

Meritz Securities Co., Ltd. and its subsidiaries

Consolidated financial statements
for the year ended December 31, 2021 and 2020
with the independent auditor's report

The logo for Meritz, featuring the word "meritz" in a bold, lowercase, red sans-serif font. The letter "i" has a red dot above it.

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Independent Auditors' Report

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Independent Auditors' Report

Based on a report originally issued in Korean

The Board of Directors and Stockholders
Meritz Securities Co., Ltd.

Opinion

We have audited the consolidated financial statements of Meritz Securities Co., Ltd. and its subsidiaries ("the Group"), which comprise the consolidated statements of financial position as of December 31, 2021 and 2020, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

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

Basis for Opinion

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

Emphasis of Matter

As a matter that does not affect our audit opinion, we draw attention to the following matter.

As described in note 48 to the consolidated financial statements, the ongoing COVID-19 pandemic has increased uncertainty and may have negative impacts on business performance and profits in financial investment industry, but the potential overall impact on the Group's consolidated financial statements and performance cannot be reliably determined as of now. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statement as of and for the year ended December 31, 2021. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

(1) Fair value measurement of derivatives and derivatives-linked securities ("DLS") classified as level 3

The Group classifies and discloses fair value of the financial instruments as level 3 when the inputs used in the valuation method that give significant impact on the result of the fair value measurement for the financial instruments are based on unobservable inputs.

As of December 31, 2021, the financial assets and financial liabilities of derivatives and DLS classified as level 3 are KRW 164,167 million and KRW 6,107,946 million, respectively. (Note 44.1.2, Fair value of financial assets and liabilities)

We identified the following risk and determined the fair value measurement of derivatives and DLS classified as level 3 as a key audit matter since the significant judgment and estimation by management are involved, and estimation uncertainties exist.

- Risk of misstatement of fair value due to incorrect application of valuation techniques for derivatives and DLS classified as fair value level 3 and unobservable inputs (variability of underlying assets, correlation and discount rate)

The following are the primary procedures we performed to address this key audit matter.

- We evaluated the effectiveness of certain internal controls on the fair value measurement of derivatives and DLS. These included the development and verification of valuation techniques and controls related to change in valuation techniques, the calculation and application of unobservable inputs, and controls related to change in unobservable inputs.
- We evaluated valuation techniques and unobservable inputs for the samples, and we compared the fair value measured with independently developed valuation techniques and unobservable inputs with the fair value presented by the management. For this procedure, valuation specialists with professional skill and knowledge, if necessary, were involved.

(2) Assessment of the allowances for credit losses for loans

The Group measures the allowances for credit losses for loans through estimating probability of default in respect of borrowers' credit rating, loss given default and forward-looking information. We identified the following risk and determined the allowances for credit losses for loans as a key audit matter since the credit rating requires high level judgment in considering qualitative and quantitative factors.

The Group recognized an allowance for credit losses for loans amounting to KRW 161,620 million as of December 31, 2021. (Note 11, Loans)

- Risk of misstatement in allowances for credit losses for loans due to management's bias or error on determination of credit rating.

The following are the primary procedures we performed to address this key audit matter.

- We evaluated testing the effectiveness of certain internal controls on allowances for credit losses for loans measurement. These included controls related to comparing internal credit ratings with credit ratings from credit rating company and evaluation of probability of default of credit rating company.
- We reviewed the reliability of the borrower's collateral Loan to Value ("LTV") and basic information used by the management, and evaluated the adequacy of the additional credit rating adjustments.
- We independently compared if any significant difference existed between the credit graded by management and re-measured credit ratings of borrower based on LTV, default information and others.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with K-IFRS, and for such internal control as management determines is

necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

We 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 the internal controls that we identify during our audit.

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements as of and for the year ended December 31, 2021 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditors' report is Min-Gyu Kim.

KPMG Samjong Accounting Corp.

KPMG Samjong Accounting Corp.

Seoul, Korea
March 8, 2022

This report is effective as of March 8, 2022, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

Meritz Securities Co., Ltd. and its subsidiaries

Consolidated financial statements
for the years ended December 31, 2021 and 2020

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

Alexander Heemoon Choi
Chief Executive Officer
Meritz Securities Co., Ltd.

Meritz Securities Co., Ltd. and its subsidiaries
Consolidated statements of financial position
as of December 31, 2021 and 2020

(Korean won in thousands)

	Notes	December 31, 2021	December 31, 2020
Assets			
Cash and due from banks	7, 37, 38, 41, 43, 44, 47	₩ 3,817,859,156	₩ 2,222,507,308
Financial assets measured at FVTPL	8, 23, 37, 38, 43, 44, 45, 47	26,982,344,185	24,740,241,541
Financial assets measured at FVOCI	9, 43, 44, 47	3,242,998,268	648,920,062
Investments in associates and joint ventures	10	1,512,864,231	1,666,295,119
Loans	11, 37, 43, 44, 45, 47	14,302,471,666	11,177,655,377
Lease assets	12, 43, 44, 47	1,559,536,486	1,300,298,950
Property and equipment	13	37,914,346	43,119,386
Investment property	14	151,170,975	6,838,530
Intangible assets	15	40,075,686	39,657,542
Net Defined benefit assets	21	87,429	-
Tax assets	35	208,693,939	182,270,631
Other assets	16, 37, 43, 44, 45, 47	2,252,222,746	1,819,186,755
Total assets		₩ 54,108,239,113	₩ 43,846,991,201
Liabilities			
Deposits	17, 37, 43, 44, 47	₩ 2,564,607,606	₩ 1,954,874,966
Financial liabilities measured at FVTPL	18, 23, 37, 43, 44, 45, 47	11,018,913,632	7,849,760,645
Borrowings	19, 37, 43, 44, 45, 47	32,166,837,112	26,474,744,774
Provisions	20, 39	20,974,113	16,036,648
Net Defined benefit liabilities	21	-	332,246
Tax liabilities	35	177,291,885	178,775,912
Other liabilities	22, 37, 43, 44, 45, 47	2,825,200,338	2,583,683,037
Total liabilities		48,773,824,686	39,058,208,228
Equity			
Issued capital	24	776,178,787	776,139,916
Hybrid bond	24	694,740,750	249,886,460
Capital surplus and adjustments	25, 26	1,270,246,360	1,548,087,012
Accumulated other comprehensive income	27	152,774,864	122,063,901
Retained earnings	28	2,316,028,606	1,918,191,404
(Regulatory reserve for credit loss)			
147,515,610 thousand won as of Dec, 31, 2021			
232,974,833 thousand won as of Dec, 31, 2020			
(Planned (reversal of) regulatory reserve for credit loss)			
33,876,123 thousand won as of Dec, 31, 2021			
(-) 85,459,223 thousand won as of Dec, 31, 2020			
Equity attributable to owners of the company		5,209,969,367	4,614,368,693
Non-controlling interests		124,445,060	174,414,280
Total equity		5,334,414,427	4,788,782,973
Total liabilities and equity		₩ 54,108,239,113	₩ 43,846,991,201

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

Meritz Securities Co., Ltd. and its subsidiaries
Consolidated statements of profit or loss and other comprehensive income
for the years ended December 31, 2021 and 2020

(Korean won in thousands, except for per share data)

	Notes	Year ended December 31, 2021	Year ended December 31, 2020
Operating revenue:			
Commission income	29	₩ 705,872,250	₩ 582,921,985
Gain on valuation and disposal of financial instruments	30	2,613,114,335	2,499,891,222
Gain on derivative valuation and transactions	23, 30	16,811,003,737	10,517,419,308
Interest income	31	1,160,415,434	1,099,735,693
Gain on valuation and disposal of loans	11	10,850,617	11,420,454
Gain on foreign exchange transactions		1,306,999,636	1,444,026,719
Lease income	12	175,500,795	148,320,290
Others	33	463,628,919	301,142,006
		<u>23,247,385,723</u>	<u>16,604,877,677</u>
Operating expenses:			
Commission expenses	29	(109,726,165)	(67,853,053)
Loss on valuation and disposal of financial instruments	30	(2,883,513,205)	(2,840,700,555)
Loss on derivative valuation and transactions	23, 30	(16,457,437,732)	(9,974,821,893)
Interest expenses	31	(393,312,733)	(424,883,745)
Loss on valuation and disposal of loans	11	(47,916,607)	(67,967,766)
Loss on foreign exchange transactions		(1,219,764,824)	(1,493,485,456)
General and administrative expenses	32	(772,910,601)	(605,441,095)
Lease expense	12	(94,148,552)	(80,667,167)
Others	33	(319,716,195)	(221,058,347)
		<u>(22,298,446,614)</u>	<u>(15,776,879,077)</u>
Operating income		948,939,109	827,998,600
Other income	34	153,808,092	81,526,925
Other expenses	34	(55,546,782)	(142,358,457)
Income before income taxes		<u>1,047,200,419</u>	<u>767,167,068</u>
Income tax expense	35	(264,275,878)	(202,032,626)
Net income	28	₩ 782,924,541	₩ 565,134,442
(Planned (reversal of) regulatory reserve for credit loss)			
33,876,123 thousand won for the year ended Dec, 31, 2021			
(-) 85,459,223 thousand won for the year ended Dec, 31, 2020			
(Adjusted net income after reserves for credit losses)			
740,992,638 thousand won for the year ended Dec, 31, 2021			
643,725,612 thousand won for the year ended Dec, 31, 2020			
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss:			
Gain (loss) on valuation of equity securities measured at FVOCI	9	₩ 19,430,293	₩ 37,196,505
Gain (loss) on disposal of equity securities measured at FVOCI		391,500	970
Gain (loss) on valuation of financial liabilities designated as measured at FVTPL		(422,375)	536,472
Remeasurement gain (loss) on Net defined benefit plan	21	(74,033)	(871,207)
Items that may be reclassified subsequently to profit or loss:			
Gain (loss) on valuation of debt securities measured at FVOCI	9	6,037,600	176,273
Decrease in valuation of investment stock using the equity method		1,263,197	(1,263,197)
Exchange differences on translation of foreign operations		4,476,281	(1,111,352)
		<u>31,102,463</u>	<u>34,664,464</u>
Total comprehensive income		₩ 814,027,004	₩ 599,798,906
Net income attributable to :			
Owners of the Company		₩ 774,868,761	₩ 558,266,389
Non-controlling interests		8,055,780	6,868,053
		<u>₩ 782,924,541</u>	<u>₩ 565,134,442</u>
Total other comprehensive income attributable to :			
Owners of the Company		₩ 31,102,463	₩ 34,664,464
Non-controlling interests		-	-
		<u>₩ 31,102,463</u>	<u>₩ 34,664,464</u>
Total Comprehensive income attributable to :			
Owners of the Company		₩ 805,971,224	₩ 592,930,853
Non-controlling interests		8,055,780	6,868,053
		<u>₩ 814,027,004</u>	<u>₩ 599,798,906</u>
Basic earnings per share (won)	36	₩ 1,201	₩ 865
Diluted earnings per share (won)	36	₩ 1,129	₩ 804

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

Meritz Securities Co., Ltd. and its subsidiaries
Consolidated statements of changes in equity
for the years ended December 31, 2021 and 2020
(Korean won in thousands)

	Issued capital	Hybrid bond	Capital surplus and adjustments	Accumulated other comprehensive income	Retained earnings	Non-controlling interests	Total
Balance at January 1, 2020	₩ 717,488,890	₩ 199,909,080	₩ 1,406,942,024	₩ 87,400,407	₩ 1,507,794,407	₩ 99,744,500	₩ 4,019,279,308
Dividends	-	-	-	-	(135,745,772)	-	(135,745,772)
Total comprehensive income:	-	-	-	-	-	-	-
Net income	-	-	-	-	558,266,389	6,868,053	565,134,442
Other comprehensive income:	-	-	-	-	-	-	-
Gain (loss) on valuation of equity securities measured at FVOCI	-	-	-	37,196,505	-	-	37,196,505
Gain (loss) on disposal of equity securities measured at FVOCI	-	-	-	-	970	-	970
Gain (loss) on valuation of debt securities measured at FVOCI	-	-	-	176,273	-	-	176,273
Remeasurements of the net defined benefit liabilities	-	-	-	(871,207)	-	-	(871,207)
Gain (loss) on valuation of financial liabilities designated as measured at FVTPL	-	-	-	536,472	-	-	536,472
Gain (loss) on valuation of investment stock using the equity method	-	-	-	(1,263,197)	-	-	(1,263,197)
Exchange differences on translation of foreign operations	-	-	-	(1,111,352)	-	-	(1,111,352)
Capital increase with consideration	58,651,026	-	141,030,891	-	-	-	199,681,917
Issue of hybrid bond	-	49,977,380	-	-	-	-	49,977,380
Issue of hybrid bond of subsidiaries	-	-	-	-	-	74,669,780	74,669,780
Dividends paid of hybrid bond	-	-	-	-	(12,124,590)	-	(12,124,590)
Dividends paid of hybrid bond of subsidiaries	-	-	-	-	-	(6,868,053)	(6,868,053)
Allocated expense of stock options	-	-	114,050	-	-	-	114,050
Sale of treasury stock	-	-	47	-	-	-	47
Balance at December 31, 2020	₩ 776,139,916	₩ 249,886,460	₩ 1,548,087,012	₩ 122,063,901	₩ 1,918,191,404	₩ 174,414,280	₩ 4,788,782,973

	Issued capital	Hybrid bond	Capital surplus and adjustments	Accumulated other comprehensive income	Retained earnings	Non-controlling interests	Total
Balance at January 1, 2021	₩ 776,139,916	₩ 249,886,460	₩ 1,548,087,012	₩ 122,063,901	₩ 1,918,191,404	₩ 174,414,280	₩ 4,788,782,973
Dividends	-	-	-	-	(222,671,002)	-	(222,671,002)
Redemption of redeemable convertible preferred stock	-	-	-	-	(132,612,342)	-	(132,612,342)
Total comprehensive income:	-	-	-	-	-	-	-
Net income	-	-	-	-	774,868,761	8,055,780	782,924,541
Other comprehensive income:	-	-	-	-	-	-	-
Gain (loss) on valuation of equity securities measured at FVOCI	-	-	-	19,430,293	-	-	19,430,293
Gain (loss) on disposal of equity securities measured at FVOCI	-	-	-	-	391,500	-	391,500
Gain (loss) on valuation of debt securities measured at FVOCI	-	-	-	6,037,600	-	-	6,037,600
Remeasurements of the net defined benefit liabilities/assets	-	-	-	(74,033)	-	-	(74,033)
Gain (loss) on valuation of financial liabilities designated as measured at FVTPL	-	-	-	(422,375)	-	-	(422,375)
Gain (loss) on valuation of investment stock using the equity method	-	-	-	1,263,197	-	-	1,263,197
Exchange differences on translation of foreign operations	-	-	-	4,476,281	-	-	4,476,281
Conversion expense of redeemable convertible preferred stock to common stock	38,871	-	(48,639)	-	-	-	(9,768)
Expense of parents company's stock option	-	-	(24,742,842)	-	-	-	(24,742,842)
Issue of hybrid bond	-	444,854,290	-	-	-	-	444,854,290
Dividends paid of hybrid bond	-	-	-	-	(22,139,715)	-	(22,139,715)
Issue of hybrid bond of subsidiaries	-	-	-	-	-	49,775,280	49,775,280
Redemption of hybrid bond of subsidiaries	-	-	(255,500)	-	-	(99,744,500)	(100,000,000)
Dividends paid of hybrid bond of subsidiaries	-	-	-	-	-	(8,055,780)	(8,055,780)
Transaction costs on issue of subsidiaries shares	-	-	(96,000)	-	-	-	(96,000)
Allocated expense of stock options	-	-	114,050	-	-	-	114,050
Acquisition of treasury stock	-	-	(252,811,721)	-	-	-	(252,811,721)
Balance at December 31, 2021	₩ 776,178,787	₩ 694,740,750	₩ 1,270,246,360	₩ 152,774,864	₩ 2,316,028,606	₩ 124,445,060	₩ 5,334,414,427

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

Meritz Securities Co., Ltd. and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2021 and 2020
(Korean won in thousands)

	Year ended December 31, 2021	Year ended December 31, 2020
Operating activities:		
Net income before income taxes	₩ 1,047,200,419	₩ 767,167,068
Adjustments to non-cash items :		
Gain on valuation of Financial assets measured at FVTPL	(55,456,783)	(41,347,872)
Gain on derivative valuation	(51,953,948)	(199,747,190)
Loss (gain) on valuation of financial assets designated at fair value through profit or loss	(4,959,678)	119,248,881
Loss (gain) on evaluation of other financial instruments	932	(10)
Provision of allowance for doubtful accounts	54,008,588	66,753,942
Provision of other allowance for doubtful accounts	4,874,733	4,438,222
Loss (gain) on foreign currency translation	(108,333,998)	36,619,957
Depreciation of property and equipment	16,096,561	15,634,432
Amortization of intangible assets	4,483,011	3,889,953
Depreciation expenses on operating lease assets	75,337,227	60,035,569
Impairment losses on financial assets measured at FVOCI	1,710,620	85,014
Loss (gain) on disposal of financial assets measured at FVOCI	788,781	(3,143)
Contribution to provision (reversal)	4,552,745	(11,502,537)
Provision of credit risk adjustments	5,697,578	3,686,701
Reversal of day 1 profit or loss adjustments	(118,804,264)	(45,142,563)
Post-employment benefit	5,055,500	4,666,802
Loss on valuation of incentives	38,048,226	8,569,459
Compensation expenses associated with stock option (Reversal)	114,050	(897,106)
Loss on disposal of property and equipment	99,177	25,869
Gain on disposal of investment property	(4,250,736)	(1,562,867)
Loss (gain) on disposal of intangible assets	372	(403,993)
Gain on disposal of investments in associates, subsidiaries and joint venture	(11,898,746)	(11,022,301)
Impairment loss on investment property	421,884	-
Reversal of impairment losses on intangible assets	-	(2,066,000)
Loss (gain) in equity method	(56,578,483)	78,449,390
Loss on redemption of debentures	-	446,929
Interest income	(1,203,837,620)	(1,144,017,265)
Interest expense	393,312,733	424,883,745
Dividend income	(41,557,948)	(32,598,982)
	(1,053,029,486)	(662,876,964)
Changes in operating assets and liabilities:		
Cash and due from banks	(1,418,463,589)	(120,133,866)
Financial assets at fair value through profit or loss	(2,227,997,651)	(5,845,885,452)
Loans	(3,949,390,466)	260,897,037
CMA	-	1,998,004
Lease assets	(336,034,015)	(51,370,982)
Other assets	(326,407,143)	(645,441,198)
Deposits	596,910,453	(114,490,277)
Financial liabilities at fair value through profit or loss	3,197,730,026	294,997,392
Defined benefit liabilities (assets)	(5,577,289)	(5,376,754)
Other liabilities	139,441,688	831,581,345
	(4,329,787,986)	(5,393,224,751)
Interest received	1,109,781,017	1,076,134,054
Interest paid	(416,049,401)	(395,567,080)
Dividends received	40,767,436	32,534,058
Income tax paid	(296,052,004)	(234,549,767)
Net cash flows used in operating activities	(3,897,170,005)	(4,810,383,382)

(Continued)

Meritz Securities Co., Ltd. and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2021 and 2020 (cont'd)
(Korean won in thousands)

	Year ended December 31, 2021	Year ended December 31, 2020
Investing activities:		
Disposal of financial assets measured at FVOCI	₩ 1,277,158,678	₩ 151,022,733
Disposal of investment in associates and joint venture	491,782,067	558,118,086
Receipt of dividends from associates	87,488,478	61,316,504
Disposal of property and equipment	1,950,236	331,405
Disposal of investment property	9,793,695	4,041,397
Decrease in intangible assets	49,629	758,373
Decrease in guarantee deposits	2,318,800	6,654,961
Acquisition of financial assets measured at FVOCI	(3,837,726,060)	(327,682,219)
Acquisition of investment in associates and joint venture	(357,334,721)	(903,656,476)
Acquisition of property and equipment	(2,610,111)	(6,650,301)
Increase in intangible assets	(4,814,303)	(5,091,776)
Increase in guarantee deposits	(519,397)	(6,522,535)
Acquisition of investments in subsidiaries (Note 41)	(169,377,169)	(15,358,616)
Net cash flows used in investing activities	(2,501,840,178)	(482,718,464)
Financing activities:		
Net increase in borrowings	5,389,296,534	4,137,364,860
Net increase in short-term bonds	1,577,060,000	-
Issue of bonds	3,253,804,155	3,625,633,117
Issue of hybrid bond	444,854,290	49,977,380
Capital increase with consideration	-	199,681,917
Issue of hybrid bond of subsidiaries	49,775,280	74,669,780
Sale of treasury stock	-	46
Net decrease in short-term bonds	-	(497,327,000)
Redemption of bonds	(3,400,000,000)	(2,120,544,650)
Dividends paid	(222,671,002)	(135,745,772)
Dividends paid of hybrid bond	(19,175,000)	(11,400,000)
Redemption of redeemable convertible preferred stock	(132,612,342)	-
Dividends paid of hybrid bond of subsidiaries	(8,294,100)	(6,502,800)
Redemption of hybrid bond of subsidiaries	(100,000,000)	-
Exercise of subsidiary stock options	(14,580,500)	-
Acquisition of treasury stock	(249,702,866)	-
Conversion expense of redeemable convertible preferred stock to common stock	(9,768)	-
Transaction costs on issue of subsidiaries shares	(96,000)	-
Payment of lease liability principal	(9,401,156)	(8,998,284)
Net cash flows provided by financing activities	6,558,247,525	5,306,808,594
Net increase in cash and cash equivalents	159,237,342	13,706,748
Effect from exchange rate changes on cash and cash equivalents	7,621,823	(4,428,076)
Cash and cash equivalents at the beginning of the year (Note 7)	999,735,338	990,456,666
Cash and cash equivalents at the end of the year (Note 7, 41)	₩ 1,166,594,503	₩ 999,735,338

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

Meritz Securities Co., Ltd. and its subsidiaries
Notes to the consolidated financial statements
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1. Group information

Meritz Securities Co., Ltd. (the "Company") was established on February 24, 1973 under the name of Hanil Securities Co., Ltd. and primarily engages in the securities business including brokerage services, proprietary trading and underwriting of securities. The Company changed its name to Hanjin Investment Securities Co., Ltd. on October 1, 1990 and finally changed its name to Meritz Securities Co., Ltd. on March 1, 2000.

The Company merged its subsidiary, Meritz Investment Bank Co., Ltd. ("Meritz IB") on April 1, 2010. The Company is terminated allowance to engage in Meritz IB's businesses, which include various financial services related to the issuance of commercial papers, providing corporate loans and payment guarantees and other related services, on April 5, 2020 according to the *Act on the structural improvement of the financial industry*. Finally, the company renamed to Meritz Securities Co., Ltd on April 6, 2020.

The Company is allowed to engage in Meritz IB's businesses, which include various financial services related to the issuance of commercial papers, providing corporate loans and payment guarantees and other related services according to the *Financial Investment Services and Capital Markets Act*. The Company has been designated as a comprehensive financial investment business entity in November 2017 to engage in the credit offering business with corporates. The Company operates through a network of the main office and 8 domestic branches which involve sales departments and digital finance center.

The Company prepared consolidated financial statements of the Company and its subsidiaries (collectively referred to as the "Group") in accordance with K-IFRS 1110 *Consolidated Financial Statements* (see Note 2). Investments in associates and joint ventures are accounted for using the equity method in the consolidated financial statements.

The Company is listed on the Korea Exchange ("KRX"), and the major shareholders of the Company as of December 31, 2021 are as follows:

Shareholders	Number of shares (in shares)		Percentage of ownership (%)	
	Common Stock	Preferred Stock	Common Stock	Preferred Stock
Meritz Financial Group Inc. ("Meritz FG")	328,355,866 shares	-	48.17	-
Cho Jeong Ho	6,424,646 shares	-	0.94	-
Treasury stock	95,458,182 shares	-	14.00	-
Others	251,491,885 shares	36,956,520 shares	36.89	100.00
Total	681,730,579 shares	36,956,520 shares	100.00	100.00

2. Scope of consolidation

2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows:

Investee	December 31, 2021				
	Country	Ownership (%)	Company	Main Business	Type of control
Meritz Capital Co., Ltd.	Korea	100.00	Financial business	Credit specialized financial business	Equity holding
Kukje Active High Yield Private Investment Trust 3	Korea	95.82	Investment fund and trust	Investment in securities etc	Equity holding
Anda H IPO high yield Private Securities Investment Trust 1[Hybrid-Bond] (Professional) (*)	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Human Rainbow High Yield Specialized Private Investment Trust Fund (*)	Korea	96.65	Investment fund and trust	Investment in securities etc	Equity holding
Yurie SPAC Plus IPO Private Investment Trust 1st	Korea	98.57	Investment fund and trust	Investment in securities etc	Equity holding

Meritz Securities Co., Ltd. and its subsidiaries
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2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows (cont' d):

Investee	Country	Ownership (%)	Company	Main Business	Type of control
Olion IPO Multi Strategy Investment Trust 2nd	Korea	90.20	Investment fund and trust	Investment in securities etc	Equity holding
Olion IPO Multi Strategy Investment Trust 2nd C-I	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Pharos Investment Private Trust 1st	Korea	57.10	Investment fund and trust	Investment in securities etc	Equity holding
Skywalk EXTENSION Private Investment Trust 2nd	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Bros IPO Investment Private Trust 1st	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Kukje Active High Yield Private Investment Trust 2	Korea	96.03	Investment fund and trust	Investment in securities etc	Equity holding
Brain KOSDAQ Venture Investment Private Trust 2nd C-I	Korea	95.08	Investment fund and trust	Investment in securities etc	Equity holding
Mercury Kosdaq Venture 2	Korea	97.38	Investment fund and trust	Investment in securities etc	Equity holding
Global One KOSDAQ Venture Investment Private Trust 1st	Korea	97.05	Investment fund and trust	Investment in securities etc	Equity holding
Mercury Kosdaq Venture Private Fund No.1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Kiwoom Milestone GRMC Investment Private Trust 1st	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
W KOSDAQ Venture(M) 2nd fund	Korea	99.99	Investment fund and trust	Investment in securities etc	Equity holding
SKYWALK ALPHA-X HEDGE FUND NO.1	Korea	80.68	Investment fund and trust	Investment in securities etc	Equity holding
Mercury IPO Konex HighYield Private Fund 5	Korea	99.50	Investment fund and trust	Investment in securities etc	Equity holding
KGT high-yield IPO Private Investment Trust 2	Korea	98.04	Investment fund and trust	Investment in securities etc	Equity holding
Hize high-yield IPO Private Investment Trust 2	Korea	99.01	Investment fund and trust	Investment in securities etc	Equity holding
GG INVESTMENT IPO 2	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
IPARTNERS Prime private fund No.10	Korea	69.21	Investment fund and trust	Investment in securities etc	Equity holding
IPARTNERS Prime private fund No.10 Class C	Korea	71.35	Investment fund and trust	Investment in securities etc	Equity holding
RELAN HIGHYIELD FUND 1	Korea	99.01	Investment fund and trust	Investment in securities etc	Equity holding
TIGER ALTERNATIVE INVESTMENT TRUST NO.10	Korea	98.49	Investment fund and trust	Investment in securities etc	Equity holding
Mountain IPO high-yield private equity investment trust	Korea	99.01	Investment fund and trust	Investment in securities etc	Equity holding
Araa high yield fund 1 C-S class	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Tiger Alternative Investment Trust No. 31 by Nonghyup Bank as trustee	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Melon High Private Securities Investment Trust 1	Korea	99.67	Investment fund and trust	Investment in securities etc	Equity holding
Blitz High-Yield MGreen Private Investment Trust (*)	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
TIMEFOLIO It's Time High-yield Hedge Fund	Korea	97.06	Investment fund and trust	Investment in securities etc	Equity holding
LX LQ I Hedge fund 1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
OHA High Yield Private Securities Investment Trust 2	Korea	98.52	Investment fund and trust	Investment in securities etc	Equity holding
Brain IPO-High Yield Private Fund 3	Korea	70.42	Investment fund and trust	Investment in securities etc	Equity holding
Lion Blue HighYield Hedge fund 3rd	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Moru Jang-in IPO Investment Trust(Private Placement) 2	Korea	74.59	Investment fund and trust	Investment in securities etc	Equity holding
KS High Yield Investment professional private investment trust 1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
W High yield 2nd fund	Korea	98.52	Investment fund and trust	Investment in securities etc	Equity holding

Meritz Securities Co., Ltd. and its subsidiaries
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2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows (cont' d):

Investee	Country	Ownership (%)	Company	Main Business	Type of control
Monnchase Galilei High Yield Hedge Fund	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
TIGER ALTERNATIVE INVESTMENT TRUST NO.17	Korea	89.32	Investment fund and trust	Investment in securities etc	Equity holding
PHAROS IPO High yield Professional Investor Private Investment Trust No.4	Korea	99.50	Investment fund and trust	Investment in securities etc	Equity holding
INMARK 必 High Yield IPO FUND	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Vogo Alpha Plus IPO High-yield fund #3	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
My first asset high yield fund	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
CK Goldlocks High-Yield Fund 1	Korea	99.67	Investment fund and trust	Investment in securities etc	Equity holding
KFIN IPO focused High Yield Bond Private Fund 2nd	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
RootN High-Yield Investment Trust(Private Placement) 3	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
INMARK 必 Post IPO fund	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
JP Professional investment type private equity investment trust 12th	Korea	96.99	Investment fund and trust	Investment in securities etc	Equity holding
RootN Global Value-up Investment Trust(Private Placement) 1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Prophet Reach-Rich IPO Plus Qualified Private Asset Investment Trust	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
W KOSDAQ Venture(M) 4st Fund	Korea	80.00	Investment fund and trust	Investment in securities etc	Equity holding
Feynman High Yield IPO Private Balanced Fund	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
KAAM High Yield Hedge Fund 2	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
INMARK 必 KOSDAQ Venture Fund	Korea	61.73	Investment fund and trust	Investment in securities etc	Equity holding
Sprott High Yield Private Investment Trust No.1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
PTR IPO High Yield Balanced I Fund	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
TERRAMONS IPO High yield FUND 1st	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
TERRAMONS IPO FUND 1st	Korea	97.09	Investment fund and trust	Investment in securities etc	Equity holding
Consus HighYield-IPO Private Fund(Balanced)	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Prophet Reach-Rich Highyield Qualified Private Asset Investment Trust No. 3	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
LX LQ III KOSDAQ Venture Hedge fund 1	Korea	99.97	Investment fund and trust	Investment in securities etc	Equity holding
Vestas Qualified Private Real Estate Fund Investment Trust No.69-2[FoF]	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
The 2nd AP IPO Private Equity Fund	Korea	97.94	Investment fund and trust	Investment in securities etc	Equity holding
Human IPO General Private Investment Trust Fund 2	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Kukje Active IPO Private Investment Trust 5	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
KOREIT IPO M Private Equity Fund No.1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
KGT High Yield general Investors Private equity investment trust No. 3	Korea	99.34	Investment fund and trust	Investment in securities etc	Equity holding

Meritz Securities Co., Ltd. and its subsidiaries
Notes to the consolidated financial statements
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2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows (cont' d):

Investee	Country	Ownership (%)	Company	Main Business	Type of control
Honors Highyield Funds 3	Korea	99.80	Investment fund and trust	Investment in securities etc	Equity holding
The 1st AP IPO High Yield Private Equity Fund	Korea	96.77	Investment fund and trust	Investment in securities etc	Equity holding
Mercury IPO & High Yield General Private Equity Investment Trust 6	Korea	97.56	Investment fund and trust	Investment in securities etc	Equity holding
GG private equity high-yield investment trust no.3	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
JP High Yield Fund 14	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Queen's Guard High yield General Private Investment Trust No. 4	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Woori Altamira Trust	Korea	99.90	Investment fund and trust	Investment in securities etc	Equity holding
Korean Alternative Investment Smart Education Investment Private Trust 1st	Korea	99.32	Investment fund and trust	Investment in securities etc	Equity holding
INMARK UK Private Real Estate Investment Trust 19-1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Adamas Venture Opportunities Fund LP	Cayman Islands	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Genesis north America power company no.1 PEF	Korea	99.60	Investment fund and trust	Investment in securities etc	Equity holding
Genesis Upstream, Co., Ltd.	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
GM Presidio, LLC	United States	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Presidio Co-Investors A LLC	United States	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Southlake Indiana LLC	United States	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Southlake Mall	United States	100.00	Real estate rental business	Real estate lease	Equity holding
Milestone India Professional Investor's Private Real Estate Investment Limited Liability Company	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Milestone Private Placement Special Asset Investment Trust 1	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
Samchully Midstream Private Placement Special Asset Fund 8	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
IGIS U.S. SPECIALIZED PRIVATE INVESTMENT TRUST NO.401	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
AIP Energy Infrastructure Specialized Privately Placed Fund Trust No.3	Korea	100.00	Investment fund and trust	Investment in securities etc	Equity holding
MS Securitization Specialty Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Zephyrus Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SH 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
M Square Jungdong 3rd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
South Lake 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
MCBH 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
HJJ 2nd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
The Tempest Co.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Maplebay, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of securities on real estates	General loan
M Square M port 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment

Meritz Securities Co., Ltd. and its subsidiaries
Notes to the consolidated financial statements
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2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows (cont' d):

Investee	Country	Ownership (%)	Company	Main Business	Type of control
GPI 6th, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
SLT JanghangDaeto 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Haeyoodong 2nd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Cygnus 2nd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
M Square Jije Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Suseong, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Galsan, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Samseong, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Spare, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
SLT Jochon, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Meri Milano, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
SLT Gurae 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Shinhwa, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
GPI11 Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
GPI12 Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
KSL 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Grasslands 2nd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Swipe 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
GM The One, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
KSL 2nd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Vienna Rose, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Nonhyeon, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
M Square Cloud, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SLT Yangju, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GM New York 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
VVertigo 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
M Start 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
SLT Believe 2nd, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
JSM 1st, Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Classic Blue, Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
CHUNGLA WAVE 1ST, Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Saint Luis Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GPI15 Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SH manchon No.1 Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
UJB 3th co., LTD	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment

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2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows (cont' d):

Investee	Country	Ownership (%)	Company	Main Business	Type of control
GPI18 Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Aoede 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Mango Aloe 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Gwangmyung Haan Tiamo Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Eco Grande Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Cherryblossom 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Msquare Shiwaha 1st Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GPI 17TH Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Hi-End CheongDam 522 Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SKY CASTLE 1st Co.,Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GPI 19TH Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Mseongnaedong 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
HDBA 3th Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Great WangSan 2nd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Great WangSan 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Seocho Terracehill 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Global HBS	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Ecodove	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Hillstate Joongdong	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Nice Supyo	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SCOPER 1st Co.,Ltd.	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Katalyst 2nd Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Doanfirst 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Doanfirst 2nd Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
M Osan 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GH Buldang 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Uyeon ost 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Uporia 6th., Co. Ltd	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Project Ssangchon	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
CHUNGLA 2nd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Great Bandalseom 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment

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2.1. The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows (cont' d):

Investee	Country	Ownership (%)	Company	Main Business	Type of control
Great Yeoksam 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
HERRYSBILL 1ST CO.,LTD	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
CAVALLI 1ST CO.,LTD	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
COSMOFORE	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
COSMOGREEN	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
M SQUARE OHCHANG	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
DAEGU BONRI FIRST	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
DAEGU BONRI SECOND	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GREAT DAECHI 2nd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GREAT DAECHI 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Suyoung Mangmi First	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Smart Hapchun	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Smart Plus Corporation	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Nice wonho First Corporation	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
NICE ANHEUNG THE FIRST	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
SMART HANNAM	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Yongsan Project 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GREAT EUMBONG 2nd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
GREAT EUMBONG 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
The First HMS	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
NEO A GREEN	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Oliveness 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Cosmojoy Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Gamma Story 1st	Korea	0.00	Special purpose Company	Securitization of loans on real estates	Mortgage loan commitment
Stark 1st Co., Ltd	Korea	0.00	Special purpose Company	Securitization of backed asset	General loan
Uporia 5th Co., Ltd	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
TREES THE FIRST CO., LTD	Korea	0.00	Special purpose Company	Securitization of loans on real estates	General loan
Meritz Auto Seventh Securitization Specialty Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of backed asset	ABS holding, a shareholder with the right of residuary estate
Meritz Auto Eighth Securitization Specialty Co., Ltd.	Korea	0.00	Special purpose Company	Securitization of backed asset	ABS holding, a shareholder with the right of residuary estate

(*) The name of fund is changed from 'Koreit Separate Taxation High-Yield PE No.4' to 'Anda H IPO high yield Private Securities Investment Trust 1[Hybrid-Bond] (Professional)', from ' Sparx Separate Taxation High-Yield No.1' to ' Human Rainbow High Yield Specialized Private Investment Trust Fund 1st', from 'Koreit Highyield M Private Equity Fund' to 'Blitz High-Yield MGreen Private Investment Trust'

Meritz Securities Co., Ltd. and its subsidiaries
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2.1.1. The entities included in or excluded from the scope of consolidation for the year ended December 31, 2021 are as follows:

	Subsidiaries	Reason for consolidation
Included in the consolidation	RELAN HIGHYIELD FUND 1	(*1)
	TIGER ALTERNATIVE INVESTMENT TRUST NO.10	(*1)
	Mountain IPO high-yield private equity investment trust 1	(*1)
	Araa high yield fund 1 C-S class	(*1)
	Tiger Alternative Investment Trust No. 31 by Nonghyup Bank as trustee	(*1)
	Melon High Private Securities Investment Trust 1	(*1)
	Blitz High-Yield MGreen Private Investment Trust	(*1)
	TIMEFOLIO It's Time High-yield Hedge Fund (C-1)	(*1)
	LX LQ I Hedge fund 1	(*1)
	OHA High Yield Private Securities Investment Trust 2	(*1)
	Brain IPO-High Yield Private Fund 3	(*1)
	Lion Blue HighYield Hedge fund 3rd	(*1)
	Moru Jang-in IPO Investment Trust(Private Placement) 2	(*1)
	KS High Yield Investment professional private investment trust 1	(*1)
	W High yield 2nd fund	(*1)
	Monnchase Galilei High Yield Hedge Fund 1	(*1)
	TIGER ALTERNATIVE INVESTMENT TRUST NO.17	(*1)
	PHAROS IPO High yield Professional Investor Private Investment Trust No.4	(*1)
	INMARK 必 High Yield IPO FUND	(*1)
	Vogo Alpha Plus IPO High-yield fund #3	(*1)
	My first asset high yield fund	(*1)
	CK Goldlocks High-Yield Fund 1	(*1)
	KFIN IPO focused High Yield Bond Private Fund 2nd	(*1)
	RootN High-Yield Investment Trust(Private Placement) 3	(*1)
	INMARK 必 Post IPO fund	(*1)
	JP Professional investment type private equity investment trust 12th	(*1)
	RootN Global Value-up Investment Trust(Private Placement) 1	(*1)
	Prophet Reach-Rich IPO Plus Qualified Private Asset Investment Trust	(*1)
	Samchully Midstream Private Placement Special Asset Fund 8	(*1)
	IGIS U.S. SPECIALIZED PRIVATE INVESTMENT TRUST NO.401	(*1)
	W KOSDAQ Venture(M) 4st Fund	(*1)
	Feynman High Yield IPO Private Balanced Fund	(*1)
	KAAM High Yield Hedge Fund 2	(*1)
	INMARK 必 KOSDAQ Venture Fund	(*1)
	Sprott High Yield Private Investment Trust No.1	(*1)
	PTR IPO High Yield Balanced I Fund	(*1)
	TERRAMONS IPO High yield FUND 1st	(*1)
	TERRAMONS IPO FUND 1st	(*1)
	Consus HighYield-IPO Private Fund(Balanced)	(*1)
	Prophet Reach-Rich Highyield Qualified Private Asset Investment Trust No. 3	(*1)
	LX LQ III KOSDAQ Venture Hedge fund 1	(*1)
	AIP Energy Infrastructure Specialized Privately Placed Fund Trust No.3	(*1)
	Vestas Qualified Private Real Estate Fund Investment Trust No.69-2[FoF]	(*1)
	The 2nd AP IPO Private Equity Fund	(*1)
	Human IPO General Private Investment Trust Fund 2	(*1)
	Kukje Active IPO Private Investment Trust 5	(*1)
	KOREIT IPO M Private Equity Fund No.1	(*1)
	KGT High Yield general Investors Private equity investment trust No. 3	(*1)

Meritz Securities Co., Ltd. and its subsidiaries
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2.1.1. The entities included in or excluded from the scope of consolidation for the year ended December 31, 2021 are as follows: (cont'd)

Included in the consolidation	Subsidiaries	Reason for consolidation
	Honors Highyield Funds 3	(*1)
	The 1st AP IPO High Yield Private Equity Fund	(*1)
	Mercury IPO & High Yield General Private Equity Investment Trust 6	(*1)
	GG private equity high-yield investment trust no.3	(*1)
	JP High Yield Fund 14	(*1)
	Queen's Guard High yield General Private Investment Trust No. 4	(*1)
	Great Wonchang First Corp	(*2)
	JA7st	(*2)
	Smart Mokok 1st	(*2)
	Aoede 1st Co., Ltd	(*2)
	Mango Aloe 1st Co., Ltd	(*2)
	Gwangmyung Haan Tiamo Co., Ltd	(*2)
	Eco Grande Co., Ltd.	(*2)
	Terra Bridge Alpha 1st	(*2)
	Terra Bridge Delta 1st	(*2)
	Cherryblossom 1st Co., Ltd	(*2)
	NICEPADONG FIRST CORPORATION	(*2)
	Msquare Shiwaha 1st Co., Ltd.	(*2)
	GREAT ANSAN 1st	(*2)
	GPI 17TH Co., Ltd	(*2)
	NICE SEONHWA THE FIRST	(*2)
	JEE-En Best the First Co., Ltd.	(*2)
	Hi-End CheongDam 522 Co., Ltd	(*2)
	Nice DoAn First	(*2)
	SKY CASTLE 1st Co.,Ltd	(*2)
	Lewest 3rd	(*2)
	Lewest 4th	(*2)
	Lewest 5th	(*2)
	Lewest 6th	(*2)
	GPI 19TH Co., Ltd	(*2)
	Mseongnaedong 1st Co., Ltd	(*2)
	Ecocamel Co., Ltd.	(*2)
	HDBA 3th Co., Ltd.	(*2)
	Great WangSan 1st	(*2)
	Great WangSan 2nd	(*2)
	The First AIM ABS	(*2)
	NICE HYANGDONG FIRST CORPORATION	(*2)
	Daegu Bondong 1st	(*2)
	Seocho Terracehill 1st	(*2)
	Global HBS	(*2)
	Ecodove	(*2)
	Hillstate Joongdong	(*2)
	Nice Supyo	(*2)
	SCOPER 1st Co.,Ltd.	(*2)
	Katalyst 2nd Co., Ltd	(*2)
	Doanfirst 1st Co., Ltd	(*2)
	Doanfirst 2nd Co., Ltd	(*2)
	Alpha Port 1	(*2)
	M Osan 1st	(*2)
	GH Buldang 1st	(*2)
	GH Buldang 2nd	(*2)
	Uyeon ost 1st	(*2)
	Great Mapo 1st	(*2)
	Uporia 6th., Co., Ltd	(*2)
	Southlake Indiana LLC	(*2)
	Southlake Mall	(*2)
	Project Ssangchon	(*2)
	CHUNGLA 2nd	(*2)
	Great Bandalseom 1st	(*2)
	Great Yeoksam 1st	(*2)
	HERRYSBILL 1ST CO.,LTD	(*2)
	CAVALLI 1ST CO.,LTD	(*2)
	COSMOFORE	(*2)
	COSMOGREEN	(*2)
	M SQUARE OHCHANG	(*2)
	DAEGU BONRI FIRST	(*2)
	DAEGU BONRI SECOND	(*2)

Meritz Securities Co., Ltd. and its subsidiaries
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2.1.1. The entities included in or excluded from the scope of consolidation for the year ended December 31, 2021 are as follows: (cont'd)

	Subsidiaries	Reason for consolidation	
Included in the consolidation	GREAT DAECHI 2nd	(*2)	
	GREAT DAECHI 1st	(*2)	
	Suyoung Mangmi First	(*2)	
	Smart Hapchun	(*2)	
	Smart Plus Corporation	(*2)	
	Nice wonho First Corporation	(*2)	
	NICE ANHEUNG THE FIRST	(*2)	
	SMART HANNAM	(*2)	
	Yongsan Project 1st	(*2)	
	GREAT EUMBONG 2nd	(*2)	
	GREAT EUMBONG 1st	(*2)	
	The First HMS	(*2)	
	NEO A GREEN	(*2)	
	Oliveness 1st Co., Ltd	(*2)	
	Cosmojoy Co., Ltd	(*2)	
	Gamma Story 1st	(*2)	
	Stark 1st Co., Ltd	(*2)	
	Uporia 5th Co., Ltd	(*2)	
	TREES THE FIRST CO., LTD	(*2)	
	Meritz Auto Eighth Securitization Specialty Co., Ltd.	(*2)	
	Excluded from the consolidation	Human Investment Trust	(*3)
		DB HAWKEYE PRIVATE FUND 1	(*3)
		SKYWALK ALPHA-Q HEDGE FUND NO.1	(*3)
IGIS Global Private Real Estate Investment Trust 311		(*3)	
RREEF Spezial Invest GmbH trust of security contract		(*3)	
Owl Public offer Investment Private Trust 2nd		(*3)	
Skywalk EXTENSION Private Investment Trust 1st		(*3)	
SPARX IPO Private Fund Trustee 3		(*3)	
Kiwoom Milestone Europe Real Estate Investment Trust 5th		(*3)	
IGIS Global Private Real Estate Investment Trust 304		(*3)	
Koreit KOSDAQ Venture Investment Private Trust 2nd C-I		(*3)	
AIP Upstream Specialized Privately Placed Fund Trust #1		(*3)	
LIFE IPO High-yield Fund 1		(*3)	
Kiwoom New Zealand Professional Private Trust 1		(*3)	
Nice Dongtan 1st Co., Ltd.		(*3)	
TCS 1st, Securitization		(*3)	
TCS 1st, Co., Ltd.		(*3)	
MS Dasa, Co., Ltd.		(*3)	
JYP, Securitization		(*3)	
DKY 1st, Co., Ltd.		(*3)	
Eessen 1st, Securitization		(*3)	
HJ 9th, Co., Ltd		(*3)	
Msinepolis 3rd, Co., Ltd		(*3)	
Uporia 1st Co., Ltd		(*3)	
Nice chungyangri 1st, Co., Ltd		(*3)	
DS Doahn Co., Ltd		(*3)	
GyeongjuYongGang 1st, Securitization		(*3)	
GPI 2nd, Co., Ltd.		(*3)	
YG Leaders 1st, Co., Ltd.		(*3)	
SLT Mokgam, Co., Ltd.		(*3)	
SLT Eoyeon, Co., Ltd.		(*3)	
Just White, Co., Ltd.		(*3)	
Just Yellow, Co., Ltd.		(*3)	
Suseong Landmark H, Co., Ltd.		(*3)	
Project Hyoseong City 1st, Co., Ltd.		(*3)	
RS Doahn Co., Ltd		(*3)	
Great Wonchang First Corp		(*3)	
Smart Mokok	(*3)		
WBRK Co., Ltd.	(*3)		
MS Smart, Co., Ltd.	(*3)		
Grasslands 1st Co., Ltd.	(*3)		
M Dragon 1, Co., Ltd.	(*3)		
SLT Myeonggok 1st, Co., Ltd.	(*3)		
WECM1 Co., Ltd	(*3)		
TS The first Co., Ltd	(*3)		
SMARTNAMSAN 1ST, Co., Ltd	(*3)		

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2.1.1. The entities included in or excluded from the scope of consolidation for the year ended December 31, 2021 are as follows: (cont'd)

Excluded from the consolidation	Subsidiaries	Reason for consolidation
	MCP4 1ST, Co., Ltd	(*3)
	Ecobeer co., ltd	(*3)
	Terra Bridge Alpha 1st	(*3)
	Terra Bridge Delta 1st	(*3)
	NICEPADONG FIRST CORPORATION	(*3)
	GRREAT ANSAN 1st	(*3)
	NICE SEONHWA THE FIRST	(*3)
	Nice DoAn First	(*3)
	Lewest 3rd	(*3)
	Lewest 5th	(*3)
	Lewest 6th	(*3)
	Haeyoodong 1st, Co., Ltd.	(*3)
	M Square Sangam Co., Ltd.	(*3)
	GPI14 Co., Ltd.	(*3)
	M Square Haan 1st Co., Ltd.	(*3)
	GPI16 Co., Ltd.	(*3)
	Uporia 4th Co., Ltd	(*3)
	M Square Sosa Co., Ltd.	(*3)
	JA7st	(*3)
	JEE-En Best the First Co., Ltd.	(*3)
	Lewest 4th	(*3)
	Ecocamel Co., Ltd.	(*3)
	The First AIM ABS	(*3)
	NICE HYANGDONG FIRST CORPORATION	(*3)
	Daegu Bondong 1st	(*3)
	Alpha Port 1	(*3)
	GH Buldang 2nd	(*3)
	Great Mapo 1st	(*3)
	Meritz Auto Sixth Securitization Specialty Co., Ltd.	(*3)

(*1) These are structured entities with the objective of raising capital from investors and allocating returns by investing in basic assets and are included in the consolidation scope, because the Group has existing rights to direct the relevant activities, and is not only exposed to variable returns, but also has the ability to use its power to affect the investees' returns.

(*2) These are structured entities with the objective of investing in loans related to real estates and are included in the consolidation scope, because the Group has existing rights to direct the relevant activities, and is not only exposed to variable returns, but also has the ability to use its power to affect the investees' returns.

(*3) The Group lost control of these entities due to liquidations, terminations of transactions, and decreases in equity ratios caused by redemptions of loans, the underlying asset.

2.1.2. Meritz Capital Co., Ltd

Meritz Capital Co., Ltd. was established on March 20, 2012 and engages in the instalment financing business, facilities leasing business since May 11, 2012 and the new technology financial business since December 22, 2014 in accordance with *Specialized Credit Finance Business Act*. The Company holds 100 % of common shares of Meritz Capital Co., Ltd. by a comprehensive stock exchange on April 28, 2017.

2.1.3. Kukje Active High Yield Private Investment Trust 3 and other 70 entities

Kukje Active High Yield Private Investment Trust 3 and other 70 entities are the collective investment vehicles that invest more than a certain percentage of funds in bonds including those with ratings of BBB+ or under in accordance with the related laws and regulations or invest initial public offering to make a profit.

Meritz Securities Co., Ltd. and its subsidiaries
Notes to the consolidated financial statements
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2.1.3. Kukje Active High Yield Private Investment Trust 3 and other 70 entities (cont'd)

The acquisition dates and the percentage ownership of the Group are as follows:

Subsidiaries	Acquisition date	Ownership (%)
Kukje Active High Yield Private Investment Trust 3	2014-09-12	95.82
Anda H IPO high yield Private Securities Investment Trust 1[Hybrid-Bond] (Professional)	2014-10-27	100.00
Human Rainbow High Yield Specialized Private Investment Trust Fund 1	2015-12-02	96.65
Yurie SPAC Plus IPO Private Investment Trust 1st	2017-03-22	98.57
Olion IPO Multi Strategy Investment Trust 2nd	2017-03-22	90.20
Olion IPO Multi Strategy Investment Trust 2nd C-I	2017-03-22	100.00
Pharos Investment Private Trust 1st	2017-04-11	57.10
Skywalk EXTENSION Private Investment Trust 2nd	2017-09-11	100.00
Bros IPO Investment Private Trust 1st	2016-08-03	100.00
Kukje Active High Yield Private Investment Trust 2	2016-10-21	96.03
Brain KOSDAQ Venture Investment Private Trust 2nd C-I	2018-05-03	95.08
Mercury Kosdaq Venture 2	2018-07-25	97.38
Global One KOSDAQ Venture Investment Private Trust 1st	2018-07-25	97.05
Mercury Kosdaq Venture Private Fund No.1	2018-12-11	100.00
W KOSDAQ Venture(M) 2nd fund	2020-02-17	99.99
SKYWALK ALPHA-X HEDGE FUND NO.1	2020-06-15	80.68
Mercury IPO Konex HighYield Private Fund 5	2020-09-22	99.50
KGT high-yield IPO Private Investment Trust 2	2020-09-22	98.04
Hize high-yield IPO Private Investment Trust 2	2020-09-22	99.01
GG INVESTMENT IPO 2	2020-09-24	100.00
IPARTNERS Prime private fund No.10	2020-09-17	69.21
IPARTNERS Prime private fund No.10 Class C	2020-09-17	71.35
RELAN HIGHYIELD FUND 1	2021-02-05	99.01
TIGER ALTERNATIVE INVESTMENT TRUST NO.10	2021-02-05	98.49
Mountain IPO high-yield private equity investment trust	2021-02-05	99.01
Araa high yield fund 1 C-S class	2021-02-08	100.00
Melon High Private Securities Investment Trust 1	2021-02-16	99.67
Blitz High-Yield MGreen Private Investment Trust	2021-02-16	100.00
TIMEFOLIO It's Time High-yield Hedge Fund	2021-02-17	97.06
LX LQ I Hedge fund 1	2021-02-24	100.00
OHA High Yield Private Securities Investment Trust 2	2021-02-24	98.52
Brain IPO-High Yield Private Fund 3	2021-02-24	70.42
Lion Blue HighYield Hedge fund 3rd	2021-02-24	100.00
Moru Jang-in IPO Investment Trust(Private Placement) 2	2021-02-25	74.59
KS High Yield Investment professional private investment trust 1	2021-03-02	100.00
W High yield 2nd fund	2021-03-02	98.52
Monnchase Galilei High Yield Hedge Fund	2021-03-02	100.00
TIGER ALTERNATIVE INVESTMENT TRUST NO.17	2021-03-03	89.32
PHAROS IPO High yield Professional Investor Private Investment Trust No.4	2021-04-16	99.50
INMARK 必 High Yield IPO FUND	2021-04-16	100.00
Vogo Alpha Plus IPO High-yield fund #3	2021-04-16	100.00
My first asset high yield fund	2021-04-19	100.00
CK Goldlocks High-Yield Fund 1	2021-04-19	99.67
KFIN IPO focused High Yield Bond Private Fund 2nd	2021-04-19	100.00
RootN High-Yield Investment Trust(Private Placement) 3	2021-04-19	100.00
INMARK 必 Post IPO fund	2021-04-16	100.00
JP Professional investment type private equity investment trust 12th	2021-04-21	96.99
RootN Global Value-up Investment Trust(Private Placement) 1	2021-06-15	100.00
Prophet Reach-Rich IPO Plus Qualified Private Asset Investment Trust	2021-06-29	100.00
W KOSDAQ Venture(M) 4st Fund	2021-07-01	80.00
Feynman High Yield IPO Private Balanced Fund	2021-07-16	100.00
KAAM High Yield Hedge Fund 2	2021-08-06	100.00
INMARK 必 KOSDAQ Venture Fund	2021-09-06	61.73

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2.1.3. Kukje Active High Yield Private Investment Trust 3 and other 70 entities (cont'd)

Subsidiaries	Acquisition date	Ownership (%)
Sprott High Yield Private Investment Trust No.1	2021-09-15	100.00
PTR IPO High Yield Balanced I Fund	2021-09-15	100.00
TERRAMONS IPO High yield FUND 1st	2021-09-15	100.00
TERRAMONS IPO FUND 1st	2021-09-15	97.09
Consus HighYield-IPO Private Fund(Balanced)	2021-09-16	100.00
Prophet reach-rich highyield qualified private asset investment trust No. 3	2021-09-16	100.00
LX LQ III KOSDAQ Venture Hedge fund 1	2021-07-20	99.97
The 2nd AP IPO Private Equity Fund	2021-11-30	97.94
Human IPO General Private Investment Trust Fund 2	2021-12-10	100.00
Kukje Active IPO Private Investment Trust 5	2021-12-10	100.00
KOREIT IPO M Private Equity Fund No.1	2021-12-10	100.00
KGT High Yield general Investors Private equity investment trust No. 3	2021-12-13	99.34
Honors Highyield Funds 3	2021-12-13	99.80
The 1st AP IPO High Yield Private Equity Fund	2021-12-13	96.77
Mercury IPO & High Yield General Private Equity Investment Trust 6	2021-12-14	97.56
GG private equity high-yield investment trust no.3	2021-12-14	100.00
JP High Yield Fund 14	2021-12-14	100.00
Queen's Guard High yield General Private Investment Trust No. 4	2021-12-14	100.00

2.1.4. Meritz Auto Seventh Securitization Specialty Co., Ltd and another entity

The company is established to securitize the financial lease asset of consolidated companies. The Group is a shareholder with the right for remaining assets, and holds all asset backed securities issued by an asset-backed company.

2.1.5. MS Securitization Specialty Co., Ltd and 104 structured entities

Structured entities enter into secured loan commitment contracts with the Group and they operate mortgage loans through issuing ABCP.

2.1.6. Kiwoom Milestone GRMC Investment Private Trust 1st

It is a collective investment organization, established on November 29, 2018, with the objective of creating revenue by investing in loans secured by accounts receivable. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.7. Tiger Alternative Investment Trust No. 31 by Nonghyup Bank as trustee

It is a collective investment organization, established on February 9, 2021, with the objective of generating profits by re-indirect investment in funds in real estate located in major Asian countries. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.8. Vestas Qualified Private Real Estate Fund Investment Trust No.69-2[FoF]

It is a collective investment organization, established on November 19, 2021, aimed at creating revenue by re-indirect investment in funds in real estate located in major cities in the United States. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.9. Woori Altamira Trust

It is a collective investment organization, established on August 29, 2018, with the objective of creating revenue by investing in housing mortgage loans in Hong Kong. The Group owns 99.9% shares of the entity as of December 31, 2021.

2.1.10. Korean Alternative Investment Smart Education Investment Private Trust 1st

It is a collective investment organization, established on October 11, 2018, with the objective of creating revenue by investing in private bonds for participation in gaining profit from facility deposit. The Group owns 99.32% shares of the entity as of December 31, 2021.

2.1.11. INMARK UK Private Real Estate Investment Trust 19-1

It is a collective investment organization, established on April 5, 2019, with the objective of creating revenue by investing in real estate mortgage bonds in London for participation in gaining profit from facility deposit. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.12. Adamas Venture Opportunities Fund LP

It is a collective investment organization, established on May 6, 2019, with the objective of creating revenue by investing in REPO based on listed Indonesian stocks for participation in gaining profit. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.13. Genesis North America power company no.1 PEF and other 3 entities

It is a collective investment organization with the objective of creating revenue by investing in bonds issued for acquisition of U.S oil and gas fields for participation in gaining profit from facility deposit. The Group owns 99.6% shares of the entity as of December 31, 2021.

2.1.14. Milestone India Private Real Estate Investment LLC

It is a collective investment organization, established on November 19, 2019, with the objective of creating revenue by investing in real estate mortgage bonds in India for participation in gaining profit from facility deposit. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.15. Milestone Professional Investor's Private Real Estate Investment Limited Liability Company

It is a collective investment organization, established on January 14, 2020, with the objective of creating revenue by investing in coal mining company in Utah, United States. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.16. Samchully Midstream Private Placement Special Asset Fund 8

It is a collective investment organization, established on April 28, 2021, with the objective of creating revenue by investing in Midstream Company that operates a gas collection and processing business produced in Permian base in North America. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.17. IGIS U.S. Specialized private investment trust No.401

It is a collective investment organization, established on June 29, 2021, with the objective of creating revenue by investing in the office remodelling business in Manhattan, New York, USA. The Group owns 100% shares of the entity as of December 31, 2021.

2.1.18. AIP Energy Infrastructure Specialized Privately Placed Fund Trust No.3

It is a collective investment organization, established on August 30, 2021, with the objective of creating revenue by investing in hydraulic fracturing companies operating hydraulic fracturing facilities 2 fleets in Permian base, North America. The Group owns 100% shares of the entity as of December 31, 2021.

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2.2. The summary of financial information in its consolidated subsidiaries as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

Investee	December 31, 2021			
	Assets	Liabilities	Operating revenue	Net income (loss)
Meritz Capital Co., Ltd.	₩ 8,000,426,618	₩ 6,811,444,277	₩ 586,352,860	₩ 221,340,141
Kukje active high yield private investment trust 3	22,733,880	5,135	10,626,757	3,614,171
Anda H IPO high yield Private Securities Investment Trust 1[Hybrid-Bond] (Professional)	39,019,097	37,994	3,539,408	3,045,609
Human Rainbow High Yield Specialized Private Investment Trust Fund	29,316,247	15,970	4,854,800	4,136,609
Yurie SPAC Plus IPO Private Investment Trust 1st	627,947	160	216,099	98,779
Olion IPO multi strategy investment trust 2nd C-I	10,852,531	1,065,556	1,797,649	1,164,324
Pharos Investment Private Trust 1st	8,375,418	18,237	1,527,099	735,242
Skywalk EXTENSION Private Investment Trust 2nd	5,384,282	3,102	701,956	561,102
Bros IPO Investment Private Trust 1st	6,238,518	13,537	2,540,902	1,966,841
Kukje Active High Yield Private Investment Trust 2	24,049,697	695	5,969,329	3,603,657
Brain KOSDAQ Venture Investment Private Trust 2nd C-I	27,130,147	863,743	23,612,876	5,148,795
Mercury Kosdaq Venture 2	5,711,528	874,858	2,349,251	2,178,077
Global One KOSDAQ Venture Investment Private Trust 1st	4,163,084	604,498	1,740,117	1,465,530
Mercury Kosdaq Venture Private Fund No.1	6,972,575	1,362,023	2,499,662	1,879,451
Kiwoom Milestone GRMC Investment Private Trust 1st	59,901,209	42,779	15,422,093	4,564,772
W KOSDAQ Venture(M) 2nd fund	9,245,136	611,381	2,170,832	1,029,978
SKYWALK ALPHA-X HEDGE FUND NO.1	12,188,169	8,617	11,090,973	4,445,453
Mercury IPO Konex HighYield Private Fund 5	3,147,948	47,148	2,565,358	2,242,199
KGT high-yield IPO Private Investment Trust 2	5,244,452	144,452	2,864,798	2,169,263
Hize high-yield IPO Private Investment Trust 2	10,648,123	548,123	2,903,538	2,289,808
GG INVESTMENT IPO 2	8,299,943	2,179	983,425	738,785
IPARTNERS Prime private fund No.10 Class C	6,142,159	1,893,271	1,910,712	912,427
RELAN HIGHYIELD FUND 1	21,259,059	1,059,059	3,114,137	2,903,257
TIGER ALTERNATIVE INVESTMENT TRUST NO.10	20,893,181	585,872	2,647,438	2,253,230
Mountain IPO high-yield private equity investment trust	21,437,019	1,237,137	2,808,563	2,590,732
Araa high yield fund 1 C-S class	34,220,677	40,040	3,585,515	3,170,680
Tiger Alternative Investment Trust No. 31 by Nonghyup Bank as trustee	2,000,610	111,780	129,427	(567,703)
Melon High Private Securities Investment Trust 1	31,287,425	1,187,426	2,908,025	2,539,179
Blitz High-Yield MGreen Private Investment Trust	39,638,854	77,375	2,451,868	2,105,292
TIMEFOLIO It's Time High-yield Hedge Fund	37,415,127	3,346,892	4,620,164	3,830,541
LX LQ I Hedge fund 1	12,434,094	11,254	1,250,631	1,172,840
OHA High Yield Private Securities Investment Trust 2	20,920,103	620,109	3,512,759	1,976,232
Brain IPO-High Yield Private Fund 3	15,477,643	1,276,391	1,707,435	1,127,143
Lion Blue HighYield Hedge fund 3rd	32,669,345	19,085	4,405,664	3,196,097
Moru Jang-in IPO Investment Trust(Private Placement) 2	6,771,717	8,295	1,939,253	1,315,611
KS High Yield Investment professional private investment trust 1	20,508,659	508,659	1,723,327	1,344,763
W High yield 2nd fund	21,318,237	1,018,237	2,666,219	2,380,167
Monnchase Galilei High Yield Hedge Fund	20,430,875	430,875	2,418,931	1,963,783
TIGER ALTERNATIVE INVESTMENT TRUST NO.17	6,856,774	1,258,874	2,818,955	2,552,070
PHAROS IPO High yield Professional Investor Private Investment Trust No.4	20,678,609	32,674	1,662,501	1,186,603

Meritz Securities Co., Ltd. and its subsidiaries
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2.2. The summary of financial information in its consolidated subsidiaries as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

Investee	December 31, 2021			
	Assets	Liabilities	Operating revenue	Net income (loss)
INMARK 必 High Yield IPO FUND	₩ 21,131,863	₩ 562,009	₩ 1,576,060	₩ 1,079,466
Vogo Alpha Plus IPO High-yield fund 3	20,892,739	41,467	1,411,572	1,129,551
My first asset high yield fund	20,024,795	31,793	1,222,478	900,366
CK Goldlocks High-Yield Fund 1	30,195,748	47,221	2,475,078	1,967,627
KFIN IPO focused High Yield Bond Private Fund 2nd	29,981,218	1,402	3,077,810	1,442,601
RootN High-Yield Investment Trust(Private Placement) 3	29,982,764	1,271	2,509,516	2,049,760
INMARK 必 Post IPO fund	13,456,961	3,372,548	1,126,124	683,143
JP Professional investment type private equity investment trust 12th	10,604,986	95,170	2,408,050	2,142,170
RootN Global Value-up Investment Trust(Private Placement) 1	5,294,142	2,962	358,905	291,180
Prophet Reach-Rich IPO Plus Qualified Private Asset Investment Trust	12,754,811	28,446	622,645	502,426
W KOSDAQ Venture(M) 4st Fund	7,381,724	381,444	421,187	351,921
Feynman High Yield IPO Private Balanced Fund	30,044,442	41,927	1,291,967	787,381
KAAM High Yield Hedge Fund 2	39,972,911	2,155	3,233,351	1,023,664
INMARK 必 KOSDAQ Venture Fund	8,422,075	7,214	347,798	314,861
Sprott High Yield Private Investment Trust No.1	15,524,359	524,359	578,841	516,975
PTR IPO High Yield Balanced I Fund	15,535,336	48,330	574,650	528,014
TERRAMONS IPO High yield FUND 1st	10,755,896	456,489	500,704	403,884
TERRAMONS IPO FUND 1st	14,543,531	543,531	588,647	536,206
Consus HighYield-IPO Private Fund(Balanced)	22,992,378	1,210	759,723	684,254
Prophet Reach-Rich Highyield Qualified Private Asset Investment Trust No. 3	22,946,490	1,676	1,013,711	900,111
LX LQ III KOSDAQ Venture Hedge fund 1	3,145,968	8,206	236,439	136,762
Vestas Qualified Private Real Estate Fund Investment Trust No.69-2[FoF]	3,075,789	17,651	17,918	263
The 2nd AP IPO Private Equity Fund	10,209,992	12,222	7,060	(12,274)
Human IPO General Private Investment Trust Fund 2	14,000,000	9,089	-	(9,089)
Kukje Active IPO Private Investment Trust 5	10,008,804	7,390	8,804	1,415
KOREIT IPO M Private Equity Fund No.1	7,508,902	4,643	8,902	4,259
KGT High Yield general Investors Private equity investment trust No. 3	15,119,761	7,908	19,761	11,853
Honors Highyield Funds 3	15,050,052	7,874	20,052	12,177
The 1st AP IPO High Yield Private Equity Fund	15,500,195	426	195	(230)
Mercury IPO & High Yield General Private Equity Investment Trust 6	20,521,355	7,638	21,355	13,718
GG private equity high-yield investment trust no.3	30,000,567	631	567	(64)
JP High Yield Fund 14	30,033,168	10,824	33,168	22,344
Queen's Guard High yield General Private Investment Trust No. 4	30,025,816	12,506	25,816	13,310
Southlake Indiana LLC	166,026,904	114,335,976	-	-
MS Securitization Specialty Co., Ltd. And other 104 entities	7,947,530,123	8,209,115,493	360,104,567	(52,425,410)

Meritz Securities Co., Ltd. and its subsidiaries
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2.2. The summary of financial information in its consolidated subsidiaries as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

Investee	December 31, 2020			
	Assets	Liabilities	Operating revenue	Net income (loss)
Meritz Capital Co., Ltd	₩ 6,602,447,239	₩ 5,651,685,696	₩ 504,163,219	₩ 133,855,476
RREEF Special Invest GmbH trust of security contract	2,227,742	-	39,373	24,436
Kukje Active High Yield Private Investment Trust 3	76,587,234	17,353	7,883,154	7,359,156
Koreit Separate Taxation High-Yield PE No.4	7,271,031	3,831	1,038,419	920,149
Sparx Separate Taxation High-Yield No.1	63,300,770	19,002	4,357,288	3,981,136
Yurie SPAC Plus IPO Private Investment Trust 1st	3,616,781	917	285,076	230,037
Olion IPO Multi Strategy Investment Trust 2nd C-I	4,235,242	305,895	212,431	132,675
Pharos Investment Private Trust 1st	7,501,812	16,019	2,555,231	1,328,560
Skywalk EXTENSION Private Investment Trust 2nd	3,246,211	1,868	182,921	133,162
Bros IPO Investment Private Trust 1st	4,056,727	7,500	679,566	569,055
Human Investment Trust	4,220,133	3,768	883,995	776,232
Kukje Active High Yield Private Investment Trust 2	72,367,470	2,150	7,460,344	6,915,298
Brain KOSDAQ Venture Investment Private Trust 2nd C-I	37,557,466	11,856,979	19,702,988	5,146,959
Koreit KOSDAQ Venture Investment Private Trust 2nd C-I	16,393,969	24,542	6,380,809	895,464
Mercury Kosdaq Venture 2	4,334,661	21,792	1,623,362	687,728
Global One KOSDAQ Venture Investment Private Trust 1st	4,269,177	607,868	5,205,683	5,109,693
Owl Public offer Investment Private Trust 2nd	3,716,210	8,492	1,092,657	1,021,836
Mercury Kosdaq Venture Private Fund no.1	6,447,770	793,537	1,170,418	900,290
Kiwoom Milestone GRMC Investment Private Trust 1st	60,036,888	1,847	15,436,773	3,870,502
Skywalk EXTENSION Private Investment Trust 1st	4,971,621	7,392	167,750	102,880
W KOSDAQ Venture(M) 2nd Fund	9,704,292	919,904	2,366,250	1,511,973
SKYWALK ALPHA-X HEDGE FUND NO.1	153,078,434	86,927	6,033,167	4,880,387
DB HAWKEYE PRIVATE FUND 1	14,448,558	7,662	979,143	883,156
SPARX IPO Private Fund Trustee 3 (Equity Mixed)	1,033,569	1,300	129,158	25,255
SKYWALK ALPHA-Q HEDGE FUND NO.1	3,086,453	4,697	103,443	82,972
Mercury IPO Konex HighYield Private Fund 5	22,193,570	1,293,570	1,340,529	1,189,312
Dareum IPO High-yield 1	31,227,343	986,726	1,204,448	1,122,012
KGT high-yield IPO Private Investment Trust 2	5,219,149	1,372	234,277	217,777
Hize high-yield IPO Private Investment Trust 2	20,669,159	461,029	615,777	564,923
GG INVESTMENT IPO 2	20,700,194	164,239	713,466	595,955
IPARTNERS Prime private fund No.10_Class c	6,246,491	1,925,117	198,150	121,375
MS Securitization Specialty Co., Ltd. And other 84 entities	4,013,968,796	4,168,939,424	331,943,009	(99,373,264)

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3. Unconsolidated structured entities

3.1. Details of the nature of the Group's interests in unconsolidated structured entities as of December 31, 2021 are as follows:

	Purposes	Financing method	Controlling type
Asset-Backed Security SPC	Securitization of assets	Issuance of ABS /ABCP secured underlying assets	Purchase commitment, etc.
Real estate finance	Develop real estate and invest in social overhead capital facilities	Loan commitment, credit line commitment	Loan commitment, credit line commitment
Shipping finance and acceptance finance	Financing to acquire vessels and to raise fund for acquisition the ownership	Investment and borrowing	Loan commitment
Investment fund and trust	Investment in securities, etc.	Sales of beneficiary certificates, investment by general partners and limited partners	Holding beneficiary certificates, investment

3.2. Details of the Group's maximum exposure to loss from its interests in unconsolidated structured entities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021			
	Special purpose company	Real estate finance	Shipping finance and acceptance finance	Investment fund and trust
Total assets of unconsolidated structured entities	₩ 275,679,438	₩ 10,529,878,827	₩ 1,855,816,527	₩ 3,271,854,887
Assets:				
Loans receivable	₩ 57,833,333	₩ 842,489,535	₩ 425,975,401	₩ -
Securities	1	1,169,040,774	-	523,576,754
	₩ 57,833,334	₩ 2,011,530,309	₩ 425,975,401	₩ 523,576,754
Maximum exposure to loss:				
Holding assets	₩ 57,833,334	₩ 2,011,530,309	₩ 425,975,401	₩ 523,576,754
ABCP purchase commitment	5,000,000	-	-	-
Conditional securities acquisition arrangement	-	-	9,000,000	-
Conditional loan arrangement	-	-	-	-
Unexecuted brokers' loan	6,666,667	344,051,194	11,063,000	-
Loan commitment	-	55,688,500	-	-
Total	₩ 69,500,001	₩ 2,411,270,003	₩ 446,038,401	₩ 523,576,754

Meritz Securities Co., Ltd. and its subsidiaries
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December 31, 2021 and 2020

3.2. Details of the Group's maximum exposure to loss from its interests in unconsolidated structured entities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

	December 31, 2020			
	Special purpose company	Real estate finance	Shipping finance and acceptance finance	Investment fund and trust
Total assets of unconsolidated structured entities	₩ 853,475,856	₩ 6,908,712,933	₩ 1,995,597,145	₩ 5,420,358,089
Assets:				
Loans receivable	₩ 164,928,276	₩ 917,123,322	₩ 392,731,750	₩ -
Securities	14,000,001	188,446,840	-	1,599,762,132
	<u>₩ 178,928,277</u>	<u>₩ 1,105,570,162</u>	<u>₩ 392,731,750</u>	<u>₩ 1,599,762,132</u>
Maximum exposure to loss:				
Holding assets	₩ 178,928,277	₩ 1,105,570,162	₩ 392,731,750	₩ 1,599,762,132
ABCP purchase commitment	-	-	-	-
Conditional securities acquisition arrangement	-	-	-	-
Conditional loan arrangement	-	125,000,000	-	-
Unexecuted brokers' loan	-	567,766,939	10,280,000	-
Loan commitment	-	131,000,000	-	54,450,000
Total	<u>₩ 178,928,277</u>	<u>₩ 1,929,337,101</u>	<u>₩ 403,011,750</u>	<u>₩ 1,654,212,132</u>

4. Summary of significant accounting policies

4.1. Basis of preparation

The Group prepares statutory financial statements in the Korean language in accordance with Korean International Financial Reporting Standards (K-IFRS) enacted by the *Act on External Audit of Stock Companies*. The accompanying consolidated financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent auditors' report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

Significant accounting policies used to prepare the consolidated financial statements are as follows. These policies are equally applied to the consolidated financial statements for the years ended December 31, 2021 and 2020 except for standards which are effective for the annual periods beginning on or after January 1, 2021.

- Amendments to K-IFRS 1116 Lease – Practical expedient for COVID-19-Related Rent Exemption, Concessions, Suspension

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. This amendments should be applied for annual periods beginning on or after June 1, 2020, and earlier application is permitted. The Group expects the amendments to have no significant impact on its financial statements.

4.1. Basis of preparation (cont'd)

- K-IFRS 1109 'Financial Instruments', 1039 Financial Instruments: Recognition and measurement, 1107 Financial Instruments: Disclosure, 1104 Insurance Contracts, and 1116 Revision of Interest Rate Indicators

Regarding the reform of interest rate indicators, exceptions such as adjusting the effective interest rate, not the book amount, and allowing hedge accounting to continue without interruption even if interest rate indicators are replaced in the hedging relationship.

All over the world, reform of interest rate indicators is underway, including replacing interbank lending rates (the "IBOR") with other interest rates. As of the end of this period, the main interest rate exposed is USD LIBOR, JPY LIBOR and GBP LIBOR. The interest rate indicator to replace USD LIBOR is SOFR(Secured Overnight Financing Rate), JPY LIBOR is TONA(Tokyo Overnight Average Rate), GBP LIBOR is SONIA(Sterling Overnight Index Average), and the timing of the suspension of CD interest rates has not been determined, and they are considering phasing out with a grace period.

Consolidated companies expect that reform of interest rate indicators affects the operational and risk management procedures and hedge accounting of consolidated companies and to be mainly exposed to operational risks. For example, this includes the application of new alternative provisions with the other party to the derivatives contract, the renewal of contract conditions related to the reform of interest rate indicators, and modification of control.

Under the management of the risk management team, consolidated companies have established IBOR conversion plans consisting of major business sectors such as finance, accounting, tax, law, IT, and risk. The purpose of IBOR conversion management is to prepare and implement an action plan to understand where exposure to IBOR occurs within the business and to smoothly convert to alternative indicator interest rates. It subscribes to the derivatives ISDA protocol, develops an evaluation model to apply alternative interest rates, analyzes market risks and risks, updates the operating risk system, and continuous communication with counterparties to apply alternative interest rates.

Consolidated companies review the total amount of contracts that have not yet been converted to alternative indicator interest rates and the amount of contracts that contain appropriate alternative provisions to monitor the progress of converting from IBOR to new indicator interest rates.

As of the end of the this period, the total amount of contracts that have not been converted to alternative indicator interest rates is as follows, including products that expire before the suspension of IBOR interest rate calculation (Unit: Korean won in million).

Interest Rate Indicator (*)	Non-derivative financial assets (book value)	Non-derivative financial liabilities (book value)	Derivatives and derivative-linked securities (nominated amount)	Off-balance sheet account (agreed amount)
USD LIBOR	₩ 460,268	₩ 200,029	₩ 1,958,403	₩ 17,921
JPY LIBOR	-	-	7,624	-
GBP LIBOR	24,071	-	-	-

(*) As of the end of this period, contracts using CD interest rates have not been counted as the timing of the suspension of CD interest rates has not been determined, and they are considering phasing out with a grace period.

The Group has not early adopted any other standard, interpretation, or amendment that has been issued but is not yet effective.

4.1. Basis of preparation (cont'd)

Management of the Group is using many assumptions and reasonable estimates to create the consolidated financial statements on the basis of K-IFRS. In applying the accounting policies of the Group, the management's judgment is required under K-IFRS. Parts that require significant judgments and complexity or parts of which estimations and assumptions have significant impact on the preparation of the consolidated financial statements are disclosed in note 5.

The following amended standards have been published that are not mandatory for December 31, 2021 reporting periods and have not been early adopted by the Company.

- *Amendments to Korean IFRS No. 1103 Business Combination – Reference to the Conceptual Framework*

The amendments update a reference of definition of assets and liabilities to qualify for recognition in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korean IFRS No. 1037 *Provisions, Contingent Liabilities and Contingent Assets*, and Korean IFRS No. 2121 *Levies*. The amendments also confirm that contingent assets should not be recognized at the acquisition date. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Company does not expect that these amendments have a significant impact on the separate financial statements.

- *Amendments to Korean IFRS No. 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, as 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 separate financial statements.

- *Amendments to Korean IFRS No. 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 separate financial statements.

- K-IFRS Annual leave improvement 2018-2020

K-IFRS Annual leave improvement 2018-2020 will be applied from the fiscal year starting on or after January 1, 2022 and will be applied early. Company expect the revision to have no significant impact on consolidated financial statements.

-K-IFRS 1101: 'first-time adopters of K-IFRS'- Subsidiaries that are first-time adopters

-K-IFRS 1109: 'Financial instrument'- fees related to 10% test for financial liabilities derecognition

-K-IFRS 1116: 'Lease' – Lease incentives

- *Amendments to Korean IFRS No.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 the right to defer settlement of the liability or the management's expectations thereof. 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 the liability by the transfer of the entity's own equity instruments is recognized separately from the liability as an equity component of a compound financial instrument.

4.1. Basis of preparation (cont'd)

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 separate financial statements.

- *Enactment of Korean IFRS No.1117 'Insurance Contract'*

IFRS 1117 'Insurance Contract' will replace IFRS 1104 'Insurance Contract'. This standard estimates all cash flows under the insurance contract and uses a discount rate that reflects the assumptions and risks at the time of reporting, and recognizes income as accrual by reflecting the services (insurance coverage) provided to the contractor for each fiscal year.

In addition, investment factors (cancellation/expiration refund) paid to policyholders regardless of insurance cases are excluded from insurance income, and insurance gains and losses and investment gains and losses are separately marked so that information users can check the source of profits and losses. The standard will be applied from the fiscal year that begins for the first time after January 1, 2023, and companies applying IFRS 9 "financial instruments" are allowed to apply early. The Company does not expect that these enactment have a significant impact on the separate financial statements.

- *Amendments to Korean IFRS No.1001 Presentation of Financial Statements – Accounting Policy Disclosure*

The amendments require an entity to define and disclose their material accounting policy information. IFRS Practice Statement 2 Making Materiality Judgements was amended to explain and demonstrate how to apply the concept of materiality. 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 separate financial statements.

- *Amendments to Korean IFRS No.1008 Accounting Policies, Changes in Accounting Estimates and Errors – Definition of Accounting Estimates*

The amendments introduce the definition of accounting estimates and clarify how to distinguish changes in accounting estimates 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 separate financial statements.

- *Amendments to Korean IFRS No.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 separate financial statements.

4.2. Principles of consolidation

4.2.1. Subsidiaries

Subsidiaries are fully consolidated from the date on which control is transferred to the Group. Subsidiaries are no longer consolidated from the date on which the Group loses control over them. Control is achieved where the Group has the power to govern the financial and operating policies of an entity so as to obtain the benefits from its activities. The Group consolidates special purpose entities if the substance of its relationship with them indicates that it has control over them. The Group considers the existence and influence of exercisable or convertible voting rights when evaluating its subsidiaries.

4.2.1. Subsidiaries (cont'd)

All significant intercompany transactions and account balances among consolidated companies are eliminated on consolidation. Unrealized gains or losses included in loans and borrowings arising from transactions between consolidated companies are eliminated on consolidation. The related accounts receivable and payable are also eliminated on consolidation. The accounting Policies of subsidiaries can be revised on consolidation in consistency policies the Group has adopted.

4.2.2. Non-controlling interests

Non-controlling interests must be presented in the consolidated statement of financial position within equity, separate from the equity of the owners of the parent. Total comprehensive income must be attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Some puttable financial instruments or some financial instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation are not accounted as the residual equity in consolidated financial statements, therefore, those non-controlling interests are classified as financial liabilities in the consolidated financial statement.

4.2.3. Investments in associates

Associates are the entities that the Group has significant effect on, but has no controlling power and the Group generally owned its equity in 20~50% of their shares with voting rights by the Group. The Group's consolidated financial statements reflects investment in an associate in using the equity method and the amount of Investment in an associate include goodwill which is acquisition cost less any accumulated impairment losses.

After acquiring shares of an associate, the Group's share of the current income (loss) of the associate is recognized as current income (loss) of the Group, and the Group's share of changes in the retained earnings of the associate is recognized as the retained earnings of the Group. If the Group's share of the loss of the associate is the same as or above the Group's investment interest including other plain bond of the associate, the Group no longer recognizes a loss unless the Group is liable for paying or has to pay the associate's debt.

When signs of damage are not aroused, the Group's share in the investee's unrealized profits and losses resulting from transactions between the Group and its investee are eliminated to the extent of the interest in the investee. And when necessary, adjustments are made to the financial statements of associates to bring their accounting policies in line with those used by the Group.

4.3. Operating segment reporting

Operating segments are disclosed in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker is responsible for allocating resources and assessing the performance of the operating segments.

4.4. Foreign exchange

4.4.1. Functional currency

When preparing for the consolidated financial statements, the Group measures and recognizes all the transactions according to the functional currency, used to conduct operating activities in the primary economic environment. Consolidated Financial statements are expressed in Korean won.

4.4.2. Translation of foreign currency transactions and balances at the end of the reporting period

Transactions in foreign currencies are initially recorded at the functional currency rate of exchange prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate of exchange prevailing at the reporting date and its exchange differences are recognized in net income for the period in which they arise. The Group applies a year-end exchange rate to non-monetary assets and liabilities measured at fair value in the consolidated statements of financial position. If valuation gain or loss on fair value is recognized as current income, foreign currency translation gain or loss is recognized in current income. If valuation gain or loss on non-monetary items is recognized in other comprehensive income, foreign currency translation gain or loss is recognized in other comprehensive income. Non-monetary items not measured at fair value are translated using the exchange rates as of the date of the initial transaction and have no exchange differences.

Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur in the predictable future (therefore forming part of the net investment in the foreign operation), are recognized initially in other comprehensive income and reclassified from equity to net income on disposal or partial disposal of the net investment.

4.4.3. Translation of the Group's foreign operation

As of the reporting date, the assets and liabilities of subsidiaries are translated into the Group's presentation currency, Korean won (KRW), at the rate of exchange as of the reporting date, and their statements of profit or loss and other comprehensive income are translated at the weighted average exchange rates for the year. Exchange differences arising on translation are taken directly to a separate component of equity.

4.5. Cash and cash equivalents

Cash and short-term deposits in the statement of financial position comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less.

4.6. Financial instruments – initial recognition and subsequent measurement

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

4.6.1. Financial instruments – Initial recognition and measurement

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

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

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

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

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

4.6.2. Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortized cost (debt instruments)
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition
- Financial assets at fair value through profit or loss

4.6.2.1. Financial assets at amortized cost (debt instruments)

The Group measures financial assets at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

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

4.6.2.2. Financial assets at fair value through OCI (debt instruments)

The Group measures debt instruments at fair value through OCI if both of the following conditions are met:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling
- And
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

For debt instruments at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the statement of profit or loss and other comprehensive income and computed in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to profit or loss.

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

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

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

4.6.2.4. Financial assets at fair value through profit or loss

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

4.6.2.4. Financial assets at fair value through profit or loss (cont'd)

Above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

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

This category includes derivatives and equity instruments that do not make an irrevocable choice to treat changes in fair value through other comprehensive income.

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

4.6.3. Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Group's consolidated statement of financial position) when:

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

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

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

4.6.4. Impairment of financial assets

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

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

4.7. Regular way trades

Equity securities, debt securities, derivatives, which are traded in the KRX or qualified foreign exchange markets, are treated as regular way trades. The Group's specific accounting policies about regular way trades are described below.

4.7.1. Proprietary trading

As for proprietary trading, purchase or sale of the asset that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognized or derecognized on the trading date.

4.7.2. Trading on consignment

As for trading on consignment, the Group serves a clientele of investors who trade public stocks and other securities and recognizes the brokerage fees on the trading date. Until the settlement date of the trading on consignment, the Group does not offset the receivables and payables to customers and offsets the receivables and payables to the KRX.

4.8. Derivative financial instruments and hedge accounting

Derivatives instruments are initially recognized at fair value on the contract date and are subsequently revalued at their fair value. Derivative instruments are accounted differently depending on whether hedge accounting is applied, and therefore, are classified into trading purpose derivatives and hedging purpose derivatives. In a hedge relationship, when a hedge item is any asset, liability or unrecognized fixed contract, which is exposed at the possibility that its some or entire fair value is fluctuated by the specified risks, fair value hedge accounting is applied. In another way, when a hedge item is any asset, liability or expected highly probable transaction, which is exposed at the possibility that its cash flow is fluctuated by the specified risk, cash flow hedge accounting is applied. For trading purpose derivative transaction, changes in the fair value of derivatives are recognized in net income.

At the inception of the hedge relationship, the Group formally documents the relationship between the hedged item and the hedging instrument, including the nature of the risk, the objective and strategy for undertaking the hedge and the method that will be used to assess the effectiveness of the hedging relationship. Also, at the inception of the hedge relationship, a formal assessment is undertaken to ensure that the hedging instrument is expected to be highly effective in offsetting the designated risk in the hedged item and the actual result.

4.8.1. Fair value hedges

The change in the fair value of an interest rate hedging derivative is recognized in finance costs in the statement of comprehensive income. The change in the fair value of the hedged item attributable to the risk hedged is recorded as a part of the carrying value of the hedged item and is also recognized in finance costs in the statement of comprehensive income.

For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through the statement of comprehensive income over the remaining term up to maturity. Effective interest rate amortization may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in the statement of comprehensive income.

4.8.2. Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized directly as other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognized immediately in finance costs in the statement of comprehensive income.

4.8.2. Cash flow hedges (cont'd)

Amounts recognized as other comprehensive income are transferred to the statement of comprehensive income when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized as other comprehensive income are transferred to the initial carrying amount of the nonfinancial asset or liability.

If the forecast transaction or firm commitment is no longer expected to occur, the cumulative gain or loss previously recognized in equity are transferred to the statement of comprehensive income. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognized in other comprehensive income remains in other comprehensive income until the forecast transaction or firm commitment affects profit or loss.

4.8.3. Embedded derivatives

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives. When their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured by fair value through profit or loss.

4.9. 'Day 1' profit or loss recognition

When the transaction price is different from the fair value of other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets, the Group immediately recognizes the differences between the transaction price and fair value (a 'Day 1' profit or loss) in 'net trading income'.

In case where fair value is determined using data which is not observable, the difference between the transaction price and model value is deferred and amortized over the life of the associated instrument using the straight-line method.

4.10. Interest income and interest expense

The Group recognizes interest income and interest expense using the effective interest rate method on an accrual basis. When a financial instrument bearing interest is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flows discounted at its original effective interest rate of the instrument, and continues unwinding the discount as interest income.

4.11. Fees and commission revenue

The Group generates fees and commission is from a wide range of services provided to the counterparty. Fees and commission revenue is recognized for the transfer of promised goods or services to customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. In accordance with the 5 step revenue recognition model below. However, fees and commission which are part of the effective interest on the financial instrument, are recognized by the effective interest rate method.

Step 1: Identify the contracts with a customer

Step 2: Identify performance obligations in the contract

Step 3: Determine the transaction price

Step 4: Allocate the transaction price to the performance obligations in the contract

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation (or as they are satisfied over time)

4.12. Dividend income

Dividend income is recognized when the Group's right to receive the payment is established.

4.13. Bonds purchased under resale agreements and bonds sold under repurchase agreements

Securities purchased under agreements to resell at a specified future date (“reverse repos”) are recorded in the statement of financial position as bonds purchased under repurchase agreements in the other loans. Conversely, securities sold under agreements to repurchase at a specified future date (“repos”) are recorded in the statement of financial position as bonds sold under repurchase agreements in the other borrowing liabilities. Interest income and expense incurred from reverse repo and repo transactions are recorded as interest income on loan and interest expense on borrowings, respectively in the statement of comprehensive income.

4.14. Property and equipment

Property and equipment is stated at cost including transaction costs, less accumulated depreciation and accumulated impairment in value. Changes in the expected useful life are accounted for by changing the amortization period or method, as appropriate, and treated as changes in accounting estimates.

Depreciation is calculated on a straight-line basis over the estimated useful life of the asset. Land is not depreciated. The estimated useful lives are as follows:

	Useful life (years)
Buildings	40
Vehicles	4
Furniture and fixtures	4
Right-of-use assets	Lease commencement date ~ Lease end date

Property and equipment is derecognized on disposal or when no future economic benefits are expected from its use. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is recognized in ‘Other operating income’ in the statement of comprehensive income in the year the asset is derecognized.

4.15. Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at depreciated cost.

Investment properties are derecognized when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized through profit or loss in the period of derecognition. And transfers are made to or from investment property only when there is a change in use.

While land is not depreciated, buildings are depreciated based on the depreciation method and useful lives of tangible assets (buildings). The estimated useful lives and residual values and depreciation method are reviewed at the end of each reporting period, and when it is deemed appropriate to change them, the effect of any change is accounted for as a change in accounting estimates.

4.16. Intangible assets

4.16.1. Software

Software acquired separately are measured on initial recognition at cost. The software with finite lives are carried at cost less any accumulated amortization. Amortization is calculated on a straight-line basis over the estimated useful life of the asset.

4.16.2. Intangible assets with indefinite useful lives

Intangible assets with indefinite useful lives are not amortized, but are annually tested for impairment. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

4.17. Impairment of non-financial assets

The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If indication exists, or when annual impairment testing for an asset is required, the Group estimates the assets recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's ("CGU") fair value less costs to sell and its value in use. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

After recognition of the impairment of non-financial assets, if there is a change in the assumptions used to determine the asset's recoverable amount, a previously recognized impairment loss is reversed. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceeds the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

After application of the equity method, the Group determines whether it is necessary to recognize an additional impairment loss on the Group's investment in its associates. The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount in the statement of comprehensive income.

4.18. Lease

In exchange for consideration in the contract, if the control over the use of the identified asset is transferred for a period of time, the contract is a lease or includes a lease.

- Lessee

At the date of the agreement or the effective date of the modification containing the lease element, the Group allocates the consideration of the contract to each lease element on the basis of its relative stand-alone price. The Group accounts for the non-lease element related to the lease element as a single lease element by applying practical expedient that does not separate the non-lease element for real estate leases.

The Group recognizes the right-of-use asset and the lease liability at the commencement date of the lease. The right-of-use asset is measured at cost, which comprises the amount of the initial measurement of the lease liability, lease payments made at or before the commencement date (less any lease incentives received), initial direct costs, and an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located.

The right-of-use asset is subsequently depreciated on a straight-line basis from the commencement of the lease to the end of the lease term. However, if the lessor transfers the ownership of the underlying asset to the lessee by the end of the lease term or if the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, the lessee depreciates the right-of-use same as a fixed asset from the commencement date to the end of the useful life of the underlying asset. The right-of-use asset may be reduced by an impairment of the underlying asset of adjusted by remeasurement of the lease liability.

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

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

- Fixed payments (including in-substance fixed payments)
- Variable lease payments that depend on an index(or a rate), initially measured using the index or rate as at the commencement date

4.18. Lease (cont'd)

- Amounts expected to be payable by the lessee under residual value guarantees
- The exercise price of a purchase option if the lessee is reasonably certain to exercise extension option, and payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminated the lease

Lease liabilities are amortized using the effective interest method. The lease liability is remeasured if the future lease payments change depending on changes in the index(or a rate), changes in the expected amount to be paid under the residual value guarantee, and changes in the assessment of whether the purchase or extension option is reasonably certain to be exercised or not to exercise the terminate option.

When remeasuring a lease liability, the related right-of-use asset is adjusted and if the carrying amount of the right-of-use asset decreases to zero (0), the remeasurement amount is recognized in profit or loss.

In the statement of financial position, the Group classified the lease liabilities that do not meet the definition of investment property as 'other financial liabilities.

The Group has chosen a practical expedient that does not recognize the right-of-use asset and lease liabilities for short-term lease with leases with a lease term less than 12 months and leases for which the underlying asset is of low value. The Group recognizes the lease payments associated with those leases as an expense on a straight-line basis over the lease term.

4.19. Employee benefits

4.19.1. Short-term employee benefits

The Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for the services rendered by the employees. Also, short-term employee benefits to be paid within 12 months from the end of the reporting period are recognized in profit or loss.

4.19.2. Retirement benefits

- Defined benefit pension plans

The Group classifies all pension plans under defined benefit pension plans ("DB plan") except for pension plans under the defined contribution pension plan ("DC plan"). The retirement benefit liabilities recognized in the consolidated statements of financial position represents the present value of the defined benefit obligation reduced by the fair value of plan assets.

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method by an independent actuary. The present value of defined benefit obligation is computed by discounting expected future cash outflows with market rate of return measured against the yield of high-graded corporate bond whose date of payment and maturity is similar to that of a defined benefit obligation. Actuarial gains and losses, incurred from the change in actuarial assumptions and the difference between the assumptions and the actual results, are recognized in other comprehensive income for the period.

If the calculated net value is an asset when the fair value of plan assets is deducted from the present value of defined benefit liabilities, the asset is recognized up to accumulated unrealized past service cost and the present value of an economic benefit available in the form of a refund from the pension plan or a saving of future contributions.

Unrecognized prior service cost, a change in the present value of defined benefit pension plan for employees' past services which is incurred by introduction or changes of severance payment, is immediately recognized in current expense for the period in which it arises.

- Defined contribution pension plans

As the Group operates a DC plan, the amount of contribution that the Group has to pay is recognized as the employee benefit expense.

4.20. Income tax expenses and deferred tax assets and liabilities

Income taxes comprise of current and deferred taxes. All items related to taxes, other than those recognized directly in equity, are accounted for in the statement of comprehensive income. Accordingly, items recognized directly in equity and the related income taxes are accounted for in the 'Other operating income'.

The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the reporting date. If the applied tax laws require an interpretation, the Group calculates income tax payable expected to be paid to the taxation authorities based on the opinion made when the taxes were reported.

Deferred tax is provided on the temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. Deferred liabilities are recognized for all taxable temporary differences, except:

When the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit loss.

In respect of taxable temporary differences associated with investments in subsidiaries, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

4.21. Recognition and measurement of financial liabilities

Financial liabilities are classified as financial liabilities at fair value through profit or loss or financial liabilities measured at amortized cost. All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, plus directly attributable transaction costs.

4.21.1. Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held-for-trading and financial liabilities designated upon initial recognition as of fair value through profit or loss. Financial liabilities are classified as held-for-trading if they are acquired for the purpose of selling in the near term. All financial liabilities including an embedded derivative separated from the host contract are reclassified as financial liabilities at fair value through profit or loss except for financial liabilities designated as effective hedging instruments or financial guarantee contracts. After initial recognition, the changes in the fair value of the financial liabilities at fair value through profit or loss and the related interest expenses are recognized as profit or loss. The Group has designated derivative-linked securities sold by the Group as financial liabilities at fair value through profit or loss.

4.21.2. Financial liabilities measured at amortized cost

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost. The difference between the amounts received less transaction costs and the amount repaid is amortized using the effective interest rate method and recognized as interest expense over the term of the borrowing.

Commissions paid in accordance with the terms of the borrowing agreements are recognized as transaction costs for the borrowings when it is highly probable that a portion or entirety of borrowings are made. The recognition of expenses thereof is deferred until the borrowings are withdrawn. If there is no evidence that it is highly probable a portion or entirety of the borrowings will be made, the payments are recorded as prepaid expenses for liquidity services and are amortized over the contractual period.

4.21.3. Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expired. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the statement of comprehensive income. Meanwhile, the group has designated derivatives linked securities sold by the group as financial liabilities at fair value through profit or loss.

4.22. Fair value of financial instruments

Financial assets and financial liabilities traded in active markets at the reporting date are based on their quoted market price or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs.

For all other financial instruments not traded in an active market, the fair value is determined by using appropriate valuation techniques. Valuation techniques include the discounted cash flow method, comparison to similar instruments for which market observable prices exist, options pricing models, credit models and other relevant valuation models. These techniques incorporate the Group's estimate of assumptions that a market participant would make when valuing the instruments. Valuation techniques which provide reliable estimates on mark-to-market prices are applied.

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: Quoted (unadjusted) prices in active markets for similar assets or liabilities.

Level 2: Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.

Level 3: Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

4.23. Provisions

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

The amount recognized as a provision is the best estimate of the expenditure required to fulfill the present obligation at the end of the reporting period, taking into account the inevitable risks and uncertainties about the events and circumstances involved. If the time value of money is important, the provision is assessed at the present value of the expected expenditure to fulfill the obligation.

If a third party is expected to payback some or all of the expenditure required to settle the provision, the repayment amount is recognized and accounted for as a separate asset only when it is almost certain that it will be reimbursed.

The balance of provisions is reviewed at the end of each reporting period and adjusted to reflect the best estimate at the end of the reporting period. When it is no longer likely that the outflow of resources embodying economic benefits for the fulfillment of obligations, the relevant provision is reversed.

4.24. Capital stock

Common stock issued is classified as a capital stock in the statement of financial position and additional stock issuance costs or incremental costs related to the stock issuance are recorded as a deduction from issued capital net of tax effects.

Preferred stocks are classified as equity if they do not have to be redeemed or are redeemed only at our option, and if the payment of dividends is determined at our discretion. Dividends are recognized when the dividend is approved at the company's general shareholders' meeting. Preferred shares are classified as liabilities for which shareholders can claim repayment of a fixed or definable amount on or after a certain date or are obligated to repay. The dividend is recognized as interest expense and in profit or loss when incurred.

4.25. Dividends

Dividends on common stock are deducted from the Group's equity and recognized as a liability when the shareholders' meeting of the Group approves the dividends.

4.26. Transaction under common control

The Group accounts transactions under common control based on book value. Assets and liabilities of participated entities are recognized book value of the date of transaction, and the difference between payment and book value is reflected in capital

4.27. Share-based payments

The Group indirectly measures the fair value of the goods or services received or the fair value of the goods or services received in a share-settled stock payment transaction that grants stocks or stock options to employees in exchange for the goods or services received. The amount is recognized as employee benefits and equity during the vesting period. If the vesting condition of the stock option is a vesting condition other than a service provision condition or a market condition, the employee cost is adjusted so that it is ultimately determined based on the actual quantity of the stock option.

In the case of cash-settled share-based compensation transactions in which cash is paid in exchange for the goods or services received, the goods or services received and the liabilities borne in return are measured at fair value. These are recognized as employee benefit expenses and liabilities during the vesting period. In addition, the fair value of the liability is remeasured at the end of each reporting period and at the final settlement date until the liability is settled, and the change in fair value is recognized as employee benefits.

Meanwhile, Meritz Financial Group, the ultimate parent entity, granted employees of consolidated companies the right under the Share-based payment arrangement, and the consolidated company signed an agreement with Meritz Financial Group to compensate for the amount under the Share-based payment arrangement. According to the payment agreement, the amount that the consolidated company has to pay to Meritz Financial Group is recognized as a liabilities, and the difference in compensation costs recognized according to the stock settlement type is reflected in capital.

4.28. Criteria of calculating earnings per share (EPS)

The Group calculates basic income per share of common stock and diluted income per share in profit or loss for the year and is presented in the statement of comprehensive income. Basic income per share is calculated by dividing the net income attributable to common stocks by the weighted average number of common stocks in circulation during the reporting period. Diluted EPS is calculated by adjusting the earnings and number of shares for the effects of all dilutive potential common shares.

5. Significant judgements and accounting estimates

The preparation of the Group's consolidated financial statements requires the management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

In the process of applying the Group's accounting policies, the management has made the following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements.

5.1. Impairment of financial assets

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

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

5.2. Impairment of non-financial assets

Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell calculation is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the cash generating unit being tested. The recoverable amount is most sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash inflows and the growth rate used for extrapolation purposes.

5.3. Income taxes

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority.

5.4. Tax for the promotion of collaborative investment cooperation

In accordance with the tax for the promotion of collaborative investment cooperation, when a certain amount of taxable income of five years from 2018 is not used for investment and wage increases, the Group will be obligated to pay additional income taxes calculated based on the methods provided in the Tax Law. As a result, the Group reflects the effect of tax for the promotion of collaborative investment cooperation on the income tax for the corresponding years, and the tax liability of the Group may vary depending on the level of investment and wage growth in each year.

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6. Operating segment information

6.1. General Information

Management of the Company decides operating segment based on the information, which is to be reported to the chief executive officer, in order to allocate resources to the segment and evaluate performance of the segment. The details of operating department consists are presented as following:

- a) Sales & Trading: Brokerage service, proprietary trading and underwriting of securities etc.
- b) Corporate finance and IB: Corporate financing advisory services, real estate-related credit offering etc.
- c) Retail business: consignment business, sale of asset management etc.
- d) Merchant banking: Issue, discount and trading of promissory note or bond, investment and loan of facilities or working capital, payment guarantees, and management of CMA (*)
- e) Credit-Specialized financial business: Equipment rental business, credit card business, installment financing business, new technology business financing etc.
- f) Others: Other operating services and headquarters management support services

(*) The merchant banking, which was led by the merger with the Meritz Investment Bank Co., Ltd, ended on April 5, 2020.

6.2. Financial Information by division

6.2.1. The financial information of the operating segments for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021						
	Sales & Trading	Corporate Finance and IB	Retail business	Credit-specialized financial business	Others	Consolidated adjustments	Total
Total revenue	₩ 21,659,087,284	₩ 584,666,170	₩ 247,142,532	₩ 721,306,765	₩ 758,134,438	₩ (569,143,373)	₩ 23,401,193,816
Total expense	(21,219,171,734)	(100,744,729)	(135,601,062)	(446,262,878)	(828,610,969)	376,397,975	(22,353,993,397)
Income (loss) before income tax expense							
Income tax expense	439,915,550	483,921,441	111,541,470	275,043,887	(70,476,531)	(192,745,398)	1,047,200,419
Income tax expense (*1)	(106,658,720)	(117,328,068)	(27,043,532)	(53,703,746)	32,881,269	7,576,920	(264,275,877)
Net income (loss)	₩ 333,256,830	₩ 366,593,373	₩ 84,497,938	₩ 221,340,141	₩ (37,595,262)	₩ (185,168,478)	₩ 782,924,542
Total Assets	41,952,648,067	-	-	8,000,426,618	8,957,436,866	(4,802,272,438)	54,108,239,113
Total Liabilities	36,883,832,583	-	-	6,811,444,277	7,919,265,542	(2,840,717,715)	48,773,824,687

	Year ended December 31, 2020							
	Sales & Trading	Corporate Finance and IB	Retail business	Merchant banking	Credit-specialized financial business	Others	Consolidated adjustments	Total
Total revenue	₩ 15,716,093,975	₩ 540,824,444	₩ 186,801,697	₩ 7,537,312	₩ 634,394,148	₩ 14,254,318	₩ (413,501,291)	₩ 16,686,404,603
Total expense	(15,524,935,627)	(247,869,590)	(159,045,304)	(6,942,221)	(453,828,467)	14,696,900	458,686,774	(15,919,237,535)
Income (loss) before income tax expense								
Income tax expense	191,158,348	292,954,854	27,756,393	595,091	180,565,681	28,951,218	45,185,483	767,167,068
Income tax expense (*1)	(50,517,893)	(77,419,910)	(7,335,251)	(157,266)	(46,710,204)	(17,003,895)	(2,888,206)	(202,032,625)
Net income (loss)	₩ 140,640,455	₩ 215,534,944	₩ 20,421,142	₩ 437,825	₩ 133,855,477	₩ 11,947,323	₩ 42,297,277	₩ 565,134,443
Total Assets	35,318,142,325	-	-	-	6,602,447,239	4,687,667,184	(2,761,265,546)	43,846,991,202
Total Liabilities	30,771,023,719	-	-	-	5,651,685,696	4,188,492,720	(1,552,993,906)	39,058,208,229

(*1) The amount is allocated to net income before income tax of each segment for 2021 and 2020

The measured amounts in each segment are reported to the chief operating decision maker for the purpose of assessing the performance of each segments. This includes profits and interest of internal funds from transactions with other sales departments.

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6.2.2. There is no single customer accounted for more than 10% of the company's operating profit in 2021 and 2020. The geographic operating revenue information and the geographic non-current assets information for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021		Year ended December 31, 2020	
	Domestic	Overseas	Domestic	Overseas
Operating revenue	₩ 23,244,484,936	₩ 2,900,787	₩ 16,601,878,383	₩ 2,999,294
Non-current assets (*)	78,779,718	150,381,290	89,615,458	-

(*) Represents the amount as of December 31, 2021 and 2020.

7. Cash and deposits

Cash and due from banks as of December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	December 31, 2021	December 31, 2020
Cash and cash equivalents:		
Current deposits	₩ 1,081,533	₩ 1,233,665
Demand deposits	401,892,475	386,600,902
Foreign currency deposit	288,846,138	80,214,779
Time deposits	245,351	51,000,000
MMDA	88,502,559	82,000,000
Others	386,026,447	398,685,991
	<u>1,166,594,503</u>	<u>999,735,337</u>
Due from banks in Korean won:		
Reserve for claims of customer's Deposits(*)	145,203,410	237,000,000
Margin on securities market	79,000,000	43,100,000
Guarantee deposits for securities Borrowed	10,000	174,731,900
Guarantee deposits for trading futures and options	220,919,084	150,635,444
Long - term deposits	1,195,378,197	302,000,000
Restricted deposits etc.	177,500	188,500
Other deposits	1,010,576,461	315,116,127
	<u>2,651,264,652</u>	<u>1,222,771,971</u>
	<u>₩ 3,817,859,155</u>	<u>₩ 2,222,507,308</u>

(*) Pursuant to the *Financial Investment Services and Capital Markets Act*, the Group is required to place a deposit on a daily basis in Korea Securities Finance Corporation ("KSFC") as a reserve against customers' deposits for the trading of stocks, derivatives and for other purposes. These deposits should exceed the amount which is calculated by deducting cash commission guarantee from total customers' deposit.

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8. Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Book value (Fair value)	
	December 31, 2021	December 31, 2020
Fair value through profit or loss measurement item:		
Equity securities and investments	₩ 1,446,982,540	₩ 835,310,364
Debt securities:		
Government and public bonds	9,098,087,157	10,074,455,674
Special purpose bonds	4,539,544,928	5,877,103,836
Corporate bonds	2,932,491,073	1,823,151,956
Collective investment securities	1,550,547,943	2,151,941,471
Commercial papers	979,540,228	182,483,933
Asset backed short-term bonds	1,058,358,303	53,015,305
Foreign currency securities	751,543,448	726,197,198
Loans	1,412,839,063	1,146,911,405
Hybrid financial instruments	1,384,134,312	189,292,369
Reserve for claims of customers' deposits (trust) (*)	1,207,894,688	994,104,732
Collective fund for default loss	36,231,462	27,223,780
Equity linked securities	128,059,031	103,462,576
Stock warrant securities	41,287	-
Others	144,957,380	109,431,886
Credit risk adjustments	(191,061)	(161,615)
Deferred day 1 profit or loss	(5,394,960)	2,391,191
	<u>26,665,666,822</u>	<u>24,296,316,061</u>
Derivative assets held for trading:		
Interest rate derivatives	46,568,774	49,291,511
Foreign currency derivatives	55,165,381	225,310,995
Equity derivatives	67,705,759	63,729,865
Stock price index derivatives	11,519,475	62,938
Others	212,862,894	91,294,581
Credit risk adjustments	(2,864,039)	(1,356,847)
Deferred day 1 profit or loss	(74,280,881)	15,592,437
	<u>316,677,363</u>	<u>443,925,480</u>
	<u>₩ 26,982,344,185</u>	<u>₩ 24,740,241,541</u>

(*) Pursuant to the *Financial Investment Services and Capital Markets Act*, the Group is required to place a deposit on a daily basis in Korea Securities Finance Corporation ("KSFC") as a reserve against customers' deposits for the trading of stocks, derivatives and for other purposes. These deposits should exceed the amount which is calculated by deducting cash commission guarantee from total customers' deposit.

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9. Financial assets measured at FVOCI

9.1. Financial assets measured at FVOCI as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Book value (Fair value)	
	December 31, 2021	December 31, 2020
Equity securities and investments (*)	₩ 309,740,475	₩ 283,258,542
Debt securities:		
Government bonds	642,867,419	-
Special purpose bonds	1,215,190,291	40,224,905
Corporate bonds	1,075,200,083	325,436,616
	₩ 3,242,998,268	₩ 648,920,063

(*) Equity securities acquired by law for contribution and acquisition, donation and public or business collaboration purposes were classified as fair value through other comprehensive income financial assets.

9.2. Gain (loss) on valuation of financial assets measured at FVOCI as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021				
	Acquisition cost	Amortized cost	Accumulated expected credit losses	Fair value	Gain(loss) on valuation
Equity securities					
Non-marketable stock	₩ 109,111,289	₩ -	₩ -	₩ 309,740,475	₩ 200,629,186
	109,111,289	-	-	309,740,475	200,629,186
Debt securities:					
Government bonds	635,301,869	636,261,270	-	642,867,419	6,606,149
Special purpose bonds	1,214,738,364	1,214,830,720	(1,025,878)	1,215,190,291	1,385,449
Corporate bonds	1,075,314,687	1,075,653,866	(1,165,159)	1,075,200,083	711,376
	2,925,354,920	2,926,745,856	(2,191,037)	2,933,257,793	8,702,974
	₩ 3,034,466,209	₩ 2,926,745,856	₩ (2,191,037)	₩ 3,242,998,268	₩ 209,332,160

	December 31, 2020				
	Acquisition cost	Amortized cost	Accumulated expected credit losses	Fair value	Gain(loss) on valuation
Equity securities					
Non marketable stock	₩ 109,411,289	₩ -	₩ -	₩ 283,258,542	₩ 173,847,253
	109,411,289	-	-	283,258,542	173,847,253
Debt securities:					
Special purpose bonds	40,268,763	40,234,487	(44,275)	40,224,905	34,693
Corporate bonds	325,635,936	325,526,459	(436,142)	325,436,616	346,299
	365,904,699	365,760,946	(480,417)	365,661,521	380,992
	₩ 475,315,988	₩ 365,760,946	₩ (480,417)	₩ 648,920,063	₩ 174,228,245

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9.3. Changes in valuation gain (loss) on valuation of financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021				
	Beginning balance	Reclassification	Changes in credit losses	Gain (loss) on valuation	Ending balance
Equity securities :					
Non-marketable equity securities	₩ 173,847,253	₩ -	₩ -	₩ 26,781,933	₩ 200,629,186
Income tax effect	(47,721,071)	-	-	(7,351,641)	(55,072,712)
	<u>126,126,182</u>	<u>-</u>	<u>-</u>	<u>19,430,292</u>	<u>145,556,474</u>
Debt securities :					
Government bonds	-	-	-	6,606,149	6,606,149
Special purpose bonds	34,693	9,583	981,603	359,570	1,385,449
Corporate bonds	346,299	89,844	729,018	(453,785)	711,376
Income tax effect	(104,583)	(27,292)	(469,565)	(1,787,527)	(2,388,967)
	<u>276,409</u>	<u>72,135</u>	<u>1,241,056</u>	<u>4,724,407</u>	<u>6,314,007</u>
	<u>₩ 126,402,591</u>	<u>₩ 72,135</u>	<u>₩ 1,241,056</u>	<u>₩ 24,154,699</u>	<u>₩ 151,870,481</u>

	Year ended December 31, 2020				
	Beginning balance	Reclassification	Changes in credit losses	Gain (loss) on valuation	Ending balance
Equity securities:					
Marketable equity securities	₩ 1,268	₩ (1,268)	₩ -	₩ -	₩ -
Non-marketable equity securities	122,558,925	-	-	51,288,328	173,847,253
Income tax effect	(33,630,516)	348	-	(14,090,903)	(47,721,071)
	<u>88,929,677</u>	<u>(920)</u>	<u>-</u>	<u>37,197,425</u>	<u>126,126,182</u>
Debt securities					
Special purpose bonds	14,859	(14,858)	44,275	(9,583)	34,693
Corporate bonds	123,143	204,922	40,738	(22,504)	346,299
Income tax effect	(37,868)	(52,153)	(23,328)	8,766	(104,583)
	<u>100,134</u>	<u>137,911</u>	<u>61,685</u>	<u>(23,321)</u>	<u>276,409</u>
	<u>₩ 89,029,811</u>	<u>₩ 136,991</u>	<u>₩ 61,685</u>	<u>₩ 37,174,104</u>	<u>₩ 126,402,591</u>

9.4. There were equity securities measured at FVOCI derecognized in 2021 and 2020 (₩300,000 thousand in 2021, ₩1,265 thousand in 2020) and ₩540,000 thousand and ₩1,338 thousand were recognized as a gain or loss on disposal in 2021 and 2020 respectively.

9.5. Residual maturity profiles of debt securities in financial assets measured at FVOCI as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021		
	No later than 1 year	After 1 year but no later than 5 years	Total
Government bonds	₩ -	₩ 642,867,419	₩ 642,867,419
Special purpose bonds	168,996,960	1,046,193,331	1,215,190,291
Corporate bonds	567,590,908	507,609,175	1,075,200,083
	<u>₩ 736,587,868</u>	<u>₩ 2,196,669,925</u>	<u>₩ 2,933,257,793</u>

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9.5. Residual maturity profiles of debt securities in financial assets measured at FVOCI as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

	Year ended December 31, 2020		
	No later than 1 year	After 1 year but no later than 5 years	Total
Special purpose bonds	₩ 40,224,905	₩ -	₩ 40,224,905
Corporate bonds	325,436,616	-	325,436,616
	₩ 365,661,521	₩ -	₩ 365,661,521

9.6. Changes in expected credit losses on debt securities in financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning accumulated expected credit losses	₩ 480,417	₩ -	₩ -	₩ 480,417
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to lifetime Impaired loans Lifetime expected credit losses	-	-	-	-
Provision (reversal) for possible loan losses	1,710,620	-	-	1,710,620
Ending accumulated expected credit losses	₩ 2,191,037	₩ -	₩ -	₩ 2,191,037

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning accumulated expected credit losses	₩ 395,403	₩ -	₩ -	₩ 395,403
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to lifetime Impaired loans Lifetime expected credit losses	-	-	-	-
Provision (reversal) for possible loan losses	85,014	-	-	85,014
Ending accumulated expected credit losses	₩ 480,417	₩ -	₩ -	₩ 480,417

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9.7. Changes in gross book value on debt securities in financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			Total
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	
Beginning accumulated expected credit losses	₩ 365,661,521	₩ -	₩ -	₩ 365,661,521
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to lifetime Impaired loans lifetime expected credit losses	-	-	-	-
Execution and collection	2,560,618,600	-	-	2,560,618,600
Foreign transactions and other changes	6,977,672	-	-	6,977,672
Ending accumulated expected credit losses	₩ 2,933,257,793	₩ -	₩ -	₩ 2,933,257,793

	Year ended December 31, 2020			Total
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	
Beginning accumulated expected credit losses	₩ 205,896,082	₩ -	₩ -	₩ 205,896,082
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to lifetime Impaired loans lifetime expected credit losses	-	-	-	-
Execution and collection	159,887,713	-	-	159,887,713
Foreign transactions and other changes	(122,274)	-	-	(122,274)
Ending accumulated expected credit losses	₩ 365,661,521	₩ -	₩ -	₩ 365,661,521

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10. Investments in associates and joint ventures

10.1. Details of investments in associates and joint ventures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

Associates	Location	Ownership (%)	Book value	
			December 31, 2021	December 31, 2020
Korea Asset Classic Private Investment Trust 2nd (*1)	Korea	7.50	₩ 296,646	₩ 299,145
Airplane fund 5 (*1)	Korea	20.81	13,858,031	13,858,031
Airplane fund 6 (*1)	Korea	8.87	1	1
Meritz Professional Private Real Estate Investment Trust 8th (*1)	Korea	0.66	239,287	234,250
Meritz Professional Private Real Estate Investment Trust 7th (*1)	Korea	0.60	504,224	502,547
M Plus Sky Private Investment Trust 4th (*1)	Korea	8.62	3,372,715	3,302,682
Heungguk Flight Private Investment Trust 10th (*1)	Korea	7.82	10,321,865	9,953,694
Heungguk Flight Private Investment Trust 11th(*1)	Korea	54.84	1	1
AI Partners Energy Infra Private Investment Trust 1st (*1)	Korea	50.00	14,999,060	18,902,939
Heungguk Flight Private Investment Trust 12th (*1)	Korea	32.40	56,863,612	58,183,544
Heungguk Flight Private Investment Trust 13th (*1)	Korea	46.37	2,335,934	2,321,962
Mastern Europe Real Estate Investment Trust 5th (*1)	Korea	26.53	24,155,205	24,155,205
Mastern Europe Real Estate Investment Trust 10th (*1)	Korea	49.89	109,930,618	114,690,826
JB IPO Private Fund Trustee 3 I	Korea	20.00	756,265	764,823
SUN&TREE IPO HIGH-YIELD HEDGE FUND 4	Korea	35.36	16,538,836	-
Global One Professional Investment Type Private IPO Investment Trust No.2	Korea	41.67	2,970,879	-
Anda Project C Private Securities Investment Trust 1	Korea	31.25	984,730	-
EK IPO High Yield Private Equity Trust II	Korea	25.00	6,253,948	-
CrownRock IPO I Hedge Fund	Korea	29.99	3,289,022	-
Consus Busan Gijang Private Real Estate Fund no.2(*1)	Korea	50.00	1,384,916	-
EK IPO Private Equity Trust III(*1)	Korea	50.00	2,603,189	-
Skywalk Game Changer Hedge Fund No.1	Korea	23.26	1,994,961	-
Intrus Value-add Professional Investment Private Fund#3	Korea	25.19	126,225	-
Hizeasset IPO Private Investment Trust 2	Korea	20.02	856,984	-
Trinity Unicorn IPO FUND 1st	Korea	20.06	971,526	-

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10.1. Details of investments in associates and joint ventures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd) :

Associates	Location	Ownership (%)	Book value	
			December 31, 2021	December 31, 2020
SUN&TREE IPO FUND 1st	Korea	20.11	₩ 929,946	₩ -
Kclavis Private Investment Trust 2nd	Korea	20.00	849,591	-
VM Energy Highyield Fund	Korea	37.32	10,050,860	-
Asia growth 1st private equity Investment Limited Partnership	Korea	45.45	4,656,839	4,707,945
MERITZ NS GLOBAL BIO FUND (*2)	Korea	12.07	1,915,983	2,067,012
Kclavis Meister 38th (*1)	Korea	81.82	848,741	863,366
Genesis North America PowerCompany 1st	Korea	24.40	8,383,984	10,665,491
Gongpyeong 15-16 PFV (*2)	Korea	13.66	1	1
OST Partners, Co., Ltd.(*2)	Korea	17.50	1	1
Rhinos-Meritz fund (*2)	Korea	16.62	1,182,981	1,623,611
Higs Frontier, Co., Ltd (*2, 3)	Korea	50.00	154	1
ASEAN Platform Fund No. 1 (*2)	Korea	10.36	957,109	973,184
TK Build, Co., Ltd (*2)	Korea	15.00	1	1
Meritz-DS Fund	Korea	22.73	950,183	971,483
Rhinos-Meritz fund 2 (*2)	Korea	16.93	1,077,939	951,943
Bric-Orbit 8th New Technology Investment Union(*5)	Korea	-	-	1,070,115
Cheongna Logistics, Co., Ltd. (*5)	Korea	-	-	1
KCGI Private Equity Fund 1-12 (*5)	Korea	-	-	19,682,434
Chungmu-ro PFV Co., Ltd.(*2)	Korea	18.00	1	1
GAHA YOU&I CO., LTD(*2)	Korea	16.67	1	1
Hangang Landmark PFV Co., Ltd.(*2)	Korea	14.79	400,715	485,374
DAON CONSTRUCTION, Co., Ltd.(*2, 3)	Korea	19.00	1,900	1
Attila Infrastructure Private Equity Fund I	Korea	28.57	420,213	1,907,622
Galmae PFV Co., Ltd.(*2)	Korea	19.50	1	659,458
New wave fund 2(*2)	Korea	14.69	1,605,958	1,491,376
Songgang Construction(*2)	Korea	10.00	1	1
DAE-SAN ENG CO.,LTD(*2, 3)	Korea	66.15	1	3,000,000
Meritz Alphaview fund 1(*2)	Korea	10.44	487,559	497,439
Next V City PFV Co., Ltd.(*2)	Korea	19.00	1	898,718
Triple space, Co., Ltd.(*2, 3)	Korea	21.00	1,503	1
Sunu Urban Development(*2, 4)	Korea	12.80	1	1
Meritz Kingo fund 1(*2)	Korea	15.99	1,958,963	1,998,528

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10.1. Details of investments in associates and joint ventures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

Associates	Location	Ownership (%)	Book value	
			December 31, 2021	December 31, 2020
Meritz Kclavis fund 1	Korea	22.08	₩ 984,306	₩ 1,006,253
Mastern 116th Gangnam Premium PFV(*2)	Korea	7.00	113,823	-
Meritz Alphaview Fund2(*2)	Korea	9.68	2,493,277	-
SMDNC(*2)	Korea	13.30	1	-
Anseong Seongeun logistics PFV Co. Ltd(*2)	Korea	6.25	418,668	-
DM METAL(*2, 3)	Korea	73.17	1	-
Handaritz(*2)	Korea	0.44	479	-
Meritz GoldenEgg Fund1(*2)	Korea	13.51	984,374	-
S R Industrial Co., Ltd(*2)	Korea	10.50	1	-
Sinchon 2-7 PFV	Korea	30.00	1,083,284	-
Dowon Corporation	Korea	33.33	3,435	-
SW-RN Fund	Korea	27.27	889,005	-
YKOSAN PFV(*2, 4)	Korea	9.00	1	-
NH-Meritz Contents 1 Fund(*2)	Korea	9.09	1,880,635	-
Meritz Hyundai Investment Partners(*2)	Korea	7.80	1,980,250	-
Daehoon Partners Corp.(*2)	Korea	19.00	1	-
JQ(*2)	Korea	13.30	1	-
Hanyang-Meritz 1 Fund(*2)	Korea	6.45	995,007	-
Heung Young Industrial Development(*2)	Korea	9.09	1	-
The First Porte 2(*2)	Korea	13.93	1	-
KAI-Veritas Venture Fund 1	Korea	17.74	793,950	-
KI CHUNGPYUNG(*2)	Korea	5.00	1	-
BUG Logistics Project Finance Investment(*2)	Korea	5.00	227,075	-
Hangang Eco	Korea	30.00	150,000	-
JUN GEUM Construction Co., Ltd(*2)	Korea	13.93	1	-
Cornerstone Mutual Growth Vill Fund	Korea	25.64	695,381	-
Gimhae Daedong Smart Logistics Corp(*2)	Korea	5.40	372,994	-
KR Seocho Co., Ltd.(*2)	Korea	16.64	1,000,000	-
COSMOS(*2)	Korea	9.00	1	-
Hanwha-Pentastone I Funds	Korea	30.30	1,993,909	-
Meritz-AssetOne 1 Partners(*2)	Korea	19.23	2,995,541	-
Dongtan Triple Space(*2)	Korea	6.16	1	-
Hanyang-Pentastone Hi-tech I Funds	Korea	28.57	1,997,169	-
Meritz-NH healthcare 1 Fund(*2)	Korea	19.35	2,998,530	-

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10.1. Details of investments in associates and joint ventures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

Associates	Location	Ownership (%)	Book value	
			December 31, 2021	December 31, 2020
Meritz-SNP 1 Fund(*2)	Korea	12.00	₩ 2,700,003	₩ -
Yuamkopain wood Enterprise Financial Stability corporate Investment Limited PA	Korea	23.77	9,460,610	18,163,528
Hyundai Ufirst Private Placement Fund No.32	Korea	40.00	32,991,835	30,909,862
AIP Euro Green Private Real Estate Investment Trust 7th (*1)	Korea	44.17	74,869,151	74,583,178
AIP Euro Green Private Real Estate Investment Trust 8th (*1)	Korea	63.13	50,382,224	40,657,970
Kiwoom Milestone US Professional Private Real Estate Trust 18 (*1)	Korea	60.00	38,140,544	94,870,270
Midas Global DEBT Private Real Estate Investment Trust 6th(*1)	Korea	38.91	44,961,444	31,883,934
IGIS Global Private Real Estate Investment Trust 254 (*5)	Korea	-	-	72,281,751
UP Global Private Real Estate Fund VI (*1)	Korea	60.00	34,824,689	35,859,953
NH Presidio Investments LLC (*2)	United States	16.60	1	22,719,052
Mastern Private Real Estate Investment Trust 61th (*5)	Korea	-	-	10,632,175
IGIS Global Private Real Estate Investment Trust 301 (*1)	Korea	60.00	323,062,113	268,754,351
Edelweiss Alternative Solutions Trust(*1)	India	70.00	163,436,631	164,898,916
PineStreet Global Corporate Finance PEF Trust No.2 (*5)	Korea	-	-	25,260,347
IGIS US Private Real Estate Investment Trust 292 (*1)	Korea	60.00	107,331,944	112,694,819
IGIS US Private Real Estate Investment Trust 266 (*1)	Korea	60.00	86,425,720	65,914,980
Pacific Private Placement REF 36(*5)	Korea	-	-	33,561,076
Germany Office Real Estate Private Placement Fund No.28 (*5)	Korea	-	-	13,660,303
PIA Private Real Estate Investment Trust No. 6-1(*1)	Korea	60.00	132,870,736	158,526,519
PIA Private Real Estate Investment Trust No. 6-2(*1)	Korea	60.00	15,402,666	52,772,082
WooriG Professional Investor's Private Real Estate Investment Trust No. 2(*5)	Korea	-	-	34,999,040
Shinhan AIM Real Estate Fund No. 22-A	Korea	41.81	16,890,686	-
IGIS Global Private Real Estate Investment Trust 434(*1)	Korea	60.00	38,651,064	-
Consus Osan Segyo Private Real Estate Fund (*1)	Korea	50.00	3,121,255	-
			₩ 1,512,864,231	₩ 1,666,295,119

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10.1. Details of investments in associates and joint ventures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

- (*1) Classified as joint venture after the consent of all participants that make important decisions. The joint venture is financed by the participants and invests in stocks and real estate and distributes the revenue to the investors.
- (*2) The Group can be executive officer or director designated by associates can be participated in Associates and has significant control. Thus, it is classified as investments in associates.
- (*3) The percentage of ownership is the Group's revenue distribution percentage in accordance with contracts of the shareholders.
- (*4) The name of investments are changed from 'Star Hub Seungdo Development' to 'Sunu Urban Development' and from EDAMOSAN 1st PFV to 'YKOSAN PFV'
- (*5) All shares have been sold or collected in 2021.

10.2. Changes in investments in associates and joint venture for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

Year ended December 31, 2021							
Beginning balance	Acquisition	Disposal (*1)	Gain or loss on equity method	Receipt of dividends	Capital changes in equity method	Others	Ending balance
₩ 1,666,295,119	₩ 357,334,721	₩ (481,073,519)	₩ 56,578,483	₩ (87,488,477)	₩ 1,741,140	₩ (523,236)	₩ 1,512,864,231

- (*1) During the current period, ₩ 24,328,658 thousand decreased due to changes in the scope of consolidation.

Year ended December 31, 2020							
Beginning balance	Acquisition	Disposal (*1)	Gain or loss on equity method	Receipt of dividends	Capital changes in equity method	Others (*2)	Ending balance
₩ 1,529,332,156	₩ 903,656,476	₩ (627,329,890)	₩ (78,449,390)	₩ (61,316,505)	₩ (1,741,140)	₩ 2,143,412	₩ 1,666,295,119

- (*1) During the previous period, ₩ 80,145,441 thousand decreased due to changes in the scope of consolidation.

- (*2) During the previous period, the Attila Infrastructure Private Equity Fund I's investments were reclassified from financial assets measured at fair value through profit or loss to investments in related (joint) companies.

10.3. Condensed financial statements as of December 31, 2021 and 2020 and for the years then ended are as follows (in thousands of Korean won):

Associates	December 31, 2021			
	Assets	Liabilities	Revenue	Net profit(loss)
Korea Asset Classic Private Investment Trust 2nd	₩ 3,957,381	₩ 2,098	₩ 932,710	₩ 453,557
Airplane fund 5	66,676,330	72,415	9,716,598	-
Airplane fund 6	7,578	7,578	10,459,179	-
Meritz Professional Private Real Estate Investment Trust 8th	36,532,084	9,203	12,663,443	1,201,477
Meritz Professional Private Real Estate Investment Trust 7th	83,737,810	23,055	15,880,057	4,223,783
M Plus Sky Private Investment Trust 4th	39,152,529	228	3,890,451	2,210,574
Heungguk Flight Private Investment Trust 10th	137,498,135	5,497,615	3,742,228	(1,005,664)
Heungguk Flight Private Investment Trust 11th	1,082	1,082	687,507	(623,740)
AI Partners Energy Infra Private Investment Trust 1st	30,788,324	20,770	12,228,486	6,726,875
Heungguk Flight Private Investment Trust 12th	184,134,677	8,634,299	34,522,897	2,684,512
Heungguk Flight Private Investment Trust 13th	5,048,021	10,912	1,013,028	(119,838)

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10.3. Condensed financial statements as of December 31, 2021 and 2020 and for the years then ended are as follows (in thousands of Korean won) (cont'd):

Associates	December 31, 2021			
	Assets	Liabilities	Revenue	Net profit(loss)
Mastern Europe Real Estate Investment Trust 5th	₩ 91,273,365	₩ 225,456	₩ 37,003,494	₩ -
Mastern Europe Real Estate Investment Trust 10th	218,766,229	265,876	93,346,454	(1,192,346)
JB IPO Private Fund Trustee 3 I	3,784,437	3,292	1,740,177	1,309,667
SUN&TREE IPO HIGH-YIELD HEDGE FUND 4	46,796,921	23,696	6,770,312	6,088,305
Global One Professional Investment Type Private IPO Investment Trust No.2	7,147,076	16,966	2,856,678	2,466,880
Anda Project C Private Securities Investment Trust 1	3,158,251	7,113	46,924	13,883
EK IPO high yield private equity trust II	25,059,222	43,431	1,120,903	1,015,791
CrownRock IPO I Hedge Fund	11,013,211	47,293	1,013,906	965,919
Consus Busan Gijang Private Real Estate Fund no.2	2,797,668	27,836	47,671	19,832
EK IPO Private Equity Trust III	5,219,260	12,882	223,103	201,428
Skywalk Game Changer Hedge Fund No.1	8,601,709	23,375	1,772	(21,666)
Intrus Value-add Professional Investment Private Fund#3	2,960,499	2,459,455	21,099,345	8,898,937
Hizeasset IPO Private Investment Trust 2	4,284,415	3,086	1,037,814	1,573,469
Trinity Unicorn IPO FUND 1st	4,844,533	473	1,629,922	365,215
SUN&TREE IPO FUND 1st	4,624,792	867	2,598,012	3,778,859
Kclavis Private Investment Trust 2nd	4,248,228	272	883,834	2,167,265
VM Energy Highyield Fund	26,928,476	200	62,225	136,265
Asia growth 1st private equity Investment Limited Partnership	10,245,055	9	-	(112,432)
MERITZ NS GLOBAL BIO FUND	16,022,657	147,367	729,691	(15,977)
Kclavis Meister 38th	1,046,437	9,086	55	(17,875)
Genesis North America PowerCompany 1st	34,677,955	316,463	9,858,087	(367,619)
Gongpyeong 15-16 PFV	401,821,695	498,728,451	40,500	(29,169,855)
OST Partners, Co., Ltd.	290,275,020	291,608,332	172,040,802	32,238,847
Rhinos-Meritz fund	7,119,180	-	1,906,605	(355,390)
Higs Frontier, Co., Ltd	654	284	-	203,220
ASEAN Platform Fund No. 1	9,236,101	-	74	(155,122)
TK Build, Co., Ltd	115,826,461	133,614,211	52,519,850	(5,935,603)
Meritz-DS Fund	4,180,806	-	419	(93,720)
Rhinos-Meritz fund 2	6,365,903	-	(899,348)	744,083
Chungmu-ro PFV Co., Ltd.	122,521,767	154,464,329	-	(26,347,585)
GAHA YOU&I CO., LTD	21,855,207	33,408,623	-	(7,624,701)
Hangang Landmark PFV Co., Ltd.	2,708,250	-	-	(961,178)
DAON CONSTRUCTION, Co., Ltd.	55,802,443	55,792,443	42,379,498	1,248,181
Attila Infrastructure private equity fund I	1,624,970	154,225	-	(5,205,930)
Galmae PFV Co., Ltd.	120,765,784	148,168,213	35,185,122	(30,784,265)
New wave fund 2	10,931,224	-	885,236	779,926
Songgang Construction	47,699,287	53,241,578	23,866	(4,471,592)
DAE-SAN ENG CO.,LTD	44,630,157	38,438,407	25,449,385	(4,535,000)
Meritz Alphaview Fund 1	4,670,818	-	387	(94,646)
Next V City PFV Co., Ltd.	150,265,978	150,901,495	-	(5,365,611)
triple space, Co., Ltd.	73,095	64,576	-	343,625
Sunu Urban Development	50,892,011	53,917,644	-	(3,485,996)
Meritz Kingo fund 1	12,253,316	-	651	(247,478)
Meritz Kclavis fund 1	4,460,770	1,862	157	(69,230)
Mastern 116th Gangnam Premium PFV	805,652,949	813,380,924	-	(17,687,317)
Meritz Alphaview Fund 2	25,763,859	-	1,169	(5,236,141)
SMDNC	21,793,614	22,583,823	-	(790,308)
Anseong Seongeun logistics PFV Co. Ltd	27,558,826	18,860,145	-	(1,301,319)
DM METAL	41,434,761	41,434,761	6,731,794	(4,100,000)
Handaritz	9,264,563	9,155,837	-	(193,174)

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10.3. Condensed financial statements as of December 31, 2021 and 2020 and for the years then ended are as follows (in thousands of Korean won) (cont'd):

Associates	December 31, 2021				
	Assets	Liabilities	Revenue	Net profit(loss)	
Meritz GoldenEgg Fund1	₩ 7,284,371	₩ -	₩ 353	₩ (115,629)	
S R Industrial Co., Ltd	18,678,335	19,561,193	-	(894,623)	
Sinchon 2-7	11,464,770	7,853,822	2,850	(1,389,052)	
Dowon Corporation	15,017,314	15,007,009	-	(277,237)	
SW-RN Fund	3,261,149	1,464	-	(40,315)	
YKOSAN PFV	173,565,628	188,024,880	-	(19,459,252)	
NH-Meritz Contents 1 Fund	20,686,980	-	-	(1,313,020)	
Meritz Hyundai Investment Partners	25,589,514	192,814	55	(253,300)	
Daehoon Partners Corp.	17,128,019	17,148,797	-	(20,878)	
JQ	7,843,565	8,127,658	-	(284,193)	
Hanyang-Meritz 1 Fund	15,422,614	-	285	(77,386)	
Heung Young Industrial Development	20,753,390	21,178,184	-	(425,893)	
The First Porte 2	44,945,649	48,332,250	-	(3,396,601)	
KAI-Veritas Venture Fund 1	4,476,885	990	635	(34,105)	
KI CHUNGPYUNG	22,923,848	21,697,695	-	(3,773,846)	
BUG Logistics Project Finance Investment	21,641,600	17,100,000	-	(458,400)	
Hangang Eco	500,000	-	-	-	
JUN GEUM Construction Co., Ltd	869,611	7,352,360	-	(6,782,749)	
Cornerstone Mutual Growth Vill Fund	2,711,984	-	93	(18,016)	
Gimhae Daedong Smart Logistics Corp	21,952,886	15,062,055	-	(859,169)	
KR Seocho Co., Ltd.	6,010,000	-	-	-	
COSMOS	2,846,032	3,037,674	-	(221,642)	
Hanwha-Pentastone I Funds	6,579,896	-	69	(20,104)	
Meritz-AssetOne 1 Partners	15,576,814	-	92	(23,186)	
Dongtan Triple Space	67,754,479	68,073,196	-	(328,716)	
Hanyang-Pentastone Hi-tech I Funds	6,990,093	-	-	(9,907)	
Meritz-NH healthcare 1 Fund	15,492,403	-	103	(7,597)	
Meritz-SNP 1 Fund	22,500,023	-	23	23	
Yuamkopain wood Enterprise Financial Stability corporate Investment Limited PA	40,212,275	403,271	783,915	(433,069)	
Hyundai Ufirst Private Placement Fund No.32	82,517,581	37,992	12,765,019	10,018,932	
AIP Euro Green Private Real Estate Investment Trust 7th	172,699,125	926	91,319,601	13,373,316	
AIP Euro Green Private Real Estate Investment Trust 8th	84,187,548	107,773	26,485,910	17,499,761	
Kiwoom Milestone US Professional Private Real Estate Trust 18	64,214,891	6,277	41,513,643	6,329,953	
Midas Global DEBT Private Real Estate Investment Trust 6th	117,743,467	70,257	9,392,778	7,540,029	
UP Global Private Real Estate Fund VI	58,076,611	35,463	13,967,323	3,561,960	
NH Presidio Investments LLC(*)	58,226,856	28,633	32,356,515	32,350,133	
IGIS Global Private Real Estate Investment Trust 301	645,285,979	41,018,475	110,932,398	102,140,776	
Edelweiss Alternative Solutions Trust(*)	318,303,244	1,471,075	17,496,325	13,989,641	
IGIS US Private Real Estate Investment Trust 292	197,298,560	13,312,319	8,919,684	10,273,668	
IGIS US Private Real Estate Investment Trust 266	161,404,492	10,366,231	13,547,635	13,634,707	
PIA Private Real Estate Investment Trust No. 6-1	245,574,283	40,898	81,520,016	(1,326,071)	
PIA Private Real Estate Investment Trust No. 6-2	28,659,544	18,641	9,099,227	540,894	
Shinhan AIM Real Estate Fund No. 22-A	41,038,123	5,614	7,729,128	2,166,991	
IGIS Global Private Real Estate Investment Trust 434	66,104,628	712,723	9,740,067	8,472,907	
Consus Osan Segyo Private Real Estate Fund	6,650,043	257,797	12,719	10,527	

(*) This is the consolidated financial information as of September 30, 2021 and for the nine months then ended.

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10.3. Condensed financial statements as of December 31, 2021 and 2020 and for the years then ended are as follows (in thousands of Korean won) (cont'd):

Associates	December 31, 2020			
	Assets	Liabilities	Revenue	Net profit(loss)
Korea Asset Classic Private Investment Trust 2nd	₩ 3,990,924	₩ 2,321	₩ 1,095,868	₩ 947,697
Airplane fund 5	66,637,482	33,566	23,798,628	(115,138,922)
Airplane fund 6	19,242	19,242	5,895,474	(111,758,658)
Meritz Professional Private Real Estate Investment Trust 8th	36,478,767	9,368	10,326,738	1,170,240
Meritz Professional Private Real Estate Investment Trust 7th	80,330,107	23,018	12,652,531	3,262,858
M Plus Sky Private Investment Trust 4th	37,785,686	222	3,131,792	1,946,811
Heungguk Flight Private Investment Trust 10th	127,311,842	19,658	37,377,274	(14,027,875)
Heungguk Flight Private Investment Trust 11th	1,904	1,904	3,406,973	(16,714,410)
AI Partners Energy Infra Private Investment Trust 1st	38,027,040	28,049	15,533,650	358,872
Heungguk Flight Private Investment Trust 12th	179,735,695	161,562	17,969,575	(36,485,885)
Heungguk Flight Private Investment Trust 13th	5,057,853	50,906	710,522	(19,644,136)
Mastern Europe Real Estate Investment Trust 5th	91,267,556	219,648	22,128,253	(101,679,417)
Mastern Europe Real Estate Investment Trust 10th	237,900,331	265,876	50,063,697	24,211,167
JB IPO Private Fund Trustee 3 I	3,827,156	3,227	1,088,006	1,015,090
Asia growth 1st private equity Investment Limited Partnership	10,357,478	-	-	(112,128)
MERITZ NS GLOBAL BIO FUND	12,788,513	147,237	5,449,739	4,833,519
Kclavis Meister 38th	1,064,312	9,086	73	(17,877)
Genesis North America PowerCompany 1st	43,955,834	243,542	2,722,866	2,194,283
Gongpyeong 15-16 PFV	401,693,104	469,430,006	53,081	(57,110,489)
OST Partners, Co., Ltd.	133,948,339	155,522,461	15,804,326	(8,776,169)
Rhinos-Meritz fund	9,770,892	-	2,730,946	(1,256,003)
Higs Frontier, Co., Ltd	2,502,698	2,705,548	-	(124,419)
ASEAN Platform Fund No. 1	9,391,223	-	261	(158,371)
TK Build, Co., Ltd	123,965,667	135,817,814	-	(11,723,930)
Meritz-DS Fund	4,274,526	-	1,394	(104,301)
Rhinos-Meritz fund 2	5,621,820	-	-	900,929
Bric-Orbit 8th New Technology Investment Union	5,029,541	-	386,983	332,229
Cheongna Logistics, Co., Ltd.	18,889,609	20,360,339	-	(1,007,792)
KCGI Private Equity Fund 1-12	49,906,498	602,000	273	(760,237)
Chungmu-ro PFV Co., Ltd	90,045,421	95,640,398	-	(10,594,977)
GAHA YOU&I CO., LTD	11,796,412	15,725,126	-	(4,648,414)
Hangang Landmark PFV Co., Ltd.	2,789,508	-	-	(2,210,492)
DAON CONSTRUCTION, Co., Ltd	48,636,270	49,874,451	1,234,905	(1,248,181)
Attila Infrastructure Private Equity Fund I	6,789,375	112,700	-	(4,486)
Galmae PFV Co., Ltd.	70,604,601	67,222,764	-	(1,618,163)
New wave fund 2	10,151,298	-	23,775	(58,702)
Songgang Construction	28,224,596	29,295,295	-	(1,370,699)
DAE-SAN ENG CO.,LTD	49,252,925	44,717,925	-	-
Meritz Alphaview fund 1	4,765,464	-	122	(24,536)
Next V City PFV Co., Ltd.	34,730,095	30,000,000	-	(269,905)
triple space, Co., Ltd.	8,253,045	8,588,151	-	(335,206)
Star Hub Seungdoo Development	4,050,400	4,076,230	-	(25,930)
Meritz Kingo fund 1	12,500,795	-	-	(9,205)
Meritz Kclavis fund 1	4,530,000	1,862	-	(1,862)
Yuamkopain wood Enterprise Financial Stability corporate Investment Limited PA	57,382,286	428,484	1,441,170	556,948
Hyundai Ufirst Private Placement Fund No.32	77,401,671	127,015	1,892	2,274,656

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10.3. Condensed financial statements as of December 31, 2021 and 2020 and for the years then ended are as follows (in thousands of Korean won) (cont'd):

Associates	December 31, 2020			
	Assets	Liabilities	Revenue	Net profit(loss)
AIP Euro Green Private Real Estate Investment Trust 7th	₩ 172,709,118	₩ 977	₩ 49,916,197	₩ 16,858,782
AIP Euro Green Private Real Estate Investment Trust 8th	65,849,807	106,851	13,868,485	5,628,459
Kiwoom Milestone US Professional Private Real Estate Trust 18	159,711,045	12,973	71,578,139	6,836,038
Midas Global DEBT Private Real Estate Investment Trust 6th	116,833,471	139,188	9,458,933	6,797,813
IGIS Global Private Real Estate Investment Trust 254	125,029,819	3,493,014	23,611,752	7,026,331
UP Global Private Real Estate Fund VI	59,803,238	36,650	13,383,714	4,198,560
NH Presidio Investments LLC(*)	117,921,138	10,826	-	5,551,369
Mastern Private Real Estate Investment Trust 61th	20,973,434	5,678,023	1,923	(82,052)
IGIS Global Private Real Estate Investment Trust 301	457,459,598	5,724,296	130,067,674	45,674,696
Edelweiss Alternative Solutions Trust(*)	271,434,960	1,286,116	30,345,003	28,065,984
PineStreet Global Corporate Finance PEF Trust No.2	268,054,622	230,907	14,348,288	13,305,789
IGIS US Private Real Estate Investment Trust 292	188,429,531	32,146	87,317,186	9,554,835
IGIS US Private Real Estate Investment Trust 266	110,944,931	10,910	29,908,199	5,549,594
Pacific Private Placement REF 36	56,522,701	20,084	12,490,156	6,226,126
Germany Office Real Estate Private Placement Fund No.28	23,130,140	57,943	4,198,121	2,193,546
PIA Private Real Estate Investment Trust No. 6-1	279,475,321	157,094	51,805,582	13,893,912
PIA Private Real Estate Investment Trust No. 6-2	93,248,753	71,799	35,261,290	6,378,479
WooriG Professional Investor's Private Real Estate Investment Trust No. 2	71,500,000	1,961	-	(1,961)

(*) This is the consolidated financial information as of September 30, 2020 and for the nine months then ended.

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11. Loans

11.1. Details of loans as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		
	Face value	Allowance for credit losses	Book value
Loans:			
RP purchased	₩ 2,378,085,062	₩ -	₩ 2,378,085,062
Brokers' loan	1,277,368,901	(1,520,770)	1,275,848,131
Loans to employees	3,668,910	(68,673)	3,600,237
Loans	10,813,822,686	(156,394,514)	10,657,428,172
Loans purchased	-	-	-
Privately-placed corporate bonds	-	-	-
Payment on behalf of another company	3,636,044	(3,636,044)	-
Deferred loan fees	(12,489,936)	-	(12,489,936)
	<u>₩ 14,464,091,667</u>	<u>₩ (161,620,001)</u>	<u>₩ 14,302,471,666</u>

	December 31, 2020		
	Face value	Allowance for credit losses	Book value
Loans:			
RP purchased	₩ 2,133,333,578	₩ -	₩ 2,133,333,578
Brokers' loan	662,644,355	(1,520,770)	661,123,585
Loans to employees	3,614,641	(68,673)	3,545,968
Loans	8,574,535,931	(187,268,138)	8,387,267,793
Loans purchased	2,000	(65)	1,935
Privately-placed corporate bonds	5,200,000	(308,579)	4,891,421
Payment on behalf of another company	3,636,044	(3,636,044)	-
Deferred loan fees	(12,508,903)	-	(12,508,903)
	<u>₩ 11,370,457,646</u>	<u>₩ (192,802,269)</u>	<u>₩ 11,177,655,377</u>

11.2. Brokers' loans

The Group provides loans to clients who either make margin transactions for purchasing securities or entrust their investment securities to the Group and records them as credit loans granted and loans secured by securities, respectively. Credit loans granted are secured with the securities purchased by clients and cash in clients' deposit account, which amount to 140 - 150% of the original loan. When the collateral value is insufficient to secure the loan and its accrued income, the Group requests for additional collateral cash or securities.

In addition, the Group asks for an opening guarantee deposit in connection with brokers' loans and the deposits are recorded as a liability item guarantee deposit received.

11.3. Residual maturity profiles of debt securities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
No later than 1 year	₩ 8,591,567,163	₩ 5,845,648,425
After 1 year but no later than 3 years	2,794,208,216	3,183,209,154
After 1 year but no later than 5 years	2,383,410,043	1,714,177,932
After 5 years	707,396,181	639,931,038
	<u>₩ 14,476,581,603</u>	<u>₩ 11,382,966,549</u>

(*) Loans related to incident expense of deferred loans is excluded.

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11.4. Changes in allowance for possible loan losses for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 70,647,310	₩ 13,215,885	₩ 108,939,074	₩ 192,802,269
Transfer to 12 month expected credit losses	2,734,099	(2,734,099)	-	-
Transfer to lifetime expected credit losses	(2,516,165)	2,546,158	(29,993)	-
Transfer to Impaired loans lifetime expected credit losses	(1,365,271)	(1,244,814)	2,610,085	-
Bad debts written off	-	-	(67,301,302)	(67,301,302)
Collection of loans written-off in prior periods	-	-	4,691,202	4,691,202
Conversion of investment	-	-	(7,554,072)	(7,554,072)
Unwinding effect	-	-	(8,717,821)	(8,717,821)
Provision (reversal) for allowance	24,298,315	1,924,481	21,476,929	47,699,725
Ending balance	₩ 93,798,288	₩ 13,707,611	₩ 54,114,102	₩ 161,620,001

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 79,157,836	₩ 22,637,536	₩ 95,110,730	₩ 196,906,102
Transfer to 12 month expected credit losses	2,004,724	(2,004,724)	-	-
Transfer to lifetime expected credit losses	(2,477,423)	2,482,332	(4,909)	-
Transfer to Impaired loans lifetime expected credit losses	(2,691,118)	(9,806,097)	12,497,215	-
Bad debts written off	-	-	(60,862,882)	(60,862,882)
Collection of loans written-off in prior periods	-	-	3,209,329	3,209,329
Utilized	-	-	(1,297,640)	(1,297,640)
Unwinding effect	-	-	(7,143,859)	(7,143,859)
Provision (reversal) for allowance	(5,346,709)	(93,162)	67,431,090	61,991,219
Ending balance	₩ 70,647,310	₩ 13,215,885	₩ 108,939,074	₩ 192,802,269

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11.5. Changes in gross book value for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			Total
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	
Beginning balance	₩ 10,620,090,115	₩ 359,497,431	₩ 403,379,003	₩ 11,382,966,549
Transfer to 12 month expected credit losses	78,706,825	(78,706,825)	-	-
Transfer to lifetime expected credit losses	(180,843,527)	180,892,173	(48,646)	-
Transfer to impaired loans lifetime expected credit losses	(59,345,096)	(9,335,018)	68,680,114	-
Execution and collection	3,127,993,698	(42,040,331)	69,216,429	3,155,169,796
Foreign transactions and Other changes	5,746,560	-	(67,301,302)	(61,554,742)
Ending balance	₩ 13,592,348,575	₩ 410,307,430	₩ 473,925,598	₩ 14,476,581,603

	Year ended December 31, 2020			Total
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	
Beginning balance	₩ 12,105,791,976	₩ 528,172,390	₩ 358,620,368	₩ 12,992,584,734
Transfer to 12 month expected credit losses	99,231,199	(99,231,199)	-	-
Transfer to lifetime expected credit losses	(168,271,613)	168,278,693	(7,080)	-
Transfer to impaired loans lifetime expected credit losses	(90,956,397)	(130,551,018)	221,507,415	-
Execution and collection	(1,318,800,366)	(107,171,435)	(115,878,819)	(1,541,850,620)
Foreign transactions and Other changes	(6,904,684)	-	(60,862,881)	(67,767,565)
Ending balance	₩ 10,620,090,115	₩ 359,497,431	₩ 403,379,003	₩ 11,382,966,549

11.6. Changes in incidental income or incident expense of deferred loans for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			Ending balance
	Beginning balance	Income or expense incurred	Depreciation	
Incidental income	₩ (41,325,002)	₩ (44,492,200)	₩ 44,695,867	₩ (41,121,335)
Incidental expense	28,816,099	26,865,462	(27,050,162)	28,631,399
	₩ (12,508,903)	₩ (17,626,738)	₩ 17,645,705	₩ (12,489,936)

	Year ended December 31, 2020			Ending balance
	Beginning balance	Income or expense incurred	Depreciation	
Incidental income	₩ (65,488,044)	₩ (42,833,037)	₩ 66,996,079	₩ (41,325,002)
Incidental expense	40,987,241	18,357,418	(30,528,560)	28,816,099
	₩ (24,500,803)	₩ (24,475,619)	₩ 36,467,519	₩ (12,508,903)

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11.7. Gain (loss) related to loans for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Gain on disposal of loans	₩ 9,330,755	₩ 10,618,322
Others	1,519,862	802,132
	<u>10,850,617</u>	<u>11,420,454</u>
Loss on disposal of loans	(216,883)	(5,976,546)
Provision for doubtful accounts	(47,699,724)	(61,991,219)
	<u>(47,916,607)</u>	<u>(67,967,765)</u>
	<u>₩ (37,065,990)</u>	<u>₩ (56,547,311)</u>

12. Lease

12.1. Details of lease assets as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021			
	Acquisition cost	Allowance for lease	Accumulated depreciation	Book value
Financial lease	₩ 1,043,577,708	₩ (5,554,287)	₩ -	₩ 1,038,023,421
Operating lease	674,233,071	-	(157,351,649)	516,881,422
Advances for acquisition of assets to be leased	4,631,643	-	-	4,631,643
	<u>₩ 1,722,442,422</u>	<u>₩ (5,554,287)</u>	<u>₩ (157,351,649)</u>	<u>₩ 1,559,536,486</u>
	December 31, 2020			
	Acquisition cost	Allowance for lease	Accumulated depreciation	Book value
Financial lease	₩ 916,018,540	₩ (7,671,158)	₩ -	₩ 908,347,382
Operating lease	510,829,860	-	(124,155,645)	386,674,215
Advances for acquisition of assets to be leased	5,277,353	-	-	5,277,353
	<u>₩ 1,432,125,753</u>	<u>₩ (7,671,158)</u>	<u>₩ (124,155,645)</u>	<u>₩ 1,300,298,950</u>

12.2. Details of total lease investment and the present value of minimum financial lease as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		December 31, 2020	
	Total lease investment	Minimum financial lease	Total lease investment	Minimum financial lease
No later than 1 year	₩ 115,332,234	₩ 114,228,509	₩ 123,134,519	₩ 122,027,163
After 1 year but no later than 5 years	922,731,399	900,121,462	789,661,299	768,445,970
After 5 years	7,989,707	7,633,172	5,492,668	5,224,803
	<u>₩ 1,046,053,340</u>	<u>₩ 1,021,983,143</u>	<u>₩ 918,288,486</u>	<u>₩ 895,697,936</u>

12.3. Unearned interests of financial lease as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Total lease investment	₩ 1,046,053,340	₩ 918,288,486
Net lease investment	1,043,577,708	916,018,540
Unearned interest	<u>₩ 2,475,632</u>	<u>₩ 2,269,946</u>

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12.4. Unsecured residual value of financial lease as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		December 31, 2020
	₩ 972,728	₩	3,049,771

12.5. The estimated future operating lease revenues as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		December 31, 2020
No later than 1 year	₩ 53,826,428	₩	51,241,790
After 1 year but no later than 5 years	468,591,903		342,120,800
After 5 years	607,915		656,926
	₩ 523,026,246	₩	394,019,516

12.6. Changes in allowance for lease for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 2,150,581	₩ 1,314,717	₩ 4,205,860	₩ 7,671,158
Transfer to 12 month expected credit losses	168,450	(168,450)	-	-
Transfer to lifetime expected credit losses	(163,043)	163,043	-	-
Transfer to lifetime Impaired loans Lifetime expected credit losses	(8,267)	(257,147)	265,414	-
Bad debts written off	-	-	(3,623,708)	(3,623,708)
Recovery of amortized bond	-	-	332,643	332,643
Disposal	-	-	-	-
Unwinding effect	-	-	(110,825)	(110,825)
Provision (reversal) for allowance	(2,758)	(81,710)	1,369,487	1,285,019
Ending balance	₩ 2,144,963	₩ 970,453	₩ 2,438,871	₩ 5,554,287

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 2,593,059	₩ 1,764,016	₩ 6,533,063	₩ 10,890,138
Transfer to 12 month expected credit losses	148,334	(148,334)	-	-
Transfer to lifetime expected credit losses	(194,073)	194,073	-	-
Transfer to lifetime Impaired loans Lifetime expected credit losses	(22,563)	(443,039)	465,602	-
Bad debts written off	-	-	(3,701,555)	(3,701,555)
Recovery of amortized bond	-	-	421,947	421,947
Disposal	-	-	(799,284)	(799,284)
Unwinding effect	-	-	(271,534)	(271,534)
Provision (reversal) for allowance	(374,176)	(51,999)	1,557,621	1,131,446
Ending balance	₩ 2,150,581	₩ 1,314,717	₩ 4,205,860	₩ 7,671,158

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12.7. Changes in gross book values in lease assets for the year ended December 31, 2021 and 2020 is as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 732,589,004	₩ 177,239,480	₩ 6,190,056	₩ 916,018,540
Transfer to 12 month expected credit losses	26,926,944	(26,926,944)	-	-
Transfer to lifetime expected credit losses	(45,303,235)	45,303,235	-	-
Transfer to impaired loans lifetime expected credit losses	(1,708,043)	(3,159,415)	4,867,458	-
Execution and collection	130,536,828	5,216,055	(4,570,007)	131,182,876
Foreign transactions and other changes	-	-	(3,623,708)	(3,623,708)
Ending balance	₩ 843,041,498	₩ 197,672,411	₩ 2,863,799	₩ 1,043,577,708

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 807,056,377	₩ 190,506,128	₩ 17,439,267	₩ 1,015,001,772
Transfer to 12 month expected credit losses	22,156,760	(22,156,760)	-	-
Transfer to lifetime expected credit losses	(53,514,592)	53,514,592	-	-
Transfer to impaired loans lifetime expected credit losses	(2,545,052)	(6,163,303)	8,708,355	-
Execution and collection	(40,564,489)	(38,461,177)	(16,256,011)	(95,281,677)
Foreign transactions and other changes	-	-	(3,701,555)	(3,701,555)
Ending balance	₩ 732,589,004	₩ 177,239,480	₩ 6,190,056	₩ 916,018,540

12.8. Gain (loss) related to lease for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Interest on financial lease	₩ 43,422,185	₩ 44,281,572
Commissions on operating lease	127,650,293	97,974,056
Gain on disposal of lease	4,428,316	6,064,661
	<u>175,500,794</u>	<u>148,320,289</u>
Operating lease depreciation	(75,337,227)	(60,035,569)
Lease commission expense	-	(3,080)
Loss on disposal of lease	(2,936,675)	(5,108,009)
Provision for allowance	(1,285,019)	(1,131,446)
Others	(14,589,630)	(14,389,063)
	<u>(94,148,551)</u>	<u>(80,667,167)</u>
	₩ 81,352,243	₩ 67,653,122

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13. Property and equipment

13.1. Details of property and equipment as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		
	Acquisition cost	Accumulated depreciation	Book value
Land	₩ -	₩ -	₩ -
Buildings	-	-	-
Vehicles	232,244	(128,155)	104,089
Furniture and fixtures	47,169,643	(34,151,717)	13,017,926
Right-of-use assets	44,342,487	(20,145,668)	24,196,819
Others	595,511	-	595,511
	₩ 92,339,885	₩ (54,425,540)	₩ 37,914,345

	December 31, 2020		
	Acquisition cost	Accumulated depreciation	Book value
Land	₩ 1,303,389	₩ -	₩ 1,303,389
Buildings	1,727,538	(1,011,906)	715,632
Vehicles	206,107	(97,954)	108,153
Furniture and fixtures	55,187,978	(37,716,969)	17,471,009
Right-of-use assets	36,534,975	(13,609,284)	22,925,691
Others	595,511	-	595,511
	₩ 95,555,498	₩ (52,436,113)	₩ 43,119,385

13.2. Changes in property and equipment for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021					
	Beginning balance	Acquisition (*)	Disposal	Depreciation	Transfer	Ending balance
Land	₩ 1,303,389	₩ -	₩ (1,303,389)	₩ -	₩ -	₩ -
Buildings	715,632	-	(704,835)	(10,797)	-	-
Vehicles	108,153	26,137	-	(30,201)	-	104,089
Furniture and fixture	17,471,009	2,588,631	(41,544)	(7,000,170)	-	13,017,926
Right-of-use assets	22,925,691	10,469,717	(227,198)	(8,971,391)	-	24,196,819
Others	595,511	-	-	-	-	595,511
	₩ 43,119,385	₩ 13,084,485	₩ (2,276,966)	₩ (16,012,559)	₩ -	₩ 37,914,345

(*) ₩308,415 thousand of tangible assets based on the recognition of provision for restoration cost are included in the acquisition of furniture and fixtures.

	Year ended December 31, 2020					
	Beginning balance	Acquisition (*1)	Disposal	Depreciation	Transfer (*2)	Ending balance
Land	₩ 1,303,389	₩ -	₩ -	₩ -	₩ -	₩ 1,303,389
Buildings	758,821	-	-	(43,189)	-	715,632
Vehicles	391,524	116,449	-	(27,426)	(372,394)	108,153
Furniture and fixture	17,250,573	6,618,393	(62,903)	(6,335,054)	-	17,471,009
Right-of-use assets	26,531,918	5,436,424	(26,691)	(9,015,960)	-	22,925,691
Others	595,511	-	-	-	-	595,511
	₩ 46,831,736	₩ 12,171,266	₩ (89,594)	₩ (15,421,629)	₩ (372,394)	₩ 43,119,385

(*1) ₩74,007 thousand of tangible assets based on the recognition of provision for restoration cost are included in the acquisition of furniture and fixtures.

(*2) Transfer for vehicles is the transferred amount to lease transactions between the consolidated entities.

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14. Investment property

14.1. Details of investment property as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Land	₩ 20,100,918	₩ -	₩ (332,250)	₩ 19,768,668
Buildings	132,245,767	(753,825)	(89,634)	131,402,308
	<u>₩ 152,346,685</u>	<u>₩ (753,825)</u>	<u>₩ (421,884)</u>	<u>₩ 151,170,976</u>

	December 31, 2020			
	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Land	₩ 4,135,601	₩ -	₩ -	₩ 4,135,601
Buildings	5,890,436	(3,187,507)	-	2,702,929
	<u>₩ 10,026,037</u>	<u>₩ (3,187,507)</u>	<u>₩ -</u>	<u>₩ 6,838,530</u>

14.2. Changes in the net carrying amount of investment properties for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021					
	Beginning balance	Acquisition (*1)	Disposal	Depreciation	Impairment loss (*2)	Ending balance
Land :						
Acquisition cost	₩ 4,135,601	₩ 19,410,918	₩ (3,445,601)	₩ -	₩ -	₩ 20,100,918
Accumulated depreciation	-	-	-	-	(332,250)	(332,250)
Buildings :						
Acquisition cost	5,890,436	130,970,371	(4,615,040)	-	-	132,245,767
Accumulated depreciation	(3,187,507)	-	2,517,682	(84,000)	-	(753,825)
Accumulated impairment loss	-	-	-	-	(89,634)	(89,634)
	<u>₩ 6,838,530</u>	<u>₩ 150,381,289</u>	<u>₩ (5,542,959)</u>	<u>₩ (84,000)</u>	<u>₩ (421,884)</u>	<u>₩ 151,170,976</u>

(*1) In this period, it reflects the amount due to the new integration of Southlake mall in the connection range.

(*2) During the current period, it was judged that the book value of investment real estate exceeded the fair value and the possibility of recovery was low, so the estimated loss was recognized as an impairment loss (non-operating cost).

	Year ended December 31, 2020			
	Beginning balance	Disposal	Depreciation	Ending Balance
Land	₩ 5,495,601	₩ (1,360,000)	₩ -	₩ 4,135,601
Buildings:				
Acquisition cost	8,020,058	(2,129,622)	-	5,890,436
Accumulated depreciation	(4,011,408)	1,011,092	(187,191)	(3,187,507)
	<u>₩ 9,504,251</u>	<u>₩ (2,478,530)</u>	<u>₩ (187,191)</u>	<u>₩ 6,838,530</u>

14.3. The fair value of the land and buildings provided by an independent property appraisal firm is amounted to ₩19,768,668 thousand and ₩131,407,621 thousand as of December 31, 2021, respectively. The transaction case comparison method (comparison method) used by an external appraisal agency is a method of calculating fair value by inputting variables such as transaction price, information politics, and time correction of nearby similar real estate. The fair value calculated in this way is classified into Level 3 according to the fair value hierarchy classification criteria described in Note 44.

14.4. The gains and losses related to the Group's investment property for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021		Year ended December 31, 2020	
Rental income	₩	178,459	₩	340,592
Gain on disposal		4,694,952		1,562,867
		<u>4,873,411</u>		<u>1,903,459</u>
Depreciation		(84,000)		(187,191)
Loss on disposal		(444,216)		-
Impairment loss		(421,884)		-
		<u>(950,100)</u>		<u>(187,191)</u>
Total	₩	<u>3,923,311</u>	₩	<u>1,716,268</u>

14.5. There is no right to collateral security established for lease deposits for investment property as of December 31, 2021.

15. Intangible assets

15.1. Intangible assets as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Software	₩ 63,319,722	₩ (52,949,404)	₩ -	₩ 10,370,318
Membership	14,418,824	-	(1,995,933)	12,422,891
Others	21,718,011	(4,435,534)	-	17,282,477
	<u>₩ 99,456,557</u>	<u>₩ (57,384,938)</u>	<u>₩ (1,995,933)</u>	<u>₩ 40,075,686</u>

	December 31, 2020			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Software	₩ 59,098,567	₩ (49,067,993)	₩ -	₩ 10,030,574
Membership	14,468,824	-	(1,995,933)	12,472,891
Others	21,127,011	(3,972,933)	-	17,154,078
	<u>₩ 94,694,402</u>	<u>₩ (53,040,926)</u>	<u>₩ (1,995,933)</u>	<u>₩ 39,657,543</u>

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15.2. Changes in carrying amounts of intangible assets for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021				
	Beginning balance	Addition	Decrease	Depreciation	Ending balance
Software	₩ 10,030,574	₩ 4,360,156	₩ (1)	₩ (4,020,411)	₩ 10,370,318
Membership	12,472,891	-	(50,000)	-	12,422,891
Others	17,154,078	591,000	-	(462,601)	17,282,477
	₩ 39,657,543	₩ 4,951,156	₩ (50,001)	₩ (4,483,012)	₩ 40,075,686

	Year ended December 31, 2020					
	Beginning balance	Addition	Decrease	Depreciation	Reversal of impairment losses (*)	Ending balance
Software	₩ 8,980,969	₩ 4,422,675	₩ -	₩ (3,373,070)	₩ -	₩ 10,030,574
Membership	10,709,176	52,095	(354,380)	-	2,066,000	12,472,891
Others	16,805,751	865,210	-	(516,883)	-	17,154,078
	₩ 36,495,896	₩ 5,339,980	₩ (354,380)	₩ (3,889,953)	₩ 2,066,000	₩ 39,657,543

(*) Some impairment losses attributable to during the previous period were reversed by an increase in the recoverable value (market price).

16. Other assets

16.1. Other assets as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Other financial assets:		
Receivable from proprietary trading	₩ 524,588,631	₩ 281,409,481
Receivable from trading on consignment	345,103,799	378,260,226
Other receivable	76,209,155	54,576,624
Accrued income	261,280,499	167,460,603
Guarantee deposits	19,811,910	21,611,313
Unsettled spot exchange	793,188,560	791,249,005
Unsettled difference	40	40
Allowance for losses	(13,948,158)	(9,760,311)
Present value discount	(752,577)	(800,022)
	2,005,481,859	1,684,006,959
Other non-financial assets:		
Advanced payment	143,853,612	102,156,517
Prepaid expenses	84,764,722	32,525,563
Others	18,122,552	497,716
	246,740,886	135,179,796
	₩ 2,252,222,745	₩ 1,819,186,755

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16.2. Changes in allowance for other assets for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 1,751,956	₩ 235,650	₩ 7,772,705	₩ 9,760,311
Transfer to 12 month expected credit losses	16,838	(16,838)	-	-
Transfer to lifetime expected credit losses	(13,351)	13,477	(126)	-
Transfer to lifetime Impaired loans Lifetime expected credit losses	(1,885)	(24,317)	26,202	-
Bad debts written off	-	-	(686,885)	(686,885)
Recovery of amortized bond	-	-	-	-
Provision for (reversal of) allowance	1,337,387	149,681	3,387,664	4,874,732
Ending balance	₩ 3,090,945	₩ 357,653	₩ 10,499,560	₩ 13,948,158

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Beginning balance	₩ 1,329,940	₩ 304,559	₩ 4,627,769	₩ 6,262,268
Transfer to 12 month expected credit losses	38,037	(38,037)	-	-
Transfer to lifetime expected credit losses	(13,359)	13,393	(34)	-
Transfer to lifetime Impaired loans Lifetime expected credit losses	(4,726)	(148,483)	153,209	-
Bad debts written off	-	-	(940,179)	(940,179)
Recovery of amortized bond	-	-	-	-
Provision for allowance	402,064	104,218	3,931,940	4,438,222
Ending balance	₩ 1,751,956	₩ 235,650	₩ 7,772,705	₩ 9,760,311

17. Deposits

Deposits as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Customers' claims on deposits	₩ 1,577,435,867	₩ 1,376,356,198
Guarantee deposit	720,975,541	499,792,190
Others	266,196,198	78,726,578
	₩ 2,564,607,606	₩ 1,954,874,966

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18. Financial liabilities measured at FVTPL

Financial liabilities measured at FVTPL as of December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Book value (fair value)	
	December 31, 2021	December 31, 2020
Financial liabilities measured at FVTPL:		
Stock	₩ 1,611,246,603	₩ 1,149,663,213
Bonds:		
Government bonds	2,352,266,891	2,760,486,750
Special purpose bonds	69,950,097	138,501,765
Foreign currency securities	175,109,382	200,951,552
Others	51,238,000	72,662,000
	<u>4,259,810,973</u>	<u>4,322,265,280</u>
Derivatives liabilities held-for-trading:		
Interest	6,221,255	6,821,821
Currency	65,620,666	180,698,405
Stock	200,207,041	79,065,374
Stock index	17,544,005	1,750,453
Others	370,096,533	126,604,427
Credit risk adjustments	(1,265,683)	(843,237)
Deferred Day1 profit or loss adjustments	(211,822,267)	(110,788,954)
	<u>446,601,550</u>	<u>283,308,289</u>
Financial liabilities designated at FVTPL:		
Equity linked securities sold (*)	5,445,107,438	2,573,578,639
Derivative linked securities sold (*)	340,733,173	175,037,499
Others	263,561,806	339,361,286
Credit risk value adjustments	(10,061,546)	(15,227,117)
Deferred day 1 profit or loss adjustments	273,160,239	171,436,767
	<u>6,312,501,110</u>	<u>3,244,187,074</u>
	<u>₩ 11,018,913,633</u>	<u>₩ 7,849,760,643</u>

(*) The Group designates equity linked securities sold and derivative linked securities sold as financial liability at fair value through profit or loss without separating embedded derivative from the host contract.

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19. Borrowings

19.1. Borrowings as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Lender	Interest rate (%)	December 31, 2021	December 31, 2020
Borrowings:				
Call money		-	₩ -	₩ 210,000,000
Commercial paper	KTB Investment & Securities and others	0.93~2.22	2,990,000,000	2,115,000,000
Commercial Paper (ABCP)	Shinhan Financial Investments and others	1.26~2.90	2,725,600,000	1,297,880,000
Repurchase agreements sold	Woori Bank and others	0.35~3.00	13,419,882,203	12,493,127,166
Repurchase agreements sold (Foreign currency)	KB Bank and others	-0.32~0.90	1,852,088,164	1,160,093,692
Borrowing from KSFC	KSFC	1.37~1.85	444,419,552	486,523,463
Others	NH bank and others	2.66~6.00	1,362,325,636	408,247,145
			<u>22,794,315,555</u>	<u>18,170,871,466</u>
Debentures :				
Asset backed short-term bonds	KTB Investment & Securities and others	1.15~2.90	2,346,560,000	1,138,973,000
Debentures	KB Securities and others	1.174~4.200	7,025,961,557	7,164,900,308
			<u>9,372,521,557</u>	<u>8,303,873,308</u>
			<u>₩ 32,166,837,112</u>	<u>₩ 26,474,744,774</u>

19.2. Debentures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Interest rate (%)	Date of issue	Maturity	December 31, 2021	December 31, 2020
Debentures guaranteed by holding company(29-3)	2.44	2016-01-14	2021-01-14	₩ -	₩ 20,000,000
Debentures guaranteed by holding company(48-2)	2.10	2016-05-25	2021-05-25	-	20,000,000
Non guaranteed debentures(64-3)	2.91	2016-08-26	2021-08-26	-	20,000,000
Asset-backed debentures(6)	2.76	2017-11-28	2021-02-28	-	10,000,000
Debentures guaranteed by holding company(107-2)	2.78	2018-02-08	2021-02-08	-	60,000,000
Debentures guaranteed by holding company(109-2)	2.84	2018-02-23	2021-02-23	-	40,000,000
Debentures guaranteed by holding company(115-2)	2.75	2018-04-11	2021-04-09	-	10,000,000
Debentures guaranteed by holding company(116-2)	2.76	2018-04-23	2021-04-23	-	10,000,000
Debentures guaranteed by holding company(119-1)	2.84	2018-05-14	2021-05-14	-	10,000,000
Debentures guaranteed by holding company(119-2)	3.23	2018-05-14	2023-05-12	70,000,000	70,000,000
Non guaranteed debentures(123-2)	2.97	2018-07-27	2021-01-27	-	60,000,000
Non guaranteed debentures(123-3)	2.97	2018-07-27	2021-01-26	-	20,000,000
Debentures guaranteed by holding company(124)	2.66	2018-07-27	2021-07-27	-	50,000,000
Non guaranteed debentures(125-2)	2.88	2018-08-08	2021-01-08	-	90,000,000
Non guaranteed debentures(125-3)	2.93	2018-08-08	2021-02-08	-	50,000,000
Debentures guaranteed by holding company(126)	2.58	2018-08-13	2021-08-13	-	30,000,000
Non guaranteed debentures(127-3)	2.71	2018-09-11	2021-03-10	-	20,000,000
Non guaranteed debentures(127-4)	2.71	2018-09-11	2021-03-11	-	80,000,000
Non guaranteed debentures(127-5)	2.76	2018-09-11	2021-04-09	-	60,000,000
Non guaranteed debentures(127-6)	2.80	2018-09-11	2021-05-11	-	50,000,000
Non guaranteed debentures(128-1)	2.75	2018-10-30	2021-03-30	-	30,000,000
Non guaranteed debentures(128-2)	2.87	2018-10-30	2021-06-30	-	40,000,000
Non guaranteed debentures(129-1)	2.77	2018-11-08	2021-04-08	-	40,000,000
Non guaranteed debentures(129-2)	2.81	2018-11-08	2021-05-07	-	50,000,000
Non guaranteed debentures(129-3)	2.85	2018-11-08	2021-06-08	-	60,000,000
Non guaranteed debentures(129-4)	2.89	2018-11-08	2021-07-08	-	40,000,000
Non guaranteed debentures(130-1)	2.65	2018-12-07	2021-08-06	-	100,000,000

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19.2. Debentures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won)
(cont'd):

	Interest rate (%)	Date of issue	Maturity	December 31, 2021	December 31, 2020
Non guaranteed debentures(130-2)	2.65	2018-12-07	2021-08-05	₩ -	₩ 20,000,000
Debentures guaranteed by holding company(131)	2.45	2018-12-07	2021-12-07	-	20,000,000
Non guaranteed debentures(132)	2.38	2019-03-12	2022-03-11	80,000,000	80,000,000
Non guaranteed debentures(133)	2.15	2019-04-04	2022-04-04	140,000,000	140,000,000
Non guaranteed debentures(134)	2.15	2019-04-18	2022-04-18	140,000,000	140,000,000
Non guaranteed debentures(135)	2.02	2019-05-24	2022-05-24	120,000,000	120,000,000
Non guaranteed debentures(136-1)	1.91	2019-06-11	2022-06-10	60,000,000	60,000,000
Non guaranteed debentures(136-2)	2.17	2019-06-11	2024-06-11	30,000,000	30,000,000
Non guaranteed debentures(137)	1.88	2019-07-17	2023-01-17	90,000,000	90,000,000
Non guaranteed debentures(138-1)	1.49	2019-08-09	2022-02-09	60,000,000	60,000,000
Non guaranteed debentures(138-2)	1.57	2019-08-09	2023-02-09	60,000,000	60,000,000
Non guaranteed debentures(139-1)	1.54	2019-08-23	2021-09-23	-	20,000,000
Non guaranteed debentures(139-2)	1.66	2019-08-23	2023-02-23	20,000,000	20,000,000
Non guaranteed debentures(140)	1.66	2019-09-05	2021-09-03	-	40,000,000
Non guaranteed debentures(141-1)	1.76	2019-09-19	2021-03-19	-	50,000,000
Non guaranteed debentures(141-2)	1.76	2019-09-19	2021-04-19	-	40,000,000
Non guaranteed debentures(141-3)	2.17	2019-09-19	2024-09-19	60,000,000	60,000,000
Non guaranteed debentures(142-1)	1.66	2019-10-11	2021-05-11	-	50,000,000
Non guaranteed debentures(142-2)	1.67	2019-10-11	2021-06-11	-	70,000,000
Non guaranteed debentures(142-3)	1.71	2019-10-11	2022-10-11	40,000,000	40,000,000
Non guaranteed debentures(143-1)	1.81	2019-10-30	2021-02-26	-	40,000,000
Non guaranteed debentures(143-2)	2.17	2019-10-30	2023-10-30	40,000,000	40,000,000
Non guaranteed debentures(144-1)	1.84	2019-11-13	2021-06-11	-	10,000,000
Non guaranteed debentures(144-2)	1.89	2019-11-13	2021-11-12	-	20,000,000
Non guaranteed debentures(145-1)	1.81	2019-11-29	2021-01-29	-	10,000,000
Non guaranteed debentures(145-2)	1.81	2019-11-29	2021-02-26	-	50,000,000
Non guaranteed debentures(145-3)	1.82	2019-11-29	2021-03-29	-	20,000,000
Non guaranteed debentures(146-2)	1.82	2019-12-16	2021-03-16	-	20,000,000
Non guaranteed debentures(146-3)	2.04	2019-12-16	2023-12-15	70,000,000	70,000,000
Non guaranteed debentures(147-2)	1.81	2019-12-24	2021-01-08	-	30,000,000
Non guaranteed debentures(147-3)	1.81	2019-12-24	2021-01-22	-	10,000,000
Non guaranteed debentures(147-4)	1.81	2019-12-24	2021-03-24	-	10,000,000
Non guaranteed debentures(148-1)	1.76	2020-01-10	2021-07-09	-	40,000,000
Non guaranteed debentures(148-2)	1.80	2020-01-10	2022-01-10	10,000,000	10,000,000
Non guaranteed debentures(149-1)	1.81	2020-01-21	2021-07-21	-	20,000,000
Non guaranteed debentures(149-2)	1.85	2020-01-21	2022-01-20	20,000,000	20,000,000
Non guaranteed debentures(149-3)	1.92	2020-01-21	2023-01-20	10,000,000	10,000,000
Non guaranteed debentures(150-1)	1.81	2020-01-30	2021-07-30	-	20,000,000
Non guaranteed debentures(150-2)	1.85	2020-01-30	2022-01-28	50,000,000	50,000,000
Non guaranteed debentures(150-3)	1.92	2020-01-30	2023-01-30	30,000,000	30,000,000
Non guaranteed debentures(151-1)	1.70	2020-02-19	2021-08-19	-	60,000,000
Non guaranteed debentures(151-2)	1.72	2020-02-19	2022-02-21	50,000,000	50,000,000
Non guaranteed debentures(151-3)	1.81	2020-02-19	2023-02-20	70,000,000	70,000,000
Non guaranteed debentures(151-4)	2.20	2020-02-19	2025-02-19	20,000,000	20,000,000
Non guaranteed debentures(152-1)	1.66	2020-02-21	2021-08-20	-	10,000,000
Non guaranteed debentures(152-2)	1.70	2020-02-21	2022-02-21	60,000,000	60,000,000
Non guaranteed debentures(152-3)	1.70	2020-02-21	2022-02-18	10,000,000	10,000,000
Asset-backed debentures(7)	1.31	2020-03-19	2021-01-18	-	10,000,000
Asset-backed debentures(7)	1.31	2020-03-19	2021-02-18	-	10,000,000
Asset-backed debentures(7)	1.31	2020-03-19	2021-03-18	-	20,000,000
Asset-backed debentures(7)	1.33	2020-03-19	2021-04-18	-	10,000,000
Asset-backed debentures(7)	1.34	2020-03-19	2021-05-18	-	10,000,000
Asset-backed debentures(7)	1.35	2020-03-19	2021-06-18	-	10,000,000
Asset-backed debentures(7)	1.36	2020-03-19	2021-07-18	-	10,000,000
Asset-backed debentures(7)	1.37	2020-03-19	2021-08-18	-	10,000,000
Asset-backed debentures(7)	1.38	2020-03-19	2021-09-18	-	10,000,000
Asset-backed debentures(7)	1.40	2020-03-19	2021-10-18	-	10,000,000
Asset-backed debentures(7)	1.41	2020-03-19	2021-11-18	-	10,000,000
Asset-backed debentures(7)	1.42	2020-03-19	2021-12-18	-	10,000,000
Asset-backed debentures(7)	1.44	2020-03-19	2022-01-18	-	10,000,000
Asset-backed debentures(7)	1.45	2020-03-19	2022-02-18	10,000,000	10,000,000
Asset-backed debentures(7)	1.46	2020-03-19	2022-03-18	10,000,000	10,000,000
Asset-backed debentures(7)	1.48	2020-03-19	2022-04-18	10,000,000	10,000,000
Asset-backed debentures(7)	1.51	2020-03-19	2022-06-18	10,000,000	10,000,000
Asset-backed debentures(7)	1.54	2020-03-19	2022-09-18	10,000,000	10,000,000
Debentures guaranteed by holding company(153-1)	1.79	2020-04-14	2021-04-14	-	20,000,000

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19.2. Debentures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won)
(cont'd):

	Interest rate (%)	Date of issue	Maturity	December 31, 2021	December 31, 2020
Debentures guaranteed by holding company(153-2)	1.81	2020-04-14	2023-04-14	₩ 20,000,000	₩ 20,000,000
Debentures guaranteed by holding company(154-1)	1.80	2020-04-22	2021-04-22	-	160,000,000
Debentures guaranteed by holding company(154-2)	1.81	2020-04-22	2021-10-22	-	20,000,000
Debentures guaranteed by holding company(155)	1.62	2020-05-25	2021-07-23	-	20,000,000
Debentures guaranteed by holding company(156-1)	1.56	2020-06-05	2021-12-03	-	70,000,000
Debentures guaranteed by holding company(156-2)	1.61	2020-06-05	2022-06-03	10,000,000	10,000,000
Debentures guaranteed by holding company(156-3)	1.75	2020-06-05	2023-06-05	30,000,000	30,000,000
Non guaranteed debentures(157)	1.91	2020-06-25	2021-06-25	-	20,000,000
Non guaranteed debentures(158)	1.85	2020-07-09	2021-08-09	-	30,000,000
Non guaranteed Privately-placed corporate bonds(159)	1.91	2020-07-23	2023-07-23	50,000,000	50,000,000
Non guaranteed debentures(160)	1.83	2020-07-23	2021-07-23	-	30,000,000
Non guaranteed debentures(161-1)	1.82	2020-07-29	2021-07-29	-	40,000,000
Non guaranteed debentures(161-2)	1.87	2020-07-29	2022-07-22	10,000,000	10,000,000
Non guaranteed Privately-placed corporate bonds(162)	1.88	2020-08-20	2023-08-20	20,000,000	20,000,000
Non guaranteed debentures(164)	1.84	2020-08-28	2021-11-26	-	10,000,000
Non guaranteed debentures(165)	1.91	2020-09-09	2021-09-09	-	100,000,000
Non guaranteed debentures(166)	1.86	2020-09-21	2021-09-21	-	50,000,000
Non guaranteed debentures(167-1)	1.87	2020-09-28	2021-09-28	-	30,000,000
Non guaranteed debentures(167-2)	1.87	2020-09-28	2021-12-28	-	50,000,000
Non guaranteed debentures(168-1)	1.86	2020-10-16	2022-01-14	40,000,000	40,000,000
Non guaranteed debentures(168-2)	1.87	2020-10-16	2022-02-16	10,000,000	10,000,000
Non guaranteed debentures(168-3)	2.10	2020-10-16	2022-03-16	20,000,000	20,000,000
Non guaranteed debentures(168-4)	1.92	2020-10-16	2022-10-14	20,000,000	20,000,000
Non guaranteed debentures(169-1)	1.85	2020-10-20	2021-12-20	-	40,000,000
Non guaranteed debentures(169-2)	1.85	2020-10-20	2022-01-20	10,000,000	10,000,000
Non guaranteed debentures(169-3)	1.86	2020-10-20	2022-02-18	10,000,000	10,000,000
Non guaranteed debentures(169-4)	1.87	2020-10-20	2022-03-18	20,000,000	20,000,000
Non guaranteed debentures(170)	1.92	2020-10-23	2022-07-22	30,000,000	30,000,000
Non guaranteed debentures(171-1)	1.88	2020-10-29	2022-03-29	20,000,000	20,000,000
Non guaranteed debentures(171-2)	1.93	2020-10-29	2022-10-28	10,000,000	10,000,000
Non guaranteed debentures(172-1)	1.89	2020-11-09	2022-05-09	50,000,000	50,000,000
Non guaranteed debentures(172-2)	1.91	2020-11-09	2022-08-09	20,000,000	20,000,000
Non guaranteed debentures(172-3)	1.94	2020-11-09	2022-10-28	10,000,000	10,000,000
Non guaranteed debentures(172-4)	1.94	2020-11-09	2022-11-09	20,000,000	20,000,000
Non guaranteed debentures(173)	1.86	2020-11-12	2022-02-11	40,000,000	40,000,000
Non guaranteed debentures(174-1)	1.93	2020-11-25	2022-11-25	150,000,000	150,000,000
Non guaranteed debentures(174-2)	1.93	2020-11-25	2022-12-23	10,000,000	10,000,000
Non guaranteed debentures(174-3)	1.94	2020-11-25	2023-05-25	80,000,000	80,000,000
Non guaranteed debentures(175-1)	1.86	2020-12-08	2022-06-08	50,000,000	50,000,000
Non guaranteed debentures(175-2)	1.90	2020-12-08	2022-12-08	90,000,000	90,000,000
Non guaranteed debentures(175-3)	1.90	2020-12-08	2022-12-07	20,000,000	20,000,000
Non guaranteed debentures(175-4)	1.93	2020-12-08	2023-06-08	30,000,000	30,000,000
Non guaranteed debentures(175-5)	1.93	2020-12-08	2023-06-07	10,000,000	10,000,000
Non guaranteed debentures(176-1)	1.89	2021-01-14	2024-01-12	120,000,000	-
Non guaranteed debentures(176-2)	1.89	2021-01-14	2024-01-15	30,000,000	-
Non guaranteed debentures(176-3)	1.90	2021-01-14	2024-04-12	40,000,000	-
Non guaranteed debentures(176-4)	1.90	2021-01-14	2024-04-15	10,000,000	-
Non guaranteed debentures(177-1)	1.92	2021-03-25	2024-03-25	180,000,000	-
Non guaranteed debentures(177-2)	1.92	2021-03-25	2024-03-22	20,000,000	-
Non guaranteed debentures(178-1)	1.44	2021-03-30	2022-06-30	30,000,000	-
Non guaranteed debentures(178-2)	1.91	2021-03-30	2024-05-30	90,000,000	-
Non guaranteed debentures(178-3)	1.91	2021-03-30	2024-05-29	40,000,000	-
Non guaranteed debentures(178-4)	2.01	2021-03-30	2025-03-28	10,000,000	-
Non guaranteed debentures(179-1)	1.72	2021-04-23	2024-04-23	70,000,000	-
Non guaranteed debentures(179-2)	1.80	2021-04-23	2024-07-23	50,000,000	-
Non guaranteed debentures(180-1)	1.69	2021-04-27	2024-04-25	10,000,000	-
Non guaranteed debentures(180-2)	1.69	2021-04-27	2024-04-26	60,000,000	-
Non guaranteed debentures(180-3)	1.77	2021-04-27	2024-07-26	50,000,000	-
Non guaranteed debentures(182-1)	1.62	2021-05-14	2024-02-14	40,000,000	-
Non guaranteed debentures(182-2)	1.68	2021-05-14	2024-05-14	30,000,000	-

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19.2. Debentures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won)
(cont'd):

	Interest rate (%)	Date of issue	Maturity	December 31, 2021	December 31, 2020
Non guaranteed debentures(182-3)	1.71	2021-05-14	2024-06-14	₩ 10,000,000	₩ -
Non guaranteed debentures(183-1)	1.45	2021-05-26	2023-05-26	100,000,000	-
Non guaranteed debentures(183-2)	1.50	2021-05-26	2023-08-25	60,000,000	-
Non guaranteed debentures(183-3)	1.55	2021-05-26	2023-11-24	40,000,000	-
Non guaranteed debentures(183-4)	2.35	2021-05-26	2026-05-26	10,000,000	-
Non guaranteed debentures(184)	1.73	2021-06-23	2023-07-21	50,000,000	-
Non guaranteed debentures(185-1)	1.73	2021-06-28	2023-06-28	30,000,000	-
Non guaranteed debentures(185-2)	1.79	2021-06-28	2023-09-28	10,000,000	-
Non guaranteed debentures(186-1)	1.69	2021-07-09	2023-04-07	60,000,000	-
Non guaranteed debentures(186-2)	1.79	2021-07-09	2023-07-06	40,000,000	-
Non guaranteed debentures(186-3)	1.79	2021-07-09	2023-07-07	120,000,000	-
Non guaranteed debentures(187-1)	1.50	2021-08-12	2023-03-10	50,000,000	-
Non guaranteed debentures(187-2)	1.77	2021-08-12	2023-08-11	10,000,000	-
Non guaranteed debentures(188)	1.87	2021-08-24	2024-02-23	10,000,000	-
Non guaranteed debentures(189-1)	1.59	2021-09-06	2022-10-06	10,000,000	-
Non guaranteed debentures(189-2)	1.68	2021-09-06	2023-01-06	10,000,000	-
Non guaranteed debentures(190-1)	2.34	2021-09-08	2026-03-06	10,000,000	-
Non guaranteed debentures(190-2)	2.64	2021-09-08	2027-09-08	10,000,000	-
Non guaranteed debentures(191-1)	1.74	2021-09-16	2022-09-16	20,000,000	-
Non guaranteed debentures(191-2)	1.95	2021-09-16	2023-03-16	20,000,000	-
Non guaranteed debentures(191-3)	2.73	2021-09-16	2027-09-13	30,000,000	-
Non guaranteed debentures(192-1)	2.02	2021-10-18	2023-01-18	40,000,000	-
Non guaranteed debentures(192-2)	2.15	2021-10-18	2023-04-18	30,000,000	-
Non guaranteed debentures(192-3)	2.32	2021-10-18	2023-10-18	20,000,000	-
Non guaranteed debentures(193-1)	2.45	2021-11-11	2023-04-11	40,000,000	-
Non guaranteed debentures(193-2)	2.50	2021-11-11	2023-05-11	10,000,000	-
Non guaranteed debentures(194)	2.44	2021-11-12	2023-05-12	20,000,000	-
Asset-backed debentures(8)	2.20	2021-11-19	2023-03-19	10,000,000	-
Asset-backed debentures(8)	2.25	2021-11-19	2023-04-19	10,000,000	-
Asset-backed debentures(8)	2.33	2021-11-19	2023-05-19	20,000,000	-
Asset-backed debentures(8)	2.36	2021-11-19	2023-06-19	20,000,000	-
Asset-backed debentures(8)	2.40	2021-11-19	2023-07-19	20,000,000	-
Asset-backed debentures(8)	2.45	2021-11-19	2023-08-19	20,000,000	-
Asset-backed debentures(8)	2.49	2021-11-19	2023-09-19	20,000,000	-
Asset-backed debentures(8)	2.52	2021-11-19	2023-10-19	20,000,000	-
Asset-backed debentures(8)	2.57	2021-11-19	2023-11-19	20,000,000	-
Asset-backed debentures(8)	2.58	2021-11-19	2023-12-19	20,000,000	-
Asset-backed debentures(8)	2.60	2021-11-19	2024-01-19	20,000,000	-
Asset-backed debentures(8)	2.61	2021-11-19	2024-02-19	20,000,000	-
Asset-backed debentures(8)	2.62	2021-11-19	2024-03-19	20,000,000	-
Asset-backed debentures(8)	2.63	2021-11-19	2024-04-19	20,000,000	-
Asset-backed debentures(8)	2.65	2021-11-19	2024-05-19	20,000,000	-
Asset-backed debentures(8)	2.66	2021-11-19	2024-06-19	20,000,000	-
Asset-backed debentures(8)	2.67	2021-11-19	2024-07-19	20,000,000	-
Asset-backed debentures(8)	2.69	2021-11-19	2024-08-19	20,000,000	-
Asset-backed debentures(8)	2.70	2021-11-19	2024-09-19	20,000,000	-
Asset-backed debentures(8)	2.71	2021-11-19	2024-10-19	20,000,000	-
Non guaranteed debentures(195-1)	2.75	2021-12-06	2023-06-05	130,000,000	-
Non guaranteed debentures(195-2)	2.84	2021-12-06	2023-12-06	120,000,000	-
Non guaranteed debentures(196)	2.75	2021-12-07	2023-06-07	60,000,000	-
Non guaranteed debentures(197-1)	2.81	2021-12-20	2023-09-20	60,000,000	-
Non guaranteed debentures(197-2)	2.83	2021-12-20	2023-11-20	110,000,000	-
Non guaranteed debentures(197-3)	2.85	2021-12-20	2024-02-20	30,000,000	-
Non guaranteed debentures(1808-01)	2.55	2018-08-03	2021-08-03	-	210,000,000
Non guaranteed debentures(1808-10)	2.62	2018-10-15	2021-10-15	-	310,000,000
Unwarranted subordinated debentures (1903-01)	4.00	2019-03-15	2026-03-15	210,000,000	210,000,000
Unwarranted subordinated debentures (1905-01)	3.95	2019-05-30	2026-05-30	110,000,000	110,000,000
Unwarranted subordinated debentures (1905-02)	4.20	2019-05-30	2029-05-30	190,000,000	190,000,000
Unwarranted subordinated debentures (2001-01)	3.90	2020-01-30	2027-01-30	84,000,000	84,000,000
Unwarranted subordinated debentures (2001-02)	4.10	2020-01-30	2030-01-30	30,000,000	30,000,000
Non guaranteed debentures(2004-01)	2.85	2020-04-27	2021-04-27	-	180,000,000
Non guaranteed debentures(2005-01)	3.05	2020-05-22	2022-05-20	300,000,000	300,000,000
Non guaranteed debentures(2006-01)	1.70	2020-06-26	2022-01-26	40,000,000	40,000,000
Non guaranteed debentures(2009-01)	1.66	2020-09-16	2022-03-16	160,000,000	160,000,000

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19.2. Debentures as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

	Interest rate (%)	Date of issue	Maturity	December 31, 2021	December 31, 2020
Non guaranteed debentures(2010-01)	1.58	2020-10-21	2022-04-21	₩ 100,000,000	₩ 100,000,000
Non guaranteed debentures(2010-02)	1.83	2020-10-21	2022-10-21	80,000,000	80,000,000
Non guaranteed debentures(2010-03)	2.01	2020-10-21	2023-10-20	20,000,000	20,000,000
Non guaranteed debentures(2011-01)	1.65	2020-11-19	2022-11-18	100,000,000	100,000,000
Non guaranteed debentures(2011-02)	1.89	2020-11-19	2023-11-17	100,000,000	100,000,000
Non guaranteed debentures(2103-01)	1.17	2021-03-05	2022-09-05	100,000,000	-
Non guaranteed debentures(2106-01)	1.35	2021-06-10	2022-12-09	200,000,000	-
Non guaranteed debentures(2109-01)	1.92	2021-09-10	2023-09-08	200,000,000	-
Discount on debenture issued				(8,038,443)	(9,099,692)
				₩ 7,025,961,557	₩ 7,164,900,308

20. Provisions

20.1. Provisions as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Provision for financial guarantee contract	₩ 105,284	₩ 1,610,055
Allowances for unused commitments	12,165,657	9,778,693
Reserve for restoration costs	4,738,748	4,389,314
Provision for possible losses from lawsuits	3,964,423	258,586
	₩ 20,974,112	₩ 16,036,648

20.2. Changes in provision for financial guarantee contract for the year ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans lifetime expected credit losses	Total
Beginning balance	₩ 1,610,055	₩ -	₩ -	₩ 1,610,055
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to Impaired loans lifetime expected credit losses	-	-	-	-
Provisions for debt guarantee transferred in (reversal)	(1,512,131)	7,360	-	(1,504,771)
Ending balance	₩ 97,924	₩ 7,360	₩ -	₩ 105,284

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans lifetime expected credit losses	Total
Beginning balance	₩ 3,285,754	₩ -	₩ -	₩ 3,285,754
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to Impaired loans lifetime expected credit losses	-	-	-	-
Provisions for debt guarantee transferred in (reversal)	(1,675,699)	-	-	(1,675,699)
Ending balance	₩ 1,610,055	₩ -	₩ -	₩ 1,610,055

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20.3. Changes in allowances for unused commitments for the year ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans lifetime expected credit losses	Total
Beginning balance	₩ 8,878,751	₩ 899,942	₩ -	₩ 9,778,693
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	(39,410)	39,410	-	-
Transfer to Impaired loans lifetime expected credit losses	-	-	-	-
Provisions for debt guarantee transferred in (reversal)	3,158,637	(771,673)	-	2,386,964
Ending balance	₩ 11,997,978	₩ 167,679	₩ -	₩ 12,165,657

	Year ended December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans lifetime expected credit losses	Total
Beginning balance	₩ 19,379,034	₩ 225,112	₩ -	₩ 19,604,146
Transfer to 12 month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	(229,651)	229,651	-	-
Transfer to Impaired loans lifetime expected credit losses	-	-	-	-
Provisions for debt guarantee transferred in (reversal)	(10,270,632)	445,179	-	(9,825,453)
Ending balance	₩ 8,878,751	₩ 899,942	₩ -	₩ 9,778,693

20.4. Changes in provision for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021				
	Beginning balance	Addition (*)	Provision (Reversal)	Use	Ending balance
Reserve for restoration costs	₩ 4,389,314	₩ 308,415	₩ 41,019	₩ -	₩ 4,738,748
Provision for possible losses from lawsuits	258,586	-	3,705,837	-	3,964,423
	₩ 4,647,900	₩ 308,415	₩ 3,746,856	₩ -	₩ 8,703,171

(*) This is the amount for tangible assets based on the recognition of provision for restoration cost in 2021.

	Year ended December 31, 2020				
	Beginning balance	Addition (*)	Provision (Reversal)	Use	Ending balance
Reserve for restoration costs	₩ 4,240,348	₩ 74,007	₩ 74,959	₩ -	₩ 4,389,314
Provision for possible losses from lawsuits	259,971	-	(1,385)	-	258,586
	₩ 4,500,319	₩ 74,007	₩ 73,574	₩ -	₩ 4,647,900

(*) This is the amount for tangible assets based on the recognition of provision for restoration cost in 2020.

21. Net defined benefit liabilities (assets)

21.1. Defined benefit liabilities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Present value of defined benefit liabilities	₩ 25,840,344	₩ 23,920,619
Fair value of plan assets	(25,927,773)	(23,588,372)
Net defined benefit liabilities(assets)	₩ (87,429)	₩ 332,247

21.2. Changes in defined benefit liabilities for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Beginning balance	₩ 23,920,619	₩ 20,003,053
Current service cost	5,046,374	4,670,186
Interest expense	607,944	488,491
Re-measurement:		
Experience adjustments	618,345	829,757
Actuarial changes arising from changes in demographic assumptions	-	297,201
Actuarial changes arising from changes in financial assumptions	(751,911)	(92,338)
Payment	(3,601,027)	(2,275,731)
Ending balance	₩ 25,840,344	₩ 23,920,619

21.3. Changes in plan assets for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Beginning balance	₩ 23,588,372	₩ 20,130,150
Expected return on plan assets	598,818	491,875
Re-measurement:		
Interest income from plan assets (Excluding the amount included in the interest income above)	(235,680)	(134,676)
Contributions by employer	5,012,552	5,426,445
Payment	(3,036,289)	(2,325,422)
Ending balance	₩ 25,927,773	₩ 23,588,372

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21.4. Changes in the remeasurement of net defined benefit liabilities(assets) for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Beginning balance	₩ (2,059,787)	₩ (1,188,579)
Re-measurement on defined benefit liabilities	133,566	(1,034,620)
Re-measurement on plan assets	(235,680)	(134,676)
Other	-	(32,370)
Income tax effect	28,081	330,458
Ending balance	₩ (2,133,820)	₩ (2,059,787)

21.5. The details of defined benefit liabilities for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Current service cost	₩ 5,046,374	₩ 4,670,186
Net interest expense (income)	9,126	(3,384)
Defined benefit of severance payment	₩ 5,055,500	₩ 4,666,802

21.6. The principal actuarial assumptions regarding to net defined liabilities(assets) as of December 31, 2021 and 2020 are as follows:

	December 31, 2021	December 31, 2020
Discount rate	3.34%	2.74%
Expected return ratio on plan assets	3.34%	2.74%
Future ratio of salary increase	2.00%+promotion rate	2.00%+promotion rate
Retirement rate by age	1.39%~38.20%	1.39%~38.20%
Mortality rate	0.002% ~ 0.099%	0.002% ~ 0.099%

21.7. Sensitivity analysis for actuarial assumptions in defined benefit liabilities as of December 31, 2021 is as follows (in thousands of Korean won):

	December 31, 2021	1% Increase	1% Decrease
Fluctuation of future salary increase rate	₩ 25,840,344	27,139,329	24,645,608
Fluctuation of discount rate	₩ 25,840,344	24,673,349	27,132,083

21.8. As of December 31, 2021, the weighted average maturity of the defined benefit liabilities is 5.304 years and expected post-employment benefits are ₩5,055,008 thousand.

21.9. As of the end of the reporting period, plan assets are accumulated in cash, deposits, interest rate guaranteed retirement pensions, ELB/DLB, and etc.

22. Other liabilities

22.1. Details of other liabilities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Other financial liabilities:		
Account payable for proprietary trading	₩ 115,704,253	₩ 187,845,467
Account payable for trading on consignment	342,039,671	377,059,366
Accounts payables	144,130,148	87,885,212
Accrued expense payables	788,575,301	599,400,421
Accrued dividend	4,587,411	1,861,016
Leasehold deposits received	50,000	2,415,000
Unsettled spot exchange	792,990,943	791,213,106
Unsettled difference	3,031,442	3,569,442
Lease liability	33,571,404	32,207,855
Lease deposits	284,576,953	245,547,071
Present value discount of other assets	(16,095,188)	(12,815,109)
Debts related to financial guarantee contract	66,811,993	65,130,580
Redeemable equity for non-controlling shareholders	27,502,542	41,814,133
	<u>2,587,476,873</u>	<u>2,423,133,560</u>
Other non-financial liabilities:		
Advance receipts	41,544,329	34,825,949
Unearned income	161,217,874	108,021,327
Withholding tax	18,546,036	13,764,762
Others	16,415,226	3,937,440
	<u>237,723,465</u>	<u>160,549,478</u>
	<u>₩ 2,825,200,338</u>	<u>₩ 2,583,683,038</u>

22.2. The amount of lease payment and interest expenses for lease liability which recognized as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Lease payment	₩ 9,401,156	₩ 8,998,284
Interest expenses for lease liability	790,472	865,922

23. Derivative instruments

The Group uses derivative financial instruments such as interest rate swaps to exchange interest rates, currency swaps to hedge against exchange rate fluctuations, stock index options or stock index futures to generate profits.

23.1. The notional amount of derivative assets and liabilities outstanding as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		
	Notional amount	Asset	Liability
Exchange-traded derivatives:			
Interest rates:			
Interest futures	₩ 3,924,027,589	₩ 853,299	₩ 636,996
Currency:			
Currency futures	1,086,177,415	848,882	857,346
Stock :			
Stock futures	3,411,806,241	48,477,660	3,674,879
Stock option purchased	2,810,150,912	62,797,396	-
Stock option sold	5,744,557,030	-	217,225,895
Commodity:			
Commodity futures	152,329,862	58,360	11,401,694
	<u>17,129,049,049</u>	<u>113,035,597</u>	<u>233,796,810</u>
Over-the-counter derivatives:			
Interest rates:			
Interest rate forward	706,000,000	45,013,294	789,834
Interest rate swap	307,385,027,243	700,397	4,783,460
Currency:			
Currency forward	6,601,502,181	40,856,052	54,533,842
Currency swap	1,127,103,757	11,372,247	10,041,173
Currency option purchased	37,936,000	1,119,848	-
Currency option sold	-	-	-
Stock:			
Stock swap	739,470,900	176,794	6,984,213
Options purchased	292,763,661	6,421,355	-
Options sold	4,424,284	-	289,870
Others:			
Other forward	-	-	-
Other swap	6,941,487,832	97,981,779	134,620,231
Other option			
Other option sold	500,000,000	-	762,118
	<u>324,335,715,858</u>	<u>203,641,766</u>	<u>212,804,741</u>
	<u>₩ 341,464,764,907</u>	<u>₩ 316,677,363</u>	<u>₩ 446,601,551</u>

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23.1. The notional amount of derivative assets and liabilities outstanding as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd) :

	December 31, 2020		
	Notional amount	Asset	Liability
Exchange-traded derivatives:			
Interest rates:			
Interest futures	₩ 3,593,963,578	₩ 505,106	₩ 829,378
Currency:			
Currency futures	392,209,474	574	824,035
Stock :			
Stock futures	1,578,053,472	11,170,760	1,949,098
Stock option purchased	963,596,093	55,285,912	-
Stock option sold	3,071,434,201	-	79,898,643
Commodity:			
Commodity futures	5,226,492	86,298	76,116
	<u>9,604,483,310</u>	<u>67,048,650</u>	<u>83,577,270</u>
Over-the-counter derivatives:			
Interest rates:			
Interest rate forward	370,000,000	12,730,811	1,303,420
Interest rate swap	249,152,519,200	36,001,218	4,678,522
Currency:			
Currency forward	6,082,635,342	159,467,664	128,179,611
Currency swap	1,392,071,892	64,750,148	50,971,338
Currency option purchased	34,800,896	311,595	-
Currency option sold	34,800,896	-	311,371
Stock:			
Stock swap	20,389,892	2,926,450	917,183
Options purchased	31,106,539	6,116,479	-
Options sold	-	-	-
Others:			
Other forward	20,000,000	5,293,935	5,295,507
Other swap	4,397,628,945	89,278,529	8,074,066
Other option			
Other option sold	-	-	-
	<u>261,535,953,602</u>	<u>376,876,829</u>	<u>199,731,018</u>
	<u>₩ 271,140,436,912</u>	<u>₩ 443,925,479</u>	<u>₩ 283,308,288</u>

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23.2. Gain (loss) on valuation of trading derivative financial instruments for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Exchange-traded derivatives:		
Interest rates	₩ 7,535,060	₩ (3,241,044)
Currency	2,238,385	(1,778,788)
Stock	(7,044,483)	3,750,633
Stock index	41,852,467	72,006,666
Others	(11,343,334)	10,182
	<u>33,238,095</u>	<u>70,747,649</u>
Over-the-counter derivatives:		
Interest rates	32,521,284	17,194,135
Currency	(15,126,201)	38,908,373
Stock	(7,677,989)	2,699,309
Credit	(2,787,183)	-
Others	11,785,942	70,197,723
	<u>18,715,853</u>	<u>128,999,540</u>
	<u>₩ 51,953,948</u>	<u>₩ 199,747,189</u>

24. Capital stock

24.1. Company is authorized to issue 2,000,000,000 shares of common stock and has 681,730,579 shares and 36,956,520 shares of common and preferred stock issued and outstanding in the amount of ₩681,730,579 thousand and ₩94,448,208 thousand as of December 31, 2021 (Cancellation by profit redemption is excluded).

On July 30, 2018, July 1, 2019 and June 29, 2021, the Company redeemed 13,804,345 shares (the first issue), 15,434,781 shares (the second issue) and 28,252,562 shares (the third and fourth issue) of redeemable convertible preference shares on which the redemption right can be exercised by profit retirement. Therefore, the face values of the preferred stock capital and the number of issued shares do not match.

In addition, 5,729,981 shares of preferred stock is transferred to 5,768,852 shares of common stock in 2021. There is no preferred stock transferred to common stock in 2020.

Changes in capital stock for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won and number of shares):

	Year ended December 31, 2021	
	Issued shares	Capital stock
January 1, 2021	746,900,790 shares	₩ 776,139,916
Redemption of redeemable convertible preferred stock	(28,252,562) shares	-
Conversion of redeemable convertible preferred stock (*1)	38,871 shares	38,871
December 31, 2021	<u>718,687,099 shares</u>	<u>₩ 776,178,787</u>
	Year ended December 31, 2020	
	Issued shares	Capital stock
January 1, 2020	688,249,764 shares	₩ 717,488,890
Paid-in capital increase (*2)	58,651,026 shares	58,651,026
December 31, 2020	<u>746,900,790 shares</u>	<u>₩ 776,139,916</u>

(*1) Due to the paid-in capital increase during the previous year, the conversion ratio was adjusted from 1 common share per preferred share to 1.00678 common shares. During this period, capital increased due to the conversion of convertible preferred stocks into common stocks.

(*2) Issued new stocks to Meritz Financial Group on a third-party allocation increase in 2020.

24.2. The Company has issued redeemable convertible preference shares, and has secured repayment rights for them. Besides, as no contractual obligation to deliver financial assets such as cash exits, they have been classified as equity. The details of redeemable convertible preference shares issued are as follows (excluding repayments prior to the previous period):

(1) 3rd issue

Classification	Details
Purpose of issue	Cumulative non-participating preferred stock
Total issued stock	23,913,042 shares
Issue price per a share (won)	₩4,600
Voting rights	No voting rights
Dividend rate	In the event of a dividend resolution in each fiscal year, dividends shall be paid within the scope of divisible profits. The initial dividend rate is 3.9%. Dividends on the stock are to be paid in cash. The payment of the dividend may be postponed at the discretion of the issuing company to the extent permitted under the applicable statutory decree.
The right of redemption	The issuing company has the right to redeem all or part of the shares from the date of the 3rd anniversary of the shares.
The right of conversion	<p>① The right of conversion : Owned by preferred stock holder</p> <p>② The conversion date : from June 30, 2018 to June 30, 2047 (subject to change in accordance with the manner or procedure permitted by statute)</p> <p>③ Ratio for conversion : A common stock for 1.00678 preferred stock (Conversion ratio adjusted from 1:1 during the current period due to capital increase)</p>

The 5,729,981 of issued stock is converted to common stock in 2021 and 11,669,629 of issued stock is converted to common stock in before the previous period. After conversion during this period, remaining 6,513,432 shares were redeemed.

(2) 4th issue

Classification	Details
Purpose of issue	Cumulative non-participating preferred stock
Total issued stock	21,739,130 shares
Issue price per a share (won)	₩4,600
Voting rights	With voting rights
Dividend rate	In the event of a dividend resolution in each fiscal year, dividends shall be paid within the scope of divisible profits. The initial dividend rate is 3.9%. Dividends on the stock are to be paid in cash. The payment of the dividend may be postponed at the discretion of the issuing company to the extent permitted under the applicable statutory decree.
The right of redemption	The issuing company has the right to redeem all or part of the shares from the date of the 3rd anniversary of the shares.
The right of conversion	<p>① The right of conversion : Owned by preferred stock holder</p> <p>② The conversion date : from June 30, 2018 to June 30, 2047 (subject to change in accordance with the manner or procedure permitted by statute)</p> <p>③ Ratio for conversion : A common stock for 1.00678 preferred stock (Conversion ratio adjusted from 1:1 during the current period due to capital increase)</p>

The 21,739,130 of shares were redeemed in 2021

24.2. The Company has issued redeemable convertible preference shares, and has secured repayment rights for them. Besides, as no contractual obligation to deliver financial assets such as cash exits, they have been classified as equity. The details of redeemable convertible preference shares issued are as follows (excluding repayments prior to the previous period) (cont'd):

(3) 5th issue

Classification	Details
Purpose of issue	Cumulative non-participating preferred stock
Total issued stock	8,695,652 shares
Issue price per a share (won)	₩9,200
Voting rights	No voting rights
Dividend rate	In the event of a dividend resolution in each fiscal year, dividends shall be paid within the scope of divisible profits. The initial dividend rate at the time of initial issuance of the shares will be determined as 1.542 times multiplied by the average interest rate of 2 year maturity A0 grade unsecured public offering bonds issued by financial institution II from the 'return on bond market valuation (Matrix)' which is announced by the Korea Financial Investment Association. Dividends on the stock are to be paid in cash. The payment of the dividend may be postponed at the discretion of the issuing company to the extent permitted under the applicable statutory decree.
The right of redemption	The issuing company has the right to redeem all or part of the shares from the date of the second anniversary of the shares.
The right of conversion	<p>① The right of conversion : Owned by preferred stock holder</p> <p>② The conversion date : from June 30, 2022 to June 30, 2024 (subject to change in accordance with the manner or procedure permitted by statute)</p> <p>③ Ratio for conversion : A common stock for 1.00678 preferred stock (Conversion ratio adjusted from 1:1 during the current period due to capital increase)</p>

The Company's shareholder, Meritz Financial Holding Co., has signed a contract with shareholders of Cube EM 1st Co., Ltd. The contract includes settlements of redeemable convertible preferred stocks, exercises of investors' put options, and contracts for the preferred right of the largest shareholders.

(4) 6th issue

Classification	Details
Purpose of issue	Cumulative non-participating preferred stock
Total issued stock	5,434,782 shares
Issue price per a share (won)	₩9,200
Voting rights	No voting rights
Dividend rate	In the event of a dividend resolution in each fiscal year, dividends shall be paid within the scope of divisible profits. The initial dividend rate at the time of initial issuance of the shares will be determined as 1.456 times multiplied by the average interest rate of 3 year maturity A0 grade unsecured public offering bonds issued by financial institution II from the 'return on bond market valuation (Matrix)' which is announced by the Korea Financial Investment Association. Dividends on the stock are to be paid in cash. The payment of the dividend may be postponed at the discretion of the issuing company to the extent permitted under the applicable statutory decree.
The right of redemption	The issuing company has the right to redeem all or part of the shares from the date of the 3rd anniversary of the shares.
The right of conversion	<p>① The right of conversion : Owned by preferred stock holder</p> <p>② The conversion date : from June 30, 2022 to June 30, 2024 (subject to change in accordance with the manner or procedure permitted by statute)</p> <p>③ Ratio for conversion : A common stock for 1.0069 preferred stock (Conversion ratio adjusted from 1:1 during the current period due to capital increase)</p>

24.2. The Company has issued redeemable convertible preference shares, and has secured repayment rights for them. Besides, as no contractual obligation to deliver financial assets such as cash exits, they have been classified as equity. The details of redeemable convertible preference shares issued are as follows (excluding repayments prior to the previous period) (cont'd):

The Company's shareholder, Meritz Financial Holding Co., has signed a contract with shareholders of Cube EM 5th Co., Ltd. The contract includes settlements of redeemable convertible preferred stocks, exercises of investors' put options, and contracts for the preferred right of the largest shareholders.

(5) 7th issue

Classification	Details
Purpose of issue	Cumulative non-participating preferred stock
Total issued stock	7,608,695 shares
Issue price per a share (won)	₩9,200
Voting rights	No voting rights
Dividend rate	In the event of a dividend resolution in each fiscal year, dividends shall be paid within the scope of divisible profits. The initial dividend rate at the time of initial issuance of the shares will be determined as 1.405 times multiplied by the average interest rate of 4 year maturity A0 grade unsecured public offering bonds issued by financial institution II from the 'return on bond market valuation (Matrix)' which is announced by the Korea Financial Investment Association. Dividends on the stock are to be paid in cash. The payment of the dividend may be postponed at the discretion of the issuing company to the extent permitted under the applicable statutory decree.
The right of redemption	The issuing company has the right to redeem all or part of the shares from the date of the 3rd anniversary of the shares.
The right of conversion	<p>① The right of conversion : Owned by preferred stock holder</p> <p>② The conversion date : from June 30, 2022 to June 30, 2024 (subject to change in accordance with the manner or procedure permitted by statute)</p> <p>③ Ratio for conversion : A common stock for 1.00678 preferred stock (Conversion ratio adjusted from 1:1 during the current period due to capital increase)</p>

The Company's shareholder, Meritz Financial Holding Co., has signed a contract with shareholders of Cube EM 3rd Co., Ltd. and Cube EM 5th Co., Ltd. The contract includes settlements of redeemable convertible preferred stocks, exercises of investors' put options, and contracts for the preferred right of the largest shareholders.

(6) 8th issue

Classification	Details
Purpose of issue	Cumulative non-participating preferred stock
Total issued stock	15,217,391 shares
Issue price per a share (won)	₩9,200
Voting rights	No voting rights
Dividend rate	In the event of a dividend resolution in each fiscal year, dividends shall be paid within the scope of divisible profits. The initial dividend rate at the time of initial issuance of the shares will be determined as 1.320 times the average interest rate of 5 year maturity A0 grade unsecured public offering bonds issued by financial institution II from the 'return on bond market valuation (Matrix)' which is announced by the Korea Financial Investment Association. Dividends on the stock are to be paid in cash. The payment of the dividend may be postponed at the discretion of the issuing company to the extent permitted under the applicable statutory decree.
The right of redemption	The issuing company has the right to redeem all or part of the shares from the date of the 4th anniversary of the shares.

24.2. The Company has issued redeemable convertible preference shares, and has secured repayment rights for them. Besides, as no contractual obligation to deliver financial assets such as cash exits, they have been classified as equity. The details of redeemable convertible preference shares issued are as follows (excluding repayments prior to the previous period) (cont'd):

The right of conversion	① The right of conversion : Owned by preferred stock holder
	② The conversion date : from June 30, 2022 to June 30, 2024 (subject to change in accordance with the manner or procedure permitted by statute)
	③ Ratio for conversion : A common stock for 1.00678 preferred stock (Conversion ratio adjusted from 1:1 during the current period due to capital increase)

The Company's shareholder, Meritz Financial Holding Co., has signed a contract with shareholders of Cube EM 4th Co., Ltd. The contract includes settlements of redeemable convertible preferred stocks, exercises of investors' put options, and contracts for the preferred right of the largest shareholders.

24.3. Hybrid bond which classified as a capital as of December 31, 2021 and 2020 consist of the following (in thousands of Korean won):

	Date of issue	Maturity	Interest Rate (%)	December 31, 2021	December 31, 2020
Private bond type hybrid bond 1 st (*)	2019.12.20	2049.12.20	4.80	₩ 200,000,000	₩ 200,000,000
Private bond type hybrid bond 2 nd	2020.01.31	2050.01.31	4.80	50,000,000	50,000,000
Private bond type hybrid bond 3-1	2021.05.28	2051.05.28	4.60	35,000,000	-
Private bond type hybrid bond 3-2 (*)	2021.05.28	2051.05.28	4.90	260,000,000	-
Private bond type hybrid bond 4 th (*)	2021.10.15	2051.10.15	4.90	150,000,000	-
Issue price				(259,250)	(113,540)
				₩ 694,740,750	₩ 249,886,460

(*) As of the end of the current year, Meritz financial group and Meritz fire & marine insurance Co., Ltd., related party of the consolidated company, own the 1st private equity type new capital securities of ₩ 200,000,000 thousand and ₩ 300,000,000 thousand respectively.

24.4. Above private bond type hybrid bond has no contractual obligation to deliver financial assets such as cash exits, they have been classified as equity. The details of private bond type hybrid bond are as follows:

Classification	Details
Revaluation interest rate	Revaluate rate of interest for every 10 years or every 7 years(3th-1), adding with interest rate to the final quoted yield of 10-year treasury bond
Interest payment condition	Payment is made every three months, and interest payments can be postponed at the option of consolidated group. When the interest payment is postponed, the interest rate, applied to the principal, additionally paid to the unpaid interest.
Maturity	The maturity term is 30 years, and if private bond type hybrid bond is not redeemed at the option, maturity is automatically extended for 30 years based on consolidated group's decision.

25. Other capital

25.1. Other capital as of December 31, 2021 and 2020 consist of the following (*in thousands of Korean won*):

	December 31, 2021	December 31, 2020
Paid in capital in excess of par value	₩ 1,548,139,222	₩ 1,548,539,361
Gain on disposal of treasury stock	3,456,338	3,456,338
Others capital surplus(*)	1,961,311	1,961,311
Treasury stock	(262,529,550)	(9,717,829)
Stock options (*)	3,961,880	3,847,831
Expense burden for share option of parent company	(24,742,842)	-
	<u>₩ 1,270,246,359</u>	<u>₩ 1,548,087,012</u>

(*) See share-based payment transaction (Note 26)

25.2. Changes in other capital for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021	Year ended December 31, 2020
Beginning balance	₩ 1,548,087,012	₩ 1,406,942,024
Allocated expense of share based payment	114,050	114,050
Disposal of treasury stock	-	47
Paid-in capital increase	-	141,030,891
Acquisition of treasury stock	(252,811,722)	-
Expense burden for share option of parent company	(24,742,842)	-
Conversion expense of redeemable convertible preferred share to common share	(48,639)	-
Redemption of hybrid bond	(255,500)	-
Paid-in capital increase of subsidiary company	(96,000)	-
Ending balance	<u>₩ 1,270,246,359</u>	<u>₩ 1,548,087,012</u>

25.3. During this period, the company concluded a trust contract for acquiring treasury stocks through a resolution of the board of directors to enhance shareholder value. The details of trust contract is as follows:

Company	Contract amount	Term of contract
NH Investment&Securities Co.,Ltd, Samsung securities Co., Ltd	₩ 100 billion	2021.03.18~2022.03.17
NH Investment&Securities Co.,Ltd, Samsung securities Co., Ltd	₩ 100 billion	2021.06.24~2022.06.23
Samsung securities Co., Ltd	₩ 140 billion	2021.11.12~2022.11.11

The stocks acquired through the trust contract will be on retirement of stock after completion of the acquisition. As of the end of the current period, there are 52,320,000 treasury stocks acquired through the trust contract.

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26. Share-based payment transaction

The Group and Meritz Financial Group Inc., the holding company of the Group, granted stock options based on the special resolution at the general meeting of shareholders in accordance with the Korean commercial code.

26.1. The details of stock options granted by the Group as of December 31, 2021 are summarized as follows (in Korean won and number of shares):

Part	Basic Shares	Stock options granted	Settlement date	Number of shares that can be exercised	Exercise price	Contracted service provision period	Exercisable period	Fair value as of grant date (*)
Share-based payment	Meritz Securities Co., Ltd	2,900,000 shares	2015.03.20	2,900,000 shares	₩ 4,380	2015.01.01 ~2019.12.31	2020.01.01 ~2024.12.31	₩ 1,109
Share-based payment	Meritz Securities Co., Ltd	2,000,000 shares	2018.03.16	1,918,496 shares	5,000	2018.01.01 ~2022.12.31	2023.01.01 ~2027.12.31	287
Share-based payment	Meritz Financial Group Inc.	1,232,000 shares	2015.03.20	555,480 shares	10,820	2015.01.01 ~2019.12.31	2020.01.01 ~2024.12.31	33,180

(*) The fair value of the share-based payment is the fair value as of grant date, and the fair value of the Meritz financial group is the fair value as of the settlement date.

26.2. Changes in stock options granted during the years ended December 31, 2021 and 2020 are summarized as follows (number of shares):

	Year ended December 31, 2021		Year ended December 31, 2020	
	Meritz Securities Co., Ltd.	Meritz Financial Group Inc.	Meritz Securities Co., Ltd.	Meritz Financial Group Inc.
Beginning balance	4,818,496 shares	1,155,480 shares	4,818,496 shares	1,209,051 shares
Number of options granted	-	-	-	-
Exercise	-	(600,000) shares	-	-
Number of options decreased(*)	-	-	-	(53,571) shares
Ending balance	<u>4,818,496 shares</u>	<u>555,480 shares</u>	<u>4,818,496 shares</u>	<u>1,155,480 shares</u>

(*) This is the adjusted amount due to the decrease in the number of grants due to the retirement of treasury stocks (retirement of profits).

26.3. Stock option granted by the Group is evaluated by using binomial model of option pricing model, and major inputs of evaluation model are as follows.

Part	Basic shares	Date	Closing price (*1)	Option price	Expected volatility (*3)	Risk free interest rate	Dividend yield ratio
Share-based payment	Meritz Securities Co., Ltd.	2015.03.20	₩ 5,010	₩ 4,380	24.43%	2.12%	4.90%
Share-based payment	Meritz Securities Co., Ltd.	2018.03.16	4,510	5,000	14.60%	2.60%	4.41%
Share-based payment	Meritz Financial Group Inc. (*2)	2015.03.20	44,000	10,820	7.30%	1.81%	2.05%

(*1) The closing price of the share-based payment is the closing price as of grant date, and the closing price of the Meritz financial group is the closing price as of the settlement date.

(*2) Meritz Financial Group shares are granted under the stock-based compensation agreement, and the difference in compensation costs that consolidated companies must pay to Meritz Financial Group under the payment agreement is reflected in capital.

(*3) The estimated share volatility is assessed based on equity volatility for the past 5 years.

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26.4. As the Group was granted stock options, it accounted for ₩6,045,407 thousand and ₩ 5,931,357 thousand as other components of equity as at December 31, 2021 and 2020, respectively. Also, the group accounted for ₩ 18,430,826 thousand and ₩ 369,055 thousand as expenses payable as at December 31, 2021 and 2020.

The amount that recognized as share-based payments (redemption), ₩ 114,050 thousand and (-) ₩897,106 thousand, were treated as sales and administrative expense for the year ended December 31, 2021 and 2020. Also, the amount ₩24,742,842 thousand was treated as other components of equity.

26.5. The Group applies the best practices of the financial investment company's performance compensation system and accordingly, a portion of executive compensation, tied to daily average stock prices, is deferred and paid in cash. These payments are other long-term employee benefits and are accounted as liability, which is measured at fair value at the end of every reporting period. Fair value changes are recognized in profit or loss. For the fair value of the liability, Monte Carlo Simulation is utilized by using the stock price prediction method. Details of the cash-settled share-based payments as of December 31, 2021 are as follows (*in thousands of Korean won*):

	Book value		Before fair value assessment		Variation of fair value		Intrinsic value of liability
₩	76,212,884	₩	52,614,465	₩	23,598,419	₩	76,460,425

26.6. Deferred performance compensation linked to Return of Equity(ROE)

The Group applies the best practices of the financial investment company's performance compensation system and accordingly, a portion of executive compensation, tied to the Company's ROE, is deferred and paid in cash. These payments are other long-term employee benefits and are accounted as liability, which is measured at fair value at the end of every reporting period. Fair value changes are recognized in profit or loss. Fair value of liability is estimated by using the target ROE and discounted by applying AA- grade rate of return of unsecured financial institution bond which is disclosed by the Korea Financial Investment Association. As of December 31, 2021, details of the performance compensation are as follows (*in thousands of Korean won*):

	Book value		Before fair value assessment		Variation of fair value
₩	135,174,726	₩	120,748,402	₩	14,426,324

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27. Accumulated other comprehensive income

Accumulated other comprehensive income as of December 31, 2021 and 2020 consist of the following (*in thousands of Korean won*):

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Gain on valuation of equity securities measured at FVOCI:		
Equity securities	₩ 200,629,186	₩ 173,847,253
Income tax effect	<u>(55,072,712)</u>	<u>(47,721,071)</u>
	<u>145,556,474</u>	<u>126,126,182</u>
Gain on valuation of debt securities measured at FVOCI:		
Debt securities	8,702,975	380,991
Income tax effect	<u>(2,388,967)</u>	<u>(104,582)</u>
	<u>6,314,008</u>	<u>276,409</u>
Gain (loss) on valuation of investment stock using the equity method :		
Gain (loss) on valuation of investment stock using the equity method	-	(1,741,140)
Income tax effect	<u>-</u>	<u>477,943</u>
	<u>-</u>	<u>(1,263,197)</u>
Exchange differences on translation of foreign operations:		
Exchange differences on translation of foreign operations	4,192,693	(1,977,233)
Income tax effect	<u>(1,150,894)</u>	<u>542,750</u>
	<u>3,041,799</u>	<u>(1,434,483)</u>
Remeasurement of the defined benefit liability:		
Actuarial loss	(2,911,282)	(2,809,168)
Income tax effect	<u>777,463</u>	<u>749,381</u>
	<u>(2,133,819)</u>	<u>(2,059,787)</u>
Other:		
Credit risk fluctuation effect of financial liabilities designated at FVTPL	(5,020)	577,165
Income tax effect	<u>1,422</u>	<u>(158,388)</u>
	<u>(3,598)</u>	<u>418,777</u>
	<u>₩ 152,774,864</u>	<u>₩ 122,063,901</u>

28. Retained earnings

28.1. Retained earnings as of December 31, 2021 and 2020 consist of the following (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Legal reserve	₩ 109,212,330	₩ 86,945,230
Regulatory reserve for credit losses	147,515,610	232,974,833
Voluntary reserves	120,899,632	253,511,974
Unappropriated retained earnings	1,938,401,034	1,344,759,368
	<u>₩ 2,316,028,606</u>	<u>₩ 1,918,191,405</u>

28.2. Changes in unappropriated retained earnings for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Beginning balance	₩ 1,344,759,368	₩ 1,145,656,700
Regulatory reversal(transfer) for credit losses	85,459,223	(68,127,585)
Transfer voluntary reserves	-	(129,413,787)
Cash dividends	(222,671,002)	(135,745,771)
Transfer of legal reserve	(22,267,100)	(13,752,958)
Dividends paid of hybrid bond	(22,139,716)	(12,124,590)
Gain (loss) on disposal of equity securities measured at FVOCI	391,500	970
Net income of non-controlling interests	774,868,761	558,266,389
Ending balance	<u>₩ 1,938,401,034</u>	<u>₩ 1,344,759,368</u>

28.3. In case the total sum of allowance for credit losses does not meet the amount prescribed in the Regulations 3-8 on Financial Investment Business, the Group is required to compensate for the difference, if any, at the reporting date as a regulatory reserve for credit losses. In case the amount of the existing regulatory reserve for credit losses exceeds the amount needed to be set aside as of the current period, the difference, if any, shall be reversed. If there is an undisposed deficit, the Group can accumulate reserves for credit losses after disposing of the deficit.

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28.3.1. Changes in regulatory reserve for credit losses for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Appropriated regulatory reserve for credit losses	₩ 147,515,610	₩ 232,974,833
Expected reversal (transfer) amount of regulatory reserve for credit losses	33,876,123	(85,459,223)
Ending of regulatory reserve for credit losses	₩ 181,391,733	₩ 147,515,610

28.3.2. Provision of regulatory reserve for credit losses and adjusted income after the provision of regulatory reserve for credit losses for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Net income	₩ 774,868,761	₩ 558,266,389
Planned reversal (transfer) of provision of regulatory reserve for credit losses	(33,876,123)	85,459,223
Adjusted income after provision of regulatory reserve for credit losses (*)	₩ 740,992,638	₩ 643,725,612
Earnings per share (won)	₩ 1,146	₩ 1,005

(*) Adjusted income after provision of regulatory reserve for credit losses is hypothetical amount not in accordance with K-IFRS. The amount was calculated by adding (deducting) provision from net income.

28.4. The details of dividends accounted for in the statements of appropriation of retained earnings for the years ended December 31, 2021 and 2020 are as follows:

28.4.1. Details of dividend calculation (in thousands of Korean won and number of shares):

	Year ended December 31, 2021			
	Number of shares to be assigned (in shares) (*)	Fixed dividend rate	Dividend per share (won)	Total dividend
Common stock	586,872,397 shares	10%	₩ 100	₩ 58,687,240
Preferred stock 5th	8,695,652 shares	28%	283	2,464,789
Preferred stock 6th	5,434,782 shares	28%	275	1,495,000
Preferred stock 7th	7,608,695 shares	37%	372	2,834,213
Preferred stock 8th	15,217,391 shares	43%	430	6,538,000
	<u>623,828,917 shares</u>			<u>₩ 72,019,242</u>
	Year ended December 31, 2020			
	Number of shares to be assigned (in shares) (*)	Fixed dividend rate	Dividend per share (won)	Total dividend
Common stock	632,823,545 shares	32%	₩ 320	₩ 202,503,534
Preferred stock 3rd	12,243,413 shares	18%	179	2,196,468
Preferred stock 4th	21,739,130 shares	18%	179	3,900,000
Preferred stock 5th	8,695,652 shares	29%	289	2,512,000
Preferred stock 6th	5,434,782 shares	34%	342	1,857,000
Preferred stock 7th	7,608,695 shares	42%	416	3,164,000
Preferred stock 8th	15,217,391 shares	43%	430	6,538,000
	<u>703,762,608 shares</u>			<u>₩ 222,671,002</u>

(*) Treasury stock held by the Company is excluded as of December 31, 2021 and 2020.

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28.4.2. Dividend payout ratio (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Total dividend	₩ 72,019,242	₩ 222,671,002
Net income attributable to controlling interests	774,868,761	558,266,389
Dividend payout ratio	9.29%	39.89%

28.4.3. Dividend yield ratio (in Korean won):

Part (*1)	Year ended December 31, 2021	Year ended December 31, 2020
A dividend per share	₩ 100	₩ 320
Average of pre-dividend closing price per share(*2)	5,288	3,866
Dividend yield ratio	1.9%	8.3%

(*1) Since preferred stocks were not listed, the dividend yield rate was calculated only for common stock.

(*2) The arithmetic average of the closing price announced in the previous week until 2 days ago from the dividend date.

29. Net fees and commission income

Net fees and commission income for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Fees and commission income:		
Brokerage commissions	₩ 120,909,569	₩ 106,473,983
Underwriting commissions	8,382,663	13,327,447
Brokerage commissions on collective investment securities	7,509,754	5,922,239
Management fees on wrap account and asset management	18,475,881	10,183,976
Finance commissions	327,354,166	285,752,090
Fees on trust accounts	4,558,313	3,132,330
Commissions on CMA	-	1,019
Others	218,681,904	158,128,900
	<u>705,872,250</u>	<u>582,921,984</u>
Fees and commission expense:		
Trading commissions	(15,907,287)	(9,355,736)
Lending and borrowing transaction commissions	(44,434,992)	(17,332,782)
Others	(49,383,887)	(41,164,535)
	<u>(109,726,166)</u>	<u>(67,853,053)</u>
	<u>₩ 596,146,084</u>	<u>₩ 515,068,931</u>

30. Gain (loss) on financial assets and liabilities

30.1. Gain (loss) on financial assets does not include interest income and dividends income. Interest income and dividends income are disclosed separately in Notes 31 and 33, respectively.

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30.2. Gain (loss) on financial instruments measured at FVTPL for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021				
	Gain on disposal	Loss on disposal	Gain on valuation	Loss on valuation	Net gain(loss)
Financial assets					
Measured at FVTPL					
Stock	₩ 572,845,569	₩ (370,742,982)	₩ 72,709,994	₩ (26,174,949)	₩ 248,637,632
Bonds	248,642,400	(552,944,161)	35,575,296	(107,674,843)	(376,401,308)
Collective investment securities	550,823,047	(506,586,638)	35,526,013	(9,687,277)	70,075,145
Commercial paper	25,959,005	(23,798,403)	176,138	(764,638)	1,572,102
Asset backed short-term bonds	796,937	(42,852)	84,972	(1,843)	837,214
Loans	5,487,583	(2,808,012)	392,922	(29,617,927)	(26,545,434)
Compound financial instruments	18,233,676	(3,355,120)	43,021,285	(27,369,243)	30,530,598
Reserve for claims of customers' deposits (trust)	-	-	8,141,908	-	8,141,908
Equity-linked securities	12,460,757	(28,524)	5,411,047	(2,407,325)	15,435,955
Stock warrant securities	8	(7,403)	-	-	(7,395)
Other	4,656,322	(1,467,954)	32,062,471	(10,955,576)	24,295,263
	<u>1,439,905,304</u>	<u>(1,461,782,049)</u>	<u>233,102,046</u>	<u>(214,653,621)</u>	<u>(3,428,320)</u>
Financial liabilities					
Measured at FVTPL					
Securities sold	515,685,677	(534,127,037)	69,382,348	(48,260,133)	2,680,855
Bonds sold	201,061,647	(127,213,422)	26,762,423	(12,045,079)	88,565,569
Collective investment securities sold	13,501,350	-	1,168,800	-	14,670,150
	<u>730,248,674</u>	<u>(661,340,459)</u>	<u>97,313,571</u>	<u>(60,305,212)</u>	<u>105,916,574</u>
	₩ 2,170,153,978	₩ (2,123,122,508)	₩ 330,415,617	₩ (274,958,833)	₩ 102,488,254
Year ended December 31, 2020					
	Gain on disposal	Loss on disposal	Gain on valuation	Loss on valuation	Net gain(loss)
Financial assets					
Measured at FVTPL					
Stock	₩ 487,423,565	₩ (351,914,896)	₩ 45,480,107	₩ (8,415,223)	₩ 172,573,553
Bonds	311,228,198	(325,087,255)	12,553,833	(91,389,066)	(92,694,290)
Collective investment securities	763,811,026	(748,158,975)	118,018,861	(934,822)	132,736,090
Commercial paper	20,264,594	(16,557,159)	99,937	(16,004)	3,791,368
Asset backed short-term bonds	1,170,679	(56,709)	15,315	(10)	1,129,275
Loans	691,897	-	1,016,984	(19,401,346)	(17,692,465)
Compound financial instruments	74,449,798	(9,452,667)	29,344,535	(1,082,756)	93,258,910
Reserve for claims of customers' deposits (trust)	-	-	7,770,779	-	7,770,779
Equity-linked securities	3,161,276	(35,607)	6,081,042	(17,412)	9,189,299
Others	8,158,477	(1,148,100)	12,250,014	(4,094,387)	15,166,004
CMA-notes discounted	1,996	-	-	-	1,996
	<u>1,670,361,506</u>	<u>(1,452,411,368)</u>	<u>232,631,407</u>	<u>(125,351,026)</u>	<u>325,230,519</u>
Financial liabilities					
Measured at FVTPL					
Securities sold	408,555,232	(654,696,567)	4,792,069	(90,061,810)	(331,411,076)
Bonds sold	86,476,710	(115,056,298)	30,585,757	(1,403,857)	602,312
Collective investment securities sold	9,679,356	(17,383,144)	-	(9,844,668)	(17,548,456)
	<u>504,711,298</u>	<u>(787,136,009)</u>	<u>35,377,826</u>	<u>(101,310,335)</u>	<u>(348,357,220)</u>
	₩ 2,175,072,804	₩ (2,239,547,377)	₩ 268,009,233	₩ (226,661,361)	₩ (23,126,701)

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30.3. Gain (loss) on financial assets and liabilities designated at fair value through profit or loss for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021				
	Gain on disposal	Loss on Disposal	Gain on valuation	Loss on valuation	Net gain (loss)
Financial liabilities designated at fair value through profit or loss:					
Equity linked securities sold	₩ 432,013	₩ (304,561,343)	₩ 99,221,382	₩ (94,536,943)	₩ (299,444,891)
Derivative linked securities sold	316,308	(11,037,792)	1,038,567	(8,420,689)	(18,103,606)
Others	1,459,947	(61,955,601)	8,468,520	(811,158)	(52,838,292)
	<u>₩ 2,208,268</u>	<u>₩ (377,554,736)</u>	<u>₩ 108,728,469</u>	<u>₩ (103,768,790)</u>	<u>₩ (370,386,789)</u>

	Year ended December 31, 2020				
	Gain on disposal	Loss on Disposal	Gain on valuation	Loss on valuation	Net gain (loss)
Financial liabilities designated at fair value through profit or loss:					
Equity linked securities sold	₩ 13,180,262	₩ (174,924,145)	₩ 7,089,689	₩ (118,434,455)	₩ (273,088,649)
Derivative linked securities sold	2,234,347	(10,468,791)	5,808,972	(1,416,446)	(3,841,918)
Others	27,878,709	(55,957,834)	158,615	(12,455,255)	(40,375,765)
	<u>₩ 43,293,318</u>	<u>₩ (241,350,770)</u>	<u>₩ 13,057,276</u>	<u>₩ (132,306,156)</u>	<u>₩ (317,306,332)</u>

30.4. Gain (loss) on financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021			
	Gain on disposal	Loss on disposal	Reversal of expected credit losses	Net gain (loss)
Bonds	₩ 1,607,935	(2,396,716)	₩ (1,710,620)	₩ (2,499,401)

	Year ended December 31, 2020			
	Gain on disposal	Loss on disposal	Reversal of expected credit losses	Net gain (loss)
Bonds	₩ 20,130	(16,987)	₩ (85,013)	₩ (81,870)

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30.5. Gain (loss) on other financial liabilities for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021		
	Gain on valuation	Loss on valuation	Net gain
Other financial liabilities	₩ 70	₩ (1,002)	₩ (932)

	Year ended December 31, 2020		
	Gain on valuation	Loss on valuation	Net gain
Other financial liabilities	₩ 15	₩ (5)	₩ 10

30.6. The ₩438,447 thousand of gain on early repayment of bonds and ₩732,887 thousand of loss on early repayment of bonds are incurred during previous reporting period.

30.7. Gain (loss) on financial derivatives for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021				
	Gain on disposal/ redemption	Loss on disposal/ redemption	Gain on valuation	Loss on valuation	Net gain(loss)
Exchange-traded derivatives:					
Futures	₩ 1,133,687,873	₩ (1,143,626,197)	₩ 77,785,077	₩ (35,653,638)	₩ 32,193,115
Option	490,672,137	(432,500,200)	69,503,434	(78,396,778)	49,278,593
Over-the-counter derivatives:	14,781,956,160	(14,528,577,716)	257,399,057	(238,683,203)	272,094,298
	<u>₩ 16,406,316,170</u>	<u>₩ (16,104,704,113)</u>	<u>₩ 404,687,568</u>	<u>₩ (352,733,619)</u>	<u>₩ 353,566,006</u>

	Year ended December 31, 2020				
	Gain on disposal/ redemption	Loss on disposal/ redemption	Gain on valuation	Loss on valuation	Net gain(loss)
Exchange-traded derivatives:					
Futures	₩ 1,207,348,116	₩ (1,136,023,957)	₩ 46,204,615	₩ (34,089,669)	₩ 83,439,105
Option	434,264,803	(340,091,602)	75,935,011	(17,302,309)	152,805,903
Over-the-counter derivatives:	8,398,349,699	(8,220,996,833)	355,317,064	(226,317,523)	306,352,407
	<u>₩ 10,039,962,618</u>	<u>₩ (9,697,112,392)</u>	<u>₩ 477,456,690</u>	<u>₩ (277,709,501)</u>	<u>₩ 542,597,415</u>

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31. Net interest income

Net interest income for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021	Year ended December 31, 2020
Interest income:		
Cash and due from banks	₩ 16,377,105	₩ 21,040,906
Financial assets at fair value through profit or loss	482,858,861	382,543,458
Financial assets measured at FVOCI	13,909,765	3,046,137
Loans, etc.	614,315,231	669,946,666
CMA	-	8,306
Others	32,954,472	23,150,219
	<u>1,160,415,434</u>	<u>1,099,735,692</u>
Interest expense:		
Deposits	(2,781,299)	(5,432,549)
Borrowings	(165,878,486)	(193,408,993)
Bonds	(178,221,282)	(193,257,077)
Others	(46,431,666)	(32,785,126)
	<u>(393,312,733)</u>	<u>(424,883,745)</u>
	<u>₩ 767,102,701</u>	<u>₩ 674,851,947</u>

32. Selling and administrative expense

Selling and administrative expenses for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021	Year ended December 31, 2020
Payroll expenses:		
Salary expenses	₩ 536,429,873	₩ 396,842,395
Post-employment benefits (DB)	5,055,500	4,666,802
Post-employment benefits (DC)	6,606,239	6,264,681
Early retirement benefits	373,598	389,740
Compensation Expenses Associated with Stock Option	114,050	(897,106)
	<u>548,579,260</u>	<u>407,266,512</u>
General and administrative expenses:		
Employee benefits	43,443,707	36,436,897
Electronic data processing expenses	10,867,049	10,388,219
Rental expense	8,867,926	8,442,406
Commission expense	56,613,199	49,149,812
Entertainment expenses	9,280,287	8,518,870
Advertising expense	3,374,360	2,663,079
Depreciation	16,096,561	15,634,432
Training expenses	81,652	109,277
Amortization	4,483,011	3,889,953
Taxes and dues	52,614,357	46,703,487
Others	18,609,232	16,238,152
	<u>224,331,341</u>	<u>198,174,584</u>
	<u>₩ 772,910,601</u>	<u>₩ 605,441,096</u>

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33. Other operating income (expense)

Other operating income (expense) for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021	Year ended December 31, 2020
Other operating income:		
Dividends on financial assets at FVTPL	₩ 35,422,785	₩ 28,609,890
Dividends on financial assets measured at FVOCI	5,863,430	3,702,494
Dividends from subsidiaries	271,733	286,598
Reversal of other provisions	35,285	11,502,537
Reversal of credit risk adjustments	422,446	572,198
Reversal of deferred day 1 profit or loss adjustments	416,474,361	256,198,821
Others	5,138,879	269,468
	<u>463,628,919</u>	<u>301,142,006</u>
Other operating expenses:		
Provision for other doubtful accounts	(4,874,733)	(4,438,222)
Provision for other provisions	(4,588,030)	-
Provision for credit risk adjustments	(6,120,023)	(4,258,899)
Amortization of deferred day 1 profit or loss adjustments	(297,670,096)	(211,056,258)
Others	(6,463,312)	(1,304,968)
	<u>(319,716,194)</u>	<u>(221,058,347)</u>
	<u>₩ 143,912,725</u>	<u>₩ 80,083,659</u>

34. Non-operating income (expense)

Non-operating income (expense) for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021	Year ended December 31, 2020
Non-operating income:		
Gain on disposal property and equipment	₩ 462,597	₩ 30,238
Gains on disposition of real-estate investment	4,694,952	1,562,867
Rental fee income	178,459	340,592
Share of earnings from investments in associates and joint ventures	83,374,219	51,539,827
Gain on disposal subsidiaries and associates	38,879,876	22,880,658
Recovery of impairment losses on intangible assets	-	2,066,000
Others	26,217,990	3,106,743
	<u>153,808,093</u>	<u>81,526,925</u>
Non-operating expense:		
Loss on disposal property and equipment	(562,129)	(61,536)
Loss on disposal real-estate investment	(444,216)	-
Loss on disposal intangible assets	(7,095)	(880)
Share of losses from investments in associates and joint ventures	(26,795,736)	(129,989,217)
Loss on disposal subsidiaries and associates	(26,981,130)	(11,858,357)
Impairment losses on real-estate investment	(421,884)	-
Others	(334,593)	(448,467)
	<u>(55,546,783)</u>	<u>(142,358,457)</u>
	<u>₩ 98,261,310</u>	<u>₩ (60,831,532)</u>

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35. Income taxes

35.1. The major components of income tax expense for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Current income taxes	₩ 322,774,521	₩ 290,449,559
Adjustments of prior year's income tax	(11,189,725)	(2,813,157)
Changes in deferred income taxes due to temporary differences	(43,440,126)	(72,190,541)
Deferred income tax income from unrecognized deferred income tax assets(liabilities)	-	(281,575)
Current and deferred income taxes recognized directly to equity :		
Gain (loss) on valuation of equity securities measured at FVOCI	(7,351,641)	(14,090,554)
Gain (loss) on disposal of equity securities measured at FVOCI	(148,500)	(368)
Gain (loss) on valuation of debt securities measured at FVOCI	(1,814,819)	(43,338)
Credit losses of debt securities measured at FVOCI	(469,565)	(23,376)
Gain (loss) on valuation financial liabilities designated at FVTPL	159,810	(202,979)
Gain (loss) on sales of treasury stock	-	1
Gain on Valuation of Investment Stock Using the Equity Method	(477,943)	477,943
Loss (gain) on effect of foreign currency translation	(1,693,645)	420,553
Remeasurement of the net defined benefit liability(asset)	28,081	330,458
Expense of parents company's stock option	7,899,430	-
Income tax expense	<u>₩ 264,275,878</u>	<u>₩ 202,032,626</u>

35.2. Details of the relationship between income tax expense and income before income taxes for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Income before income taxes	₩ 1,047,200,419	₩ 767,167,068
Income taxes at statutory tax rate (*)	277,618,115	200,608,944
Adjustments:		
Non-deductible expenses and others	2,678,867	2,132,000
Non-taxable income and others	(8,507,128)	(5,246,260)
Tax system for investment win-win cooperation	9,900,000	14,818,990
Adjustments of prior year's income tax	(11,189,725)	(2,813,157)
Others	(6,224,251)	(7,467,891)
Income tax expense	<u>₩ 264,275,878</u>	<u>₩ 202,032,626</u>
Effective income tax rate	25.24%	26.33%

(*) Tax rates applicable, at the aggregate of income tax rate and local tax rate, are 11% for income below ₩200 million, 22% for income above ₩200 million and below ₩20 billion, 24.2% for income above ₩20 billion and below ₩300 billion and 27.5% for income above ₩300 billion

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35.3. The details of tax liabilities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Current income tax assets	₩ 14,325	₩ -
Deferred income tax assets	208,679,614	182,270,631
Income tax assets	₩ 208,693,939	₩ 182,270,631
Current income tax liabilities	₩ 177,291,885	₩ 178,775,912
Income tax liabilities	₩ 177,291,885	₩ 178,775,912

35.4. Temporary differences and deferred income tax assets (liabilities) as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Finance lease receivables	₩ (5,216,995)	₩ (4,860,416)
Financial assets measured at FVTPL	975,717	849,550
Gain (loss) on valuation of financial liabilities measured at FVTPL	(10,158,795)	18,098,474
Gain (loss) on valuation of financial assets measured at FVTPL	300,501	(22,997,607)
Financial instruments designated at FVTPL	(2,421,408)	2,457,313
Gain (loss) on valuation of derivatives-combined securities sold	(91,966,757)	(18,482,429)
Gain (loss) on valuation of derivatives-combined securities	2,908,142	469,174
Loss on valuation of derivative instruments	18,231,267	(20,069,747)
Deferred loan fee	3,444,640	3,971,167
Deferred day 1 profit or loss	36,119,421	11,711,319
Gain (loss) on foreign transactions	(8,384,816)	(781,201)
Allowance for loan losses	20,104	132,151
Lease assets	(3,867,362)	(3,123,921)
Financial assets measured at FVOCI	(56,615,411)	(46,980,182)
Accrued income	(12,320,932)	(8,626,381)
Accrued expenses	174,897,367	131,715,164
Credit risk-adjusted	(2,270,700)	(3,994,494)
Property and equipment, intangible assets	(7,596,313)	(7,951,848)
Subsidiaries and associates	(995,104)	(12,936,546)
Allowance accounts	18,452,701	16,773,093
Retirement pension premium	(6,343,570)	(5,693,239)
Defined benefit liabilities	6,790,842	6,286,338
Treasury stock	65,811,814	65,811,814
Lease liabilities	8,676,711	7,182,567
Others	33,959,776	27,061,744
	162,430,840	136,021,857
Unrecognized deferred tax liabilities	46,248,774	46,248,774
Deferred Income Taxes Assets	₩ 208,679,614	₩ 182,270,631
Deferred income tax assets before offsetting	₩ 370,589,003	₩ 292,519,868
Deferred income tax liabilities before offsetting	₩ (161,909,389)	₩ (110,249,237)

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35.5. Changes in the temporary differences and deferred income tax assets (liabilities) for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021		
	Beginning balance (*1)	Changes	Ending balance
Financial lease receivables	₩ (20,076,424)	₩ (1,481,408)	₩ (21,557,832)
Financial assets measured at FVTPL	3,094,901	459,623	3,554,524
Gain (loss) on valuation of financial liabilities measured at FVTPL	65,932,509	(102,940,868)	(37,008,359)
Gain (loss) on valuation of financial assets measured at FVTPL	(82,848,289)	83,064,198	215,909
Financial instruments designated at FVTPL	8,951,960	(17,773,120)	(8,821,160)
Gain (loss) on valuation of derivatives-combined securities sold	(67,331,254)	(267,702,468)	(335,033,722)
Gain (loss) on valuation of derivatives-combined securities	1,709,195	8,950,831	10,660,026
Gain (loss) on valuation of derivative instruments	(74,087,421)	140,688,405	66,600,984
Deferred loan fee	12,891,082	(641,938)	12,249,144
Deferred day 1 profit or loss	42,664,185	88,918,406	131,582,591
Gain (loss) on foreign transactions	(3,992,271)	(26,614,789)	(30,607,060)
Allowance for loan losses	76,500	-	76,500
Lease assets	(12,775,865)	(3,204,970)	(15,980,835)
Withdrawal of sales transaction	-	-	-
Financial assets measured at FVOCI	(171,205,343)	(34,943,512)	(206,148,855)
Accrued income	(30,613,718)	(14,152,799)	(44,766,517)
Accrued expenses	430,409,909	228,971,131	659,381,040
Credit risk-adjusted	(14,551,892)	6,279,763	(8,272,129)
Property and equipment, intangible assets	(27,817,137)	(77,780)	(27,894,917)
Subsidiaries and associates	(53,456,162)	43,824,991	(9,631,171)
Allowance accounts	61,777,765	6,628,134	68,405,899
Retirement pension premium	(22,150,600)	(1,987,796)	(24,138,396)
Defined benefit liabilities	23,920,619	1,919,724	25,840,343
Treasury stock	250,425,472	-	250,425,472
Loss from merger	-	-	-
Lease liabilities	31,241,508	880,674	32,122,182
Others	98,063,552	34,782,802	132,846,354
	₩ 450,252,781	₩ 173,847,234	₩ 624,100,015
Unrecognized deferred tax liabilities (*2)	₩ (175,984,682)	₩ -	₩ (175,984,682)
Deferred income tax assets(liabilities)	₩ 165,239,488	₩ 43,440,126	₩ 208,679,614

(*1) Beginning temporary difference and deferred income taxes have been calculated reflecting the changes in the accounting standards and final income tax return.

(*2) The deferred income tax liabilities, caused by the temporary difference in shares in Meritz Capital, were not recognized.

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35.5. Changes in the temporary differences and deferred income tax assets (liabilities) for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

	Year ended December 31, 2020		
	Beginning balance (*1)	Changes	Ending balance
Financial lease receivables	₩ (25,723,585)	₩ 5,639,222	₩ (20,084,363)
Financial assets measured at FVTPL	-	3,094,901	3,094,901
Gain (loss) on valuation of financial liabilities measured at FVTPL	(24,199,091)	90,131,600	65,932,509
Gain (loss) on valuation of financial assets measured at FVTPL	(98,935,366)	14,903,353	(84,032,013)
Financial instruments designated at FVTPL	1,512,818	7,439,142	8,951,960
Gain (loss) on valuation of derivatives-combined securities sold	48,327,933	(115,659,187)	(67,331,254)
Gain (loss) on valuation of derivatives-combined securities	(1,161,422)	2,870,617	1,709,195
Gain (loss) on valuation of derivative instruments	(39,553,362)	(34,534,059)	(74,087,421)
Deferred loan fee	25,611,352	(12,720,291)	12,891,061
Deferred day 1 profit or loss	23,210,399	19,453,786	42,664,185
Gain (loss) on foreign transactions	(31,130,581)	28,736,701	(2,393,880)
Allowance for loan losses	710,015	(228,592)	481,423
Lease assets	(11,130,047)	(1,778,718)	(12,908,765)
Withdrawal of sales transaction	(817,468)	817,468	-
Financial assets measured at FVOCI	(112,954,326)	(58,251,017)	(171,205,343)
Accrued income	(45,712,565)	14,332,410	(31,380,155)
Accrued expenses	338,722,457	155,796,601	494,519,058
Credit risk-adjusted	(17,499,142)	2,947,250	(14,551,892)
Property and equipment, intangible assets	(30,487,817)	1,226,338	(29,261,479)
Subsidiaries and associates	(156,308,876)	102,852,714	(53,456,162)
Allowance accounts	29,788,272	31,989,493	61,777,765
Retirement pension premium	(19,088,309)	(2,575,463)	(21,663,772)
Defined benefit liabilities	20,003,053	3,917,566	23,920,619
Treasury stock	250,425,472	-	250,425,472
Loss from merger	7,676,225	(7,676,225)	-
Lease liabilities	28,401,828	(2,235,830)	26,165,998
Others	86,730,653	16,627,439	103,358,092
	<u>₩ 246,418,520</u>	<u>₩ 267,117,219</u>	<u>₩ 513,535,739</u>
Unrecognized deferred tax liabilities (*2)	₩ (175,984,682)	₩ -	₩ (175,984,682)
Deferred income tax assets(liabilities)	₩ 109,798,515	₩ 72,472,116	₩ 182,270,631

(*1) Beginning temporary difference and deferred income taxes have been calculated reflecting the changes in the accounting standards and final income tax return.

(*2) The deferred income tax liabilities, caused by the temporary difference in shares in Meritz Capital, were not recognized.

Deferred income tax assets (liabilities) are measured at the average tax rates that are expected to be applied in the year when the related temporary differences are expected to reverse, based on tax rates (and tax laws) that have been enacted at the reporting date.

36. Earnings per share

The Group presents basic earnings per share attributable to its common stock holders in the statement of comprehensive income. Basic earnings per share amounts are calculated by dividing the net profit for the period attributable to common stock holders of the parent by the weighted average number of common shares outstanding during the period.

36.1. Basic earnings per share amounts for the years ended December 31, 2021 and 2020 are as follows (in Korean won and number of shares):

	Year ended December 31, 2021	Year ended December 31, 2020
Net income attributable to controlling interests	₩ 774,868,761,322	₩ 558,266,388,844
Dividends of convertible callable preferred stock	(15,982,559,277)	(20,162,393,778)
Dividends of hybrid bond	(22,139,714,830)	(12,124,590,161)
Net income attributable to the common stock controlling interests	₩ 736,746,487,215	₩ 525,979,404,905
Weighted average number of common stock outstanding (in shares) (*)	613,362,704 shares	608,145,239 shares
Basic earnings per share	₩ 1,201	₩ 865

(*) Weighted average number of common stock outstanding is calculated by deducting treasury stock from total issued stock.

36.2. Diluted earnings per share amounts for the years ended December 31, 2021 and 2020 are as follows (in Korean won and number of shares):

	Year ended December 31, 2021	Year ended December 31, 2020
Net income attributable to controlling common equity	₩ 736,746,487,215	₩ 525,979,404,905
Redeemable convertible preferred stock dividend	15,982,559,277	20,162,393,778
Dilution gain on controlling common equity (A)	₩ 752,729,046,492	₩ 546,141,798,683
Weighted average number of ordinary shares outstanding (in shares)	613,362,704 shares	608,145,239 shares
Weighted average number of diluted shares _stock options (in shares) (*)	168,482 shares	-
Weighted average number of diluted shares _convertible preferred stock (in shares)	53,188,885 shares	71,420,678 shares
Weighted average number of common shares outstanding considering dilution effect (B) (in shares)	666,720,071 shares	679,565,917 shares
Diluted earnings per share (A/B)	₩ 1,129	₩ 804

(*) In the case that average market price of Company exceeds the exercise price of stock option described in Note 26, a dilution effect occurs.

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37. Assets and liabilities denominated in foreign currencies

Significant assets and liabilities denominated in foreign currencies as of December 31, 2021 and 2020 are as follows:

	Currency	December 31, 2021	
		Amount in foreign currency in unit	Korean won equivalent (in thousands)
Assets in foreign currencies:			
Cash and due from banks	USD	\$ 393,260,313	₩ 466,210,101
	EUR	€ 68,712,829	92,235,978
	HKD	\$ 1,152,902,387	175,275,750
	JPY	¥ 2,666,092,983	27,467,156
	GBP	£ 33,499	53,607
	CNH	¥ 7,116,096	1,325,444
	AUD	\$ 127,805	109,770
	CAD	\$ 1,252,623	1,165,703
	SGD	\$ 264,673	232,155
	TRY	₺ 28,571	2,566
	VND	₫ 170,697,117	8,893
Financial assets measured at FVTPL	USD	\$ 963,453,119	1,142,173,672
	EUR	€ 122,035,538	163,813,185
	HKD	\$ 3,975,922	604,459
	VND	₫ 382,284,000,000	19,916,996
	CNH	¥ 252,751,506	47,077,495
	AUD	\$ 94,109,260	80,829,502
Loans	USD	\$ 985,009,095	1,167,728,283
	AUD	\$ 34,823,116	29,909,226
	HKD	\$ 1,026,124,595	156,001,722
	GBP	£ 15,042,273	24,071,398
Other assets	USD	\$ 484,610,945	574,506,276
	EUR	€ 864,703	1,160,726
	HKD	\$ 26,273,752	3,994,399
	CNH	¥ 30,238,542	5,632,231
			₩ 4,181,506,693
Liabilities in foreign currency:			
Deposits	USD	\$ 233,682,925	₩ 277,031,107
	EUR	€ 75,304,314	101,083,993
	CNH	¥ 4,979,587	927,498
	HKD	\$ 5,160,444	784,542
	JPY	¥ 29,550,180	304,438
	AUD	\$ 3,080	2,645
	CAD	\$ 15,001	13,960
	VND	₫ 170,697,117	8,893
Financial liabilities at measured at FVTPL	USD	\$ 225,506,764	267,338,269
	HKD	\$ 137,832,217	20,954,632
Borrowings	USD	\$ 1,453,399,713	1,723,005,359
	EUR	€ 96,162,526	129,082,805
Other liabilities	USD	\$ 290,583,148	344,486,322
	EUR	€ 81,274	109,097
	HKD	\$ 21,421,392	3,256,694
	JPY	¥ 2,387,500	24,597
			₩ 2,868,414,851

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37. Assets and liabilities denominated in foreign currencies (cont'd)

	December 31, 2020		
	Currency	Amount in foreign currency in unit	Korean won equivalent (in thousands)
Assets in foreign currencies:			
Cash and due from banks	USD	\$ 150,316,378	₩ 163,544,221
	EUR	€ 53,403,950	71,467,302
	HKD	\$ 424,375,078	59,561,042
	JPY	¥ 1,630,150,210	17,186,022
	GBP	£ 24,450	36,245
	CNH	¥ 21,237,410	3,545,798
	AUD	\$ 111,725	93,465
	CAD	\$ 409,042	349,036
	SGD	\$ 151,672	124,708
	TRY	₺ 28,571	4,210
	VND	₫ 3,512,528,000	165,440
Financial assets measured at FVTPL	USD	\$ 922,835,071	1,004,044,557
	EUR	€ 118,197,936	158,177,205
	JPY	¥ 187,904,000	1,980,997
	HKD	\$ 30,226,188	4,242,245
	VND	₫ 419,400,000,000	19,753,740
	CNH	¥ 2,087,400	348,512
	AUD	\$ 93,714,053	78,397,428
Loans	USD	\$ 897,378,463	976,347,767
	EUR	€ 87,135,214	116,607,829
	AUD	\$ 34,823,116	29,131,626
	HKD	\$ 1,414,464,363	198,520,073
	GBP	£ 42,241,978	62,619,509
	NZD	\$ 62,661,089	49,154,491
Other assets	USD	\$ 421,964,975	459,097,893
	EUR	€ 229,437	307,042
	HKD	\$ 11,078,688	1,554,894
	JPY	¥ 26,058,666	274,726
			₩ 3,476,638,023
Liabilities in foreign currency:			
Deposits	USD	\$ 316,923,702	₩ 344,812,988
	EUR	€ 123,350,744	165,072,899
	CNH	¥ 4,730,709	789,839
	HKD	\$ 7,002,123	982,748
	JPY	¥ 147,541,128	1,555,467
	AUD	\$ 2	2
	SGD	\$ 24,946	20,511
	CAD	\$ 177,155	151,166
	VND	₫ 4,616,000	217
Financial liabilities at measured at FVTPL	USD	\$ 450,180,745	489,796,650
Borrowings	USD	\$ 941,172,581	1,023,995,768
	EUR	€ 101,699,190	136,097,924
Other liabilities	USD	\$ 380,401,636	413,876,980
	EUR	€ 445	596
	HKD	\$ 5,723,160	803,246
	JPY	¥ 54,742,735	577,131
			₩ 2,578,534,132

38. Restricted balances in due from banks and pledged assets

38.1. Restricted balances in due from banks as of December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won):

	Counterparty	Other information	December 31, 2021	December 31, 2020
Cash and Deposits:				
Restricted due from financial institutions	KB Bank and others	Deposits for checking accounts	₩ 78,000	₩ 86,000
Fixed deposits	Woori Bank and others	Pledged for settlement and loan transactions	302,000,000	153,000,000
Certificate of deposits	KB Bank and others	Pledged for loan transactions	500,745,468	-
Ordinary deposits	Woori Bank and others	Seizure related to litigation	2,632,729	-
Reserve for claims of customers' deposits	Korea Securities Finance Corporation ("KSFC")	(*)	145,203,410	237,000,000
Margin on securities market	KRX		79,000,000	43,100,000
Guarantee deposits for loan transaction	Korea Securities Depository and others		10,000	174,731,900
Guarantee deposits for trading futures and options (brokerage)	KRX		220,919,084	150,635,444
Financial asset at fair value through profit or loss :				
Reserve for claims of customers' deposits(Trust)	KSFC	(*)	1,207,894,688	994,104,732
Collective fund for default loss	KRX		36,231,462	27,223,780
			<u>₩ 2,494,714,841</u>	<u>₩ 1,779,881,856</u>

(*) Pursuant to the *Financial Investment Services and Capital Markets Act*, the Group is required to place a deposit on a daily basis in Korea Securities Finance Corporation ("KSFC") as a reserve against customers' deposits for the trading of stocks, derivatives and for other purposes. These deposits should exceed the amount which is calculated by deducting cash commission guarantee from total customers' deposit.

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38.2. Details of securities pledged as collateral for operating activities including derivative transactions, loan transactions and borrowings as of the reporting date are as follows (in thousands of Korean won):

		December 31, 2021	
Pledged to	Description of pledged asset	Pledged amount(*1)	Pledged for
KRX	Bonds	₩ 629,523,018	Derivative transaction
KSD & KSFC	Cash, Deposits, ETF beneficiary certificate, Stocks, CP, Bonds	10,168,909,612	Lending and borrowing transactions
KSFC and others	Bonds	16,631,291,058	Bonds under repurchase agreements(*2)
Woori bank	Deposits, Bonds	24,675,231	Payment fund
RREEF Special Invest GmbH	Bonds	-	Withholdings
		₩ 27,454,398,919	

		December 31, 2020	
Pledged to	Description of pledged asset	Pledged amount(*1)	Pledged for
KRX	Bonds	₩ 607,254,557	Derivative transaction
KSD & KSFC	Cash, Deposits, ETF beneficiary certificate, Stocks, CP, Bonds	6,155,167,293	Lending and borrowing transactions
KSFC and others	Bonds	13,396,722,111	Bonds under repurchase agreements(*2)
Woori bank	Deposits, Bonds	26,091,639	Payment fund
RREEF Special Invest GmbH	Bonds	1,885,465	Withholdings
		₩ 20,187,121,065	

(*1) The amount calculated from the closing price of collateral or based on External Credit Assessment Institution's valuation. The collateral is included in borrowing securities.

(*2) A Repurchase agreement is a transaction in which a consolidated entity sells securities to a customer on the condition that it repurchases the sum of the amount of interest, such as interest, and the amount of the original sale after a certain period of time. As the elimination condition for the transfer of financial assets is not met, the related assets are recognized continuously and the amount of the sale is recognized as a liability. The liability is amounted to ₩ 15,271,970 million and ₩ 13,653,221 million as of December 31, 2021 and 2020, respectively

38.3. As of the end of the reporting period, the fair value of collateral that can be sold and re-secured regardless of default is as follows (in thousands of Korean won):

	December 31, 2021		December 31, 2020	
	Fair value of collateral held	Fair value of collateral sold or re-provided as collateral	Fair value of collateral held	Fair value of collateral sold or re-provided as collateral
Securities	₩ 2,379,315,224	₩ 1,614,999,567	₩ 1,850,866,194	₩ 512,019,037

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39. Guarantees and commitments

39.1. The Group has the following agreements with several banks as of December 31, 2021 (in thousands of Korean won, USD):

Agreement	Bank	Currency	Maximum limit	Maturity date
Intraday overdraft	Woori Bank	KRW	50,000,000	2022.09.02
Intraday overdraft	Hana Bank	KRW	10,000,000	2022.10.28
Intraday overdraft	Shinhan Bank	KRW	20,000,000	2022.09.05
Intraday overdraft	KB Bank	KRW	5,000,000	2022.11.18
Overdraft	Daegu Bank	KRW	5,000,000	2022.06.29
Loans on limit	Woori Bank	KRW	30,000,000	2022.09.02
Loans on limit	NH Bank	KRW	50,000,000	2022.03.04
Loans on limit	Daegu Bank	KRW	20,000,000	2022.12.18
Exhortation guarantee	Meritz Financial Group	KRW	800,000,000	-
Performance payment guarantee	Seoul guarantee Insurance	KRW	10,383,442	Individual contract
Usance letter of credit	The Korea Development Bank	USD	10,000,000	2022.06.09
Commitment with limit	China Everbright Bank	KRW	20,000,000	2022.02.18
Commitment with limit	Industrial and Commercial Bank of China	KRW	20,000,000	2022.10.19
Commitment with limit	China Bank	KRW	20,000,000	2022.01.04
Commitment with limit	Woori Bank	KRW	30,000,000	2022.05.04
Commitment with limit	The Korea Development Bank	KRW	80,000,000	2022.08.07
Commitment with limit	Shinhan Bank	KRW	10,000,000	2022.08.12
Commitment with limit	Mirae Asset Bank	KRW	30,000,000	2024.11.29
Note discounted	KSFC	KRW	200,000,000	2024.10.31
Note discounted	KSFC	-	Within the	2024.10.31
Agency operating funds	KSFC	KRW	200,000,000	2022.03.02
Agency operating funds (trust)	KSFC	-	Within the	2022.03.02
Financial capital distribution	KSFC	KRW	400,000,000	2022.07.01
Mortgage financing	KSFC	KRW	700,000,000	2022.04.30
Mortgage financing	KSFC	KRW	130,000,000	2022.08.30
Call half the day	KSFC	KRW	200,000,000	2022.03.03
Financial bond dealer	KSFC	KRW	500,000,000	2022.03.31
FX Swap Committed contract	JP Morgan Chase Bank, N.A., Seoul Branch	USD	50,000,000	2022.12.22

39.2. Lawsuit

The Group is involved in 30 lawsuits (Plaintiff: 10 cases, defendant: 20 cases) with the total claim amounting ₩76,933 million. The Group provided provisions estimated from previous experiences in similar lawsuits (Balance of provisions: ₩3,964 million) as of December 31, 2021 (Note 20).

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39.3. The Group's purchase agreements as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	
	Maximum limit	Balance
Securitized securities purchase commitment (*1,4)	₩ 5,000,000	₩ 5,000,000
Payment guarantee (*4)	19,271,997	19,271,997
Conditional loan commitment(*4)	-	-
Conditional commitments for acceptance (*4)	34,215,254	34,215,254
Loans on limit (*4)	5,405,422,267	2,784,276,739
Loan commitment (*2,4)	254,282,207	231,970,707
	5,718,191,725	3,074,734,697
Duplicate commitment amount (*3)	22,311,500	22,311,500
	₩ 5,695,880,225	₩ 3,052,423,197

	December 31, 2020	
	Maximum limit	Balance
Securitized securities purchase commitment (*1,4)	₩ -	₩ -
Payment guarantee (*4)	-	-
Conditional loan commitment(*4)	125,000,000	125,000,000
Conditional commitments for acceptance (*4)	-	-
Loans on limit (*4)	5,123,432,876	2,690,679,444
Loan commitment (*2,4)	354,650,000	354,650,000
	5,603,082,876	3,170,329,444
Duplicate commitment amount (*3)	-	-
	₩ 5,603,082,876	₩ 3,170,329,444

(*1) The Group purchased residual securitized securities that are issued but not sold through liquidity-providing commitments. Liquidity-providing commitments can be exercised when the credit ratings of underlying assets of securitized securities and financial institutions are not below the required level.

(*2) The amount is the sum of the contractual amounts of secured loans executed by the Group according to mortgage loan commitments as of December 31, 2021 and 2020.

(*3) The amount represents two or more commitments being provided to the same counterparty.

(*4) As of December 31, 2021, the details of the consolidated subsidiaries are as follows:

Details of the Group's agreements as of December 31, 2021 are as follows (in thousands of Korean won):

	Opponent	Maximum limit	Balance
Securitized securities purchased agreement	Fireblood 1st Co., Ltd	₩ 5,000,000	₩ 5,000,000
Payment guarantee	Aareal Capital Corporation	19,271,997	19,271,997
Conditional acquisition arrangement	Green Energy Fund	5,000,000	5,000,000
	DSPE Private Equity Fund I	4,000,000	4,000,000
	Sprott Korea Asset Management	25,215,254	25,215,254

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39.3. Details of the Group's agreements as of December 31, 2021 are as follows (in thousands of Korean won) (cont'd):

	Opponent	Maximum limit	Balance
Loans on limit	Gyeongju D&C	₩ 108,000,000	₩ 29,540,000
	Golden Summit Co.,Ltd	27,500,000	19,800,000
	DaewonPlus rnc 4th	28,500,000	14,550,000
	THELANDINBEST	39,900,000	25,680,000
	Mento D&C	17,000,000	3,300,000
	VEGA	50,000,000	17,300,000
	SEWON	600,000	600,000
	WOOWON	400,000	400,000
	Incheon Global City	58,700,000	58,700,000
	7th Avenue Nashville Hotel Owner LLC	222,507,900	17,921,194
	DB US PRIVATE LOAN FUND 1	33,184,200	12,757,598
	GAWOO HOLDINGS	42,600,000	39,000,000
	Galmae PFV Co., Ltd.	75,000,000	31,300,000
	Gapeul Co.,Ltd	28,000,000	10,500,000
	Geomyeong Construction	26,800,000	7,740,000
	Gun Young Construction Co.,Ltd	19,140,000	6,450,000
	Kyung Bo Development Co.,Ltd	24,000,000	18,500,000
	GoldPara	24,000,000	18,600,000
	Ground D Holdings Co., Ltd.	19,500,000	5,700,000
	Geumgok Housing Union	50,000,000	5,000,000
	Gimhae Daedong Smart Logistics Corp	280,000	280,000
	NARAE HOLDINGS	42,000,000	30,120,000
	DAE MYOUNG GAEBAL	27,000,000	18,000,000
	Daeshin Construction Co.,Ltd, kyeyangencplus	28,600,000	9,600,000
	DAESHIN DEVELOPMENT	2,400,000	2,400,000
	DAESHIN PLUS	45,600,000	28,640,000
	THE PEOPLE	17,000,000	12,100,000
	THE JIEUM DEVELOPMENT	27,000,000	22,800,000
	Dongraehotel	35,400,000	8,200,000
	Raum Urban Development	39,900,000	20,800,000
	RED SEA PLANNING	30,000,000	21,900,000
	REAYAN D&C CO.,LTD	19,500,000	19,500,000
	ROMERSPARK	26,200,000	13,050,000
	Lead industry development co.ltd	20,000,000	1,200,000
	Leadon industry development co.ltd	75,000,000	66,000,000
	The LEADCORP, Inc.	25,000,000	5,000,000
	LINK CITY PFV INC.	800,000	800,000
	Makok MICE PFV	200,000,000	10,100,000
	Seongnam Godeung Jeil Pungkyeongchae Fund No.1	800,000	800,000
	MIGANG A&C	29,800,000	29,800,000
	Mirae Development Co., Ltd	24,700,000	15,000,000
	Bestone Premium	150,000,000	122,062,500
	Bric Hwaseong Logistics Center Co., Ltd	40,200,000	29,400,000
	VC Babylon Co., Ltd.	25,000,000	5,768,683
	Blackstone Co., Ltd	25,200,000	14,700,000

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39.3. Details of the Group's agreements as of December 31, 2021 are as follows (in thousands of Korean won) (cont'd):

	Opponent	Maximum limit	Balance
Loans on limit	Blueming	₩ 30,000,000	₩ 20,800,000
	B&M Asset Management	704,000	204,000
	BA PAJU DEVELOPMENT 2nd	33,000,000	25,800,000
	Geoje Bigislands PFV	21,120,000	15,840,000
	SAI Marketing Co., Ltd.	63,200,000	14,860,000
	Samwon Development	23,200,000	1,020,000
	SEHA FARM STORAGE CO.,LTD	24,000,000	17,800,000
	Central City	30,000,000	30,000,000
	Song San Development Co., Ltd	23,000,000	8,200,000
	SONGSANDNC co.,Ltd	39,600,000	840,000
	Suwongalleria PFV	29,000,000	5,660,000
	Smartkiwoomhubcity corp	23,000,000	10,300,000
	City Field Co., Ltd.	30,000,000	3,000,000
	Sinseo AMC	75,000,000	12,041,000
	CW Housing	33,500,000	20,000,000
	IVY Development. Co.,Ltd	23,500,000	17,400,000
	IN Construction Co., Ltd	22,500,000	18,100,000
	INDC Co.	2,000,000	2,000,000
	IMDC	19,800,000	14,400,000
	YANGJU PFV	73,150,000	46,725,000
	Asstinpp Partners Co., Ltd	27,900,000	13,800,000
	SDB	23,000,000	12,000,000
	SNHC Co., Ltd	25,600,000	25,600,000
	AGRAPH Co., Ltd	25,000,000	4,700,000
	HG Development Co., Ltd.	39,100,000	18,400,000
	AT Co. Ltd.	53,100,000	3,340,000
	Enterprise DY Co., Ltd	18,600,000	18,600,000
	LOKDNC	27,000,000	16,800,000
	OST Partners, Co., Ltd.	124,600,000	64,900,000
	Oncheon Development Co., Ltd	34,600,000	27,900,000
	Y&C Holdings	25,000,000	8,400,000
	YJ	57,300,000	35,100,000
	WUMIN	35,000,000	30,060,000
	Woojung Development	63,000,000	49,200,000
	Withus	24,800,000	18,740,000
	Withworking	26,300,000	9,361,200
	The first universe	6,666,667	6,666,667
	Eun-Pyung, Complex Development. Ltd.	55,000,000	55,000,000
	Urban Development Co., Ltd.	23,400,000	9,900,000
	IAN DNC Company	21,800,000	16,080,000
	Ian Industrial Development	59,400,000	59,400,000
	LAH	17,000,000	17,000,000
	EQ Green 2nd Limited	2,500,000	2,500,000
	Intrus Value Add Private Real Estate Investment Trust 2nd	21,100,000	8,240,000
	ILSEUNG CO.,LTD	20,000,000	7,000,000
	JASEOUNG	24,000,000	17,720,000

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39.3. Details of the Group's agreements as of December 31, 2021 are as follows (in thousands of Korean won) (cont'd):

	Opponent	Maximum limit	Balance
Loans on limit	JUNGWOONG C&D Corporation	₩ 49,000,000	₩ 49,000,000
	Genesis management, Inc.	350,000	253,470
	JWH Company	21,000,000	18,000,000
	Jade D&C, Co., Ltd.	23,300,000	11,580,000
	JS Partners	64,200,000	57,420,000
	geunhwae&c	24,500,000	24,500,000
	DRCND	24,960,000	17,540,000
	SEAUM.Co.Ltd	92,920,000	10,380,000
	DAON CONSTRUCTION CO.,LTD.	26,000,000	11,950,000
	Daelim Holdings	21,600,000	800,000
	TheLoren	39,900,000	25,680,000
	DEO PURUN SONGDO	20,500,000	8,800,000
	DUYEONGELEEAENDI CO., LTD.	16,800,000	16,000,000
	DO Development	39,000,000	25,300,000
	Logifield	48,000,000	48,000,000
	BUM UNG	19,220,000	6,200,000
	Bene mine	27,000,000	18,000,000
	Sentralland	25,000,000	7,500,000
	Seung ho	19,140,000	6,800,000
	AMI CO.,LTD.	21,000,000	11,520,000
	ALASK	31,800,000	18,200,000
	SCI	140,000,000	110,000,000
	SG Development	16,000,000	1,600,000
	HONESTY PROMISE DEVELOPMENT	32,700,000	25,980,000
	MNSPrime	52,800,000	17,220,000
	YOOLIMI&D	30,400,000	5,800,000
	cheong Sol Development Company	19,500,000	1,100,000
	Tigerdnc	29,000,000	13,800,000
	TRC2 Co.	63,000,000	17,597,000
	PART A	21,600,000	2,580,000
	MJ development	49,200,000	39,680,000
	YOOLIMDNC	11,600,000	11,600,000
	JS CITY DEVELOPMENT CO.,LTD.	45,080,000	19,220,000
	CD101	6,134,000	5,125,000
	CHAUNGLA CO., LTD	6,500,000	6,500,000
	Kabod Co., Ltd	16,260,000	8,563,000
	KR Seocho Co., Ltd.	500,000	500,000
	KN development	20,000,000	7,000,000
	KJ Sarang	77,200,000	69,300,000
	Korea Inpartners	9,230,000	9,230,000
Koaland D&C	24,200,000	17,340,000	
KLAYTON Co., Ltd	51,000,000	45,000,000	
Tiger Alternative Investment Trust No. 31 by Nonghyup Bank as trustee	7,624,000	6,978,682	
Taeseung Industrial Development Co., Ltd	13,000,000	13,000,000	
TAE WOO Corporation, Shinmoon 1 housing development project	48,000,000	24,000,000	

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39.3. Details of the Group's agreements as of December 31, 2021 are as follows (in thousands of Korean won) (cont'd):

	Opponent	Maximum limit	Balance
Loans on limit	TAE WOONG HOLDINGS CO.,LTD	₩ 22,400,000	₩ 15,600,000
	Todam Construction. Co, Ltd	55,000,000	4,000,000
	Paramark Ventures Co., Ltd	9,320,000	9,320,000
	PineStreet Asia Private Placement Special Asset Investment Trust No. 1-2	1,731,500	1,364,745
	PANCITY Co., Ltd	27,600,000	16,150,000
	First M&D	39,000,000	27,000,000
	FERAZ Realty Co.,Ltd.	67,200,000	11,970,000
	4bros	69,300,000	13,700,000
	P&D United Co., Ltd	60,600,000	34,500,000
	PFV Chungdam 502	22,000,000	3,152,000
	PFV Chungdam 522	26,000,000	2,805,000
	Igaram c&d	32,000,000	2,420,000
	Hankyung DNC	39,000,000	30,000,000
	KOFAD	29,000,000	1,600,000
	Hanryeo Construction	48,800,000	8,000,000
	Haejin Asset Management	10,000,000	5,700,000
	HYUNYOUNG HOLDINGS CO.,LTD	25,000,000	11,500,000
	HEUNGDEOK	23,000,000	20,600,000
		<u>5,405,422,267</u>	<u>2,784,276,739</u>
	Loan commitment etc.	The CITY	14,032,300
THE PARTNERS		7,019,564	7,019,564
DONGIL CONSTRUCTION LTD		296,100	296,100
Mastern Private Investment Trust 102th		54,450,000	54,450,000
Sacheon IC Urban Development Co., Ltd		78,000,000	55,688,500
SAMGYE GAMBUN UNION		34,270,000	34,270,000
Alpha Development Co., Ltd		17,825,000	17,825,000
Woori Bank		17,500,000	17,500,000
YULHA UNION		30,889,243	30,889,243
		<u>254,282,207</u>	<u>231,970,707</u>
	<u>₩ 5,718,191,725</u>	<u>₩ 3,074,734,697</u>	

39.4. The Group's securities received as deposits held on behalf of clients as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Securities received as deposit:		
Consigner	₩ 29,294,471,482	₩ 19,925,402,653
Savers	4,154,463	3,836,830
Beneficiary	9,582,833,633	7,431,459,641
	<u>₩ 38,881,459,578</u>	<u>₩ 27,360,699,124</u>
Securities loaned:		
Stock	₩ 1,287,968,329	₩ 1,171,523,854
Bonds	681,366,166	449,944,040
	<u>₩ 1,969,334,495</u>	<u>₩ 1,621,467,894</u>
Securities borrowed:		
Stock	₩ 1,265,852,482	₩ 645,692,128
Bonds	4,533,525,107	1,661,226,016
	<u>₩ 5,799,377,589</u>	<u>₩ 2,306,918,144</u>
Written-off loan	₩ 193,683,510	₩ 168,785,767

40. Related party disclosures

40.1. Significant related parties for the year ended December 31, 2021 are as follows.

	<u>Company</u>
Parent company	Meritz Financial Group Inc.
Associates	Korea Asset Classic Private Investment Trust 2nd Airplane fund 5th Airplane fund 6th Meritz Professional Private Real Estate Investment Trust 8th Meritz Professional Private Real Estate Investment Trust 7th M Plus Sky Private Investment Trust 4th Heungguk Flight Private Investment Trust 10th Heungguk Flight Private Investment Trust 11th AI Partners Energy Infra Private Investment Trust 1st Heungguk Flight Private Investment Trust 12th Heungguk Flight Private Investment Trust 13th Mastern Europe Real Estate Investment Trust 5th Mastern Europe Real Estate Investment Trust 10th JB IPO Private Fund Trustee 3 I SUN&TREE IPO HIGH-YIELD HEDGE FUND 4 Global One Professional Investment Type Private IPO Investment Trust No.2 Anda Project C Private Securities Investment Trust 1 EK IPO High Yield Private Equity Trust II CrownRock IPO I Hedge Fund Consus Busan Gijang Private Real Estate Fund no.2 EK IPO Private Equity Trust III Skywalk Game Changer Hedge Fund No.1 Intrus Value-add Professional Investment Private Fund#3 Asia growth 1 st private equity Investment Limited Partnership MERITZ NS GLOBAL BIO FUND Kclavis Meister 38th Genesis North America PowerCompany 1st Gongpyeong 15-16 PFV OST Partners, Co., Ltd. Rhinos-Meritz fund Higs Frontier, Co., Ltd ASEAN Platform Fund No. 1 TK Build, Co., Ltd Meritz-DS Fund Rhinos-Meritz fund 2 Chungmu-ro PFV Co., Ltd. GAHA YOU&I CO., LTD Hangang Landmark PFV Co., Ltd. DAON CONSTRUCTION, Co., Ltd. Galmae PFV Co., Ltd. Attila Infrastructure Private Equity Fund I New wave fund 2

40.1. Significant related parties for the year ended December 31, 2021 are as follows. (cont'd)

	Company
Associates	<p>Songgang Construction DAE-SAN ENG CO.,LTD Meritz Alphaview fund 1 Next V City PFV Co., Ltd. Triple space, Co., Ltd. Sunu Urban Development Meritz Kingo fund 1 Meritz Kclavis fund 1 Mastern 116th Gangnam Premium PFV Meritz Alphaview Fund2 SMDNC Anseong Seongeun logistics PFV Co. Ltd DM METAL Handaritz Meritz GoldenEgg Fund1 S R Industrial Co., Ltd Sinchon 2-7 Dowon Corporation SW-RN Fund YKOSAN PFV NH-Meritz Contents 1 Fund Meritz Hyundai Investment Partners Daehoon Partners Corp. JQ Hanyang-Meritz 1 Fund Heung Young Industrial Development The First Porte 2 KAI-Veritas Venture Fund 1 KI CHUNGPYUNG BUG Logistics Project Finance Investment Hangang Eco JUN GEUM Construction Co., Ltd Cornerstone Mutual Growth Vill Fund Gimhae Daedong Smart Logistics Corp KR Seocho Co., Ltd. COSMOS Hanwha-Pentastone I Funds Meritz-AssetOne 1 Partners Dongtan Triple Space Hanyang-Pentastone Hi-tech I Funds Meritz-NH healthcare 1 Fund Meritz-SNP 1 Fund AIP Euro Green Private Real Estate Investment Trust 7th AIP Euro Green Private Real Estate Investment Trust 8th Kiwoom Milestone US Professional Private Real Estate Trust 18 Midas Global DEBT Private Real Estate Investment Trust 6th</p>

40.1. Significant related parties for the year ended December 31, 2021 are as follows. (cont'd)

	<u>Company</u>
Associates	UP Global Private Real Estate Fund VI NH Presidio Investments LLC IGIS Global Private Real Estate Investment Trust 301 Edelweiss Alternative Solutions Trust IGIS US Private Real Estate Investment Trust 292 IGIS US Private Real Estate Investment Trust 266 PIA Private Real Estate Investment Trust No. 6-1 PIA Private Real Estate Investment Trust No. 6-2 Shinhan AIM Real Estate Fund No. 22-A IGIS Global Private Real Estate Investment Trust 434 Consus Osan Segyo Private Real Estate Fund Yuamkopain wood Enterprise Financial Stability corporate Investment Limited PA Hyundai Ufirst Private Placement Fund No.32 Hizeasset IPO Private Investment Trust 2 Trinity Unicorn IPO FUND 1st SUN&TREE IPO FUND 1st Kclavis Private Investment Trust 2nd VM Energy Highyield Fund
Other related parties (*)	Meritz Fire & Marine Insurance Co., Ltd Meritz Asset Management Co., Ltd Meritz Alternative Investment Management Co., Ltd. Meritz DM Investment Trust on Special Asset 1st Meritz Vietnam Security Investment Trust Meritz Private Real Estate Fund 20 Meritz Private Real Estate Fund 21 Ecodaisy DK Project 4th Co., Ltd Cosplace 1st PT.MERITZ KORINDO INSURANCE Meritz Korea Securities Feeder Investment Trust 1 C-2 Meritz China Security Investment CI VI Light Professional Private Investment Trust 1 Ciel IPO Private Investment Trust No.1 KIM Navigator Securities Investment Trust 1(Equity)(C-F) SP High Yield Private Investment Trust 2 Alpha Senior Loan Real Estate General Investment Trust 1 PIM Bond and IPO Investment Trust 1 PIM IPO Private Investment Trust 3 Woori IPO High Yield Private Investment Trust 2 MiraeAsset High Dividend Focus Feeder Investment Trust (Equity)(C-I) Belle Époque Opportunity High-Yield, High-Risk Hedge Fund 1 Eastspring Best growth Private Investment Trust 2nd JR General Private Placement Real Estate Fund Investment Trust No.9-1 Meritz Private Real Estate Fund 19 Ciel IPO High Yield Private Investment Trust 2

40.1. Significant related parties for the year ended December 31, 2021 are as follows. (cont'd)

	<u>Company</u>
Other related parties (*)	Korea Asset Classic IPO Private Equity Fund 4
	PineStreet Asia Private Placement Special Asset Investment Trust No. 1-2
	Hize High-yield IPO Private Investment Trust 3
	Global One High Yield IPO Private Investment Trust 3
	PTR USA NASDAQ100 Core Professional Private Investment Trust 1
	Meritz China Security Investment C4
	Meritz salaryman stockholder C
	Meritz salaryman stockholder C-P2
	Meritz Korea smallcap Securities Investment trusts CI
	Meritz Korea Opportunity Private Securities
	Meritz Global Infra stockholder C
	Meritz Global Bond stockholder Ae
	Meritz Global Healthcare Investment Trust on Securities 1st (C4)
	Meritz the woman security Investment CF
	Meritz Korea stockholder C-P2
	Kingo Bio Growth 3rd Fund
	KAI-DI Hiddentag fund
	Seongnam Godeung Jeil Pungkyeongchae Fund No.1

(*) As a subsidiary of Meritz Financial Group Co., Ltd., it has a related party relationship with the consolidated subsidiary

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40.2. Significant transactions with related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won):

	Company	Year ended December 31, 2021		Year ended December 31, 2020	
		Income	Expense	Income	Expense
Parent company	Meritz Financial Group	₩ 22,227	₩ 29,602,980	₩ 90,000	₩ 29,441,464
Associates	Mastern Private Real Estate Investment Trust 40th	-	-	173,221	-
	Gongpyeong 15-16 PFV	-	-	3,565,600	-
	OST Partners, Co., Ltd.	6,235,414	674,690	3,952,382	135,941
	Cheongna Logistics, Co., Ltd.	100,678	-	144,566	-
	Higs Frontier, Co., Ltd	48,407	-	-	224
	TK Build, Co., Ltd	35,800	-	7,719	-
	GAHA YOU&I CO., LTD	62,920	157	713,959	25,817
	DAON CONSTRUCTION, Co., Ltd.	1,659,042	150,797	-	96,813
	DAE-SAN ENG CO.,LTD	3,360,805	6,674,722	2,740,881	1,032,673
	Galmae PFV Co., Ltd.	3,921,800	26,567	2,315,047	185,008
	triple space, Co., Ltd.	92,778	-	-	59,164
	Sunu Urban Development	1,260,403	107,976	-	19,183
	Mastern 116th Gangnam Premium PFV	2,004,033	-	-	-
	SMDNC	17,128	29,478	-	-
	Eun-Pyung, Complex Development. Ltd.	441,343	-	-	-
	DM METAL	5,067,507	952,379	-	-
	Handaritz	74,170	44,909	-	-
	S R Industrial Co., Ltd	395,629	33,973	-	-
	Dowon Corporation	-	93,942	-	-
	Daehoon Partners Corp.	-	32,394	-	-
	JQ	22,572	68,027	-	-
	Heung Young Industrial Development	130,408	29,945	-	-
	YKOSAN PFV	150,356	174,693	-	-
	The First Porte 2	8,620	45,351	-	-
	JUN GEUM Construction Co., Ltd	8,772	68,027	-	-
	COSMOS	23,145	37,924	-	-
	Dongtan Triple Space	844,445	808,755	-	-
Others	Meritz Fire & Marine Insurance Co., Ltd	293,028	8,297,305	1,000	7,959,300
	Meritz Asset Management Co., Ltd	-	40,897	-	19,271
	DK Project 4th Co., Ltd	3,512,073	-	2,541,270	90,565
	GPI8 Co., Ltd.	5,389,455	-	4,983,647	-
	GSS1 Co., Ltd.	-	-	1,196,737	-
	Ecodaisy	999,932	1,608	326,005	52,474
	Cosplace 1st	604,712	10,740	-	-
	Mugunghwa Trust Co., Ltd	1,035,616	-	1,763,115	-
		₩ 37,823,218	₩ 48,008,236	₩ 24,515,149	₩ 39,117,897

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40.3. Dividends and distributions received from related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won):

Related parties	Year ended December 31, 2021	Year ended December 31, 2020
Related parties		
Related parties		
Korea Asset Classic Private Investment Trust 2nd	₩ 33,750	₩ 57,187
Airplane fund 5	-	490,870
Airplane fund 6	-	286,418
Meritz Professional Private Real Estate Investment Trust 8th	7,884	9,064
Meritz Professional Private Real Estate Investment Trust 7th	25,807	19,795
M Plus Sky Private Investment Trust 4th	185,745	158,783
AI Partners Energy Infra Private Investment Trust 1st	1,553,462	2,039,341
Heungguk Flight Private Investment Trust 10th	-	798,671
Heungguk Flight Private Investment Trust 11th	-	474,561
Heungguk Flight Private Investment Trust 12th	771,040	3,757,522
Heungguk Flight Private Investment Trust 13th	42,230	398,798
Mastern Private REIT No.5	-	14,121
Mastern Europe Real Estate Investment Trust 10th	6,255,066	4,605,234
JB IPO Private Fund Trustee 3 I	154,727	34,202
SUN&TREE IPO HIGH-YIELD hedge fund 4	111,873	-
Global One Professional Investment Type Private IPO Investment Trust No.2	372,748	-
Intrus Value-add Professional Investment Private Fund#3	1,443,762	-
Hana Special Situation Professional Private Real Estate Investment Trust 30th	-	132,104
Skywalk Convertible Private Investment Trust 2nd	-	73,577
IPARTNERS SS NPL Private Investment Trust 3th	-	282,561
Hangang Naepo Green Energy Private Special Asset Fund	-	97,671
Genesis North America PowerCompany 1st	3,006,970	-
Rhinos-Meritz fund	142,931	247,566
KCGI Private Equity Fund 1-12	3,529,692	-
Kiwoom Meritz Trend 1 Fund	4,267	-
New Wave Medical Investment Union	-	291,627
Y&P Growth Fund 1	-	14,703
AIP Euro Green Private Real Estate Investment Trust 7th	5,226,747	5,402,930
AIP Euro Green Private Real Estate Investment Trust 8th	4,286,132	3,531,756
Kiwoom Milestone US Professional Private Real Estate Trust 18	2,670,500	5,235,786
UP Global Private Real Estate Fund VI	3,172,456	4,486,523
NH Presidio Investments LLC	12,789,195	-
Edelweiss Alternative Solutions Trust	8,199,559	4,168,645

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40.3. Dividends and distributions received from related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won) (cont'd):

	Related parties	Year ended December 31, 2021	Year ended December 31, 2020
Related parties	IGIS Global Private Real Estate Investment Trust 301	₩ 174,870	₩ -
	IGIS US Private Real Estate Investment Trust 292	7,079,241	5,486,113
	IGIS US Private Real Estate Investment Trust 266	7,900,200	3,748,347
	Hyundai Ufirst Private Placement Fund No.32	1,925,600	-
	Hizeasset IPO Private Investment Trust 2	480,286	-
	Trinity Unicorn IPO FUND 1st	236,998	-
	SUN&TREE IPO FUND 1st	1,072,604	-
	Kclavis Private Investment Trust 2nd	700,061	-
	Midas Global DEBT Private Real Estate Investment Trust 6th	2,584,555	1,686,178
	Shinhan AIM Real Estate Fund No. 22-A	965,838	-
	Consus Osan Sehyo Private Real Estate Fund	419,014	-
	IGIS Global Private Real Estate Investment Trust 254	4,718,874	6,171,600
	PineStreet Global Corporate Finance PEF Trust No.2	919,414	1,331,694
	Pacific Private Placement REF 36	2,438,241	977,909
	Germany Office Real Estate Private Placement Fund No.28	625,124	-
	Platform Partners ESS Private Special Asset Investment Trust 1st	-	803,099
		<u>₩ 86,227,463</u>	<u>₩ 57,314,956</u>

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40.4. Outstanding balances with related parties as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Company	December 31, 2021		December 31, 2020	
		Assets	Liabilities	Assets	Liabilities
Parent company	Meritz Financial Group(*1)	₩ -	₩ 94,635,865	₩ -	₩ 34,506,813
Associates	OST Partners, Co., Ltd.	146,739,518	2,772,669	72,930,272	3,054,254
	Cheongna Logistics, Co., Ltd.	-	-	2,419,322	-
	Higs Frontier, Co., Ltd	-	-	1,451,593	-
	TK Build, Co., Ltd	766,826	-	1,099,692	-
	GAHA YOU&I CO., LTD	1,656,946	2,603	1,644,183	2,603
	DAON CONSTRUCTION, Co., Ltd.	18,110,311	1,170,013	2,903,187	-
	DAE-SAN ENG CO.,LTD	9,292,605	-	30,866,889	2,125,552
	Galmae PFV Co., Ltd.	57,835,733	1,450,798	57,677,583	1,783,124
	Triple space, Co., Ltd.	-	-	2,040,836	-
	Sunu Urban Development	29,528,805	25,757	650,817	-
	SMDNC	897,649	-	-	-
	DM METAL	29,331,566	821,918	-	-
	Handaritz	1,369,260	-	-	-
	S R Industrial Co., Ltd	1,050,420	-	-	-
	Dowon Corporation	2,806,058	-	-	-
	Daehoon Partners Corp.	967,606	-	-	-
	JQ	2,054,544	-	-	-
	Heung Young Industrial Development	1,200,364	-	-	-
	YKOSAN PFV	6,825,307	127,342	-	-
	The First Porte 2	1,363,269	-	-	-
	JUN GEUM Construction Co., Ltd	2,033,863	-	-	-
	COSMOS	1,089,036	-	-	-
	Dongtan Triple Space	40,702,177	-	-	-
Others	Meritz Fire & Marine Insurance Co., Ltd (*2)	1,247,842	272,194,671	118,798	109,503,248
	Meritz Asset Management Co., Ltd	-	28,561	-	5,987
	DK Project 4th Co., Ltd	18,996,277	79,886	48,577,785	560,207
	GPI8 Co., Ltd.	-	-	67,600,526	-
	GSS1 Co., Ltd.	-	-	18,241,764	-
	Ecodaisy	20,007,677	-	20,009,353	-
	Cosplace 1st	10,338,580	60,274	-	-
	Mugunghwa Trust Co., Ltd	-	-	60,000,000	955,068
		₩ 406,212,239	₩ 373,370,357	₩ 388,232,600	₩ 152,496,856

(*1) In addition to the above, the outstanding balances of hybrid bond with related parties by Meritz Financial Group Inc. is ₩200,000 million in 2021.

(*2) In addition to the above, the outstanding balances of hybrid bond with related parties by Meritz Fire & Marine Insurance Co., Ltd is ₩350,000 thousand and ₩250,000 thousand in 2021 and 2020 respectively.

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40.5. The details of funds transaction with the related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won):

Company	Year ended December 31, 2021			
	Loan	Collection	Borrowing	Repayment
Meritz Fire & Marine Insurance Co., Ltd	₩ -	₩ -	₩ 170,600,000	₩ 8,983,502
OST Partners, Co., Ltd.	74,400,000	-	-	-
Cheongna Logistics, Co., Ltd.	-	2,500,000	-	-
Higs Frontier, Co., Ltd	-	1,500,000	-	-
TK Build, Co., Ltd	-	343,865	-	-
DAON CONSTRUCTION, Co., Ltd.	25,660,000	10,300,000	-	-
DAE-SAN ENG CO.,LTD	-	15,000,000	-	-
Triple space, Co., Ltd.	-	1,400,000	-	-
Sunu Urban Development Mastern 116th Gangnam Premium PFV	29,100,000	-	-	-
SMDNC	140,000,000	140,000,000	-	-
Eun-Pyung, Complex Development. Ltd.	910,000	-	-	-
DM METAL	2,999,000	2,999,000	-	-
Handaritz	40,000,000	10,600,000	-	-
S R Industrial Co., Ltd	1,400,000	-	-	-
Dowon Corporation	1,048,764	-	-	-
Daehoon Partners Corp.	2,900,000	-	-	-
JQ	1,000,000	-	-	-
Heung Young Industrial Development	2,100,000	-	-	-
YKOSAN PFV	1,199,900	-	-	-
The First Porte 2	7,000,000	-	-	-
JUN GEUM Construction Co., Ltd	1,400,000	-	-	-
COSMOS	2,100,000	-	-	-
Dongtan Triple Space	1,195,500	-	-	-
DK Project 4th Co., Ltd	41,300,000	-	-	-
GPI8 Co., Ltd.	3,100,000	32,832,400	-	-
GSS1 Co., Ltd.	-	68,454,720	-	-
Cosplace 1st	909,393	17,225,176	-	-
Mugunghwa Trust Co., Ltd	10,000,000	-	-	-
	-	60,000,000	-	-
	<u>₩ 389,722,557</u>	<u>₩ 363,155,161</u>	<u>₩ 170,600,000</u>	<u>₩ 8,983,502</u>

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40.5. The details of funds transaction with the related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won) (cont'd) :

Company	Year ended December 31, 2020			
	Loan	Collection	Borrowing	Repayment
Meritz Fire & Marine Insurance Co., Ltd	₩ -	₩ -	₩ -	₩ 64,750,000
Mastern Private Real Estate Investment Trust 40th	-	16,200,000	-	-
IPARTNERS SS NPL Private Real Estate Investment Trust No.3	-	16,000,000	-	-
Gongpyeong 15-16 PFV	30,720,000	88,720,000	-	-
OST Partners, Co., Ltd.	13,800,000	-	-	-
Cheongna Logistics, Co., Ltd.	-	8,150,000	-	-
Higs Frontier, Co., Ltd	-	-	-	-
TK Build, Co., Ltd	-	1,363,636	-	-
GAHA YOU&I CO., LTD	1,690,000	-	-	-
DAON CONSTRUCTION, Co., Ltd.	3,000,000	-	-	-
DAE-SAN ENG CO.,LTD	35,000,000	3,000,000	-	-
Galmae PFV Co., Ltd.	58,500,000	-	-	-
triple space, Co., Ltd.	2,100,000	-	-	-
Star Hub Seungdoo Development	670,000	-	-	-
DK Project 4th Co., Ltd	24,800,000	-	-	-
GPI8 Co., Ltd.	-	3,602,880	-	-
GSS1 Co., Ltd.	9,514,956	-	-	-
Ecodaisy	20,000,000	-	-	-
Mugunghwa Trust Co., Ltd	60,000,000	-	-	-
	<u>₩ 259,794,956</u>	<u>₩ 137,036,516</u>	<u>₩ -</u>	<u>₩ 64,750,000</u>

(*) In addition to the above, among hybrid issued in current period, ₩200,000 million of the hybrid bonds issued by the consolidated company and ₩180,000 million by the Meritz Fire & Marine Insurance were raised. Among hybrid issued before the previous period, ₩80,000 million is redeemed by Meritz Fire & Marine Insurance.

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40.6. The details of contribution and collection with the related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won):

Company	Year ended December 31, 2021		Year ended December 31, 2020	
	Contribution	Collection	Contribution	Collection
Meritz Korea Private Investment Trust 1st	₩ -	₩ -	₩ -	₩ 97,971
Meritz Korea Private Investment Trust 2nd	-	-	-	97,903
Airplane fund 5	-	-	963,331	123,353
Airplane fund 6	-	-	206,145	33,209
Hana Special Situation Professional Private Real Estate Investment Trust 30th	-	-	-	4,017,529
Meritz Professional Private Real Estate Investment Trust 8th	10,396	9,885	14,869	75,189
Meritz Professional Private Real Estate Investment Trust 7th	19,640	-	-	8,430
M Plus Sky Private Investment Trust 4th	152,220	83,283	-	141,622
Heungguk Flight Private Investment Trust 10th	446,810	-	75,162	815,511
Heungguk Flight Private Investment Trust 11th	342,056	-	60,520	623,516
Skywalk Convertible Private Investment Trust 2nd	-	-	-	816,311
IPARTNERS SS NPL Private Investment Trust 3th	-	-	-	2,000,002
AI Partners Energy Infra Private Investment Trust 1st	1,381,955	6,706,577	1,466,446	6,869,146
Heungguk Flight Private Investment Trust 12th	-	1,641,515	1,030,438	101,504
Heungguk Flight Private Investment Trust 13th	69,513	-	171,998	845
Mastern Europe Real Estate Investment Trust 5th	-	-	-	6,715,457
Mastern Europe Real Estate Investment Trust 10th	-	2,191,021	-	2,282,508
Hangang Naepo Green Energy Private Special Asset Fund Trust(SOC)	-	-	10,000,000	10,136,438
JB IPO Private Fund Trustee 3 I	12,000,000	12,088,678	9,600,000	9,000,000
Vogo-wavefront multi strategy fund #1	1,000,000	-	-	-
SUN&TREE IPO HIGH-YIELD HEDGE FUND 4	45,200,000	30,559,982	-	-
Global One Professional Investment Type Private IPO Investment Trust No.2	42,500,000	40,185,881	-	-
Hize High-yield IPO Private Investment Trust 3	8,000,000	4,000,000	-	-
Anda Project C Private Securities Investment Trust 1	1,000,000	-	-	-
EK IPO High Yield Private Equity Trust II	6,000,000	-	-	-
Consus Busan Gijang Private Real Estate Fund no.2	1,375,000	-	-	-
CrownRock IPO I Hedge Fund	3,000,000	-	-	-
Skywalk Game Changer Hedge Fund No.1	2,000,000	-	-	-
EK IPO Private Equity Trust III	5,000,000	2,499,225	-	-
Intrus Value-add Professional Investment Private Fund#3	13,163,066	13,038,086	-	-

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40.6. The details of contribution and collection with the related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won) (cont'd):

Company	Year ended December 31, 2021		Year ended December 31, 2020	
	Contribution	Collection	Contribution	Collection
MERITZ NS GLOBAL BIO FUND	₩ 650,650	₩ 300,820	₩ 49,000	₩ 1,054,906
Genesis North America				
PowerCompany 1st	-	1,527,755	66,120	1,098,147
Gongpyeong 15-16 PFV	-	-	-	360,000
New Wave Medical Investment				
Union	-	-	-	1,000,000
Seocho Art PFV	-	-	-	1,093,448
OST Partners, Co., Ltd.	-	250,000	-	500,000
Y&P Growth Fund 1	-	-	-	1,149,212
Rhinos-Meritz fund	-	381,576	-	575,220
Meritz-Koreit fund 1	-	-	-	1,602,647
Meritz Behigh Fund	-	-	-	259,865
Bric-Orbit 8th New Technology				
Investment Union	-	1,000,000	-	-
KCGI Private Equity Fund 1-12	-	20,000,000	-	-
Cheongna Logistics, Co., Ltd.	-	6,000,019	-	-
Chungmu-ro PFV Co., Ltd.	-	-	900,000	-
Hangang Landmark PFV Co., Ltd.	-	-	870,000	-
DAON CONSTRUCTION, Co., Ltd.	-	-	1,900	-
GAHA YOU&I CO., LTD	-	-	10,000	-
Galmae PFV Co., Ltd.	-	-	975,000	-
New wave fund 2	-	-	1,500,000	-
DAE-SAN ENG CO.,LTD	-	-	3,000,000	-
Songgang Construction	-	-	30,000	-
Meritz Alphaview fund 1	-	-	500,000	-
Next V City PFV Co., Ltd.	-	-	950,000	-
Triple space, Co., Ltd.	-	-	13	-
Sunu Urban Development	64,000	-	13	-
Meritz Kingo fund 1	-	-	2,000,000	-
Meritz Kclavis fund 1	-	-	1,000,000	-
Mastern 116th Gangnam				
Premium PFV	700,010	-	-	-
Meritz Alphaview Fund2	3,000,000	-	-	-
SMDNC	13	-	-	-
Anseong Seongeun logistics PFV				
Co. Ltd	500,000	-	-	-
DM METAL	3,000,000	-	-	-
Eun-Pyung, Complex				
Development. Ltd.	1,000	1,000	-	-
Handaritz	1,330	-	-	-
Meritz GoldenEgg Fund1	1,000,000	-	-	-
S R Industrial Co., Ltd	1,236	-	-	-
Dowon Corporation	100,000	-	-	-
Sinchon 2-7	1,500,000	-	-	-
SW-RN Fund	900,000	-	-	-
YKOSAN PFV	995,000	545,000	-	-
Heung Young Industrial				
Development	100	-	-	-
Hanyang-Meritz 1 Fund	1,000,000	-	-	-
JQ	13	-	-	-
Daehoon Partners Corp.	19	-	-	-
Meritz Hyundai Investment				
Partners	2,000,000	-	-	-
NH-Meritz Contents 1 Fund	2,000,000	-	-	-

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40.6. The details of contribution and collection with the related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won) (cont'd):

Company	Year ended December 31, 2021		Year ended December 31, 2020	
	Contribution	Collection	Contribution	Collection
Kiwoom Meritz Trend 1 Fund	₩ 3,000,000	₩ 3,000,000	₩ -	₩ -
The First Porte 2	1,393	-	-	-
KAI-Veritas Venture Fund 1	800,000	-	-	-
KI CHUNGPYUNG	250,000	-	-	-
Hangang Eco	150,000	-	-	-
BUG Logistics Project Finance Investment	249,995	-	-	-
Gimhae Daedong Smart Logistics Corp	420,000	-	-	-
Cornerstone Mutual Growth Vill Fund	700,000	-	-	-
JUN GEUM Construction Co., Ltd	41,790	-	-	-
KR Seocho Co., Ltd.	1,000,000	-	-	-
Meritz-AssetOne 1 Partners	3,000,000	-	-	-
Hanwha-Pentastone I Funds	2,000,000	-	-	-
COSMOS	2,700	-	-	-
Dongtan Triple Space	616	-	-	-
Hanyang-Pentastone Hi-tech I Funds	2,000,000	-	-	-
Meritz-NH healthcare 1 Fund	3,000,000	-	-	-
Meritz-SNP 1 Fund	2,700,000	-	-	-
AIP Euro Green Private Real Estate Investment Trust 8th	4,814,535	-	-	-
Kiwoom Milestone US Professional Private Real Estate Trust 18	-	57,122,368	6,703,488	8,313,562
IGIS Global Private Real Estate Investment Trust 254	-	70,605,591	3,477,600	-
Mastern Private Real Estate Investment Trust 61th	-	10,632,175	-	-
IGIS Global Private Real Estate Investment Trust 301	61,721,027	-	95,521,011	-
IGIS Global Private Real Estate Investment Trust 434	39,867,569	-	-	-
Genesis north america power company no.1 PEF	-	22,719,051	-	-
Edelweiss Alternative Solutions Trust	1,916,763	9,210,793	13,457,822	-
IGIS US Private Real Estate Investment Trust 292	3,992,337	5,754,669	6,399,529	6,171,940
IGIS US Private Real Estate Investment Trust 266	23,674,162	-	-	3,582,000
Pacific Private Placement REF 36	1,083,790	33,066,719	31,420,949	-
Germany Office Real Estate Private Placement Fund No.28	328,573	13,363,752	12,528,651	-
PIA Private Real Estate Investment Trust No. 6-1	-	19,314,000	171,172,800	2,622,000
PIA Private Real Estate Investment Trust No. 6-2	-	38,370,000	78,454,200	22,068,000
Kiwoom Vietnam Professional Private Trust 1	-	-	60,000	60,000
Midas Global DEBT Private Real Estate Investment Trust 6th	9,744,063	-	116,122	637,991
Platform Partners ESS Private Special Asset Investment Trust 1st	-	-	-	22,830,917

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40.6. The details of contribution and collection with the related parties for the years ended December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won) (cont'd):

Company	Year ended December 31, 2021		Year ended December 31, 2020	
	Contribution	Collection	Contribution	Collection
AIP KR Green Private Real Estate Investment Trust 2nd	₩ -	₩ -	₩ 380,086,947	₩ 380,086,947
Mastern Private Real Estate Investment Trust 40th	-	-	-	27,530,446
Shinhan AIM Real Estate Fund No. 22-A	17,215,966	-	-	-
WooriG Professional Investor's Private Real Estate Investment Trust No. 2	-	34,999,040	35,000,000	-
Consus Osan Segyo Private Real Estate Fund	3,250,000	-	-	-
Yuamkopain wood Enterprise Financial Stability corporate Investment Limited PA	-	8,600,000	2,680,000	-
PineStreet Global Corporate Finance PEF Trust No.2	283,145	24,624,078	1,136,404	105,429,459
Hyundai Ufirst Private Placement Fund No.32	-	-	30,000,000	-
Hizeasset IPO Private Investment Trust 2	1,022,312	-	-	-
Trinity Unicorn IPO FUND 1st	1,135,276	-	-	-
SUN&TREE IPO FUND 1st	1,242,560	-	-	-
Kclavis Private Investment Trust 2nd	1,116,199	-	-	-
VM Energy Highyield Fund	10,000,000	-	-	-
	<u>₩ 361,798,798</u>	<u>₩ 494,392,539</u>	<u>₩ 903,656,478</u>	<u>₩ 631,983,151</u>

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40.7. The balance of the agreements provided to related parties of the consolidated company as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	<u>December 31, 2021</u>		<u>December 31, 2020</u>
Commitment for loans on limit	₩ 111,348,215	₩	285,121,086

The balance of the agreements provided by related parties of consolidated company as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	<u>December 31, 2021</u>		<u>December 31, 2020</u>
Limit transaction of Commercial Paper	₩ -	₩	150,000,000

40.8. The balance of the loan receivable transferred under bond transfer agreements with the related parties for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	<u>Year ended December 31, 2021</u>		<u>Year ended December 31, 2020</u>
Meritz Fire & Marine Insurance Co., Ltd	₩ -	₩	280,000,000

40.9. Details of compensation paid to key management personnel are shown below. The key management personnel is composed of registered directors and non-registered directors who have the authority and responsibilities of corporate activities (in thousands of Korean won):

	<u>Year ended December 31, 2021</u>		<u>Year ended December 31, 2020</u>
Short-term salary	₩ 64,658,517	₩	50,358,280
Severance payment	2,411,901		2,436,628
	<u>₩ 67,070,418</u>	<u>₩</u>	<u>52,794,908</u>

41. Statements of cash flows

41.1. Cash and cash equivalents in the statements of cash flows as of December 31, 2021 and 2020 are summarized as follows (in thousands of Korean won):

	<u>December 31, 2021</u>		<u>December 31, 2020</u>
Cash	₩ -	₩	-
Cash equivalents	1,166,594,503		999,735,337
Cash and Cash equivalents on statement of financial position	1,166,594,503		999,735,337
Overdraft used for cash management purposes	-		-
Cash and Cash equivalents on cash flow statements	<u>₩ 1,166,594,503</u>	<u>₩</u>	<u>999,735,337</u>

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41.2. Significant non-cash transactions for the years ended December 31, 2021 and 2020 are as follows
(in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Gain (loss) on valuation of financial assets measure at FVOCI	₩ 33,393,297	₩ 51,445,033
Transferred between profit/loss from disposal of fair value measurement instruments	540,000	1,338
Actuarial valuation of the net defined benefit liabilities	(102,114)	(1,169,296)
Transferred between gain(loss) on valuation of financial liabilities measured at FVTPL and other comprehensive income	(582,185)	739,451
Unpaid dividends of hybrid bond	3,689,305	724,590
Present value discount of other assets	173,706	307,132
Present value discount of withholdings	10,984,934	7,734,107
Initial recognition of provisions for restoration costs	308,415	74,007
Replacement of advance payment and tangible assets	4,658	84,541
Replacement of advance payment and intangible assets	136,853	248,204
Increase in real-estate investment	150,381,290	-
Alternative to investment in affiliated companies by gaining significant influence	4,516,347	-
Bad debts written off	71,611,897	65,504,616
Increase in non-controlling interests	8,294,100	6,502,800
Increase (decrease) in loss on foreign currency transactions	6,169,926	(1,531,904)
Increase (decrease) in valuation of Investment Stock Using the Equity Method	1,741,140	(1,741,140)
Removed internal transactions of auto lease	-	(346,782)
Recognition of lease-related assets and liabilities	10,038,595	5,497,582
Replacement of right-of-use asset and receivables	51,000	296,100
Conversion of convertible preferred stock into common stock	38,871	15,566,476
Accounts payable related to treasury shares	3,108,856	-
Increase in accounts payable of capital stock option	32,642,272	-

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41.3. Net cash flows from the disposal of subsidiaries for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021	Year ended December 31, 2020
Proceed from disposal	₩ 68,712,659	₩ 50,373,850
Cash and cash equivalent in subsidiaries	(238,089,828)	(65,732,466)
Net cash flow	₩ (169,377,169)	₩ (15,358,616)

41.4. Changes in liabilities arising from financing activities for the years ended December 31, 2021 are as follows (in thousands of Korean won):

	January 1, 2021	Cash flow	Change in scope of consolidation	Non-cash flow changes			December 31, 2021
				New or Prepayment	Changes of exchange rate	Amortization of discount on debentures	
Call money	₩ 210,000,000	₩ (210,000,000)	₩ -	₩ -	₩ -	₩ -	₩ -
Borrowing from bank	-	50,000,000	-	-	-	-	50,000,000
Borrowing from KSFC	486,523,463	(42,103,911)	-	-	-	-	444,419,552
Borrowing in foreign currency	-	-	100,624,078	-	-	-	100,624,078
Repurchase agreements sold	13,653,220,858	1,616,318,206	-	-	2,431,303	-	15,271,970,367
Other borrowings	3,821,127,145	3,975,082,239	(868,907,826)	-	-	-	6,927,301,558
Asset backed short-term bonds	1,138,973,000	1,577,060,000	(369,473,000)	-	-	-	2,346,560,000
Debentures	7,164,900,308	(146,195,845)	-	-	-	7,257,094	7,025,961,557
Lease liability	30,602,180	(9,401,156)	-	9,811,045	-	790,472	31,802,541
	₩ 26,505,346,954	₩ 6,810,759,533	₩ (1,137,756,748)	₩ 9,811,045	₩ 2,431,303	₩ 8,047,566	₩ 32,198,639,653

42. Trust accounts

The Group engages in the investment trust services and separately maintains the books of accounts and financial statements in connection with the trust operations (the trust accounts) from those of the Group accounts in accordance with the *Financial Investment Services and Capital Markets Act*.

42.1. Details of the financial information in relation to trust accounts as of December 31, 2021 are as follows (in thousands of Korean won):

	Specific money trust	Property trust	Total
Cash and due from banks	₩ 505,159,924	₩ -	₩ 505,159,924
Negotiable instruments	274,320,932	58,408,668	332,729,600
Monetary claims	-	546,582,484	546,582,484
Other assets	710,941	-	710,941
	₩ 780,191,797	₩ 604,991,152	₩ 1,385,182,949
Other liabilities	₩ 2,289,892	₩ -	₩ 2,289,892
Trust and the original	777,901,905	604,991,152	1,382,893,057
	₩ 780,191,797	₩ 604,991,152	₩ 1,385,182,949

42.2. Details of transactions with trust accounts as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020
Fees on trust accounts	₩ 4,558,313	₩ 3,132,330
Accrued fees on trust accounts	535,589	308,629

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43. Classification of financial assets and liabilities

Classification of financial assets and liabilities as of December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	December 31, 2021				
	Financial assets or liabilities measured at FVTPL	Financial assets or liabilities designated at FVTPL	Financial assets or liabilities measured at FVOCI	Measured at amortized cost	Total
Financial assets:					
Cash and due from banks	₩ -	₩ -	₩ -	₩ 3,817,859,155	₩ 3,817,859,155
Financial assets measured at FVTPL	26,665,666,822	-	-	-	26,665,666,822
Derivative assets	316,677,363	-	-	-	316,677,363
Financial assets Measured at FVOCI	-	-	3,242,998,268	-	3,242,998,268
Loans	-	-	-	14,302,471,666	14,302,471,666
Finance lease receivables	-	-	-	1,038,023,421	1,038,023,421
Other financial assets	-	-	-	2,005,481,859	2,005,481,859
	<u>₩ 26,982,344,185</u>	<u>₩ -</u>	<u>₩ 3,242,998,268</u>	<u>₩ 21,163,836,101</u>	<u>₩ 51,389,178,554</u>
Financial liabilities:					
Deposits	₩ -	₩ -	₩ -	₩ 2,564,607,606	₩ 2,564,607,606
Financial liabilities measured at FVTPL	4,259,810,973	-	-	-	4,259,810,973
Derivative liabilities	446,601,550	-	-	-	446,601,550
Financial liabilities designated at FVTPL	-	6,312,501,110	-	-	6,312,501,110
Borrowings	-	-	-	22,794,315,555	22,794,315,555
Bonds	-	-	-	9,372,521,557	9,372,521,557
Other financial liabilities	-	-	-	2,587,476,873	2,587,476,873
	<u>₩ 4,706,412,523</u>	<u>₩ 6,312,501,110</u>	<u>₩ -</u>	<u>₩ 37,318,921,591</u>	<u>₩ 48,337,835,224</u>
	December 31, 2020				
	Financial assets or liabilities measured at FVTPL	Financial assets or liabilities designated at FVTPL	Financial assets or liabilities measured at FVOCI	Measured at amortized cost	Total
Financial assets:					
Cash and due from banks	₩ -	₩ -	₩ -	₩ 2,222,507,308	₩ 2,222,507,308
Financial assets measured at FVTPL	24,296,316,061	-	-	-	24,296,316,061
Derivative assets	443,925,480	-	-	-	443,925,480
Financial assets Measured at FVOCI	-	-	648,920,063	-	648,920,063
Loans	-	-	-	11,177,655,377	11,177,655,377
Finance lease receivables	-	-	-	908,347,382	908,347,382
Other financial assets	-	-	-	1,684,006,959	1,684,006,959
	<u>₩ 24,740,241,541</u>	<u>₩ -</u>	<u>₩ 648,920,063</u>	<u>₩ 15,992,517,026</u>	<u>₩ 41,381,678,630</u>
Financial liabilities:					
Deposits	₩ -	₩ -	₩ -	₩ 1,954,874,966	₩ 1,954,874,966
Financial liabilities measured at FVTPL	4,322,265,280	-	-	-	4,322,265,280
Derivative liabilities	283,308,289	-	-	-	283,308,289
Financial liabilities designated at FVTPL	-	3,244,187,074	-	-	3,244,187,074
Borrowings	-	-	-	18,170,871,466	18,170,871,466
Bonds	-	-	-	8,303,873,308	8,303,873,308
Other financial liabilities	-	-	-	2,423,133,560	2,423,133,560
	<u>₩ 4,605,573,569</u>	<u>₩ 3,244,187,074</u>	<u>₩ -</u>	<u>₩ 30,852,753,300</u>	<u>₩ 38,702,513,943</u>

44. Fair value of financial assets and liabilities

44.1.1. Fair values classification and measurement

Fair value means a price that a market participant receives by selling an asset or pays by transferring a liability in an ordinary transaction on the date of transaction. Fair value measurement estimates the price in the ordinary transaction between the market participants, who sell the asset and transfer the liability, at an active market on the date of transaction. The Group calculates the fair values of assets/liabilities by making the best use of market values and making the least use of inputs that are not based on the observable market data.

The Group classifies fair value measurements of financial assets or liabilities by reference to the source of inputs used to derive the fair values. The classification is as follows:

	Details
(Level 1)	In case assets or liabilities are measured by quoted prices (unadjusted) in active markets, fair value of the assets or liabilities is classified as Level 1. The assets of liabilities classified as Level 1 include stock transacted in KRX, ETF, listed option, stock warrant, stock transacted in foreign, etc.
(Level 2)	In case assets or liabilities are measured by valuation techniques and all significant inputs are based on the observable market data, fair value of the assets or liabilities is classified as Level 2. The assets of liabilities classified as Level 2 include bond, interest rate swap, foreign exchange forward, etc.
(Level 3)	In case assets or liabilities are measured by valuation techniques and all significant inputs are based on the no observable market data, fair value of the assets or liabilities is classified as Level 3. The assets of liabilities classified as Level 3 include unlisted stock, option related over-the-counter securities, DLS, separate deposit from investors, etc.

The Group calculates the fair values of assets/liabilities by using an internal valuation model or receives fair market values assessed by independent external appraisers.

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44.1.2. Details of the carrying amount and fair value of financial instruments as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021			
	Fair value			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets measured at FVTPL:				
Equity securities	₩ 1,410,317,586	₩ -	₩ 154,026,472	₩ 1,564,344,058
Debt securities	-	19,242,203,621	-	19,242,203,621
Collective investment securities	1,442,791,128	42,356,330	65,400,484	1,550,547,942
Loans	-	-	1,411,631,752	1,411,631,752
Others (*4)	3,509,825	450,811,360	2,442,618,263	2,896,939,448
Derivative assets	113,035,596	178,510,898	25,130,869	316,677,363
Financial assets measured at FVOCI:				
Equity securities	-	-	309,740,475	309,740,475
Debt securities	-	2,933,257,793	-	2,933,257,793
	<u>₩ 2,969,654,135</u>	<u>₩ 22,847,140,002</u>	<u>₩ 4,408,548,315</u>	<u>₩ 30,225,342,452</u>
Financial liabilities:				
Financial liabilities measured at FVTPL				
Equity securities	₩ 1,632,201,235	₩ -	₩ -	₩ 1,632,201,235
Debt securities	-	2,576,371,737	-	2,576,371,737
Others	51,238,000	-	-	51,238,000
Derivative liabilities	233,796,810	167,035,830	45,768,910	446,601,550
Financial liabilities designated at FVTPL	1,499,567	248,824,631	6,062,176,911	6,312,501,109
	<u>₩ 1,918,735,612</u>	<u>₩ 2,992,232,198</u>	<u>₩ 6,107,945,821</u>	<u>₩ 11,018,913,631</u>

(*1) There was no transfer between level 1 and level 2 in 2021. The Group recognizes a transfer at the end of the reporting period when an event or circumstance causing the transfer among fair value levels is incurred.

(*2) The balance of financial instruments measured at costs since there was no quoted price of the same financial instrument in an active market or fair value was not reliably estimable, amounts to ₩45,110,927 thousand (excluding reserve of collective fund for default loss). Of the financial instruments measured at cost for the year ended December 31, 2021, ₩3,962,791 thousand of book value was derecognized, and ₩1,651,254 thousand was recognized as a gain or loss on disposal.

(*3) This is the amount including gains and losses on the first deferred day incurred in financial instruments with a level 3 fair value hierarchy.

(*4) This includes the amount ₩139,036,231 thousand of derivative-linked securities with a level 3 fair value hierarchy.

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44.1.2. Details of the carrying amount and fair value of financial instruments as of December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

	December 31, 2020			
	Fair value			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets measured at FVTPL:				
Equity securities	₩ 801,378,919	₩ -	₩ 102,275,902	₩ 903,654,821
Debt securities	-	18,668,063,445	-	18,668,063,445
Collective investment securities	2,046,470,895	81,170,670	24,299,906	2,151,941,471
Loans	-	-	1,142,496,396	1,142,496,396
Others (*4)	-	48,925,439	1,381,234,489	1,430,159,928
Derivative assets	67,048,650	312,752,036	64,124,794	443,925,480
Financial assets measured at FVOCI:				
Equity securities	-	-	283,258,542	283,258,542
Debt securities	-	365,661,520	-	365,661,520
	<u>₩ 2,914,898,464</u>	<u>₩ 19,476,573,110</u>	<u>₩ 2,997,690,029</u>	<u>₩ 25,389,161,603</u>
Financial liabilities:				
Financial liabilities measured at FVTPL				
Equity securities	₩ 1,149,663,213	₩ -	₩ -	₩ 1,149,663,213
Debt securities	-	2,898,988,515	-	2,898,988,515
Others	273,613,552	-	-	273,613,552
Derivative liabilities	83,577,270	245,356,197	(45,625,179)	283,308,288
Financial liabilities designated at FVTPL	-	243,879,178	3,000,307,896	3,244,187,074
	<u>₩ 1,506,854,035</u>	<u>₩ 3,388,223,890</u>	<u>₩ 2,954,682,717</u>	<u>₩ 7,849,760,642</u>

(*1) There was no transfer between level 1 and level 2 in 2020. The Group recognizes a transfer at the end of the reporting period when an event or circumstance causing the transfer among fair value levels is incurred.

(*2) The balance of financial instruments measured at costs since there was no quoted price of the same financial instrument in an active market or fair value was not reliably estimable, amounts to ₩39,342,843 thousand (excluding reserve of collective fund for default loss). Of the financial instruments measured at cost for the year ended December 31, 2020, ₩2,084,051 thousand of book value was derecognized, and ₩209,256 thousand was recognized as a gain or loss on disposal.

(*3) This is the amount including gains and losses on the first deferred day incurred in financial instruments with a level 3 fair value hierarchy.

(*4) This includes the amount ₩110,950,462 thousand of derivative-linked securities with a level 3 fair value hierarchy.

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44.2. Details of inputs used in fair value, valuation technique, and measurement of fair value classified into level 2 among financial assets and liabilities, currently measured at fair value as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021	December 31, 2020	Valuation technique	Inputs
Financial assets:				
Financial assets measured at FVTPL:				
Debt securities	₩ 19,242,203,621	₩ 18,668,063,445	DCF model	Discount rate, interest rate
Collective investment securities	42,356,330	81,170,670	DCF model	Discount rate, interest rate
Others	450,811,360	48,925,439	DCF model	Discount rate, interest rate
Derivative assets	178,510,898	312,752,036	DCF model, etc.	Interest rate, exchange rate, stock price
Financial assets measure at FVOCI :				
Debt securities	2,933,257,793	365,661,521	DCF model, etc.	Discount rate, interest rate
	<u>₩ 22,847,140,002</u>	<u>₩ 19,476,573,111</u>		
Financial liabilities:				
Financial liabilities measured at FVTPL:				
Debt securities	₩ 2,576,371,737	₩ 2,898,988,515	DCF model	Discount rate, interest rate
Derivative liabilities	167,035,830	245,356,197	DCF model	Discount rate, exchange rate, stock price
Financial liabilities designated at FVTPL	248,824,631	243,879,178	DCF model	Discount rate, interest rate
	<u>₩ 2,992,232,198</u>	<u>₩ 3,388,223,890</u>		

44.3.1. Changes in the fair value of level 3 financial assets and liabilities for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	Year ended December 31, 2021						
	Beginning balance	Profit/Loss	Other comprehensive income	Interlevel movement (*)	Purchase/issuance	Disposal/redemption	Ending balance
Assets:							
Financial assets measure at FVTPL	₩ 2,650,306,693	₩ 116,954,083	₩ -	₩ (6,723,246)	₩ 16,990,480,470	₩ (15,677,341,029)	₩ 4,073,676,971
Derivative assets	64,124,794	112,867,592	-	-	(73,174,920)	(78,686,598)	25,130,868
Financial assets measured at FVOCI:							
Equity instrument	283,258,542	-	27,321,933	-	-	(840,000)	309,740,475
	<u>₩ 2,997,690,029</u>	<u>₩ 229,821,675</u>	<u>₩ 27,321,933</u>	<u>₩ (6,723,246)</u>	<u>₩ 16,917,305,550</u>	<u>₩ (15,756,867,627)</u>	<u>₩ 4,408,548,314</u>
Liabilities:							
Derivative instruments	₩ (45,625,179)	₩ (399,638,833)	₩ -	₩ -	₩ (322,483,693)	₩ 14,238,949	₩ 45,768,910
Financial liabilities designated at FVTPL	3,000,307,896	37,453,796	(578,269)	-	7,763,043,674	(4,664,299,132)	6,062,176,911
	<u>₩ 2,954,682,717</u>	<u>₩ (362,185,037)</u>	<u>₩ (578,269)</u>	<u>₩ -</u>	<u>₩ 7,440,559,981</u>	<u>₩ (4,650,060,183)</u>	<u>₩ 6,107,945,821</u>

(*) There is no transfer to Level 3 of the fair value hierarchy in 2021, and it is the amount that has moved from Level 3 to Level 1 as unlisted stocks are listed. The Group recognizes changes in levels at the end of the reporting period in which events or changes in circumstances that result in a shift between levels of fair value have occurred.

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44.3.1. Changes in the fair value of level 3 financial assets and liabilities for the years ended December 31, 2021 and 2020 are as follows (in thousands of Korean won) (cont'd):

	Year ended December 31, 2020						
	Beginning balance	Profit/Loss	Other comprehensive income	Interlevel movement (*)	Purchase/issuance	Disposal/redemption	Ending balance
Assets:							
Financial assets measure at FVTPL	₩ 1,708,268,880	₩ 77,385,756	₩ -	₩ (159,995,421)	₩ 13,621,345,875	₩ (12,596,698,397)	₩ 2,650,306,693
Derivative assets	57,823,220	81,954,484	-	-	45,108,043	(120,760,953)	64,124,794
Financial assets measured at FVOCI:							
Equity instrument	215,192,692	-	51,288,329	-	16,777,521	-	283,258,542
CMA	1,998,004	1,996	-	-	-	(2,000,000)	-
	<u>₩ 1,983,282,796</u>	<u>₩ 159,342,236</u>	<u>₩ 51,288,329</u>	<u>₩ (159,995,421)</u>	<u>₩ 13,683,231,439</u>	<u>₩ (12,719,459,350)</u>	<u>₩ 2,997,690,029</u>
Liabilities:							
Derivative instruments	₩ (121,854,229)	₩ (73,197,443)	₩ -	₩ -	₩ 21,476,412	₩ (18,444,805)	₩ (45,625,179)
Financial liabilities designated at FVTPL	4,154,309,211	(62,655,944)	735,202	-	4,849,601,869	(6,065,523,926)	3,000,307,896
	<u>₩ 4,032,454,982</u>	<u>₩ (135,853,387)</u>	<u>₩ 735,202</u>	<u>₩ -</u>	<u>₩ 4,871,078,281</u>	<u>₩ (6,083,968,731)</u>	<u>₩ 2,954,682,717</u>

(*) There is no transfer to Level 3 of the fair value hierarchy in 2020, and it is the amount that has moved from Level 3 to Level 1 as unlisted stocks are listed. The Group recognizes changes in levels at the end of the reporting period in which events or changes in circumstances that result in a shift between levels of fair value have occurred.

44.3.2. Details of the changes in the fair value of the financial assets that were measured at fair value and classified as level 3 in fair value hierarchy, current profits or losses in 2021 and 2020 were recognized as follows (in thousands of Korean won):

	December 31, 2021		December 31, 2020	
	Profit and loss for the current term	Gain and loss on valuation	Profit and loss for the current term	Gain and loss on valuation
Assets:				
Financial assets measured at FVTPL	₩ 116,954,083	₩ 67,300,780	₩ 77,385,756	₩ 1,929,258
Derivative instruments	112,867,592	88,838,870	81,954,484	17,190,667
CMA	-	-	1,996	-
	<u>229,821,675</u>	<u>156,139,650</u>	<u>159,342,236</u>	<u>19,119,925</u>
Liabilities:				
Derivative instruments	(399,638,833)	(332,665,986)	(73,197,443)	78,730,301
Financial liabilities designated at FVTPL	37,453,796	(1,840,501)	(62,655,944)	(112,180,709)
	<u>(362,185,037)</u>	<u>(334,506,487)</u>	<u>(135,853,387)</u>	<u>(33,450,408)</u>
	<u>₩ (132,363,362)</u>	<u>₩ (178,366,837)</u>	<u>₩ 23,488,849</u>	<u>₩ (14,330,483)</u>

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44.3.3. Details of fair value, valuation technique, and inputs used to develop those measurements classified into level 3 assets and liabilities disclosure but not measured at fair value as of December 31, 2021 are as follows (in thousands of Korean won):

	December 31, 2021				
	Fair value	Valuation technique	Inputs	Significant unobservable inputs	Sensitivity of the input to fair value Range
Financial assets:					
Financial assets measured at FVTPL	₩ 4,073,676,971	DCF, Monte-Carlo Simulation Cox, Ross and Rubinstein Model	Risk free rate, dividend rate, discount rate, default rate etc.	Recovery rate Volatility correlation	Fair value increased due to the increase in recovery rate Fair value increased or decreased due to the increase in volatility Fair value increased or decreased to the increase in correlation coefficient
Derivative assets	25,130,869	Binomial model, Black Scholes model, Monte-Carlo Simulation Reduced Form Model etc.	Risk free rate, dividend rate, discount rate, default rate	Volatility correlation	Fair value increased or decreased due to the increase in volatility Fair value increased or decreased to the increase in correlation coefficient
Financial assets designated at FVOCI	309,740,475	DCF, Past deal method, Cost method	-	Growth rate Discount rate	Fair value increased due to the increase in growth rate Fair value decreased due to the increase in discount rate
	<u>₩ 4,408,548,315</u>				
Financial liabilities:					
Derivative liabilities	₩ 45,768,910	Binomial model Monte-Carlo Simulation, Hull&White 1 factor	Risk free rate, dividend rate, discount rate, stock price	Volatility correlation	Fair value increased or decreased due to the increase in volatility Fair value increased or decreased to the increase in correlation coefficient
Financial liabilities designated at FVTPL	6,062,176,911	Monte-Carlo Simulation, Reduced form, Hull&White 1 factor, Black-Scholes Model, etc.	Risk free rate, dividend rate, discount rate, default rate	Recovery rate Volatility Correlation	Fair value increased due to the increase in recovery rate Fair value increased or decreased due to the increase in volatility Fair value increased or decreased to the increase in correlation coefficient
	<u>₩ 6,107,945,821</u>				

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44.3.4. Based on changes in fair values of financial assets according to changes in unobservable input variables by using statistics method, the sensitivity analysis of financial assets is conducted separately on favorable changes and unfavorable changes. If fair value is influenced by more than 2 input variables, the fair value is calculated on the basis of the most favorable or the most unfavorable amount. As of December 31, 2021, the result of sensitivity analysis according to changes in input variables by financial asset is as follows (in thousands of Korean won):

	Computation effect of volatility	Favorable change	Unfavorable change
Assets:			
Financial assets measured at FVTPL	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	₩ 17,807,532	₩ (16,537,463)
Derivative assets	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	5,801,406	(5,314,363)
Financial assets designated at FVOCI	Adjustment 1% of growth rate, discount rate	21,261,045	(14,562,754)
		<u>44,869,983</u>	<u>(36,414,580)</u>
Liabilities:			
Derivative instruments	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	42,752,186	(46,441,808)
Financial liabilities designated at FVTPL	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	73,346,313	(78,094,247)
		<u>116,098,499</u>	<u>(124,536,055)</u>
		<u>₩ 160,968,482</u>	<u>₩ (160,950,635)</u>

44.4.1. The hierarchical fair values of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021				
	Book value	Fair value			Total
		Level 1	Level 2	Level 3	
Financial assets:					
Cash and due from banks (*)	₩ 3,817,859,155	₩ -	₩ 3,817,859,155	₩ -	₩ 3,817,859,155
Loans	14,302,471,666	-	-	14,545,330,134	14,545,330,134
Finance lease receivables	1,038,023,421	-	-	1,044,548,326	1,044,548,326
Other financial assets (*)	2,005,481,859	-	-	2,005,481,859	2,005,481,859
	<u>₩ 21,163,836,101</u>	<u>₩ -</u>	<u>₩ 3,817,859,155</u>	<u>₩ 17,595,360,319</u>	<u>₩ 21,413,219,474</u>
Financial liabilities:					
Deposits (*)	₩ 2,564,607,606	₩ -	₩ 2,564,607,606	₩ -	₩ 2,564,607,606
Borrowings (*)	22,794,315,555	-	22,794,315,555	-	22,794,315,555
Finance lease receivables	9,372,521,557	-	9,390,995,087	-	9,390,995,087
Other financial liabilities (*)	2,587,476,873	-	-	2,587,476,873	2,587,476,873
	<u>₩ 37,318,921,591</u>	<u>₩ -</u>	<u>₩ 34,749,918,248</u>	<u>₩ 2,587,476,873</u>	<u>₩ 37,337,395,121</u>

(*) Book value was considered to be a reasonable approximation of fair value due to book value was disclosed as fair value.

	December 31, 2020				
	Book value	Fair value			Total
		Level 1	Level 2	Level 3	
Financial assets:					
Cash and due from banks (*)	₩ 2,222,507,308	₩ -	₩ 2,222,507,308	₩ -	₩ 2,222,507,308
Loans	11,177,655,377	-	-	10,761,961,814	10,761,961,814
Finance lease receivables	908,347,382	-	-	908,837,729	908,837,729
Other financial assets (*)	1,684,006,959	-	-	1,684,006,959	1,684,006,959
	<u>₩ 15,992,517,026</u>	<u>₩ -</u>	<u>₩ 2,222,507,308</u>	<u>₩ 13,354,806,502</u>	<u>₩ 15,577,313,810</u>
Financial liabilities:					
Deposits (*)	₩ 1,954,874,966	₩ -	₩ 1,954,874,966	₩ -	₩ 1,954,874,966
Borrowings (*)	18,170,871,466	-	18,170,871,466	-	18,170,871,466
Finance lease receivables	8,303,873,308	-	8,395,300,023	-	8,395,300,023
Other financial liabilities (*)	2,423,133,560	-	-	2,423,133,560	2,423,133,560
	<u>₩ 30,852,753,300</u>	<u>₩ -</u>	<u>₩ 28,521,046,455</u>	<u>₩ 2,423,133,560</u>	<u>₩ 30,944,180,015</u>

(*) Book value was considered to be a reasonable approximation of fair value due to book value was disclosed as fair value.

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44.4.2. The following valuation methods and input variables were applied to the financial assets classified as level 2 of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2021 and 2020 (in thousands of Korean won):

	December 31, 2021	December 31, 2020	Valuation method	Input variables
Financial liabilities:				
Debentures	₩ 9,390,995,087	₩ 8,395,300,023	DCF method	Discount rate

44.4.3. The following valuation methods, input variables and unobservable input were applied to the financial assets classified as level 3 of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2021 and 2020 (in thousands of Korean won):

	December 31, 2021	December 31, 2020	Valuation method	Input variable	Unobservable input variable
Financial assets					
Loans	₩ 14,545,330,134	₩ 10,761,961,814	DCF method	Discount rate	Credit risk
Lease assets	1,044,548,326	908,837,729	DCF method	Discount rate	Credit risk
	<u>₩ 15,589,878,460</u>	<u>₩ 11,670,799,543</u>			

45. Offsetting of financial assets and liabilities

Details of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021					
	Gross amounts of recognized financial instruments	Gross amounts of recognized financial instruments set off in the statement of financial position	Net amounts of financial assets presented in the statement of financial position	Related amounts not set off in the statement of financial position (*2)		
				Financial assets recognized in the statement of financial position	Cash collateral received	Net amount
Assets						
Derivatives (*1)	₩ 393,822,282	₩ -	₩ 393,822,282	₩ (134,931,255)	₩ (54,779,464)	₩ 204,111,563
Loans						
Repurchase agreement	2,378,085,062	-	2,378,085,062	-	(2,378,085,062)	-
Other assets						
Receivable spot exchange	793,188,560	-	793,188,560	(792,774,542)	-	414,018
Difference of uncollected	4,620,991	(4,620,951)	40	-	-	40
Receivable from proprietary trading	800,953,661	(276,365,031)	524,588,630	-	-	524,588,630
Receivable from trading on consignment	942,233,099	(597,129,300)	345,103,799	-	-	345,103,799
	<u>₩ 5,312,903,655</u>	<u>₩ (878,115,282)</u>	<u>₩ 4,434,788,373</u>	<u>₩ (927,705,797)</u>	<u>₩ (2,432,864,526)</u>	<u>₩ 1,074,218,050</u>
Liabilities:						
Derivatives (*1)	₩ 923,251,306	₩ -	₩ 923,251,306	₩ (134,931,255)	₩ (356,497,087)	₩ 431,822,964
Securities sold	4,259,810,972	-	4,259,810,972	-	(4,259,810,972)	-
Borrowings						
Repurchase agreement	15,271,970,367	-	15,271,970,367	-	(15,271,970,367)	-
Other liabilities						
Payable spot exchange	792,990,943	-	792,990,943	(792,774,542)	-	216,401
Difference of unsettled	7,652,393	(4,620,951)	3,031,442	-	-	3,031,442
Accounts payable for proprietary trading	392,069,284	(276,365,031)	115,704,253	-	-	115,704,253
Accounts payable for trading on consignment	939,168,971	(597,129,300)	342,039,671	-	-	342,039,671
	<u>₩ 22,586,914,236</u>	<u>₩ (878,115,282)</u>	<u>₩ 21,708,798,954</u>	<u>₩ (927,705,797)</u>	<u>₩ (19,888,278,426)</u>	<u>₩ 892,814,731</u>

(*1) Derivative assets and derivative liabilities correspond to the amount before considering the credit risk adjustment and the deferred initial transaction date profit and loss adjustment.

(*2) The rights to offset exist only in case of default and others. Accordingly, the amounts are not offset in the statement of financial position as they do not meet the criteria for offsetting.

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45. Offsetting of financial assets and liabilities (cont'd)

Details of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	December 31, 2020					
	Gross amounts of recognized financial instruments	Gross amounts of recognized financial instruments set off in the statement of financial position	Net amounts of financial assets presented in the statement of financial position	Related amounts not set off in the statement of financial position (*2)		Net amount
				Financial assets recognized in the statement of financial position	Cash collateral received	
Assets						
Derivatives (*1)	₩ 429,689,890	₩ -	₩ 429,689,890	₩ (174,497,909)	₩ (99,123,655)	₩ 156,068,326
Loans						
Repurchase agreement	2,133,333,578	-	2,133,333,578	-	(2,133,333,578)	-
Other assets						
Receivable spot exchange	791,249,005	-	791,249,005	(791,026,655)	-	222,350
Difference of uncollected	7,021,061	(7,021,021)	40	-	-	40
Receivable from proprietary trading	714,145,885	(432,736,404)	281,409,481	-	-	281,409,481
Receivable from trading on consignment	1,115,506,290	(737,246,064)	378,260,226	-	-	378,260,226
	<u>₩ 5,190,945,709</u>	<u>₩ (1,177,003,489)</u>	<u>₩ 4,013,942,220</u>	<u>₩ (965,524,564)</u>	<u>₩ (2,232,457,233)</u>	<u>₩ 815,960,423</u>
Liabilities:						
Derivatives (*1)	₩ 734,301,766	₩ -	₩ 734,301,766	₩ (174,497,909)	₩ (385,323,699)	₩ 174,480,158
Securities sold	4,322,265,280	-	4,322,265,280	-	(4,322,265,280)	-
Borrowings						
Repurchase agreement	13,653,220,858	-	13,653,220,858	-	(13,653,220,858)	-
Other liabilities						
Payable spot exchange	791,213,106	-	791,213,106	(791,026,655)	-	186,451
Difference of unsettled	10,590,463	(7,021,021)	3,569,442	-	-	3,569,442
Accounts payable for proprietary trading	620,581,872	(432,736,404)	187,845,468	-	-	187,845,468
Accounts payable for trading on consignment	1,114,305,430	(737,246,064)	377,059,366	-	-	377,059,366
	<u>₩ 21,246,478,775</u>	<u>₩ (1,177,003,489)</u>	<u>₩ 20,069,475,286</u>	<u>₩ (965,524,564)</u>	<u>₩ (18,360,809,837)</u>	<u>₩ 743,140,885</u>

(*1) Derivative assets and derivative liabilities correspond to the amount before considering the credit risk adjustment and the deferred initial transaction date profit and loss adjustment.

(*2) The rights to offset exist only in case of default and others. Accordingly, the amounts are not offset in the statement of financial position as they do not meet the criteria for offsetting.

46. Deferred day 1 profit or loss

Changes in deferred day 1 profit or loss, for the years ended December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	Year ended December 31, 2021		Year ended December 31, 2020	
	Assets	Liabilities	Assets	Liabilities
Beginning	₩ (17,983,628)	₩ 60,647,813	₩ 5,373,224	₩ 17,837,177
Increase	136,523,327	82,700,420	(9,312,527)	77,137,669
Decrease	(38,863,858)	(82,010,261)	(14,044,325)	(34,327,033)
Ending	<u>₩ 79,675,841</u>	<u>₩ 61,337,972</u>	<u>₩ (17,983,628)</u>	<u>₩ 60,647,813</u>

47. Risk management

The Group is exposed to credit risk, liquidity risk, market risk and operational risk of its financial instruments. Risk management is the basic activities to effectively use the Group's limited capital under the rapidly changing financial circumstances. The ultimate goal of risk management is to maximize the Group's shareholder value while minimizing the sudden fluctuation of its income through a proper balance between risks and returns.

The basic policies for managing risk are as follows:

- (i) Set the limits and comply with them for each risk, and strike a balance between risk and return.
- (ii) When a conflict exists between risk and return, the Group should seek to increase return without exceeding the risk limits.
- (iii) Spread the risks to prevent them from being concentrated in specific areas.
- (iv) Analyze the effect of various market fluctuations on parts of or entire portfolio on a regular basis.
- (v) Separate risk management segment, operating segment, and segment that deals with trade-confirmation and payments to maintain independence from one another.

Risk management committee is responsible for setting maximum permissible limits for each risk, and the risk management conference is responsible for checking compliance with the limit and the risk levels.

Risk management committee is the top decision-making body within the Board of Directors for risk management. Through risk management committee, the Group establishes the control system of risk management from top management to operating segment. However, risk management conference is a subordinate committee for risk management and practices risk management by business unit in detail.

Risk management center consists of risk management team and credit risk analysis team. Risk management team manages market risk, liquidity risk, operational risk and capital and credit risk analysis team to perform credit risk analysis of counterparties and assessment on loan contracts. Risk management center deals with monitoring of risk position, risk measurement, identification of assets exposed to risk and forecasting change of risk position.

47.1. Credit risk

Credit risk is the risk that the Group will incur a loss because its customers or counterparties fail to discharge their contractual obligations. Credit risk arises from on-balance and off-balance accounts including loans, financial guarantees, securities and derivatives. The purpose to manage the credit risk is to control the relevant losses upon the counterparties' default, for a certain period, within the allowable range.

Credit risk management is performed by the risk management committee and judging committee, risk management conference and credit risk management department which is a subordinate organization of the risk management center.

Risk management committee establishes risk management strategy through the periodical report on asset management and portfolio construction. Judging committee is delegated to deal with all the matters. Credit risk management department, which is separated from operating segments, manages the overall credit risk of the Group and operates the credit risk management system.

47.1.1. Credit risk management

47.1.1.1. Loans

Performing comprehensive analysis on economic environments and changes, the Group reduces credit concentration by setting credit limits on same counterparties to ensure asset quality.

The Group measures and manages risk indicators of each operating segment. Also, the Group regularly examines the counterparties whose credit ratings are likely to be degraded.

As to large credit, the Group examines the customer's credit and adequacy of credit evaluation as part of the subsequent management process. In addition, the Group conducts focused examinations on industries or groups with increasing credit risks and performs sample inspections on small loans.

47.1.1.2. Debt securities

The Group controls credit exposure of debt securities through either the agencies' ratings of creditworthiness or its own rating. The debt securities are held as a means of maintaining resources in order to keep high credit rating as well as to meet the demands of financing.

47.1.2. Risk reduction policy

47.1.2.1. Collateral

The Group manages various policies and practices so as to reduce credit risks. Acquisition of collateral on loans is conventional method to reduce credit, and collaterals for secured loans are mainly deposits and financial instruments such as debt securities or equity securities. Collaterals on financial assets other than loans are decided by the attributes of the financial instruments. Debt securities are usually unsecured; asset backed securities or other similar instruments are secured by financial instrument portfolio.

47.1.2.2. Derivatives

Considering the notional exposure, the amount exposed to credit risk remains within small limits. Credit exposure is managed and controlled through limiting the counterparty risks such as latent exposure to market fluctuations.

47.1.2.3. Master netting arrangement

The Group limits credit exposure by entering into a 'master netting agreement' with the counterparties in the high volume trading. Generally such an agreement is settled by gross, and therefore assets and liabilities related to it are not offset in the financial statements of position. However, in case the remaining contracts are settled net at the end because default occurs, credit risk related to profitable contracts decreases. Due to the impact of individual trades, total credit exposure can vary substantially in the short term.

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47.1.3. Maximum exposure to credit risk

The maximum exposure to credit risk as of December 31, 2021 and 2020 are as follows. The Group does not consider risk reduction obtained by collaterals or other. Equity securities are excluded in financial assets measured at FVTPL and Financial assets measured at FVOCI (*in thousands of Korean won*):

	December 31, 2021	December 31, 2020
On balance accounts:		
Cash and due from banks	₩ 3,817,859,156	₩ 2,222,507,308
Financial assets measured at FVTPL	22,312,193,406	20,217,161,681
Derivative instruments	264,016,055	318,069,491
Financial assets measured at FVOCI	2,933,257,793	365,661,520
Loans	14,476,581,603	11,382,966,549
Lease assets	1,043,577,708	916,018,540
Other financial assets	2,020,182,594	1,694,567,292
	<u>₩ 46,867,668,315</u>	<u>₩ 37,116,952,381</u>
Off balance accounts(*)		
Commitments on loans	₩ 2,993,935,946	₩ 3,170,329,443
Payment guarantee	19,271,997	-
ABCP Purchase agreement	39,215,254	-
	<u>₩ 3,052,423,197</u>	<u>₩ 3,170,329,443</u>

(*) The amounts provided to the same counterparty for two or more contracts have been excluded.

47.1.4. Credit risk exposure

47.1.4.1. Gross book values of loans, finance lease assets, and other financial assets measured under the expected credit losses measurement method by internal credit rating are as follows (*in thousands of Korean won*):

	December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Loans:				
AAA	₩ 214,788,000	₩ -	₩ -	₩ 214,788,000
AA- to AA+	194,522,000	-	-	194,522,000
A-To A+	2,124,245,185	-	-	2,124,245,185
BBB- to BBB+	5,572,049,794	176,287,910	55,809,226	5,804,146,930
BB- to BB+	128,271,419	37,955,245	85,043,774	251,270,438
B- to B+	-	-	269,397,687	269,397,687
Unrated	5,358,472,176	196,064,275	63,674,912	5,618,211,363
	<u>13,592,348,574</u>	<u>410,307,430</u>	<u>473,925,599</u>	<u>14,476,581,603</u>
Lease				
Unrated	843,041,498	197,672,411	2,863,799	1,043,577,708
Other financial assets (*)				
Unrated	1,996,185,389	12,467,623	11,529,582	2,020,182,594
	<u>₩ 16,431,575,461</u>	<u>₩ 620,447,464</u>	<u>₩ 488,318,980</u>	<u>₩ 17,540,341,905</u>

(*) Other assets which did not meet the definition of accounts receivables were excluded.

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47.1.4.1. Gross book values of loans, finance lease assets, and other financial assets measured under the expected credit losses measurement method by internal credit rating are as follows (in thousands of Korean won) (cont'd) :

	December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Loans:				
AAA	₩ 188,200,000	₩ -	₩ -	₩ 188,200,000
AA- to AA+	512,630,338	-	-	512,630,338
A-To A+	2,173,972,667	20,789,360	-	2,194,762,027
BBB- to BBB+	3,595,846,416	62,142,571	-	3,657,988,987
BB- to BB+	108,742,176	30,263,653	59,571,000	198,576,829
B- to B+	-	-	247,427,781	247,427,781
Unrated	4,040,698,518	246,301,847	96,380,222	4,383,380,587
	<u>10,620,090,115</u>	<u>359,497,431</u>	<u>403,379,003</u>	<u>11,382,966,549</u>
Lease				
Unrated	732,589,004	177,239,480	6,190,056	916,018,540
Other financial assets (*)				
Unrated	1,681,662,346	5,447,010	7,457,936	1,694,567,292
	<u>₩ 13,034,341,465</u>	<u>₩ 542,183,921</u>	<u>₩ 417,026,995</u>	<u>₩ 13,993,552,381</u>

(*) Other assets which did not meet the definition of accounts receivables were excluded.

47.1.4.2. Off-balance accounts exposure measured under the expected credit losses measurement method classified by internal credit rating is as follows (in thousands of Korean won):

	December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Commitments on loans:				
AA- to AA+	₩ 30,000,000	₩ -	₩ -	₩ 30,000,000
A-To A+	1,211,773,457	-	-	1,211,773,457
BBB- to BBB+	1,710,848,492	19,121,000	-	1,729,969,492
BB- to BB+	21,896,897	296,100	-	22,192,997
Unrated	-	-	19,271,997	19,271,997
	<u>2,974,518,846</u>	<u>19,417,100</u>	<u>19,271,997</u>	<u>3,013,207,943</u>
ABCP Purchase agreement :				
AA- to AA+	5,000,000	-	-	5,000,000
BB- to BB+	34,215,254	-	-	34,215,254
	<u>39,215,254</u>	<u>-</u>	<u>-</u>	<u>39,215,254</u>
	<u>₩ 3,013,734,100</u>	<u>₩ 19,417,100</u>	<u>₩ 19,271,997</u>	<u>₩ 3,052,423,197</u>

47.1.4.2. Off-balance accounts exposure measured under the expected credit losses measurement method classified by internal credit rating is as follows (in thousands of Korean won) (cont'd):

	December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Commitments on loans:				
AAA	₩ 27,820,288	₩ -	₩ -	₩ 27,820,288
AA- to AA+	22,500,000	-	-	22,500,000
A-To A+	1,534,433,912	-	-	1,534,433,912
BBB- to BBB+	1,513,779,311	68,204,833	-	1,581,984,144
BB- to BB+	1,253,470	2,337,629	-	3,591,099
	<u>₩ 3,099,786,981</u>	<u>₩ 70,542,462</u>	<u>₩ -</u>	<u>₩ 3,170,329,443</u>

47.1.4.3. Debt securities measured at FVOCI which measured under the expected credit losses measurement method classified by internal credit rating is as follows (in thousands of Korean won):

	December 31, 2021			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
Public bonds and financial bonds	₩ 1,858,057,710	₩ -	₩ -	₩ 1,858,057,710
AAA	1,075,200,083	-	-	1,075,200,083
	<u>₩ 2,933,257,793</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ 2,933,257,793</u>

	December 31, 2020			
	12 month expected credit losses	Lifetime expected credit losses	Impaired loans Lifetime expected credit losses	Total
AAA	₩ 310,661,661	₩ -	₩ -	₩ 310,661,661
AA- to AA+	35,044,460	-	-	35,044,460
A-To A+	19,955,399	-	-	19,955,399
	<u>₩ 365,661,520</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ 365,661,520</u>

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47.1.5. Details of the credit soundness of due from banks and debt securities as of December 31, 2021 and 2020 are as follows (in thousands of Korean won):

	December 31, 2021		December 31, 2020	
Bonds:				
Government, public and specific bonds	₩	10,108,605,326	₩	13,053,893,574
AAA		5,764,238,829		4,783,968,366
AA- to AA+		552,299,423		340,916,067
A- to A+		185,651,299		103,533,039
Less A-		548,723,083		141,394,896
Unrated		44,787,129		8,858,265
		<u>17,204,305,089</u>		<u>18,432,564,207</u>
CP:				
A1		2,009,704,171		228,094,374
A2 to A3		28,194,360		7,404,863
		<u>2,037,898,531</u>		<u>235,499,237</u>
Loans and notes discounted :				
AAA		219,528		-
AA- to AA+		59,911,272		8,408,019
A- to A+		455,981,630		319,058,334
BBB- to BBB+		815,334,607		651,445,136
BB- to BB+		32,289,280		109,938,224
Unrated		49,102,746		58,061,692
		<u>1,412,839,063</u>		<u>1,146,911,405</u>
Hybrid financial instruments, etc:				
AAA		40,196,160		
AA- to AA+		465,014,523		191,028,615
A- to A+		64,133,916		45,779,994
BBB- to BBB+		50,455,712		20,120,784
BB- to BB+		1,910,603		-
B- to B+		12,512,244		247,382
Under CCC		3,541,666		-
Unrated		1,019,385,899		145,010,057
		<u>1,657,150,723</u>		<u>402,186,832</u>
	₩	<u>22,312,193,406</u>	₩	<u>20,217,161,681</u>

(*) The Group surveyed the credit soundness of debt securities in financial assets. In case of other financial assets, credit risk is not taken into consideration or the rating of credit soundness cannot be calculated due to their nature of business.

47.1.6. Details of industrial credit exposure classified by Korean Standard Industrial Classification as of December 31, 2021 and 2020 consist of the following (in thousands of Korean won):

	December 31, 2021					
	Finance and insurance	Manufacturing	Wholesale and retailing	Construction	Others	Total
Cash and due from banks	₩ 3,817,859,156	₩ -	₩ -	₩ -	₩ -	₩ 3,817,859,156
Financial assets measured at FVTPL (*)	9,263,534,874	901,482,118	49,260,056	27,891,851	12,070,024,507	22,312,193,406
Derivative instrument assets (*)	264,016,055	-	-	-	-	264,016,055
Financial assets measured at FVOCI (*)	1,972,379,901	-	-	-	960,877,892	2,933,257,793
Loans	6,138,955,898	160,669,398	218,576,737	643,061,714	7,315,317,856	14,476,581,603
Lease assets	72,267,051	37,202,153	83,751,323	16,803,063	833,554,118	1,043,577,708
Other financial assets	1,321,559,265	772,124	1,336,008	1,165,788	695,349,409	2,020,182,594
	<u>₩ 22,850,572,200</u>	<u>₩ 1,100,125,793</u>	<u>₩ 352,924,124</u>	<u>₩ 688,922,416</u>	<u>₩ 21,875,123,782</u>	<u>₩ 46,867,668,315</u>

47.1.6. Details of industrial credit exposure classified by Korean Standard Industrial Classification as of December 31, 2021 and 2020 consist of the following (in thousands of Korean won) (cont'd):

(*) The Group excluded financial assets below, since they had no significant credit risk.

- Financial assets held-for-trading: Stocks and collective investment securities
- Financial assets designated at fair value through profit and loss: Reserve for claims of customers' deposits (trust)
- Financial assets available-for-sale: Stocks, collective investment securities, foreign currency securities and others
- Derivative financial assets: Options purchased of stock

	December 31, 2020						Total
	Finance and insurance	Manufacturing	Wholesale and retailing	Construction	Others		
Cash and due from banks	₩ 2,222,507,308	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 2,222,507,308
Financial assets measured at FVTPL (*)	5,991,515,264	128,844,054	12,880,480	29,770,506	14,054,151,377		20,217,161,681
Derivative instrument assets (*)	318,069,491	-	-	-	-		318,069,491
Financial assets measured at FVOCI (*)	365,661,520	-	-	-	-		365,661,520
Loans	4,266,676,052	298,864,756	97,762,588	787,101,424	5,932,561,729		11,382,966,549
Lease assets	59,925,738	40,294,604	84,151,068	16,144,173	715,502,957		916,018,540
Other financial assets	1,072,658,526	-	-	-	621,908,766		1,694,567,292
	<u>₩ 14,297,013,899</u>	<u>₩ 468,003,414</u>	<u>₩ 194,794,136</u>	<u>₩ 833,016,103</u>	<u>₩ 21,324,124,829</u>		<u>₩ 37,116,952,381</u>

(*) The Group excluded financial assets below, since they had no significant credit risk.

- Financial assets held-for-trading: Stocks and collective investment securities
- Financial assets designated at fair value through profit and loss: Reserve for claims of customers' deposits (trust)
- Financial assets available-for-sale: Stocks, collective investment securities, foreign currency securities and others
- Derivative financial assets: Options purchased of stock

47.2. Liquidity risk

47.2.1. Procedures of the liquidity risk management

The Group defines liquidity risk as the possibility of incurring losses due to a temporary shortage in funds caused by a maturity mismatch or an unexpected capital outlay. Liquidity risk soars when funding rates rise, or assets are sold below a normal price, or a good investment opportunity is missed. The purpose to manage liquidity risk is to early identify the potential risk factors upon raising and operating the Group's funds and to obtain a stable revenue base maintaining an appropriate level of the Group's liquidity by systematically managing the risk.

The targets of liquidity risk management are all assets and liabilities outstanding in the Group's statements of financial position.

The Group's principles of the liquidity risk management are as follows:

- Set up and comply with tolerable limits to liquidity risk.
- Prepare insufficient liquidity by forecasting cash requirements regularly.
- Establish an emergency plan against a liquidity crisis to prepare for an unexpected liquidity risk.
- Evaluate and manage the effect of a large amount of money that is loaned out, invested, or procured on liquidity risks.

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47.2.2. The residual maturity of non-derivative financial instruments as of December 31, 2021 and 2020 consists of the following (in thousands of Korean won):

	December 31, 2021							Total
	Within 1 week	After 1 week ~ but no later than 1 month	After 1 month~ but no later than 3 months	After 3 months~ but no later than 6 months	After 6 months~ but no later than 1 year	After 1 year		
Assets:								
Cash and due from banks	₩ 2,298,917,566	₩ -	₩ 40,000,000	₩ 200,000,000	₩ 150,000,000	₩ 1,128,941,590	₩ 3,817,859,156	
Financial assets measured at FVTPL	11,300,909,114	1,910,686,111	397,995,692	805,270,435	201,576,986	7,695,755,068	22,312,193,406	
Financial assets measured at FVOCI	1,494,740,167	518,301,558	-	-	-	920,216,068	2,933,257,793	
Loans (*1)	2,160,948,572	861,671,356	934,512,154	934,841,923	3,699,182,141	5,885,425,457	14,476,581,603	
Lease assets	2,177,018	4,320,927	12,945,795	29,222,032	66,355,775	928,556,161	1,043,577,708	
Other financial assets (*2)	1,676,766,631	25,015,841	256,762,319	8,817,479	12,932,293	39,888,031	2,020,182,594	
	<u>₩ 18,934,459,068</u>	<u>₩ 3,319,995,793</u>	<u>₩ 1,642,215,960</u>	<u>₩ 1,978,151,869</u>	<u>₩ 4,130,047,195</u>	<u>₩ 16,598,782,375</u>	<u>₩ 46,603,652,260</u>	
Liabilities:								
Deposits (*2)	₩ 2,397,016,407	₩ -	₩ -	₩ 64,291,408	₩ 90,416,342	₩ 12,883,449	₩ 2,564,607,606	
Financial liabilities held-for- trading	26,476,013	170,090,603	85,429,948	296,579,049	2,068,470,332	1,612,765,028	4,259,810,973	
Financial liabilities designated at fair value through profit or loss (*3)	-	282,814,071	596,024,797	53,906,392	2,140,130,744	2,976,526,413	6,049,402,417	
Borrowings	9,347,608,968	3,427,727,694	921,370,750	926,654,298	4,303,773,788	3,867,180,057	22,794,315,555	
Debentures	70,000,000	1,035,490,000	1,903,070,000	1,088,000,000	950,000,000	4,334,000,000	9,380,560,000	
Lease liabilities (*2)	-	526,329	1,639,177	498,008	7,973,712	22,934,178	33,571,404	
Other financial liabilities	1,315,483,934	23,936,927	186,419,997	15,001,757	419,598,536	609,559,506	2,570,000,657	
	<u>₩ 13,156,585,322</u>	<u>₩ 4,940,585,624</u>	<u>₩ 3,693,954,669</u>	<u>₩ 2,444,930,912</u>	<u>₩ 9,980,363,454</u>	<u>₩ 13,435,848,631</u>	<u>₩ 47,652,268,612</u>	

(*1) Deferred loan fees and present value discounts are excluded from loans.

(*2) Present value discounts of other financial assets, lease liabilities and deposits are excluded.

(*3) The credit risk assessment adjustment for financial liabilities designated at fair value through profit or loss and Day 1 profit or loss adjustment are excluded.

(*4) Commitments mentioned in Note 39-3 are the expected maximum exposure which the Group may have to pay in accordance with the contracts in the future. The Group expects that the actual payment will be less than the maximum exposure according to its past transactions and the nature of the commitments. It is difficult for the Group to reasonably estimate the actual timing, amount and probability of settlement of the commitments.

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47.2.2. The residual maturity of non-derivative financial instruments as of December 31, 2021 and 2020 consists of the following (in thousands of Korean won) (cont'd) :

	December 31, 2020							Total
	Within 1 week	After 1 week ~ but no later than 1 month	After 1 month~ but no later than 3 months	After 3 months~ but no later than 6 months	After 6 months~ but no later than 1 year	After 1 year		
Assets:								
Cash and due from banks	₩ 1,764,081,915	₩ 12,529,918	₩ 140,000,000	₩ 50,000,000	₩ 150,000,000	₩ 105,895,475	₩ 2,222,507,308	
Financial assets measured at FVTPL	10,562,441,486	3,183,046,500	220,092,196	51,195,045	101,564,126	6,098,822,328	20,217,161,681	
Financial assets measured at FVOCI	85,964	76,125,000	19,955,400	35,044,460	-	234,450,696	365,661,520	
Loans (*1)	1,721,771,393	153,444,551	1,346,702,621	657,441,840	1,965,909,704	5,537,696,440	11,382,966,549	
Lease assets	2,887,068	5,255,727	15,425,281	32,331,592	66,919,188	793,199,684	916,018,540	
Other financial assets (*2)	1,458,288,213	16,771,466	146,906,868	8,194,727	13,811,685	50,594,333	1,694,567,292	
	<u>₩ 15,509,556,039</u>	<u>₩ 3,447,173,162</u>	<u>₩ 1,889,082,366</u>	<u>₩ 834,207,664</u>	<u>₩ 2,298,204,703</u>	<u>₩ 12,820,658,956</u>	<u>₩ 36,798,882,890</u>	
Liabilities:								
Deposits (*2)	₩ 1,667,165,549	₩ -	₩ 52,056,795	₩ 142,348,450	₩ 85,587,550	₩ 7,716,622	₩ 1,954,874,966	
Financial liabilities held-for-trading	25,563,336	67,999,882	420,178,157	624,433,664	2,041,419,455	1,142,670,786	4,322,265,280	
Financial liabilities designated at fair value through profit or loss (*3)	-	150,257,008	453,355,455	91,587,845	131,810,652	2,260,966,464	3,087,977,424	
Borrowings	7,465,552,091	4,444,676,053	1,667,027,920	996,325,909	897,513,823	2,699,775,670	18,170,871,466	
Debentures	-	864,523,000	894,050,000	1,059,800,000	1,590,600,000	3,904,000,000	8,312,973,000	
Lease liabilities	-	490,471	951,030	174,077	6,749,666	23,842,611	32,207,855	
Other financial liabilities	1,363,996,536	18,346,695	223,469,548	14,984,493	370,852,424	412,091,118	2,403,740,814	
	<u>₩ 10,522,277,512</u>	<u>₩ 5,546,293,109</u>	<u>₩ 3,711,088,905</u>	<u>₩ 2,929,654,438</u>	<u>₩ 5,124,533,570</u>	<u>₩ 10,451,063,271</u>	<u>₩ 38,284,910,805</u>	

(*1) Deferred loan fees and present value discounts are excluded from loans.

(*2) Present value discounts of other financial assets, lease liabilities and deposits are excluded.

(*3) The credit risk assessment adjustment for financial liabilities designated at fair value through profit or loss and Day 1 profit or loss adjustment are excluded.

(*4) Commitments mentioned in Note 39-3 are the expected maximum exposure which the Group may have to pay in accordance with the contracts in the future. The Group expects that the actual payment will be less than the maximum exposure according to its past transactions and the nature of the commitments. It is difficult for the Group to reasonably estimate the actual timing, amount and probability of settlement of the commitments.

Non-derivative financial instruments of consolidated companies with marketability were classified within one week of maturity. Non-marketable non-derivative financial instruments have been classified according to contractual residual maturity.

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47.2.3. The residual maturity of derivative financial instruments as of December 31, 2021 and 2020 consists of the following (in thousands of Korean won):

	December 31, 2021						Total
	Within 1 week	After 1 week ~ but no later than 1 month	After 1 month~ but no later than 3 months	After 3 months~ but no later than 6 months	After 6 months~ but no later than 1 year	After 1 year	
Exchange-traded derivatives	₩ 184,133	₩ (207,902)	₩ (32,292,172)	₩ (2,524,826)	₩ (38,771,782)	₩ (47,148,666)	₩ (120,761,215)
Over-the-counter derivatives (*):							
Interests	-	114,811	1,686,954	1,654,342	21,240,020	15,435,090	40,131,217
Currency	(1,150,072)	(5,512,587)	594,693	(7,667,306)	(3,332,377)	6,620,829	(10,446,820)
Stock	(638)	(31,950)	(31,680)	17,714	60,288	15,888,953	15,902,687
Others	(6,748,932)	-	100,950,402	(6,886,746)	(35,054,372)	(242,953,438)	(190,693,086)
	(7,899,642)	(5,429,726)	103,200,369	(12,881,996)	(17,086,441)	(205,008,566)	(145,106,002)
	₩ (7,715,509)	₩ (5,637,628)	₩ 70,908,197	₩ (15,406,822)	₩ (55,858,223)	₩ (252,157,232)	₩ (265,867,217)

(*) It corresponds to the amount before considering the credit risk adjustment and the deferred initial transaction date profit and loss adjustment.

	December 31, 2020						Total
	Within 1 week	After 1 week ~ but no later than 1 month	After 1 month~ but no later than 3 months	After 3 months~ but no later than 6 months	After 6 months~ but no later than 1 year	After 1 year	
Exchange-traded derivatives	₩ -	₩ (21,494)	₩ (13,156,033)	₩ (689,388)	₩ (25,063,732)	₩ 22,402,027	₩ (16,528,620)
Over-the-counter derivatives (*):							
Interests	-	567,125	418,378	34,147,427	51,083	7,609,949	42,793,962
Currency	59,358	11,378,105	21,639,153	(15,660,852)	19,057,961	8,962,326	45,436,051
Stock	24,350	2,918	(182,092)	-	2,117,866	5,626,665	7,589,707
Others	4,696,361	(13,330,929)	(15,426,616)	(7,357,487)	(565,881)	(12,557,138)	(44,541,690)
	4,780,069	(1,382,781)	6,448,823	11,129,088	20,661,029	9,641,802	51,278,030
	₩ 4,780,069	₩ (1,404,275)	₩ (6,707,210)	₩ 10,439,700	₩ (4,402,703)	₩ 32,043,829	₩ 34,749,410

(*) It corresponds to the amount before considering the credit risk adjustment and the deferred initial transaction date profit and loss adjustment.

47.3. Market risk

Market risk is the risk that the fair value or future cash flows of financial instruments will fluctuate due to the changes in market variables such as interest rates, equity prices, and exchange ratios in the market and so on.

The purposes of market risk management are to control the tolerable loss-limit of assets and liabilities arising from the changes in market variables such as interest rates, foreign exchanges and equity prices. The scope of market risk management is marketable securities which are traded for operating the Group's properties, net foreign exchange positions, derivatives, other assets and liabilities embedded with market risks and off-balances. Significant market risks are interest rate risk, foreign exchange risk and equity price risk as of the reporting date.

The Group manages and controls the market risk arising from the changes of market variables within adequate level by measuring and monitoring the risk exposures on a regular basis.

47.3.1. Trading positions

The trading positions include positions of interest rate, equity price, commodity and foreign exchange held for trading purpose:

- (i) Financial instruments for the purpose of acquiring the differences incurred due to held-for-trading or price fluctuations
- (ii) Financial instruments for the purpose of hedging risks
- (iii) Financial instruments for the purpose of acquiring arbitrages
- (iv) Financial instruments for the purpose of acquisition, brokerage, and market-making

The Group's principles to manage the market risk of its trading positions are to measure its market risk status on a regular basis and to establish and comply with the various market risk limits. The Group analyzes whether the return against risk is appropriate by reviewing its profit and risk on a regular basis.

47.3.2. Value at risk (VaR)

Value at Risk ("VaR") is a primary method that manages and measures the degree of market risks of the trading portfolio subject to exposure, which estimates the potential loss of the trading portfolio that is not expected to be exceeded if the current market risk positions were to be held unchanged for one day. The Group calculates VaR for a standard 10 days in the 99% confidence level. In addition, to account for the method's limited use, a stress test is performed in order to measure the extent of the loss in extreme cases.

47.3.3. The types of Market VaR as of December 31, 2021 and 2020 consist of the following (*in thousands of Korean won*):

	December 31, 2021		Average	Max	Min	December 31, 2020	
Interest rates risk	₩	34,684,495	₩ 39,762,571	₩ 55,321,380	₩ 30,692,854	₩	37,112,650
Stock price risk		98,720,369	90,880,568	124,372,711	73,230,479		31,896,454
Foreign exchange rates risk		8,749,132	8,760,888	12,728,108	1,797,116		23,885,577
Total risk	₩	<u>142,153,996</u>				₩	<u>92,894,681</u>

47.3.4. Non-trading position

Interest rate risk of non-trading position is the risk of loss when interest rate fluctuates at a disadvantage to assets and liabilities sensitive of interest rate. This is caused by the mismatch between the maturity structure of interest-bearing assets and liabilities and the interest rate revision cycle. Meritz Capital Co., Ltd., a subsidiary, maintains interest rate risk management on all interest-bearing assets, liabilities and transactions except for those subject to price fluctuation risk management.

The interest rate VaR is an estimated maximum loss of net asset due to adverse changes of interest rate. The interest rate VaR of non-trading position of Meritz Capital Co., Ltd., a subsidiary, calculated by standard method as of December 31, 2021 and 2020 are as follows (*in thousands of Korean won*):

	December 31, 2021		December 31, 2020	
Interest rate VaR	₩	42,420,481	₩	56,686,812

47.4. Operational risk

Operational risk is the risk of loss arising from systems failure, human error, fraud or external events. Risks related to strategy or damaging reputation are excluded but legal or regulatory implications are identified as operational risks. Operational risk includes non-financial risks related to losses due to internal operational problems and due to externalities such as natural disasters and terrorist attacks. Operational risk does not have a direct correlation with income and the Group needs to mitigate such risk through internal controls and insurance. The Group measures the operational risk exposures using the approaches suitable to the Financial Investment Industry Regulations.

47.5. Capital management

The Group evaluates the internal capital adequacy by calculating net capital ratio (“NCR”) in accordance with the *Regulation on Financial Investment Services* and detailed enforcement regulations in order to have adequate capital and comply with supervisory regulation.

NCR as of December 31, 2021 and 2020 consist of the following (*in thousands of Korean won*):

	December 31, 2021	December 31, 2020
I. Net capital for business	₩ 4,294,130,916	₩ 4,109,298,433
II. Total risk amount	2,373,587,982	1,875,307,925
III. Surplus capital(I - II)	1,920,542,934	2,233,990,508
IV. Regulatory capital required (*)	134,610,000	134,610,000
V. NCR(III/IV)	1,426.75%	1,659.60%

(*) Own capital required is calculated as 70% of legal capital (₩192.3 billion).

48. Uncertainty in the economic environment

Due to concerns about the spread of COVID-19 since 2020, the world, including Korea, is facing a difficult economic situation and uncertainty over the prolonged situation. Financial investment companies are sensitive to domestic and international economic conditions and various variables. In the past, the transaction value was the main variable in the business structure centered on simple investment brokerage. Recently, various external environmental factors such as interest rates, exchange rates, global stock indices, and domestic and overseas real estate market are playing a major role in the performance of financial investment companies. In particular, economic slowdown may become visible in the future due to the impact of the spread of COVID-19.

Therefore, the expansion of volatility in domestic and overseas economic conditions due to rapid changes in the stock market and uncertainty in the direction of monetary policy in major developed countries leads to a decrease in liquidity, increased possibility of capital evacuation, and a decline in investment sentiment, which negatively affects overall financial investment business performance and profitability. The Group is closely monitoring the impact of COVID-19, but the ultimate impact on the Group's financial position and performance cannot be predicted at this time.

49. Approval of the financial statements

The consolidated financial statements were approved by the Board of Directors on January 27, 2022 and expected to approve at the general shareholder's meeting on March 17, 2022.