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December 31, 2021 and 2020

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Shareholders and Board of Directors of NAVER Corporation

Opinion

We have audited the accompanying separate financial statements of NAVER Corporation (the "Company"), which comprise the separate statements of financial position as at December 31, 2021 and 2020, and the separate statements of comprehensive income, separate statements of changes in equity and separate statements of cash flows for the years then ended, and notes to the separate financial statements, including a summary of significant accounting policies.

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

We also have audited, in accordance with Korean Standards on Auditing, the Company's Internal Control over Financial Reporting as at December 31, 2021, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting*, and our report dated March 4, 2022 expressed an unqualified opinion.

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 Separate Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the separate financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

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

(1) Revenue recognition of search advertisement service

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

The Company recognizes search advertisement service revenue when a platform user has searched relevant information and executed related activities on the Company's platform (Note 2). For the year ended December 31, 2021, total operating revenues and search advertisement revenue are $\mbox{$W$}$ 5,019 billion and $\mbox{$W$}$ 3,318 billion, respectively.

We have determined the revenue recognition (occurrence) of the search advertisement service as a key audit matter because (i) search advertisement service revenue represents a significant portion of the Company's total operating revenues and (ii) there is a risk of potential material misstatement related to search advertisement service revenue due to various and complex systems involved in recognition and measurement of such revenue.

How our audit addressed the key audit matter

Our main audit procedures performed on the Company's revenue recognition of the search advertisement service are as follows:

- Obtained an understanding of the Company's accounting policies, processes, and internal controls relating to the search advertisement service revenue recognition
- Evaluated the design and operating effectiveness of IT general controls and internal controls relating to the search advertisement service revenue recognition
- Tested the accuracy and completeness of the revenue related data transfer between/to search service related systems and accounting system
- Tested the occurrence of revenue transactions by examining related underlying data on a sample basis

(2) Fair value measurement of financial assets categorized as level 3

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

As at December 31, 2021, the Company's financial assets measured at fair value amount to $\mbox{$W$}$ 3,657 billion, of which $\mbox{$W$}$ 1,843 billion were categorized as level 3 financial assets measured based on unobservable valuation inputs (Note 5).

We have determined the fair value measurement of financial assets categorized as level 3 as a key audit matter because (i) book value of the financial assets categorized as level 3 is material to the Company's separate financial statements and (ii) the significant judgment and estimation by management when determining valuation models and inputs used to measure the fair value of financial assets.

How our audit addressed the key audit matter

Our main audit procedures performed on the Company's fair value measurement of financial assets categorized as level 3 are as follows:

- Obtained an understanding of the Company's accounting policies, processes, and internal controls relating to the fair value measurement of financial assets based on the risk assessment.
- Evaluated the design and operating effectiveness of the internal controls on the fair value measurement of financial assets
- · Reviewed the competency and independence of valuation expert engaged by the Company
- Evaluated the appropriateness of the valuation methods and the reasonableness of input assumptions used in the valuation by management on a sample basis

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

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

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

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

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

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

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

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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and 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 separate 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 Jong-Yup Han, Certified Public Accountant.

Seoul, Korea March 4, 2022

This report is effective as at March 4, 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 separate 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.

Separate Statements of Financial Position

December 31, 2021 and 2020

(in Korean won)	Notes	December 31, 2021	December 31, 2020
Assets			
Current assets			
Cash and cash equivalents	6,7	₩ 964,418,443,986	₩ 369,314,307,214
Short-term financial instruments	6,7	205,748,800,000	3,998,800,000
Financial assets at fair value - profit or loss	5,6,7	3,692,735,930	1,134,151,477
Trade and other receivables	6	538,909,879,285	553,283,357,905
Inventories		1,657,864,895	2,546,626,045
Financial assets at fair value - other comprehensive income	5,6,7	24,254,505,540	-
Other current assets	9	41,090,961,495	27,725,389,027
		1,779,773,191,131	958,002,631,668
Non-current assets			
Property and equipment	10	1,429,366,401,646	1,078,819,008,478
Right-of-use assets	11	27,825,290,362	22,191,160,932
Intangible assets	12	52,992,451,444	40,107,676,668
Long-term financial instruments	6,7	13,755,872,000	13,755,872,000
Financial assets at fair value - profit or loss	5,6,7	1,619,663,081,922	1,370,978,035,427
Financial assets at fair value - other comprehensive income	5,6,7	2,009,532,628,699	1,238,899,975,144
Investments in subsidiaries, associates and joint ventures	13	5,872,911,000,309	4,046,756,563,826
Deferred tax assets	26	95,528,039,196	24 064 020 000
Trade and other receivables	6	27,689,808,738	24,861,039,898
Other non-current assets	9	33,382,800,462	29,178,569,706
		11,182,647,374,778	7,865,547,902,079
Total assets		₩ 12,962,420,565,909	₩ 8,823,550,533,747
Liabilities			
Current liabilities			
Trade and other payables	14	₩ 523,648,450,674	₩ 569,677,851,494
Short-term borrowings	4,6,16	-	40,000,000,000
Current tax payables		466,079,897,352	359,805,275,309
Provisions	17	2,674,409,542	32,541,708,760
Lease liabilities	4,11	18,371,326,491	19,788,581,544
Other current liabilities	15	323,720,635,850	247,655,861,357
		1,334,494,719,909	1,269,469,278,464
Non-current liabilities Trade and other payables	14	0 533 607 979	14,510,378,435
Trade and other payables Debentures	4,6,16	9,533,697,878 1,636,827,463,521	14,510,578,455
Long-term borrowings	4,6,16	349,525,600,000	-
Net defined benefit liabilities	18	277,385,543,494	220,740,226,032
Provisions	17	2,302,657,082	2,092,860,956
Deferred tax liabilities	26	2,302,037,002	29,669,335,032
Non-current lease liabilities	4,11	19,505,218,405	24,672,861,187
Other non-current liabilities	15	387,013,868	269,097,204
Other Horr-current habilities	10	2,295,467,194,248	291,954,758,846
Total liabilities		3,629,961,914,157	1,561,424,037,310
Equity		3,023,301,314,107	1,001,424,007,010
Share capital	19	16,481,339,500	16,481,339,500
Share premium	10	1,055,716,814,497	675,891,629,000
Other components of equity	20	(997,204,415,003)	
Retained earnings	22	9,257,464,912,758	7,803,526,568,981
Total equity	~	9,332,458,651,752	7,262,126,496,437
Total liabilities and equity		₩ 12,962,420,565,909	₩ 8,823,550,533,747
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Separate Statements of Comprehensive Income

Years Ended December 31, 2021 and 2020

(in Korean won)	Notes		2021		2020
Operating revenues	32	₩	5,018,667,294,374	₩	4,126,629,312,584
Operating expenses	23		(3,459,938,514,095)		(2,685,815,580,704)
Operating profit			1,558,728,780,279		1,440,813,731,880
Other income	24		51,361,277,372		50,734,211,779
Other expenses	24		(279,284,899,638)		(206,972,193,347)
Interest income			5,275,649,103		4,956,097,488
Finance income	25		824,513,997,579		412,115,444,862
Finance costs	25		(71,247,340,942)		(41,343,378,557)
Profit before income tax expense			2,089,347,463,753		1,660,303,914,105
Income tax expense	26		(564,592,453,792)		(463,379,370,520)
Profit for the year		₩	1,524,755,009,961	₩	1,196,924,543,585
Other comprehensive income (loss) Items that will not be reclassified to profit or loss Gain (loss) on valuation of equity instruments at fair value - other					
comprehensive income Gain on disposal of equity instruments at fair value - other			(74,057,026,958)		110,915,469,318
comprehensive income			17,199,903,875		2,034,430,424
Remeasurements of net defined benefit liabilities			(13,245,960,772)		(176,218,395)
Other comprehensive income (loss) for the year, net of tax			(70,103,083,855)		112,773,681,347
Total comprehensive income for the year		₩	1,454,651,926,106	₩	1,309,698,224,932
Earnings per share	27				
Basic earnings per share		₩	10,257	₩	8,214
Diluted earnings per share			10,165		8,168

		Attributable to owners of the Parent Company									
(in Korean won)	Notes		Share Capital		Share Premium		Other Components of Equity		Retained Earnings		Total Equity
Balance at January 1, 2020		₩	16,481,339,500	₩	362,406,388,434	₩	(1,548,531,531,541)	₩	6,699,190,676,516	₩	5,529,546,872,909
Total comprehensive income for the year											
Profit for the year			-		-		-		1,196,924,543,585		1,196,924,543,585
Gain on valuation of equity instruments at											
fair value - other comprehensive income			-		-		110,915,469,318		-		110,915,469,318
Gain on disposal of equity instruments at	6										
fair value - other comprehensive income			-		-		-		2,034,430,424		2,034,430,424
Remeasurements of net defined benefit liabilities	6		-		-		-		(176,218,395)		(176,218,395)
Transactions with owners											
Dividends	28		-		-		-		(54,688,370,920)		(54,688,370,920)
Share-based payment expenses			-		-		(15,516,003,480)		-		(15,516,003,480)
Acquisition of treasury shares			-		328,485,240,566		151,388,772,302		-		479,874,012,868
Disposal of treasury shares			-		-		39,758,492,229		(39,758,492,229)		-
Changes in equity due to business combination			-		-		28,211,760,128		-		28,211,760,128
Retirement of treasury shares			-		(15,000,000,000)		<u> </u>		-		(15,000,000,000)
Balance at December 31, 2020		₩	16,481,339,500	₩	675,891,629,000	₩	(1,233,773,041,044)	₩	7,803,526,568,981	₩	7,262,126,496,437
Balance at January 1, 2021		₩	16,481,339,500	₩	675,891,629,000	₩	(1,233,773,041,044)	₩	7,803,526,568,981	₩	7,262,126,496,437
Total comprehensive income for the year							,				
Profit for the year			-		-		-		1,524,755,009,961		1,524,755,009,961
Loss on valuation of equity instruments at											
fair value - other comprehensive income	6		-		-		(74,057,026,958)		-		(74,057,026,958)
Gain on disposal of equity instruments at							,				
fair value - other comprehensive income	6		-		-		-		17,199,903,875		17,199,903,875
Remeasurements of net defined benefit liabilities			-		-		-		(13,245,960,772)		(13,245,960,772)
Transactions with owners											
Dividends	28		-		-		-		(59,278,532,070)		(59,278,532,070)
Transaction of treasury shares			-		332,414,020,979		104,643,917,817		-		437,057,938,796
Share-based payment transactions			-		42,100,214,545		190,489,657,965		-		232,589,872,510
Retirement of treasury shares			-		-		15,492,077,217		(15,492,077,217)		-
Changes in equity due to business combination	33				5,310,949,973				<u> </u>		5,310,949,973
Balance at December 31, 2021		₩	16,481,339,500	₩	1,055,716,814,497	₩	(997,204,415,003)	₩	9,257,464,912,758	₩	9,332,458,651,752

Separate Statements of Cash Flows

Years Ended December 31, 2021 and 2020

(in Korean won)	Note		2021		2020
Cash flows from operating activities					
Cash generated from operations	29	₩	1,656,553,370,619	₩	1,668,333,659,331
Interest received			4,581,536,466		3,900,318,666
Interest paid			(15,792,780,568)		(1,709,784,849)
Dividends received			330,762,793,801		46,848,446,017
Income taxes paid			(610,139,155,670)		(430,253,184,593)
Net cash inflow from operating activities			1,365,965,764,648		1,287,119,454,572
Cash flows from investing activities					
Net increase in short-term financial instruments			(187,544,000,000)		_
Increase in short-term loans			(40,046,440,000)		(95,268,000,000)
Increase in long-term financial instruments			(10,010,110,000)		(2,560,000,000)
Decrease in long-term financial instruments			_		10,000,000,000
Payments for financial assets at fair value - profit or loss			(289,352,018,876)		(334,969,205,470)
Proceeds from disposal of financial assets at fair value - profit or loss			176,867,578,236		801,146,157,760
Payments for property and equipment			(381,462,480,731)		(256,096,494,860)
Proceeds from disposal of property and equipment			785,914,054		1,617,851,470
Payments for intangible assets			(16,905,804,564)		(10,516,027,161)
Proceeds from disposal of intangible assets			1,572,701,194		1,032,880,000
Payments for financial assets at fair value - other comprehensive income			(484,354,877,014)		(46,470,714,355)
Proceeds from disposal of financial assets at fair value - other comprehensive income			152,862,987,099		5,584,356,500
Payments for investments in subsidiaries and associates			(1,961,871,943,107)		(1,506,443,550,995)
Proceeds from disposal of investments in subsidiaries and associates			207,101,722,713		153,479,128,783
Collection of lease receivables			11,877,750,317		11,161,612,229
Cash outlows due to business combination	33		10,476,254,714		(13,771,707,516)
Cash outflows from other investing activities	00		(25,501,525,090)		(2,488,461,610)
Net cash outflow from investing activities			(2,825,494,181,055)		(1,284,562,175,225)
Net cash outlow from investing activities			(2,020, 10 1,10 1,000)		(1,201,002,110,220)
Cash flows from financing activities					
Proceeds from short-term borrowings			158,905,500,000		40,000,000,000
Repayment of short-term borrowings			(196,301,500,000)		-
Proceeds from long-term borrowings			351,297,700,000		-
Issuance of debentures			1,588,456,943,730		-
Repayment of lease liabilities			(20,033,517,627)		(18,288,199,584)
Acquisition of treasury shares			-		(15,516,003,480)
Disposal of treaury shares			188,237,813,981		-
Exercise of stock options			39,796,328,200		-
Dividends paid	28		(59,278,532,070)		(54,688,370,920)
Cash inflows from other financing activities.			704,415,860		178,899,551
Net cash inflow (outflow) from financing activities			2,051,785,152,074		(48,313,674,433)
Effects of exchange rate changes on cash and cash equivalents			2,847,401,105		641,666,927
Net increase (decrease) in cash and cash equivalents			595,104,136,772		(45,114,728,159)
Cash and cash equivalents at the beginning of the year			369,314,307,214		414,429,035,373
Cash and cash equivalents at the end of the year		₩	964,418,443,986	₩	369,314,307,214

1. General Information

NAVER Corporation (the Company) was established on June 2, 1999 under the Commercial Code of the Republic of Korea to provide internet portal services. The Company's headquarter is located at Buljeong-ro 6, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea.

On October 29, 2002, the Company listed its shares on the Korean Securities Dealers' Automated Quotations market. On November 28, 2008, the Company transferred its share listing to the Korea Composite Stock Price Index market. As at December 31, 2021, the major shareholders of the Company consist of National Pension Service (8.94%) and others.

2. Significant Accounting Policies

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

The separate financial statements of the Company 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)
- 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 Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the separate financial statements are disclosed in Note 3.

2.2 Changes in Accounting Policy and Disclosures

(a) New and amended standards adopted by the Company

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

- Amendments to Korean IFRS 1116 Lease – Practical expedient for COVID-19 - Related Rent Concessions

As a 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. A lessee that makes this election shall account for any change in lease payments resulting from the rent concession the same way it would account for the change applying this Standard if the change were not a lease modification. The amendment does not have a significant impact on the financial statements.

- 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) New standards and interpretations not yet adopted by the Company

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 Company.

- Amendment to Korean IFRS 1116 - 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. A lessee shall apply the practical expedient consistently to eligible contracts with similar characteristics and in similar circumstances. The amendment should be applied for annual periods beginning on or after April 1, 2021, and earlier application is permitted. The Company does not expect that these amendments have a significant impact on the financial statements.

- Amendments to Korean IFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities to be recognized in a business combination 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 clarifies 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 Company does not expect that these amendments have a significant impact on the financial statements.

- 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 Company does not expect that these amendments have a significant impact on the financial statements.

- 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 Company does not expect that these amendments have a significant impact on the financial statements.

- 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 Company does not expect that these amendments have a significant impact on the financial statements.

- 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 Company does not expect that these amendments have a significant impact on the financial statements.

- 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 Company is in review for the impact of these amendments on the financial statements.

- 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 Company does not expect that these amendments have a significant impact on the financial statements.

 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 Company does not expect that these amendments have a significant impact on the financial statements.

- 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 Company 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 Subsidiaries, Associates and Joint ventures

The financial statements of the Company are the separate financial statements prepared in accordance with Korean IFRS 1027 *Separate Financial Statements*. Investments in subsidiaries, associates and joint ventures are recognized at cost under the direct equity method. Management applied the carrying amounts under the previous K-GAAP at the time of transition to the Korean IFRS as deemed cost of investments. The Company recognizes dividend income from subsidiaries, associates and joint ventures in profit or loss when its right to receive the dividend is established.

2.4 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment (the "functional currency"). The separate financial statements are presented in Korean won, which is the Company's functional and presentation currency.

(b) Transactions in foreign currency and translation of period end

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

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities held at fair value through other comprehensive income are recognized in other comprehensive income.

2.5 Financial Assets

(a) Classification

The Company 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 Company'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 Company 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 Company 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 Company 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 or the issuance of the financial liabilities. 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 Company's business model for managing the asset and the cash flow characteristics of the asset. The Company 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 (and 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 'finance income and finance costs' and impairment loss in 'finance costs'.
- 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 comprehensive income within 'finance income and finance costs' in the period in which it arises.

B. Equity instruments

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

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'finance income and finance costs' in the separate statement of comprehensive income as applicable. Impairment loss (and 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 Company assesses on a forward-looking basis the expected credit loss associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Company applies the simplified approach, which requires expected lifetime losses to be recognized from initial recognition of the receivables. (Note 4 provides more details of how the Company determines whether 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 trade-date, the date on which the Company 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 Company has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Company has retained substantially all the risks and rewards of ownership of the transferred asset, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received.

(e) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the separate 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 Company or the counterparty.

2.6 Derivative Instruments

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

2.7 Trade Receivables

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

2.8 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the first-in, first-out (FIFO) method.

2.9 Property and Equipment

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

Depreciation of all property and equipment, except for land, is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

	Useful life
Buildings	30 years
Structures	10 years
Vehicles	5 years
Equipment	3 - 5 years
Machinery	3 years
Others	4 - 5 years

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

2.10 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.

2.11 Intangible Assets

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

Membership rights that have an indefinite useful life are not subject to amortization because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Company amortizes intangible assets with a limited useful life using the straight-line method over the following periods:

Useful lives

Industrial rights5 yearsSoftware5 yearsOthers5, 30 years

2.12 Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Company will comply with all attached conditions. Government grants related to assets are presented in the statement of financial position by deducting the grant in arriving at the carrying amount of the asset, and government grants related to income are deferred and later deducted from the related expense.

2.13 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.

2.14 Trade Payables and Other Payables

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

2.15 Financial Liabilities

(a) Classification and measurement

The Company'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 Company 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 and other payables', 'borrowings', or 'debentures' in the statement of financial position.

Borrowings are initially recognized at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as a prepayment for liquidity services and amortized over the period of the facility to which it relates.

(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.

2.16 Provisions

Provision for litigation, provision for loyalty programs, provision for restoration, greenhouse gas emission obligations and others are recognized when the Company 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.

2.17 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. The Company is implementing a consolidated tax payment system to presume that the Parent Company and its subsidiaries in Korea are a single taxpayer. Domestic and overseas subsidiaries that are not included in the consolidated tax payment system measure and pay their tax returns by regarding each entity as a taxation unit. 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 Company 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 separate financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

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

The Company 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 Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, the Company 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 Company has a legally enforceable right to offset and intends either to settle on a net basis.

2.18 Employee Benefits

(a) Post-employment benefits

The Company operates a defined benefit plan.

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, curtailments and settlements are recognized immediately in profit or loss as past service costs.

(b) Share-based payments

Equity-settled share-based payment is recognized at fair value of equity instruments granted, and employee benefit expense is recognized over the vesting period. At the end of each period, the Company revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognizes the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

When the options are exercised, the Company issues new shares. The proceeds received, net of any directly attributable transaction costs, are recognized as share capital (nominal value) and share premium.

Under cash-settled share based payment plan, the Company compensates the difference of the fair value and exercise price of option as the consideration for employee services received. Total expense that will be recognized over the vesting period is determined by reference to the fair value of the option granted. Until the liability is settled, the Company is required to remeasure the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in value recognized in profit or loss for the year.

If the Company treats grants rights of its equity instruments of its own (or its subsidiaries' parent company) to employees of its subsidiaries, a corresponding increase recognized in equity as a contribution. The fair value of employee services, calculated based on the fair value of the equity instrument at the grant date, is accounted for as an increase in the investment in the subsidiary over the vesting period, and the corresponding amount is recognized in other capital.

(c) Other long-term employee benefits

The Company provides long-term employee benefits to employees who have worked for more than a

certain period of time. Long-term employee benefits are calculated annually by independent actuaries using the projected unit credit method. The Company recognizes service cost, net interest on long-term employee benefits and remeasurements as profit or loss for the year.

2.19 Revenue Recognition

The Company engages in providing internet search portal services, and its operating revenues are mainly comprised of advertisement, contents providing services and sales commission.

The Company allocates transaction prices based on relative individual selling prices if several performance obligations are identified in a single contract.

(a) Advertisement

The Company has an obligation to provide advertisement service over the contract period. Accordingly, the Company recognizes the allocated transaction price for each performance obligation over the service period as revenue. However, the Company recognizes revenue when it performs its obligation to provide the advertisement service if the contract is to settle the advertisement services based on the total number of services provided, instead of the recognizing over the contract period. In addition, the Company provides the option to additionally select the goods or services when providing advertisement services to its customers, in which the Company identifies this as a separate performance obligation and allocates the transaction price to each performance obligation on the basis of the relative individual selling price. The individual selling price is the price at which the Company would sell a promised good or service separately to the customer. The best evidence of an individual selling price is the observable price of a good or service when the Company sells that good or service separately in similar circumstances and to similar customers.

(b) Contents services

The Company provides various digital contents to its customers. The transaction price of digital contents is immediately paid by customers when they purchase contents online. When the Company provides digital contents and there is no unsatisfied performance obligations which could cause the customers to affect on the usage of contents, the Company considers that the right of using of contents has transferred to the customers and recognize revenue when customers uses the contents. However, the Company recognizes revenue over the service period for those exposed to activities that could significantly affect the digital contents provided to customers during their usage period.

(c) Sales commission

The Company provides brokerage service for the sale of goods and others on the online platforms and receives commissions. Although the Company receives the entire considerations from the transactions, only commissions are recognized as sales since the Company provides the service as an agent.

2.20 Leases

Lease income from operating leases where the Company 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.

The Company leases various properties, vehicles, and others. Lease contracts are typically made for fixed periods but may have extension options.

Contracts may contain both lease and non-lease components. The Company allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for lease contracts for which the Company is lessee, the Company applies the practical expedient which has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

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 Company 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 Company should consider a termination penalty in determining the period for which the contract is enforceable.

Leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Company.

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 Company (the lessee) under residual value guarantees
- The exercise price of a purchase option if the Company (the lessee) is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the Company (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 Company uses a build-up approach that starts with an

interest rate that the Company can be practically financed for economic circumstances, lease period for leases, credit risk for leases and others, and makes adjustments specific to the lease, for example, country, currency and others.

The Company 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 Company 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 and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and office furniture.

2.21 Segment Reporting

Information of each operating segment is reported in a manner consistent with the internal business segment reporting provided to the chief operating decision-maker (Note 32). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors that makes strategic decisions.

2.22 Approval of Issuance of the Financial Statements

The separate financial statements 2021 were approved for issue by the Board of Directors on January 26, 2022 and are subject to change with the approval of shareholders at their Annual General Meeting.

3. Critical Accounting Estimates and Assumptions

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

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

(a) Income taxes

The Company's income is subject to income taxes based on tax laws and interpretations of tax authorities and there are many transactions and calculations for which the ultimate tax determination is uncertain (Note 26).

If certain portion of taxable income is not used for investments or increase in wages or dividends for certain periods, the Company 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 Company's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

(b) 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 Company 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).

(c) Impairment of financial assets

The provision for impairment for financial assets are based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Company's past history, existing market conditions as well as forward looking estimates at the end of reporting period (Note 4).

(d) 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 and wage growth rate (Note 18).

(e) Provisions

As at December 31, 2021, the Company recognizes provisions for litigation, restoration and others. These

provisions are estimated based on historical experience (Note 17).

(f) Stock option

The Company measures the cost of equity-settled share-based payment transaction by reference to the fair value of equity instruments granted at the grant date and the fair value is estimated using valuation models which considers the conditions upon which equity instruments are granted. Also, the Company measures the cost of cash-settled share-based payment transaction based on the fair value of the liability considering vesting conditions. Until the liability is settled, the Company is required to remeasure the fair value of the liability at the end of each reporting period and at the date of settlement (Note 21).

(g) Impairment loss of investments in subsidiaries and associates

The recoverable amount for tests of impairment of investments in subsidiaries and associates is determined based on value-in use method (Note 13).

(h) Lease

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

For leases held by the Company, the following factors are normally the most relevant:

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

Most extension options in offices and vehicles leases have not been included in the lease liability, because the Company could replace the assets without significant cost or business disruption.

The lease term is reassessed if an option is actually exercised (or not exercised) or the Company 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.

4. Financial Risk Management

4.1 Financial Risk Factors

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

4.1.1 Market risk

(a) Foreign exchange risk

The Company operates internationally and is exposed to foreign exchange risk, primarily with respect to the US dollar and the Japanese yen. Foreign exchange risk arises from recognized assets and liabilities.

The Company's financial assets and liabilities denominated in currencies other than the functional currency (i.e., US dollar and Japanese yen) and thus, exposed to foreign currency risk for major foreign currencies as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)			2021	2020
Financial asset				
	USD	₩	180,042,914	₩ 61,923,123
Cash and cash equivalents	JPY		67,365,730	2,071,810
	EUR		16,456,975	2,169,367
Shor-term financial instruments	USD		118,550,000	-
	USD		1,626,108	29,165,310
Trade and other receivables	JPY		144,381,531	100,152,569
	EUR		43,385	365,855
Financial assets at fair value - profit or loss	USD		1,000,224,734	625,420,116
	JPY		1,690,567	1,831,155
01 1000	EUR		120,341,053	69,245,127
	USD		39,835,090	10,867,566
Financial assets at fair value - other comprehensive income	JPY		111,352,049	24,837,660
comprehensive moonie	EUR		111,228,239	-
Financial liabilities				
	USD		11,191,967	5,737,491
Trade and other payables	JPY		640,388	533,527
	EUR		14,999,235	15,810,238
Parrawings and dehantures	USD		938,457,067	-
Borrowings and debentures	JPY		324,525,600	-

The impact of weakened/strengthened Korean won by 5% against foreign currencies with all other variables held constant on the post-tax profit for the years ended and equity as at December 31, 2021 and 2020, is as follows:

(in thou Korear	sands of า won)	Impact on post-tax profit					Impact o	n ed	quity
			2021		2020		2021		2020
USD	Strengthened	₩	12,807,515	₩	25,779,666	₩	14,261,894	₩	26,173,833
	Weakened		(12,807,515)		(25,779,666)		(14,261,894)		(26,173,833)
JPY	Strengthened		(4,079,195)		3,754,740		(13,732)		4,655,602
	Weakened		4,079,195		(3,754,740)		13,732		(4,655,602)
EUR	Strengthened		4,448,458		2,048,226		8,509,401		2,048,226
	Weakened		(4,448,458)		(2,048,226)		(8,509,401)		(2,048,226)

(b) Price risk

The Company is exposed to equity securities price risk arises from investments held by the Company that are classified either as financial assets at fair value - other comprehensive income or financial assets at fair value - profit or loss in the separate statement of financial position.

The impact of increases/decreases of the stock price by 5% with all other variables held constant on the Company's post-tax profit for the years ended and equity as at December 31, 2021 and 2020, is as follows:

(in thousa	nds of	lı	Impact on post-tax profit Impact on equity					Impact on post-tax profit Impac				act on equity		
Korean wo	on)		2021 2020			2021	2020							
Korea	Increase	₩	- ₩		- ₩	49,654,841 ₩	42,701,793							
	Decrease		-		-	(49,654,841)	(42,701,793)							
Japan	Increase		-		-	4,065,463	908,313							
	Decrease		-		-	(4,065,463)	(908,313)							
USA	Increase		108,895		-	404,814	-							
	Decrease		(108,895)		-	(404,814)	-							
Germany	Increase		-		-	4,060,943	-							
	Decrease		-		-	(4,060,943)	-							
Indonesia	Increase		-		-	8,034,455	-							
	Decrease		-		-	(8,034,455)	-							

The amounts recognized in current profit or loss and other comprehensive income in relation to the various financial instruments held by the Company are discussed in Note 6.

(c) Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate due to changes in future market interest rate. The interest rate risk mainly arises through floating rate deposits and borrowings. The Company's objective of interest rate risk management lies in maximizing corporate value by minimizing uncertainty from fluctuations in interest rates and net interest expense.

As at December 31, 2021, the Company's floating rate deposits which exceed floating rate borrowings, which results in net interest income increase when interest rates increase. The Company adequately minimizes risks from interest rate fluctuations through various policies, such as avoiding high rate borrowings, reforming capital structure, monitoring fluctuations of domestic and foreign interest rates on a daily, weekly and monthly basis, establishing alternatives, and balancing floating rate short-term borrowings with floating rate deposits.

The impact of 10bp increase/ decrease in interest rate with all other variables held constant on the Company's post-tax profit for the years ended and equity as at December 31, 2021 and 2020, is as follows:

(in thousands of	!	mpact on post-t	ax profit	Impact on equity			
Korean won)		2021	2020	2021	2020		
Increase	₩	207,495 ₩	98,895 ₩	207,495 ₩	98,895		
Decrease		(207,495)	(98,895)	(207,495)	(98,895)		

4.1.2 Credit Risk

The Company has three types of financial assets that are subject to the expected credit loss model:

- trade receivables and other receivables carried at amortized cost
- · other financial assets carried at amortized cost, and
- · debt investments carried at fair value through other comprehensive income
- lease receivables that is within the scope of Korean IFRS 1116

While cash equivalents and lease receivables are also subject to the impairment requirement, the identified impairment loss was not material.

(a) Trade receivables and other receivables

To measure the expected credit losses which is inclusive of forward looking information, the company has grouped its trade receivables and other receivables based on credit risk characteristics and the days past due. On that basis, the loss allowance as at December 31, 2021 and 2020, was determined as follows for trade receivables and other receivables:

2021										
6 r	nonths past				-		Total			
	0.05%		66.93%		100.00%		1.59%			
₩	388,769,797	₩	281,093	₩	5,903,706	₩	394,954,595			
₩	199,150	₩	188,122	₩	5,903,706	₩	6,290,978			
			20	20						
6 r	nonths past		lore than		e than 1 year					
	due		due		•		Total			
	0.03%		21.68%		100.00%		1.34%			
₩	446,136,025	₩	2,485,369	₩	5,403,513	₩	454,024,907			
	6 r du/	0.05% ₩ 388,769,797 ₩ 199,150 Less than 6 months past due and within due	6 months past due and within due 0.05% W 388,769,797 W 199,150 W Less than 6 months past due and within due 6 m	Less than 6 months past due and within due 0.05% 388,769,797 199,150 Less than 6 months past W 199,150 Less than 6 months past due 20 Less than 6 months past due and within due More than 6 months past due due	Less than 6 months past due and within due 0.05%	Less than 6 months past due and within due More than 6 months past due More than 1 year past due 0.05% 66.93% 100.00% ₩ 388,769,797 ₩ 281,093 ₩ 5,903,706 ₩ 199,150 ₩ 188,122 ₩ 5,903,706 Less than 6 months past due and within due and within due More than 6 months past due More than 1 year past due	Less than 6 months past due and within due More than 6 months past due More than 1 year past due 0.05% 66.93% 100.00% ₩ 388,769,797 ₩ 281,093 ₩ 5,903,706 ₩ ₩ 199,150 ₩ 188,122 ₩ 5,903,706 ₩ Less than 6 months past due and within due and within due due More than 6 months past due More than 1 year past due			

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

(in thousands of Korean won)		2021		2020
Beginning balance	₩	6,065,401	₩	5,127,319
Increase in loss allowance recognized in profit or loss during the year		231,443		967,783
Receivables written off during the year as uncollectible		(5,866)		(29,701)
Ending balance	₩	6,290,978	₩	6,065,401

The amounts recognized in profit or loss as 'operating expenses' in relation to impaired receivables for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021				
Impairment loss						
Movement in loss allowance	₩	231,443	₩	967,783		

(b) Other financial assets at amortized cost

Other financial assets at amortized cost include long and short-term financial instruments like time deposits and other receivables.

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 thousands of Korean won)		2021	2	2020
Beginning balance	₩	5,328	₩	7,560
Reversal of loss allowance recognized in profit or loss during the year		-		(2,232)
Ending balance	₩	5,328	₩	5,328

All of these financial assets are considered to have low credit risk, and thus the loss allowance provision recognized was limited to 12 months expected credit losses during the year. The Company considers the credit risk to be low when the risk of default is low and the issuer has sufficient capability to meet contractual cash flow obligations in the near term.

(c) Financial asset at fair value - through profit or loss

The Company is exposed to credit risk from financial assets at fair value – through profit or loss. The maximum exposure is the carrying amount of these assets as at December 31, 2021 and 2020.

(d) Impairment loss

Impairment loss recognized in profit or loss in relation to impaired financial assets for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2020		
Trade receivables and other receivables	₩	231,443	₩	967,783
Other financial assets at amortized cost		-		(2,232)
Net impairment loss	₩	231,443	₩	965,551

4.1.3 Liquidity Risk

The Company monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Company does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. Such forecasting takes into consideration the Company's debt financing plans, covenant compliance, compliance with internal financial ratio targets and external regulatory or legal requirements such as currency restrictions. As at December 31, 2021, the Company has borrowing agreements with a limit of \forall 1,319,526 million for managing liquidity risk (Note 30).

Details of the Company's liquidity risk analysis as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)									
	Book amount	Contractual cash flow	Less than 1 years	Between 1 and 5 years	Over 5 years				
Trade and other payables Borrowings and	₩ 387,054,428	₩ 387,054,428	₩ 384,106,250	₩ 2,948,178	₩ -				
debentures	1,986,353,064	2,113,980,614	27,081,639	2,086,898,975	-				
Lease liabilities Financial guarantee	37,876,545	39,485,734	18,821,414	20,664,320	-				
contracts	710,473	198,757,243	198,757,243						
	₩ 2,411,994,510	₩ 2,739,278,019	₩ 628,766,546	₩ 2,110,511,473	₩ -				

(in thousands of Korean won)						2020				
	Book amount		Contractual cash flow		Less than 1 years		Between 1 and 5 years		Over 5 years	
Trade and other payables	₩	454,406,915	₩	454,406,915	₩	446,357,367	₩	8,049,548	₩	-
Borrowings		40,000,000		40,000,000		40,000,000		-		-
Lease liabilities Financial guarantee		44,461,443		46,558,262		20,420,100		25,874,490		263,672
contracts		2,982,724		1,772,882,101		1,772,882,101				
	₩	541,851,082	₩	2,313,847,278	₩	2,279,659,568	₩	33,924,038	₩	263,672

4.2 Capital Risk Management

The Company's objectives when managing capital are to maintain a sound capital structure. The Company uses debt to equity ratio for capital management. This ratio is calculated as total debt divided by total equity as shown in the separate statements of financial position.

The Company's gearing ratio as at December 31, 2021 and 2020, is as follows:

(in thousands of Korean won)		2021	2020				
Total debt	₩	3,629,961,914	₩	1,561,424,037			
Total equity		9,332,458,652		7,262,126,496			
Gearing ratio		38.90%		21.50%			

5. Fair Value

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

5.1 Financial Instruments Measured at Fair Value

Details of financial instruments measured at fair value as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)	2021					2020				
	Ca	rrying amount		Fair value	Car	rrying amount	Fair value			
Financial assets										
Financial assets at fair value - profit or loss	₩	1,623,355,818	₩	1,623,355,818	₩	1,372,112,187	₩	1,372,112,187		
Financial assets at fair value - other comprehensive income		2,033,787,134		2,033,787,134		1,238,899,975		1,238,899,975		
	₩	3,657,142,952	₩	3,657,142,952	₩	2,611,012,162	₩	2,611,012,162		

The financial assets and liabilities whose book amount is a reasonable approximation of fair value are excluded from the fair value disclosures.

5.2 Fair Value Hierarchy

To provide an indication about the reliability of the inputs used in determining fair value, the Company classifies its financial instruments into the three levels prescribed under the accounting standards. Financial instruments that are measured at fair value are categorized by the fair value hierarchy, and the defined levels are as follows:

- Level 1: The fair value of financial instruments traded in active markets (e.g. as publicly traded derivatives and equity securities) is based on quoted market prices at the end of the reporting period. The quoted marked price used for financial assets held by the Company is the current bid price. These instruments are included in level 1.
- Level 2: The fair value of financial instruments that are not traded in an active market (e.g. unlisted derivatives) is determined using valuation techniques which maximize the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.
- Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Fair value hierarchy classifications of the financial instruments that are measured at fair value as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)	2021							
	Leve	l 1		Level 2		Level 3		Total
Financial assets								
Financial assets at fair value - profit or loss Equity instruments at fair value	₩ 2,	982,610	₩	710,126	₩	1,619,663,082	₩	1,623,355,818
- other comprehensive income	1,810,	781,179		-		223,005,955		2,033,787,134
(in thousands of Korean won)				2				
	Level 1			Level 2		Level 3		Total
Financial assets								
Financial assets at fair value - profit or loss Equity instruments at fair value	₩	-	₩	1,134,151	₩	1,370,978,035	₩	1,372,112,187
- other comprehensive income	1,192,	510,414		-		46,389,561		1,238,899,975

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

The Company recognizes transfers between levels of the fair value at the end of the reporting period. There were no transfers between level 1 and level 2 for recurring fair value measurements during the year ended December 31, 2021.

The following table presents the changes in level 3 financial instruments for the years ended December 31, 2021 and 2020:

(in thousands of	nds of 2021			2020					
Korean won)	á	nancial assets at fair value - profit or loss	Financial asse at fair value - other comprehensiv income	ue - Financi nsive at fair		nancial assets at fair value - orofit or loss	;	nancial assets at fair value - other omprehensive income	
Beginning balance	₩	1,370,978,035	₩ 46,389,5	61	₩	1,502,266,436	₩	41,602,914	
Total profit or loss Amount recognized in profit or loss		406,432,190		-		324,104,464		-	
Amount recognized in other comprehensive income		-	76,899,1	86		-		8,479,229	
Purchase		289,352,019	82,343,8	00		334,969,205		8,677,732	
Sales		(415,261,573)	(4,056,03	30)		(800,690,641)		-	
Transfer into Level 1		(18,703,175)	(3,232,66	65)		-		-	
Others ¹		(13,134,414)	24,662,1	03		10,328,572		(12,370,314)	
Ending balance	₩	1,619,663,082	₩ 223,005,9	55	₩	1,370,978,036	₩	46,389,561	

¹ Includes reclassifications arising from changes in ownership of financial assets held at fair value.

5.4 Valuation Techniques and Inputs

Valuation techniques and inputs used in the fair value measurements of financial instruments categorized in levels 2 and level 3 of the fair value hierarchy as at December 31, 2021 and 2020, are as follows:

(in thousands of				2021		
Korean won)	Fair value	Level	Valuation techniques	Major inputs	Unobservable inputs	Range of unobservable inputs
Financial assets at fai	ir value - profit or	loss				
Compound financial instruments	₩ 480,558,804	3	Option pricing model	Underlying asset price, volatility of underlying asset	Volatility of the underlying assets	36.37%~68.16%
			Market approach	EV/SALES, PSR, PBR,	EV/SALES	1.00~15.54
				PER	PSR	0.57~5.32
					PBR	3.27
					PER	26.41
			Present value method	Recent transaction price, underlying asset price	-	-
Beneficiary certificates and funds	710,126	2	Present value method	Credit risk adjusted discount rate	-	-
	1,139,104,278	3	Market approach and others	Underlying asset price	(*)	(*)
Equity instruments at	fair value - other	compre	hensive income			
Equity securities	223,005,955	3	Present value	Recent transaction price,	EV/SALES	2.63~13.69
			method, market approach	EV/SALES, PSR etc.	PSR	1.21~4.27

(*) Various inputs are used in the measurements of underlying asset price and thus, further disclosure has not been provided.

(in thousands of					2020		
Korean won)		Fair value	Level	Valuation techniques	Major Inputs	Unobservable inputs	Range of unobservable inputs
Financial assets at fa	ir va	lue - profit or le	oss				
Compound financial instruments	₩	664,073,081	3	Option pricing model	Underlying asset price, volatility of the underlying assets	Volatility of the underlying assets	41.71% ~ 115.70%
				Market approach method	PBR, EV/SALES, PSR	PSR PBR EV/SALES	0.44~11.20 1.32~10.80 1.30~20.12
				Present value method	Recent transaction price, underlying asset price	-	-

Beneficiary certificates and	1,134,151	2	Present value method	Credit risk adjusted discount rate	-	-
funds	706,904,955	3	Market approach method and others	Underlying asset price	(*)	(*)
Equity instruments at fair	value - other co	mpreh	ensive income			
Equity securities	46,389,561	3	Present value method, Market approach method	Recent transaction price, EV/SALES, PSR and others	EV/SALES PSR	1.93~11.10 1.28

^(*) Various inputs are used in the measurements of underlying asset price and thus, further disclosure has not been provided.

5.5 Valuation Processes for Fair Value Measurements Categorized Within Level 3

The Company's investment management team and treasury team performs the fair value measurements required for financial reporting purposes, including level 3 fair values. These teams report directly to the director in financial department("director"). Discussions of valuation processes and results are held between the director and these teams at least once every quarter, in line with the Company's quarterly reporting schedule.

5.6 Sensitivity Analysis for Recurring Fair Value Measurements Categorized Within Level 3

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by the unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the amounts represent the most favorable or most unfavorable.

The results of the sensitivity analysis for the effect on profit or loss from changes in inputs for each financial instrument, which is categorized within Level 3 and subject to sensitivity analysis, are as follows:

(in thousands of Korean won)	2021					
	Favorable change	s Unfavorable changes				
	Profit or loss Equ	ity Profit or loss Equity				
Financial assets						
Unlisted equity securities ¹	₩ 14,338,564 ₩ 15,3	88,580 \((14,324,788) \(\frac{1}{3} \) (15,374,804)				
(in thousands of Korean won)	2020					
	Egyarable abanga					
	Favorable change	s Unfavorable changes				
	Profit or loss Equ					
Financial assets						

¹ For unlisted equity securities, changes in their fair value are calculated by increasing or decreasing the discount rate, which is significant unobservable inputs, by 1%, and by increasing or decreasing the volatility of underlying assets, PBR, EV/SALES, PSR and others, which are significant unobservable inputs, by 10%.

6. Financial Instruments by Category

6.1. Carrying Amounts of Financial Instruments by Category

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

(a) Financial assets

(in thousands of Korean won) 2021 **Financial assets** at fair value -**Financial assets** other **Financial assets** at fair value comprehensive at amortized Other financial profit or loss income cost assets1 Total Cash and cash equivalents - ₩ 964,418,444 ₩ 964,418,444 Long and short-term financial instruments² 219,504,672 219,504,672 Financial assets at fair value - profit or loss 1,623,355,818 1,623,355,818 Trade and other receivables 555,645,823 10,953,865 566,599,688 Financial assets at fair value - other comprehensive 2,033,787,134 income 2,033,787,134 ₩ 1,623,355,818 ₩ 2,033,787,134 ₩ 1,739,568,939 ₩ 10,953,865 ₩ 5,407,665,756

² As at December 31, 2021, long and short-term financial instruments amounting to ₩ 13,760 million are restricted as deposits for shared corporate growth program and ₩ 37,200 million are restricted for the borrowings with prime rate for the Company's employees.

(in thousands of Korean won)	2020							
	Financial assets at fair value - profit or loss	Financial assets at fair value - other comprehensive income	Financial assets at amortized cost	Other financial assets ¹	Total			
Cash and cash equivalents Long and short-term financial	₩ -	₩ -	₩ 369,314,307	₩ -	₩ 369,314,307			
instruments ² Financial assets at fair value	-	-	17,754,672	-	17,754,672			
- profit or loss	1,372,112,187	-	-	-	1,372,112,187			
Trade and other receivables Financial assets at fair value - other comprehensive	-	-	555,532,836	22,611,561	578,144,397			
income		1,238,899,975			1,238,899,975			
	₩ 1,372,112,187	₩ 1,238,899,975	₩ 942,601,815	₩ 22,611,561	₩ 3,576,225,538			

¹ Other financial assets represent lease receivables, which are not subject to financial instruments categorization.

(b) Financial liabilities

(in thousands of Korean won)	2021				
	Financial liabilities at fair value - profit or loss			cial liabilities at ortized cost	
Trade and other payables	₩	-	₩	387,054,428	
Long-term borrowings		-		349,525,600	
Debentures				1,636,827,464	
	₩		₩	2,373,407,492	
(in thousands of Korean won)		20	20		
	Financial liab fair value - p loss			ial liabilities at ortized cost	
Trade and other payables	₩	-	₩	454,406,915	
Short-term borrowings				40,000,000	
	₩	-	₩	494,406,915	

¹ Other financial assets represent lease receivables, which are not subject to financial instruments categorization.

 $^{^2}$ As at December 31, 2020, long and short-term financial instruments amounting to \forall 13,760 million are restricted as deposits for shared corporate growth program and \forall 4,000 million are restricted for the borrowings with prime rate for the Company's employees.

6.2. Net Gains or Losses by Category of Financial Instruments

Net gains or losses on each category of financial instruments for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021	2020		
Financial asset at fair value - profit or loss					
Gain on valuation	₩	400,827,406	₩ 317,114,717		
Gain on disposal		2,713,354	6,304,070		
Interest income		771,928	891,120		
Dividend income		202,717,070	11,448,475		
Financial asset at fair value - other comprehensive income					
Dividend income		11,527,396	12,322,275		
Gain (loss) on valuation - other comprehensive income		(74,057,027)	110,915,469		
Gain on disposal - reclassification		17,199,904	2,034,430		
Financial assets at amortized cost					
Interest income		3,992,589	3,170,742		
Impairment loss		(231,443)	(967,783)		
Other impairment loss		-	2,232		
Foreign currency exchange differences		15,501,630	(3,840,040)		
Financial liabilities at amortized cost					
Foreign currency exchange differences		(42,598,831)	(20,815)		
Interest income (expense)		(12,805,070)	43,883		

7. Financial Assets

7.1 Financial Assets at Fair Value - Profit or Loss

(a) Financial assets at fair value - profit or loss

(in thousands of Korean won)	:			2020	
Non-current					
Compound financial instruments ¹	₩	480,558,804	₩	664,073,081	
Beneficiary certificates and funds		1,139,104,278		706,904,955	
		1,619,663,082		1,370,978,036	
Current					
Beneficiary certificates and funds		710,126		1,134,151	
Equity securities		2,982,610			
		3,692,736		1,134,151	
	₩	1,623,355,818	₩	1,372,112,187	

¹ The Company recognized gain amounting ₩ 4,495 million as the convertible bond the Company held was redeemed by LINE, a subsidiary of the Company, for the year ended December 31, 2020 (Note 31).

(b) Amounts recognized in profit or loss

Amounts recognized in profit or loss for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021	2020	
Compound financial instruments and equity securities	₩	108,295,504	₩	180,585,342
Beneficiary certificates and funds		295,245,255		142,808,264
Others		<u>-</u>		25,181
	₩	403,540,759	₩	323,418,787

Profit or loss during the years ended December 31, 2021 and 2020 does not include Interest and dividend income.

7.2 Financial Assets at Fair Value - Other Comprehensive Income

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

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

(in thousands of Korean won)		2021		2020
Listed equity securities	₩	1,810,781,179	₩	1,192,510,414
Unlisted equity securities		223,005,955		46,389,561
	₩	2,033,787,134	₩	1,238,899,975

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

7.3 Trade Receivables and Other Financial Assets at Amortized Cost

(a) Trade receivables and other receivables

(in thousands of Korean won)		2021		2020		
Trade receivables	₩	382,059,754	₩	346,883,198		
Other receivables		12,894,841		56,991,804		
Less: provision for impairment		(6,290,977)		(5,127,319)		
Trade receivables and other receivables - net	₩	388,663,618	₩	398,747,683		

(b) Other financial assets at amortized cost

Other financial assets at amortized cost comprise the following individual investments:

(in thousands of Korean won)		2021					
	Current		Non-current		Total		
Cash equivalents	₩	964,418,443	₩	-	₩	964,418,443	
Time deposits		205,750,000		13,760,000		219,510,000	
Loans		127,304,640		-		127,304,640	
Accrued income		2,630,791		-		2,630,791	
Leasehold deposits		10,901,104		26,145,671		37,046,775	
Lease receivables		9,409,727		1,544,138		10,953,865	
		1,320,414,705		41,449,809		1,361,864,514	
Less: provision for impairment		(1,200)		(4,128)		(5,328)	
	₩	1,320,413,505	₩	41,445,681	₩	1,361,859,186	

(in thousands of Korean won)	2020								
	Current		No	on-current	Total				
Cash equivalents	₩	369,314,307	₩	-	₩	369,314,307			
Time deposits		4,000,000		13,760,000		17,760,000			
Loans		89,612,100		-		89,612,100			
Accrued income		1,129,134		-		1,129,134			
Leasehold deposits		2,516,674		14,315,423		16,832,097			
Lease receivables		12,065,945		10,545,617		22,611,562			
		478,638,160		38,621,040		517,259,200			
Less: provision for impairment		(1,200)		(4,128)		(5,328)			
	₩	478,636,960	₩	38,616,912	₩	517,253,872			

(c) Impairment

See Note 4 for the impairment of trade receivables and other financial assets at amortized cost and the Company's exposure to credit risk.

8. Contract Assets and Liabilities

(a) Contract assets and liabilities

There are no contract assets that the Company recognizes, and the contract liabilities as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021	2020 ¹		
Customer loyalty programs	₩	2,926,593	₩	2,405,829	
Search Platform		136,535,793		107,601,934	
Commerce		41,140,608		29,293,889	
Contents		16,916,234		6,828,909	
Total contract liabilities	₩	197,519,227	₩	146,130,561	

¹ The contract liabilities are included in other liabilities (advances from customers, unearned revenues and withholdings).

The Company changed the classification of operating information by service types during year ended December 31, 2020.

(b) Revenue recognized in relation to contract liabilities

The following table shows how much of the revenue recognized for the years ended December 31, 2021 and 2020, related to carried-forward contract liabilities from the prior year.

(in thousands of Korean won)		2021	2020 ¹
Revenue recognized during the current year that was included in the contract liability balance at the	as		
beginning of the year	₩	146,130,561 ₩	114,040,844
Customer royalty programs		2,405,829	1,847,917
Search Platform		107,601,934	87,659,432
Commerce		29,293,889	19,376,083
Contents		6,828,909	5,157,412

The Company changed the classification of operating information by service types during year ended December 31, 2020.

9. Other Assets

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

(in thousands of Korean won)		20	021		2020				
		Current	No	Non-current		Current		on-current	
Prepayment	₩	15,643,132	₩	9,487,858	₩	8,290,551	₩	9,777,132	
Prepaid expenses		25,447,829		23,894,942		19,434,838		19,401,438	
	₩	41,090,961	₩	33,382,800	₩	27,725,389	₩	29,178,570	

10. Property and Equipment

(a) Details of property and equipment as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)	2021									
	Acquisition Cost			Accumulated depreciation ¹	Book amount					
Land	₩	271,222,169	₩	-	₩	271,222,169				
Buildings		493,422,657		(141,576,863)		351,845,794				
Structures		113,915,120		(81,929,225)		31,985,895				
Machinery		3,545,930		(2,023,042)		1,522,888				
Vehicles		554,421		(535,825)		18,596				
Equipment		94,569,141		(60,398,597)		34,170,544				
Construction in progress		738,600,516				738,600,516				
	₩	1,715,829,953	₩	(286,463,551)	₩	1,429,366,402				

¹ Includes accumulated impairment losses and government grants.

(in thousands of Korean won)	2020								
	Acquisition Cost			Accumulated lepreciation ¹	Book amount				
Land	₩	269,970,459	₩	-	₩	269,970,459			
Buildings		464,612,962		(126,005,313)		338,607,649			
Structures		113,860,438		(71,394,343)		42,466,095			
Machinery		2,759,168		(1,613,844)		1,145,324			
Vehicles		629,421		(550,693)		78,728			
Equipment		81,533,941		(50,427,273)		31,106,668			
Others		627,678		(529,546)		98,132			
Construction in progress		395,345,953		<u>-</u>		395,345,953			
	₩	1,329,340,020	₩	(250,521,012)	₩	1,078,819,008			

¹ Includes accumulated impairment losses and government grants.

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

(in thousands of Korean won)	of 2021									
	Land	Buildings	Structures	Machinery	Vehicles	Equipment	Others	Construction in progress	Total	
Beginning balance, net Acquisition/	₩ 269,970,459	₩ 338,607,649	₩ 42,466,095	₩ 1,145,324	₩ 78,728	₩ 31,106,668	₩ 98,132	₩ 395,345,953	₩ 1,078,819,008	
capital expenditures	986,102	2,251,230	54,682	786,762	-	12,483,106	-	366,648,001	383,209,882	
Disposal	-	-	-	-	-	(477,881)	(57,064)	-	(534,945)	
Depreciation	-	(15,571,550)	(10,534,882)	(409,197)	(60,132)	(14,282,738)	(41,068)	-	(40,899,567)	
Reclassification	265,608	26,558,465	-	-	-	5,341,389	-	(32,165,462)	-	
Others ¹								8,772,023	8,772,023	
Ending balance, net	₩ 271,222,169	₩ 351,845,794	₩ 31,985,895	₩ 1,522,888	₩ 18,596	₩ 34,170,544	₩ -	₩ 738,600,516	₩ 1,429,366,402	

¹ Includes capitalization of borrowing costs and others.

(in thousands of Korean won)					2020				
	Land	Buildings	Structures	Machinery	Vehicles	Equipment	Others	Construction in progress	Total
Beginning balance, net Acquisition/ capital	₩ 269,732,845	₩ 351,893,482	₩ 53,177,254	₩ 528	₩ 140,598	₩ 21,268,528	₩ 145,760	₩ 159,584,169	₩ 855,943,164
expenditures	-	-	-	685,011	-	13,635,399	-	243,011,894	257,332,304
Disposal	-	-	-	-	-	(332,596)	-	(619,350)	(951,946)
Depreciation	-	(14,794,184)	(10,711,159)	(103,215)	(61,870)	(11,242,207)	(50,900)	-	(36,963,535)
Reclassification	-	-	-	563,000	-	7,777,544	-	(8,340,544)	-
Others ¹	237,614	1,508,351					3,272	1,709,784	3,459,021
Ending balance, net	₩ 269,970,459	₩ 338,607,649	₩ 42,466,095	₩ 1,145,324	₩ 78,728	₩ 31,106,668	₩ 98,132	₩ 395,345,953	₩ 1,078,819,008

¹ Includes capitalization of borrowing costs and others.

- (c) During the year ended December 31, 2021, the Company has capitalized borrowing costs amounting to ₩ 8,722 million (2020: ₩ 1,710 million) on property and equipment that are qualifying assets. The capitalization rate of borrowings used to determine the amount of borrowing costs to be capitalized is 1.75% (2020: 2.85%).
- (d) Depreciation expense is classified as 'operating expenses' in the separate financial statements.

11. Leases

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

Details of amounts relating to leases as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021	2020		
Right-of-use assets					
Properties	₩	26,655,072	₩	21,398,913	
Vehicles		1,170,218		792,248	
	₩	27,825,290	₩	22,191,161	
Lease receivables	₩	10,953,865	₩	22,611,561	
Lease liabilities					
Current	₩	18,371,326	₩	19,788,582	
Non-current		19,505,218		24,672,861	
	₩	37,876,544	₩	44,461,443	

¹ Additions to the right-of-use assets during the year ended December 31, 2021 were ₩ 14,901 million.

(b) Amounts recognized in the separate statement of comprehensive income

Details of amounts relating to leases for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021	2020		
Depreciation of right-of-use assets					
Properties	₩	8,774,648	₩	7,553,062	
Vehicles		492,533		413,194	
	₩	9,267,181	₩	7,966,256	
Interest expense relating to lease liabilities (included in 'finance costs') ¹	₩	1,292,740	₩	1,744,285	
Expense relating to short-term leases and leases of low-value assets		5,392,891		1,855,340	

¹ There is a difference between interest expenses recognized with regard to the leases and interest expenses in the statement of comprehensive income due to capitalization of borrowing costs.

The total cash outflow and inflow for leases during the year ended December 31, 2021, were \forall 26,719 million (2020: \forall 21,888 million) and \forall 14,385 million (2020: \forall 13,765 million), respectively.

12. Intangible Assets

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

(in thousands of Korean won)	2021								
	Acq	uisition cost		ccumulated mortization ¹	Book amount				
Industrial rights	₩	9,489,054	₩	(8,681,108)	₩	807,946			
Software		30,819,932		(24,059,959)		6,759,973			
Others		87,588,389		(42,163,857)		45,424,532			
	₩	127,897,375	₩	(74,904,924)	₩	52,992,451			
(in thousands of Korean won)	2020								
	Acq	uisition cost		ccumulated mortization ¹	Book amount				
Industrial rights	₩	9,311,468	₩	(7,839,011)	₩	1,472,457			
Software		24,494,278		(22,613,161)		1,881,117			
Others		77,590,568		(40,836,465)	-	36,754,103			
	₩	111,396,314	₩	(71,288,637)	₩	40,107,677			

¹ Includes accumulated impairment losses and government grants.

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

(in thousands of Korean won)	2021										
	Industrial rights		Software		Others		Total				
Beginning balance, net	₩	1,472,457	₩	1,881,117	₩	36,754,103	₩	40,107,677			
Acquisition		186,494		6,325,654		10,423,600		16,935,748			
Disposal		(1,096)		-		(575,779)		(576,875)			
Amortization		(849,909)		(1,446,798)		(1,327,392)		(3,624,099)			
Others ¹						150,000		150,000			
Ending balance, net	₩	807,946		6,759,973		45,424,532		52,992,451			

¹ Others include greenhouse gas emission permits surrendered to the government and others.

(in thousands of Korean won)	2020							
		dustrial rights	Software		Others			Total
Beginning balance, net Acquisition	₩	2,183,558 204,477	₩	2,383,364 668,489	₩	31,757,736 9,641,397	₩	36,324,658 10,514,363
Disposal		(9,612)		(82)		(605,380)		(615,074)
Amortization Impairment loss		(905,966) -		(1,170,654)		(1,340,252) (216,707)		(3,416,872) (216,707)
Others ¹	₩	1 472 457	₩	1 001 117	₩	(2,482,691) 36,754,103	₩	(2,482,691) 40,107,677
Ending balance, net	V	1,472,457		1,881,117		30,734,103	- V V	40, 107,677

¹ Others include greenhouse gas emission permits surrendered to the government and others.

Amortization cost is classified as 'operating expenses' in the separate financial statements.

(c) Total research and development costs recognized by the Company amounts to ₩ 629,620 million (2020: ₩ 526,350 million), which are expensed as 'operating expenses'.

(d) Emission permits

The quantities of expected emission permits which are allocated free of charge for the 3rd planning period (2021~2025) are as follows.

(in KAU)	2021	2022	2023	2024	2025	Total
Allocation with nil consideration	68,467	68,467	68,467	67,825	67,825	341,051

Changes in the allocated emission quantity and book amount during the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won and in KAU)

	2021			2020			
	Quantity		Amount	Quantity		Amount	
Beginning balance Allocation with nil	15,382	₩	512,321	2,852	₩	77,004	
consideration	63,350		-	58,964		-	
Purchase Surrendered to the	-		-	25,100		905,900	
government	(73,176)		(345,697)	(71,534)		(470,583)	
Disposal	(556)		(16,624)	<u>-</u>		<u>-</u>	
Ending balance	5,000	₩	150,000	15,382	₩	512,321	

13. Investments in Subsidiaries, Associates and Joint Ventures

(a) Details of investments in subsidiaries, associates and joint ventures of the Company as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)					2021	2020
,			Closing	Percentage of ownership		
Name of entity	Primary business	Location	month	(%)	Book amount	Book amount
Subsidiaries						
NAVER Cloud	Cloud service	Korea	December	100.00	₩ 98,449,807	₩ 98,449,807
NAVER I&S	Business support, workforce supply, and employee dispatch	Korea	December	100.00	28,031,186	28,031,186
Search Solution ⁹	Searching solution development	Korea	December	-	-	3,459,255
N-Visions	Exhibition and performance planning business	Korea	December	100.00	1,452,802	1,452,802
NAVER China	Software development and distribution	China	December	100.00	11,807,060	6,820,604
Works Mobile	Groupware development and service	Korea	December	62.59	98,000,069	98,000,069
SNOW	Camera and communication application service	Korea	December	80.55	447,003,463	327,003,526
SB Next Media Innovation Fund	Investment	Korea	December	96.30	145,518,763	156,295,821
NAVER Labs	New technology development and research	Korea	December	100.00	50,599,924	34,332,903
NAVER-KTB Audio Contents Fund	Investment	Korea	December	99.00	26,928,000	26,928,000
SpringCamp Early Stage Fund 1	Investment	Korea	December	99.00	39,600,000	39,600,000
SpringCamp Early Stage Fund 2	Investment	Korea	December	91.95	30,000,000	10,000,000
NAVER U.HUB (formerly, V Live)	Online streaming service	USA	December	100.00	-	-
NAVER BAND	North America community service marketing	USA	December	100.00	-	-
NAVER France	Europe IT investment and research and development	France	December	100.00	302,902,769	302,902,769
NAVER WEBTOON COMPANY	Webtoon service	Korea	December	100.00	19,962,185	27,076,000
NAVER J.Hub	Global Business Support	Japan	December	100.00	983,514,210	868,948,890
TBT Global Growth Fund I	Investment	Korea	December	89.91	95,007,093	99,000,000
Audiensori	Audio contents production and distribution	Korea	December	100.00	5,811,601	5,811,601
NAVER VIETNAM	Online live broadcast service and local marketing	Vietnam	December	99.00	50,849,396	50,849,396
NAVER Financial ⁶	Electronic financial business	Korea	December	89.21	29,284,740	28,852,802

(in thousands of Korean won)				2020		
				Percentage		
				of		
	D :		Closing	ownership		
Name of entity SVA Content Media ⁷	Primary business Investment	Location Korea	month December	(%)	Book amount	Book amount 16,774,282
				67.04	- CE4 024 0E2	
WEBTOON Entertainment	Webtoon service	USA	December	67.91	651,034,952	344,149,120
Do Ventures Annex Fund, LP	Investment	USA	December	99.01	1,580,960	177,075
SVA Soda ⁸	Investment	Korea	December	1.43	1,359,790	22,002,860
Smart Spring Fund ⁶	Investment	Korea	December	35.71	9,000,000	2,000,000
Naver-Quantum Contents 1 Fund	Investment	Korea	December	98.81	6,250,000	6,250,000
Company Al ⁷	Al development and research	Korea	December	-	-	-
A Holidings (formerly, LINE) ¹	Mobile service development	Japan	March	-	-	221,372,599
LINE Conomi ¹	Global restaurant review service	Japan	March	-	-	4,847,572
Drama & Company ¹	Business card application service	Korea	December	-	-	29,308,399
Line Friends ¹	Character and doll wholesale and retail	Korea	March	-	-	85,000,048
NAVER Hands. 4	standard workplace operation for the disabled	Korea	December	47.00	47,000	47,000
NAVER WP I, L.P.	Managing local business	USA	December	100.00	2,807,628	-
Wattpad	Global web novel platform	Canada	December	100.00	698,168,630	-
SVA Content Media Private Equity	,					
Fund II	Investment	Korea	December	98.83	70,395,030 3,905,367,058	2,945,744,386
Associates				-		_
NetMania	Software development and distribution	Korea	December	27.17	161,829	161,829
Synapsoft	Software development and distribution	Korea	December	26.41	1,249,990	1,249,990
BonAngels Pacemaker Fund	Investment	Korea	December	22.73	750,000	3,750,000
Korea Contents Mutual Aid	Mutual Aid Association	Korea	December	53.75	10,000,000	10,000,000
Association ²						
ARO In Tech	Software development and distribution	Korea	December	29.85	500,000	500,000
NAVER KIP Cheer up! Gamers Fund	Investment	Korea	December	50.00	1,265,000	2,450,000
Future Creation NAVER-Stonebridge Early Stage Start-up Fund ⁷	Investment	Korea	December	-	-	1,800,000
Future Creation NAVER-SB Startup Investment Fund	Investment	Korea	December	37.04	7,336,945	8,188,794
Digital Media Partners II	Investment	Cayman Islands	December	26.88	3,321,036	3,370,770
NAVER-Suprema Youth Foundation No.5 Investment Fund	Investment	Korea	December	50.00	4,421,803	6,580,164
NSPACE	Space service business	Korea	December	49.04	1,700,006	1,700,006
One Store	E-Commerce business	Korea	December	25.10	29,497,707	29,497,707
Mirae Asset-NAVER New Growth Fund 1	Investment	Korea	December	50.00	49,000,176	49,000,176
K-Fund I ²	Investment	France	December	74.81	172,060,079	147,728,572

(in thousands of Korean won)				2020		
				Percentage of		
			Closing	ownership		
Name of entity	Primary business	Location	month	(%)	Book amount	Book amount
YG NAVER Contents & Lifestyle Fund ²	Investment	Korea	December	90.91	50,000,000	50,000,000
Soran Media Venture Fund I ²	Investment	Korea	December	66.67	747,173	1,000,000
MiraeAsset MAPS Private Placement Real Estate 62	t Investment	Korea	December	45.08	196,330,551	196,330,551
MIRAE ASSET-NAVER ASIA GROWTH INVESTMENT	Investment	Singapore	December	40.00	350,483,239	249,247,176
MiraeAsset-Naver Asia Growth Fund	³ Investment	Korea	December	16.67	87,610,771	62,476,265
China Ventures Fund I, L.P. ²	Investment	Canada	December	70.33	99,007,308	143,274,892
China Ventures Fund II, L.P.	Investment	Canada	December	30.00	75,450,379	-
Alliance Internet	Revenue support for internet business start-up	Korea	December	23.53	200,000	200,000
DHP private equity fund 3	Investment	Korea	December	25.16	200,000	200,000
AIRI ³	Al technology investment	Korea	December	14.29	3,000,000	3,000,000
YN Culture & Space	Record Production and Planning	Korea	December	23.04	7,846,155	1,974,950
Do Ventures Fund I-A	Investment	Cayman Islands	December	22.70	5,926,500	5,926,500
SMEJ Plus	Global fanship related investment	Japan	December	30.07	14,873,626	38,366,926
Carousell Pte ³	Platform Investment	Singapore	December	8.39	74,862,910	74,862,910
Smart Korea NAVER-Stonebridge rising investment association	Investment	Korea	December	37.74	4,000,000	2,000,000
Silicon Cube	Applied software development and distribution	Korea	December	41.89	-	-
A Holidings (formerly, LINE) ¹	Mobile service development	Japan	March	42.25	221,372,599	-
Drama & Company ^{1, 10}	Business card application service	Korea	December	10.55	-	-
LINE Conomi ¹	Global restaurant review service	Japan	March	49.90	4,847,572	-
Line Friends ¹	Character and doll wholesale and retail	Korea	March	30.00	71,593,000	-
WEVERSE COMPANY	Contents production	Korea	December	33.91	211,884,516	-
K-Fund II ²	Investment	Korea	December	67.90	2,174,976	-
Cafe24 ³	E-Commerce business	Korea	December	14.81	137,164,280	-
FUTURE INNOVATION PRIVATE						
EQUITY FUND III	Investment	Korea	December	25.38	45,831,000	-
ICART GROUP ³	E-Commerce business	Korea	December	5.00	12,726,816	-
Paramark KB Fund I	Investment	Korea	December	20.00	1,972,000	
Joint ventures				-	1,961,369,942	1,094,838,178
JobsN	Online information service	Korea	December	49.00	98,000	98,000
Cineplay	Online information service	Korea	December	49.00	98,000	98,000
отторіау	and online advertising	Notea	Peceumer	43.00	90,000	90,000

(in thousands of Korean won)					2021	2020
				Percentage of		
			Closing	ownership		
Name of entity	Primary business	Location	month	(%)	Book amount	Book amount
Designpress	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
China Lab (Joongang JV)	Database and online information service	Korea	December	49.00	98,000	98,000
YEOPEUL	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Interbiz (Dong-A JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Artitian (Kyunghyang Daily News JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Schooljam (EBS JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Agroplus (Korea Business JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Sumlab (Munhwa Ilbo JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Techplus (Electronic Times JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Animal and Human Story (Hankook Ilbo JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
Law and Media (Money Today JV)	Online information service and internet contents business	Korea	December	49.00	98,000	98,000
DANAA Data	Internet information service business	Korea	December	49.00	4,900,000	4,900,000
					6,174,000	6,174,000
					₩ 5,872,911,000	₩ 4,046,756,564

¹ Investments in four subsidiaries including A-Holdings (formerly, LINE) over which the Company lost control have been classified as investments in associates as the business integration of LINE and SoftBank Corp. has been completed during the year ended December 31, 2021.

² As at December 31, 2021, although the Company has more than 50% ownership in the investees, the Company does not have control over these entities by virtue of agreements and classifies them as associates.

³ As at December 31, 2021, although the Company has less than 20% ownership in the investees, the Company has significant effect over these entities by virtue of agreements and classified as associates.

- ⁴ Although the Company has less than 50% ownership in NAVER HANDS CO.,LTD, the Company is considered to have control over these entities since Snow, NAVER Financial, NAVER WEBTOON COMPANY Corporation, NAVER Cloud a subsidiary of the Company, owns 53% ownership of the entities. As a result, NAVER HANDS CO.,LTD has been classified as a subsidiary.
- ⁵ The Company's ownership in NAVER Financial is based on the number of shares with voting right.
- ⁶ Although the Company owns less than 50% ownership in Smart Spring Fund, the Company is considered to have control over this entity since Spring Camp, a subsidiary of the Company, owns 12.68% ownership of the entity and the Company has significant influence over investment decision-makings as a general partner. As a result, Smart Spring Fund has been classified as a subsidiary.
- ⁷ Its liquidation has been completed during the year ended December 31, 2021.
- ⁸ Although the Company owns less than 50% ownership in SVA Soda, a joint venture, the Company is considered to have control over this entity if 98.1% ownership held by KREAM, a subsidiary of the Company, is included. As a result, SVA Soda has been classified as a subsidiary.
- ⁹ Its merger has been completed during the year ended December 31, 2021.
- ¹⁰ Classified from investments in associates to financial instruments due to the decreased Company's ownership in these entities during the year ended December 31, 2021.
- (b) Changes in investments in subsidiaries, associates and joint ventures for the years ended December 31, 2021 and 2020, are as follows:

2021			2020		
₩	4,046,756,564	₩	2,804,011,012		
	2,111,763,039		1,851,224,291		
	(179,977,740)		(499,334,225)		
	(99,747,208)		(109,381,071)		
	(5,883,654)		236,556		
₩	5,872,911,000	₩	4,046,756,564		
		₩ 4,046,756,564 2,111,763,039 (179,977,740) (99,747,208) (5,883,654)	₩ 4,046,756,564 ₩ 2,111,763,039 (179,977,740) (99,747,208) (5,883,654)		

¹ The Company recognized impairment losses as the carrying amounts of investments exceed their recoverable amounts due to persistent operating losses of Naver Labs, NAVER WEBTOON COMPANY Corporation, Line Friends SMEJ Plus and others for the year ended December 31, 2021. The recoverable amount is measured on the value in use or the fair value less the costs of disposal which were estimated using an income approach. An assumed discount rate and a permanent growth rate used for the measurement of value in use is 15.5-15.6% and 1.0%, respectively.

14. Trade and Other Payables

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

(in thousands of Korean won)	202	21	20	20
	Current	Non-current	Current	Non-current
Financial Liabilities				
Non-trade payables	₩ 370,857,496	₩ -	₩ 443,825,417	₩ -
Accrued expenses	4,789,719	-	19,951	-
Deposits received	8,459,036	2,948,178	2,512,000	8,049,548
	384,106,251	2,948,178	446,357,368	8,049,548
Non-financial Liabilities				
Accrued expenses	139,542,200	6,585,520	123,320,484	6,460,830
	₩ 523,648,451	₩ 9,533,698	₩ 569,677,852	₩ 14,510,378

15. Other Liabilities

Other liabilities as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)	202	21	2020		
	Current	Non-current	Current	Non-current	
Advances from customers	₩ 228,746,978	₩ -	₩ 178,344,073	₩ -	
Unearned revenues	17,677,171	387,014	6,112,763	269,097	
Withholdings	6,282,064	-	4,401,467	-	
VAT withholdings	71,014,422		58,797,559		
	₩ 323,720,635	₩ 387,014	₩ 247,655,862	₩ 269,097	

16. Borrowings and Debentures

Borrowings as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)

	Lender	Maturity date	Annual interest rate (%)		2021		2020
Short-term	KEB Hana Bank Shinhan	-	-	₩	-	₩	10,000,000
borrowings	Bank	-	-		-		30,000,000
	Kookmin Bank	October 1, 2023	2.50		10,000,000		-
Long-term	Shinhan Bank	December 3, 2025	2.99		15,000,000		-
borrowings	Mizuho Bank	November 15, 2023	0.54		169,989,600		-
	BNP Paribas	December 23, 2024	0.61		154,536,000		<u>-</u>
				₩	349,525,600	₩	40,000,000

Debentures as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)			Annual interest			
	Issue date	Maturity date	rate (%)	2021	2020	
Debentures in won (4 th -1)	February 25, 2021	February 25, 2024	1.24	₩ 250,000,000	₩	-
Debentures in won (4 th -2)	February 25, 2021	February 25, 2026	1.60	450,000,000		-
Unsubordinated unsecured bonds in foreign currency	March 29, 2021 May 12, 2021	March 29, 2026	1.50	948,400,000		
Less: Discount on bonds payable	•			(11,572,536)		
				₩ 1,636,827,464	₩	-
Less: Discount on bonds payable	•				₩	

The details of conditions of issuance of debentures as at December 31, 2021, are as follows:

	Payment of principal and interest	Financial ratios maintenance ¹	Limitation on settlement of security rights ¹	Limit on the sale of assets ¹	Limitation on changes in governance	
Debentures in won (4 th -1)	Interest paid quarterly and lump-sum	Debt ratio below	Equity capital	Within 100% of	Change in	
Debentures in won (4 th -2)	repayment at maturity for principal	300% below 500		total assets	largest shareholder	
Unsubordinated unsecured bonds in foreign currency	Interest paid semiannually and lump-sum repayment at maturity for principal	-	Restrictions on the settlement of security rights over a certain amount under contractual terms	Restrictions on the sale of important property in the contract.	Restriction on the merger and others under contractual terms	

¹ The above financial ratio maintenance, restrictions on the settlement of security rights and limits on the sale of assets are applied based on the consolidated financial statements.

17. Provisions

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

(in thousands of Korean										
won)						2021				
		vision for tigation		ovision for estoration	g	rovision for reenhouse s emissions		Others		Total
Beginning balance Charged / (credited) to the statement of comprehensive income	₩	927,939	₩	2,306,507	₩	685,399	₩	30,714,725	₩	34,634,570
Additional provisions		-		59,274		541,923		-		601,197
Unused amounts reversed		-		(762,920)		(1,155,982)		(1,081,058)		(2,999,960)
Charged during the year		-		1,664,453		-		10,221		1,674,674
Used during the year		-		_		-		(28,933,415)		(28,933,415)
Ending balance	₩	927,939	₩	3,267,314	₩	71,340	₩	710,473	₩	4,977,066
Current	₩	927,939	₩	964,657	₩	71,340	₩	710,473	₩	2,674,409
Non-current		-		2,302,657		-		-		2,302,657

(in thousands of Korean									
won)						2020			
		vision for igation		ovision for storation	gr	ovision for eenhouse emissions	Others ¹		Total
Beginning balance Charged / (credited) to the statement of comprehensive income	₩	926,439	₩	1,819,748	₩	972,621	₩ -	₩	3,718,808
Additional provisions		1,500		43,883		183,361	27,732,000		27,960,744
Unused amounts reversed		-		-		-	-		-
Charged during the year		-		442,876		-	3,356,363		3,799,239
Used during the year		_				(470,583)	(373,638)	-	(844,221)
Ending balance	₩	927,939	₩	2,306,507	₩	685,399	₩ 30,714,725	₩	34,634,570
Current	₩	927,939	₩	213,646	₩	685,399	₩ 30,714,725	₩	32,541,709
Non-current		-		2,092,861		-	-		2,092,861

¹In relation to certain services provided by the Company, a penalty amounting to ₩ 27,732 million, which had been imposed by the Fair Trade Commission, is recognized as provision at December 31, 2020.

18. Post-Employment Benefits

18.1 Defined benefit pension plans

The Company operates defined benefit pension plans. The level of benefits provided depends on employees' length of service and their salary in the final years leading up to retirement. The certain amount of benefits are funded by an external institution.

(a) Details of net defined benefit liabilities recognized in the statements of financial position as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021		2020
Present value of funded defined benefit liabilities	₩	15,009,871	₩	14,868,149
Present value of unfunded defined benefit liabilities		272,835,865		216,830,135
Sub total		287,845,736		231,698,284
Fair value of plan assets		(10,460,193)		(10,958,058)
Liability in the statement of financial position	₩	277,385,543	₩	220,740,226

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

(in thousands of Korean won)		2021		2020
Beginning balance	₩	231,698,284	₩	195,430,461
Current service cost		46,317,760		39,858,378
Interest expense		6,795,737		5,299,370
Remeasurements:				
Actuarial losses from change in demographic assumptions		906,101		16,338,431
Actuarial losses (gains) from changes in financial assumptions		15,058,274		(19,333,763)
Actuarial losses from experience adjustments		1,922,018		3,147,665
Payments from plans:				
Benefit payments		(15,683,273)		(9,556,292)
Transfer to / from subsidiaries		(332,212)		514,034
Business combination (Note 33)		1,163,048		<u>-</u>
Ending balance	₩	287,845,736	₩	231,698,284

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

(in thousands of Korean won)		2021		2020
Beginning balance	₩	10,958,058	₩	11,169,837
Interest income		316,894		297,671
Remeasurements:				
Return on plan assets (excluding amounts included in interest income)		(241,376)		(88,599)
Payments from plans:				
Benefit payments		(573,383)		(420,851)
Ending balance	₩	10,460,193	₩	10,958,058

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

(in thousands of Korean		20	21	2020			
won)		Amount	Ratio		Amount	Ratio	
Cash and cash equivalents	₩	1,499,992	14.3%	₩	854,728	7.8%	
Beneficiary certificates		1,009,409	9.7%		524,891	4.8%	
Government bonds		7,950,793	76.0%		9,578,439	87.4%	
	₩	10,460,193	100.0%	₩	10,958,058	100.0%	

(e) The principal actuarial assumptions as at December 31, 2021 and 2020, are as follows:

	2021	2020
Discount rate	3.56%	3.04%
Salary growth rate	6.71%	5.69%

(f) The sensitivity analysis of the defined benefit liabilities to changes in the principal assumptions is:

(in thousands of Korean won)	Impact on defined benefit obligation							
	Changes in assumption		ncrease in ssumption	Decrease in assumption				
Discount rate	1% increase/decrease	₩	(31,618.535)	₩	37,657,124			
Salary growth rate	1% increase/decrease		36,119,135		(31,056,858)			

The above sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

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

(g) Effects of defined benefit plans on future cash flows

There are no expected contributions to plan assets for the year ending December 31, 2022, and the weighted average duration of the defined benefit obligation is 12.58 years.

18.2 Other Short-term and Long-term Employee Benefits

The short-term employee benefits represent the amount recognized for paid absences in respect of service rendered by employees in the current period and other long-term employee benefits represent the amount recognized for long-term paid absences for which the employees render the related services.

(in thousands of Korean won)		2021		2020
Short-term employee benefits	₩	30,930,726	₩	27,308,676
Other long-term employee benefits		19,221,514		15,317,398
	₩	50,152,240	₩	42,626,074

19. Issuance and Acquisition of Shares

The Company's total number of authorized shares is 300,000,000 shares. As at December 31, 2021, the Company has issued 164,049,085 ordinary shares (par value - \forall 100 per share) and 14,750,130 treasury shares (excludes retired shares). The Company's share capital and share premium as at December 31, 2021, amount to \forall 16,481,340 thousand and \forall 132,920,605 thousand, respectively. The par value of outstanding shares amounting to \forall 16,404,909 thousand differs from the share capital (\forall 16,481,340 thousand) due to the retirement of shares.

The Company disposed of 1,839,920 treasury shares through treasury shares exchange transaction and exercise of stock options, and recognized gain on disposal of treasury shares amounting to ₩ 374,507 million.

20. Other Components of Equity

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

(in thousands of Korean won)		2021	2020
Treasury shares	₩	(1,066,259,871)	₩ (1,214,756,394)
Stock options Gain (loss) on valuation of financial assets at fair		201,251,339	39,122,209
value through other comprehensive income		(71,357,770)	2,699,257
Others		(60,838,113)	(60,838,113)
	₩	(997,204,415)	₩ (1,233,773,041)

The Company retired 214,310 treasury shares and disposed of 1,447,594 shares (acquisition cost: $\mbox{$W$}$ 104,644 million) through treasury shares exchange transaction with E-MART Inc., SHINSEGAE Inc., Cafe24 Corp. and Wattpad, and recognized gain on disposal of treasury shares amounting to $\mbox{$W$}$ 333,847 million. In addition, the Company disposed of 392,326 treasury shares (acquisition cost: $\mbox{$W$}$ 28,361 million) through exercise of stock options and payment of stock grants to employees, and recognized gain on disposal of treasury shares amounting to $\mbox{$W$}$ 40,660 million.

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

(in number of shares)	2021	2020
Beginning balance	16,804,360	19,365,600
Acquisition	-	83,000
Disposal ¹	(1,839,920)	(2,094,240)
Retirement	(214,310)	(550,000)
Ending balance	14,750,130	16,804,360

¹ Include 392,326 treasury shares issued by the Company through exercise of stock options and stock grants.

during the exercisable period are ₩ 192,000 or

21. Share-Based Payments

As at December 31, 2021, the Company entered into share-based payment agreements for the employees and directors of the Company upon the resolution of shareholders' meetings and the Board of Directors.

(1) Equity-settled stock option

s follows:

Details of equity-	-settled stock option	ns granted to emplo	oyees as at Decem	ber 31, 2021, are as
	Granted on February 27, 2019	Granted on March 22, 2019	Granted on February 26, 2020	Granted on February 26, 2020
Vesting condition	More than two years' service from the grant date	More than three years' service from the grant date	More than two years' service from the grant date	More than three years' service from the grant date
Exercisable period and condition	Five years from the exercisable date	•	Five years from the exercisable date	· ·
Authorized shares	Registered ordinary	•		greater
Granting method	Either issuance of si	hares or distribution of	of treasury shares	
	Granted on March 27, 2020	Granted on February 23, 2021	Granted on February 23, 2021	Granted on March 24, 2021
Vesting condition	More than three years' service from the grant date	More than two years' service from the grant date	More than three years' service from the grant date	More than three years' service from the grant date
Exercisable period and condition	- Five years from the exercisable date - If daily closing price for ten consecutive days immediately preceding the exercising date or	Five years from the exercisable date	Five years from the exercisable date	Five years from the exercisable date

greater

Authorized

Registered ordinary shares

shares

Granting method Either issuance of shares or distribution of treasury shares

The changes in the number of equity-settled stock options and weighted average exercise prices for the years ended December 31, 2021 and 2020, are as follows:

(in number of shares and in

Korean won)			2021		
Grant date	Beginning unexercised balance	Granted	Exercised	Expired	Ending unexercised balance
2019.2.27	393,024	-	(308,738)	(585)	83,701
2019.3.22	787,000	-	-	(37,000)	750,000
2020.2.26	153,753	-	-	(9,116)	144,637
2020.2.26	881,500	-	-	(31,000)	850,500
2020.3.27	670,000	-	-	(60,000)	610,000
2021.2.23	-	86,643	-	(5,319)	81,324
2021.2.23	-	1,027,500	-	(39,000)	988,500
2021.3.24		806,000	<u>-</u> _	(41,000)	765,000
Total number of stock option	2,885,277	1,920,143	(308,738)	(223,020)	4,273,662
Weighted average exercise price (in number of	₩ 163,220	₩ 371,735	₩ 128,900	₩ 248,292	₩ 254,945
shares and in Korean won)			2020		
Grant date	Beginning unexercised balance	Granted	Exercised	Expired	Ending unexercised balance

Korean won)	2020									
Grant date	Beginning unexercised balance Gra			anted	Exercised Expired				Ending unexercised balance	
2019.2.27		407,112		_		_		(14,088)		393,024
2019.3.22		812,000		_		_		(25,000)		787,000
2020.2.26		-		162,869		-		(9,116)		153,753
2020.2.26		-		907,000		-		(25,500)		881,500
2020.3.27				682,000		-		(12,000)		670,000
Total number of stock option		1,219,112		1,751,869		<u>-</u> _		(85,704)		2,885,277
Weighted average exercise price	₩	130,299	₩	186,000	₩	_	₩	160,570	₩	163,220

The Company calculated the compensation costs using binomial model and Least Square Monte-Carlo ("LSMC"), and the assumptions and inputs used for calculation of the compensation costs are as follows:

	(in n	umber	of s	hares	and i	in Ko	rean	won)
- 1		ullibei	UI O	ii iai co	ana	11 I V	ncan	WUIII

`		ruary 27, 2019		rch 22, 2019		ruary 26, 2020		ruary 26, 2020
Risk-free interest rate (%)		1.98		1.92		1.40		1.40
Expected option life	7 years		8	years	7 years		8 years	
Expected price volatility (%)	24.30		24.00		20.40		20.40	
Expected dividend yield (%)		0.2	0.2		0.16		0.16	
Share price at grant date Fair value of stock options at	₩	129,500	₩	127,000	₩	190,500	₩	190,500
grant date	₩	39,906	₩	19,365	₩	48,526	₩	37,580
Exercise price	₩	128,900	₩	131,000	₩	186,000	₩	186,000

(in number of shares and in Korean won)

(,						
	March 27, 2020		February 23, 2021			uary 23, 2021	March 24, 2021	
Risk-free interest rate (%)		1.48		1.02		1.19		1.44
Expected option life	8 years		3 years		4 years		4 years	
Expected price volatility (%)	2	24.00	26.12		25.09		25.11	
Expected dividend yield (%)		0.20	0.2		0.2		0.2	
Share price at grant date Fair value of stock options at	₩	152,500	₩	386,500	₩	386,500	₩	386,000
grant date	₩	18,219	₩	81,253	₩	89,003	₩	79,368
Exercise price	₩	186,000	₩	362,500	₩	362,500	₩	384,500

The amount of expenses recognized in relation to equity-settled stock options is \forall 72,050 million (2020: \forall 28,092 million) and the amount recognized as an investment in a subsidiary is \forall 5,884 million (2020: \forall 119 million) for the year ended December 31, 2021.

(2) Cash-settled stock options

Details cash-settled stock options granted by some of the Company's subsidiaries to their employees as at December 31, 2021, are as follows

	Granted on February 27, 2019	Granted on March 22, 2019	Granted on February 26, 2020	Granted on February 26, 2020
Granted by		Certain subsidiaries	of NAVER Corporation	า
Vesting condition	More than two years' service from the grant date	More than three years' service from the grant date	More than two years' service from the grant date	More than three years' service from the grant date
Exercisable period and condition	Five years from the exercisable date	 Five years from the exercisable date If daily closing price for ten consecutive days immediately preceding 	Five years from the exercisable date	 Five years from the exercisable date If daily closing price for ten consecutive days immediately preceding

the exercising date or
during the exercisable
period are ₩ 192,000 or
greater

the exercising date or during the exercisable period are \W 192,000 or greater

	Granted on April 30, 2020	Granted on April 30, 2020	Granted on February 23, 2021	Granted on February 23, 2021
Granted by		Certain subsidiaries	of NAVER Corporation	n
Vesting condition	More than two years' service from the grant date	More than three years' service from the grant date	More than two years' service from the grant date	More than three years' service from the grant date
Exercisable period and condition	Five years from the exercisable date	 Five years from the exercisable date If daily closing price for ten consecutive days immediately preceding the exercising date or during the exercisable period are ₩ 192,000 or greater 	Five years from the exercisable date	Five years from the exercisable date

The changes in the number of cash-settled stock options and weighted average exercise prices for the years ended December 31, 2021 and 2020, are as follows:

(in number of shares and in Korean won)			2021		
Grant date	Beginning unexercised balance	Transfer from/to associates	Exercised	Expired	Ending unexercised balance
2019.02.27	6,523	2,327	(4,391)	-	4,459
2019.03.22	2,000	1,000	-	-	3,000
2020.02.26	1,482	1,060	-	(159)	2,383
2020.02.26	4,000	-	-	-	4,000
2020.04.30	212	265	-	(53)	424
2020.04.30	-	1,553	-	-	1,553
2021.02.23	-	999	-	(27)	972
2021.02.23	<u>-</u>	6,554	<u> </u>		6,554
Total number of stock option	14,217	13,758	(4,391)	(239)	23,345
Weighted average exercise price	₩ 152,064	₩ 269,241	₩ 128,900	₩ 205,939	₩ 224,926
(in number of shares and in					
Korean won)			2020		
	Beginning unexercised	Transfer from/to			Ending unexercised
Grant date	balance	associates	Exercised	Expired	balance
2019.02.27	5,999	1,187	-	(663)	6,523
2019.03.22	1,000	1,000	-	-	2,000
2020.02.26	-	1,482	-	-	1,482
2020.02.26	-	4,000	-	-	4,000
2020.04.30	-	212	-	-	212
Total number of stock option	6,999	7,881		(663)	14,217
Weighted average exercise price	₩ 129,200	₩ 170,421	₩ -	₩ 128,900	₩ 152,064

The Company calculated the compensation costs using binomial model and Monte-Carlo, and the assumptions and inputs used for calculation of the compensation costs are as follows:

		rch 22, 2019		ruary 26, 2020		ruary 26, 2020		pril 30, 2020
Risk-free interest rate (%)		1.44		1.42		1.7		1.49
Expected option life	1.23 years		1.16 years		2.16 years		1.33 years	
Expected price volatility (%)	25.59		25.07		25.59		25.07	
Expected dividend yield (%)		0.14	0.14		0.14			0.14
Share price at the end of period	₩	378,500	₩	378,500	₩	378,500	₩	378,500
Fair value of stock options granted at								
the end of period	₩	247,472	₩	193,243	₩	194,273	₩	193,466
Exercise price	₩	131,000	₩	186,000	₩	186,000	₩	186,000

(in number of shares and in Korean won)

		oril 30, 2020		ruary 23, 2021		ruary 23, 2021
Risk-free interest rate (%)		1.72		1.7		1.82
Expected option life	2.3	3 years	2.1	5 years	3.1	5 years
Expected price volatility (%)	2	25.59	2	25.07	2	25.59
Expected dividend yield (%)		0.14		0.14		0.14
Share price at the end of period	₩	378,500	₩	378,500	₩	378,500
Fair value of stock options granted at						
the end of period	₩	194,234	₩	65,940	₩	80,033
Exercise price	₩	186,000	₩	362,500	₩	362,500

The amount of expenses recognized in relation to cash-settled stock options is \forall 1,414 million (2020: \forall 958 million) for the year ended December 31, 2021.

Treasury share payment (stock grant)

The Company distributed treasury shares amounting to \forall 38,813 million without consideration to employees during the year ended December 31, 2021.

(in number of shares and i Korean won)	Issued on July 1, 2021	Issued on January 3, 2022
Disposal value per share	413,000	376,000
Total number of shares disposed	45,488	53,263

22. Retained Earnings

Retained earnings as at December 31, 2021 and 2020, consist of:

(in thousands of Korean won)	2021		2020	
Legal reserves ¹	₩	8,240,670	₩	8,240,670
Other reserves		13,909,234		13,909,234
Retained earnings before appropriation		9,235,315,009		7,781,376,665
	₩	9,257,464,913	₩	7,803,526,569

¹ The Commercial Code of the Republic of Korea requires the Company to appropriate for each financial period, 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. The reserve is not available for cash dividends payment, but may be transferred to share capital or used to reduce accumulated deficit. 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, the excess legal reserves may be distributed in accordance with a resolution of the shareholders' meeting.

The appropriation of retained earnings for the year ended December 31, 2021, is expected to be appropriated at the shareholders' meeting on March 14, 2022. The appropriation date for the year ended December 31, 2020, was March 24, 2021.

The appropriation of retained earnings for the years ended December 31, 2021 and 2020, is as follows:

(in thousands of Korean won)	December 31, 2021 (Expected appropriation date: March 14, 2022)		(Actua	December 31, 2020 (Actual appropriation date: March 24, 2021)		
Retained earnings available for appropriation						
Unappropriated retained earnings carried over from prior year	₩	7,722,098,133	₩	6,622,352,402		
Profit for the year Gain on disposal of equity instruments at		1,524,755,010		1,196,924,544		
fair value - other comprehensive income Remeasurements of the defined benefit		17,199,904		2,034,430		
liabilities		(13,245,961)		(176,218)		
Retirement of treasury shares		(15,492,077)		(39,758,492)		
		9,235,315,009		7,781,376,665		
Appropriation of retained earnings Dividends Dividends per share: 2021: ₩ 511 (511%)						
2020: ₩ 402 (402%)		76,291,766		59,278,532		
Unappropriated retained earnings to be carried forward	₩	9,159,023,243	₩	7,722,098,133		

23. Operating Expenses

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

(in thousands of Korean won)	2021		2020	
Salaries and wages ¹	₩	562,387,175	₩	431,821,149
Employee benefits	**	86,927,611	* *	65,611,750
Share-based payment expenses		73,463,673		29,050,863
Depreciation		40,899,567		36,963,536
Depreciation of right-of-use assets		9,267,181		7,966,256
Amortization		3,624,099		3,416,872
Utility		16,615,952		17,637,694
Taxes and dues		5,718,093		7,633,240
Commission		2,026,661,095		1,614,031,361
Advertising		579,450,942		425,634,461
Supplies		4,897,360		8,384,569
Others		50,025,766		37,663,830
	₩	3,459,938,514	₩	2,685,815,581

¹ Include expenses related to stock grants amounting to ₩ 39,449 million.

24. Other Income and Other Expenses

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

(in thousands of Korean won)	2021		2020	
Rental income	₩	2,171,450	₩	2,512,335
Foreign currency exchange gain		13,631,504		3,385,190
Gain on disposal of property and equipment		516,051		648,068
Gain on disposal of intangible assets		1,503,683		427,500
Gain on disposal of investments in subsidiaries and				
associates		28,564,360		35,666,870
Others		4,974,229		8,094,249
	₩	51,361,277	₩	50,734,212

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

(in thousands of Korean won)		2021	2020		
Foreign currency exchange loss	₩	57,782,107	₩	7,888,072	
Donations		90,297,443		52,401,364	
Impairment loss on investments in subsidiaries and associates		99,747,208		109,381,071	
Others		31,458,142		37,301,686	
	₩	279,284,900	₩	206,972,193	

25. Finance Income and Finance Costs

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

(in thousands of Korean won)		2021		2020
Dividends income	₩	346,854,161	₩	46,848,446
Foreign currency exchange gain Gain on valuation of financial assets at fair value -		22,969,946		2,359,164
profit or loss		449,993,627		356,603,765
Gain on transactions of financial assets at fair value - profit or loss		4,696,264		6,304,070
	₩	824,513,998	₩	412,115,445

Details of finance costs for the years ended December 31, 2021 and 2020, are as follows:

383
137
048
-
310
379
1

26. Income Tax Expense

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

(in thousands of Korean won)		2021	2020		
Current tax:					
Current tax on profits for the year	₩	580,695,308	₩	412,119,332	
Adjustments in respect of prior year		(11,341,368)		(3,006,814)	
Deferred tax:					
Origination and reversal of temporary differences		(4,793,752)		53,416,004	
Impact of changes in corporate tax rate		32,266		850,849	
Income tax expense	₩	564,592,454	₩	463,379,371	

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

3,914
21,847
9,969)
4,521
7,319
9,061
6,814)
1,204
5,333)
0,849
6,686
9,371
)4,)7, 59, 6,8 11, 5,3

The weighted average applicable tax rate of the Company was 27.13% (2020: 26.81%).

Income tax effect relating to components of other comprehensive income (loss) for the years ended December 31, 2021 and 2020, is as follows:

(in thousands of Korean won)		2021					
	Before tax		•	Tax effect	After tax		
Gain (loss) on valuation of financial assets at fair value - other comprehensive income	₩	(101,347,261)	₩	27,290,234	₩	(74,057,027)	
Remeasurements of net defined benefit liabilities		(18,127,769)		4,881,808		(13,245,961)	
	₩	(119,475,030)	₩	32,172,042	₩	(87,302,988)	
(in thousands of Korean won)				2020			
	I	Before tax		Tax effect	After tax		
Gain (loss) on valuation of financial assets at fair value - other comprehensive income	₩	151,385,652	₩	(40,470,183)	₩	110,915,469	
Remeasurements of net defined benefit liabilities		(240,933)		64,715		(176,218)	
	₩	151,144,719	₩	(40,405,468)	₩	110,739,251	

The aggregate current and deferred tax relating to items that are charged or credited directly to equity for the year ended December 31, 2021, is as follows. And, there are no income tax effect that are charged or credited directly to equity for the year ended December 31, 2020.

(in thousands of Korean won)	won)			2021			
	Before tax			Tax effect	After tax		
Gain (loss) on disposal of treasury	NA /		147	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\ \ \ \ \		
shares	₩	513,957,587	₩	(139,450,734)	₩	374,506,853	
Gain (loss) on disposal of financial assets at fair value - other							
comprehensive income		23,604,431		(6,404,527)		17,199,904	
Share options		112,987,493		88,263,846		201,251,339	
	₩	650,549,511	₩	(57,591,415)	₩	592,958,096	
(in thousands of Korean won)				2020			
	E	Before tax		Tax effect		After tax	
Gain (loss) on disposal of treasury							
shares	₩	448,610,988	₩	(120,125,747)	₩	328,485,241	
Gain (loss) on disposal of financial assets at fair value - other							
comprehensive income		2,781,557		(747,126)		2,034,431	
Share options		39,122,209		-		39,122,209	
	₩	490,514,754	₩	(120,872,873)	₩	369,641,881	

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

(in thousands of Korean won)		2021	2020		
Deferred tax assets					
Deferred tax asset to be recovered within 12 months	₩	42,153,090	₩	51,587,160	
Deferred tax asset to be recovered after more than 12 months		238,152,465		84,988,325	
		280,305,555		136,575,485	
Deferred tax liabilities		_		_	
Deferred tax liability to be recovered within 12 months		885,559		194,304	
Deferred tax liability to be recovered after more than 12 months		(185,663,075)		(166,439,124)	
		(184,777,516)		(166,244,820)	
Deferred tax assets (liabilities), net	₩	95,528,039	₩	(29,669,335)	

The movement in deferred tax assets and liabilities for the years ended December 31, 2021 and 2020, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

(in thousands of						2021				
Korean won)						Other				_
	ı	Beginning	S	tatement of	co	mprehensive				Ending
		balance	р	rofit or loss	ir	icome (loss)		Equity		balance
Investments in										
subsidiaries and										
associates	₩	(422,561)	₩	(1,223,771)	₩	-	₩	-	₩	(1,646,332)
Financial assets at fair										
value - profit or loss		(165,170,620)		(17,908,435)		-		-		(183,079,055)
Accrued income		(310,173)		258,044				<u>-</u> _		(52,129)
Deferred tax liabilities		(165,903,354)		(18,874,162)				<u>-</u>		(184,777,516)
Provision for impairment		455,986		91,358		-		-		547,345
Intangible assets		4,566,771		(105,896)		-		-		4,460,875
Accrued expenses		31,973,540		1,053,870		-		-		33,027,410
Net defined benefit										
liabilities		59,290,825		10,701,409		4,881,808		-		74,874,042
Provisions		9,820,501		(8,380,576)		-		-		1,439,926
Financial assets at fair										
value - other										
comprehensive income		(341,466)		15,158		27,290,234		-		26,963,926
Depreciation		24,113,477		2,996,879		-		-		27,110,355
Stock option		-		17,313,410		-		88,263,846		105,577,256
Others		6,354,385		(49,964)		-		-		6,304,421
Deferred tax assets		136,234,019		23,635,648		32,172,042		88,263,846		280,305,555
Deferred tax assets										
(liabilities), net	₩	(29,669,335)	₩	4,761,486	₩	32,172,042	₩	88,263,846	₩	95,528,039

(in thousands of	2020							
Korean won)						Other		
	ı	Beginning	_	tatement of		prehensive		Ending
		balance	р	rofit or loss	inc	ome (loss)		balance
Investments in								
subsidiaries and								
associates	₩	(223,724)	₩	(198,837)	₩	-	₩	(422,561)
Financial assets at fair								
value - profit or loss		(84,090,437)		(81,080,183)		-		(165,170,620)
Accrued income		(20,143)		(290,030)		-		(310,173)
Financial assets at fair								
value - other								
comprehensive income		40,056,608		72,108		(40,470,182)		(341,466)
Deferred tax liabilities		(44,277,696)		(81,496,942)		(40,470,182)		(166,244,820)
Provision for impairment		1,774,007		(1,318,021)		-		455,986
Intangible assets		4,634,754		(67,983)		-		4,566,771
Accrued expenses		27,476,415		4,497,125		-		31,973,540
Net defined benefit								
liabilities		47,179,870		12,046,240		64,715		59,290,825
Provisions		1,288,462		8,532,039		-		9,820,501
Depreciation		20,560,452		3,553,025		-		24,113,477
Others		6,366,722		(12,337)		-		6,354,385
Deferred tax assets		109,280,682		27,230,088		64,715		136,575,485
Deferred tax assets								
(liabilities), net	₩	65,002,986	₩	(54,266,854)	₩	(40,405,467)	₩	(29,669,335)

The Company did not recognize deferred tax assets for the temporary differences amounting to $\mbox{$\,\fombda}$ 454,007 million (2020: $\mbox{$\,\fombbu}$ 400,706 million) from the investments in subsidiaries / associates and others which are not subject to disposal.

27. Earnings per Share

(a) Basic earnings per share for the years ended December 31, 2021 and 2020, is calculated as follows:

(in thousands of Korean won and in number of shares)		2021		2020
Profit for the year attributable to ordinary shares	₩	1,524,755,010	₩	1,196,924,544
Weighted average number of ordinary shares		148,659,354		145,724,906
Basic earnings per share (in Korean won)	₩	10,257	₩	8,214

(b) Weighted average number of ordinary shares outstanding for the years ended December 31, 2021 and 2020, is calculated as follows:

(in number of shares)	2021						
	Number of ordinary shares outstanding	Cumulative shares					
Beginning balance	147,459,035	53,822,547,775					
Disposal of treasury shares	1,839,920	438,116,562					
	_	54,260,664,337					

Weighted average number of ordinary shares outstanding: $54,260,664,337 \div 365$ days = 148,659,354 shares

(in number of shares)	2020				
	Number of ordinary shares outstanding	Cumulative shares			
Beginning balance	145,447,795	53,233,892,970			
Treasury shares acquisition	(83,000)	(26,325,964)			
Disposal of treasury shares	2,094,240	127,748,640			
	<u>_</u>	53,335,315,646			

Weighted average number of ordinary shares outstanding: $53,335,315,646 \div 366$ days = 145,724,906 shares

(c) Diluted Earnings per share

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. The Company has stock options as dilutive potential ordinary shares. For the share options, a calculation is done to determine the number of shares that could have been acquired at fair value (determined as the average annual market share price of the Company's shares) based on the monetary value of the subscription rights attached to outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming the share options are exercised.

(in thousands of Korean won and in number of shares)		2021		2020
Profit attributable to the controlling ordinary shareholders				
of the Company	₩	1,524,755,010	₩	1,196,924,544
Profit for calculating diluted earnings per share		1,524,755,010		1,196,924,544
Weighted average number of ordinary shares outstanding		148,659,354		145,724,906
Stock option		1,344,737		805,705
Weighted average number of ordinary shares				
outstanding for calculating diluted earnings (loss) per				
share		150,004,091		146,530,611
Diluted earnings per share		10,165		8,168

28. Dividends

Dividends in respect of the year ended December 31, 2020, amounting to \forall 59,278 million, was paid in April, 2021. Details of the dividends are as follows:

		2021		2020
Shares eligible for dividends (in number of shares)		147,459,035		145,447,795
Dividend rate per share (in Korean won)		402		376
Cash dividends (in thousands of Korean won)	₩	59,278,532	₩	54,688,371

29. Cash Generated from Operations

Details of cash generated from operations and changes in assets and liabilities due to operations for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)		2021		2020
Profit for the year	₩	1,524,755,010	₩	1,196,924,544
Adjustments:				
Depreciation		40,899,567		36,963,536
Depreciation – ROU assets		9,267,181		7,966,256
Amortization		3,624,099		3,416,872
Gain on valuation of financial assets at fair value - profit or loss		(449,993,627)		(356,603,765)
Loss on valuation of financial assets at fair value -		(110,000,021)		(000,000,000)
profit or loss		49,166,221		39,489,048
Gain on transaction of financial assets at fair value -		// ·		/ ·
profit or loss		(4,696,264)		(6,304,070)
Loss on transaction of financial assets at fair value - profit or loss		1,982,910		-
Gain on disposal of investments in subsidiaries and associates		(28,564,360)		(35,666,870)
Loss on disposal of investments in subsidiaries and associates		1,030,094		-
Impairment loss of investments in subsidiaries and associates		99,747,208		109,381,071
Interest income		(5,275,649)		(4,956,097)
Interest expenses		13,900,708		43,883
Dividends income				•
Post-employment benefits		(346,854,161) 52,796,602		(46,848,446) 43,017,186
Income tax expenses		564,592,454 112,942,803		463,379,370 29,050,863
Share-based payment expenses Others				
		23,933,798		32,219,660
Changes in operating assets and liabilities, net: Decrease (increase) in trade receivables		11,797,230		(49,966,900)
Decrease in other receivables		16,774,685		30,409,146
Decrease (increase) in other current assets		(4,920,654)		28,285,849
Increase in other non-current assets		(4,365,104)		
		,		(35,498,546)
Increase (decrease) in other payables		(75,503,391)		129,758,002
Increase in accrued expenses		17,020,548		16,669,361
Increase in other liabilities		76,112,554		41,154,126
Increase (decrease) in long-term accrued expenses		(1,437,192)		6,010,207
Decrease in net defined benefit liabilities		(15,442,102)		(7,273,037)
Others	₩	(26,737,797)	₩	(2,687,593)
	V V	1,656,553,371	V V	1,668,333,659

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

(in thousands of Korean won)	2021			2020		
Reclassification of construction in progress	₩	32,165,462	₩	8,340,544		
Other payables arising from acquisitions of property and equipment		1,747,401		1,235,809		
Reclassification of current portion of long-term prepaid expenses		8,426,601		17,236,200		
Other receivable arising from disposals of investment in subsidiaries		(27,303,478)		27,303,478		
Increase in investments in subsidiaries due to issue of stock option		431,938		750,994		

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

(in thousands of	2021									
Korean won)			I	Liabilities from fi	nanc	ing activities				
		Short-term corrowings		Long-term borrowings		Debentures	Le	ase liabilities		Total
Beginning balance	₩	40,000,000	₩	-	₩	-	₩	44,461,443	₩	84,461,443
Cash flows - proceeds		158,905,500		351,297,700		1,588,456,944		-		2,098,660,144
Cash flows - repayment Recognized for the year -		(196,301,500)		-		-		(20,033,518)		(216,335,018)
lease		-		-		-		13,874,098		13,874,098
Disposal - lease		-		-		-		(425,478)		(425,478)
Amortization		-		-		-		8,772,023		8,772,023
Others ¹		(2,604,000)		(1,772,100)		48,370,520		(8,772,023)		35,222,397
Ending balance	₩		₩	349,525,600	₩	1,636,827,464	₩	37,876,545	₩	2,024,229,608

¹ Includes interest payments which are presented as operating activities in the separate statement of cash flows when paid and effects of changes in foreign currency exchange rate.

(in thousands of Korean won)	2020								
		Liabilities from fi							
		Short-term borrowings	Lea	ase liabilities		Total			
Beginning balance	₩	-	₩	57,458,310	₩	57,458,310			
Cash flows - proceeds		40,000,000		-		40,000,000			
Cash flows - repayment		-		(18,288,200)		(18,288,200)			
Recognized for the year - lease		-		5,296,414		5,296,414			
Amortization		-		1,744,285		1,744,285			
Others ¹		<u>-</u>		(1,749,366)		(1,749,366)			
Ending balance	₩	40,000,000	₩	44,461,443	₩	84,461,443			

¹ Includes interest payments which are presented as operating activities in the separate statement of

cash flows when paid.

30. Commitments and Contingencies

- (a) As at December 31, 2021, the Company has borrowing agreements with Kookmin Bank and other nine financial institutions with an aggregated credit limit up to ₩ 1,240,000 million, JPY 33,000 million and USD 200 million.
- (b) As at December 31, 2021, the Company has been provided with guarantees of ₩ 7,865 million from Seoul Guarantee Insurance and ₩ 1,112 million (available up to ₩ 4,700 million) from Shinhan Bank in relation to the performance and payment guarantee, respectively.
- (c) As at December 31, 2021, the Company has entered into a construction contract amounting to ₩ 424,437 million (outstanding amount of the contract: ₩ 21,222 million) with Samsung C&T Corporation in relation to a construction of a new building for the Company, and a construction contract amounting to ₩ 224,174 million (outstanding amount: ₩ 158,551 million) with HYUNDAI ENGINEERING & CONSTRUCTION CO.,LTD in relation to a construction of cloud data center and others. Also, the Company has entered into contracts to acquire land amounting to ₩ 51,000 million (outstanding amount: ₩ 100 million) for construction of cloud data center and others.
- (d) As at December 31, 2021, the Company is a defendant in 17 lawsuit cases filed with regard to patent infringement and compensation for damages (aggregate amounts of cases: ₩ 3,137 million), and the Company is a plaintiff in one lawsuit case filed with regard to compensation for damages (aggregate amount of the cases: ₩ 2,542 million). The outcome of these cases is uncertain as at the reporting date and the Company's management recognizes the provision in relation to the potential loss if these cases meet the condition for the recognition of the provision.
- (e) Details of significant capital commitments contracted in relation to funds owned by the Company as at December 31, 2021, are as follows:

(in thousands of Korean won)	Total commitment to invest		itment to Acc		Accumulated investment		Unexecuted amount	
General Atlantic LLC K-Fund II MIRAE ASSET-NAVER ASIA GROWTH INVESTMENT ¹	₩	177,825,000 107,387,200 500,000,000	₩	30,521,167 2,174,976 452,041,262	₩	147,303,833 105,212,224 47,958,738		
China Ventures Fund I, L.P. Sequoia Capital Global Growth Fund II		116,179,000 160,042,500		75,450,379 132,602,242		40,728,621 27,440,258		

¹ Contract amount in relation with investment in associate MIRAE ASSET-NAVER ASIA GROWTH INVESTMENT and MIRAE ASSET-NAVER ASIA GROWTH FUND.

- (f) With the resolution of the Board of Directors on March 27, 2020, and the Transparency Committee on April 9, 2020, the Company has entered into a loan agreement amounting to JPY 8.5 billion with NAVER J. Hub, a subsidiary of the Company, and a two-year payment guarantee contract for borrowings of NAVER J. Hub amounting to JPY 5 billion from Citi Bank Japan on April 13, 2020. Also, with the resolution of the Board of Directors on August 3, 2020, the Company has entered into a payment guarantee contract for borrowings of NAVER J. Hub amounting to JPY 35 billion for 3year maturity and JPY 21.6 billion for 5-year maturity from Mizuho Bank, and JPY 35 billion for 3year maturity and JPY 22.1 billion for 5-year maturity from SMBC.
- (g) As at December 31, 2021, the Company has entered into executives and employees' group injury insurance with KB insurance.
- (h) As at December 31, 2021, the Company holds shares of CJ Logistics Corporation, CJ ENM Co., Ltd. and Studio Dragon Corporation to reinforce and maintain strategic partnership with CJ corporate group affiliates. The shares acquired by the Company are restricted on disposal for a certain period and the Company has preferential purchase right and sale claim right in accordance with the mutual share exchange agreement.
- (i) With the resolution of the Board of Directors on March 16, 2021, the Company conducted an exchange of treasury shares (SHINSEGAE INTERNATIONAL Inc. and E-MART Inc.) to reinforce and maintain strategic partnership with SHINSEGAE corporate group affiliates. In connection with this exchange, the Company entered into a mutual agreement for preferential purchase right and sale claim right. The shares acquired by the Company are restricted on disposal for a certain period.
- (j) With the resolution of the Board of Directors on August 10, 2021, the Company entered into a contract for contribution in kind using treasury shares to reinforce and maintain strategic partnership with Cafe24 Corp. In connection with this contract, the Company entered into an agreement for preferential purchase right and right to nominate directors. The shares acquired by the Company are restricted on disposal for a certain period.
- (k) As at December 31, 2021, the Company provides time deposits of $\forall 37,200$ million as collaterals for the employees' loans from financial institutions.
- (I) As at December 31, 2021, the Company entered into a mutual agreement for preferential purchase right and sale claim right in relation to the Company's investments in MIRAE ASSET SECURITIES CO.,LTD. (exchange of treasury shares). The shares held by the Company are restricted on disposal for a certain period.
- (m) In relation to the investments in Tving Co., Ltd. held by the Group, as at December 31, 2021, the Company has drag-along rights that are exercisable in accordance with the contract terms. The investments are restricted on disposal for a certain period.
- (n) In relation to the acquisition of shares of WEVERSE COMPANY Inc., an associate, the Company plans to complete the acquisition of the final cumulative 49% shares on March 2, 2022 according to the shareholders' agreement. For the shares completely acquired, the contracting parties have entered into a mutual agreement for preferential purchase right and sale claim right. When certain

conditions are met, contracting parties can request for sales of shares. The shares acquired by the Company are restricted on disposal for a certain period.

31. Related Party Transactions

Details of subsidiaries, associates and joint ventures as at December 31, 2021 and 2020, are as follows:

2021

Subsidiaries

NAVER CLOUD, NAVER Cloud Asia Pacific, NAVER Cloud America, NAVER Cloud EUROPE, NAVER Cloud Japan, SB Next Media Innovation Fund, NAVER-KTB Audio Contents Fund, SpringCamp Early Stage Fund 1, SpringCamp Early Stage Fund 2, SVA Content Media, DoVentures Annex Fund, LP, Smart Spring Fund, SVA Soda Private Equity Partnership, Naver-Quantum Contents 1 Fund, C-Fund, C-Fund subfund 2, C-Fund sub fund 3, NAVER I&S, N Tech Service, Greenweb Service, Incomms, CommPartners, NIT Service, LINE Digital Frontier, N-Visions, NAVER CHINA, NAVER BAND, Works Mobile, Works Mobile Japan, SNOW, SNOW China, WEBTOON Entertainment, Watong Entertainment, SNOW Japan, NAVER Labs, SNOW China (Beijing), SNOW Inc., Broccoli Entertainment, Dongman Entertainment, Spring Camp, NAVER WEBTOON COMPANY, Playlist, Naver France, Lico, Yiruike Information Technology (Beijing), Amuse, NAVER J.Hub, Studio N, TBT Global Growth Fund I, Audiensori, NAVER VIETNAM, Semicolon Studio, SNOW VIETNAM, NAVER Financial, V.DO., NAVER Z, Naver Webtoon LLC, NF Insurance Service, YLAB Japan, Cake, NAVER Hands, Kream, NAVER WP I, LP, NAVER WP II, LLC, Wattpad corp., Wattsub, Wattpad Studios, WP Technology(UK), WP Technology, Wattpad Inc., Wattpad Studios(Cell Phone Swap), Namain, NAVER Z USA, C-Fund sub fund 4, NAER U.HUB (formerly, V Live)

Associates

NetMania, Synapsoft, BonAngels Pacemaker Fund, Korea Contents Mutual Aid Association, ARO In Tech, NAVER KIP Cheer up! Gamers Fund, Future Creation NAVER Stonebridge Early Stage Start-up Fund, Future Creation NAVER-SB Startup Investment Fund, Digital Media Partners II, NAVER-Suprema Youth Foundation No.5 Investment Fund, NSPACE, Silicon Cube, One Store, Mirae Asset-NAVER New Growth Fund 1, K-Fund I, YG NAVER Contents & Lifestyle Fund, Studio Horang, The Grim Ent., Soran Media Venture Fund I, Fast Cowell Private Equity Fund, Laigu Technology(Shenzhen), BIKPIKCHYUHKOMIKSEU CO.,LTD., AXIS, MiraeAsset MAPS Private Placement Real Estate 62, Studio JHS, Mirae Asset-NAVER Asia Growth Fund, CHINA VENTURES FUND I, L.P., CINAMON GAMES CO., LTD., MIRAE ASSET-NAVER ASIA GROWTH INVESTMENT, JQ Comics, ZK Studio, Soo COMICS, ALLIANCE INTERNET, China Ventures Fund I, LogisValley BacNinh, FAMOUS STUDIO, DHP private equity fund 3, CONG TY CO PHAN RBW CIETNAM, PLACE A INC., DoVentures Fund I-A, L.P., SEUTYOODIOMUL, SMEJ Plus, HAVIT, Smart Korea Naver-Stonebridge Rising Investment Associate, Carousell Pte, Seno, Next Library, SHINEWANT TECHNOLOGY, Unblock Ventures, JDW Taxi, A Holdings (formerly, LINE)1, Z Holdings, AlphaPurchase, ASKUL, Carview, Actapio, Dynatech, eBOOK Initiative Japan, GYAO, Ikyu, Netrust, ValueCommerce, YJ1 Investment Partnership, YJ2 Investment Partnership, YJ3 Investment Partnership, YJ US, PayPay Investments, Z Corporation, ASKUL LOGIST, BUSINESSMART, Charm, Sportsnavi, Magne-Max Capital Management, Techbase VietNam, Z Lab, Z Fund No.1 Investment Limited Partnership, dely, YJ Card, PayPay Asset Management, ZOZO, ZOZO Technologies, Stanby, Z Financial, Yahoo Japan, mybest, Global Equity Big Data Strategy Fund, Shanghai ZOZO, yutori, Z Intermediate Holdings, Z Fund Investment, ZFI Investment Limited Partnership, TSUMAGOI MEISUI, LINE Corp¹, Line Fukuoka, Gatebox, LINE TICKET, LINE Growth Technology, LINE Ventures Global, LINE Ventures Japan, LINE SOUTHEAST ASIA, LINE Pay, LINE Biz Plus, LINE Pay Taiwan, LINE VIETNAM, MARKT, Line Plus, LINE PLAY, LINE Taiwan, LINE Company (Thailand), LINE TECHNOLOGY VIETNAM, LINE Digital Technology (Shanghai), PT.LINE PLUS INDONESIA, LFG HOLDINGS, LINE UP, LINE Studio, LINE Financial, LINE Financial Plus, LINE Financial Taiwan, LINE Credit, LINE Securities Preparatory, LVC, LVC USA, LINE TECH PLUS, LINE Financial Asia, JDW, LINE Healthcare, HOP, LITGP 1, LIT Fund 1 LP, Line Friends, LINE Friends, LINE Friends (Shanghai) Commercial Trade, LINE Friends Japan, LINE Friends Taiwan, LINE Conomi, Drama & Company, myBridge, Mission Worldwide Group,

2021

CHOCO Media, PayPay Bank, Z Venture Capital, PayPay Insurance Service, A to Z Co., Ltd., SAM STUDIO CO.,LTD. ONLYONE Entertainment, WEVERSE COMPANY, Sasom Company, Unblock, Unchain, Grayhash, ZVC Fund I LLP, ZVC1 Investment Partnership, Z Data Technology, ATC, CoinDesk Japan, FROSK, N.Avenue, SOLOEL, Zahlen, BridalConcierge, Z Life Portal, Lizenz, AlphaPurchase Shanghai, KENKEY, OJI, Surfmonkey Asia, Leaf, Work & Wellness, Chat Support Base, BrainCell, Anonymous Partnership1, Anonymous Partnership2, Anonymous Partnership4, Partier KC Liability Company, Alpha Purchase(Dalian) Techology, PayPay Financial, Z Shopping, Z Life Media, Bespokify, STV FUND, LP, ZOZO Apparel USA, ZOZO NEW ZEALAND, Bespokify (Thailand), Bespokify (Vietnam), NANTONG ZHUOTENG INFORMATION TECHNOLOGY, Shanghai Jingxiang Information Technology, SEISHO TRANSPORT, Kioicho Daiichi Financial Preparations, Kioicho Daisan Financial Preparations, LINE Marketing Partner, LINE Business Support, LINE Euro America, LINE Investment Technologies, NAVER CO., Ltd, Studio Ohohoee, Geulbitneun Iyakiggun, Studio 389, Makma, SODA, K-Fund II, Cafe24, YUMI studio, M.Contens LABS, Munpia Webtoon Cultural Industry Specialized company. SPC, VerseWork, JAYPLEMEDIA, Munpia, YN Culture & Space, FUTURE INNOVATION PRIVATE EQUITY FUND III, A2Z-IP Fund, TAIL Start-up Fund I, China Ventures Fund II, L.P., LINE NEXT, plants tech, Gorilla NCORE Metaverse Fund I, Paramark KB Fund I, ICART GROUP, ZEP, BIFROST, SHINE PARTNERS, Feelway Co., Ltd., Cafe24 Phillippines, YANJI SIMPLEX Scientific Technology, SIIC, CAFE24 JAPAN, JCAPPAREL, FASTBOX.INC, PIMZ, CAFE24 VIETNAM, CAFE24, CAFE24 CHINA, CAFE24 INDIA, CAFE24 AMERICA, Simplexi Hangzhou, ROKMEDIA, PT Icart Group Indonesia, Icart Malaysia, HappyFresh(Thailand), Icart Venture Philippines, LUXURY LOAN CO., LTD, **FASTBOX JAPAN**

Joint ventures

JobsN, YEOPEUL, Cineplay, Designpress, China Lab, Interbiz (Dong-A JV), Artitian (Kyunghyang Daily News JV), Agroplus (Korea Business JV), Schooljam (EBS JV), Sumlab (Munhwa Ilbo JV), Techplus (Electronic Times JV), DONGGEURAMLEE (Hankook Ilbo JV), Law and Media (Money Today JV), DANAA Data, Mirai Fund, Baecomm, Mission World Group

2020

Subsidiaries

NAVER CLOUD, NAVER Cloud Asia Pacific, NAVER Cloud America, NAVER Cloud EUROPE GmbH, NAVER Cloud Japan, SB Next Media Innovation Fund, NAVER-KTB Audio Contents Fund, SpringCamp Early Stage Fund 1, SpringCamp Early Stage Fund 2, SVA Content Media, DoVentures Annex Fund, LP, Smart Spring Fund, SVA Soda Private Equity Partnership, Naver-Quantum Contents 1 Fund, NAVER I&S, N Tech Service, Greenweb Service, Incomms, CommPartners, NIT Service, Search Solution, N-Visions, NAVER CHINA, NAVER BAND, Works Mobile, Works Mobile Japan, V Live, SNOW, SNOW China, WEBTOON Entertainment, Watong Entertainment, SNOW Japan, NAVER Labs, SNOW China (Beijing), SNOW Inc., Broccoli Entertainment, Dongman Entertainment, Spring Camp, NAVER WEBTOON COMPANY Corporation, Playlist, Naver France, Company AI, Lico, Yiruike Information Technology (Beijing), Amuse, Drama & Company, HEART IT, NAVER J.Hub, Studio N Corporation, Shine Interactive, TBT Global Growth Fund I, Audiensori, Xiaying Entertainment, Mission Worldwide Group, CHOCO Media, NAVER VIETNAM, Semicolon Studio, SNOW VIETNAM, NAVER Financial, V.DO., NAVER Z Corporation, Naver Webtoon LLC, NF Insurance Service, YLAB Japan, Cake, NAVER Hands, C-FUND, Line, Line Euro America, LINE Plus, LINE Play, LINE TECHNOLOGY VIETNAM, Line Fukuoka, LINE Pay, LINE SOUTHEAST ASIA, LINE Taiwan, LINE Digital Technology (Shanghai), LINE Company (Thailand), LINE Book Distribution, Line Biz Plus, LINE Ventures, LINE Friends, Webpay Holdings, Webpay, LINE Pay Taiwan, PT.LINE PLUS INDONESIA, LINE Friends, Gatebox, Beijing Wangzhongwenda Technology, LINE Friends(Shanghai) Commercial Trade, BALIE, LINEFriends Japan, LINE TICKET, LFG HOLDINGS, SHINEWANT TECHNOLOGY, LINE Studio, LINE Up, Nemustech, LINE VIETNAM,

2020

Next Library, Unblock, Markt, LINE Financial, LVC, LINE Financial Plus, myBridge,LVC USA, LINE TECH PLUS, LINE Credit, LINE Growth Technology, LINE Securities Preparatory, LINE Ventures Global, LINE Ventures Japan, LINE Digital Frontier, Unblock Ventures, Unchain, LINE Financial Taiwan, Mirai Fund, LINE Financial Asia, LINE Conomi, LINE Bank Preparatory, GrayHash, LINE Healthcare, LINE Pay hokkaido, LINE Friends Taiwan, LINE business support, HOP, LINE Investment Technologies, LINE Split Preparation, JDW, JDW Taxi, DEMAE-CAN, SATSUMAEBISUDO.

Associates

NetMania, Synapsoft, BonAngels Pacemaker Fund, ARO In Tech, NAVER KIP Cheer up! Gamers Fund, Korea Contents Mutual Aid Association, Epic Voyage, LINE Music, Future Creation NAVER Stonebridge Early Stage Start-up Fund, Future Creation NAVER-SB Startup Investment Fund, Digital Media Partners II, NAVER-Suprema Youth Foundation No.5 Investment Fund, NSPACE, Silicon Cube, Transcosmos Online Communication, One Store, Mirae Asset-NAVER New Growth Fund 1, K-Fund I, YG NAVER Contents & Lifestyle Fund, Studio Horang, The Grim Ent., Soran Media Venture Fund I, Fast Cowell Private Equity Fund, Laiqu Technology (Shenzhen), FOLIO, Bigpicture Comics, iPASS, AXIS, MiraeAsset MAPS Private Placement Real Estate 62, FOLIO Asset Management, LENSA, LINE Mobile, Venture Republic, Studio JHS, Mirae Asset-NAVER Asia Growth Fund, CHINA VENTURES FUND I, L.P, Cinamon Games, LINE Games, MIRAE ASSET-NAVER ASIA GROWTH INVESTMENT, VENTURE REPUBLICGLOBAL, Trip101, FOLIO Holdings, JQ Comics, PT. Bank KEB Hana Indonesia, ZK Studio, Soo COMICS, PIG Corporation, Studio 4LEAF Corporation, Stairs, Msquared Management, Oozoo, InnoAG Inc., MFC, Connection Labs, Alliance Internet, China Ventures Fund I, LogisValley BacNinh, Famous Studio Corp., VRex Lab Co., Ltd, CONG TY CO PHAN RBW VIETNAM, DHP private equity fund 3, Meerkat Games Co., Ltd., Zerogames, Japan Food Delivery, PIG BKK, PLACE A (formerly, Lano Co., Ltd), YN Culture & Space, SMEJ Plus, LINE MAN, LINE Man (THAILAND), DoVentures Fund I-A, LP, AIRI, Inc., Wongnai Media, Studio Mul, Have It Co., Ltd., Smart Korea Naver-Stonebridge Rising Investment Association, Carousell Pte Ltd

Joint ventures

LINE PROJECT, Collab+LINE, Lantu Games, Beijing Lantu Times Technology, RABBIT-LINE PAY, JobsN, YEOPEUL, Cineplay, Designpress, China Lab, Interbiz (Dong-A JV), Artitian (Kyunghyang Daily News JV), Agroplus (Korea Business JV), Schooljam (EBS JV), Sumlab (Munhwa Ilbo JV), Techplus (Electronic Times JV), Animal and Human Story (Hankook Ilbo JV), Law and Media (Money Today JV), Kasikorn LINE, DANAA Data, LINE Bank Taiwan

¹ LINE, which was a subsidiary of the Company, changed its name to A-Holdings as a result of business integration completed during the year ended December 31, 2021. During the year ended December 31, 2021, the existing division and investment securities of LINE were transferred to LINE corp, a subsidiary of A-Holdings.

Details of other related parties of the Company as at December 31, 2021 and 2020, are as follows:

Type	2021	2020
Others ¹	Orpeo Sound Works, Bravepops, Studio Pot, ITSB, ESPRESO MEDIA, Luna Soft, Mesh Korea, Mystic Story, Jakga Company, Happybean, Naver Cultural foundation, Naver Connect, Jieum, Line Games, PiG, Studio 4LEAF, ZERO Games, HDJunction, Huniverse Global, Studioswingbat, FASSTO, DOHANDS	Fandom, Orpeo Sound Works, Bravepops, Studio Pot, ITSB, ESPRESO MEDIA, Luna Soft, ICART GROUP, Mesh Korea, Mystic Story, Jakga Company, Happybean, Naver Cultural foundation, Naver Connect, Jieum

¹ Although these entities are not related parties of the Company in accordance with Korean IFRS 1024, they belong to the same large enterprise group according to the Monopoly Regulation and Fair Trade Act.

Transactions with related parties including operating revenues and operating expenses for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)	2021							
	0	Operating revenues and others ⁵ Operating expens					ises	and others
Туре		Operating revenues		Others		Operating expenses	Others	
Subsidiaries								
NAVER CLOUD	₩	22,039,274	₩	1,632,917	₩	546,468,117	₩	-
NAVER Financial		18,990,557		1,674,911		78,187,509		16,903,208
Works Mobile		1,487,333		79,708		37,523,578		-
Naver Webtoon LLC		1,287,913		49,065		59,081,127		-
CommPartners		127		-		11,603,138		-
Greenweb Service		-		-		36,424,576		-
Incomms		-		69,384		18,357,512		-
NAVER I&S		25,194		214,096		12,925,632		-
Naver France		-		-		27,911,011		5,761
N Tech Service		-		8,482		43,790,112		-
Search Solution ⁴		3,009		15,084		1,964,471		-
Playlist		4,000		-		1,063,439		-
SNOW		201,080		-		623,000		-
NIT Service		-		-		1,253,628		-
Audiensori		-		-		1,133,180		-
NAVER HANDS		-		5,508		978,363		-
NAVER CHINA		-		-		16,681,698		-
NAVER BAND		-		-		5,141,376		-
NAVER J.Hub		-		1,685,323		-		83,346

(in thousands of Korean won)	2021							
	Operating revenue	es and others ⁵	Operating expens	es and others				
Туре	Operating revenues	Others	Operating expenses	Others				
NAVER VIETNAM	-	-	1,270,401	-				
Works Mobile Japan	-	-	286,690	-				
A Holdings (formerly, LINE) ²	2,972,179	-	143,805	-				
LINE Pay ²	-	-	10,708	-				
LINE VIETNAM ²	-	-	269,998	-				
LINE Friends ²	-	-	1,160,716	-				
LINE Plus ²	486,707	3,195	713,213	-				
LINE Play ²	17,110	-	-	-				
Markt ²	277,372	-	5,511,645	-				
LINE Healthcare ²	717,197	-	-	-				
Others	197,339	52,952	74,462	13,437				
Associates								
LINE ²	23,614,815	651,404	997,238	620,410				
LINE Conomi ²	506,122	790	-	-				
LINE Pay ²	565,419	-	35,504	-				
LINE VIETNAM ²	-	-	1,618,183	-				
LINE Friends ²	2,254	-	3,040,111	6,322				
LINE Plus ²	1,606,656	12,595	180,765	-				
Markt ²	706,213	-	29,357,412	-				
Synapsoft	-	-	850,000	-				
ARO In Tech	-	-	801,991	476				
Cafe24	219,911	-	4,509,745	-				
Line Studio	1,987	-	909,040	-				
Line Games ³	20,000	-	-	-				
Others	387,883	78,530	25,467	4,069				
Joint ventures								
JobsN	1,221,579	-	2,341,213	-				
Cineplay	884,000	-	1,891,560	-				
YEOPEUL	686,307	-	1,780,715	-				
Interbiz (Dong-A JV)	398,286	-	1,780,824	-				
Sumlab (Munhwa Ilbo JV)	382,286	-	1,518,465	-				
Agroplus (Korea Business JV) DONGGEURAMLEE (Hankook	241,079	-	1,391,737	-				
Ilbo JV)	324,429	-	1,695,019	-				
Designpress	191,186	-	1,454,175	-				
Law and Media (Money Today JV)	43,071	-	952,546	-				
China Lab	85,294	-	1,374,864	-				

(in thousands of Korean won)	2021							
	Operating revenue	es and others ⁵	Operating expenses and others					
Туре	Operating revenues	Others	Operating expenses	Others				
Schooljam (EBS JV) Artitian (Kyunghyang Daily News JV)	13,516	-	712,799 1,178,346	-				
Techplus (Electronic Times JV)	1	-	1,573,718	-				
Others								
Naver Connect ¹	177,571	44,412	-	13,117,833				
Happybean foundation ¹	3,240	-	20,200	10,013,306				
Espreso Media	-	-	490,792	-				
MYSTIC STORY	-	-	117,826	-				
Line Games ³	100,000	-	73	-				
Others	11,235	-	15,007	-				

¹ Although these entities are not related parties of the Company in accordance with Korean IFRS 1024, they belong to the same large enterprise group according to the Monopoly Regulation and Fair Trade Act.

⁵ The amounts above exclude ₩ 8,079 million paid by the Company for the related parties.

(in thousands of Korean won)		2020							
	0	perating reven	ues	and others ³	Operating expenses and others				
Туре	Operating revenues		Others		Operating expenses		Others		
Subsidiaries									
NAVER CLOUD	₩	20,213,563	₩	230,502	₩	402,343,252	₩	-	
NAVER I&S		22,258		328,060		11,857,975		-	
N Tech Service		-		14,311		46,927,346		-	
Greenweb Service		-		-		33,696,724		-	
Incomms		-		140,728		18,105,562		-	
CommPartners		-		-		10,479,402		-	
NIT Service		-		-		1,166,348		-	
Line		20,812,877		321,002		733,854		-	
LINE Plus		2,368,104		24,992		6,690,852		-	
LINE Friends		224,320		-		6,383,775		234,720	

² These entities have been reclassified from subsidiaries to associates as the business integration of LINE and SoftBank Corp. has been completed during the year ended December 31, 2021.

³ These entities have been excluded from associates and included in the same large enterprise group and accordingly reclassified to other related parties as the business integration of LINE and SoftBank Corp. has been completed during the year ended December 31, 2021.

⁴ Merged into NAVER during the year ended December 31, 2021.

(in thousands of Korean won)	2020							
	Operating revenue	es and others ³	Operating expenses and others					
Туре	Operating revenues	Others	Operating expenses	Others				
LINE Conomi	3,075,138	-	-	-				
LINE Healthcare	2,636,755	-	-	-				
Search Solution	3,752	30,636	3,440,100	-				
NAVER CHINA	-	-	14,242,143	-				
NAVER BAND	-	-	6,172,411	-				
Works Mobile	1,702,131	141,929	33,137,127	-				
NAVER WEBTOON COMPANY	202,761	90,982	29,012,796	-				
Playlist	8,634	-	2,561,288	-				
Naver France	-	-	28,942,035	-				
Company AI	940	25,944	1,510,095	-				
NAVER J.Hub	-	1,085,754	14,776	-				
Audiensori	-	-	1,041,572	-				
NAVER VIETNAM	-	-	5,532,264	-				
NAVER Financial	15,067,743	1,168,206	66,867,434	-				
Naver Webtoon LLC	1,901,630	32,060	32,045,122	-				
Markt	6,267		23,219,809					
Others	349,928	212,166	2,259,593	22,991				
Associates								
KG Allat ²	-	-	106,240	-				
Synapsoft	-	-	850,000	-				
ARO In Tech	-	-	1,301,243	812				
AXIS	-	-	194,560	-				
Others	121,000	-	38,438	162,919				
Joint ventures								
JobsN	1,149,500	-	2,330,862	-				
YEOPEUL	456,643	-	1,744,649	-				
Cineplay	24,400	-	1,289,200	-				
Designpress	216,527	-	1,420,045	-				
China Lab	27,214	-	1,382,810	-				
Interbiz (Dong-A JV)	383,271	-	1,736,390	-				
Artitian (Kyunghyang Daily News JV)	-	-	1,155,575	-				
Agroplus (Korea Business JV)	287,445	-	1,310,331	-				
Schooljam (EBS JV)	-	-	1,090,539	-				
Sumlab (Munhwa Ilbo JV)	133,714	-	1,444,181	-				
Techplus (Electronic Times JV) DONGGEURAMLEE (Hankook	-	-	1,782,217	-				
Ilbo JV)	32,071	-	1,347,268	-				

(in thousands of Korean won)	2020								
	Operating revenue	es and others ³	Operating expenses and others						
Туре	Operating revenues	Others	Operating expenses	Others					
Law and Media (Money Today JV)	39,929	-	1,163,686	-					
Others									
Happybean foundation ¹	12,238	-	-	8,137,552					
Espreso Media	-	-	358,208	-					
Luna Soft	-	-	83,467	-					
Naver Cultural foundation ¹	-	-	-	6,000,000					
Naver Connect ¹	13,968	67,152	4,874	7,000,000					

¹ Although these entities are not related parties of the Company in accordance with Korean IFRS 1024, they belong to the same large enterprise group according to the Monopoly Regulation and Fair Trade Act.

² This entity is excluded from associates due to the disposal of shares during the year ended December 31, 2021 and transaction amount before the exclusion from associates are disclosed.

³ The amounts above exclude ₩ 9,871 million paid by the Company for the related parties.

Outstanding balances of receivables due from and payables due to related parties as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)	2021									
(III thousands of Norsair work)		Re	ceivables		2021		Paya	bles		
	Trade receivables	re	Other ceivables d others ¹		Loans	ı	Other payables	Le d	easehold eposits d others ¹	
Subsidiaries										
NAVER Financial	₩ 104,916,893	₩	1,922,874	₩	_	₩	63,546,332	₩	1,451,192	
NAVER CLOUD	3,497,214		2,630,747		-		70,521,350		1,892,770	
Naver Webtoon LLC	902,223		2,043,615		-		9,529,880		1,484,943	
Works Mobile	157,772		1,723,387		_		5,213,422		1,147,554	
NAVER I&S	3,467		2,551,751		_		1,330,103		985,837	
NAVER Labs	7,021		400,681		-		6,326		87,704	
CommPartners	974		18,215		-		1,194,974		-	
Lico	_		417,986		-		-		294,624	
Greenweb Service	73		2,082		-		3,645,039		-	
N Tech Service	11		163,573		-		4,153,862		112,596	
Incomms	-		92		-		1,788,645		57,816	
NAVER France	-		43,385		-		14,989,559		_	
NAVER CHINA	-		79,842		-		1,421,101		-	
NAVER J.Hub	-		3,501,886		87,570,400		91,862		715,883	
NAVER VIETNAM	-		250,236		-		826,143		-	
LINE Digital Frontier	-		-		36,058,400		-		-	
NAVER BAND	-		39,089		-		514,052		-	
SNOW	3,392		124,973		-		404,520		-	
Playlist	4,400		-		-		467,500		-	
NAVER HANDS	-		-		-		303,070		4,590	
Audiensori	-		-		-		216,390		-	
Others	99,681		34,983		-		284,625		19,021	
Associates										
LINE	12,622,181		973,851		-		336,157		-	
LINE Conomi	-		790		3,605,840		-		-	
LINE Plus	51,118		156,034		-		7,682		442,130	
Markt	-		-		-		1,371,354		-	
LINE Friends	221		8,508		-		931,047		-	
Line Biz Plus	274		8,899		-		-		671,561	
LINE Up	181		854		-		999,944		-	
Synapsoft	-		-		-		220,000		-	
Cafe24	-		-		-		1,064,870		12,397	
Others	86,273		27,984		-		170,879		71,680	
Joint ventures										
JobsN	52,499		-		-		12,884		-	
Cineplay	70,400		-		-		158,117		-	
Agroplus (Korea Business	45 000						227 404			
JV)	15,800		-		-		327,101		-	

141,389

36,300

Sumlab (Munhwa Ilbo JV)

(in thousands of Korean won)	2021								
_		Receivables		Payal	Payables				
		Other			Leasehold				
	Trade	receivables		Other	deposits				
	receivables	and others ¹	Loans	payables	and others ¹				
Interbiz (Dong-A JV)	43,450	-	-	76,909	-				
China Lab	26,400	-	-	217,900	-				
Techplus (Electronic Times									
JV)	-	-	-	385,876	-				
DONGGEURAMLEE									
(Hankook Ilbo JV)	30,250	-	-	140,442	-				
YEOPEUL	58,850	-	-	15,848	-				
Others	22,550	-	-	70,222	-				
Others									
Naver Connect ²	196,730	2,989	-	97	37,014				
Espreso Media	-	-	-	349,400	-				
Others	11,328	2,750	-	-	-				

¹ Includes lease receivable.

There is no loss allowance recognized in relation to the receivables due from related parties.

(in thousands of Korean won)		2020								
			Re	ceivables				Payables		
		Other							Le	asehold
		Trade		ceivables				Other		eposits
	re	ceivables	an	d others ¹		Loans	l	payables	an	d others
Subsidiaries										
NAVER Financial	₩	88,032,882	₩	1,691,744	₩	-	₩	72,372,895	₩	786,022
Line		4,894,079		18,598,213		-		203,655		-
NAVER CLOUD		2,581,065		5,803,347		-		133,995,964		1,892,770
Naver Webtoon LLC		828,733		5,653,990		-		8,698,090		1,484,943
Works Mobile		312,238		3,540,932		-		5,588,826		1,147,554
LINE Plus		230,275		789,075		-		1,171,275		196,482
N Tech Service		39,737		361,571		-		5,056,861		112,596
NAVER I&S		12,478		3,761,572		-		1,314,838		915,524
CommPartners		508		11,412		-		1,046,453		-
Incomms		7		88		-		1,773,846		57,816
Playlist		6		-		-		1,023,000		-
LINE Friends		1		14,321		-		2,969,248		-
Greenweb Service		-		1,725		-		3,549,121		-
NAVER CHINA		-		65,807		-		1,216,235		-
Naver France		-		63,376		-		15,547,856		-
NAVER J.Hub		-		1,114,331		89,612,100		8,872		-
Others		1,389,315		5,645,141		-		3,124,626		1,890,744

² Although these entities are not related parties of the Company in accordance with Korean IFRS 1024, they belong to a same large enterprise group according to the Monopoly Regulation and Fair Trade Act.

(in thousands of Korean won)	2020									
_		Receivables		Payables						
		Other		Leaseh						
	Trade	receivables		Other	deposits					
	receivables	and others ¹	Loans	payables	and others					
Associates										
Synapsoft	-	-	-	220,000	-					
ARO In Tech	-	-	-	65,808	-					
K-Fund I	-	305,995	-	-	-					
CHINA VENTURES FUND I,										
L.P	-	27,303,478	-	-	-					
Others	11,000	76	-	-	-					
Joint ventures										
YEOPEUL	117,150	-	-	26,917	-					
JobsN	110,000	-	-	25,683	-					
Sumlab (Munhwa Ilbo JV)	23,100	-	-	212,193	-					
Law and Media (Money										
Today JV)	6,050	-	-	101,705	-					
Cineplay	-	-	-	101,389	-					
China Lab	-	-	-	256,453	-					
Techplus (Electronic Times										
JV)	-	-	-	274,444	-					
Others	68,200	-	-	201,967	-					
Others										
Naver Connect ²	5,072	200	-	1,451	37,014					
Happybean foundation ²	315	1,324	-	-	-					
Espreso Media	-	-	-	349,400	-					
Luna Soft	-	-	-	17,561	-					
Naver Cultural foundation ²	-	522	-	-	-					

¹ Includes lease receivable.

There is no loss allowance recognized in relation to the receivables due from related parties.

² Although these entities are not related parties of the Company in accordance with Korean IFRS 1024, they belong to a same large enterprise group according to the Monopoly Regulation and Fair Trade Act.

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

(in thousands of Korean won)			2021		
	Contributions in cash	Dividends received and others	Loans	Collections ¹	Repayments ¹
Subsidiaries					
WEBTOON Entertainment	₩ 313,201,424	₩ -	₩ -	₩ -	₩ -
SNOW	119,999,937	-	-	-	-
Smart Spring Fund	7,000,000	-	-	-	-
NAVER WP I, LP	2,807,628	-	-	-	-
Wattpad	698,168,630	-	-	-	-
SB Next Media Innovation					
Fund	-	22,424,832	-	-	-
SVA Soda Private Equity Partnership		20,643,070			
NAVER I&S	-	20,043,070	-	1,556,907	-
Works Mobile			_	2,038,079	
N Tech Service			_	191,918	
Lico	_	_	_	502,182	_
Amuse	_	_	_	3,251	_
NAVER WEBTOON				0,201	
COMPANY	2,000,066	-	-	21,389	-
Naver Webtoon LLC	-	-	-	2,637,288	-
NAVER CLOUD	-	-	-	3,362,585	-
NAVER Labs	70,000,000	-	-	-	297,739
NAVER J.Hub	114,565,320	-	-	-	-
TBT Global Growth Fund ${ m I}$	-	3,992,907	-	-	-
Spring Camp	20,000,000	-	-	-	-
DoVentures Annex Fund	1,403,885	-	-	-	-
SVA Content Media	-	29,252,046	-	-	-
SVA Content Media II	70,395,030	-	-	-	-
NAVER CHINA	4,986,456	7,355,967	-	-	-
LINE Digital Frontier	-	-	36,311,800	-	-
Associates					
MiraeAsset-Naver Asia					
Growth Fund	25,134,506	-	-	-	-
YN Culture & Space	5,871,205	-	-	-	-
K-Fund I	24,331,507	307,032	-	-	-
China Ventures Fund I, L.P.	41,457,351	113,028,413	-	-	-
MIRAE ASSET-NAVER ASIA GROWTH INVESTMENT	101,236,064	_	_	_	_
WEVERSE COMPANY	211,884,516		_	_	
NAVER-Suprema Youth	211,004,510	_	_	_	_
Foundation No.5 Investment					
Fund	-	3,259,293	-	-	-
NAVER KIP Cheer up!					
Gamers Fund	-	9,735,696	-	-	-
MiraeAsset MAPS Private		145 400 000			
Placement Real Estate 62	-	145,486,028	-	-	-

(in thousands of Korean won)	2021									
, ,	Contributions in cash	Dividends received and others	Loans	Collections ¹	Repayments ¹					
BonAngels Pacemaker Fund Future Creation NAVER- Stonebridge Early Stage	-	3,000,000	-	-	-					
Start-up Fund	-	12,164,499	-	-	-					
ARO In Tech	-	22,000	-	-	-					
Line Biz Plus	-	-	-	1,195,170	-					
LINE Plus	-	-	-	518,383	-					
LINE Up	-	-	-	357,399	-					
Smart Korea Naver- Stonebridge Rising										
Investment Association	2,000,000	-	-	-	-					
K-Fund II	2,174,976	-	-	-	-					
Soran Media Venture Fund I	-	252,827	-	-	-					
A Holdings	-	81,247,366	-	-	-					
Cafe24 ²	137,164,280	-	-	-	-					
Paramark KB Fund I	1,972,000	-	-	-	-					
China Ventures Fund II, L.P. FUTURE INNOVATION	75,450,379	-	-	-	-					
PRIVATE EQUITY FUND III Future Creation Naver-SB	45,831,000	178,924	-	-	-					
Startup Investment Fund DIGITAL MEDIA PARTNERS	-	851,850	-	-	-					
II	-	49,734	-	-	-					
LINE Conomi	-	-	3,664,640	-	-					
Others										
HD junction	2,900,005	-	-	-	-					

¹ Collections includes collection from loans and transaction resulting from leases, and repayments include transaction resulting from leases.

² Includes contribution in kind with its treasury shares amounting to ₩ 137,164 million.

(in thousands of Korean won)	2020								
	Contributions in cash	Dividends received and others	Loans ¹		Co	llections ¹	Repayments ¹	_	
Subsidiaries									
NAVER CLOUD	₩ -	- ₩ -	₩	-	₩	3,265,968	₩	-	
SB Next Media Innovation									
Fund	-	39,462,956		-		-		-	
SpringCamp Early Stage									
Fund 1	2,475,000	-		-		-		-	
SpringCamp Early Stage									
Fund 2	10,000,000	-		-		-		-	
SVA Content Media	16,774,282	<u>-</u>		-		_		-	

(in thousands of Korean won)	2020									
(Dividends								
	Contributions in	received and								
	cash	others	Loans ¹	Collections ¹	Repayments ¹					
DoVentures Annex Fund, LP	177,075	_	_	_	-					
Smart Spring Fund	2,000,000	_	_	_	-					
SVA Soda	22,002,860	_	_	-	-					
Naver-Quantum Contents 1	, ,									
Fund	6,250,000	-	-	-	-					
NAVER I&S	-	9,990,000	-	2,937,503	-					
N Tech Service	-	-	-	185,428	-					
Line	-	-	-	783,333,780	-					
LINE Plus	-	-	-	323,574	-					
Line Biz Plus	-	-	-	1,166,019	-					
LINE Friends	85,000,048	-	-	-	-					
LINE Up	-	-	-	522,592	-					
Works Mobile	42,000,069	-	-	1,988,370	-					
SNOW	70,000,070	-	-	269,344	-					
WEBTOON Entertainment	344,780,740	-	-	-	-					
NAVER Labs	-	-	-	-	289,066					
NAVER WEBTOON	00.000.440		- 4 - 0 - 00	40.000.744						
COMPANY ²	90,000,418	-	7,479,706	12,993,744	-					
Lico	-	-	-	485,200	-					
Amuse	-	-	-	3,141	-					
NAVER J.Hub	784,481,690	-	89,612,100	-	-					
NAVER VIETNAM	49,147,051	-	-	-	-					
Naver Webtoon LLC	47.000	-	5,515,029	1,090,488	-					
NAVER Hands	47,000	-	-	-	-					
Associates		050 000								
BonAngels Pacemaker Fund	-	250,000	-	-	-					
ARO In Tech NAVER KIP Cheer up!	-	21,200	-	-	-					
Gamers Fund	_	2,050,000	<u>-</u>	_	-					
Future Creation NAVER		2,000,000								
Stonebridge Early Stage										
Start-up Fund	-	2,208,000	-	-	-					
Future Creation NAVER-SB										
Startup Investment Fund	-	651,676	-	-	-					
NAVER-Suprema Youth Foundation No.5 Investment										
Fund	_	1,161,077	<u>-</u>	_	-					
Mirae Asset-NAVER New		.,								
Growth Fund 1	10,000,000	-	-	-	-					
K-Fund I	13,111,343	-	-	-	-					
MiraeAsset MAPS Private										
Placement Real Estate 62	-	3,277,327	-	-	-					
Mirae Asset-NAVER Asia	44400400	2 620 000								
Growth Fund CHINA VENTURES FUND I,	14,166,162	2,630,000	-	-	-					
L.P	62,227,060	33,471,156	_	_	-					
MIRAE ASSET-NAVER ASIA	58,134,328	11,724,434	_	-	-					
	,, - = -	, = -,								

(in thousands of Korean won)	2020								
	Contributions in cash	Dividends received and others	Loans¹	Collections ¹	Repayments ¹				
GROWTH INVESTMENT									
DHP private equity fund 3	200,000	-	-	-	-				
YN Culture & Space	1,974,950	-	-	-	-				
SMEJ Plus	38,366,926	-	-	-	-				
DoVentures Fund I-A, LP Smart Korea Naver- Stonebridge Rising	5,926,500	-	-	-	-				
Investment Association	2,000,000	-	-	-	-				
Carousell Pte Ltd Institute of Artificial	74,862,910	-	-	-	-				
Intelligence	3,000,000								
Others									
ESPRESO MEDIA	958,257	-	-	-	-				
Luna Soft	810,720	-	-	-	-				
ICART GROUP	1,750,150	-	-	-	-				
Mystic Story	12,000,055	-	-	-	-				

¹ Collections includes collection from loans and transaction resulting from leases, and repayments include transaction resulting from leases.

Details of payment guarantees provided by the Company for the related parties as at December 31, 2021, are as follows:

Туре	Name of company guaranteed	Name of creditors	Commenc ement date	Maturity date	Currency	Guarantee amount	Amount executed
Subsidiaries	NAVER J.Hub	Citi bank Mizuho, Bank	2020-04-13 2020-09-23	2022-04-15 2023-09-23	JPY JPY	5,000,000,000 35,000,000,000	5,000,000,000 35,000,000,000
		SMBC	2020-09-23 2020-09-23 2020-09-23	2025-09-23 2023-09-23 2025-09-23	JPY JPY JPY	21,599,711,347 35,000,000,000 22,079,769,077	21,599,711,347 35,000,000,000 22,079,769,077

The compensation paid or payable to key management (executive directors) for their services for the years ended December 31, 2021 and 2020, consists of:

(in thousands of Korean won)	2021			2020	
Short-term employee benefits	₩	5,404,500	₩	4,564,872	
Post-employment benefits		430,928		536,712	
Other benefits		310,078		5,720	

² During the year ended December 31, 2020, NAVER WEBTOON COMPANY (formerly, NAVER webtoon) spun off its business divisions excluding the Chinese business division and the Company received shares of WEBTOON Entertainment as a consideration of the merger through division.

Share-based payment expenses

1,423,922

472,703

32. Operating Segment Information

The Company consists of a single operating segment. Operating information by service types is reported to chief operating decision-maker. Such reported segment information does not differ from the amount presented in the separate statement of comprehensive income.

Operating revenues by service types for the years ended December 31, 2021 and 2020, are as follows:

(in thousands of		2021		2020		
Korean won)	Operating revenues		Ratio (%)	Operating revenues		Ratio (%)
Search Platform ¹	₩	3,293,777,077	65.63	₩	2,807,900,782	68.04
Commerce ²		1,492,376,551	29.74		1,089,658,062	26.41
FinTech ³		57,576,201	1.15		52,267,105	1.27
Contents ⁴		122,460,496	2.44		134,604,579	3.26
Cloud⁵		52,476,970	1.05		42,198,784	1.02
	₩	5,018,667,294	100.00	₩	4,126,629,312	100.00

¹ Search and Display

The Company changed the classification of operating information by service types during year ended December 31, 2020.

The revenue from contracts with customers by category for the years ended December 31, 2021 and 2020, is as follows

(in thousands of Korean won)	2021	2020	
By timing of revenue recognition			
Recognized at a point in time	₩ 3,435,852,156	₩ 2,922,974,715	;
Recognized over time	1,582,815,138	1,203,654,597	•
	₩ 5,018,667,294	₩ 4,126,629,312	<u>, </u>

² Shopping Search & Display, brokerage fees and others

³ Pay services and Digital finance

⁴ Music, V and others

⁵ Cloud and others

33. Business Combination of Entities under a Common Control

The Company merged with Search Solution on October 1, 2021. The Company applied the book amount method to account for the merger since the merger was a business combination under a common control. Details of the merger are as follows:

(a) Summary of merger

	Surviving Company	Weiged Company
Name of company	NAVER Corporation	Search Solution
Main business	Online information distribution business	Searching solution and engine development

Surviving Company

Morgod Company

The Company, as surviving company, acquired 100% of the share of Search Solution, the merged company, through an acquisition at the merger ratio of 1:0 at the merger date. The Company did not issue any new shares for the merger. Through the merger, the Company expects to enhance its competitiveness by increasing management efficiency.

(b) Accounting treatments of merger

The assets and liabilities acquired from the merger with Search Solution were recognized as the book amount on the consolidated financial statements of the Parent Company at the merger date. Also, the difference between the investments in subsidiaries on the separate financial statements amounting to $\mbox{$W$}$ 3,459 million and the book amount of acquired net assets amounting to $\mbox{$W$}$ 8,770 million amounts to $\mbox{$W$}$ 5,311 million, which was recognized as share premium.

The following table summarizes, the book amount of assets acquired and liabilities assumed:

(in thousands of Korean won)	Amount		
Investment securities in subsidiaries recognized in separate financial statements Recognized amounts of identifiable assets acquired and liabilities assumed	₩	3,459,255	
Cash and cash equivalents		10,476,255	
Intangible assets		11,917	
Trade and other receivables		240,256	
Other assets		40,343	
Deferred tax assets		482,226	
Trade and other payables		(1,201,840)	
Net defined benefit liabilities		(1,163,048)	
Other liabilities		(115,904)	
Fair value of identifiable net assets		8,770,205	
Difference (share premium)		5,310,950	

Report on Independent Auditor's Audit of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

To the Shareholders and Board of Directors of NAVER Corporation

Opinion on Internal Control over Financial Reporting

We have audited NAVER Corporation's (the "Company") Internal Control over Financial Reporting as at December 31, 2021, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting*.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as at December 31, 2021, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting*.

We also have audited, in accordance with Korean Standards on Auditing, the separate financial statements of the Company, which comprise the separate statement of financial position as at December 31, 2021, and the separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flow for the year then ended, and notes to the separate financial statements including a summary of significant accounting policies, and our report dated March 4, 2021, expressed an unqualified opinion.

Basis for Opinion on Internal Control over Financial Reporting

We conducted our audit in accordance with Korean Standards on Auditing. Our responsibility under these standards are further described in the *Auditor's Responsibilities for the Audit of Internal Control over Financial Reporting* section of our report. We are independent of the Company in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of internal control over financial reporting 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.

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

Management is responsible for designing, implementing and maintaining effective internal control over financial reporting, and for its assessment about the effectiveness of internal control over financial reporting, included in the accompanying Report on the Effectiveness of Internal Control over Financial Reporting.

Those charged with governance have the responsibilities for overseeing internal control over financial reporting.

Auditor's Responsibilities for the Audit of Internal Control over Financial Reporting

Our responsibility is to express opinion on the Company's internal control over financial reporting based on our audit. We conducted the audit in accordance with Korean Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

An audit of internal control over financial reporting involves performing procedures to obtain audit evidence about whether a material weakness exists. The procedures selected depend on the auditor's judgment, including the assessment of the risks that a material weakness exists. An audit includes obtaining an understanding of internal control over financial reporting and testing and evaluating the design and operating effectiveness of internal control over financial reporting based on the assessed risk.

Definition and Inherent Limitations of Internal Control over Financial Reporting

An entity's internal control over financial reporting is a process effected by those charged with governance, management, and other personnel, designed to provide reasonable assurance regarding the preparation of reliable separate financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea. An entity's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the entity; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of separate financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea, and that receipts and expenditures of the entity are being made only in accordance with authorizations of management and those charged with governance; and (3) provide reasonable assurance regarding prevention, or timely detection and correction of unauthorized acquisition, use, or disposition of the entity's assets that could have a material effect on the separate financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent, or detect and correct, misstatements. Also, projections of any assessment of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The engagement partner on the audit resulting in this independent auditor's report is Jong-Yup Han, Certified Public Accountant.

Seoul, Korea March 4, 2022

This report is effective as at March 4, 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 Company's internal control over financial reporting 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.

Report on the Effectiveness of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

To the Shareholders, Board of Directors and Audit Committee of NAVER Corporation

We, as the Chief Executive Officer ("CEO") and the Internal Control over Financial Reporting Officer of NAVER Corporation (the "Company"), assessed the effectiveness of the design and operation of the Company's Internal Control over Financial Reporting ("ICFR") for the year ended December 31, 2021.

The Company's management, including ourselves, is responsible for designing and operating ICFR. We assessed the design and operating effectiveness of ICFR in the prevention and detection of an error or fraud which may cause material misstatements in the preparation and disclosure of reliable financial statements. We designed and operated ICFR in accordance with *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting* established by the Operating Committee of Internal Control over Financial Reporting in Korea (the "ICFR Committee"). And, we conducted an evaluation of ICFR based on *Best Practice Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting* established by the ICFR Committee.

Based on the assessment results, we believe that the Company's ICFR, as at December 31, 2021, is designed and operating effectively, in all material respects, in accordance with *Conceptual Framework* for Designing and Operating Internal Control over Financial Reporting.

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

February 11, 2022

Seong-sook Han

Chief Executive Officer

Sang Jin Park

Internal Control over Financial Reporting Officer