

Hana Financial Group Inc. and its subsidiaries

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

Hana Financial Group Inc. and its subsidiaries

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Independent auditor's report

The Shareholders and Board of Directors Hana Financial Group Inc.

Opinion

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

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 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 ("KIFRS").

Basis for opinion

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

Emphasis of matter

Impact of COVID-19

The following matter is considered relevant for users in making reasonable decisions based on the accompanying consolidated financial statements. As Note 31-8 of the consolidated financial statements describes, in order to prevent the spread of COVID-19, various prevention and control measures, including restrictions on traveling are being implemented worldwide, and as a result, the global economy has been extensively affected. The Group is concerned about the global economic difficulties and prolonged conditions caused by COVID-19, and is periodically monitoring the uncertainties that COVID-19 could have on its operations and financial status. Our opinion is not modified in respect of this matter.

Restatement of the consolidated financial statements

As a matter that does not affect the audit opinion, users of audit report should pay attention to Note 3-37 of the consolidated financial statements. As explained in Note 3-37, total assets and total liabilities of the consolidated financial statements as of December 31, 2020 were understated by ₩633,744 million and operating income and operating expenses of the consolidated financial statements for the year ended December 31, 2020 were understated by ₩156 million. The attached comparative financial statements as of and for the year ended December 31, 2020 were restated reflecting these modifications.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion

thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

1) Assessments of loss allowances on loan receivables measured at amortized cost

As discussed in Note 3 of the consolidated financial statements ('Significant accounting policies and basis of preparation'), the Group recognizes loss allowance based on an assessment of the expected credit loss impairment model for loan receivables measured at amortized cost.

The expected credit loss impairment model requires a loss allowance for 12-month expected credit loss or life-time expected credit loss to be recognized based on changes in credit risk subsequent to the initial recognition of the financial assets.

Management's significant judgment is involved in determining factors such as the level of increase in credit risk to assess loss allowance, estimation of risk factors such as probability of default and loss given default, future cash flows and discount rates related to the estimation of forward-looking information and individual assessment. Therefore, significant attention was placed on loss allowances on loan receivables measured at amortized cost and identified it as a key audit matter

In Note 16 to the consolidated financial statements of the Group, loan receivables measured at amortized cost and loss allowances based on the expected credit loss impairment model amount to ₩337,349,273 million and ₩1,914,402 million, respectively, as of December 31, 2021. Our audit procedures performed for management's assertion on the measurement of loss allowances on loan receivables measured at amortized cost are as follows:

- We performed analytical procedures on the appropriateness of stage classification, inspected documentation and tested methodology.
- We involved a specialist to inspect documentation and perform testing of the estimation methodology of probability of default and loss given default.
- We involved a specialist to inspect documentation and perform testing of the estimation methodology of forward-looking information.
- We performed inquiries, inspected documentation and performed testing of the future cash flow estimation and discount rate used to calculate loss allowances on individual basis of assessment.

2) Assessment of fair value of financial instruments measured at FVTPL, financial assets measured at FVOCI and derivatives categorized as Level 3 of the fair value hierarchy

As discussed in Note 3 of the consolidated financial statements ('Significant accounting policies and basis of preparation'), the Group categorizes the fair value measurement of financial instruments into Level 1, 2 or 3 based on the extent at which inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety. If the input used in the fair value measurement are significant and unobservable, the financial instruments are categorized as Level 3 of the fair value hierarchy.

As discussed in Note 5 of the consolidated financial statements, the Group uses a variety of valuation techniques and variables, the fair value measurement may vary significantly depending on management's judgement on the use of valuation techniques and unobservable inputs, thus a high level of uncertainty exists in such accounting estimates, Therefore, significant attention was placed on the fair value measurement of financial instruments at Level 3 of the fair value hierarchy and identified it as a key audit matter.

Financial assets measured at FVTPL (including derivative assets held for trading), financial assets measured at FVOCI, financial liabilities measured at FVTPL (including derivative liabilities held for trading), financial liabilities designated as measured at FVTPL and derivative liabilities used for hedging

categorized at Level 3 of the fair value hierarchy amount to ₩11,187,189 million, ₩761,557 million, ₩855,358 million, ₩6,829,288 million, and ₩9,124 million, respectively, as of December 31, 2021. Our audit procedures performed for management's assertion on the fair value measurement of financial instruments measured at level 3 of the fair value hierarchy are as follows:

- We inspected documentation to evaluate whether the fair value hierarchy classification of financial instruments by type of financial instrument is categorized based on the characteristics of significant input variables used in the fair value measurement.
- We performed inquiries and inspected documentation to evaluate the professional competence and independence of external valuers engaged by the Group to measure fair value.
- We performed inquiries, inspected documentation and performed testing of assumptions and methodology of fair value measurement on unlisted equity securities.
- We involved a specialist to perform inquiries, inspect documentation and perform testing of hybrid financial instruments and derivatives.

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

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

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

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

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

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

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

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



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and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

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

March 10, 2022

This audit report is effective as of March 10, 2022, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditor's report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report

Hana Financial Group Co., Ltd. and its subsidiaries

Consolidated Financial Statements
December 31, 2021 and 2020
(With the Independent Auditor's Report Thereon)

Consolidated Statements of Financial Position

As of December 31, 2021 and 2020

Hana Financial Group Inc. and its subsidiaries

(Korean won in millions)

Accounts	Notes	December 31, 2021	December 31, 2020
Assets			
I. Cash and due from banks	5, 6, 7, 9, 11, 56	31,406,596	27,529,815
II. Financial assets measured at FVTPL	5, 6, 7, 9, 12, 15	38,718,285	43,133,717
III. Financial assets measured at FVOCI	5, 6, 7, 9, 13, 15, 17	39,473,529	36,165,388
IV. Securities measured at amortized cost	5, 6, 7, 9, 14, 15, 17	23,769,017	18,376,657
V. Loans measured at amortized cost	5, 6, 7, 9, 16	337,349,273	308,791,815
VI. Derivative assets used for hedging	5, 6, 7, 9, 17	77,507	141,463
VII. Investments in associates and joint ventures	18	3,282,042	2,731,378
VIII. Property and equipment	15, 19, 21	3,539,669	3,304,736
IX. Investment properties	20	1,055,719	899,346
X. Intangible assets	22	748,337	739,138
XI. Deferred tax assets	52	302,030	161,523
XII. Current income tax assets		27,515	29,898
XIII. Non-current assets held for sale	23	412,594	82,506
XIV. Other assets	5, 6, 7, 9, 24	22,283,157	18,859,666
Total assets		502,445,270	460,947,046
Liabilities			
I. Financial liabilities measured at FVTPL	5, 6, 7, 9, 17, 25	6,772,300	10,859,818
II. Financial liabilities designated as measured at FVTPL	5, 6, 7, 9, 26	9,104,623	9,802,701
III. Deposits	5, 6, 7, 9, 27	325,149,095	295,509,614
IV. Borrowings	5, 6, 7, 9, 28	30,261,598	26,494,316
V. Debentures	5, 6, 7, 9, 29	54,476,161	48,761,838
VI. Derivative liabilities used for hedging	5, 6, 7, 9, 17	118,599	34,737
VII. Net defined benefit liabilities	30	198,020	325,169
VIII. Provisions	31	587,422	555,239
IX. Deferred tax liabilities	52	203,288	175,938
X. Current income tax liabilities		782,822	542,277
XI. Other liabilities	5, 6, 7, 9, 32	39,292,002	36,285,111
Total liabilities		466,945,930	429,346,758
Equity			
I. Issued capital	33	1,501,210	1,501,210
II. Hybrid equity securities	33	2,626,459	2,007,927
III. Capital surplus	33	10,576,587	10,579,945
IV. Capital adjustment	34	(315,606)	(315,030)
V. Accumulated other comprehensive loss	35	(994,227)	(1,001,953)
VI. Retained earnings	36	20,824,212	17,941,584
Equity attributable to equity holder of the parent		34,218,635	30,713,683

Accounts	Notes	December 31, 2021	December 31, 2020
VII. Non-controlling shareholders' equity	1	1,280,705	886,605
Total equity		35,499,340	31,600,288
Total liabilities and equity		502,445,270	460,947,046

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

**Consolidated Statements of Profit or Loss and
Other Comprehensive Income**

For the years December 31, 2021 and 2020

Hana Financial Group Inc. and its subsidiaries

(Korean won in millions)

Accounts	Notes	2021		2020	
I. Net interest income	38, 39		7,437,205		6,439,878
1. Interest income		10,867,491		10,705,196	
2. Interest expense		(3,430,286)		(4,265,318)	
II. Net fees and commission income	38, 40		1,741,717		1,534,183
1. Fees and commission income		2,653,186		2,596,945	
2. Fees and commission expense		(911,469)		(1,062,762)	
III. Net gain on financial instruments measured at FVTPL	38, 41		856,994		595,931
IV. Net gain (loss) on financial instruments designated as measured at FVTPL	38, 42		(67,010)		224,095
V. Net gain on financial instruments measured at FVOCI	38, 43		104,548		358,076
VI. Gain on disposal of financial assets measured at amortized cost	38, 44		76,830		70,168
VII. Gain (loss) on derivative assets used for hedging	38, 45		(51,735)		25,767
VIII. Gain on foreign currencies transactions	38		38,322		286,721
IX. Total operating income			10,136,871		9,534,819
X. Impairment loss on financial assets	38, 46		(533,218)		(870,939)
XI. Net operating income			9,603,653		8,663,880
XII. General and administrative expenses	38, 47		(4,050,460)		(3,917,656)
XIII. Other operating income	38, 48		1,587,197		1,179,797
XIV. Other operating expenses	38, 49		(2,509,294)		(2,089,599)
XV. Operating income			4,631,096		3,836,422
XVI. Non-operating income (loss)			273,829		(107,188)
1. Net gain on valuation of investments in associates and joint ventures	18	130,980		45,668	
2. Other non-operating income	50	558,348		357,532	
3. Other non-operating expenses	51	(415,499)		(510,388)	
XVII. Net income before income tax expense			4,904,925		3,729,234
XVIII. Income tax expenses	52		(1,323,343)		(1,044,356)
XIX. Net income for the year			3,581,582		2,684,878
Equity holders of the parent		3,526,068		2,637,242	
Non-controlling interests	1	55,514		47,636	
XX. Other comprehensive income (loss)			62,539		(156,181)
1. Items that may be reclassified subsequently to profit or loss:		29,176		(156,070)	
Gain (loss) on valuation of debt securities measured at FVOCI		(405,131)		3,009	
Exchange differences on translation of foreign operations, net		292,027		(144,057)	
Changes in capital from valuation of equity method for investments in associates		182,642		(37,134)	
Gain (loss) on valuation of net investment in hedges		(40,788)		26,546	
Gain (loss) on valuation of cash flow hedges		2,234		(3,814)	
Other comprehensive loss on separate accounts		(1,808)		(620)	
2. Items that will not be reclassified subsequently to profit or loss:		33,363		(111)	
Gain on valuation of equity securities measured at FVOCI		18,208		19,730	
Effect of changes in the credit risk of financial liabilities designated at FVTPL		(10,356)		(5,436)	
Gain (loss) on valuation of fair value hedges		(14,138)		10,121	

Accounts	Notes	2021		2020	
Remeasurements of the defined benefit plan		39,649		(24,526)	
XXI. Total comprehensive income for the year attributable to:			3,644,121		2,528,697
Equity holder of the parent		3,570,890		2,495,247	
Non-controlling interests		73,231		33,450	
XXII. Earnings per share	54				
Basic earnings per share (Korean won)			11,819		8,858
Diluted earnings per share (Korean won)			11,819		8,858

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

Consolidated Statements of Changes in Equity

For the years ended December 31, 2021 and 2020

Hana Financial Group Inc. and its subsidiaries

(Korean won in millions)

Accounts	Issued capital	Hybrid equity securities	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Equity attributable to equity holder of the parent	Non-controlling shareholder's equity	Total
As of January 1, 2020	1,501,210	1,244,603	10,582,183	(315,030)	(853,546)	15,965,055	28,124,475	860,298	28,984,773
Annual Dividends	—	—	—	—	—	(466,502)	(466,502)	—	(466,502)
Interim Dividends	—	—	—	—	—	(145,782)	(145,782)	—	(145,782)
Issuance of hybrid equity securities	—	997,654	—	—	—	—	997,654	149,578	1,147,232
Redemption of hybrid equity securities	—	(234,330)	(1,053)	—	—	—	(235,383)	(149,617)	(385,000)
Paid-in capital increases of subsidiaries	—	—	(1,176)	—	—	—	(1,176)	—	(1,176)
Changes in Shares of Subsidiaries	—	—	—	—	—	—	—	7,623	7,623
Dividends on hybrid equity securities	—	—	—	—	—	(54,598)	(54,598)	(14,727)	(69,325)
Reclassification of equity securities measured at FVOCI	—	—	—	—	(6,412)	6,412	—	—	—
Others	—	—	(9)	—	—	(243)	(252)	—	(252)
Subtotal	1,501,210	2,007,927	10,579,945	(315,030)	(859,958)	15,304,342	28,218,436	853,155	29,071,591
Net income for the year	—	—	—	—	—	2,637,242	2,637,242	47,636	2,684,878
Gain on valuation of financial assets measured at FVOCI	—	—	—	—	18,843	—	18,843	3,896	22,739
Exchange differences on translation of foreign operations	—	—	—	—	(126,689)	—	(126,689)	(17,368)	(144,057)
Changes in capital from valuation of equity method for investments in associates	—	—	—	—	(37,068)	—	(37,068)	(66)	(37,134)
Gain on valuation of net investment hedges	—	—	—	—	26,546	—	26,546	—	26,546
Loss on valuation of cash flow hedges	—	—	—	—	(3,242)	—	(3,242)	(572)	(3,814)
Gain on valuation of fair value hedges	—	—	—	—	10,121	—	10,121	—	10,121
Other comprehensive loss on separate accounts	—	—	—	—	(620)	—	(620)	—	(620)
Effect of changes in credit risk on financial liabilities designated as measured at FVTPL	—	—	—	—	(5,436)	—	(5,436)	—	(5,436)
Remeasurement of the net defined benefit plan	—	—	—	—	(24,450)	—	(24,450)	(76)	(24,526)
Total comprehensive income (loss) for the year	—	—	—	—	(141,995)	2,637,242	2,495,247	33,450	2,528,697
As of December 31, 2020	1,501,210	2,007,927	10,579,945	(315,030)	(1,001,953)	17,941,584	30,713,683	886,605	31,600,288

Accounts	Issued capital	Hybrid equity securities	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Equity attributable to equity holder of the parent	Non-controlling shareholder's equity	Total
As of January 1, 2021	1,501,210	2,007,927	10,579,945	(315,030)	(1,001,953)	17,941,584	30,713,683	886,605	31,600,288
Annual Dividends	—	—	—	—	—	(393,611)	(393,611)	—	(393,611)
Interim Dividends	—	—	—	—	—	(204,094)	(204,094)	—	(204,094)
Issuance of hybrid equity securities	—	618,532	—	—	—	—	618,532	353,739	972,271
Redemption of hybrid equity securities	—	—	(165)	—	—	—	(165)	(29,835)	(30,000)
Paid-in capital increases of subsidiaries	—	—	(3,109)	(578)	—	—	(3,687)	17	(3,670)
Changes in Shares of Subsidiaries	—	—	—	—	—	—	—	12,889	12,889
Dividends on hybrid equity securities	—	—	—	—	—	(80,083)	(80,083)	(15,941)	(96,024)
Reclassification of equity securities measured at FVOCI	—	—	—	—	(37,096)	37,096	—	—	—
Others	—	—	(84)	2	—	(2,748)	(2,830)	—	(2,830)
Subtotal	1,501,210	2,626,459	10,576,587	(315,606)	(1,039,049)	17,298,144	30,647,745	1,207,474	31,855,219
Net income for the year	—	—	—	—	—	3,526,068	3,526,068	55,514	3,581,582
Loss on valuation of financial assets measured at FVOCI	—	—	—	—	(386,160)	—	(386,160)	(763)	(386,923)
Exchange differences on translation of foreign operations	—	—	—	—	274,147	—	274,147	17,880	292,027
Changes in capital from valuation of equity method for investments in associates	—	—	—	—	182,658	—	182,658	(16)	182,642
Loss on valuation of net investment hedges	—	—	—	—	(40,788)	—	(40,788)	—	(40,788)
Gain on valuation of cash flow hedges	—	—	—	—	1,899	—	1,899	335	2,234
Loss on valuation of fair value hedges	—	—	—	—	(14,138)	—	(14,138)	—	(14,138)
Other comprehensive loss on separate accounts	—	—	—	—	(1,808)	—	(1,808)	—	(1,808)
Effect of changes in credit risk on financial liabilities designated as measured at FVTPL	—	—	—	—	(10,356)	—	(10,356)	—	(10,356)
Remeasurement of the net defined benefit plan	—	—	—	—	39,368	—	39,368	281	39,649
Total comprehensive income for the year	—	—	—	—	44,822	3,526,068	3,570,890	73,231	3,644,121
As of December 31, 2021	1,501,210	2,626,459	10,576,587	(315,606)	(994,227)	20,824,212	34,218,635	1,280,705	35,499,340

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

Consolidated Statements of Cash Flows

For the years December 31, 2021 and 2020

Hana Financial Group Inc. and its subsidiaries

(Korean won in millions)

Accounts	2021	2020
I. Net cash flows provided by (used in) operating activities	696,230	(7,716,525)
1. Net income before income tax expenses	4,904,925	3,729,234
2. Adjustments to income and expenses:	(7,504,043)	(6,500,120)
Interest expenses	3,430,286	4,265,318
Interest income	(10,867,491)	(10,705,196)
Dividend income	(66,838)	(60,242)
3. Adjustments to non-cash items:	1,829,221	3,192,425
Loss (Gain) on valuation of financial instruments at FVTPL	420,473	(586,784)
Gain on disposal of financial instruments at FVTPL	(42,913)	(31,694)
Net gain on valuation of financial instruments designated at FVTPL	(143,419)	(200,796)
Net gain on transaction of financial instruments measured at FVOCI	(93,754)	(349,746)
Transfer of credit losses on financial assets measured at FVOCI	(64)	3,589
Provision for loan losses on debt securities measured at amortized cost	10,286	7,341
Net loss (gain) on derivative assets used for hedging	50,561	(29,729)
Net loss on foreign currencies transactions	254,606	2,630,421
Net allowance for loans and other assets	522,996	860,009
Depreciation and amortization	768,787	760,800
Share-based compensation expenses	28,712	17,243
Provision for post-employment benefit obligations	194,874	203,736
Net gain on valuation of investments in associates and joint ventures	(130,980)	(45,668)
Other gain relating to property and equipment and intangible assets	(62,272)	(45,879)
Others	51,328	(418)
4. Changes in operating assets and liabilities:	(4,340,698)	(12,652,278)
Due from banks	(4,862,011)	(3,631,457)
Financial assets measured at FVTPL (held-for-trading)	4,638,039	(10,212,514)
Loans measured at amortized cost	(23,112,201)	(25,945,511)
Derivative assets used for hedging	(13,907)	(20,824)
Investments in associates and joint ventures	23,201	32,868
Other assets	(2,757,790)	2,545,194
Financial liabilities measured at FVTPL	(4,098,040)	5,416,452
Financial liabilities designated as measured at FVTPL	(559,541)	(1,591,242)
Deposits	24,942,466	21,341,406
Derivative liabilities used for hedging	(19,034)	24,908
Net defined benefit liabilities	(268,397)	(274,876)
Net provisions	29,918	(39,842)
Other liabilities	1,716,599	(296,840)
5. Cash provided by operating activities:	10,441,547	10,415,722
Interest received	10,374,289	10,356,005

Accounts	2021	2020
Dividend received	67,258	59,717
6. Cash used in operating activities:	(4,634,722)	(5,901,508)
Interest paid	(3,530,628)	(4,796,632)
Income tax paid	(1,104,094)	(1,104,876)
II. Net cash flows provided by (used in) investing activities	(8,931,994)	482,813
Net cash flows from changes in subsidiaries	40,612	(233,358)
Purchase of financial assets measured at FVTPL (other than held-for-trading)	(16,707,654)	(9,765,768)
Proceeds from disposal of financial assets measured at FVTPL (other than held-for-trading)	17,005,226	9,855,389
Purchase of financial assets measured at FVOCI	(21,648,517)	(33,429,603)
Proceeds from disposal of financial assets measured at FVOCI	18,462,270	35,647,659
Purchase of financial assets measured at amortized cost	(10,511,761)	(5,882,068)
Proceeds from disposal of financial assets measured at amortized cost	5,429,969	4,404,982
Acquisition of investment in associates	(402,667)	(545,899)
Proceeds from disposal of investment in subsidiaries	357,122	268,827
Purchase of property and equipment	(1,163,853)	(382,497)
Proceeds from disposal of property and equipment	359,175	226,908
Purchase of investment properties	(171,986)	(19,577)
Proceeds from disposal of investment properties	127,847	461,245
Acquisition of intangible assets	(201,443)	(214,949)
Proceeds from disposal of intangible assets	9,122	2,316
Increase in non-current assets held for sale, net	16,147	11,807
Increase in in guarantee deposit, net	68,397	77,399
III. Net cash flows provided by (used in) by financing activities	6,863,497	8,474,770
Increase of borrowings, net	2,827,521	5,339,390
Issuance of debentures	39,441,225	26,956,209
Redemption of debentures	(35,425,612)	(23,660,633)
Payment of lease liabilities	(224,509)	(249,866)
Dividends payment	(597,705)	(612,284)
Issuance of hybrid equity securities	618,532	997,654
Dividends on hybrid equity securities	(80,083)	(60,933)
Redemption of hybrid equity securities	—	(235,000)
Increase (Decrease) in non-controlling shareholders' equity, net	304,128	(16,995)
Others	—	17,228
IV. Effect of exchange rate changes on cash and cash equivalents	164,574	(393,391)
V. Net increase (decrease) in cash and cash equivalents(I+II+III+IV)	(1,207,693)	847,667
VI. Cash and cash equivalents as of January 1	7,357,241	6,509,574
VII. Cash and cash equivalents as of December 31 (Notes No. 56)	6,149,548	7,357,241

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

Notes to the consolidated financial statements

December 31, 2021 and 2020

Hana Financial Group Inc. and its subsidiaries

1. Company information

The accompanying consolidated financial statements include Hana Financial Group Inc. ("HFG" or the "Company" or the "Parent Company") and its controlled subsidiaries (collectively, the "Group"). General information describing HFG and the Group is provided below.

1-1 HFG

HFG was incorporated on December 1, 2005 under the Financial Holding Companies Act, in exchange for those entities' shares owned by the shareholders of Hana Bank, Hana Financial Investment Co., Ltd. ("HFI"), Hana TI (Formerly Hana I&S), and Hana Institute of Finance ("HIF"). HFG primarily engages in the management of its subsidiaries, which operate in the financial services industry or closely related sectors in the Republic of Korea. The Group's subsidiaries included in and excluded from the consolidation are as follows.

Date of acquisition	Subsidiaries	Notes
October 13, 2006	Hana IB Securities Co., Ltd. ("Hana IB")	Acquired by "HFI" in 2008
April 27, 2007	Hana Capital Co., Ltd. ("Hana Capital")	Acquired by the purchase of common shares
August 10, 2007	Hana HSBC Life Insurance Co., Ltd. ("Hana HSBC Life Insurance")	Acquired by the purchase of common shares
October 31, 2009	Hana SK Card Co., Ltd. ("Hana SK Card")	Established by the spin-off of Hana Bank's credit card business division, merged into Hana Card Co., Ltd in 2014
March 10, 2010	Hana Asset Trust Co., Ltd. ("Hana Asset Trust")	Acquired by the purchase of common shares
February 8, 2012	Hana Savings Bank Co., Ltd. ("Hana Savings Bank")	Established by the purchase and Assumption(P&A) agreement
February 9, 2012	Korea Exchange Bank ("KEB")	Acquired by the purchase of common shares
August 30, 2013	Hana Bancorp, Inc.	Acquired by the purchase of common shares
February 20, 2014	PT Bank KEB	Merged with PT Bank Hana(PT Bank KEB Hana)
	KEB Hana Card	Established by the spin-off of KEB credit card business division, merged

Date of acquisition	Subsidiaries	Notes
September 1, 2014	(formerly, KEB Card)	with Hana SK Card Co., Ltd.
December 1, 2014	Hana SK Card Co., Ltd.	Merged with KEB Hana Card Co., Ltd.
December 15, 2014	KEB Bank(China) Co.,Ltd.	Merged with Hana Bank(China) Co.,Ltd.
September 1, 2015	Hana Bank	Merged with KEB Hana Bank
December 29, 2015	Hana Investors Services Co., Ltd. ("HIS")	Acquired by the purchase of common shares held by Hana Bank
March 28, 2016	Hana Bancorp, Inc.	Sold common shares to KEB Hana Bank
May 26, 2016	Hana Asset Management Co., Ltd.	Acquired by the purchase of common shares held by Hana Asset Trust
August 1, 2016	Hana Futures Co., Ltd.	Merged with "HFI" Co., Ltd.
August 24, 2016	Finnq Inc.	Established by capital investment (Joint Venture)
December 14, 2017	Hana Institute of Finance ("HIF")	Liquidation registration completed
October 4, 2018	Hana Ventures	Established by capital investment
December 3, 2019	Hana F&I, Inc..	Acquired by the purchase of common shares held by Hana Bank
May 27, 2020	Hana Insurance. Co., Ltd. (Formerly, The K Insurance. Co., Ltd)	Acquired by the purchase of common shares
July 19, 2021	Hana Asset Management Asia	Incorporated as a subsidiary

The capital stock amounted to ₩1,021,281 million at the time of establishment. As of December 31, 2021, the capital stock amounted to ₩1,501,210 million due to stock dividends, stock exchanges and capital increase. Also, the Group's common shares were listed on the Korea Exchange (KRX) on December 12, 2005 and the Group's authorized common shares are 800,000,000 shares as of December 31, 2021.

1-2 Scope of consolidation

Details of subsidiaries in scope of consolidation as of the December 31, 2021 are as follows.

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Subsidiaries of HFG:				
Hana Bank	Korea	Banking	100.0	December 31, 2021
HFI	Korea	Financial investments	100.0	December 31, 2021
KEB Hana Card	Korea	Credit card business	85.0	December 31, 2021
Hana Capital	Korea	Installment credit financing	100.0	December 31, 2021
Hana Asset Trust	Korea	Real estate trust	100.0	December 31, 2021
Hana TI	Korea	System development service	100.0	December 31, 2021
Hana Savings Bank	Korea	Mutual savings banking	100.0	December 31, 2021
Hana Life Insurance	Korea	Life insurance	100.0	December 31, 2021
Hana Insurance, Co., Ltd.	Korea	Non-Life insurance	84.6	December 31, 2021
HIS	Korea	Transfer agent	100.0	December 31, 2021
Hana Alternative Asset Management	Korea	Asset management	100.0	December 31, 2021
Hana Ventures	Korea	New Technology Financial business	100.0	December 31, 2021
Hana F&I, Inc..	Korea	Investment and management service for NPL assets backed securities	99.8	December 31, 2021
HANA ASSET MANAGEMENT ASIA	Singapore	Asset management	100.0	December 31, 2021
Hana Alternative BlackRock QIP Trust No.73	Korea	Private investment trust company	33.3	December 31, 2021
Hana Alternative Special Investment Private Trust No.90	Korea	Private investment trust company	67.5	December 31, 2021
Hana Alternative UK Government Office Professional Investors' Private Real Estate Investment Feeder Trust No.1	Korea	Private investment trust company	50.1	December 31, 2021
Hana Alternative Infra Special Investment Private Trust No.3-1	Korea	Private investment trust company	100.0	December 31, 2021
Hana Alternative Infra Special Investment Private Trust No.3-2	Korea	Private investment trust company	100.0	December 31, 2021
Hana Alternative Infra Special Investment Private Trust No.3-3	Korea	Private investment trust company	100.0	December 31, 2021
Hana Alternative Energy Infra Special Asset Fund 3-4	Korea	Private investment trust company	100.0	December 31, 2021
Hana Alternative Special Investment Private Trust No.100	Korea	Private investment trust company	50.0	December 31, 2021
Hana Alternative Special Investment Private Trust No.102	Korea	Private investment trust	44.0	December

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
		company		31, 2021
Hana Alternative Special Investment Private Trust No.108	Korea	Private investment trust company	83.3	December 31, 2021
Hana Alternative Special Investment Private Trust No.123-1 (USD)	Korea	Private investment trust company	100.0	December 31, 2021
Hana Alternative Houston Private Investment Trust No.121	Korea	Private investment trust company	77.9	December 31, 2021
Hana Alternative Special Asset Private Trust No.123-2	Korea	Private investment trust company	50.3	December 31, 2021
Hana Alternative Special Asset Private Trust No.126	Korea	Private investment trust company	30.3	December 31, 2021
Hana Alternative Special Investment Private Trust No.116	Korea	Private investment trust company	89.2	December 31, 2021
Hana Alternative Investment Real Estate Private Trust No.163-1	Korea	Private investment trust company	90.9	December 31, 2021
Hana Private Real Estate Investment Trust No.165	Korea	Private investment trust company	58.0	December 31, 2021
Hana Alternative Investment Land Chip Real Estate Private Trust 68	Korea	Private investment trust company	52.2	December 31, 2021
Hana Ventures New Technology Investment Association No.4	Korea	New Technology Financial business	100.0	December 31, 2021
Hana Ventures New Technology Investment Association No.6	Korea	New Technology Financial business	73.8	December 31, 2021
Hana Ventures New Technology Investment Association No.7	Korea	New Technology Financial business	100.0	December 31, 2021
HANA Alternative Wando Geum-il Wind Power Infra Special Asset No.1	Korea	Private investment trust company	66.7	December 31, 2021
Hana Special New Deal National Representative Growth Private Trust	Korea	Private investment trust company	100.0	December 31, 2021
Hana Alternative Frontier Private Investment Trust No.1	Korea	Private investment trust company	67.60	December 31, 2021
Hana Alternative Private Real Estate Investment Trust No.183-1	Korea	Private investment trust company	45.30	December 31, 2021
Hana Alternative Private Real Estate Investment Trust No.119	Korea	Private investment trust company	40.20	December 31, 2021
Specified Money Trust (*2)	Korea	Specified money trust	-	December 31, 2021
Subsidiaries of Hana Bank:				
Hana Bank (China) Co., Ltd.	China	Financial business	100.0	December 31, 2021
KEB Hana Bank Canada	Canada	Financial business	100.0	December 31, 2021
KEB Hana Bank Germany	Germany	Financial business	100.0	December 31, 2021
PT Bank KEB Hana	Indonesia	Financial business	69.0	December 31, 2021
Banco KEB Hana do Brazil S. A.	Brazil	Financial business	100.0	December 31, 2021
KEB Hana NY Financial Corp.	U.S.	Financial business	100.0	December 31, 2021
KEB Hana LA Financial Corp.	U.S.	Financial business	100.0	December 31, 2021
KEB Hana Global Finance	Hong Kong	Financial business	100.0	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
KEB Hana Russia	Russia	Financial business	99.9	December 31, 2021
KEB Hana Mexico	Mexico	Financial business	99.9	December 31, 2021
Hana Bancorp, Inc.	U.S.	Financial business	90.6	December 31, 2021
GLN International Co., Ltd.	Korea	Other financial business	100.0	December 31, 2021
UBS Hana Power Private equity investment trust 21 [Bond]	Korea	Private investment trust company	100.0	December 31, 2021
Hyundai Trust PEF Invest 16 [Bond]	Korea	Private investment trust company	100.0	December 31, 2021
Kyobo Axa Tomorrow Private Equity KH-1 [Bond]	Korea	Private investment trust company	100.0	December 31, 2021
DGB Leading Solution Private Bond 143 (Previously, DGB Leading Solution PEF Invest Trust 143)	Korea	Private investment trust company	100.0	December 31, 2021
Sevenstar Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Marine Solution Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Chungangstar Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Display First Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Ocean Betts The First Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana H in the holdings 1st LLC (*3)	Korea	Other financial business	–	December 31, 2021
BEST ONE Q 1st (*3)	Korea	Other financial business	–	December 31, 2021
H-Plus 1st, L.L.C. (*3)	Korea	Other financial business	–	December 31, 2021
Hana CK 1st Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Netoneq 1st L.L.C (*3)	Korea	Other financial business	–	December 31, 2021
DONGAM TOWER 1st Co.,Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana H in the holdings 2nd L.L.C (*3)	Korea	Other financial business	–	December 31, 2021
PIOTOWER1st, LLC (*3)	Korea	Other financial business	–	December 31, 2021
KSPARTNERSHIP 1st 2020, INC (*3)	Korea	Other financial business	–	December 31, 2021
HEONEQ1st, LLC (*3)	Korea	Other financial business	–	December 31, 2021
HCONEQ1st, LLC (*3)	Korea	Other financial business	–	December 31, 2021
H Hotel ONEQ 1st, LLC (*3)	Korea	Other financial business	–	December 31, 2021
DPS 2nd, Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Bbq 1q 1st, LLC (*3)	Korea	Other financial business	–	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Skoffice 1q 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
Cleanenergy 1q 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
HANA DL First Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
HANA TERMINUS First Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Hana 1Q Startup Investment Fund	Korea	Other financial business	98.0	December 31, 2021
Hana 1Q Startup Investment Fund	Korea	Other financial business	90.9	December 31, 2021
THE HAM ONEQ 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
HANA BAY 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
HANA I.S 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
HANA I.G 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
GRAND ONEQ 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
THE MIRAE ONEQ 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
DONG DAEGU TERMINAL 2nd. LLC (*3)	Korea	Other financial business	–	December 31, 2021
KENDALL NO.9 1st. LLC (*3)	Korea	Other financial business	–	December 31, 2021
Hana Double H 1Q 2nd Co.,Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Double H 1Q 3rd Co.,Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Trust accounts guaranteeing the repayment of principal	Korea	Trust account	–	December 31, 2021
Subsidiaries of Hana Bancorp, Inc:				
KEB Hana Bank USA	U.S.	Banking	100.0	December 31, 2021
Subsidiaries of HFI :				
Hana the First Private Equity Fund	Korea	Private equity fund	48.9	December 31, 2021
Hana Daol Land Chip Heungdeok Real Estate Private Fund 35	Korea	Private investment trust company	100.0	December 31, 2021
Hana Equity Investment Management (Shenzhen) Co., Ltd (Formerly, Hana Global Investment Consulting Co.,Ltd)	China	Investment consulting	100.0	December 31, 2021
Hana Land Chip Houston Real Estate Private Fund 59	Korea	Private investment trust company	100.0	December 31, 2021
Hana the Third Private Equity Fund	Korea	Private equity fund	35.0	December 31, 2021
Hana New Technology Fund No.1	Korea	Private equity fund	50.0	December 31, 2021
Citizenfyu 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Portfolio 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Yellow Balloon 3rd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
YDL 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Areca 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Charlemont Exchange (*3)	Korea	Other financial business	–	December 31, 2021
Centaur First Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Ocean 1st (*3)	Korea	Other financial business	–	December 31, 2021
Hana Formula-E Private Special Asset Fund 114	Korea	Private investment trust company	99.5	December 31, 2021
KB Spain Solar Energy Private Special Asset Fund	Korea	Private investment trust company	96.8	December 31, 2021
KB Bonaccord Private Fund(FOFS)	Korea	Private investment trust company	99.9	December 31, 2021
KB Mobility Solution Private Special Asset Fund 1	Korea	Private investment trust company	99.9	December 31, 2021
San Jose Real 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
GIF Rocinante Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana US Emerging Office Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
AIP Energy Infrastructure Specialized Privately Placed Fund Trust #2	Korea	Private investment trust company	98.4	December 31, 2021
Hana Private Real Estate Investment Trust No.130	Korea	Private investment trust company	100.0	December 31, 2021
Capstone EU Private Investment Trust No. 12 (Previously, DS Networks Private Alternative Investment Trust 2)	Korea	Private investment trust company	100.0	December 31, 2021
HERITAGE US Manhattan Qualified Investors Real Estate Private Investment Trust No.2 (USD)	Korea	Private investment trust company	99.8	December 31, 2021
Shinhan AIM Infrastructure Fund No.6-2	Korea	Private investment trust company	100.0	December 31, 2021
K-Reits Specialized Private Investment Trust No.23	Korea	Private investment trust company	99.6	December 31, 2021
Shinhan AIM Infrastructure Fund No.6-A	Korea	Private investment trust company	99.3	December 31, 2021
KAIM Global Value Specialized Private Investment Trust No.1	Korea	Private investment trust company	99.9	December 31, 2021
AIP Energy Transport Infrastructure Specialized Privately Placed Fund Trust #4	Korea	Private investment trust company	99.9	December 31, 2021
Hana Trust Global Reit One Co ., Ltd	Korea	Real estate management	100.0	December 31, 2021
Hana Global New Technology Fund No.1	Korea	Private equity fund	100.0	December 31, 2021
Madrid First Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana AIC 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Peach Shine 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Hanalogis No.1 Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
GIF Boomerang Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
GIF Sowol-ro Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Runway Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
JLB Square Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Private Real Estate Investment Trust No.137	Korea	Private investment trust company	99.9	December 31, 2021
Broadway 1st Co. Ltd (*3)	Korea	Other financial business	–	December 31, 2021
HANA MC ONE Co.,Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Hana-Sinjang 1st Co.,Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Hana Solar 1st Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
YK Ho 1st., Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
YK Ho 2nd., Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Hana Datacenter 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Anseong KL 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Achenhaim Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Eco Clover Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana 5-geori 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana-Ulsan Co., Ltd (*3)	Korea	Other financial business	–	December 31, 2021
Hana Port 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
HF Caribbean Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana YJDL Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
GMHB 2nd., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana In Chungmu 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Penta 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hangdong West 2nd., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Wonderful GM 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Magic Town 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
GIF Olympus Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
GS Solution 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Sewoon 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Zero To One 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Heaven 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana 1Q Logis B Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Bukjincheon 2nd., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Seattle Prime Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Tree Unique 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Ernest Hyun 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
GIF MD Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Alternative Investment Shipping Specialized Private Equity Fund No.1	Korea	Financial business	99.8	December 31, 2021
Darby Hana New York Hotel Specialized Private Investment Trust No.1	Korea	Financial business	99.9	December 31, 2021
Tree Yard 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Tree Axion 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Planet Seocho Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Easy Tree 6th., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Shinhan AIM Real Estate Fund No.22-B	Korea	Financial business	99.9	December 31, 2021
AIP Environment Infrastructure Specalized Privately Placed Fund Trust No.1	Korea	Financial business	99.9	December 31, 2021
JA 8th., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Joon Dragon Fairness 2nd., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana HQ 1st., Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Asan Baebang 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Zeronine 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana AI 5th Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Highyield Stone Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
The 1st GM 23th Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Hana JH 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Gamsam 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
JEY Complex Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
JHY Complex Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
IGIS U.S. Specialized Private Placement Real Estate Investment Trust No. 417-1 (*3)	Korea	Financial business	99.9	December 31, 2021
Midas Global Qualified Investors Private Real Estate Investment Trust no.10	Korea	Financial business	99.9	December 31, 2021
Sanchilly Renewable Energy Privat Equity Trust II (*3)	Korea	Financial business	99.9	December 31, 2021
Hana Alternative Specialized Private Placement Real Estate Investment Trust No. 175-1	Korea	Financial business	100.0	December 31, 2021
Hana Alternative Specialized Private Placement Real Estate Investment Trust No. 175-2	Korea	Financial business	100.0	December 31, 2021
Hana Alternative Private Placement Real Estate Investment Trust No. 182	Korea	Financial business	100.0	December 31, 2021
Hana Residence 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Residence 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
New Deal Beomre 1 Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Joon Dragon Brite Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
E-Master 14th Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Middle Mile 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Planet Seocho 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
E-Master 18th Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Boston Core 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Boston Core 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
E-Master 17th Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Geordan Nine One 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Geordan Nine One 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Planet Advisor Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
New Deal IDC 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
New Deal IDC 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
US Alix 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Hana Western 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Core-value Securitization 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Black Wing 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Joon Dragon Mark 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana HD 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana 4 Sky Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Auto 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
YDJ 2nd Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Suseong 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hana Dowon 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Hridan 1st Co., Ltd. (*3)	Korea	Other financial business	–	December 31, 2021
Subsidiaries of Hana the 3rd PEF:				
Venus 1 SPC Co., Ltd.	Korea	SPC	100.0	December 31, 2021
Bareun Food Factory Co.,Ltd.	Korea	SPC	100.0	December 31, 2021
Titan 1 SPC LLC	Korea	SPC	100.0	December 31, 2021
HIT 1 SPC LLC	Korea	SPC	100.0	December 31, 2021
Subsidiaries of Bareun Food Factory Co.,Ltd.:				
Dduksim Co., Ltd.(*4)	Korea	Korean traditional food business	81.8	December 31, 2021
Keunho Trading Co., Ltd. (*4)	Korea	Seafood processing business	67.4	December 31, 2021
Subsidiaries of Dduksim :				
Seojewon Co.,Ltd (*4)	Korea	Franchise business	70.0	December 31, 2021
Subsidiaries of Keunho fnb:				
Keunho seafood.Co., Ltd. (*4)	Korea	Seafood processing business	100.0	December 31, 2021
Designmeal co.,Ltd (*4)	Korea	Seafood processing business	100.0	December 31, 2021
Subsidiaries of Hana Card:				
Hana Card Payment	Japan	Other financial support service	100.0	December 31, 2021
Hana Card 2019-1 Asset Securitization Specialty. Co., Ltd. (*3)	Korea	Asset securitization	0.5	December 31, 2021
Hana Card 2020-1 Asset Securitization Specialty. Co., Ltd. (*3)	Korea	Asset securitization	0.5	December 31, 2021
Hana Card 2021-1 Asset Securitization Specialty. Co., Ltd. (*3)	Korea	Asset securitization	0.5	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Specified Money Trust (*2)	Korea	Specified money trust	–	December 31, 2021
Subsidiaries of Hana Capital:				
Hana Ventures No.2 Investment Fund	Korea	New Technology/ Financial business	100.0	December 31, 2021
Hana Ventures No.3 Investment Fund	Korea	New Technology/ Financial business	100.0	December 31, 2021
Hana Capital–Capstone Venture Fund	Korea	New Technology/ Financial business	88.9	December 31, 2021
Hana Capital–Capstone Venture Fund II	Korea	New Technology/ Financial business	90.0	December 31, 2021
Hana Micro Finance, Ltd.	Myanmar	Financial business	100.0	December 31, 2021
Subsidiaries of Hana Alternative Asset management:				
Hana Alternative Private Real Estate Investment Trust No.157	Korea	Private investment trust company	99.7	December 31, 2021
Hana Alternative Private Real Estate Investment Trust No.158	Korea	Private investment trust company	92.3	December 31, 2021
Hana Private Real Estate Investment Trust No.166	Korea	Private investment trust company	99.8	December 31, 2021
Hana Private Real Estate Investment Trust No.177	Korea	Private investment trust company	39.5	December 31, 2021
Subsidiaries of Hana Private Real Estate Investment Trust No. 166:				
H&H investment 4 (*3)	Korea	SPC	–	December 31, 2021
Subsidiaries of Hana TI:				
PT Next Transformtech Indonesia	Indonesia	System development service	100.0	December 31, 2021
Subsidiaries of Hana F&I, Inc:				
KEB The Loft Inc. (*3)	Korea	Asset securitization	–	December 31, 2021
HFT Second Securitization Specialty (*3)	Korea	Asset securitization	5.0	December 31, 2021
Hana SH First Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	14.0	December 31, 2021
HFS Second Securitization Specialty (*3)	Korea	Asset securitization	14.0	December 31, 2021
Hana K First Securitization Specialty (*3)	Korea	Asset securitization	14.0	December 31, 2021
HFD First Securitization Specialty (*3)	Korea	Asset securitization	14.0	December 31, 2021
HFS 73A Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFS 73B Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFW 73 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HK 74 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFSNB1 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFB81 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Fine Fifth Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFS 82 Securitization Specialty Co Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFF 82 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 83 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFS 84 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFF 84 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HKF 84 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFFN 91 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 91 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFS 92A Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFS 92B Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFB 92 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFN 92B Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 93 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFB 93 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFF 93 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFF94 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFF95 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	100.0	December 31, 2021
HFI01B Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFH02 Inc. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI02A Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFD02 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFN02 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HKF02 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFO03 Inc. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 03B Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFB 03 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
HFG 03 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFD 03 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFG 04 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 04 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 11 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFG 11 Securitization Specialty Co.,Ltd.(*3)	Korea	Asset securitization	9.0	December 31, 2021
HFT 12 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFTW 12 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 12A Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 12C Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFW 13 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFN 13 Securitization Specialty Co.,Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFG 13 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFK 14 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFB14 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFN14 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFT 14 Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 14A Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
HFI 14B Securitization Specialty Co., Ltd. (*3)	Korea	Asset securitization	9.0	December 31, 2021
Specified Money Trust (*2)	Korea	Specified money trust	-	December 31, 2021
Subsidiaries of Hana Insurance. Co., Ltd.:				
HANA FINANCIAL FUND INC.(Previously, Hana Financial Partner)	Korea	Financial business	100.0	December 31, 2021
Subsidiaries of Hana Alternative UK Government Office Professional Investors' Private Real Estate Investment Feeder Trust No.1:				
VICTORY LIMITED PARTNERSHIP (*4)	U.K	Other financial business	100.0	November 30, 2021
VICTORY Investment Company Limited (*4)	U.K	Other financial business	100.0	November 30, 2021
VICTORY GP(Jersey) LIMITED (*4)	U.K	Other financial business	100.0	November 30, 2021
Subsidiary of Hana Alternative Special Investment Private Trust No.90:				
H&H investment (*3)	Korea	Other financial business	-	December 31, 2021

Classification	Country	Major business	Ownership (%) (*1)	Reporting date
Subsidiary of Hana Alternative Special Investment Private Trust No.116:				
H&H investment 2 (*3)	Korea	Other financial business	-	December 31, 2021
Subsidiary of Hana Alternative Special investment private Trust No.123-1(USD):				
Dragon one investment Limited	Hong Kong	Other financial business	100.0	December 31, 2021
Subsidiaries of Dragon One Investment Limited:				
QFLP (*4)	China	Other financial business	100.0	December 31, 2021
Subsidiaries of QFLP:				
Beijing Shunhe Enterprise Management Co.,Ltd.	China	Other financial business	100.0	December 31, 2021
Subsidiary of Beijing Shunhe Enterprise Management Co.,Ltd.:				
Beijing Jianhao Hongji Real Estate Development Co.,Ltd. PFV	China	Other financial business	99.9	December 31, 2021
Subsidiary of Hana Alternative Special Asset Private Trust No.126:				
K-REIT LLC (*4)	U.S.	Other financial business	100.0	November 30, 2021
Subsidiaries of Hana Private Real Estate Investment Trust No. 165:				
H&H investment 3 (*3)	Korea	Other financial business	-	December 31, 2021

(* 1) The ownership percentage was calculated based on the shareholding of the ultimate parent company.

(* 2) Specified money trust accounts consist of different accounts, but the number of accounts is not recorded.

(* 3) It is included in the scope of consolidation since the subsidiary provides granting of credit.

(* 4) As year end financial statements were not available, the Group used the most recent financial statements available as of December 31, 2021.

The financial information of subsidiaries as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Assets	Liabilities	Equity	Revenue	Net income (loss)	Other comprehensive income (loss)	Comprehensive income (loss)
KEB Hana Bank (*1)	430,193,576	401,437,105	28,756,471	30,175,283	2,575,746	140,697	2,716,443
HFI (*1)	37,614,683	32,323,651	5,291,032	8,059,329	505,993	(26,038)	479,955
KEB Hana Card (*1)	9,596,474	7,565,896	2,030,578	1,322,005	250,484	2,480	252,964
Hana Capital (*1)	13,856,805	12,030,439	1,826,366	1,017,815	273,726	(13,358)	260,368
Hana Asset Trust	511,369	88,866	422,503	163,732	92,739	—	92,739
Hana TI (*1)	482,015	376,564	105,451	261,276	374	(2,028)	(1,654)
Hana Savings Bank	2,477,165	2,116,578	360,587	130,573	26,548	(332)	26,216
Hana Life Insurance (*1)	5,858,383	5,442,993	415,390	767,576	24,271	(55,348)	(31,077)
HIS	57,833	13,081	44,752	36,645	8,303	108	8,411
Hana Alternative Asset Management Co., Ltd. (*1)	219,454	23,870	195,584	81,533	30,951	(49)	30,902
Hana Ventures, Ltd.	109,850	4,365	105,485	11,845	5,458	79	5,537
Hana F&I, Inc. (*1)	1,557,988	1,274,391	283,597	97,846	25,384	(489)	24,895
Hana Insurance, Co., Ltd. (*1)	1,362,941	1,126,281	236,660	600,819	16,818	(21,221)	(4,403)
HANA ASSET MANAGEMENT ASIA	8,210	123	8,087	—	(664)	300	(364)
Hana Alternative BlackRock QIP Trust No.73	52,717	1,859	50,858	7,907	3,336	—	3,336
Hana Professional Investment Type Private Equity 90	20,265	1,743	18,522	3,830	2,165	—	2,165
Hana Alternative UK Government Office Professional Investors Private Real Estate Investment Feeder Trust No.1	1,628	1,617	11	1	1,832	33	1,865
Hana Alternative Infra Special Investment Private Trust No.3-1	9,728	13	9,715	636	504	—	504
Hana Alternative Infra Special Investment Private Trust No.3-2	6,035	8	6,027	3,570	1,930	705	2,635
Hana Alternative Infra Special Investment Private Trust No.3-3	20,937	25	20,912	1,104	442	—	442
Hana Alternative Infra Special Investment Private Trust No.3-4 (*2)	34,672	26	34,646	165	(1,140)	47	(1,093)
Hana Alternative Special Investment Private Trust No.100	11,862	159	11,703	947	726	—	726
Hana Alternative Special Investment Private Trust No.102	75,768	2,130	73,638	10,031	2,921	—	2,921
Hana Alternative Special Investment Private Trust No.108	9,627	590	9,037	2,002	391	—	391
Hana Alternative Special Investment Private Trust No.123-1 (USD)	332,785	220,593	112,192	903	(15,586)	14,972	(614)
Hana Alternative Houston Private Investment Trust No.121	35,907	1,416	34,491	6,083	2,581	—	2,581
Hana Alternative Special Asset Private Trust No.123-2	41,800	1,924	39,876	11,377	2,892	—	2,892
Alternative Special Asset Private Trust No.126	104,490	7,242	97,248	74	(11,246)	8,444	(2,802)
Hana Alternative Special Investment Private Trust No.116	52,772	24	52,748	25,636	13,238	—	13,238
Hana Alternative Investment Real Estate Private Trust No.163-1 (H) (*2)	35,770	3,163	32,607	7,641	1,417	—	1,417
Hana Alternative Investment Land Chip Real Estate Private Trust 68 (*3)	178,309	136,269	42,040	124	3,730	—	3,730
Hana Private Real Estate Investment Trust No. 165 (*1)(*2)	55,682	3,383	52,299	3,616	(2,186)	—	(2,186)
Hana Alternative Special Investment Wando Geuril Offshore Wind Power Private Trust No.1 (*2)	2,170	188	1,982	96	34	—	34

Classification	Assets	Liabilities	Equity	Revenue	Net income (loss)	Other comprehensive income (loss)	Comprehensive income (loss)
Hana Ventures New Technology Investment Association No.4	5,817	—	5,817	—	(95)	—	(95)
Hana Ventures New Technology Investment Association No.6	10,891	—	10,891	4,543	4,407	—	4,407
Hana Ventures New Technology Investment Association No.7	5,370	—	5,370	1	(115)	—	(115)
Hana Special New Deal National Representative Growth Private Trust (*2)	2,007	35	1,972	7	(28)	—	(28)
Hana Capstone AI Platform Fund (*4)	—	—	—	8	(448)	—	(448)
Genesis Environment Energy No.6 Private Equity Fund (*4)	—	—	—	—	(1,544)	—	(1,544)
Hana Alternative Private Real Estate Investment Trust No.119 (*2)	13,196	101	13,095	1	(105)	—	(105)
Hana Alternative Private Real Estate Investment Trust No.183-1 (*2)	19,793	94	19,699	405	(171)	—	(171)
Hana Alternative Frontier Private Investment Trust No.1 (*2)	34,864	2,599	32,265	802	(85)	—	(85)

(*1) Consolidated financial information of the intermediate parent company.

(*2) Newly established in 2021.

(*3) Changed from subsidiary of Hana Life Insurance to subsidiary of HFG.

(*4) Excluded from the consolidation scope during the year ended December 31, 2021

<December 31, 2020>

Classification	Assets	Liabilities	Equity	Revenue	Net income (loss)	Other compr ehensive inc ome (loss)	Comprehensi ve income
KEB Hana Bank (*1)	396,187,562	369,376,033	26,811,529	36,002,259	2,024,377	(160,117)	1,864,260
HFI (*1)	35,796,518	31,367,561	4,428,957	9,019,361	410,036	37,166	447,202
KEB Hana Card (*1)	8,211,042	6,433,428	1,777,614	1,280,176	154,457	(5,998)	148,459
Hana Capital (*1)	11,112,113	9,807,790	1,304,323	829,418	180,721	1,131	181,852
Hana Asset Trust	434,455	74,691	359,764	150,873	80,821	—	80,821
Hana TI (*1)	473,135	363,738	109,397	232,487	755	(1,262)	(507)
Hana Savings Bank	1,843,758	1,605,211	238,547	95,574	18,002	(171)	17,831
Hana Life Insurance (*1)	5,375,558	5,028,934	346,624	843,899	26,564	(19,265)	7,299
HIS	48,177	9,835	38,342	27,213	3,712	(186)	3,526
Hana Alternative Asset Management Co., Ltd.(*1)	139,931	15,221	124,710	49,552	18,610	34	18,644
Hana Ventures, Ltd.	102,901	2,953	99,948	8,657	2,930	77	3,007
Hana F&I, Inc.(*1)	1,483,337	1,293,591	189,746	72,000	15,620	2,953	18,573
Hana Insurance, Co., Ltd. (*2)	1,127,541	894,106	233,435	335,642	(5,168)	(4,171)	(9,339)
HANA ASSET MANAGEMENT ASIA (*3)	206	—	206	—	—	(8)	(8)
Hana Professional Investment Type Private Equity Real Estate 28 (*4)	—	—	—	—	—	—	—
Hana Japan Residence Professional Investment Type Private Equity Real Estate 47 (*4)	—	—	—	7,687	6,734	—	6,734
Hana Private Real Estate Investment Trust No. 68-1	36,762	11	36,751	7,696	1,465	—	1,465
Hana Alternative BlackRock QIP Trust No.73	52,579	73	52,506	9,185	2,669	—	2,669
Hana Professional Investment Type Private Equity 90	19,409	1,587	17,822	5,924	3,616	—	3,616
Hana Alternative UK Government Office Professional Investors' Private Real Estate Investment Feeder Trust No.1	714	1,644	(930)	12,287	6,254	(142)	6,112
Hana Alternative Infra Special Investment Private Trust No.3-1	7,189	10	7,179	413	287	—	287
Hana Alternative Infra Special Investment Private Trust No.3-2	20,805	30	20,775	1,824	(292)	(989)	(1,281)
Hana Alternative Infra Special Investment Private Trust No.3-3	11,611	2	11,609	1,548	634	—	634
Hana Alternative Special Investment Private Trust No.100	12,359	12	12,347	1,169	960	—	960
Hana Alternative Special Investment Private Trust No.102	76,480	1,081	75,399	13,325	4,719	—	4,719
Hana Alternative Special Investment Private Trust No.108	10,821	25	10,796	1,838	808	—	808
Hana Alternative Special Investment Private Trust No.123-1(USD)	159,052	38,448	120,604	40	(8,490)	4,101	(4,389)
Hana Alternative Houston Private Investment Trust No.121	34,636	23	34,613	5,984	1,853	—	1,853
Hana Alternative Special Asset Private Trust No.123-2	40,786	950	39,836	10,637	2,561	—	2,561
Alternative Special Asset Private Trust No.126	104,885	55	104,830	2,436	(7,593)	(5,826)	(13,419)
Hana Alternative Special Investment Private Trust No.116	54,723	616	54,107	9,857	4,635	—	4,635
Hana Ventures New Technology Investment Association No.4 (*2)	5,914	2	5,912	1	(88)	—	(88)
Hana Ventures New Technology Investment Association No.6 (*2)	6,485	1	6,484	—	(16)	—	(16)
Hana Ventures New Technology Investment Association No.7 (*2)	5,485	—	5,485	—	(15)	—	(15)

(* 1) Consolidated financial information of the intermediate parent company.

(* 2) Included as a subsidiary during the year ended December 31, 2020, and gains and losses are gains and losses after inclusion as a subsidiary.

(* 3) Hana Asset Management Asia was newly established in 2020.

(* 4) Excluded from the consolidation scope during the year ended December 31, 2020

Changes in scope of consolidation for the year ended December 31, 2021 is as follows:

Name of subsidiaries	Rationale
Included in scope of consolidation:	
Hana Alternative Investment Real Estate Private Trust No.163-1(H)	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
HEONEQ1st, LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HCONEQ1st, LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Bulls Hana 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Alternative Private Real Estate Investment Trust No.157	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Alternative Private Real Estate Investment Trust No.158	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
HFI 11 Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFG 11 Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Financial Partner	Obtained majority of shares with voting rights.
Tree Yard 1st., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Tree Axion 1st., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Planet Seocho Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Easy Tree 6th., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Y-Energy Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana K-Energy Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Midas Global Special Real Estate Investment Private Trust No.8	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
JR Global Real Estate Specialized Investment Private Trust No.28	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Alternative Energy Infra Special Asset Fund 3-4	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Alternative Investment Real Estate Private Trust No.165	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Alternative Special Investment Wando Geumil Offshore Wind Power Private Trust No.1	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Special New Deal National Representative Growth Private Trust	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
	In default, the entity holds power as an actual beneficiary of a private equity fund, a

Name of subsidiaries	Rationale
H&H investment 3	nd exposed to variable returns in accordance with credit or purchase arrangements.
H Hotel ONEQ 1st, LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
DPS 2nd, Co., Ltd	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Private Real Estate Investment Trust No. 166	Holds power as a fund manager and exposed to variable returns based on credit facility or purchase arrangements.
H&H investment 4	In default, the entity holds power as an actual beneficiary of a private equity fund, and exposed to variable returns in accordance with credit or purchase arrangements.
HFT 12 Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFW 12 Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFI 12A Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFI 12C Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
JA 8th., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Joon Dragon Fairness 2nd., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana HQ 1st., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Recycle 1st., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Recycle 2nd., Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Shinhan AIM Real Estate Fund No.22-B	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Shinhan AIM Infrastructure Fund No.7-1	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
AIP Environment Infrastructure Specialized Privately Placed Fund Trust #1	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns..
Genesis Environment Energy No.4 Private Equity Fund	Obtained majority of shares with voting rights.
Hana Card 2021-1 Asset Securitization Specialty. Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Bbq 1q 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Skoffice 1q 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Cleanenergy 1q 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HANA DL First Co., Ltd	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HANA TERMINUS First Co., Ltd	Holds power as an asset manager and exposed to variable returns based on credit

Name of subsidiaries	Rationale
	facility or purchase arrangements.
Hana Asan Baebang 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Zeronine 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana AI 5th Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Highyield Stone Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
GLN International Co., Ltd.	Obtained majority of shares with voting rights.
Hana Tech Value-Up Investment Fund	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana 1Q Startup Investment Fund	Obtained majority of shares with voting rights.
The 1st GM 23th Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana JH 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Gamsam 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
JEY Complex Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
JHY Complex Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
IGIS U.S. Specialized Private Placement Real Estate Investment Trust No. 417-1	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
HFW 13 Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFN 13 Securitization Specialty Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFG 13 Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana-Capstone AI Platform Fund	Obtained majority of shares with voting rights.
Genesis Environment Energy No.6 Private Equity Fund	Obtained majority of shares with voting rights.
Midas Global Qualified Investors Private Real Estate Investment Trust no.10	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Sanchilly Renewable Energy Privat Equity Trust II	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Alternative Specialized Private Placement Real Estate Investment Trust No. 175-1	Holds power as a fund manager and exposed to significant variable returns
Hana Alternative Specialized Private Placement Real Estate Investment Trust No. 175-2	Holds power as a fund manager and exposed to significant variable returns
Hana Alternative Private Placement Real Estate Investment Trust No. 182	Holds power as a fund manager and exposed to significant variable returns
Hana Residence 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
	Holds power as an asset manager and exposed to variable returns based on credit

Name of subsidiaries	Rationale
Hana Residence 2nd Co., Ltd.	facility or purchase arrangements.
New Deal Beomeo 1 Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Joon Dragon Brite Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
E-Master 14th Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Middle Mile 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Planet Seoho 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
E-Master 18th Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Boston Core 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Boston Core 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
E-Master 17th Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Geordan Nine One 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Geordan Nine One 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Planet Advisor Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
New Deal IDC 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
New Deal IDC 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
US Alix 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Western 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Core-value Securitization 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Black Wing 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Joon Dragon Mark 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana HD 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana 4 Sky Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Auto 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
YDJ 2nd Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit

Name of subsidiaries	Rationale
	facility or purchase arrangements.
Hana Suseong 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Dowon 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hridan 1st Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Capital–Capstone Venture Fund	Holds power as a limited partner and exposed to significant variable returns
Hana Capital–Capstone Venture Fund II	Holds power as a limited partner and exposed to significant variable returns
HK 14 Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HPB14 Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFN14 Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFT 14 Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFI 14A Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HFI 14B Securitization Specialty Co., Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Alternative Private Real Estate Investment Trust No.177	Holds power as a fund manager and exposed to significant variable returns
THE HAM ONEQ 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HANA BAY 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HANA I.S 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
HANA I.G 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
GRAND ONEQ 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
THE MIRAE ONEQ 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
DONG DAEGU TERMINAL 2nd. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
KENDALL NO.9 1st. LLC	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Double H 1Q 2nd Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Double H 1Q 3rd Co.,Ltd.	Holds power as an asset manager and exposed to variable returns based on credit facility or purchase arrangements.
Hana Alternative Private Real Estate Investment Trust No.119	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.
Hana Alternative Private Real Estate Investment Trust	Holds power as an actual beneficiary of a private equity fund, and exposed to

Name of subsidiaries	Rationale
No.183-1	variable returns.
Hana Alternative Frontier Private Investment Trust No.1	Holds power as an actual beneficiary of a private equity fund, and exposed to variable returns.

Name of subsidiaries	Rationale
Excluded in scope of consolidation:	
Bulls Hana 1st Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
YDPP 1st Co.,Ltd.	Loss of control due to disposal (Termination of credit facility).
HFV02 ABS Ltd.	Loss of control due to disposal.
GIF Rocinante Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
GYD 1st Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hridan 2nd., Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana Bukjincheon 1st., Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
IGIS U.S. Specialized Private Placement Real Estate Investment Trust NO. 380-1	Loss of control due to disposal.
Hana Alternative Specialized Private Placement Real Estate Investment Trust No. 153-2	Loss of control due to disposal.
Ramda Global Specialized Private Placement Real Estate Investment Trust	Loss of control due to disposal.
Antakya Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana Indonesia Green Forest Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hanafuturelifes 1st, Ltd.	Loss of control due to disposal (Termination of credit facility).
Vestas Qualified Investors Private Real Estate Fund Investment Trust No.54B	Loss of control due to disposal.
Hana Alternative US California BESS Special Asset No. 6	Loss of control due to disposal.
IGIS U.S. Specialized Private Placement Real Estate Investment Trust No.350	Loss of control due to disposal.
Midas Global Special Real Estate Investment Private Trust No.8	Loss of control due to disposal.
PIS 2nd., Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Sejoong Co., Ltd.	Loss of control due to disposal.
Siwon Co., Ltd.	Loss of control due to disposal.
Genesis Environment Energy No.4 Private Equity Fund	Loss of control due to disposal of voting shares.
Hanalogis No.2 Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Darby Hana Europe Renewable Energy Private Investment Fund	Loss of control due to disposal.
JR Global Real Estate Specialized Investment Private Trust No.28	Loss of control due to disposal.
Hana Semiconductor New Technology Fund	Loss of control due to liquidation.
Hana Professional Investment Type Private Equity Real Estate 68-1	Loss of control due to disposal.
Shinhan AIM Infrastructure Fund No.7-1	Loss of control due to the liquidation
YDL 3rd Co. Ltd.	Loss of control due to disposal (Termination of credit facility).

Name of subsidiaries	Rationale
Yellow Balloon 3nd Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
US Smile 1st Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
US Smile 2nd Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana S-Energy Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana Unju 1st., Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana Y-Energy Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana K-Energy Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana Recycle 1st., Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
Hana Recycle 2nd., Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
HFN 82 Securitization Specialty Co., Ltd.	Loss of control due to disposal
HFI01C Securitization Specialty Co., Ltd.	Loss of control due to disposal
Hana Alternative Private Real Estate Investment Trust No.111	Loss of control due to disposal
Nineteen Dahlia S.a r.l.	Loss of control due to disposal
H on 1st L.L.C	Loss of control due to disposal (Termination of credit facility).
DYONEQ1st, LLC	Loss of control due to disposal (Termination of credit facility).
Bulls Hana 2nd Co., Ltd.	Loss of control due to disposal (Termination of credit facility).
HanaGreen, 1st L.L.C.	Loss of control due to disposal (Termination of credit facility).
Hana-Capstone AI Platform Fund	Loss of control due to disposal
Genesis Environment Energy No.6 Private Equity Fund	Loss of control due to disposal

1-2-1 KEB Hana Bank

KEB was established on January 30, 1967, as a government-invested bank to engage in foreign exchange and trade finance business under the Korea Exchange Bank Act proclaimed on July 28, 1966. On December 30, 1989, the Korea Exchange Bank Act was repealed and KEB was converted into a corporation under the Commercial Code of the Republic of Korea. On April 4, 1994, KEB was listed on the Korean Stock Exchange. The merger between KEB and Korea Exchange Bank Credit Service Co., Ltd. was finalized on February 28, 2004. KEB primarily provides commercial banking services, trust banking services, foreign exchange, merchant banking business through the merger with Korea International Merchant Bank, a domestic subsidiary of the Bank, and other related operations as permitted under the Banking Act, the Capital Market and the Financial Investment Business Act and other relevant laws and regulations in the Republic of Korea. As of February 9, 2012, the Group purchased 57.27% interest in KEB, and acquired control over the investee. On March 15, 2013, the Group's Board of Directors approved a share swap contract to acquire a 100 percent stake of KEB. Pursuant to the contract, KEB was incorporated into the Group's wholly owned subsidiary as of April 5, 2013. As of September 1, 2014, Hana Card (formerly, KEB Card) was spun off from the credit card business unit of KEB. KEB merged with Hana Bank and changed its name to KEB Hana Bank on September 1, 2015.

1-2-2 Hana Financial Investment Co., Ltd.

Hana Financial Investment Co., Ltd. ("HFI") was incorporated on January 18, 1977 pursuant to the Security Investment Trust Act of the Republic of Korea for the purpose of providing investment trading, brokerage, advisory, collective investment, entrusting, trust service and a wide range of security investment trust services for its customers. Meanwhile, HFI combined with Hana IB as a business combination under common control on December 1, 2008 and changed its name to HFI on September 1, 2015. HFI merged with Hana Futures Co., Ltd on August 1, 2016.

1-2-3 KEB Hana Card

Hana SK Card (extinct entity) was merged into Korea Exchange Bank Credit Service Co., Ltd. ("KEB Card") (surviving entity) on December 1, 2014 through exchanging common shares at a ratio of 1 common share of Hana SK Card for 1.1731316 common shares of KEB Card, and it has been included in the Company's subsidiary.

1-2-4 Hana Capital

Hana Capital (formerly, Kolon Capital Co., Ltd.) was incorporated on February 13, 1987 and changed its name to Hana Capital on April 8, 2005. Hana Capital obtained a license to engage in the installment financing business on January 9, 1996 in accordance with the Credit Card Business Act of the Republic of Korea and was registered as an installment financing company in accordance with the Credit Specialized Financial Business Act of the Republic of Korea on January 16, 1998 to engage in leasing, installment financing and corporate and consumer loan business. The Group acquired a 50.13% ownership of Hana Capital through a stock swap transaction with Hana Bank on April 27, 2007. In February 2018, the Group acquired the remaining stake and Hana Capital became a wholly-owned subsidiary of the Group.

1-2-5 Hana Asset Trust

Hana Asset Trust was incorporated on June 15, 1999 for the purpose of conducting research and analysis of regional and local developments. On February 27, 2004, Hana Asset Trust changed its primary business to a real estate investment trust company, pursuant to the Trust Business Act. As such, it changed its name from JW Asset to Daol Real Estate Trust, and it changed its name to Daol Trust on March 17, 2010 again. The Group acquired 58% ownership of Hana Daol Trust (formerly, Daol Trust Co., Ltd.) and incorporated Hana Daol Trust as its subsidiary as of March 10, 2010. The Group additionally acquired 7% ownership of Hana Daol Trust as of December 30, 2011, and purchased residual shares in Hana Daol Trust for the year ended December 31, 2013 and incorporated Hana Asset Trust as its wholly owned subsidiary.

1-2-6 Hana TI

Hana TI (formerly, Seoun System Inc.) was incorporated on August 30, 1990 pursuant to the laws of the Republic of Korea for the purpose of developing and maintaining software used in the financial service industry. The Group changed its name to Hana I&S on March 1, 2003 and changed its name to Hana TI on June 19, 2017. The Group purchased residual shares (10.02%) in Hana TI as of November, 2019 and incorporated Hana TI as its wholly owned subsidiary.

1-2-7 Hana Savings Bank

Hana Savings Bank was incorporated on February 8, 2012 pursuant to the Depositor Protection Act of the Republic of Korea to engage in the credit business as permitted by Financial Services Commission and the Group made a purchase and assumption agreement with Korea Deposit Insurance Corporation. In accordance with the agreement, Hana Savings Bank commenced its business after purchasing assets and assuming liabilities from Ace Savings Bank and Jeil-2 Savings Bank on February 17, 2012. On September 5, 2012, Hana Savings Bank purchased assets and assumed liabilities from Korea Mutual Savings Bank in accordance with the purchase and assumption agreement with Korea Deposit Insurance Corporation after the approval of the Board of Directors held on August 21, 2012.

1-2-8 Hana Life Insurance

Hana Life Insurance Co., Ltd. (the Hana Life Insurance) was incorporated on November 25, 1991 pursuant to the laws of the Republic of Korea after obtaining permission for foreign investment to engage in the life insurance business from the Ministry of Strategy and Finance. The Group changed its business name from France Life Insurance Co., Ltd. to Hana Life Insurance Co., Ltd. on March 21, 2003. The Group acquired 100% ownership of Hana Life Insurance Co., Ltd. through acquisition of Hana Bank's equities on August 10, 2007 and the Group subsequently sold its 50% ownership minus 1 share of Hana Life Insurance on January 28, 2008 to the HSBC Group (HSBC Insurance (Asia-Pacific) Holding Ltd.). As a result, Hana Life Insurance became a joint venture and changed its name

to Hana HSBC Insurance. The Group re-acquired the ownership of Hana HSBC Insurance after the Group's Board of Directors approved a share purchase contract to acquire a 50 percent minus 1 share of Hana HSBC Insurance on April 26, 2013. Accordingly, it changed its name to Hana Life Insurance on May 10, 2013.

1-2-9 Hana Investors Services Co., Ltd.

Hana Investors Services Co., Ltd. (HIS) was established on April 1, 2003 to provide trust services for securities companies and general services including accounting and trust services for banks, pension funds and other companies under the Capital Market and Financial Investment Business Act (formerly, Indirect Investment Asset Management Business Act). The Group acquired 100% ownership of HIS from Hana Bank on December 29, 2015.

1-2-10 Hana Alternative Asset Management Co., Ltd.

Hana Alternative Asset Management Co., Ltd. (Hana Alternative Asset Management) was incorporated on April 14, 2006 to provide asset management and investment advisory services, pursuant to the Capital Market Financial Investment Business Act. Hana Alternative Asset Management changed its name from Hana Daol Fund Management to Hana Asset Management on December 12, 2013. The Group acquired a 100% ownership of Hana Asset Management through a stock swap transaction with Hana Asset Trust on May 26, 2016. It changed its name to Hana Alternative Asset Management on November 23, 2017.

1-2-11 Hana Ventures, Ltd.

Hana Ventures was incorporated as a subsidiary of Hana Financial Group on October 4, 2018. Hana Ventures provides investments to venture firms and start-up companies. Also, it organizes and provides management to new technology business investment association, Korea venture fund and private equity fund under specialized credit finance business act.

1-2-12 Hana F&I, Inc.

Hana F&I, Inc. (Hana F&I) was established on September 11, 1989, to engage in equipment rental and other relevant businesses under the Specialized Credit Financial Business Act (formerly Equipment Rental Business Act) and was listed on the Korea Securities Dealers Automated Quotation (KOSDAQ) on January 15, 1995. On May 19, 1992, the Group changed its name to KEB Lease Inc. and on June 13, 1995 again changed the name to KEB Lease Finance Inc. and finally changed the name to KEB Capital Inc. on October 18, 2002. As HFG acquired KEB and its subsidiaries including Hana F&I, KEB is restricted to control a company which runs the specialized credit financial business in accordance with the Financial Holding Companies Act Article 19 as on and after January 31, 2014. On October 17, 2013, Hana F&I's Board of Directors approved to change business field to investment in asset backed securities and management of asset securitization firm in Asset-Backed Securitization Act. On September 30, 2015, Hana F&I changed its name to Hana F&I, Inc. resulting from the merger of Hana Bank and KEB on September 1, 2015. As of December 3, 2019, the Group acquired the ownership of Hana F&I by purchasing entire shares(99.8%) that KEB Hana Bank owned.

1-2-13 Hana Insurance Co., Ltd.

The main business purpose of Hana Insurance Co., Ltd. (Hana Insurance) is the management of assets for property and liability insurance, reinsurance and insurance payments. Hana Insurance commenced business on December 1, 2003 as Kyowon National Automobile Insurance Co., Ltd. and on November 5, 2008, changed its name to The K Insurance Co., Ltd. On May 27, 2020, the Company acquired The K Insurance Co., Ltd. as a subsidiary by acquiring 70% of shares held by the Korean Teachers Credit Union through a resolution of the board of directors, and changed its name to Hana Insurance on June 10, 2020. On July, 28, 2020, the Company completed the payment of shares by acquiring 70% of issued shares of Hana Insurance. The Company's shareholding subsequently increased to 84.6% due to the non-participation in the stock increase by the existing shareholders, The Korean Teachers Credit Union.

1-2-14 Hana Asset Management Asia Pte. Ltd.

Hana Asset Management Asia Pte. Ltd. was established on September 4, 2020 for asset management in Singapore, and on July 15, 2021 obtained approval from the Monetary Authority of Singapore (MAS) for the Registered Fund Management Company (RFMC)

1-2-15 Hana Ventures New Technology Fund, etc.

In accordance with the KIFRS 1110 Consolidated Financial Statements, investees are consolidated when the investor is exposed to, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Accordingly, Hana Ventures New Technology Fund No. 4 and No.6 and No.7 are included in the Group's consolidation scope.

1-2-16 Specified money trusts and private equity investment vehicles

In accordance with the KIFRS 1110 Consolidated Financial Statements, investees are consolidated when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Accordingly, specified money trusts and private equity investment vehicles are included in the Group's consolidation scope.

1-2-17 Subsidiaries of KEB Hana Bank

1-2-17-1 Hana Bank (China) Co., Ltd. (Hana Bank China)

Hana Bank China was incorporated in Beijing to engage in commercial banking, foreign currency exchanges and other related operations in China on December 14, 2007. On December 24, 2007, Hana Bank took investment in kind through assets and liabilities of branches in Shanghai and Syenyang and shares in Qingdao International Bank owned by Hana Bank. The branches and Qingdao International Bank were changed into the branches of Hana Bank China. Hana Bank China was merged with KEB China and incorporated into a subsidiary of Hana Bank in December, 2014 since Hana Bank acquired control over Hana Bank China after the merger.

1-2-17-2 KEB Hana Bank (Canada)

Canadian KEB Hana Bank was established in Toronto, Canada on October 6, 1981 for the purpose of providing financial services to Korean companies and Korean residents in Canada.

1-2-17-3 KEB Hana Bank (Germany)

Germany KEB Hana Bank was established in Frankfurt, Germany on December 29, 1992 for the purpose of providing financial services to Korean companies and Korean residents in Germany.

1-2-17-4 PT Bank KEB Hana

PT. Bank KEB Hana was established in Jakarta, Indonesia on November 5, 1990 to provide financial services to Korean companies and residents in Jakarta. In accordance with the regulations of the Bank Indonesia, 2 or more local banks with the same ultimate parent company are prohibited to operate as an independent entity in Indonesia. Accordingly, PT. Bank KEB Indonesia (KEBI), a subsidiary of the Bank, and PT. Bank Hana, a subsidiary of Hana Bank, have completed a merger process on February 20, 2014 and changed the name to PT. Bank KEB Hana. PT. Bank KEB Hana incorporated into a subsidiary of KEB on February 28, 2014 since KEB owned the major shares of PT. Bank KEB Hana after the acquisition. PT Bank KEB Hana has issued third-party allocation during 2019. At the end of the reporting period, Hana Bank holds 69.01% of shares.

1-2-17-5 Banco KEB do Brazil S. A. (KEBB)

KEBB was incorporated on May 21, 1999 to provide finance services for foreign clients, advisory services, finance arrangement and security investment trust services regarding overseas investment for domestic companies

1-2-17-6 KEB NY Financial Corp. (NYFinCo)

NYFinCo was established in New York, USA on April 8, 2004 to provide financial services to Korean companies and residents in New York and the surrounding area.

1-2-17-7 KEB LA Financial Corp. (LAFinCo)

LAFinCo was established in Los Angeles, USA on July 2, 2009 to provide financial services to Korean companies and residents in Los Angeles and the surrounding area.

1-2-17-8 KEB Hana Global Finance Limited

KEB Hana Global Finance Limited was established in Los Angeles, USA on July 2, 2009 to provide finance services for foreign clients, advisory services, finance arrangement and security investment trust services regarding overseas investment for domestic companies

1-2-17-9 KEB Hana Russia

KEB launched a Moscow representative office in 2008 to provide financial information and consulting services for Korean and local companies in Russia. KEB Russia was established on August 15, 2014, after obtaining corporate business license from the Russian regulatory authority in July 2014 to expand its business scope. At the end of the reporting period, Hana Bank holds 99.99% of shares.

1-2-17-10 KEB Hana Mexico

Mexico KEB Hana Bank was established in Mexico City on November 3, 2017 to engage in provision of financial services to Korean companies and local corporations. At the end of the reporting period, KEB Hana Bank holds 99.99% interest in the entity.

1-2-17-11 HI Leading Solution PEF Invest Trust 143 (Previously, DGB Leading Solution PEF Invest Trust 143) and a set of 3 other private equity investment vehicles

In accordance with KIFRS 1110 *Consolidated Financial Statements*, 3 other private equity investment vehicles and HI Leading Solution PEF Invest Trust 143 (Previously, DGB Leading Solution PEF Invest Trust 143) were included in consolidation scope, because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-2-17-12 Sevenstar Co., and other 32 Special Purpose Entities

In accordance with the KIFRS 1110 Consolidated Financial Statements, the Group consolidated Sevenstar Co., Ltd. and other 32 special purpose companies because the Group is exposed, or has rights, to variable returns from its involvement with the SPEs and has the ability to affect those returns through its power over the SPEs

1-2-17-13 Hana Bancorp, Inc.

Hana Bancorp, Inc. (formerly, BNB Financial Service Corporation) was incorporated on April 8, 1988 to engage in the bank business. The Group acquired 52.29% ownership of BNB Financial Service Corporation and incorporated Hana Bancorp, Inc. as its subsidiaries as of August 30, 2013 and changed its name to Hana Bancorp, Inc. The Group sold all common shares of Hana Bancorp to Hana Bank on March 28, 2016 and Hana Bancorp became a subsidiary of Hana Bank. Hana Bancorp, Inc. holds 100% of shares of KEB Hana Bank USA as a financial holding company.

1-2-17-14 GLN International Co., Ltd.

GLN International Co., Ltd. was established in Korea on July 7, 2021 with the main purpose of the electronic finance industry (global payment brokerage, etc.). At the end of the reporting period, the Hana Bank has 100% interest in the entity. Its paid-in capital is 50,000 million Korean won as of December 31, 2021.

1-2-17-15 Hana Tech Value-Up Investment Fund and 1 other fund

In accordance with KIFRS 1110 *Consolidated Financial Statements*, Hana Tech Value-Up Investment Fund and 1 other fund are included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-2-17-16 Trust Accounts

In accordance with the KIFRS 1110 Consolidated Financial Statements, investment in trust accounts are consolidated when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

1-2-18 Subsidiaries of HFI

1-2-18-1 Hana the First Private Equity Fund

Hana the First Private Equity Fund (Hana the First PEF) was established on December 22, 2009 as a joint-stock company under the Capital Market Financial Investment Business Act for the purpose of distributing to the partners of Hana the First PEF the profits generated from participating in control, improving financial, business and governance structures of invested companies. Hana the First PEF is owned by KEB Hana Bank (29.97% ownership) as a limited partner and HFI (18.93% ownership) as a general and management partner. Initial contributions were paid on January 13, 2010.

1-2-18-2 Hana Daol Land Chip Heungdeok Real Estate Private Fund 35

Hana Daol Land Chip Heungdeok Real Estate Private Fund 35 was incorporated on September 19, 2011 in accordance with the Financial Investment Services and Capital Markets Act and wholly owned by HFI. It manages Knowledge Industrial Center (apartment-style factory), Heungdeok IT Valley that was built in Heungdeok housing site development district G1 block. The collective investment company, an asset management company, is Hana Asset Management Co., Ltd., and the trustor is National Agricultural Cooperative Federation.

1-2-18-3 Hana Equity Investment Management (Shenzhen) Co., Ltd

Hana Equity Investment Management (Shenzhen) Co., Ltd. (Formerly, Hana Global Investment Consulting Co., Ltd.) was incorporated in Beijing on October 14, 2011 and engages in the advisory services on issuing bonds, listing Chinese companies on the Korean stock market, cross-border M&A transactions and others.

1-2-18-4 Hana Land Chip Houston Real Estate Private Fund 59

Hana land Chip Houston Private Equity Real Estate Investment Trust No.59, which was established on October 30, 2014 by the Financial Investment Services and Capital Markets Act, manages common stock of REITs (FG US Holdings 2 LLC), which was established to acquire the preferred stocks of 3000 Post Oak Blvd., in Houston, USA, as an item transferred to fund. A collective investment company (asset management company) was UBS Hana Asset Management Co., Ltd., and a trustor was NAFC (National Agricultural Cooperative Federation).

1-2-18-5 Hana the Third Private Equity Fund

Hana the Third Private Equity Fund (Hana the Third PEF) was established on July 29, 2016 as a joint-stock company under the Capital Market Financial Investment Business Act to distribute to the partners of Hana the First PEF the profits generated from participating in control, improving financial, business and governance structures of invested companies. Hana the Third Private Equity Fund has Venus1 SPC LLC, Bareun Food Factory Co.,ltd, Titan 1 SPC LLC and HIT 1 SPC LLC as subsidiaries, which are special purpose entities. Bareun Food Factory Co.,ltd has Dduksim Co., Ltd. and Keumho Trading Co., Ltd. as subsidiaries. Dduksim Co., Ltd. and Keumho Trading Co., Ltd. have Seojewon Co., Ltd. and Keumhoseafood Co., Ltd. & designmeal co.,Ltd as a subsidiary, respectively.

1-2-18-6 Madrid First Co., Ltd. and 94 others

Madrid First Co., Ltd. and 94 others are included in the scope of the consolidation since the Group is exposed, or has rights, to variable returns from its involvement with the investees such as credit provision, and has the ability to affect those returns through its power over the SPEs.

1-2-18-7 Hana Formula-E Private Special Asset Fund 114 and 23 others

Hana Formula-E Private Special Asset Fund 114 and 23 others are included in the scope of the consolidation since the Group is exposed, or has rights, to variable returns from its involvement with the investees and has the ability to affect those returns through its power over the SPEs.

1-2-18-8 Hana New Technology Fund No.1 and 1 others

Hana New Technology Fund No.1 and 1 others was established with the aim of distributing the profits to the members by investing and operating the fund in accordance with the Enforcement Rules of the Specialized Credit Finance Business Act, and related laws and regulations.

1-2-18-9 Hana Trust Global Reit One CO., Ltd.

It was established for the purpose of allocating profits to members by investing and operating them in accordance with the Real Estate Investment Company Act, the Enforcement Decree of the same Act, the Enforcement Rules and the related statutes.

1-2-19 Subsidiaries of KEB Hana Card

1-2-19-1 Hana Card Payment

Hana Card Payment was established on May 26, 2017 to provide electronic payment services to Chinese tourists making purchases in Japan.

1-2-19-2 Hana Card 2019-1 Asset Securitisation Specialty Co., Ltd. and 2 others

Hana Card 2019-1 Asset Securitisation Specialty Co., Ltd., Hana Card 2020-1 Asset Securitisation Specialty Co., Ltd., Hana Card 2021-1 Asset Securitisation Specialty Co., Ltd. is established to securitize the right of loans in related to existed or future lump-sum payment, paying in installment, cash advance and revolving.

1-2-19-3 Specified money trust

In accordance with the KIFRS 1110 Consolidated Financial Statements, investees are consolidated when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Accordingly, specified money trusts have been included in the consolidation scope.

1-2-20 Subsidiaries of Hana Capital

1-2-20-1 Hana Ventures New Technology Fund No. 2 and 3 others

In accordance with the KIFRS 1110 Consolidated Financial Statements, investees are consolidated when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Accordingly Hana Ventures New Technology Fund No.2 and 3 others are included in the consolidated scope of Hana Capital.

1-2-20-2 Hana Micro Finance

Hana Microfinance is a subsidiary operating in the financial services business and was newly established on August 7, 2014 and is located in Yangon, Myanmar. It aims to meet demands of microfinance for the people in Myanmar and to structure the foundation for a retail market that has abundant potential for growth.

1-2-21 Subsidiaries of Hana TI

1-2-21-1 PT.NEXT Transformtech Indonesia

PT.NEXT Transformtech Indonesia started its operations on February 23, 2017 with the purpose of providing development and maintenance of financial information system for local banks and multi-financing companies in Indonesia.

1-2-22 Subsidiaries of Hana Alternative Asset Management

1-2-22-1 Hana Alternative Private Investment Trust No.157 and 3 others

In accordance with the KIFRS 1110 Consolidated Financial Statements, investees are consolidated when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Accordingly, Hana Alternative Private Investment Trust No.157 and 3 others are included in the consolidated scope of Hana Alternative Asset Management.

1-2-23 Subsidiaries of Hana F&I

1-2-23-1 KEB The Loft Inc. and other 57 SPCs etc

Hana F&I has established a special purpose company for securitization of non-performing loans (NPL), and has the power to direct related activities by investing in subordinated bonds issued by consolidated structured companies and is exposed to variable profits based on performance. Therefore, Hana F&I has recognized KEB The Loft Inc. and other 57 special purpose companies and specified money trusts as subsidiaries.

1-2-23-2 Specified money trust

In accordance with the KIFRS 1110 Consolidated Financial Statements, investees are consolidated when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Accordingly, specified money trusts have been included in the consolidation scope.

1-2-24 Subsidiaries of Hana Insurance. Co., Ltd.

1-2-24-1 Hana Financial Partners

Hana Financial Partner Co., Ltd. ("Hana Financial Partners") was established as 100% subsidiary of Hana Insurance. Co., Ltd. on March 5, 2021. Hana Financial Partners engages in the sales of all insurance products (life insurance/damage insurance) of affiliated insurers through business partnerships with insurance companies.

1-3 Risk and the financial support to a consolidated structured entity

A structured entity is established for asset-back securitization of NPL and beneficiary interest in investment funds of property. A consolidated entity involves in by purchasing a subordinated bonds from a consolidated structured entity or offering buyout option of ABCP or loans issued by a consolidated structured entity. It is exposed to a risk of not being able to recover the acquisition (investment) money according to the performance.

Nature and reasons of the contractual arrangements for providing the financial support to a consolidated structured entity as of December 31, 2021 are as follows:

Entity	The Characteristics and Purposes	Intention
Trust Accounts with guarantee of the repayment of principal and interest	The Group offers principal conservation commitment to trust accounts. The Group is required to conserve the deficit amount in case the trust account stands below the principal as a result of the operation.	Credit enhancerrent on financial management of trust account
Hana Display the First Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩200 billion) from Hana Display the First Co., Ltd.	Credit facility
Ocean Betts The First Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from Ocean Betts The First Co., Ltd.	Credit facility
Hana H in the holdings 1st LLC	The Group partially purchased ABCP (purchase commitment of ₩150 billion) from Hana H in the holdings 1st LLC	Credit facility
H-Plus 1st, L.L.C.	The Group partially purchased ABCP (purchase commitment of ₩100 billion) from H-Plus 1st, L.L.C.	Credit facility
Hanack 1st Co.,Ltd.	The Group partially purchased ABCP (purchase commitment of ₩60 billion) from Hanack 1st Co.,Ltd.	Credit facility
Netoneq 1st L.L.C.	The Group partially purchased ABCP (purchase commitment of ₩6.7 billion) from Netoneq 1st L.L.C.	Credit facility
Dongam Tower 1st Co., LTD	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from Dongam Tower 1st Co., LTD.	Credit facility
Hana H in the holdings 2nd L.L.C	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from Hana H in the holdings 2nd L.L.C	Credit facility
PIOTOWER1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩60 billion) from PIOTOWER1st, LLC	Credit facility
KSPARTNERSHIP 1st 2020, INC	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from KSPARTNERSHIP 1st 2020, INC	Credit facility
HEONEQ1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from HEONEQ1st, LLC	Credit facility
HOONEQ1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from HOONEQ1st, LLC	Credit facility
DPS 2nd, Co., Ltd	The Group partially purchased ABCP (purchase commitment of ₩41.8 billion) from DPS 2nd, Co., Ltd	Credit facility
H Hotel ONEQ 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩48 billion) from H Hotel ONEQ 1st, LLC	Credit facility
Bbq 1q 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩20 billion) from Bbq 1q 1st. LLC	Credit facility
Skoffice 1q 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩60 billion) from Skoffice 1q 1st. LLC	Credit facility
Cleanenergy 1q 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩60 billion) from Cleanenergy 1q 1st. LLC	Credit facility
HANA DL First Co., Ltd	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from HANA DL First Co., Ltd	Credit facility
HANA TERMINUS First Co., Ltd	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from HANA TERMINUS First Co., Ltd	Credit facility
THE HAM ONEQ 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩40 billion) from THE HAM ONEQ 1st. LLC	Credit facility
HANA BAY 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩80 billion) from HANA BAY 1st. LLC	Credit facility
HANA I.S 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩20 billion) from HANA I.S 1st. LLC	Credit facility
HANA I.G 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩20 billion) from HANA I.G 1st. LLC	Credit facility

Entity	The Characteristics and Purposes	Intention
GRAND ONEQ 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩40 billion) from GRAND ONEQ 1st, LLC	Credit facility
THE MIRAE ONEQ 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50 billion) from THE MIRAE ONEQ 1st, LLC	Credit facility
DONG DAEGU TERMINAL 2nd, LLC	The Group partially purchased ABCP (purchase commitment of ₩20 billion) from DONG DAEGU TERMINAL 2nd, LLC	Credit facility
KENDALL NO.9 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30.3 billion) from KENDALL NO.9 1st, LLC	Credit facility
Hana Double H 1Q 2nd Co.,Ltd.	The Group partially purchased ABCP (purchase commitment of ₩11.1 billion) from Hana Double H 1Q 2nd Co.,Ltd.	Credit facility
Hana Double H 1Q 3rd Co.,Ltd.	The Group partially purchased ABCP (purchase commitment of ₩11.1 billion) from Hana Double H 1Q 3rd Co.,Ltd.	Credit facility
Hana Charlemont Exchange	The Group is obligated to acquire privately-placed bonds up to ₩11.6 billion.	Credit facility
Hana AIC 1st Co., Ltd	The Group is obligated to acquire privately-placed bonds up to ₩217 billion.	Credit facility
Peach Shine 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩37 billion.	Credit facility
Yellow Balloon 3rd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩142.5 billion.	Credit facility
Citizenryu 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩132.6 billion.	Credit facility
Areca 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩21 billion.	Credit facility
Centaur First Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩29 billion.	Credit facility
GIF Boomerang No.1 Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩22.5 billion.	Credit facility
Hana Runway Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩115 billion.	Credit facility
JLB Square Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩135 billion.	Credit facility
Hana-Sinjang 1st Co.,Ltd	The Group is obligated to acquire privately-placed bonds up to ₩9.3 billion.	Credit facility
YK Ho 1st., Co., Ltd	The Group is obligated to acquire privately-placed bonds up to ₩7.7 billion.	Credit facility
YK Ho 2nd., Co., Ltd	The Group is obligated to acquire privately-placed bonds up to ₩7.7 billion.	Credit facility
Hana Datacenter 1st., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩0.1 billion.	Credit facility
Achenhaim Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩106.5 billion.	Credit facility
Eco Clover Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩129.7 billion.	Credit facility
Hana-Ulsan Co., Ltd	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Hana Port 1st., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩46 billion.	Credit facility
HF Caribbean Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩108 billion.	Credit facility
Hana YJDL Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩40.0 billion.	Credit facility
GMHB 2nd., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩45 billion.	Credit facility
Hangdong West 2nd., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30 billion.	Credit facility
GIF Olympus Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩10 billion.	Credit facility
Hana Sewoon 1st., Co., Ltd	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Zero To One 1st., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩72 billion.	Credit facility
Hana Heaven 1st., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Hana 1Q Logis B Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩10 billion.	Credit facility
Hana Bukjincheon 2nd., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩5 billion.	Credit facility
Ernest Hyun 1st., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩78.5 billion.	Credit facility
GIF MD Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩15.5 billion.	Credit facility
Tree Axion 1st., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩5 billion.	Credit facility
Easy Tree 6th., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
JA 8th., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Joon Dragon Fairness 2nd., Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30 billion.	Credit facility
Hana Asan Baebang 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩13 billion.	Credit facility
Zeronine 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩10 billion.	Credit facility
Hana AI 5th Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩12 billion.	Credit facility
Highyield Stone Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩12 billion.	Credit facility

Entity	The Characteristics and Purposes	Intention
Hana JH 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩12 billion.	Credit facility
Hana Gamsam 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30 billion.	Credit facility
The 1st GM 23th Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩10 billion.	Credit facility
JEY Complex Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩100 billion.	Credit facility
JHY Complex Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩50 billion.	Credit facility
Hana Residence 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩65.3 billion.	Credit facility
Hana Residence 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩63.5 billion.	Credit facility
New Deal Beomeo 1 Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Joon Dragon Brite Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩17 billion.	Credit facility
E-Master 14th Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩9.5 billion.	Credit facility
Planet Seocho 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30.5 billion.	Credit facility
E-Master 18th Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Hana Boston Core 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩79.6 billion.	Credit facility
Hana Boston Core 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩79.6 billion.	Credit facility
E-Master 17th Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩5 billion.	Credit facility
Geordan Nine One 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩160 billion.	Credit facility
Geordan Nine One 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Planet Advisor Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩74.3 billion.	Credit facility
New Deal IDC 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩26.5 billion.	Credit facility
New Deal IDC 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩9.5 billion.	Credit facility
US Alix 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩110 billion.	Credit facility
Hana Western 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30.5 billion.	Credit facility
Hana Core-value Securitization 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩8.2 billion.	Credit facility
Black Wing 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30 billion.	Credit facility
Joon Dragon Mark 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩22 billion.	Credit facility
Hana HD 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩30 billion.	Credit facility
Hana 4 Sky Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩17 billion.	Credit facility
Hana Auto 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩18 billion.	Credit facility
YDJ 2nd Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩25 billion.	Credit facility
Hana Suseong 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩20 billion.	Credit facility
Hana Downon 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩38 billion.	Credit facility
Hmidan 1st Co., Ltd.	The Group is obligated to acquire privately-placed bonds up to ₩51 billion.	Credit facility
KB Bonnacord Private Fund(FOFS)	The Group committed to increase investment up to ₩46.9 billion on its asset.	Investment commitment
AIP Energy Transport Infrastructure Specialized Privately Placed Fund Trust #4	The Group committed to increase investment up to ₩10.9 billion on its asset.	Investment commitment
AIP Energy Infrastructure Specialized Privately Placed Fund Trust #2	The Group committed to increase investment up to ₩5.5 billion on its asset.	Investment commitment
Hana Formula-E Private Special Asset Fund 114	The Group committed to increase investment up to ₩15 billion on its asset.	Investment commitment
Darby Hana New York Hotel Specialized Private Investment Trust	The Group committed to increase investment up to ₩29.9 billion on its asset.	Investment commitment
Shinhan AIM Real Estate Fund No.22-B	The Group committed to increase investment up to ₩35.7 billion on its asset.	Investment commitment
AIP Environment Infrastructure Specialized Privately Placed Fund Trust #1	The Group committed to increase investment up to ₩34.5 billion on its asset.	Investment commitment
Sanchyly Renewable Energy Privat Equity Trust II	The Group committed to increase investment up to ₩63.8 billion on its asset.	Investment commitment
IGIS U.S. Specialized Private Placement Real Estate Investment Trust No. 417-1	The Group committed to increase investment up to ₩91.5 billion on its asset.	Investment commitment
Hana Card 2019-1 Asset Securitization Specialty Co., Ltd.	In related to asset securitization, the transferred beneficial interest is required to be above a certain rate. If asset shortage is constant, additional asset transfer shall be held.	Asset securitization

Entity	The Characteristics and Purposes	Intention
Hana Card 2020-1 Asset Securitization Specialty Co., Ltd.	In related to asset securitization, the transferred beneficial interest is required to be above a certain rate. If asset shortage is constant, additional asset transfer shall be held.	Asset securitization
Hana Card 2021-1 Asset Securitization Specialty Co., Ltd.	In related to asset securitization, the transferred beneficial interest is required to be above a certain rate. If asset shortage is constant, additional asset transfer shall be held.	Asset securitization
Hana Alternative Infra Special Investment Private Trust	The Group committed to increase investment up to ₩43.5 billion on its asset.	Investment commitment
Hana Special New Deal National Representative Growth Private Trust	The Group committed to increase investment up to ₩98 billion on its asset.	Investment commitment
Hana Alternative Special Investment Private Trust No.108	The Group committed to increase investment up to ₩1.6 billion on its asset.	Investment commitment
HANA Alternative Wando Geum-il Wind Power Infra Special Asset No.1	The Group committed to increase investment up to ₩0.7 billion on its asset.	Investment commitment
Hana 1Q Startup Investment Fund	The Group committed to increase investment up to ₩3.3 billion on its asset.	Investment commitment
Hana Tech Value-Up Investment Fund	The Group committed to increase investment up to ₩35.7 billion on its asset.	Investment commitment
Hana Alternative Private Real Estate Investment Trust No.119	The Group committed to increase investment up to ₩35.0 billion on its asset.	Investment commitment
Hana Alternative Frontier Private Investment Trust No.1	The Group committed to increase investment up to ₩32.9 billion on its asset.	Investment commitment

1-4 Non-controlling interest of subsidiaries

1-4-1 Major non-controlling interests' share of the equity of the subsidiaries as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Hana Bank (*1)	533,475	179,737
KEB Hana Card	305,825	270,667
Hana Capital (*1)	149,578	149,578
Hana F&I, Inc. (*1)	—	29,835
Hana F&I, Inc.	540	477
PT Bank KEB Hana	262,399	239,876
Hana Bancorp	4,089	3,873
Hana Equity Investment Management (Shenzhen) Co., Ltd	18,153	—
Others (*2)	6,646	12,562
Total	1,280,705	886,605

(*1) The carrying amount of hybrid bonds issued by the subsidiary.

(*2) The carrying amounts of non-controlling interest of Dduksim Co., Ltd., and Keumho Trading Co., Ltd.

1-4-2 Major non-controlling interest share of profit or loss of the subsidiaries for the year ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Hana Bank (*1)	7,027	8,000
KEB Hana Card	37,573	19,453
Hana Capital (*1)	5,625	4,969
Hana F&I, Inc. (*1)	503	1,759
Hana F&I, Inc.	47	41
PT Bank KEB Hana	5,430	14,735
Hana Bancorp	(44)	(447)
Others (*2)	(647)	(874)
Total	55,514	47,636

(*1) The carrying amount of dividends from hybrid bonds issued by the subsidiary.

(*2) Non-controlling interest share of profit or loss of Dduksim Co., Ltd., Sejoong Co., Ltd., Keumho Trading Co., Ltd.

2. Unconsolidated structured entities

2-1 Nature of the Group's interests in unconsolidated structured entities

Details of the nature of the Group's interests in unconsolidated structured entities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Purpose	Financing arrangement	Total assets	
			December 31, 2021	December 31, 2020
Special purpose company	Financing through asset liquidation and securitization	Issuing ABL/ABCP and others	7,211,374	9,398,854
Real estate finance	Operation for real estate (including SOC) development	Investment and borrowing	35,521,837	27,258,324
Shipping finance and primary market finance	Financing to purchase ships, NPL and ownership	Investment and borrowing	25,967,276	18,954,245
Investment fund	Managing investment fund and trust	Issuing beneficiary certificates	277,704,873	180,489,761

2-2 Risks from its interests in unconsolidated structured entities (Korean won in millions):

<December 31, 2021>

Classification	Special purpose company	Real estate finance	Shipping finance and primary market finance	Investment fund
Assets:				
Loans receivable (A)	416,759	2,395,327	1,276,791	1,044,937
Securities (B)	1	55,260	26,292	13,991,289
Derivatives (C)	4,391	3,782	11,868	–
Others (D)	1,253	6,988	4,694	70,232
Liabilities:				
Derivatives	6,574	170	1,200	–
Provision	2,198	3,291	979	252
Others	24	124	55	–
Net asset	413,608	2,457,772	1,317,411	15,106,206
Maximum exposure to loss				
Financial assets (A+B+C+D)	422,404	2,461,357	1,319,645	15,106,458
Credit and other commitment	908,695	1,129,319	462,185	1,847,264

<December 31, 2020>

Classification	Special purpose company	Real estate finance	Shipping finance and primary market finance	Investment fund
Assets:				
Loans receivable (A)	608,143	1,368,442	1,065,186	1,087,215
Securities (B)	1	108,484	25,150	12,313,544
Derivatives (C)	18,571	13,953	4,799	—
Others (D)	1,459	2,930	4,495	87,189
Liabilities:				
Derivatives	3,137	2,278	11,263	—
Provision	1,795	2,119	361	31
Others	118	197	50	—
Net asset	623,124	1,489,215	1,087,956	13,487,917
Maximum exposure to loss				
Financial assets (A+B+C+D)	628,174	1,493,809	1,099,630	13,487,948
Credit and other commitment	1,512,445	692,456	271,854	716,393

3. Summary of significant accounting policies

3-1 Basis of preparation

The Group prepares statutory consolidated financial statements in the Korean language in accordance with KIFRS. 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' review report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

3-2 Principles of consolidation

The significant accounting methods of consolidation that the Group adopts in preparing the consolidated financial statements are as follows.

3-2-1 Subsidiaries

Subsidiaries are the companies controlled by the Group, and the Group has rights to determine the financial and operational policies of the subsidiaries. Generally, it has at least 50% voting rights, and special purpose vehicles are included. When the Group evaluates whether a company falls under a subsidiary, it considers the existence of an exercisable or convertible potential voting right and its effect.

When the Group controls a subsidiary, the subsidiary is subject to consolidation; when the Group loses the control, it is eliminated from the consolidation.

3-2-2 Structured entity

A structured entity is an entity that has been designed so that voting or similar rights are not a dominant factor in deciding who controls the entity.

When assessing whether the Group has power over a structured entity, which the Group holds an interest, following factors should be considered: the purpose and form of the structured entity, substantive ability to direct the relevant activities of the structured entity, relationship and its character with the structured entity, and the size of exposure to earnings volatility of the structured entity.

3-2-3 Offsetting investment account against equity account

The investment accounts of the Group and the corresponding equity accounts of the subsidiaries were offset and eliminated as of the date of acquiring control.

3-2-4 Difference between net assets of an investee and acquisition costs

When offsetting the investment of the Parent Company and the equity of a subsidiary, the Group applies an acquisition method in accounting treatment.

When applying the acquisition method, if the purchase price to acquire shares of the subsidiary's assets and liabilities at fair value exceeds the investment as of the date of acquiring control, the excess is recognized as goodwill and recorded as an intangible asset, and the Group tests goodwill for impairment annually at the end of reporting period.

If the parent acquires additional shares of the subsidiary after acquiring the control of the subsidiary, the investment of the Parent Company and the equity of the subsidiary are offset and eliminated as of the initial acquisition date: at this time, if the investment and the corresponding equity are not equal, the difference is recorded as consolidated capital surplus (or consolidated capital adjustments).

3-2-5 Elimination of related party transactions and unrealized gains or losses

The Group offset and eliminated intercompany accounts receivable–payable, and intercompany revenues–expenses, and interest incomes or expenses arising from intercompany loans by applying an interest rate for the current term.

3-2-6 Application of equity method

According to the sources of changes in net assets of an investee under equity method, the Group differently records the changes in accounting treatments. If the net assets of an investee are changed due to a net profit or loss for the current term, the change is recorded as an investment income or loss under equity method; if the net assets are changed due to an increase or decrease in retained earnings carried over from the previous term, the change is recorded as a positive or negative change in retained earnings under equity method; if the net assets are changed due to an increase or decrease in equity other than the net profit or loss for the current term or the change in retained earnings carried over from the previous term, the change is recorded as a positive or negative change in equity under equity method.

3-2-7 Special reserve of trust account

In the trusts with stipulations of preserving principals and interests, which are consolidated, special reserves accumulated in accordance with the terms and conditions of the trusts are adjusted in the consolidated retained earnings in accordance with the detailed enforcement regulations on banking supervision.

3-2-8 Non-controlling interests

The Group recognizes equity in a subsidiary not attributable to a parent as non-controlling interests. The Group also attributes total comprehensive income to the non-controlling interests even if this results in the non-controlling interests having a deficit balance. The Group presents the deficit balance as a negative number in equity.

3-2-9 Business combinations

3-2-9-1 Business combinations

Acquisition method is applied to business combinations except a business combination between entities or business under the control of the same ultimate parent company. The Group recognizes identifiable assets acquired and liabilities taken over at fair value on the acquisition date except the following cases.

- Lease contracts: classified by the terms and conditions of contracts on the date of contract
- Contingent liabilities: recognized as the liabilities that can be reliably measured as current obligations
- Deferred tax assets and liabilities: recognized and measured in accordance with KIFRS 1012 Income taxes.
- Employee benefits: recognized and measured in accordance with KIFRS 1019 Employee benefits
- Compensable assets: recognized and measured in accordance with standards applicable to compensable items
- Reacquired rights: measured in accordance with special regulations
- Stock options: stock option related debt or equity securities are measured in accordance with KIFRS 1102 Share-based payment
- Assets held-for-sale: measured at net fair value in accordance with KIFRS 1105 Non-current assets held-for-sale and discontinued operations

In business combination, consideration for transfer is measured at fair value, which is a sum of the fair values of assets transferred by the Group, liabilities that the Group bears for the previous owner of a company being acquired, and equity instruments issued by the Group on the acquisition date. However, the stock options included in the consideration for transfer, which the acquirer grants to exchange for the compensations that are held by the employees of the acquiree, are not measured at fair value but evaluated in the way described above.

The acquisition-related costs are costs the acquirer has incurred to achieve effects of business combination. Those costs include brokerage fees – in other words, advisory, legal, accounting, valuation and other professional or consulting fees – general administrative costs including costs of maintaining an internal acquisitions department, and costs to register and issue debt securities and equity securities. Except the costs of issuing debt and equity securities under KIFRS 1032 and KIFRS 1109, the acquirer recognizes acquisition related costs as expenses in the periods in which the costs are incurred and the services are received.

3-2-9-2 Goodwill or gain on bargain purchase

The Group recognizes goodwill as of the acquisition date measured as the excess of (a) the aggregate of (i) the consideration transferred measured which generally requires acquisition-date fair value and (ii) the amount of any non-controlling interest in the acquire over (b) the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed in accordance with KIFRS 1103 Business combinations. If (b) exceeds (a), the Group reassess whether it has correctly identified all of the assets acquired and all of the liabilities assumed. After reassessments, the Group recognizes the resulting gain in profit or loss (a gain on bargain purchase) on the acquisition date.

Additional acquisition of non-controlling interest is taken into account as transactions between the shareholders, and the resulting goodwill, etc. is not recognized.

3-3 Foreign exchange

3-3-1 Functional currency

When the Group prepares the financial statements, it measures and recognizes all transactions according to the functional currency. The functional currency is the currency of the primary economic environment in which the entity operates and entities with different functional currencies measures and recognizes in its own functional currencies.

3-3-2 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 ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate at the reporting date and the exchange difference is recognized as profit or loss. Non-monetary items measured at fair value in a foreign currency are translated at the exchange rates at the end of reporting date. When a gain or loss on a non-monetary item is recognized in other comprehensive income, any exchange component of that gain or loss is recognized in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognized in profit or loss, any exchange component of that gain or loss is recognized in profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as of the dates of the initial transactions.

The Group may have a monetary item that is receivable from or payable to a foreign operation. An item for which settlement is neither planned nor likely to occur in the foreseeable future is, in substance, a part of the entity's net investment in that foreign operation. Exchange differences arising on a monetary item that forms part of a reporting entity's net investment in a foreign operation are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment

3-3-3 Translation to the presentation currency

The Group translates the results and financial position of overseas branches and subsidiaries recorded on its own functional currencies into the presentation currency of the Group, Korean Won (KRW). The Group translates (i) assets and liabilities for each statement of financial position at the closing rate at the date of that statement of financial position and (ii) income and expenses for each statement presenting profit or loss and other comprehensive income at exchange rates at the dates of the transactions or an average rate of the period. The Group recognizes all resulting exchange differences as other comprehensive income.

3-4 Cash and cash equivalents

Cash and cash equivalent comprise of cash at banks and on hand and short-term demand deposits. The purpose of cash and cash equivalents are to make short-term investments and to meet short-term cash demands. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

3-5 Classification and measurement of financial assets

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

Purchase or sale of financial assets is recognized at the date of settlement. However, 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.

The Group initially measures a financial asset and a financial liability at its fair value plus (minus), in the case of a financial asset (financial liability) not at fair value through profit or loss, transaction costs. Fair value is defined as the amount by which an asset can be exchanged or a liability settled in a transaction between an independent party with a reasonable judgment and a willingness to trade. The fair value of a financial instrument at initial recognition is generally the transaction price (the fair value provided or received).

3-5-1 Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss and financial assets not classified as fair value through OCI or subsequently measured at amortized cost.

In addition, if the designation of a financial asset eliminates or significantly reduces the recognition and measurement inconsistencies that may arise from the measurement of assets or liabilities on a different basis or recognition of gains or losses, a financial asset can be designated as fair value through profit or loss.

Financial assets at fair value through profit or loss are measured at fair value and the gains or losses arising from changes in fair value are recognized in profit or loss. Dividends and interest income from financial assets are also recognized in profit or loss.

3-5-2 Financial assets at fair value through OCI

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

- a. The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling
- b. 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

The Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they are held strategically not for short-term trading. Financial assets at fair value through OCI are measured at fair value after initial recognition. 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 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. However, the cumulative fair value change from equity instruments designated at fair value through OCI is never recycled to profit or loss when derecognized.

The fair value of financial assets at fair value through OCI is measured in the foreign currency and translated at the exchange rate at the end of the reporting period. The part of changes in fair value arising from changes in the amortized cost is recognized in profit or loss and other changes are recognized in equity.

3-5-3 Financial assets at amortized cost

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

- a. The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows
- b. 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. Interest income is recognized using the EIR method.

The Group defers LOF/LOCs associated with originating loans and LOCs that have future economic benefits. Loan balances are reported net of these LOF/LOCs. The deferred LOF/LOCs are amortized based on the effective interest rate method with the amortization recognized as adjustments to interest income.

3-6 Derivative financial instruments and hedge accounting

The Group measures derivative financial instruments at fair value at initial recognition. The Group classifies derivative financial instruments as derivative financial instruments held for trading purpose or hedging instruments. After initial recognition, the Group measures derivative financial instruments at fair value and gains or loss arising from changes in the fair value as profit or loss, except the following cases. When the derivative financial instruments are previously a designated and effective hedging instrument in a cash flow hedge or net investment hedge no longer qualifies, the Group recognizes the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge as other comprehensive income.

The Group applies fair value hedge accounting for a hedge of the exposure to changes in fair value of a recognized asset or liability or an unrecognized firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss.

The Group applies cash flow hedge for a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction.

The Group formally documents the hedging relationship, Group's risk management objective and strategy for undertaking the hedge, the risk being hedged and how to assess the hedging instrument's effectiveness for applying hedge accounting. The effectiveness of the hedge is the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. The Group assesses the hedge on an ongoing basis and determined actually to have been highly effective throughout the financial reporting periods for which the hedge was designated and documents the result of assessment.

3-6-1 Fair value hedges

For fair value hedge accounting, the Group recognizes a gain or a loss on valuation of the hedging instrument and the hedged item as profit or loss for offsetting the changes in the fair value of the hedging instrument and the hedged item. The Group discontinues prospectively the hedge accounting if the hedge no longer meets the criteria for hedge accounting. Any adjustment arising from the change in the fair value of the hedged financial instrument for which the effective interest method is used is amortized to profit or loss fully by maturity of the hedged financial instrument.

3-6-2 Cash flow hedges

For cash flow hedge accounting, the Group recognizes the effective portion of the gain or loss on the hedging instrument directly as other comprehensive income for offsetting the exposure to changes in cash flows of the hedging instrument and the hedged item attributable to the hedged risk. The Group reclassified from equity to profit or loss the associated gain or loss that was recognized in other comprehensive income in the same period during which the hedged forecast cash flows affect profit or loss. The Group discontinues prospectively the cash flow hedge accounting if the hedge no longer meets the criteria for hedge accounting.

3-6-3 Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized as OCI while any gains or losses relating to the ineffective portion are recognized in the statement of profit or loss. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is transferred to the statement of comprehensive income in accordance with KIFRS 1021 The Effects of Changes in Foreign Exchange Rates.

3-6-4 Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract—with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. The Group separates an embedded derivative from the host contract and accounted for as a derivative only if the requirements of separation are met.

3-6-5 'Day 1' profit or loss

In case of derivatives in level 3, whose fair value is determined using data which is not observable from markets, the difference between the transaction price and fair value at initial recognition (a 'Day 1' profit or loss) is deferred and amortized over the life of the associated instrument using the straight-line method and the amortization is recognized in the statement of comprehensive income.

3-6-6 Credit risk valuation adjustment

When measuring derivatives at fair value, credit risk valuation adjustment is calculated to reflect the effectiveness of the adjustment for counterparties.

3-7 Investments in associates and joint ventures

Investments in entities over which the Group has joint control or significant influence (investments in associates and joint ventures) are accounted for using the equity method. Under the equity method, on initial recognition the Group recognizes investments in associates and joint ventures cost. Subsequently, the Group adjusts the carrying amount of the investments in associates and joint ventures to recognize the Group's share of the profit or loss of the investee as profit or loss in the statement of comprehensive income. The Group recognizes the Group's share of changes in equity (except for profit or loss of the investee) directly in the related equity account to the statement of financial position.

If the Group's share of losses of the investee equals or exceeds its interest in the associates and joint ventures, it suspends recognizing its share of further losses. However, if the Group has other long-term interests in the investee, it continues recognizing its share of further losses to the extent of the carrying amount of such long-term interests. Such items include preference shares and long-term receivables or loans. The Group resumes the application of the equity method if the Group's share of income or change in equity of an investee exceeds the Group's share of losses accumulated during the period of suspension of the equity method.

On acquisition of the investment, the excess of the cost of the investment over the Group's share of the net fair value of the investee's identifiable assets and liabilities is accounted for as goodwill. The Group does not amortize goodwill relating to an associates or a joint venture and tests the investment for impairment if there is an indication which the investment is impaired. Further, the Group's share of any difference between the net fair value of the investee's identifiable assets and liabilities, and the net book value of such assets and liabilities is amortized based on the investee's accounting treatments on the related assets and liabilities and charged or credited to the valuation gain or loss on the equity method investments in the statement of comprehensive income

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.

3-8 Impairment of financial assets

The Group evaluates expected credit losses (ECLs) of financial assets at amortized cost and fair value through OCI except financial assets at fair value through profit or loss at the end of each reporting period, and an allowance for ECLs is recognized.

The expected credit loss (ECL) is the weighted average amount of possible outcomes within a certain range, reflecting the time value of money, estimates on the past, current and future situations, and information accessible without excessive cost of effort.

The ECL can be measured in three followings ways:

- General approach: when financial assets do not fall into below two categories and are off-balance-sheet undrawn commitments
- Simplified approach: when financial assets are trade receivables, contract assets or lease receivables
- Credit-impaired approach: when financial assets are credit-impaired at initial recognition

The general approach is applied differently depending on the significance of the increase of the credit risk. If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, an entity shall measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on that financial instrument has increased significantly since initial recognition, an entity shall measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses at each reporting date.

The loss allowance is measured at an amount equal to lifetime expected credit losses for the simplified approach, and an entity shall only recognize the cumulative changes in lifetime expected credit losses since initial recognition as a loss allowance for purchased or originated credit-impaired financial assets at each reporting date for the credit-impaired approach.

The following non-exhaustive list of information may be relevant in assessing changes in credit risk:

- Significant changes in internal price indicators of credit risk as a result of a change in credit risk since inception
- Other changes in the rates or terms of an existing financial instrument that would be significantly different
- An actual or expected significant change in the financial instrument's external credit rating.
- An actual or expected internal credit rating downgrade for the borrower or decrease in behavioral scoring used to assess credit risk internally
- An actual or expected significant change in the operating results of the borrower
- Past due information

1) Forward-looking information

The Group measures the significance of the increase of the credit risk and the expected credit loss using forward-looking information.

The Group assumes that the risk component is correlated with changes in market conditions, and calculates the expected credit loss using the forward-looking information by modelling macroeconomic variables and risk components.

The forward-looking information used to measure the expected credit loss is derived from 'stress-case' or 'worst-case' scenarios.

2) Measurement of expected credit loss for financial assets measured at amortized cost

Expected credit loss for financial assets measured at amortized cost is measured as the difference between the present value of the cash flows expected to be received and the cash flow expected to be paid. For this purpose, the Group calculates expected cash flows for individually significant financial assets.
(Individual valuation allowance)

Financial assets insignificant in value individually are measured on a collective basis with financial assets with similar credit risks (collective loss allowance).

① Loss allowance on an individual assessment basis

Loss allowance on an individual assessment basis is based on the best estimates of management in regards to the present value of cash flows expected to be recovered from receivables. In estimating the cash flows, the Group uses all available information including the financial conditions such as the operating cash flows of counterparties and the net realizable value of collateral provided.

② Loss allowance on a collective assessment basis

Loss allowance on a collective assessment basis uses the estimation model that accounts for the forward-looking information based on the past loss rate to measure the expected credit loss. The model considers the probability of default (PD) and the loss given default (LGD) reflecting the type of instruments and borrowers', credit rating, portfolio size and collection period. Also, certain assumptions are applied to model the expected credit loss measurement and to determine input variables based on past experiences and forward-looking information. Methodologies and assumptions for this model are regularly reviewed to minimize the difference between the loss allowance and the actual loss.

The expected credit loss for financial assets measured at amortized cost is recognized as the loss allowance, and when the financial asset is determined to be irrecoverable, the carrying amount and loss allowance are decreased. If financial assets previously written off are recovered, the loss allowance is increased and the difference is recognized in the current profit or loss.

3) Expected credit loss measurement for financial assets measured at fair value through other comprehensive income

The measurement method is the same as the one for financial assets measured at amortized cost, but the change in the loss allowance is recognized as other

comprehensive income. The loss allowance for financial assets measured at fair value through other comprehensive income is reclassified from other comprehensive income to current profit or loss when the assets are disposed of or repaid.

3-9 Derecognition of financial assets

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized when (i) the rights to receive cash flows from the asset have expired or, (ii) the Group has transferred substantially all the risks and rewards of the asset. If the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset, the Group recognizes the asset and the associated liability to the extent of the Group's continuing involvement in the asset. If the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the transferred asset and recognizes a collateralized borrowing for the consideration received.

3-10 Classification and measurement of financial liabilities

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or borrowings. All financial liabilities are recognized initially at fair value and, except for financial liabilities at fair value through profit or loss, net of directly attributable transaction costs.

3-10-1 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 incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by KIFRS 1109. Separated embedded derivatives are also classified as

held for trading unless they are designated as effective hedging instruments. Financial liabilities at fair value through profit or loss are subsequently measured at fair value and the related gain and income expense are recognized in the statement of profit or loss.

The Group performs securities lending and borrowing classified to financial liabilities at fair value through profit or loss. When the Group borrows securities from Korea Securities Depository, securities borrowed are managed as memorandum value and when selling them, they are recorded as securities sold. At closing, the difference in the price securities are sold and the market price prevailing on the closing date is taken into account as valuation gain or loss on securities sold, and at the time of selling the securities, the difference in book value and the price securities are purchased is recorded as trading gain or loss on securities sold.

3-10-2 Deposits, borrowings, and debentures

After initial recognition, interest bearing deposits, borrowings and debentures are subsequently measured at amortized cost using the effective interest rate method. Gains and losses are recognized in the statement of comprehensive income when the liabilities are derecognized as well as through the EIR method amortization process.

3-11 Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as 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.

3-12 Offsetting of financial instruments

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

3-13 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 provision is used only for expenditures for which the provision was originally recognized. If a present obligation is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability, the Group discloses the obligation as a contingent liability. If the effect of the time value of money is material, provisions are measured at present value, the amount of a provision is measured at the present value of the expenditures expected to be required to settle the obligation.

The Group recognizes a provision for confirmed acceptances and guarantees, unconfirmed acceptances and guarantees, bills endorsed, unused credit line and cash advance commitments on credit cards by applying credit conversion factor (CCF). The Group measures provisions for such off-statement of financial position items in the same way that is applied to collective assessments of loans and receivables.

3-14 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument and is measured at fair value on date of

initial recognition. After initial recognition, the Group, as an issuer of such a contract, measures it at the higher of (i) the amount determined in accordance with KIFRS 1109 Financial instruments and (ii) the amount initially recognized less, when appropriate, cumulative amortization recognized in accordance with KIFRS 1115 Revenues from contracts with customers.

3-15 Bonds purchased under resale agreements and bonds sold under repurchase agreements

Bonds purchased under resale agreements and bonds sold under repurchase agreements are included in loans receivable and borrowings, respectively, in the accompanying statement of financial position. Interest income and expense from purchase or sale are recognized as interest income on loan receivables and interest expense on borrowings.

3-16 Property and equipment

An item of property and equipment is measured at its cost less any accumulated depreciation. The cost of an item of property and equipment includes any costs directly attributable to acquisition of an item.

Subsequent cost is recognized as an asset if, and only if it is probable that future economic benefits associated with the cost will follow to the Group and the cost can be measured reliably. The carrying amount of parts that are replaced is derecognized. The Group recognizes other repair and maintenance costs as profit or loss for the current period.

Land is not depreciated. Depreciation of other item of property and equipment is calculated using methods listed below to write down the cost of property and equipment to their residual values over their estimated useful lives. The depreciation methods and estimated useful lives are as follows:

Classification	Depreciation method	Years
Buildings for business purpose, equipment attached to the building and Construction structures	Straight-line method	5 to 55
Vehicles, furniture and fixtures, leasehold improvements	Straight-line method or declining balance method	3 to 20

When the carrying amount of an asset exceeds its recoverable amount, the asset is written down to its recoverable amount. The residual value of and useful life of an asset is reviewed at each financial year end and, if expectations differ from previous estimates, the Group applies change in estimates. 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 included in non-operating income in the statements of comprehensive income.

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in equal amounts over the expected useful life of the related asset.

3-17 Investment properties

An item of investment properties is measured at its cost less any accumulated depreciation. The cost of an item of investment properties includes any costs directly attributable to acquisition of an item. After initial recognition, the Group measures all of its investment properties in accordance with the cost model in IAS 40.

Land is not depreciated. Depreciation of other item of investment properties is calculated using methods listed below to write down the cost of investment properties to their residual values over their estimated useful lives. The depreciation methods and estimated useful lives are as follows:

Classification	Depreciation method	Years
Buildings	Straight-line method	5 to 55

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 in the statement of comprehensive income in the period of derecognition. Transfers to, or from, investment properties are made when, and only when, there is a change in use.

3-18 Intangible assets

An intangible asset is recognized only when its cost can be measured reliably and it is probable that the expected future economic benefits that are attributable to it will flow to the Group. Intangible assets include industrial right, software, development cost and others.

Amortization of items of intangible assets is calculated using methods listed below to write down the cost of items to their residual values over their estimated useful lives. The amortization methods and estimated useful lives are as follows:

Classification	Depreciation method	Years
Industrial property, software, system development, trademark rights	Straight-line method	5
Core deposit	Straight-line method	14
Client membership	Straight-line method	10 to 30
Others	Straight-line method	1 to 20

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value as of the date of acquisition in accordance with KIFRS 1103 Business Combinations. Following initial recognition, the carrying amount of intangible assets with finite useful lives is allocated on a systematic basis over their useful lives. The intangible assets with indefinite useful lives are not amortized and the Group tests those assets for impairment annually and whenever there is an indication that the intangible asset may be impaired. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable.

3-19 Non-current assets held for sale

The Group classifies a non-current asset or disposal group as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition and its sale must be highly probable. The asset (or disposal group) must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups) and its sale must be highly probable.

The Group measures a non-current asset (or disposal group) classified as held for sale at the lower of its carrying amount and fair value less costs to sell.

3-20 Impairment of non-financial assets

The Group tests the depreciable asset for impairment whenever there is a change of environment or an event that the carrying amount may not be recoverable. The Group recognizes an excess of the carrying amount over the recoverable amount as an impairment loss. The Group defines recoverable amount as the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use. For measuring the impairment of assets, the Group identifies the lowest aggregation of assets that generate largely independent cash inflows (CGU). The Group assesses reversal of an impairment loss recognized for the non-

financial assets other than goodwill at the end of reporting period.

3-21 Short-term employee benefits

When employees have rendered services to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits. This amount is expected to be settled in whole before twelve months after the end of the reporting period, in exchange for those services.

3-22 Retirement benefits

The Group has both defined benefit (DB plan) and defined contribution (DC plan) plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service rendered in the current and prior periods. Defined benefit plans are all post-employment benefit plans except for defined contribution plans. A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors, such as age, years of service and compensation.

The defined benefit liability is the present value of the defined benefit obligation less the fair value of plan assets. The cost of providing benefits under the defined benefit plan is determined separately using the projected unit credit actuarial valuation method. The present value of the defined benefit liability is recorded in the same currency as the payment itself and is calculated by discounting the expected future cash flow and using the interest rate of other reputable companies with similar payment and end of reporting dates.

Changes in the actuarial estimates and actuarial gains and losses between estimates and results are recognized in the period they occur as part of other comprehensive income. The past service cost is recognized immediately.

The Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

3-23 Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or an employee's decision to accept an offer of benefits in exchange for the termination of employment. The Group recognizes a liability and expense for termination benefits at the earlier of the following dates ; when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring that is within the scope of KIFRS 103 7 and involves the payment of termination benefits. Termination benefits for voluntary redundancies are recognized as an expense if the Group has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably. If the termination benefits are not expected to be settled wholly before twelve months after the end of the annual reporting period, then the termination benefits are discounted to present value.

3-24 Share-based payment transactions

The Group grants share options to its employees in the form of share-based payment transactions. For equity-settled share-based payment transactions, the Group measures the goods or services received, and the corresponding increase in equity, directly, at the fair value of the goods or services received, and recognizes the cost as employee benefits expense and other capital adjustment in equity. If the Group cannot estimate reliably the fair value of the goods or services received, the Group measures their value, and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted and recognizes the cost as employee benefits expense and other capital adjustment in equity. For cash-settled share-based payment transactions, the Group measures the goods or services acquired and the liability

incurred at the fair value of the liability. Until the liability is settled, the Group remeasures the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period. For share-based payment transactions in which the terms of the arrangement provide the counterparty with a choice of settlement, the Group accounted for the transactions in accordance with their commercial substance.

3-25 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 taxes are accounted for as other comprehensive income in the consolidated statements of comprehensive income.

Current income tax expenses are computed based on the tax rates and tax laws enacted or substantively enacted in the jurisdictions that the Group operates in and generates taxable income at the end of the reporting period. If application of related tax law or regulation depends on the interpretation, the Group measures the current tax liabilities at the amount expected to be paid to the taxation authorities based on its interpretation and assesses its initial interpretation periodically.

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.

When the initial recognition of an asset or liability in a transaction which is not a business and at the time of the transaction, affects neither accounting profit nor taxable profit, the Group does not recognize a deferred tax asset or liability. The Group measures deferred tax assets and liabilities at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted

by the end of the reporting period.

The Group recognizes a deferred tax asset for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized.

The Group recognizes a deferred tax liability for all taxable temporary differences with investments in subsidiaries, except to the extent that both of the following conditions are satisfied: (a) the parent is able to control the timing of the reversal of the temporary difference; and (b) it is probable that the temporary difference will not reverse in the foreseeable future.

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

3-26 Insurance contracts

Hana Life Insurance and Hana Insurance. Co., Ltd.'s significant accounting policies relating to insurance contracts are as follows.

An insurance contract is a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

A contract that qualifies as an insurance contract remains an insurance contract until all rights and obligations are extinguished or expire. Such investment

contract that contains Discretionary Participation Features subsequent to the contract classification according to quantitative criteria is within the scope of KIFRS 1104 *Insurance Contracts*. If the investment contract does not contain Discretionary Participation Features, the contract is subject to KIFRS 1109 *Financial Instruments*.

3-26-1 Reinsurance assets

The Group does not offset the reinsurance assets against the related reinsurance liabilities. If a reinsurance asset is impaired, the Group reduces its carrying amount accordingly and recognizes that impairment loss in profit or loss.

3-26-2 Deferred acquisition costs

The Group amortized the acquisition costs arising from long-duration contracts during the term of the contracts in the straight-line method in accordance with accounting standards for insurance business article 31 and article 3 of the supplementary provisions. If the acquisition costs exceed the expected amount or the additional premiums are settled highly for earlier term of the contracts to collect the acquisition costs in early stage, the acquisition costs are recognized in the period they occur as profit or loss. The deferred acquisition costs are amortized over the term of the contracts within the limits of 7 years. The unamortized costs of surrendered insurance contract are amortized in the period it is surrendered.

3-26-3 Liabilities reserves

The Group recognizes liabilities reserves by types of insurance contracts as of the reporting date in accordance with the Insurance Business Act and the related regulations. The liabilities reserves refer to an amount calculated pursuant to the premiums and liabilities reserves calculation manual for payment of claims, bonus return and policyholders dividend.

3-26-4 Valuation of special accounts assets and liabilities

The Group designates and operates any of the retirement insurance contracts, retirement dividend insurance contracts and variable insurance contracts (including variable universal insurance contracts) as special accounts pursuant to Article 108 (1) of the Insurance Business Act and Article 52 of the Regulations on Supervision of Insurance Business.

3-26-5 Liability adequacy assessment

At the end of each reporting period, the Group evaluates the appropriate insurance liabilities recognized using current estimates of future cashflows of all insurance contracts (including cash flows such as claims handling costs, as well as cash flows resulting from embedded options and guarantees). In the case of long-term insurance, future cash flows are discounted at the rate of return on future operating assets, and In the case of general insurance and auto insurance, the present value is not discounted.

Earned premiums and long-term unearned premiums evaluate insurance liabilities adequacy by considering all cash flows such as future insurance, business expenses, and operating insurance premiums. As a result of the evaluation, if the carrying amount of insurance liability is inappropriate from the perspective of estimated future cash flows, the full amount is recognized as profit or loss. If the evaluation shows that the liability is inadequate, the entire deficiency is recognised in profit or loss.

3-27 Equity

3-27-1 Classification of equity

The Group classifies a financial instrument on initial recognition as a financial liability or an equity instrument in accordance with the substance of the contractual arrangement. If the Group has the right to avoid contractual obligation relating to an issued financial instrument, the Group classifies the financial instrument as an equity instrument in accordance with the substance of the contractual arrangement. The Group classifies a hybrid equity security on initial recognition as equity if it meets the condition of an equity instrument. The hybrid equity securities, issued by subsidiaries of the Group, are classified as non-controlling interests according to this classification standard. Distributions from hybrid equity securities are accounted as net income attributable to non-controlling interests in the Consolidated Statements of Profit or Loss and Other Comprehensive Income.

3-27-2 Stock issuance costs

Additional stock issuance costs or incremental costs related to the stock issuance for business combinations are recorded as a deduction from issued capital net of tax effects.

3-27-3 Dividends on common stock

Dividends from common stock are deducted from the Group's equity and recognized as a liability upon approval of dividend distributions at the shareholders' meeting (the board of directors for the interim dividends).

Dividends declared for the year that is approved after the reporting date are disclosed as a subsequent event.

3-27-4 Treasury stock

Equity instruments of the Group which are acquired by the Group or any of its subsidiaries are deducted from its equity and recorded at acquisition cost, including transaction costs. Consideration received on the sale or issuance of the Group's own equity instruments is recognized directly in equity.

3-28 Earnings per share

Basic and diluted earnings per share are computed by dividing net income by the weighted-average number of shares of common stock outstanding during the year.

3-29 Accounting basis for trust accounts

The Group separates trust properties from proprietary properties in accordance with the Supervisory Regulations on Financial Investment Business. The Group recognizes funds lent or borrowed to trust accounts as accounts receivables or account payables, respectively. The Group recognizes trust commissions earned from trust accounts as income from trust operations. When a loss is incurred on a trust account that includes a guarantee of principal repayment, the corresponding loss is recognized as a loss from trust operations.

3-30 Lease accounting

In accordance with KIFRS 1116, the Group applies a single recognition and measurement approach for all leases, except for leases of low-value assets. KIFRS 1116 provides guidance on specific transition requirements and practical expedients that an entity may apply.

The Group recognized right-of-use assets and lease liabilities for those leases previously classified as operating leases, except leases of low-value assets. The right-of-use assets for most leases were recognized based on the carrying amount as if the standard had always been applied, apart from the use of incremental borrowing rate at the date of initial application.. In some leases, the right-of-use assets were recognized based on the amount equal to the lease liabilities, adjusted for any related prepaid and accrued lease payments previously recognized. Lease liabilities were recognized based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application.

The Group also applied the available practical expedients wherein it:

- Used a single discount rate to a portfolio of leases with reasonably similar characteristics
- Relied on its assessment of whether leases are onerous immediately before the date of initial application
- Applied the short-term leases exemptions to leases with lease term that ends within 12 months of the date of initial application
- Excluded the initial direct costs from the measurement of the right-of-use asset at the date of initial application
- Used hindsight in determining the lease term where the contract contained options to extend or terminate the lease

3-31 Merchant banking accounts

As permitted by the Restructuring of Financial Institutions Act, the Group may continue its merchant banking operations, including business affairs of bill management accounts, until the existing contracts acquired from Korea International Merchant Bank upon merger are terminated.

Significant accounting policies applied to the Group's merchant banking operations are summarized as follows:

3-31-1 Revenue recognition on discounted notes

Interest income on discounted notes is accrued over the term of the notes. Income from the sale of the discounted notes is recognized at the date of sale based on the difference between the purchase and sales prices of the notes, adjusted for interest earned during the holding period.

3-31-2 Cash Management Accounts (CMA)

The Group recognizes interest income from CMA investments and interest expense from CMA deposits as other income and other expenses, respectively.

3-32 Revenue Recognition

The Group recognizes revenues in accordance with the following steps determined in accordance with KIFRS 1115 Revenue from Contracts with Customers.

- Step 1: Identify the contract with a customer.
- Step 2: Identify the separate performance obligations in the contract.
- Step 3: Determine the transaction price of the contract.
- Step 4: Allocate the transaction price to each of the separate performance obligations in the contract.
- Step 5: Recognize revenue when (or as) each performance obligation is satisfied.

3-32-1 Interest income and interest expense

The Group recognizes interest income and expense using the effective interest method by the passage of time.

The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability (or group of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. The Group estimates cash flows considering all contractual terms of the financial instrument but do not consider future credit losses. The cash flows include all fees and points paid or received by the Group including transaction costs, and all other premiums or discounts.

If it is probable that interest income arising from a financial asset will flow to the Group, the interest income is recognized as income when the Group receives interest payments. For the impaired loans and receivable that are individually assessed, the Group recognizes the adjustment as interest income if recoverability of the assets subsequently increases.

3-32-2 Fee and commission income

The Group earns fees and commissions income from a diverse range of services it provides to its customers. Fee income, which is part of the effective interest rate of a financial instrument, is adjusted to an effective interest rate and recognized as interest income.

Under the new KIFRS 1115, the commission income charged by providing services is recognized by applying a five-stage revenue recognition model (Identification of a contract with a customer → Identification of performance obligations in the contract → Determination of the transaction price → Allocation of the transaction price to the separate performance obligations in the contract → Recognition of revenue upon satisfying the performance obligations) to all of its contracts with customers.

3-32-3 Net gains or losses on financial instruments at fair value through profit or loss

Net gains or losses on financial instruments at FVTPL (including changes in fair value, etc) include gains and losses from following financial instruments:

- Gains or losses relating to financial instruments at FVTPL
- Gains or losses relating to derivatives for trading

3-33 Dividend income

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

3-34 Transaction under common control

The Group conducted accounting treatment of transactions under common control based on book value. Therefore, the Group recognized (eliminated) asset, liability and capital as at merger and spinoff date as book value and didn't recognize transaction gain (loss).

3-35 New and amended standards and interpretations

The nature and the impact of each new and amended standards and interpretations are described below:

3-35-1 Amendments to KIFRS 1109, KIFRS 1039, KIFRS 1107, KIFRS 1104 and KIFRS 1116: Interest Rate Benchmark Reform – Phase 2

The amendment provides a temporary waiver to address the impact on financial reporting when the Interbank Loan Rate (IBOR) is replaced by an Alternative Risk Free Indicator (RFR).

- Contractual changes, or changes in cash flows that are directly affected by the reforms are treated as if they are changing at variable interest rates, such as changes in market interest rates.
- Changes required by the reform of interest rate indicators allow the designation of hedging and documentation of hedging without interruption of the hedging relationship.
- A temporary exemption that is deemed to satisfy the requirement that financial instruments referencing the Alternative Risk Free Indicator (RFR) must be separately identifiable when designated as a hedging factor.

There is no material impact of this amendment on the Group's financial statements. The Group will use the practical simple method in the future when it becomes applicable.

3-35-2 Amendments to KIFRS 1116 – Covid- 19 – Related Rent Concessions provided after June 30 June 2021

The application of the practical expedient, in which a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, is extended to lease payments originally due on or before June 30, 2022.

A lessee that makes this election accounts for any change in lease payments resulting from the coronavirus pandemic-related rent concession the same way it would account for the change under KIFRS 1116, if the change was not a lease modification. The amendment should be applied for annual periods beginning on or after April 1, 2021, and earlier application is permitted. The Group has early adopted the amendments, and recognized ₩42,848 million as current gain or loss by applying practical expedient to the rent concession.

3-36 Standard issued but not yet effective is as follows:

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are disclosed below.

3-36-1 Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current

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

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

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

3-36-2 Reference to the Conceptual Framework – Amendments to KIFRS 1103

The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements, issued in 1989, with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements .An exception to the recognition principle of KIFRS 1103 was also added to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 or KIFRS 2121 *Levies*, if incurred separately. At the same time, the Board decided to clarify existing guidance in KIFRS 1103 for

contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively. The amendments are not expected have material impact on the consolidated financial statements.

3-36-3 Property, Plant and Equipment: Proceeds before Intended Use – Amendments to KIFRS 1016

The amendments prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the costs of producing those items, in profit or loss.

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

3-36-4 Onerous Contracts Costs of Fulfilling a Contract Amendments to KIFRS 1037

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

amendments. The amendments are not expected to have a material impact on the Group.

3-36-5 KIFRS 1101 First-time Adoption of International Financial Reporting Standards – Subsidiary as a first-time adopter

The amendment permits a subsidiary that elects to apply paragraph D16(a) of KIFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to KIFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(a) of KIFRS 1101. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The amendments are not expected to have a material impact on the Group.

3-36-6 KIFRS 1109 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Group will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendments are not expected to have a material impact on the Group.

3-36-7 KIFRS 1041 *Agriculture* – Taxation in fair value measurements

The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted.

The amendments are not expected to have a material impact on the Group.

3-36-8 Amendments to KIFRS 1117: Insurance contracts

The KIFRS 1117 insurance contract established on April 23, 2021 applies for annual periods beginning on or after January 1, 2023, which will replace the current KIFRS 1104 insurance contract.

The main features of KIFRS 1117 are the measurement of the current value of insurance liabilities, the recognition of insurance returns on an accrued basis, and the separation of gains and losses on insurance and investment. Previous KIFRS 1104 measured insurance liabilities using historical information (such as interest rates at the time of sale), recognized premiums received by the entity as insurance revenue on a cash basis, and had no obligation to distinguish between insurance and investment gains. On the other hand, KIFRS 1117 measures the current value of insurance liabilities by using discount rates that reflect assumptions and risks at present, and insurance revenue recognizes revenue on an accrual basis, reflecting services provided by insurers to contractors in each financial year, separating insurance gain or loss on investment.

When an insurer applies KIFRS 1117 to prepare new financial statements, it is expected to cause significant differences from the current financial statements. These parts do not include all future differences and can be changed by the analysis in the future.

According to KIFRS 1117, an insurer estimates all cash flows under an insurance contract and measures insurance liabilities using discount rates that

reflect assumptions and risks at the time of reporting.

Specifically, insurers identify a portfolio of insurance contracts that are exposed to similar risks and consisted of similar contracts, and within that portfolio separate sets of insurance contracts with similar profitability. Subsequently, group of insurance contracts are measured by estimates of future cash flows (including insurance loan-related cash flows, reflecting the time value of money), risk adjustment, and the sum of insurance contract margins. The introduction of KIFRS 1117 introduces a new insurance contract margin account, which means unrealized gains that will be recognized in future by delivering insurance contract services.

On the other hand, reinsurance contracts mean insurance contracts issued by reinsurers to compensate for insurance premiums. Also, the new group of insurance contracts applies a consistent assumption with original contract in estimating the present value of future cash flows.

According to KIFRS 1117, insurance revenue is recognized on an accrual basis, reflecting the services (insurance) provided by the insurer to the contractor in each fiscal year, and the investment components paid to the clients are excluded from insurance revenue. In addition, by separately displaying insurance gains and losses on investment, the information user can identify the source of the gains and losses.

In addition, insurance companies include the time value of money related to group of insurance contracts, financial risks, and the effects of their fluctuations in insurance finance income and loss, and should select an accounting policy on whether to separate insurance finance gains and losses for the period into profit or loss and other comprehensive income.

According to the transitional provisions of KIFRS 1117, insurers apply the full retrospective method, modified retrospective method or fair value method to adjust fair value measurement rather than cost-based valuation for group of insurance contracts issued prior to the date of transition on January 1, 2022 (the beginning of the annual reporting period prior the date of initial application).

In principle, an insurer must identify, recognize, and measure a group of insurance contracts (completely retrospectively) as if KIFRS 1117 had been applied even before the date of transition. However if it is practically difficult, the insurer may choose to apply the modified retrospective method or fair value approach. However, in the case of a group of insurance contracts with direct participation characteristics that meet certain requirements, the fair value method can be applied even if the full retrospective method is applicable.

The modified retrospective method is a method for obtaining results similar to the full retrospective method using reasonable and supportable information available without undue cost or effort. The fair value method is a method of evaluating a group of insurance contracts by using the fair value valuation amount according to KIFRS 1113 Measurement of fair value.

When the fair value method is applied, the insurance contract margin on the remaining guarantee liability is calculated as the difference between the fair value of the insurance contract group at the date of transition and the fulfillment cash flow.

In KIFRS 1104, insurance liabilities have been measured using historical information, but in KIFRS 1117, insurance liabilities are measured at their present value using a discount rate that reflects the assumptions and risks at the time of reporting. In addition, the existing cost-based valuation should be adjusted to the current valuation by applying (optionally) the full retrospective method, the modified retrospective method, or the fair value method for a group of insurance contracts issued before the date of conversion.

In order for an insurance company to adopt KIFRS 1117, it is necessary to prepare a separate introduction team, establish an accounting settlement system, train employees, and analyze financial impact.

Above all, the stability of the accounting settlement system and the consistency of system calculations must be secured for the adequacy of insurance liability evaluation, and accounting policies and actuarial assumptions must be set reasonably and applied consistently every period.

To do this, the insurer must continuously validate the system and put in place several internal controls. In particular, the entity must establish and comply with an internal accounting management system suitable for the changed accounting environment so that reliable accounting information can be prepared and disclosed after the implementation of the new accounting standards.

The adoption of KIFRS 1117 will not only change accounting standards, but will also have an impact on insurance product development, sales strategy, and long-term management strategy. Accordingly, it is necessary for entities to establish various management strategies after the implementation of the new standards, to provide continuous education for related employees, and to report the preparation status and future plans to the management.

The preparation status and plans for the introduction of KIFRS 1117 of Hana Life Insurance, a subsidiary of the Group, are as follows.

In preparation for the adoption of KIFRS 1117, Hana Life Insurance has organized and operated the IFRS 17 task force team since March 2017.

In March 2017, Hana Life Insurance commissioned an external professional agency to establish a debt rating system and completed it in April 2018. In June 2018, Hana Life Insurance has commissioned an accounting firm to establish an accounting settlement system, and in January 2020, the integrated accounting settlement system was completed. As of December 2021, Hana Life Insurance is conducting a pilot operation of the system and verifying its consistency. Hana Life Insurance plans to continue upgrading the system by 2022 while also establishing an overall internal accounting management system.

In addition, while providing internal and external education related to KIFRS 1117 for all employees, Hana Life Insurance plans to continue to provide an in-depth training course in 2022.

In 2021, the Group's management reported the preparations for introduction three times to mid-level management.

Specific preparations for the adoption and future plans are as follows.

Main Activity	Preparation (December 31, 2021)	Future plans
Organized a task force	<ul style="list-style-type: none"> - In March (2017) organization of task force (6 members in present) 	<ul style="list-style-type: none"> - Continuous operation of task force
Establishment of settlement system	<ul style="list-style-type: none"> - In June (2018) System construction service undertaken - System development completed, pilot operation in progress 	<ul style="list-style-type: none"> - System advancement (parallel settlement) - Establishment of internal accounting management system
Employee training	<ul style="list-style-type: none"> - Video training course related to IFRS17 - Training courses for department heads/major practitioners in all departments 	<ul style="list-style-type: none"> - Intensive course
Management reporting	<ul style="list-style-type: none"> - System establishment, Reporting financial impact 	<ul style="list-style-type: none"> - Report on all matters related to parallel settlement

With the adoption of KIFRS 1117, as the valuation method of liabilities and the method of revenue recognition are changed, the financial figures for 2023 are expected to change accordingly.

In 2021, Hana Life Insurance expects to perform continuous system integrity verification and preparation for parallel settlement of accounts in 2022.

Accordingly, in 2021, Hana Life Insurance will disclose preliminary and potential impact of the application of KIFRS 1117 (e.g., financial volatility and the value of insurance liabilities (assets) whose valuation method is changed). In 2022, specific financial impacts will be disclosed in the annual financial statements.

As of December 31, 2021, Hana Life Insurance evaluated the potential impact of the application of KIFRS 1117 on the financial statements based on information available as of December 31, 2021. After the implementation of KIFRS 1117, the valuation of insurance contract liabilities is expected to increase.

As of December 31, 2021, Hana Life Insurance has total insurance contract liabilities of ₩4,562,067 million (general account ₩3,398,052 million, special account ₩1,164,015 million).

In addition, when KIFRS 1117 is applied, insurance revenue is expected to decrease as savings premiums are excluded from insurance revenue. As of December 2021, savings-type insurance accounted for 58% (₩300,177 million) of insurance revenue based on the general accounts.

The preparation status and plans for the adoption of KIFRS 1117 of Hana Insurance Co., Ltd. ("Hana Insurance"), a subsidiary of the Group, are as follows. Hana Insurance first formed the IFRS17 introduction preparation TFT in May 2017 to introduce KIFRS 1117 and is currently in operation.

In May 2017, Hana Insurance initiated the establishment of an actuarial system for calculating insurance liabilities through the Insurance Development Institute consortium, and from March 2019, has commissioned an accounting firm to establish a settlement system and completed in June 2020.

As of December 2021, Hana Insurance is conducting a pilot operation of the system and verifying its consistency, and plans to continuously upgrade the system by 2022 and establish an overall internal accounting management system.

In addition, Hana Insurance plans to provide internal and external training to the related employees on accounting actuary, impact, and settlement process related to KIFRS 1117, and prepare an in-depth training course in 2022.

For the period ended 2021, Hana Insurance reported to the Board of Directors and management four times on the status of preparations for introduction.

Specific preparations for introduction and future plans are as follows

Main Activity	Preparation (December 31, 2021)	Future plans
Organized a task force	-In May (2017) organization of Task Force Team (4 members in present)	- Continuous operation of task force
Establishment of settlement system	- In May (2017) system construction service undertaken - System development completed, pilot operation in progress	- System advancement (parallel settlement) - Establishment of internal accounting management system
Employee training	- Conducted training for major accounting practitioners - Training for executives and department heads	- Intensive course
Management reporting	- System establishment, Reporting financial impact	- Report on all matters related to parallel settlement

With the adoption of KIFRS 1117, as the valuation method of liabilities and the method of revenue recognition are changed, the financial figures for 2023 are expected to change accordingly.

In the case of 2021, Hana Insurance expects to perform continuous system integrity verification and preparation for parallel settlement of accounts in 2022.

As of December 31, 2021, Hana Insurance evaluated the potential impact of the application of KIFRS 1117 on the financial statements based on information available as of December 31, 2021. After the implementation of KIFRS 1117, the valuation of insurance contract liabilities is expected to increase.

As of December 31, 2021, Hana Insurance has total insurance contract liabilities of ₩978,683 million

In addition, when KIFRS 1117 is applied, insurance revenue is expected to decrease as savings premiums are excluded from insurance revenue. As of December 2021, savings-type insurance accounted for 17.56% (₩97,092 million)

of insurance revenue based on the general account.

3-36-9 KIFRS 1001 Presentation of Financial Statements – Disclosure of Accounting Policies

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

The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The amendments are not expected to have a material impact on the Group.

3-36-10 KIFRS 1008 Accounting policies, changes in accounting estimates and errors – Definition of Accounting Estimates

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

3-36-11 Amendments to KIFRS 1012 "Income Taxes" – Narrowing the scope of the initial recognition exception of deferred income taxes

The amendments narrowed the scope of the initial recognition exemption so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary difference, thus to resolve accounting diversity in the recognizing of deferred tax assets and liabilities. Paragraphs 15 and 24 (initial recognition exemption of deferred income taxes) of KIFRS 1012 were amended to include an additional condition (3) where a deferred tax asset and liability shall be recognized for a temporary difference that arises on initial recognition of an asset or liability in a single transaction if that transaction give rise to equal amounts of taxable and deductible temporary differences. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 with

earlier adoption permitted. The amendments are not expected to have a material impact on the Group.

3-37 Restatement of comparative consolidated financial statements

3-37-1 Restatement of HFI's financial statements

HFI, a subsidiary of the group, has revised and restated the consolidated financial statements presented for comparative purposes due to errors in spot exchange receivables and payables as of December 31, 2020.

Before the restatement, HFI understated accounts receivables and payables by accounting for spot exchange transactions as derivatives and gain and loss on foreign exchange transactions were recognized as gain and loss on financial instruments measured at FVTPL.

The Group revised the consolidated statement of financial position and the consolidated statement of comprehensive income for the year ended December 31, 2020 to reflect HFI's restatement of the financial statements.

There is no change in net income, net assets, and earnings per share due to the restatement of the consolidated financial statements, and the main revised amount for each item in the consolidated statement of financial position and consolidated statement of comprehensive income in 2020 are as follows (Korean won in millions):

<Consolidated Statements of Financial Position>

Classification	December 31, 2020		
	Before revised	After revised	Net increase (decrease)
Total assets	460,313,302	460,947,046	633,744
Financial assets at FVTPL	43,134,045	43,133,717	(328)
Other assets	18,225,594	18,859,666	634,072
Total liabilities	428,713,014	429,346,758	633,744
Financial liabilities at FVTPL	10,860,230	10,859,818	(412)
Other liabilities	35,650,955	36,285,111	634,156
Total equity	31,600,288	31,600,288	-

<Consolidated Statements of Profit or Loss and Other Comprehensive Income>

Classification	2020		
	Before revised	After revised	Net increase (decrease)
Operating income	48,215,862	48,216,018	156
Gain financial instruments measured at FVTPL	26,746,603	26,074,059	(672,544)
Gain on foreign currencies transactions	5,786,059	6,458,759	672,700
Operating expenses	44,379,440	44,379,596	156
Loss financial instruments measured at FVTPL	26,181,424	25,478,128	(703,296)
Loss on foreign currencies transactions	5,468,586	6,172,038	703,452
Operating income	3,836,422	3,836,422	-

3-37-2 Account reclassification between fees and commission income and interest income

Considering the consistency of the group's accounting policies related to financial statements and comparability between industries, the group changed credit card-related income (credit card installments and overdue fees, etc.) classified by KEB Hana Card from commission income to interest income.

The Group revised the consolidated Statements of Profit or Loss and Other

Comprehensive Income presented for comparative purposes. There is no change in net income, net assets due to the restatement of the consolidated statement of financial position and consolidated statement of comprehensive income in 2020

Due to the reclassification of this account, ₩625,587 million of the 2020 fees and commission income in 2020 was reclassified as interest income, which has no effect on operating profit due to reclassification between items within operating income.(Korean won in millions)

Classification	2020		
	Before revised	After revised	Net increase (decrease)
Interest income	10,079,609	10,705,196	625,587
Fee and commission income	3,222,532	2,596,945	(625,587)

4. Significant judgments and accounting estimates

For applying accounting policies of the Group's consolidated financial statements, management are required to make judgments, estimates and assumptions that affect the amount of assets and liabilities which are difficult to identify through other resources. The estimates and assumptions are based on the other factors considered that they are related to historical experience. Actual results may differ from these estimations.

Management reviews these estimates and assumptions regularly. The effect of a change in an accounting estimate is recognized in profit or loss in the period of the change, if the change affects that period only and the effect of a change in an accounting estimate is recognized in profit or loss in the period of the change and the future periods, if the change affects both.

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

4-1 Fair value of financial instruments

Where the fair values of financial assets and financial liabilities recorded on the statement of financial position cannot be derived from active markets, they are determined using a variety of valuation techniques that include the use of mathematical models. The inputs to these models are derived from observable market data where possible, but where observable market data is not available, a degree of judgment is required to establish fair values. The judgments include considerations of liquidity and model inputs such as volatility for longer dated derivatives and discount rates, prepayment rates and default rate assumptions for asset backed securities.

4-2 Impairment losses on financial assets

The Group recognizes impairment losses on debt instruments, lease receivables, contract assets, loan commitment, and financial guarantee contracts that were accounted for at amortized cost, or FVOCI, based on the expected credit loss (ECL) impairment model using a three-stage model for 12-month expected credit losses, or lifetime expected credit losses based on changes in credit risk since initial recognition of financial assets.

Classification		Loss allowance
STAGE 1	Credit risk on a financial instrument has not increased significantly since initial recognition.	12-month ECL: Expected credit losses that result from default events that are possible within 12 months after the reporting date
STAGE 2	Credit risk on a financial instrument has increased significantly since initial recognition.	Lifetime ECL: Expected credit losses that result from all possible default events over the expected life of the financial instrument
STAGE 3	Credit-impaired	

The cumulative changes in lifetime expected credit losses since initial recognition are recognized as loss allowance for a financial asset that is considered credit-impaired at initial recognition.

4-3 Provision for severance and retirement benefits

The cost of providing benefits under the defined benefit plans is determined separately for each plan using the projected unit credit method. Actuarial assumptions were made for the discount rate, the overall expected rates of return on assets, and an increase in the future pay rate. Severance and retirement benefits include significant uncertainties in the estimates due to the long duration of the period.

4-4 Impairment of non-financial assets

The Group assesses at the end of the reporting period whether there is any

indication that a non-financial assets may be impaired. The Group tests an intangible asset with an indefinite useful life for impairment annually or if any such indication exists. The Group tests an intangible asset with definite useful life for impairment if any such indication exists. Management estimates future cash flow associated with an asset or a cash-generating unit, and selects the adequate discount rate to compute present value of future cash flow.

4-5 Income taxes

There are uncertainties exist on the calculation of the final tax effect since the Group's tax expense on taxable income is calculated based on the tax laws and interpretations of tax authorities in numerous countries. In addition, there has been various transactions and tax accounting methods which have made computing the final tax expenses for the period uncertain. Significant judgment is required when determining the estimation of corporate taxes in various countries. The contingent liability from any future tax assessments is based on the estimates of the likelihood of additional taxes imposed and has been included in the Group's consolidated financial statements for the current period. When the finalized tax expense assessments are different from the appropriated amounts, the differences, if any, are recognized in current deferred tax assets, liabilities, and expenses for the period.

4-6 Estimated amount for IBNR

Incurred But Not Reported("IBNR") is the sum of the estimated insurance amount of accidents that have not been reported to the Group but have already occurred and the estimated insurance amount to be additionally paid due to the resumption of payment claims. The Group calculates the estimated amount by applying statistical method to the calculation units prescribed by the Insurance Business Supervision Enforcement Regulations and accounts for the reserve within the insurance contract liability. IBNR according to the statistical method requires significant estimation in determining the application methodology (PLDM, ILDM, BFM, etc.) for each accident year and determining the progress coefficient.

5. Methods for measuring the fair value of financial assets and financial liabilities

The following standards are applied in measuring the fair value of financial assets and financial liabilities

- a. Financial assets and financial liabilities traded in active markets at the reporting date is 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.
- b. 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.
- c. When determining fair value by the use of valuation techniques, comparison of current market transaction of another instrument that is substantially the same to the financial instrument needs to be objectively substantiated or inclusion of variables in the marketable data must be performed. Not all the significant market variables are observable and therefore in determining fair value, reasonable estimates or assumptions are required.
- d. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity instruments, which are measured at cost, will be accounted for using the cost method.

5-1 Fair value hierarchy of financial instruments

The fair value hierarchy of financial assets and liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Fair Value Hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets held-for-trading				
Debt securities	3,216,070	18,881,802	5,818,785	27,916,657
Equity securities	329,917	32,783	1,267,151	1,629,851
Derivative assets held-for-trading	67,335	5,003,189	218,451	5,288,975
Loans	–	–	1,898,878	1,898,878
Others	–	–	1,983,924	1,983,924
Subtotal	3,613,322	23,917,774	11,187,189	38,718,285
Financial assets designated at FVOCI:				
Debt securities	13,410,125	24,975,265	–	38,385,390
Equity securities	326,532	50	761,557	1,088,139
Subtotal	13,736,657	24,975,315	761,557	39,473,529
Derivative assets used for hedging	–	77,507	–	77,507
Merchant banking accounts asset	–	4,741,939	–	4,741,939
Total	17,349,979	53,712,535	11,948,746	83,011,260
Financial liabilities:				
Financial liabilities measured at FVTPL				
Derivative liabilities held-for-trading	167,633	4,866,443	855,358	5,889,434
Securities lent	859,252	23,614	–	882,866
Subtotal	1,026,885	4,890,057	855,358	6,772,300
Financial liabilities designated as measured at FTVPL	364,970	1,910,365	6,829,288	9,104,623
Derivative liabilities used for hedging	–	109,475	9,124	118,599
Total	1,391,855	6,909,897	7,693,770	15,995,522

<December 31, 2020>

Classification	Fair Value Hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets held-for-trading				
Debt securities	4,092,184	18,309,516	5,298,892	27,700,592
Equity securities	253,951	33,723	1,178,768	1,466,442
Derivative assets held-for-trading	85,338	10,057,587	646,350	10,789,275
Loans	–	–	1,492,111	1,492,111
Others	–	–	1,685,297	1,685,297
Subtotal	4,431,473	28,400,826	10,301,418	43,133,717
Financial assets designated at FVOCI:				
Debt securities	10,601,136	24,282,195	–	34,883,331
Equity securities	471,347	–	810,710	1,282,057
Subtotal	11,072,483	24,282,195	810,710	36,165,388
Derivative assets used for hedging	–	141,311	152	141,463
Merchant banking accounts asset	–	3,465,306	–	3,465,306
Total	15,503,956	56,289,638	11,112,280	82,905,874
Financial liabilities:				
Financial liabilities measured at FVTPL				
Derivative liabilities held-for-trading	105,270	9,423,550	1,165,337	10,694,157
Securities sold	165,661	–	–	165,661
Subtotal	270,931	9,423,550	1,165,337	10,859,818
Financial liabilities designated as measured at FTVPL	208,010	1,515,057	8,079,634	9,802,701
Derivative liabilities used for hedging	–	34,737	–	34,737
Total	478,941	10,973,344	9,244,971	20,697,256

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

- a. Level 1: Quoted (unadjusted) prices in active markets for similar assets or liabilities
- b. Level 2: Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly
- c. Level 3: Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data

Fair value, valuation method, and input variables used to measure fair value of financial instruments classified as fair value hierarchy Level 2 as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Fair value	Valuation method	Input variable
Financial assets:			
Financial assets measured at FVTPL			
Debt securities	18,881,802	Black-Scholes model, Hull-White 1 fact or model, DCF model, Gaussian 1 factor model, Net asset value model, etc	Volatility, Discount rate, Stock price, exchange rate, interest rate, CDS premium, price of underlying asset such as bond, stock, etc.
Equity securities	32,783	Hull & White Monte Carlo Simulation	Discount rate, etc.
Derivative assets held-for-trading	5,003,189	Black-Scholes model, Hull-White 1 fact or model, Black model, DCF Model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, exchange rate, interest rate, CDS premium, yield curve of swap, volatility of swaption, yield curve of currency, etc..
Subtotal	23,917,774		
Financial assets measured at FVOCI			
Debt securities	24,975,265	DCF model	Discount rate, etc.
Equity securities	50	Market value	Stock price
Derivative assets used for hedging	77,507	Hull-White 1 factor model	Exchange rate, yield curve of swap, volatility of swaption, yield curve of currency
Merchant banking account asset	4,741,939	DCF model	Discount rate
Total	53,712,535		
Financial liabilities :			
Financial liabilities measured at FVTPL			
Derivative liabilities held-for-trading	4,866,443	Black-Scholes model, Hull-White 1 fact or model, DCF model, Black model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, exchange rate, interest rate, CDS premium, yield curve of swap, volatility of swaption, yield curve of currency etc.
Securities sold	23,614	DCF model	Discount rate
Financial liabilities designated as measured at FVTPL	1,910,365	Black-Scholes model, Hull-White 1 factor model, DCF model, Gaussian 1 factor model, etc	Yield curve of KRW swap, volatility of KRW swaption, volatility, discount rate, stock price, exchange rate, interest rate, CDS premium etc.
Derivative liabilities used for hedging	109,475	Hull-White 1 factor model	Exchange rate, discount rate, yieldcurve of swap, yield curve of currency
Total	6,909,897		

<December 31, 2020>

Classification	Fair value	Valuation method	Input variable
Financial assets:			
Financial assets measured at FVTPL			
Debt securities	18,309,516	Black-Scholes model, Hull-White 1 factor model, DCF model, Gaussian 1 factor model, Net asset value model, etc.	Volatility, Discount rate, Stock price, exchange rate, interest rate, CDS premium, price of underlying asset such as bond, stock, etc.
Equity securities	33,723	Hull & White Monte Carlo Simulation	Discount rate, etc.
Derivative assets held-for-trading	10,057,587	Black-Scholes model, Hull-White 1 factor model, Black model, DCF Model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, exchange rate, interest rate, CDS premium, yield curve of swap, volatility of swaption, yield curve of currency, etc.
Subtotal	28,400,826		
Financial assets measured at FVOCI			
Debt securities	24,282,195	DCF model	Discount rate, etc.
Derivative assets used for hedging	141,311	Hull-White 1 factor model	Exchange rate, yield curve of swap, volatility of swaption, yield curve of currency
Merchant banking account asset	3,465,306	DCF model	Discount rate
Total	56,289,638		
Financial liabilities :			
Financial liabilities measured at FVTPL			
Derivative liabilities held-for-trading	9,423,550	Black-Scholes model, Hull-White 1 factor model, DCF model, Black model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, exchange rate, interest rate, CDS premium, yield curve of swap, volatility of swaption, yield curve of currency etc.
Financial liabilities designated as measured at FVTPL	1,515,057	Black-Scholes model, Hull-White 1 factor model, DCF model, Gaussian 1 factor model, etc.	Yield curve of KRW swap, volatility of KRW swaption, volatility, discount rate, stock price, exchange rate, interest rate, CDS premium etc.
Derivative liabilities used for hedging	34,737	Hull-White 1 factor model	Exchange rate, discount rate, yield curve of swap, yield curve of currency
Total	10,973,344		

Fair value, valuation method, input variables and significant unobservable input variables information used to measure fair value of financial instruments classified as fair value hierarchy Level 3 as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Fair value	Valuation method	Input variable	Significant unobservable inputs used in the fair value measurement	Range	The effect of changes in unobservable inputs on fair value
Financial assets :						
Financial assets measured at FVTPL						
		Black-scholes model, Hull-White 1 factor model,	Volatility, discount rate, stock price,	Volatility, correlation,	Volatility: 0~100% Correlation: -1~+1	Volatility of underlying assets : Positive

Classification	Fair value	Valuation method	Input variable	Significant unobservable inputs used in the fair value measurement	Range	The effect of changes in unobservable inputs on fair value
Debt securities	5,818,785	DCF model, Guassian 1 factor model, income approach LSMC, etc	exchange rate, interest rate, CDS premium correlation, liquidating value, etc	discount rate, liquidating value, etc	Discount rate : 5.13 ~21.37% Liquidating value: 0	Correlation : Positive (Negative in some cases) Discount rate : Negative Liquidating value: Positive
Equity securities	1,267,151	Monte Carlo Simulation model, Hull-White 1 factor model, DCF model, etc.	stock price, interest rate, striking price, Growth rate, discount rate, liquidating value, etc	Volatility, Growth rate, Discount rate, liquidating value etc.	Volatility: -1~1% Growth rate: 0~1% Discount rate: 10.2 5~25.46% Liquidating value: 0	Volatility of underlying assets : Positive Growth rate : Positive Discount rate : Negative Liquidating value: Positive
Derivative assets held-for-trading	218,451	Black-Scholes model, Hull-White 1 factor model, Hull-White 2 factor model, DCF model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, Exchange rate, interest rate, CDS premium, correlation, yield curve of swap, volatility of swap, correlation between valuation models, etc.	Volatility, correlation, Correlations between USD IRS rates etc	Volatility: 0~100% Correlation: -1~+1 between USD IRS rates: 53.00~79.00	Volatility: Positive Correlation: Positive (Negative in some cases) Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Loans	1,898,878	LSMC, DCF model, etc.	Volatility and price of underlying asset, discount rate, etc.	Volatility of underlying asset, Discount rate, etc.	Volatility: 17.89~34 .16% Discount rate: 3.84 ~10.53%	Volatility: Positive Discount rate: Negative
Others	1,983,924	DCF model, etc.	Discount rate, etc.	Discount rate, etc.		
Subtotal	11,187,189					
Financial assets measured at FVOCI						
Equity securities	761,557	DCF model, utilization of market price, Asset approach, Income approach Net asset value model, multiple, etc	Growth rate, discount rate, Volatility and price of underlying asset etc.	Growth rate, discount rate, Volatility of underlying asset	Growth rate: 0.00~ 2.00% Discount rate: 9.90 ~18.02% Volatility of underlying asset: 23.32~25 .49%	Growth rate: Positive Discount rate: Negative Volatility of underlying asset: Positive
Total	11,948,746					
Financial liabilities :						
Financial liabilities measured at FVTPL						
Derivative liabilities held-for-trading	855,358	Black-Scholes model, Hull-White 1 factor model, Hull-White 2 factor model, DCF model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, Exchange rate, interest rate, CDS premium, correlation, Swap yield curve, volatility of swaption, correlation between valuation models, etc.	Volatility, correlation, between USD IRS rates	Volatility: 0~100% Correlation: -1~+1 between USD IRS rates: 53.00~79.00	Volatility : Positive Correlation : Positive (negative in some cases) Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Financial liabilities designated as measured at FVTPL	6,829,288	Black-Scholes model, Hull-White 1 factor model, DCF model, Gaussian 1 factor model, etc.	Volatility, discount rate, Stock price, exchange rate, interest rate, CDS premium, correlation, etc.	Volatility, correlation	Volatility: 0~100% Correlation: -1~+1	Volatility : Positive Correlation : Positive (negative in some cases)
			Swap yield curve, volatility of swaption,	between KRW	between USD IRS	Fair value increase or decrease based on the changes in

Classification	Fair value	Valuation method	Input variable	Significant unobservable inputs used in the fair value measurement	Range	The effect of changes in unobservable inputs on fair value
Derivative liabilities used for hedging	9,124	Hull-White 2 factor model	correlation between valuation models, Exchange rate,	IRS rates, between USD IRS rates	rates:53.00~98.00 between USD IRS rates:53.00~98.00	correlation by the effect of trading instruments and market status
Total	7,693,770					

<December 31, 2020>

Classification	Fair value	Valuation method	Input variable	Significant unobservable inputs used in the fair value measurement	Range	The effect of changes in unobservable inputs on fair value
Financial assets :						
Financial assets measured at FVTPL						
Debt securities	5,298,892	Black-scholes model, Hull-White 1 factor model, DCF model, Gaussian 1 factor model, income approach LSMC, etc	Volatility, discount rate, stock price, exchange rate, interest rate, CDS premium, correlation, price and volatility of underlying assets, liquidating value, etc	Volatility, correlation, discount rate, liquidating value, Price of underlying assets, Volatility of underlying asset, etc	Volatility: 0~100 % Correlation: -1~+1 Discount rate : 6 .02~21.37% Liquidating value : 0 Volatility of underlying asset : 18: 99	Volatility of underlying assets : Positive Correlation : Positive (Negative in some cases) Discount rate : Negative Liquidating value: Positive Fair value volatility increases when price of underlying assets volatility increases
Equity securities	1,178,768	Monte Carlo Simulation model, Hull-White 1 factor model, DCF model, etc.	stock price, interest rate, striking price, Growth rate, discount rate, liquidating value, etc	Volatility, Growth rate, Discount rate, liquidating value etc.	Volatility: 1~25% Growth rate:0~1 % Discount rate: 9 .41~24.93% Liquidating value : 0	Volatility of underlying assets : Positive Growth rate : Positive Discount rate : Negative Liquidating value: Positive
Derivative assets held-for-trading	646,350	Black-Scholes model, Hull-White 1 factor model, Hull-White 2 factor model, DCF model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, Exchange rate, interest rate, CDS premium, correlation, yield curve of swap, volatility of swap, correlation between valuation models, etc.	Volatility, correlation, etc	Volatility: 0~100 % Correlation: -1~+1	Volatility: Positive Correlation: Positive (Negative in some cases)
Loans	1,492,111	LSMC, DCF model, etc.	Volatility and price of underlying asset, discount rate, etc.	Price of underlying asset, Volatility of underlying asset, Discount rate, etc.	Volatility: 17.61~45.68% Discount rate: 3 .11~9.63%	Volatility: Positive Discount rate: Negative
Others	1,685,297	DCF model, etc.	Discount rate, etc.	Discount rate, etc.		
Subtotal	10,301,418					
Financial assets measured at FVOCI						

Classification	Fair value	Valuation method	Input variable	Significant unobservable inputs used in the fair value measurement	Range	The effect of changes in unobservable inputs on fair value
Equity securities	810,710	DCF model, utilization of market price, Asset approach, Income approach Binomial trees, LSMC etc	Growth rate, discount rate, Volatility and price of underlying asset etc.	Growth rate, discount rate, Volatility of underlying asset	Growth rate: -1.0~2.0% Discount rate: 7.64~19.05% Volatility of underlying asset: 22.11~24.16%	Growth rate: Positive Discount rate: Negative Volatility of underlying asset: Positive
Derivative assets used for hedging	152	Hull-White 2 factor model	Swap yield curve, volatility of swaption, correlation between valuation models	Correlations between KRW IRS rates	99	Volatility of correlation because of products and market condition is positive or negative
Total	11,112,280					
Financial liabilities :						
Financial liabilities measured at FVTPL						
Derivative liabilities held-for-trading	1,165,337	Black-Scholes model, Hull-White 1 factor model, Hull-White 2 factor model, DCF model, Gaussian 1 factor model, etc.	Volatility, discount rate, stock price, Exchange rate, interest rate, CDS premium, correlation, Swap yield curve, volatility of swaption, correlation between valuation models, etc.	Volatility, correlation	Volatility: 0~100 % Correlation: -1~-+1	Volatility : Positive Correlation : Positive (negative in some cases)
Financial liabilities designated as measured at FVTPL	8,079,634	Black-Scholes model, Hull-White 1 factor model, DCF model, Gaussian 1 factor model, etc.	Volatility, discount rate, Stock price, exchange rate, interest rate, CDS premium, correlation, etc.	Volatility, correlation	Volatility: 0~100 % Correlation: -1~-+1	Volatility : Positive Correlation : Positive (negative in some cases)
Total	9,244,971					

5-2 Changes in the fair value of Level 3

Changes in the fair value of Level 3 financial instruments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Financial assets measured at FVTPL				Financial assets measured at FVOCI		Financial liabilities designated as measured at FVTPL	Net derivative instruments	
	Debt securities	Equity securities	Loans	Others	Debt securities	Equity securities		Held-for-trading	Held-for-hedging
January 1, 2021	5,298,892	1,178,768	1,492,111	1,685,297	–	810,710	8,079,634	(518,987)	152
Increase due to business combination (*)	14,948	485	–	–	–	–	–	–	–
Net income	56,253	(36,416)	64,082	18,678	–	–	209,454	106,357	(9,276)
Other comprehensive income	–	–	–	–	–	(38,473)	(2,516)	–	–
Buy / Issue	3,461,049	1,252,384	2,275,703	11,305,075	–	1,018	4,808,344	(377,461)	–
Sell / Settlement	(3,015,651)	(1,284,467)	(1,937,195)	(11,025,126)	–	(11,698)	(6,265,628)	153,184	–
Others	3,294	156,397	4,177	–	–	–	–	–	–
December 31, 2021	5,818,785	1,267,151	1,898,878	1,983,924	–	761,557	6,829,288	(636,907)	(9,124)

(*) It includes the changes of subsidiaries incorporated as of credit provision or purchase agreements.

<December 31, 2020>

Classification	Financial assets measured at FVTPL				Financial assets measured at FVOCI		Financial liabilities designated as measured at FVTPL	Net derivative instruments	
	Debt securities	Equity securities	Loans	Others	Debt securities	Equity securities		Held-for-trading	Held-for-hedging
January 1, 2020	4,866,007	878,957	803,661	956,186	–	820,109	8,760,680	5,589	704
Increase due to business combination (*)	542,292	117,670	300,982	–	–	–	–	–	–
Net income	201,481	(45,286)	(20,393)	13,633	–	–	(178,563)	(286,796)	(552)
Other comprehensive income	–	–	–	–	–	(83,892)	(6,451)	–	–
Buy / Issue	3,014,362	1,145,292	1,627,616	6,145,147	–	79,278	6,983,182	(345,317)	–
Sell / Settlement	(3,426,618)	(890,468)	(1,219,755)	(5,429,669)	–	(4,785)	(7,479,214)	107,537	–
Others	101,368	(27,397)	–	–	–	–	–	–	–
December 31, 2020	5,298,892	1,178,768	1,492,111	1,685,297	–	810,710	8,079,634	(518,987)	152

(*) It includes the changes of subsidiaries incorporated as of credit provision or purchase agreements.

5-3 Total gains or losses recognized in profit or loss

Total gains or losses recognized in profit or loss, and the line item in profit or loss in which those gains or losses are recognized for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Total gains or losses recognized in profit or loss	The line item in profit or loss in which those gains or losses are recognized
Net gain or loss on financial instruments measured at FVTPL	208,954	(72,304)
Net gain or loss related to financial instruments designated as measured at FVTPL	(209,454)	97,614
Net gain or loss related to derivative instruments used for hedging	(9,276)	(9,124)
Total	44,154	70,116

<December 31, 2020>

Classification	Total gains or losses recognized in profit or loss	The line item in profit or loss in which those gains or losses are recognized
Net gain or loss on financial instruments measured at FVTPL	(137,361)	(49,692)
Net gain or loss related to financial instruments designated as measured at FVTPL	178,563	177,400
Net gain or loss related to derivative instruments used for hedging	(552)	451
Total	40,650	128,159

5-4 Transfer into or out between the fair value hierarchy

There are no transfers into or out of level 3 of the fair value hierarchy for the years ended December 31, 2021 and 2020.

5-5 Sensitivity

Sensitivity of the fair value measurement for the each level 3 financial instrument upon the changes in significant unobservable input, whose results are favorable and unfavorable changes in profit or loss or other comprehensive income or loss as of December 31, 2021 and 2020 are as follows (Korean won in millions):

The results of the sensitivity analysis from changes in significant unobservable inputs as of December 31, 2021 are as follows. The subjects of the sensitivity analysis are the financial assets and liabilities classified as Level 3, and the changes in fair value effect on profit or loss or other comprehensive income are classified as either favorable or unfavorable changes. The sensitivity analysis of financial instruments classified as Level 3 amount to ₩1,080,315 million and ₩1,062,052 million as of December 31, 2021 and 2020, respectively, is impossible in practice and thus are excluded. (Korean won in millions)

<December 31, 2021>

Classification	Favorable changes	Unfavorable changes
Financial assets :		
Financial instruments measured at FVTPL		
Debt securities (*3)	25,765	(25,522)
Equity securities (*2)	11,089	(10,521)
Derivative assets held-for-trading (*1)	1,630	(1,812)
Loans (*4)	6,907	(6,630)
Financial instruments designated as measured	11,054	(7,761)

Classification	Favorable changes	Unfavorable changes
at FVTPL		
Subtotal	56,445	(52,246)
Financial assets measured at FVOCI		
Equity securities (*2)	29,646	(22,348)
Total	86,091	(74,594)
Financial liabilities :		
Financial liabilities measured at FVPL		
Derivative liabilities held-for-trading (*1)	2,967	(2,790)
Financial liabilities designated as measured at FVTPL	8,986	(8,986)
Subtotal	11,953	(11,776)
Derivative liabilities used for hedging(*1)	287	(241)
Total	12,240	(12,017)

(*1) 1) Correlation between rates of IRS of KRW, 2) Correlation between rates of KRW-USD IRS, 3) Correlation between KRW/USD exchange rate and rate of USD IRS, 4) Correlation between stock price index and individual stock,
 5) Favorable and unfavorable changes are calculated by taking 10% fluctuation of correlation within the valuation model.

(*2) Changes in fair value of equity securities are calculated by changing growth rate (0.0~1.0%) and discount rate, which are main unobservable inputs.

(*3) Changes in fair value of debt securities are calculated by changing discount rate (-1.0~1.0%), which is the main unobservable input. Favorable changes and unfavorable changes in fair value of beneficiary securities are calculated by changing discount rate of lease cash flow (-1.0~1.0%) and growth rate of selling price of real estate (-1.0~1.0%), under limited circumstances when it is consisted of real estate. However it is impossible to calculate sensitivity of beneficiary securities based on changes in inputs.

(*4) Changes in loans are calculated by changing the prices and volatility of underlying assets (-10.0~-10.0%, -10.0~10.0%, respectively), which are the main unobservable input.

<December 31, 2020>

Classification	Favorable changes	Unfavorable changes
Financial assets :		
Financial instruments measured at FVTPL		
Debt securities (*3)	38,025	(37,710)
Equity securities (*2)	13,296	(12,352)
Derivative assets held-for-trading (*1)	1,990	(2,062)
Loans (*4)	11,573	(11,336)
Subtotal	64,884	(63,460)
Financial assets measured at FVOCI		
Equity securities (*2)	22,295	(16,365)
Derivative assets used for hedging (*1)	-	(792)
Total	87,179	(80,617)
Financial liabilities :		
Financial liabilities measured at FVPL		
Derivative liabilities held-for-trading (*1)	5,303	(5,231)
Financial liabilities designated as measured at FVTPL	5,159	(5,159)
Total	10,462	(10,390)

(*1) 1) Correlation between rates of IRS of KRW, 2) Correlation between rates of KRW-USD IRS, 3) Correlation between KRW/USD exchange rate and rate of USD IRS, 4) Correlation between stock price index and individual stock,
 5) Favorable and unfavorable changes are calculated by taking 10% fluctuation of correlation within the valuation model.

(*2) Changes in fair value of equity securities are calculated by changing growth rate (0.0~1.0%) and discount rate, which are main unobservable inputs.

(*3) Changes in fair value of debt securities are calculated by changing discount rate (-1.0~1.0%), which is the main unobservable input. Favorable changes and unfavorable changes in fair value of beneficiary securities are calculated by changing discount rate of lease cash flow (-1.0~1.0%) and growth rate of selling price of real estate (-1.0~1.0%), under limited circumstances when it is consisted of real estate. However it is impossible to calculate sensitivity of beneficiary

securities based on changes in inputs.

(*4) Changes in loans are calculated by changing the prices and volatility of underlying assets (-10.0~-10.0%, -10.0~10.0%, respectively), which are the main unobservable input.

5-6 Financial assets and liabilities that are not measured with fair values

The fair values of financial assets and liabilities whose fair values are not readily determinable as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets:				
Cash and due from banks	2,139,052	29,267,544	–	31,406,596
Securities measured at amortized cost	3,113,948	20,312,141	–	23,426,089
Loans measured at amortized cost	–	–	336,125,757	336,125,757
Others	–	–	14,924,535	14,924,535
Total	5,253,000	49,579,685	351,050,292	405,882,977
Financial liabilities:				
Deposits	–	51,251,577	274,811,131	326,062,708
Borrowings	–	12,801,006	17,358,134	30,159,140
Debentures	–	51,400,853	2,773,206	54,174,059
Merchant banking account liabilities	–	–	2,908,280	2,908,280
Others	–	–	28,937,543	28,937,543
Total	–	115,453,436	326,788,294	442,241,730

<December 31, 2020>

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets:				
Cash and due from banks	2,226,065	25,303,750	–	27,529,815
Securities measured at amortized cost	3,324,056	15,290,556	–	18,614,612
Loans measured at amortized cost	–	–	308,926,740	308,926,740
Others	–	–	13,526,995	13,526,995
Total	5,550,121	40,594,306	322,453,735	368,598,162
Financial liabilities:				
Deposits	–	43,104,066	253,493,893	296,597,959
Borrowings	–	9,222,459	17,242,896	26,465,355
Debentures	–	42,207,895	7,300,203	49,508,098
Merchant banking account liabilities	–	–	2,246,273	2,246,273
Others	–	–	27,413,126	27,413,126
Total	–	94,534,420	307,696,391	402,230,811

Details of fair value, valuation technique, and inputs used to develop those measurements classified into level 2 assets and liabilities that are not measured at fair value as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Fair value	Valuation method	Input variables
Financial assets :			
Cash and due from banks	29,267,544	DCF model, etc	Discount rate, credit and other spread, etc.
Securities measured at amortized cost	20,312,141	DCF model, etc	Discount rate
Total	49,579,685		
Financial liabilities :			
Deposits	51,251,577	DCF model, etc	Discount rate
Borrowings	12,801,006	DCF model, etc	Discount rate, other spread
Debentures	51,400,853	DCF model, etc	Discount rate, other spread, rate of inheritance bankruptcy
Total	115,453,436		

<December 31, 2020>

Classification	Fair value	Valuation method	Input variables
Financial assets :			
Cash and due from banks	25,303,750	DCF model, etc	Discount rate, credit and other spread, etc.
Securities measured at amortized cost	15,290,556	DCF model, etc	Discount rate
Total	40,594,306		
Financial liabilities :			
Deposits	43,104,066	DCF model, etc	Discount rate
Borrowings	9,222,459	DCF model, etc	Discount rate, other spread
Debentures	42,207,895	DCF model, etc	Discount rate, other spread, rate of inheritance bankruptcy
Total	94,534,420		

Fair value, valuation method, and input variables of financial instruments disclosed as fair value though it cannot be measured as fair value and the fair value hierarchy Level 3 as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Fair value	Valuation method	Input variables
Financial assets :			
Amortized cost Loans measured at Amortized cost	336,125,757	DCF model etc.	Credit and other spread, rate of advanced redemption, etc.
Others	14,924,535	DCF model etc.	Discount rate, etc.
Total	351,050,292		
Financial liabilities :			
Deposits	274,811,131	DCF model etc.	Other spread, rate of advanced redemption, etc
Borrowings	17,358,134	DCF model etc.	Other spread, etc
Debentures	2,773,206	DCF model etc.	Other spread, rate of inheritance bankruptcy, Discount rate, etc.
Merchant banking account liabilities	2,908,280	(*)	
Others	28,937,543	DCF model etc.	Discount rate, etc.
Total	326,788,294		

(*) The carrying amount is considered fair value without applying the DCF method because it is derived from various transactions and has a relatively short or no maturity

<December 31, 2020>

Classification	Fair value	Valuation method	Input variables
Financial assets :			
Amortized cost Loans measured at Amortized cost	308,926,740	DCF model etc.	Credit and other spread, rate of advanced redemption, discount rate, etc.
Others	13,526,995	DCF model etc.	Discount rate, etc.
Total	322,453,735		
Financial liabilities :			
Deposits	253,493,893	DCF model etc.	Other spread, rate of advanced redemption, discount rate
Borrowings	17,242,896	DCF model etc.	Other spread, discount rate
Debentures	7,300,203	DCF model etc.	Other spread, rate of inheritance bankruptcy, Discount rate, etc.
Merchant banking account liabilities	2,246,273	(*)	
Others	27,413,126	DCF model etc.	Discount rate, etc.
Total	307,696,391		

(*) The carrying amount is considered fair value without applying the DCF method because it is derived from various transactions and has a relatively short or no maturity

5-7 Deferred Day 1 loss

Changes in deferred Day 1 loss, for the years ended December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Beginning balance	(107,818)	(49,192)
Increase(decrease)	(89,824)	(136,343)
Profit or loss	83,645	77,717
Ending balance	(113,997)	(107,818)

5-8 Financial instruments transfer transaction

The Group has bonds sold under repurchase agreements and securities. In such transactions, financial assets were transferred but the derecognition conditions were not met, so the entire transferred assets are continuously recognized in the Group's statement of financial position. In the case of bonds sold under repurchase agreements, it is sold on the condition that it will be repurchased at a fixed price, and when the Group lends securities held by the Group, ownership of the securities is transferred, but the securities are returned at the end of the rental period, so they retain most of the risks and rewards of ownership.

Transferred financial assets and related liabilities not eliminated as a whole as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Book value	Fair value
Assets:		
Financial assets measured at FVTPL (*)	6,563,556	6,563,556
Financial assets measured at FVOCI (*)	3,988,042	3,988,042
Securities measured at amortized cost (*)	969,732	961,803
Liabilities:		
Securities sold under repurchase agreements	8,180,548	8,161,707

(*) The leased financial assets at FVTPL and FVOCI and leased securities measured at amortized cost, of which related liabilities are not recognized, amounting to ₩49,906 million ₩2,538,542 million and ₩59,586 million, respectively, as of December 31, 2021, are included.

<December 31, 2020>

Classification	Book value	Fair value
Assets:		
Financial assets measured at FVTPL	5,664,048	5,664,048
Financial assets measured at FVOCI (*)	2,746,558	2,746,558

Classification	Book value	Fair value
Securities measured at amortized cost (*)	581,617	601,707
Liabilities:		
Securities sold under repurchase agreements	7,283,399	7,256,385

(*) The leased financial assets at FVTPL and FVOCI and leased securities measured at amortized cost, of which related liabilities are not recognized, amounting to ₩50,221 million ₩1,053,479 million and ₩90,035 million, respectively, as of December 31, 2020, are included.

6. Fair value of financial instruments

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

Classification	December 31, 2021		December 31, 2020	
	Book value	Fair value	Book value	Fair value
Financial assets:				
Cash and due from banks	31,406,596	31,406,596	27,529,815	27,529,815
Financial assets measured at FVTPL	38,718,285	38,718,285	43,133,717	43,133,717
Financial assets measured at FVOCI	39,473,529	39,473,529	36,165,388	36,165,388
Securities measured at amortized cost	23,769,017	23,426,089	18,376,657	18,614,612
Loans measured at amortized cost	337,349,273	336,125,757	308,791,815	308,926,740
Derivative assets used for hedging	77,507	77,507	141,463	141,463
Merchant banking account asset	4,741,939	4,741,939	3,465,306	3,465,306
Others	14,924,144	14,924,535	13,527,142	13,526,995
Total	490,460,290	488,894,237	451,131,303	451,504,036
Financial liabilities:				
Financial liabilities measured at FVTPL	6,772,300	6,772,300	10,859,818	10,859,818
Financial liabilities designated as measured at FVTPL	9,104,623	9,104,623	9,802,701	9,802,701
Deposits	325,149,095	326,062,708	295,509,614	296,597,959
Borrowings	30,261,598	30,159,140	26,494,316	26,465,355
Debentures	54,476,161	54,174,059	48,761,838	49,508,098
Derivative liabilities used for hedging	118,599	118,599	34,737	34,737
Merchant banking account liabilities	2,908,280	2,908,280	2,246,273	2,246,273
Others	28,951,207	28,937,543	27,411,469	27,413,126
Total	457,741,863	458,237,252	421,120,766	422,928,067

The following standards are applied in measuring the fair value of financial instruments

- a. Loans measured at Amortized cost : Expected cash flows, current market interest rates and discount rates including borrowers' credit risks are factors to calculate the fair value of loans. For lines of credit and loans that have a short term maturity (less than three months), it is assumed that the carrying amounts approximate to their fair value.
- b. Financial investment assets: The fair value of securities measured at

amortized cost are as stated by the market, broker, or by credible sources. If none of the information from these entities is usable, published market price of financial instruments with similar credit rating, maturity, and ROI is used to estimate the fair value.

c. Deposits : For deposits without an explicit maturity period including deposits with no interests, deposits that have a short term maturity (less than three months), and deposits with a floating rate readjustment period of less than three months, it is assumed that the carrying amounts approximate to their fair value. The estimated fair value of fixed interest bearing deposits is based on discounted cash flows using prevailing money–market interest rates for debts with similar credit risk and maturity.

d. Borrowings: For borrowings that have a short term maturity (less than three months) and borrowings with floating rate readjustment period of less than three months, it is assumed that the carrying amounts approximate to their fair value. The estimated fair value of fixed interest bearing borrowings is based on and discounted cash flows using prevailing money–market interest rates for debts with similar credit risk and maturity.

e. Debentures: For quoted debt issued, the fair values are determined based on quoted market prices. For those notes issued where quoted market prices are not available, a discounted cash flow model is used based on a current interest rate yield curve appropriate for the remaining term to maturity and credit spreads.

7. Categories of financial assets and financial liabilities

Categories of financial assets and financial liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Financial assets measured at FVTPL	Financial assets measured at FVOCI	Financial assets measured at amortized cost	Derivatives for hedging	Total
Financial assets					
Cash and due from banks	–	–	31,406,596	–	31,406,596
Financial assets measured at FVTPL	38,718,285	–	–	–	38,718,285
Financial assets measured at FVOCI	–	39,473,529	–	–	39,473,529
Securities measured at amortized cost	–	–	23,769,017	–	23,769,017
Loans measured at amortized cost	–	–	337,349,273	–	337,349,273
Derivative assets used for hedging	–	–	–	77,507	77,507
Merchant banking account asset	4,741,939	–	–	–	4,741,939
Others	–	–	14,924,144	–	14,924,144
Total	43,460,224	39,473,529	407,449,030	77,507	490,460,290

Classification	Financial liabilities measured at FVTPL	Financial liabilities designated as measured at FVTPL	Financial liabilities measured at amortized cost	Derivatives for hedging	Total
Financial liabilities					
Financial liabilities measured at FVTPL	6,772,300	–	–	–	6,772,300
Financial liabilities designated as measured at FVTPL	–	9,104,623	–	–	9,104,623
Deposits	–	–	325,149,095	–	325,149,095
Borrowings	–	–	30,261,598	–	30,261,598
Debentures	–	–	54,476,161	–	54,476,161
Derivative liabilities used for hedging	–	–	–	118,599	118,599
Merchant banking account liabilities	–	–	2,908,280	–	2,908,280
Others	–	–	28,951,207	–	28,951,207
Total	6,772,300	9,104,623	441,746,341	118,599	457,741,863

<December 31, 2020>

Classification	Financial assets measured at FVTPL	Financial assets measured at FVOCI	Financial assets measured at amortized cost	Derivatives for hedging	Total
Financial assets					
Cash and due from banks	–	–	27,529,815	–	27,529,815
Financial assets measured at FVTPL	43,133,717	–	–	–	43,133,717
Financial assets measured at FVOCI	–	36,165,388	–	–	36,165,388
Securities measured at amortized cost	–	–	18,376,657	–	18,376,657
Loans measured at amortized cost	–	–	308,791,815	–	308,791,815
Derivative assets used for hedging	–	–	–	141,463	141,463
Merchant banking account asset	3,465,306	–	–	–	3,465,306
Others	–	–	13,527,142	–	13,527,142
Total	46,599,023	36,165,388	368,225,429	141,463	451,131,303

Classification	Financial liabilities measured at FVTPL	Financial liabilities designated as measured at FVTPL	Financial liabilities measured at amortized cost	Derivatives for hedging	Total
Financial liabilities					
Financial liabilities measured at FVTPL	10,859,818	–	–	–	10,859,818
Financial liabilities designated as measured at FVTPL	–	9,802,701	–	–	9,802,701
Deposits	–	–	295,509,614	–	295,509,614
Borrowings	–	–	26,494,316	–	26,494,316
Debentures	–	–	48,761,838	–	48,761,838
Derivative liabilities used for hedging	–	–	–	34,737	34,737
Merchant banking account liabilities	–	–	2,246,273	–	2,246,273
Others	–	–	27,411,469	–	27,411,469
Total	10,859,818	9,802,701	400,423,510	34,737	421,120,766

8. Offsetting financial assets and liabilities

The Group engage in Master netting arrangement contracts with counterparties through International Derivatives Swaps and Dealers Association (ISDA) or similar agreements in relation to over-the-counter derivatives and spot exchange transactions. Under this agreement, in the event of a credit case such as the counterparty's bankruptcy, the transaction with the counterparty will be terminated, and at the time of termination, the amount paid or received by each party is offset and paid or received. Bonds purchased under resale agreements and Securities loan transaction has been made offsetting arrangement which is similar derivatives offsetting arrangement

In the case of unpaid domestic exchange bonds and unpaid domestic exchange obligations that deal with bonds and debts arising from domestic exchange transactions between banks, the Group holds the right to netting and pays in a net amount, it is displayed in the statement of financial position based on the amount after offsetting. Other financial instruments include bonds and debts related to securities traded in the market, and are marked on the statement of financial position based on the amount after netting as they hold legal offsetting rights and pay in net amounts.

8-1 Details of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities offset	Net amounts of financial assets presented in the financial statements	Related amounts not offset in the statement of financial position		Net amount
				Financial instruments (*)	Cash collateral	
Derivatives	5,280,303	-	5,280,303	(3,856,516)	(238,492)	1,185,295
Securities lent	2,648,033	-	2,648,033	(2,648,033)	-	-
Bonds purchased under resale agreement	11,676,882	-	11,676,882	(11,676,882)	-	-

Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities offset	Net amounts of financial assets presented in the financial statements	Related amounts not offset in the statement of financial position		Net amount
				Financial instruments (*)	Cash collateral	
Unsettled spot exchanges	7,936,381	–	7,936,381	(7,930,650)	–	5,731
Domestic exchange settlement debts	36,861,598	(33,077,374)	3,784,224	–	–	3,784,224
Other accounts receivable	1,090,665	(428,851)	661,814	–	–	661,814
Total	65,493,862	(33,506,225)	31,987,637	(26,112,081)	(238,492)	5,637,064

(*) The rights to offset exist only in case of default, insolvency or bankruptcy.

Accordingly, the amounts are not offset in the statement of financial position as they do not meet the criteria for offsetting.

<December 31, 2020>

Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities offset	Net amounts of financial assets presented in the financial statements	Related amounts not offset in the statement of financial position		Net amount
				Financial instruments (*)	Cash collateral	
Derivatives	10,949,782	(135,660)	10,814,122	(7,735,047)	(1,220,082)	1,858,993
Securities lent	1,193,735	–	1,193,735	(1,193,735)	–	–
Bonds purchased under resale agreement	12,369,466	–	12,369,466	(12,369,466)	–	–
Unsettled spot exchanges	6,223,651	–	6,223,651	(6,218,704)	–	4,947
Domestic exchange settlement debts	26,352,865	(23,565,466)	2,787,399	–	–	2,787,399
Other accounts receivable	1,371,969	(626,147)	745,822	–	–	745,822
Total	58,461,468	(24,327,273)	34,134,195	(27,516,952)	(1,220,082)	5,397,161

(*) The rights to offset exist only in case of default, insolvency or bankruptcy.

Accordingly, the amounts are not offset in the statement of financial position as they do not meet the criteria for offsetting.

8-2 Details of financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets offset	Net amounts of financial liabilities presented in the financial statements	Related amounts not offset in the statement of financial position		Net amount
				Financial instruments (*)	Cash collateral	
Derivatives	5,806,970	–	5,806,970	(4,533,548)	(246,815)	1,026,607
Bonds sold under repurchase agreements	8,180,548	–	8,180,548	(8,180,548)	–	–
Unsettled spot exchanges	7,935,821	–	7,935,821	(7,930,656)	–	5,165
Domestic exchange settlement credit	39,250,072	(33,077,374)	6,172,698	(6,172,698)	–	–
Other accounts payable	1,099,653	(428,851)	670,802	–	–	670,802
Securities lent	882,866	–	882,866	(882,866)	–	–
Total	63,155,930	(33,506,225)	29,649,705	(27,700,316)	(246,815)	1,702,574

<December 31, 2020>

Classification	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets offset	Net amounts of financial liabilities presented in the financial statements	Financial instruments (*)	Cash collateral	Net amount
Derivatives	10,614,221	(135,661)	10,478,560	(8,304,126)	(430,686)	1,743,748
Bonds sold under repurchase agreements	7,283,399	–	7,283,399	(7,283,399)	–	–
Unsettled spot exchanges	6,223,975	–	6,223,975	(6,218,777)	–	5,198
Domestic exchange settlement credit	27,654,736	(23,565,466)	4,089,270	(4,085,686)	–	3,584
Other accounts payable	1,367,681	(626,147)	741,534	–	–	741,534
Securities lent	165,661	–	165,661	(165,661)	–	–
Total	53,309,673	(24,327,274)	28,982,399	(26,057,649)	(430,686)	2,494,064

(*) The rights to offset exist only in case of default, insolvency or bankruptcy.

Accordingly, the amounts are not offset in the statement of financial position as they do not meet the criteria for offsetting.

9. 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 use the Group's limited capital effectively under the rapidly changing financial circumstances. The ultimate goal of risk management is to maximize the Group's shareholder value with minimizing the sudden fluctuation of its income through a proper balance between risks and returns.

To keep the consistent risk management on a group level basis, the Group establishes and manages the group risk management policies and each of its subsidiaries also establishes its own risk management systems and policies suitable for the subsidiaries' industry through the risk committees and working-level councils under the group risk management policies. The Group identifies improvements by diagnosing the subsidiaries' risk management performance if necessary, and continuously enforces the subsidiaries' risk management activities to make them reflect the improvements.

The Group risk management committee is the top decision-making organization of the group risk management and has responsibilities to establish and monitor risk management strategies and policies, allowable risk limits and investment limits, and capital allocation, which are required to be managed on a group level basis. The subsidiaries' risk management committees (or board of directors) are responsible for its own risk management strategies, policies and monitoring. If necessary, the group risk management committee or group risk management execution committee can apply separate risk management standards considering distinct characteristics of each subsidiary.

9-1 Credit risk

9-1-1 Credit risk management

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

The Group's group risk management committee and group risk management execution committee examines its credit risk on a regular basis. The Group continuously monitors whether credit limits set for each individual, corporation, borrower, subsidiary and major shareholder are compiled and reviews the subsidiaries' asset quality. The Group also checks the status of change of risk exposure, residual limit, profitability, delinquency rate and change of loan loss provision, etc. at least on a quarterly basis.

The Group classifies expected loss and unexpected loss calculating the credit risk. The expected loss is assessed based on estimated LGD (Loss Given Default). The LGD is calculated by using EAD (Exposure at Default), estimated PD (Probability of Default), which is based on a historical default rate, and historical collection rate. The assessed expected loss is reflected on the interest rates on new or rolled over loans and loan loss provision. The unexpected loss, which means a potential volatility between estimate loss and actual loss, is estimated as a credit risk exposure of a portfolio using statistical models. The unexpected loss is used for the Group's internal management purpose.

9-1-2 Degree of exposure to credit risk

The maximum exposure to credit risk as of December 31, 2021 and 2020 are as follows. The following table shows the maximum exposure to credit risk for the items in the statement of financial position, including derivatives, by geography of counterparty and by industry before the effect of mitigation through the use of master netting and collateral agreements. Equity securities in financial assets measured at FVTPL and financial assets held-for-trading, financial assets measured at FVOCI are excluded (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
On-balance-sheet items		
Due from banks	29,375,449	25,330,834
Financial assets measured at FVTPL		
Debt securities	27,939,273	27,840,620
Derivative assets measured at FVTPL	5,288,975	10,789,275
Loans	1,898,878	1,492,111
Others	1,983,924	1,685,297
Subtotal	37,111,050	41,807,303
Financial assets measured at FVOCI	38,385,390	34,883,331
Securities measured at amortized cost	23,769,017	18,376,657
Derivative assets used for hedging	77,507	141,463
Loans measured at amortized cost	337,349,273	308,791,815
Merchant banking account asset	4,741,939	3,465,306
Others	14,924,144	13,527,142
Total	485,733,769	446,323,851
Off-balance-sheet items		
Financial guarantees	1,451,843	2,156,627
Guarantee contracts	16,433,918	13,698,873
Commitment	118,472,476	116,526,573
Commitment to merchant banking account	790,000	950,000
Total	137,148,237	133,332,073

9-1-3 Collateral management and credit risk mitigation

Details of collateral management and credit risk mitigation as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Impaired loan		Total
	Individual assessment	Collective assessment	
Guarantees	12,936	106,383	119,319
Deposit	90	10,593	10,683
Real estate	206,468	193,442	399,910
Securities	–	58	58
Movables and others	25,630	3,963	29,593
Total	245,124	314,439	559,563

<December 31, 2020>

Classification	Impaired loan		Total
	Individual assessment	Collective assessment	
Guarantees	22,780	90,066	112,846
Deposit	105	8,590	8,695
Real estate	313,438	202,349	515,787
Securities	–	33	33
Movables and others	4,700	26,483	31,183
Total	341,023	327,521	668,544

9-1-3-1 As of December 31, 2021 and 2020, financial assets that have collateral and do not recognize a loss allowance are ₩455,162million and ₩420,415million, respectively.

9-1-4 Credit risk exposure

9-1-4-1 Loans

As of December 31, 2021 and 2020 carrying amounts of debt securities by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2021>

Classification	12-month expected credit loss	Lifetime expected credit loss		Subject to the application of credit-impaired approach	Total
		Non credit-impaired loan	Credit-impaired loans		
Household loans					
Grade 1	105,546,439	19,132,518	–	–	124,678,957
Grade 2	8,603,470	5,547,758	–	–	14,151,228
Grade 3	94,255	141,541	355,748	–	591,544
Unrated (*)	2,354,909	700	5,931	–	2,361,540
Subtotal	116,599,073	24,822,517	361,679	–	141,783,269
Corporate loans					
Grade 1	113,400,972	2,694,780	–	–	116,095,752
Grade 2	58,317,326	9,959,224	–	–	68,276,550
Grade 3	240,056	2,131,950	683,009	1,369,499	4,424,514
Unrated (*)	256,190	10,000	–	–	266,190
Subtotal	172,214,544	14,795,954	683,009	1,369,499	189,063,006
Credit Card loans					
Grade 1	3,362,392	93,494	–	–	3,455,886
Grade 2	3,988,964	383,003	–	–	4,371,967
Grade 3	3,049	43,528	127,519	–	174,096
Subtotal	7,354,405	520,025	127,519	–	8,001,949
Total	296,168,022	40,138,496	1,172,207	1,369,499	338,848,224

(*) The amounts of items that are internally unrated

<December 31, 2020>

Classification	12-month expected credit loss	Lifetime expected credit loss		Subject to the application of credit-impaired approach	Total
		Non credit-impaired loan	Credit-impaired loans		
Household loans					
Grade 1	106,946,346	16,670,047	—	—	123,616,393
Grade 2	5,905,988	2,200,039	—	—	8,106,027
Grade 3	44,967	124,832	289,698	—	459,497
Unrated (*)	1,566,888	359	6,940	—	1,574,187
Subtotal	114,464,189	18,995,277	296,638	—	133,756,104
Corporate loans					
Grade 1	101,002,672	2,089,254	—	—	103,091,926
Grade 2	54,871,473	6,326,103	—	—	61,197,576
Grade 3	133,741	2,045,943	827,451	1,361,444	4,368,579
Unrated (*)	264,578	—	11,239	—	275,817
Subtotal	156,272,464	10,461,300	838,690	1,361,444	168,933,898
Credit Card loans					
Grade 1	3,580,031	305,112	—	—	3,885,143
Grade 2	3,025,533	355,664	—	—	3,381,197
Grade 3	1,011	35,891	164,852	—	201,754
Subtotal	6,606,575	696,667	164,852	—	7,468,094
Total	277,343,228	30,153,244	1,300,180	1,361,444	310,158,096

(*) The amounts of items that are internally unrated

The above book amount does not reflect the loan origination deferred asset, provision for loss and present value discount.

The credit rating classification of the loans for the years ended December 31, 2021 and 2020 are as follows:

<December 31, 2021>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less or equal to 0.58% of PD	Less or equal to 0.51% of PD	Less or equal to 2.56% of PD
Grade 2	Less or equal to 30.72% of PD	Less or equal to 10.99% of PD	Less or equal to 25.64% of PD
Grade 3	From 30.72% to 100% of PD	From 10.99% to 100% of PD	From 25.64% to 100% of PD

<December 31, 2019>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less or equal to 1.53% of PD	Less or equal to 0.58% of PD	Less or equal to 2.06% of PD
Grade 2	Less or equal to 34.35% of PD	Less or equal to 13.69% of PD	Less or equal to 25.89% of PD
Grade 3	From 34.35% to 100% of PD	From 13.69% to 100% of PD	From 25.89% to 100% of PD

9-1-4-2 Off-balance-sheet items

As of December 31, 2021 and 2020, exposures of off-balance-sheet items by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2021>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Financial guarantees				
Grade 1	1,218,378	55,091	–	1,273,469
Grade 2	147,773	26,447	–	174,220
Grade 3	–	4,150	4	4,154
Subtotal	1,366,151	85,688	4	1,451,843
Guarantee contracts				
Grade 1	11,705,587	1,075,730	–	12,781,317
Grade 2	2,740,338	588,344	–	3,328,682
Grade 3	8	297,838	26,073	323,919
Subtotal	14,445,933	1,961,912	26,073	16,433,918
Commitment				
Grade 1	96,936,886	5,210,937	–	102,147,823
Grade 2	12,650,113	3,169,877	–	15,819,990
Grade 3	8,622	304,186	32,681	345,489
Unrated (*)	159,174	–	–	159,174
Subtotal	109,754,795	8,685,000	32,681	118,472,476
Total	125,566,879	10,732,600	58,758	136,358,237

(*) The amounts of items that are internally unrated

<December 31, 2020>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Financial guarantees				
Grade 1	1,617,314	93,930	–	1,711,244
Grade 2	413,478	27,308	–	440,786
Grade 3	4,597	–	–	4,597
Subtotal	2,035,389	121,238	–	2,156,627
Guarantee contracts				
Grade 1	9,762,223	528,103	–	10,290,326
Grade 2	2,557,372	439,826	–	2,997,198
Grade 3	981	368,396	41,972	411,349
Subtotal	12,320,576	1,336,325	41,972	13,698,873
Commitment				
Grade 1	95,005,024	5,637,196	–	100,642,220
Grade 2	12,443,723	2,930,428	–	15,374,151
Grade 3	6,252	354,444	46,110	406,806
Unrated (*)	103,396	–	–	103,396
Subtotal	107,558,395	8,922,068	46,110	116,526,573
Total	121,914,360	10,379,631	88,082	132,382,073

(*) The amounts of items that are internally unrated

The credit rating classification of the off-balance-sheet items is as follows for the years ended December 31, 2021 and 2020.

⟨December 31, 2021⟩

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less or equal to 0.58% of PD	Less or equal to 0.51% of PD	Less or equal to 2.56% of PD
Grade 2	Less or equal to 30.72% of PD	Less or equal to 10.99% of PD	Less or equal to 25.64% of PD
Grade 3	From 30.72% to 100% of PD	From 10.99% to 100% of PD	From 25.64% to 100% of PD

⟨December 31, 2020⟩

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less or equal to 1.53% of PD	Less or equal to 0.58% of PD	Less or equal to 2.06% of PD
Grade 2	Less or equal to 34.35% of PD	Less or equal to 13.69% of PD	Less or equal to 25.89% of PD
Grade 3	From 34.35% to 100% of PD	From 13.69% to 100% of PD	From 25.89% to 100% of PD

9-1-5 Internal credit rating of debt securities

9-1-5-1 As of December 31, 2021 and 2020, the carrying amounts of debt securities by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2021>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Financial assets measured at FVOCl				
Grade 1	38,385,390	—	—	38,385,390
Subtotal	38,385,390	—	—	38,385,390
Financial assets measured at amortized cost				
Grade 1	23,618,738	—	—	23,618,738
Grade 2	76,096	68,827	—	144,923
Grade 3	—	25,113	—	25,113
Subtotal	23,694,834	93,940	—	23,788,774
Total	62,080,224	93,940	—	62,174,164

<December 31, 2020>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Financial assets measured at FVOCl				
Grade 1	34,883,331	—	—	34,883,331
Subtotal	34,883,331	—	—	34,883,331
Financial assets measured at amortized cost				
Grade 1	18,386,747	—	—	18,386,747
Subtotal	18,386,747	—	—	18,386,747
Total	53,270,078	—	—	53,270,078

The credit ratings of debt securities based on the internal rating used by Hana bank and credit ratings by external credit rating agencies are as follows.

Classification	Internal credit rating	Domestic rating agencies	Overseas rating agencies	
			Moody's	Fitch
Grade 1	A1 ~ A7	AAA ~ BBB	Aaa ~ Ba2	AAA ~ BB
Grade 2	B1 ~ B6	BBB- ~ BB-	Ba3 ~ B3	BB- ~ B-
Grade 3	C1 ~ C3	BB+ ~ CCC	Caa1 ~ C	CCC+ ~ C

9-1-6 Credit risk concentration

9-1-6-1 Credit risk concentration in each major industry as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Industry	December 31, 2021		December 31, 2020	
		Amounts	Ratio(%)	Amounts	Ratio(%)
On-balance-sheet items					
Financial assets measured at FVTPL (*)	Due from banks	Financial services	29,375,449	100.0	25,330,834
		Financial services	22,855,396	61.6	27,423,488
		Manufacturing	2,315,583	6.2	2,256,874
		Public administration	3,705,198	10.0	4,141,944
		Construction	8,829	—	175,151
		Wholesale & retail	214,002	0.6	331,448
		Others	8,012,042	21.6	7,478,398
Financial assets measured at FVOCI		Subtotal	37,111,050	100.0	41,807,303
	Financial services	19,322,185	50.3	16,615,268	47.6
	Manufacturing	273,971	0.7	136,413	0.4
	Public administration	14,754,866	38.4	14,662,927	42.0
	Construction	337,319	0.9	284,603	0.8
	Wholesale & retail	133,056	0.3	43,101	0.1
	Others	3,563,993	9.4	3,141,019	9.1
Securities measured at amortized cost		Subtotal	38,385,390	100.0	34,883,331
	Financial services	9,904,454	41.7	9,121,248	49.6
	Manufacturing	84,749	0.4	34,546	0.2
	Public administration	7,987,248	33.6	5,103,812	27.8
	Construction	204,833	0.9	250,018	1.4
	Others	5,607,490	23.5	3,877,123	21.1
	Allowance for credit loss	(19,757)	(0.1)	(10,090)	(0.1)
	Total	23,769,017	100.0	18,376,657	100.0

Classification	Industry	December 31, 2021		December 31, 2020	
		Amounts	Ratio(%)	Amounts	Ratio(%)
Derivative assets used for hedging	Financial services	77,507	100.0	140,380	99.2
	Manufacturing	—	—	304	0.2
	Others	—	—	779	0.6
	Subtotal	77,507	100.0	141,463	100.0
Loans measured at amortized cost	Household loans	141,783,269	42.0	133,756,104	43.3
	Credit card loans	8,001,949	2.4	7,468,094	2.4
	Corporate loans				
	Manufacturing	44,901,226	13.3	42,112,572	13.6
	Construction	4,104,014	1.2	3,595,727	1.2
	Wholesale & retail	22,244,449	6.6	18,997,088	6.2
	Financial services	22,848,839	6.8	21,879,009	7.1
	Real estate rental	44,839,185	13.3	38,768,504	12.6
	Others	50,125,293	14.8	43,580,998	14.0
	Subtotal	338,848,224	100.4	310,158,096	100.4
	Deferred loan fees	420,682	0.1	407,149	0.1
	Present value discount	(5,231)	—	(2,957)	—
	Provision for loss	(1,914,402)	(0.5)	(1,770,473)	(0.5)
	Subtotal	(1,498,951)	(0.4)	(1,366,281)	(0.4)
	Total	337,349,273	100.0	308,791,815	100.0
Merchant banking account	Financial services	668,878	14.1	991,046	28.6
	Manufacturing	49,827	1.1	49,903	1.4
	Wholesale & retail	119,976	2.5	—	—
	Real estate rental	1,208,226	25.5	829,705	23.9
	Others	2,695,032	56.8	1,594,652	46.1
	Subtotal	4,741,939	100.0	3,465,306	100.0
Total		470,809,625		432,796,709	
Off-balance-sheet items					
Financial guarantees	Manufacturing	170,742	11.8	237,531	11.0
	Construction	4,083	0.3	47,538	2.2
	Wholesale & retail	48,765	3.4	66,786	3.1
	Financial services	652,535	44.9	394,237	18.3
	Real estate rental	138,890	9.6	153,688	7.1
	Others	436,828	30.0	1,256,847	58.3
	Subtotal	1,451,843	100.0	2,156,627	100.0
Guarantee contracts	Household loans	19,369	0.1	57,352	0.4
	Manufacturing	9,410,325	57.3	7,911,867	57.8
	Construction	1,602,680	9.8	1,411,452	10.3
	Wholesale & retail	3,264,298	19.9	1,062,535	7.8
	Financial services	802,350	4.9	1,543,619	11.3
	Real estate rental	149,210	0.9	111,833	0.8

Classification	Industry	December 31, 2021		December 31, 2020	
		Amounts	Ratio(%)	Amounts	Ratio(%)
	Others	1,185,686	7.1	1,600,215	11.6
	Subtotal	16,433,918	100.0	13,698,873	100.0
Commitment	Household loans	51,108,539	43.1	53,212,610	45.7
	Manufacturing	27,245,050	23.0	25,645,138	22.0
	Construction	2,542,532	2.1	2,493,568	2.1
	Wholesale & retail	8,613,975	7.3	7,654,699	6.6
	Financial services	8,602,102	7.3	8,533,170	7.3
	Real estate rental	4,142,299	3.5	3,311,379	2.8
	Others	16,217,979	13.7	15,676,009	13.5
	Subtotal	118,472,476	100.0	116,526,573	100.0
Merchant banking account	Financial services	460,000	58.2	510,000	53.7
	Manufacturing	50,000	6.3	80,000	8.4
	Wholesale & retail	130,000	16.5	260,000	27.4
	Real estate rental	100,000	12.7	60,000	6.3
	Others	50,000	6.3	40,000	4.2
	Subtotal	790,000	100.0	950,000	100.0
Total		137,148,237		133,332,073	

(*) Financial assets measured at FVTPL consist of debt securities and loans.

9-1-6-2 Credit risk concentration in each country as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Country	December 31, 2021		December 31, 2020	
		Amounts	Ratio(%)	Amounts	Ratio(%)
On balance accounts:					
Due from banks	Korea	21,769,253	74.1	17,538,691	69.2
	U.S	619,767	2.1	1,910,954	7.5
	China	1,133,907	3.9	1,123,704	4.4
	Japan	1,844,472	6.3	359,361	1.4
	Singapore	246,342	0.8	369,493	1.5
	Hong Kong	123,637	0.4	154,960	0.6
	U.K	54,880	0.2	—	—
	Others	3,583,191	12.2	3,873,671	15.4
Financial assets measured at FVTPL (*)	Subtotal	29,375,449	100.0	25,330,834	100.0
	Korea	32,172,436	86.7	33,217,407	79.5
	U.S	2,164,344	5.8	2,601,321	6.2
	China	14,802	—	29,157	0.1
	Japan	152,774	0.4	346,098	0.8
	Singapore	36,475	0.1	18,374	—
	Hong Kong	42,795	0.1	100,956	0.2

Classification	Country	December 31, 2021		December 31, 2020	
		Amounts	Ratio(%)	Amounts	Ratio(%)
Financial assets measured at FVOCI	U.K	251,772	0.7	230,177	0.6
	Others	2,275,652	6.2	5,263,813	12.6
	Subtotal	37,111,050	100.0	41,807,303	100.0
Securities measured at amortized cost	Korea	33,079,714	86.2	29,491,427	84.5
	U.S	596,427	1.6	269,774	0.8
	China	2,195,189	5.7	2,333,428	6.7
	Japan	13,460	—	48,639	0.1
	Hong Kong	103,977	0.3	138,822	0.4
	Australia	35,249	0.1	—	—
	France	56,571	0.1	77,482	0.2
	Others	2,304,803	6.0	2,523,759	7.3
	Subtotal	38,385,390	100.0	34,883,331	100.0
Derivative assets used for hedging	Korea	21,614,683	90.9	17,438,440	94.9
	U.S	540,728	2.3	103,830	0.6
	China	131,144	0.6	113,084	0.6
	Others	1,502,220	6.3	731,393	4.0
	Subtotal	23,788,775	100.1	18,386,747	100.1
	Allowance for credit loss	(19,758)	(0.1)	(10,090)	(0.100)
	Total	23,769,017	100.0	18,376,657	100.0
Loans measured at amortized cost	Korea	311,205,550	92.3	286,368,036	92.7
	U.S	4,263,906	1.3	3,180,983	1.0
	China	6,107,149	1.8	4,707,307	1.5
	Japan	1,840,661	0.5	1,774,538	0.6
	Hong Kong	2,359,165	0.7	2,253,697	0.7
	Others	13,071,793	3.8	11,873,535	3.9
	Subtotal	338,848,224	100.4	310,158,096	100.4
	Deferred loan fees and expenses	420,682	0.1	407,149	0.1
	Present value discount	(5,231)	—	(2,957)	—
	Allowance for possible loan losses	(1,914,402)	(0.5)	(1,770,473)	(0.5)
	Subtotal	(1,498,951)	(0.4)	(1,366,281)	(0.4)
	Total	337,349,273	100.0	308,791,815	100.0
Merchant banking accounts					

Classification	Country	December 31, 2021		December 31, 2020	
		Amounts	Ratio(%)	Amounts	Ratio(%)
asset	Korea	4,741,939	100.0	3,465,306	100.0
	Total	470,809,625		432,796,709	
Off-balance accounts:					
Financial guarantees	Korea	1,451,843	100.0	2,156,627	100.0
Guarantee contracts	Korea	13,097,487	79.7	9,819,333	71.7
	U.S	26,714	0.2	69,885	0.5
	China	1,822,912	11.1	2,193,753	16.0
	Japan	29,602	0.2	26,743	0.2
	Others	1,457,203	8.8	1,589,159	11.6
	Subtotal	16,433,918	100.0	13,698,873	100.0
Commitment	Korea	114,407,903	96.6	111,397,974	95.6
	U.S	293,350	0.2	416,905	0.4
	China	623,483	0.5	2,415,127	2.1
	Japan	272,926	0.2	265,269	0.2
	Others	2,874,814	2.5	2,031,298	1.7
	Subtotal	118,472,476	100.0	116,526,573	100.0
Merchant banking accounts	Korea	790,000	100.0	950,000	100.0
	Total	137,148,237		133,332,073	

(*) Financial assets measured at FVTPL consist of debt securities and loans.

9-1-7 Details of the Group's corporate loans by industry affected by the spread of COVID-19 as of December 31, 2021 and 2020 are as follows. The effect on the industries may vary significantly based on future economic conditions.

Household loan debtors subject to measurement of lifetime expected credit loss as disclosed in Note 9-1-4-1, may be impacted by the spread of COVID-19. The effect may vary significantly based on future economic conditions. (Korean won in millions):

<December 31, 2021>

Industry	Financial assets at FVPL	Financial assets at FVOCl	Securities measured at amortized cost	Loans at amortized cost	Off-balance-sheet items	Total
Air transportation	118,276	–	–	559,471	290,076	967,823
Lodging	377,220	–	–	3,235,904	406,478	4,019,602
Food	4,302	–	–	5,276,673	209,605	5,490,580
Automobile	429,609	9,849	13,379	6,587,129	5,060,751	12,100,717
Petroleum refining	181,251	9,728	–	819,014	2,424,649	3,434,642
Travel	301	–	–	172,308	60,374	232,983
Total	1,110,959	19,577	13,379	16,650,499	8,451,933	26,246,347

<December 31, 2020>

Industry	Financial assets at FVPL	Financial assets at FVOCl	Securities measured at amortized cost	Loans at amortized cost	Off-balance-sheet items	Total
Air transportation	97,845	–	–	542,293	670,841	1,310,979
Lodging	314,804	–	–	3,211,611	303,843	3,830,258
Food	1,284	–	–	4,219,340	238,925	4,459,549
Automobile	116,555	–	12,347	6,168,455	4,848,850	11,146,207
Petroleum refining	37,349	9,980	–	460,588	2,659,204	3,167,121
Travel	–	–	–	120,369	48,078	168,447
Total	567,837	9,980	12,347	14,722,656	8,769,741	24,082,561

9-2 Liquidity risk

9-2-1 Liquidity risk management

Liquidity risk is defined as the risk that the Group will encounter difficulty in meeting obligations associated with financial liabilities. 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 through 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 regarding liquidity risk management are as follows:

- Set up and comply with tolerable limits to liquidity risk
- Maintain liquidity by regularly forecasting cash requirements on a regular basis

Each associate assesses and manages liquidity coverage ratios (LCR) and liquidity ratio of the relevant assets and liabilities by applying the relevant supervisory regulations. The Group manages an acceptable limit on each associate's liquidity risk through the group risk management executive committee and performs liquidity stress test periodically and establishes a contingent funding plan based on the test results to be prepared for liquidity crisis.

9-2-2 Maturity of financial instruments analysis

9-2-2-1 Reporting standard

The details of the remaining contractual maturities of financial liabilities are analyzed by the earliest maturity date when the Group would be required to pay, based on the undiscounted cash outflows of the Group's financial liabilities. In addition, financial liabilities at fair value through profit or loss and depository liabilities (payment on demand) are shown at fair value in the immediate payment column.

9-2-2-2 Maturity of the financial liabilities

The table below summarizes the maturity profile of the contractual undiscounted cash flows of the Group's financial liabilities. The maturity of financial liabilities as of December 31, 2021 and 2020 is summarized as follows (Korean won in millions):

<December 31, 2021>

Classification	On demand	Within 1 month	After 1 month ~ but no later than 3 months	After 3 months ~ but no later than 1 year	After 1 year ~ but no later than 5 years	After 5 years	Total
On balance accounts:							
Financial liabilities measured at FVTPL	6,772,300	–	–	–	–	–	6,772,300
Financial liabilities designated as measured at FVTPL	–	128,507	113,122	1,950,260	4,044,713	2,944,657	9,181,259
Deposits	168,885,302	20,824,748	32,642,988	93,004,427	9,739,702	2,084,058	327,181,225
Borrowings	5,530,618	10,622,547	3,157,158	6,672,462	3,917,418	449,091	30,349,294
Debentures	12,741	2,946,602	3,719,445	14,694,412	29,100,506	5,160,244	55,633,950
Derivative liabilities used for hedging	–	1,889	1,728	7,312	43,457	(88,970)	(34,584)
Merchant banking account liabilities	895,438	2,012,842	–	–	–	–	2,908,280
Others	7,040,521	19,106,583	121,314	336,510	794,470	307,694	27,707,092
Total	189,136,920	55,643,718	39,755,755	116,665,383	47,640,266	10,856,774	459,698,816
Off balance accounts:							
Financial guarantees	1,451,843	–	–	–	–	–	1,451,843
Acceptances and guarantees	16,433,918	–	–	–	–	–	16,433,918
Commitment	118,472,476	–	–	–	–	–	118,472,476
Commitment to merchant banking account	790,000	–	–	–	–	–	790,000
Total	137,148,237	–	–	–	–	–	137,148,237

<December 31, 2020>

Classification	On demand	Within 1 month	After 1 month ~ but no later than 3 months	After 3 months ~ but no later than 1 year	After 1 year ~ but no later than 5 years	After 5 years	Total
On balance accounts:							
Financial liabilities measured at FVTPL	10,859,818	-	-	-	-	-	10,859,818
Financial liabilities designated as measured at FVTPL	-	303,565	404,663	1,132,104	5,177,426	2,861,993	9,879,751
Deposits	147,924,038	18,861,130	29,963,166	86,931,576	11,442,498	2,401,347	297,523,755
Borrowings	7,076,841	6,653,737	3,267,376	5,780,305	3,327,429	462,318	26,568,006
Debentures	339	2,694,455	2,847,222	11,348,811	28,316,888	4,555,090	49,762,805
Derivative liabilities used for hedging	-	618	971	4,360	41,332	(93,949)	(46,668)
Merchant banking account liabilities	453,146	1,793,036	-	-	-	-	2,246,182
Others	8,773,858	15,118,921	134,998	281,439	846,758	240,217	25,396,191
Total	175,088,040	45,425,462	36,618,396	105,478,595	49,152,331	10,427,016	422,189,840
Off balance accounts:							
Financial guarantees	2,156,627	-	-	-	-	-	2,156,627
Acceptances and guarantees	13,698,873	-	-	-	-	-	13,698,873
Commitment	116,526,573	-	-	-	-	-	116,526,573
Commitment to merchant banking account	950,000	-	-	-	-	-	950,000
Total	133,332,073	-	-	-	-	-	133,332,073

Derivative liabilities used for hedging are denominated based on the net cash flow. Available assets that exist in redeeming financial liabilities and unused loan commitments are cash and due from banks, debt securities, equity securities, loans, etc. In addition, the Group is able to cope with unexpected cash flows through the sale of securities and additional sources of funding, similar to asset backed securitization.

9-3 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.

The purpose of market risk management is to maintain the loss of assets and liabilities incurred due to changes in market variables such as interest rates, foreign exchanges and equity prices within the allowable limits in order to ensure profitability and stability. Market risk management targets include securities held-for-trading, foreign currency net positions, derivatives and other assets and liabilities with embedded market risks. Significant risks exposed to the Group as of the reporting date are interest rate risk, foreign exchange risk and equity price risk.

For market risk management, the Group measures and monitors the relevant risk exposures on a regular basis. The Group also established and complies with market risk limits, whereby it can manage the exposures arising from changes of market variables within an adequate level. The subsidiaries exposed to market risks, such as Hana Bank and H&DS, set up and operate their own market risk management system. The group-level market risk exposures are consistently calculated through the Group-integrated risk management system. The Group reports its current status of market risk management to the group risk management execution committee and group risk management committee on a monthly and quarterly basis.

9-3-1 Trading position

The trading position includes interest rate positions, equity price positions, commodity positions, and all foreign exchange positions:

- a. Financial instruments for the purpose of acquiring the differences incurred due to short-term trading or price fluctuations.
- b. Financial instruments for the purpose of hedging risks
- c. Financial instruments for the purpose of acquiring arbitrages
- d. Financial instruments for the purpose of acquisition, mediation and market creation

The Group regularly measures the degree of market risks and complies with the allowable limits set for the various areas of the trading position. In addition, the Group reviews the adequacy of the risk-reward ratio by evaluating risks and related profits and losses on a regular basis and complies with the established trading policy regulations.

9-3-1-1 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 the VaR for a standard 10 days in the 99% confidence level. In addition, to account for the method's limited use, stress tests are performed in order to measure the extent of the loss in extreme cases.

9-3-1-2 Risk types of VaR

Risk types of VaR as of December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

Classification	December 31, 2021	Average	Min	Max	December 31, 2020
Interest rates risk	64,980	70,124	39,170	121,667	84,666
Foreign exchange rates risk	406,435	371,090	275,140	461,381	378,562
Stock price risk	39,554	38,429	6,379	90,428	56,273
Total risk(*)	408,720	380,193	284,863	470,446	391,341

(*) The calculation of the total risk VaR takes into consideration the correlation and diversification effects between each risk factor and therefore, is not the same as the arithmetic additions of all the VaRs.

9-3-2 Non-trading position

9-3-2-1 Interest rate risk

Interest rate risk of non-trading position is a risk of losses in financial assets and liabilities with interest rates due to adverse changes in interest rates and is incurred when maturity structure does not match interest rate setting cycle of the related assets and liabilities. The Group manages interest rate risks in order to maintain the stability of net interest income and net asset value.

The Group is closely monitoring the output and market of various industry working groups that manage the transition to new interest rate indicators, including those announced by LIBOR regulators. A fundamental shift in interest rate indicators (hereafter, 'interest rate indicator reform') is taking place around the world, and certain interbank lending rates (hereinafter 'IBORs') are being replaced by new risk-free rates. In particular, LIBOR, with the exception of overnight, 1-month, 3-month, 6-month, and 12-month USD LIBOR, all of the calculations were stopped as of December 31, 2021. 5-month USD LIBOR which was mentioned earlier will also be discontinued as of June 30, 2023. In response to these changes, Hana Bank, a subsidiary of the Group selected the head of the capital market group as its responsible officer and organized the sub-TF to

establish LIBOR conversion plan consisting of the business flows such as determination of alternative interest rates, computer development, communication management with employees and customers, risk management, taxation, finance, law, and accounting system establishment. Progress according to the plan is regularly reported to the Risk Management Steering Committee and, if necessary, will also be reported to the Board of Directors. The purpose of the plan is to understand where exposure to LIBOR is occurring within the business, and to prepare and implement an action plan to ensure a smooth transition to an alternative interest rate indicator. To manage the risks posed by such interest rate indicator reform, the Group manage and supervise interest rate indicator reform by evaluating the extent to which a contract references IBOR cash flows, whether these contracts need to be modified as a result of interest rate indicator reform, and how to manage communication with counterparties on interest rate indicator reform.

Interest rate risk establish limits and monitors interest rate EVEs according to IRRBB methodology. The interest rate VaR is an estimated maximum loss of net asset due to adverse changes of interest rate.

Interest rate EVE means the maximum decrease in net asset value when interest rate changes, and details of \triangle EVE as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
\triangle EVE	411,681	276,409

9-3-2-2 Details of the financial instruments that have not been converted to an alternative indicator interest rate as of December 31, 2021 are as follows
(Korean won in millions):

Classification	Non-derivative financial assets(*1)			Non-derivative financial liabilities(*1)		Derivatives(*2)	Commitments and Finance guarantee contracts (*2)
	Financial assets measured at FVOCI	Financial assets measured at amortized costs	Total	Financial liabilities measured at amortized costs	Total		
USD LIBOR	48,425	5,595,621	5,644,046	1,319,972	1,319,972	58,912,456	631,126

(*1) The amount of non-derivative financial instruments are based on the book value

(*2) The amount of derivatives is based on the nominal amount.

(*3) For financial instruments related to USD-LIBOR, those with maturities before June 30, 2023 are excluded.

9-3-2-3 Equity price risk

Equity price risk is the risk that the fair value of equities results in changes in the level of related revenue and capital. Effects on capital due to fluctuations in equity price risk as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	20% decline	10% decline	10% rise	20% rise
Equity price risk	(98,040)	(49,020)	49,020	98,040

<December 31, 2020>

Classification	20% decline	10% decline	10% rise	20% rise
Equity price risk	(119,479)	(59,740)	59,740	119,479

The Group measures the equity price risk on the domestic listed equity securities only.

9-3-3 Currency risk concentration

Currency risk is a risk incurred when the value of a financial instrument or future cash flows fluctuates due to the changes in foreign exchange rates. Currency risk arises from the financial instruments expressed in currencies other than the functional currency. Currency risk does not arise from the financial instruments expressed in the functional currency, measured based on historical currency, or in non-monetary items measured by using the historical foreign exchange rates. The Group manages the foreign exchange net exposure amount of the trading and non-trading positions by each currency.

Significant foreign currency assets and liabilities denominated in Korean won as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	USD	JPY	EUR	CNY	IDR	₩	Total
Assets							
Cash and due from bank	9,387,554	1,973,385	554,962	781,113	206,986	1,006,320	13,910,320
Financial assets measured at FVTPL	3,992,312	151,116	834,640	115,512	122,071	321,327	5,536,978
Financial assets measured at FVOCI	2,852,585	–	–	2,193,679	282,334	1,430,360	6,758,958
Securities measured at amortized cost	1,625,260	–	104,411	119,932	199,405	1,195,406	3,244,414
Loans measured at amortized cost	23,921,730	1,906,806	4,009,683	6,853,211	1,449,769	4,067,343	42,208,542
Derivative assets used for hedging	57,747	–	–	–	–	–	57,747
Others	3,795,944	234,531	443,485	139,047	49,171	514,839	5,177,017
Total	45,633,132	4,265,838	5,947,181	10,202,494	2,309,736	8,535,595	76,893,976
Liabilities							
Financial liabilities measured at FVTPL	926,610	20,327	76,237	3,332	1,252	159,470	1,187,228
Financial liabilities designated as measured at FVTPL	2,312,957	–	13,685	–	–	6,904	2,333,546
Deposits	31,150,254	2,332,032	4,068,677	7,667,956	1,396,788	4,907,220	51,522,927
Borrowings	6,404,445	128,189	1,283,632	435,611	3,882	846,133	9,101,892
Debentures	5,240,235	–	881,849	340,786	20,213	231,796	6,714,879
Derivative liabilities used for hedging	22,764	–	3,242	–	–	–	26,006
Others	5,341,727	518,474	1,171,299	232,302	18,638	390,756	7,673,196
Total	51,398,992	2,999,022	7,498,621	8,679,987	1,440,773	6,542,279	78,559,674

<December 31, 2020>

Classification	USD	JPY	EUR	CNY	IDR	KRW	Total
Assets							
Cash and due from bank	8,868,857	784,436	740,629	846,842	53,218	1,599,568	12,893,550
Financial assets measured at FVTPL	4,708,198	191,405	865,801	77,483	195,715	345,473	6,384,075
Financial assets measured at FVOCI	3,430,292	—	85,421	2,266,646	265,932	1,574,386	7,622,677
Securities measured at amortized cost	1,364,334	—	137,814	109,021	154,279	263,268	2,028,716
Loans measured at amortized cost	18,813,525	1,827,492	4,917,215	5,457,334	1,434,089	3,082,061	35,531,716
Derivative assets used for hedging	111,088	—	182	—	—	—	111,270
Others	4,377,241	288,152	209,216	291,439	39,001	497,619	5,702,668
Total	41,673,535	3,091,485	6,956,278	9,048,765	2,142,234	7,362,375	70,274,672
Liabilities							
Financial liabilities measured at FVTPL	1,488,436	79,432	63,760	3,431	876	108,478	1,744,413
Financial liabilities designated as measured at FVTPL	1,868,854	—	41,817	—	—	6,739	1,917,410
Deposits	26,090,583	2,210,903	4,036,595	7,479,150	1,194,896	4,294,490	45,306,617
Borrowings	6,848,220	177,286	1,007,763	295,001	139,080	709,487	9,176,837
Debentures	4,938,245	—	—	215,211	74,500	338,063	5,566,019
Derivative liabilities used for hedging	—	—	89	—	—	—	89
Others	5,322,948	189,698	711,998	431,569	16,941	361,922	7,035,076
Total	46,557,286	2,657,319	5,862,022	8,424,362	1,426,293	5,819,179	70,746,461

9-4 Operational risk

Operational risk is the risk of loss arising from systems failure, human error, fraud or other 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 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 and monitors its operational risk on a regular basis and complies with the predetermined risk limits, whereby the Group manages and controls its operational risk arising from changes of its operation environments and internal controls within an appropriate level. The Group's subsidiaries measures the operational risk exposures using their own approaches suitable to the relevant supervisory regulations of each industry and the group-level operational risk exposures are consistently calculated through the group-integrated risk management system. The Group reports its current status of operational risk management to the group risk management execution committee and group risk management committee on a monthly and quarterly basis.

9–5 Capital management

The Group implements the BIS capital requirement system in order to secure capital adequacy and comply with the supervisory regulations. The Group maintains appropriate capital ratio in accordance with BIS capital requirement system. In addition, the Group performs a capital adequacy assessment in order to cope with an unexpected loss.

Risk-weighted assets calculated per each risk type when calculating BIS ratio are as follows:

- a. Credit risk incurs when potential loss arises from default of a borrower or counterparty or downgrading of its credit rating. Risk-weighted assets of credit risk of bank subsidiaries are calculated using the internal model approved by Financial Supervisory Service. Risk-weighted assets of credit risk are calculated by multiplying risk weights reflecting counterparty credit rating, maturity, collateral and guarantees granted according to the standardized model of Basel III.
- b. Market risk incurs when potential loss arises from the fluctuation of market price of stocks, interest rates and foreign currency rates. Risk-weighted assets of market risk are calculated by multiplying 12.5 to the required capital of market risk, which consists of the interest rate risk, equity price risk, foreign currency risk, commodity risk and option risk, according to the standardized model of Supervisory Regulations on Financial Holding Companies.
- c. Operational risk incurs when loss arises from systems failure, human error, and business process. Risk-weighted assets of operational risk are calculated by multiplying 12.5 to the required capital of operational risk according to Detailed Regulations on Supervisory of Banking Business.

Regulatory capital in accordance with the Regulations on the Supervision of Banking Business for calculating BIS ratio is as follows:

- a. Common Equity Tier 1: common shares issued by the bank that meet the criteria for classification as common shares for regulatory purposes, stock surplus (share premium) resulting from the issue of instruments included in Common Equity Tier 1, retained earnings, Accumulated other comprehensive income and other disclosed reserves, common shares issued by consolidated subsidiaries of the bank and held by third parties (i.e. minority interest) that meet the criteria for inclusion in Common Equity Tier 1 capital, regulatory adjustments applied in the calculation of Common Equity Tier 1
- b. Additional Tier 1: instruments issued by the bank that meet the criteria for inclusion in Additional Tier 1 capital, stock surplus (share premium) resulting from the issue of instruments included in Additional Tier 1 capital, instruments issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in Additional Tier 1 capital and are not included in Common Equity Tier 1, regulatory adjustments applied in the calculation of Additional Tier 1
- c. Tier 2 capital: Instruments issued by the bank that meet the criteria for inclusion in Tier 2 capital (and are not included in Tier 1 capital), stock surplus (share premium) resulting from the issue of instruments included in Tier 2 capital, instruments issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in Tier 2 capital and are not included in Tier 1 capital, certain loan loss provisions, Regulatory adjustments applied in the calculation of Tier 2 Capital

Regulatory capital and BIS ratios as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Common Equity Tier 1 capital	30,001,299	27,236,650
Additional Tier 1 capital	2,983,389	2,222,295
Subtotal(Tier 1 Capital)	32,984,688	29,458,945
Tier 2 capital	2,490,969	2,642,271
Total(Total Capital)	35,475,657	32,101,216
Risk-weighted assets:		
Credit risk-weighted assets	189,389,595	199,177,817
Market risk-weighted assets	11,996,151	11,583,065
Operational risk-weighted assets	16,382,247	15,377,702
Total	217,767,993	226,138,584
BIS capital ratio:		
Common Equity Tier 1 ratio	13.78%	12.04%
Additional Tier 1 capital ratio	15.15%	13.03%
Total capital ratio	16.29%	14.20%

9-5-1 Assessing reasonableness and managing internal capital

Internal capital is the amount that allows for continuous operation of business while accounting for all risks. Internal capital is defined as the size of capital needed to cope with unexpected loss under a certain rate. The purpose of managing the internal capital is to compare the size of internal capital and available capital ("Tier 1") and to serve as a measure of financial strength. Managing the internal capital also provides the amount of risk-adjusted capital and the basis for measurement. The indicators consist of risk appetite ratio as well as exhaustion ratio of foreign holding limits. The risk appetite ratio is an internal capital ratio established after taking into consideration a capital buffer in Tier 1 capital. The exhaustion ratio of foreign holding limits is a ratio used to measure the amount of internal capital used against the internal capital limits.

Internal capital limits are established after accounting for the size of current and subsequent Tier 1 capital as well as the components, quality, risk appetite, target credit rating, operational strategy and business plans. The Risk Committee determines risk types and internal capital limits for HFG and each subsidiary more than once a year. In the case where new operations or expansion of operations result in the amount exceeding the internal capital limits, an approval from the Risk Committee is needed beforehand. If such a situation occurs in cases outlined as exceptions, an approval from the Risk Committee is needed for the information on exceeded amount, post hoc results, as well as subsequent plans.

10. Operating segments information

10-1 General information

The Group is organized into four operating segments based on their financial information of each legal entity used for making decisions about resources to be allocated to the segment and assessing its performance. Details of operating segments are presented as follows; 1) Hana Bank and its subsidiaries (Banking) 2) HFI and its subsidiaries (Financial Investing) 3) KEB Hana Card and its subsidiaries (Credit Card) 4) Others (consist of Hana Financial Group's separate performance and its other subsidiaries such as Hana Capital, Hana Asset Trust, Hana TI, Hana Ventures, Hana Savings Bank, Hana Life Insurance, Hana Alternative Asset Management, HIS, Hana Insurance and others)

10-2 Income or loss by operating segments

10-2-1 Details of net income, assets and liabilities by operating segments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions) :

<2021>

Classification	Hana Bank	HFI	KEB Hana Card	Others	Subtotal	Adjustments	Total
Operating segment Income and loss(*):							
Net interest income(loss)	6,150,597	291,749	471,974	524,608	7,438,928	(1,723)	7,437,205
Interest income	8,786,664	595,099	587,624	918,542	10,887,929	(20,438)	10,867,491
Interest expense	(2,636,067)	(303,350)	(115,650)	(393,934)	(3,449,001)	18,715	(3,430,286)
Net fee and commission income(loss)	552,794	553,955	232,595	409,054	1,748,398	(6,681)	1,741,717
Fee and commission income	837,624	685,482	682,944	523,171	2,729,221	(76,035)	2,653,186
Fee and commission expense	(284,830)	(131,527)	(450,349)	(114,117)	(980,823)	69,354	(911,469)
Others	545,724	239,421	45,226	1,525,891	2,356,262	(1,398,313)	957,949
Total Operating income(loss)	7,249,115	1,085,125	749,795	2,459,553	11,543,588	(1,406,717)	10,136,871
Impairment loss on financial assets	(243,338)	(3,446)	(188,173)	(98,805)	(533,762)	544	(533,218)
Net operating income(loss)	7,005,777	1,081,679	561,622	2,360,748	11,009,826	(1,406,173)	9,603,653
General and administrative expenses	(2,973,063)	(575,010)	(221,898)	(434,925)	(4,204,896)	154,436	(4,050,460)
Net other operating income (loss)	(614,276)	(15,159)	4,735	(147,028)	(771,728)	(150,369)	(922,097)
Operating income(loss)	3,418,438	491,510	344,459	1,778,795	6,033,202	(1,402,106)	4,631,096
Net other non-operating income(loss)	60,036	181,914	(1,739)	46,562	286,773	(12,944)	273,829
Income tax expenses	(902,728)	(167,431)	(92,236)	(176,964)	(1,339,359)	16,016	(1,323,343)
Net income(loss)	2,575,746	505,993	250,484	1,648,393	4,980,616	(1,399,034)	3,581,582
Total assets(*)	430,193,576	37,614,683	9,596,474	51,769,924	529,174,657	(26,729,387)	502,445,270
Total liabilities(*)	401,437,105	32,323,652	7,565,896	28,803,826	470,130,479	(3,184,549)	466,945,930

(*) The amount of net income or loss, asset and liabilities by the operating segments does not consider the transaction amount between the segments

<2020>

Classification	Hana Bank	HFI	KEB Hana Card	Others	Subtotal	Adjustments	Total
Operating segment income and loss(*):							
Net interest income(loss)	5,307,790	244,191	508,709	384,250	6,444,940	(5,062)	6,439,878
Interest income	8,816,550	530,062	632,056	747,246	10,725,914	(20,718)	10,705,196
Interest expense	(3,508,760)	(285,871)	(123,347)	(362,996)	(4,280,974)	15,656	(4,265,318)
Net fee and commission income(loss)	574,898	516,096	119,453	332,536	1,542,983	(8,800)	1,534,183
Fee and commission income	812,576	633,268	599,874	631,419	2,677,137	(80,192)	2,596,945
Fee and commission expense	(237,678)	(117,172)	(480,421)	(298,883)	(1,134,154)	71,392	(1,062,762)
Others	1,070,189	374,762	39,728	674,391	2,159,070	(598,312)	1,560,758
Total Operating income(loss)	6,952,877	1,135,049	667,890	1,391,177	10,146,993	(612,174)	9,534,819
Impairment loss on financial assets	(528,942)	(37,156)	(224,377)	(80,662)	(871,137)	198	(870,939)
Net operating income(loss)	6,423,935	1,097,893	443,513	1,310,515	9,275,856	(611,976)	8,663,880
General and administrative expenses	(2,973,870)	(497,568)	(226,902)	(350,334)	(4,048,674)	131,018	(3,917,656)
Net other operating income (loss)	(522,080)	(119,008)	(4,075)	(148,493)	(793,656)	(116,146)	(909,802)
Operating income(loss)	2,927,985	481,317	212,536	811,688	4,433,526	(597,104)	3,836,422
Net other non-operating income(loss)	(181,884)	93,562	(1,719)	(6,695)	(96,736)	(10,452)	(107,188)
Income tax expenses	(721,724)	(164,843)	(56,360)	(119,085)	(1,062,012)	17,656	(1,044,356)
Net income(loss)	2,024,377	410,036	154,457	685,908	3,274,778	(589,900)	2,684,878
Total assets(*)	396,187,562	35,796,518	8,211,042	45,634,565	485,829,687	(24,882,641)	460,947,046
Total liabilities(*)	369,376,033	31,367,561	6,433,428	24,801,119	431,978,141	(2,631,383)	429,346,758

(*) The amount of net income or loss, asset and liabilities by the operating segments does not consider the transaction amount between the segments

10-2-2 The operating income or loss from external customers and internal transactions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Hana Bank	HFI	KEB Hana Card	Others	Subtotal	Adjustments	Total
Revenue (expense) from external customers	7,165,349	1,132,653	780,850	1,058,019	10,136,871	–	10,136,871
Revenue (expense) from internal transactions	83,766	(47,528)	(31,055)	1,401,534	1,406,717	(1,406,717)	–
Total	7,249,115	1,085,125	749,795	2,459,553	11,543,588	(1,406,717)	10,136,871

<2020>

Classification	Hana Bank	HFI	KEB Hana Card	Others	Subtotal	Adjustments	Total
Revenue (expense) from external customers	6,952,583	1,085,831	717,060	779,345	9,534,819	–	9,534,819
Revenue (expense) from internal transactions	294	49,218	(49,170)	611,832	612,174	(612,174)	–
Total	6,952,877	1,135,049	667,890	1,391,177	10,146,993	(612,174)	9,534,819

10-2-3 Significant non-cash transactions included in income of operating segments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Hana Bank	HFI	KEB Hana Card	Others	Subtotal	Adjustments	Total
Gain(loss) on equity method	127,673	(5,477)	2,070	6,445	130,711	269	130,980
Depreciation and amortization	(451,498)	(51,119)	(30,079)	(240,756)	(773,452)	4,665	(768,787)

<2020>

Classification	Hana Bank	HFI	KEB Hana Card	Others	Subtotal	Adjustments	Total
Gain(loss) on equity method	56,471	(5)	1,258	(1,533)	56,191	(10,523)	45,668
Depreciation and amortization	(450,959)	(44,085)	(36,650)	(226,038)	(757,732)	(3,068)	(760,800)

10-3 Information about regions

Revenue by region from the external customers for the years ended December 31, 2021 and 2020 and non-current assets by region as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Revenue from external customers		Non-current assets	
	2021	2020	December 31, 2021	December 31, 2020
Domestic	10,672,518	9,396,579	5,408,606	4,869,505
Foreign:				
Hong Kong	63,976	64,552	3,997	6,748
Singapore	46,801	33,984	1,563	1,095
U.S	49,686	45,706	6,872	7,256
Japan	29,060	36,168	3,894	4,979
China	229,228	202,709	63,523	202,641
Indonesia	195,281	180,894	67,821	65,193
U.K	30,625	22,489	2,626	3,346
Canada	32,851	29,324	10,809	10,299
Others	193,562	134,588	18,323	8,519
Subtotal	871,070	750,414	179,428	310,076
Adjustments	(1,406,717)	(612,174)	(244,310)	(236,362)
Total	10,136,871	9,534,819	5,343,724	4,943,219

Non-current assets consist of property and equipment, investment properties, and intangible assets and are classified as either domestic or overseas depending on its geographic proximity.

11. Cash and due from banks

11-1 Cash and due from banks as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Counterparty	December 31, 2021	December 31, 2020
Cash		2,031,147	2,198,981
Due from banks in Korean won			
Reserve deposits with BOK, etc.	Bank of Korea ("BOK"), etc.	13,199,451	11,038,294
Time deposits, etc.	Other banks	281,200	702,753
Other deposits	Other financial institutions	2,446,061	1,274,985
Subtotal		15,926,712	13,016,032
Due from banks in foreign currencies			
Due from banks on demand	BOK, etc.	7,815,953	7,408,869
Time deposits	Agricultural Bank of China	971,559	1,385,988
Other deposits	Other financial institutions	4,661,225	3,519,945
Subtotal		13,448,737	12,314,802
Total		31,406,596	27,529,815

11-2 Restricted balances in due from banks as of December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020	Restrictions
Due from banks in Korean won			
Reserve deposits with BOK, etc.	13,102,451	11,038,294	Reserve deposits from the Banking Act and the Bank of Korea Act, currency stabilization account, reserve, domestic exchange transaction collateral
Reserve for futures trading	-	364	Margin for trading account
Reserve for claims of customers' deposits	293,000	343,199	Capital market law, regulation on brokerage business of securities company, etc.
Other deposits	936,896	315,125	For the right of pledge, etc.
Subtotal	14,332,347	11,696,982	
Due from banks in foreign currencies			
Deposits in foreign currencies in other branches	5,883,930	5,993,187	Reserve for payment of deposits from the Banking Act and the Bank of Korea Act
Other deposits	4,150,948	1,580,111	OTC derivative contracts, etc.
Subtotal	10,034,878	7,573,298	
Total	24,367,225	19,270,280	

12. Financial assets measured at FVPL

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

Classification	December 31, 2021	December 31, 2020
Stocks	483,000	377,249
Investments in partnerships	464,596	357,781
Government and public bonds	2,828,697	3,530,704
Financial bonds	7,240,570	7,473,379
Corporate bonds and others	5,465,545	5,202,047
Beneficiary certificates	7,434,923	7,479,753
Other securities denominated in Korean won	293,367	174,193
Securities denominated in foreign currencies	4,860,918	4,259,531
Derivative linked securities	474,891	312,397
Derivative assets held for trading(*)	5,288,975	10,789,275
Loans	1,898,878	1,492,111
Others	1,983,925	1,685,297
Total	38,718,285	43,133,717

(*) Refers to Note 17. Derivatives Reference

13. Financial assets measured at FVOCI

13-1 Details of financial assets measured at fair value through other comprehensive income as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Stocks	977,270	1,114,110
Investments in partnerships	773	786
Government and public bonds	11,253,235	11,007,981
Financial bonds	14,143,886	10,128,914
Corporate bonds	6,229,311	6,113,830
Other securities denominated in Korean won	80,334	105,871
Securities denominated in foreign currencies	6,788,720	7,693,896
Total	39,473,529	36,165,388

13-2 Details of shares(including shares in foreign currencies) included in financial assets measured at FVOCI as of December 31, 2021 and 2020 are as follows

<December 31, 2021>

Counterparty	Book value (Fair value)
Daewoo Shipbuilding & Marine Engineering Co., Ltd. etc.	207,809
UAMCO., Ltd..	176,628
KRX	148,732
The Korea Securities Finance Corporation	139,872
Consumer Credit Assistant Fund Co., Ltd.	84,067
KCI	56,454
Taihan Electric Wire Co., Ltd.	54,925
HMM	23,924
STX Engine(perpetual convertible bonds)	23,877
CM International	23,710
KG Dongbu Steel Co., Ltd.	20,908
Korea Asset Management Corporation	15,737
Korea Enterprise Data	14,330
Korea Money Brokerage Corp	13,789
Kunho Tire Co., Inc.	11,190
BC Card Co., Ltd.	9,784
HJC CORP.	8,271
Korea Securities Depository	7,964
DB ASSET MANAGEMENT CO., LTD	5,698
CLS GROUP HOLDINGS AG	4,761
Daelim Construction Co.	4,586
Others	31,123
Total	1,088,139

<December 31, 2020>

Counterparty	Book value (Fair value)
Daewoo Shipbuilding & Marine Engineering Co., Ltd. etc.	247,026
UAMCO., Ltd..	150,244
Consumer Credit Assistant Fund Co., Ltd.	118,096
The Korea Securities Finance Corporation	135,591
KCI	74,632
CM International	65,498
Taihan Electric Wire Co., Ltd.	58,063
HMM	55,698
Hanjin Heavy Industries & Construction Co., Ltd.	54,260
KG Dongbu Steel Co., Ltd.	22,881
STX Engine(perpetual convertible bonds)	21,310
ChinHung international, Inc	15,931
Korea Asset Management Corporation	15,737
Korea Enterprise Data	14,642
Korea Money Brokerage Corp	12,980
BC Card Co., Ltd.	9,710
Kumho Tire Co., Inc.	9,188
Koramco REITs Management and Trust Co., Ltd.	8,703
HJC CORP.	7,299
Daelim Construction Co.	5,161
POSCO PLANTEC CO.,LTD	4,570
DB ASSET MANAGEMENT CO., LTD	4,094
Korea Securities Depository	7,901
Others	162,842
Total	1,282,057

Equity instruments that are held for strategic alliances, not for trading, converted from debt instruments and acquired for access rights of systems and facilities are designated as measured at FVOCI.

13-3 Details of disposal of shares (including shares in foreign currencies) included in financial assets measured at FVOCI as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Counterparty	Book value	Cumulative valuation gain (loss) (*)	Reason for disposal
HMM	146,293	110,760	Decision of the Board of Directors
Hanjin Heavy Industries & Construction Co., Ltd.	40,747	(36,905)	Decision of the Board of Directors
ChinHung International, Inc	12,700	(2,915)	Decision of the Board of Directors
Taihan Electric Wire Co., Ltd.	12,111	(28,391)	Decision of the Board of Directors
Koramco REITs Management and Trust Co., Ltd.	9,327	8,952	Sales due to reduced effectiveness of strategic investment through business partnership
Kumho Electric	1,672	(1,353)	Decision of the Board of Directors
Others	3,508	917	
Total	226,358	51,065	

(*) Cumulative gain or loss is replaced with retained earnings.

<December 31, 2020>

Counterparty	Book value	Cumulative valuation gain (loss) (*)	Reason for disposal
NHN KCP Corp.	10,024	9,609	Stock disposal because of deterioration of VAN market
Korea Credit-card Electronic-settlement Service Co.,Ltd	4,763	3,866	Stock disposal because of deterioration of VAN market
STX Heavy Industry Co., Ltd	155	102	Sale of the debt equity swap stock
Huvexel	35	35	Sale of the debt equity swap stock
Others	49	(3,926)	
Total	15,026	9,686	

(*) Cumulative gain or loss is replaced with retained earnings.

13-4 Dividends recognized from financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Dividends recognized from equity instruments held as of December 31 2021 and 2020	10,661	8,296
Dividends recognized from equity instruments derecognized	133	34
Total	10,794	8,330

13-5 Changes in the loss allowance in relation to financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	10,859	—	—	10,859
Provision (reversal) for possible loan losses	4,982	—	—	4,982
New financial assets executed or purchased	693	—	—	693
Disposal financial assets	(5,739)	—	—	(5,739)
Exchange rate fluctuation and others	1,483	—	—	1,483
Ending balance	12,278	—	—	12,278

<2020>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	7,458	—	—	7,458
Increase due to business combination	6	—	—	6
Provision (reversal) for possible loan losses	8,161	—	—	8,161
New financial assets executed or purchased	681	—	—	681
Disposal financial assets	(5,253)	—	—	(5,253)
Exchange rate fluctuation and others	(194)	—	—	(194)
Ending balance	10,859	—	—	10,859

13-6 Changes in the carrying amount in relation to financial assets measured at FVOCI for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	34,883,331	—	—	34,883,331
New financial assets executed or purchased	21,641,073	—	—	21,641,073
Disposed financial assets	(17,957,206)	—	—	(17,957,206)
Exchange rate fluctuation and others	(181,808)	—	—	(181,808)
Ending balance	38,385,390	—	—	38,385,390

<2020>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	36,781,485	—	—	36,781,485
Increase due to business combination	228,401	—	—	228,401
New financial assets executed or purchased	33,345,608	—	—	33,345,608
Disposed financial assets	(35,246,716)	—	—	(35,246,716)
Exchange rate fluctuation and others	(225,447)	—	—	(225,447)
Ending balance	34,883,331	—	—	34,883,331

14. Securities measured at amortized cost

14-1 Details of securities measured at amortized cost as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Government and public bonds	6,695,621	4,031,947
Financial bonds	1,483,330	2,146,316
Corporate bonds and others	12,352,368	10,174,991
Securities denominated in foreign currencies	3,257,456	2,033,493
Allowance for credit losses	(19,758)	(10,090)
Total	23,769,017	18,376,657

14-2 Profit or loss from disposal of securities at amortized cost for the years ended December 31, 2021 are as follows (Korean won in millions):

<2021>

Classification	Face amount	Book value	Amount of profit from disposal
Corporate bonds and others	28,900	28,880	20

14-3 Changes in provision for allowance for loan losses in relation to securities measured at amortized cost for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Beginning balance	10,090	–	–	10,090
Transfer to non credit-impaired financial assets	(4,062)	4,062	–	–
Provision for possible loan losses	5,489	6,603	–	12,092
Disposed financial assets	(1,561)	(245)	–	(1,806)
Exchange rate fluctuation and others	(1,399)	780	–	(619)
Ending balance	8,557	11,200	–	19,757

<2020>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Beginning balance	4,011	—	—	4,011
Increase due to business combination	29	—	—	29
Provision for possible loan losses	8,208	—	—	8,208
New financial assets executed or purchased	1	—	—	1
Disposed financial assets	(868)	—	—	(868)
Exchange rate fluctuation and others	(1,291)	—	—	(1,291)
Ending balance	10,090	—	—	10,090

14-4 Changes in the carrying amount in relation to securities measured at amortized cost for years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Beginning balance	18,386,747	—	—	18,386,747
Transfer to non credit-impaired financial assets	(112,583)	112,583	—	—
New financial assets executed or purchased	10,395,043	—	—	10,395,043
Disposed financial assets	(5,127,492)	(28,354)	—	(5,155,846)
Exchange rate fluctuation and others	153,119	9,711	—	162,830
Ending balance	23,694,834	93,940	—	23,788,774

<2020>

Classification	12 month expected credit loss	Lifetime expected credit losses		Total
		Non credit-impaired loans	Credit-impaired loans	
Beginning balance	16,858,632	—	—	16,858,632
Increase due to business combination	81,956	—	—	81,956
New financial assets executed or purchased	5,835,696	—	—	5,835,696
Disposed financial assets	(4,321,152)	—	—	(4,321,152)
Exchange rate fluctuation and others	(68,385)	—	—	(68,385)
Ending balance	18,386,747	—	—	18,386,747

15. Pledged asset

15-1 The details of assets provided as collateral as of the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Details	Book Value
Financial assets measured at FVTPL	Pledged securities	5,766,635
	Derivative instruments	1,486,824
	KRX, etc.	393,312
	Client RP	6,513,651
	Others	46,608
	Subtotal	14,207,030
Financial assets measured at FVOCI	Futures	202,927
	Daylight credit	277,657
	Client RP	1,245,539
	Foreign currency	203,962
	Pledged securities	2,541,827
	BOK payment	1,871,226
	Borrowings from BOK	829,803
	Others	733,625
	Subtotal	7,906,566
Securities measured at amortized cost	Foreign currency borrowing	910,097
	Establishment of a pledge right	10,199
	Futures	100,047
	BOK payment	2,313,892
	Daylight credit	372,940
	Client RP	50
	Borrowings from BOK	4,311,268
	Pledged securities	59,586
	Others	427,638
	Subtotal	8,505,717

Classification	Details	Book Value
Loans measured at amortized cost	Borrowings	474,805
Property and equipment	Rental deposit	523
	Total	31,094,641

<December 31, 2020>

Classification	Details	Book Value
Financial assets measured at FVTPL	Pledged securities	3,662,080
	Derivative instruments	1,868,548
	KRX, etc.	380,273
	Client RP	5,613,828
	Others	5,242
	Subtotal	11,529,971
Financial assets measured at FVOCI	Futures	79,860
	Daylight credit	543,533
	Client RP	915,924
	Foreign currency	777,154
	Pledged securities	1,061,613
	BOK payment	2,193,151
	Borrowings from BOK	1,207,402
	Others	575,390
	Subtotal	7,354,027
Securities measured at amortized cost	Foreign currency borrowing	491,286
	Establishment of a pledge right	10,242
	Futures	298,597
	BOK payment	1,649,843
	Daylight credit	116,809
	Client RP	296
	Borrowings from BOK	3,098,593
	Pledged securities	183,482
	Others	356,108
	Subtotal	6,205,256

Classification	Details	Book Value
Property and equipment	Rental deposit	763
	Total	25,090,017

15-2 The fair value of collateral that is available-for-sale and re-pledge, irrespective of default, is as follows (Korean won in millions):

<December 31, 2021>

Classification	Fair value of collateral	Fair value of collateral sold or re-pledged
Securities	13,988,194	1,015,450
Deposits	336,619	–

<December 31, 2020>

Classification	Fair value of collateral	Fair value of collateral sold or re-pledged
Securities	13,818,912	1,081,816
Deposits	350,047	–

16. Loans and receivables measured at amortized cost

16-1 Details of loans and receivables measured at amortized cost as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Loans and receivables:		
Loans in Korean won	272,786,199	251,403,242
Loans in foreign currencies	28,782,642	24,226,188
Domestic import usance	4,188,861	2,756,392
Call loans	1,288,673	946,689
Bills purchased in Korean won	187,361	37,026
Bills purchased in foreign currencies	5,799,103	5,936,779
Advance payments on acceptances and guarantees	12,083	10,182
Credit card loans	8,023,704	7,468,094
Bonds purchased under resale agreement	11,676,882	12,369,466
Installment receivables purchased	808,625	496,441
Privately-placed corporate bonds	2,821,097	2,368,818
Lease receivables	2,472,994	2,138,779
Subtotal	338,848,224	310,158,096
Plus (less):		
Deferred loan fees	420,682	407,149
Present value discount	(5,231)	(2,957)
Allowance for loan losses	(1,914,402)	(1,770,473)
Total	337,349,273	308,791,815

16-2 Loans measured at amortized cost to customer as of December 31, 2021 and 2020 are listed as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Corporate loans:		
Large business	41,727,560	36,535,621
Small and medium business	123,156,797	109,120,077
Public sector and others	24,178,649	23,278,200
Subtotal	189,063,006	168,933,898
Household loans	141,783,269	133,756,104
Credit card loans	8,001,949	7,468,094
Subtotal	338,848,224	310,158,096
Plus (less):		
Deferred loan fees	420,682	407,149
Present value discount	(5,231)	(2,957)
Allowance for loan losses	(1,914,402)	(1,770,473)
Total	337,349,273	308,791,815

16-3 Changes in allowance for possible loan losses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	12 month expected credit	Lifetime expected credit losses		Credit impairment model	Total
		Non credit-impaired loan	Credit-impaired loan		
As of January 1, 2021	538,269	580,541	630,980	20,683	1,770,473
Increase due to business combination	—	196	—	—	196
Transfer to 12 month expected credit loss	115,989	(67,285)	(48,704)	—	—
Transfer to non credit-impaired financial assets	(73,774)	82,109	(8,335)	—	—
Transfer to credit-impaired loan	(126,969)	(90,843)	217,812	—	—
Provisions of allowance of possible loan losses	22,014	271,900	214,324	17,028	525,266
Write-offs	10	22	(558,867)	—	(558,835)
Collection of loans written-off	—	—	213,419	—	213,419
Disposal of non performing loans	—	—	(46,863)	(3,582)	(50,445)
Changes in exchange rate, etc.	35,757	(14,254)	(7,175)	—	14,328
As of December 31, 2021	511,296	762,386	606,591	34,129	1,914,402

<2020>

Classification	12 month expected credit	Lifetime expected credit losses		Credit impairment model	Total
		Non credit-impaired loan	Credit-impaired loan		
As of January 1, 2020	477,717	418,223	700,518	13,076	1,609,534
Increase due to business combination	195	33	316	—	544
Transfer to 12 month expected credit loss	52,447	(47,615)	(4,832)	—	—
Transfer to non credit-impaired financial assets	(36,130)	40,141	(4,011)	—	—
Transfer to credit-impaired loan	(128,247)	(90,394)	219,018	(377)	—
Provisions of allowance of possible loan losses	229,441	263,013	358,742	10,047	861,243
Write-offs	(114)	(338)	(679,887)	—	(680,339)
Collection of loans written-off	—	—	176,525	—	176,525
Disposal of non performing loans	—	—	(55,236)	(2,063)	(57,299)
Changes in exchange rate, etc.	(57,040)	(2,522)	(80,173)	—	(139,735)
As of December 31, 2020	538,269	580,541	630,980	20,683	1,770,473

16-4 Changes in the carrying amounts of allowance for possible loan losses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	12 month expected credit	Lifetime expected credit losses		Credit impairment model	Total
		Non credit-impaired loan	Credit-impaired loan		
As of January 1, 2021	277,343,228	30,153,244	1,300,180	1,361,444	310,158,096
Increase due to business combination	–	10,000	–	–	10,000
Transfer to 12 month expected credit loss	4,459,382	(4,399,754)	(59,628)	–	–
Transfer to non credit-impaired financial assets	(18,390,881)	18,438,038	(47,157)	–	–
Transfer to credit-impaired loan	(629,299)	(474,032)	1,103,331	–	–
Write-offs	–	–	(558,867)	–	(558,867)
Net increase and decrease	33,407,714	(3,581,951)	(318,178)	11,637	29,519,222
Disposal of non-performing loans	(22,122)	(7,049)	(247,474)	(3,582)	(280,227)
As of December 31, 2021	296,168,022	40,138,496	1,172,207	1,369,499	338,848,224

<2020>

Classification	12 month expected credit	Lifetime expected credit losses		Credit impairment model	Total
		Non credit-impaired loan	Credit-impaired loan		
As of January 1, 2020	247,592,363	33,532,727	1,572,453	851,956	283,549,499
Increase due to business combination	112,474	8,210	11,758	–	132,442
Transfer to 12 month expected credit loss	3,707,669	(3,688,605)	(19,064)	–	–
Transfer to non credit-impaired financial assets	(8,397,962)	8,460,192	(62,230)	–	–
Transfer to credit-impaired loan	(807,094)	(538,154)	1,348,827	(3,579)	–
Write-offs	(3)	(338)	(679,887)	–	(680,228)
Net increase and decrease	35,135,781	(7,620,788)	(557,931)	515,129	27,472,191
Disposal of non-performing loans	–	–	(313,746)	(2,062)	(315,808)
As of December 31, 2020	277,343,228	30,153,244	1,300,180	1,361,444	310,158,096

16-5 Amortized cost before change and net gain or loss due to change from cash flows of contract of loans, whose allowance for possible loan losses were measured based on the life-time expected credit loss for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Amortized cost before change	83,324	140,093
Net gain or loss due to change	(941)	20,918

16-6 Loans whose contractual cash flows changed for which the measurement of allowance for doubtful accounts changed from the lifetime ECL to 12-month ECL on initial recognition during the reporting period are ₩17,538 million as of December 31, 2021 and not exist as of December 31, 2020, respectively.

16-7 The contractual non-recoverable amount of the loan receivable that has been fully amortized as of the end of the reporting period but is still trying to recover is ₩5,331,950 million and ₩4,920,853 as of December 31, 2021, and 2020 respectively.

17. Derivative instruments

17-1 Details of amounts of the unsettled derivative contract and fair value of derivatives held by the Group as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Notional amounts	Net valuation gain	Net valuation loss	Assets	Liabilities
Currency:					
Forward	207,574,461	3,104,657	2,372,709	2,856,394	2,206,665
Swap	93,499,816	2,657,272	3,420,437	1,461,317	1,889,435
Call option	452,589	4,373	–	2,344	–
Put option	443,674	–	1,955	–	1,565
Future	1,492,911	562	494	562	494
Subtotal	303,463,451	5,766,864	5,795,595	4,320,617	4,098,159
Interest:					
Forward	1,467,163	36,539	28,408	49,367	40,459
Swap	175,714,299	472,784	732,906	486,615	559,343
Call option	251,966	4,688	821	53,273	–
Put option	905,000	–	299	–	13,354
Future	4,280,415	3,639	1,037	3,639	1,038
Subtotal	182,618,843	517,650	763,471	592,894	614,194
Stock:					
Forward	654	–	34	184	–
Swap	3,447,020	44,166	141,219	100,130	750,813
Call option	2,103,991	33,871	24,515	59,350	–
Put option	4,447,453	35,702	16,982	–	147,837
Future	611,158	2,666	2,849	2,666	2,849
Subtotal	10,610,276	116,405	185,599	162,330	901,499
Credit:					
Swap(CDS)	13,626,442	26,002	46,684	99,821	125,059
Total revenue swap (TRS)	151,447	908	544	5,975	1,438
Subtotal	13,777,889	26,910	47,228	105,796	126,497
Others:					
Credit risk valuation adjustment	–	2,159	–	(12,029)	–
Profit or loss on the trade date (unamortized)	–	–	–	19,150	33,430
Other forwards	1,550,831	30,684	28,177	30,684	28,177
Other swaps	7,635,278	29,353	22,086	40,705	57,766

Classification	Notional amounts	Net valuation gain	Net valuation loss	Assets	Liabilities
Other call options	1,357,349	28,822	29,704	28,828	–
Other put options	–	–	–	–	29,712
Subtotal	10,543,458	91,018	79,967	107,338	149,085
Total	521,013,917	6,518,847	6,871,860	5,288,975	5,889,434

◁December 31, 2020>

Classification	Notional amounts	Net valuation gain	Net valuation loss	Assets	Liabilities
Currency:					
Forward	202,777,433	5,735,012	6,036,594	5,867,243	6,051,902
Swap	82,640,638	3,057,577	2,538,056	2,957,837	2,392,080
Call option	455,357	2,797	–	3,337	–
Put option	383,230	–	3,517	–	6,421
Future	1,634,898	46	1,189	46	1,189
Subtotal	287,891,556	8,795,432	8,579,356	8,828,463	8,451,592
Interest:					
Swap	166,773,776	540,227	490,812	1,094,676	980,603
Call option	487,326	2,840	–	59,168	–
Put option	1,165,000	–	1,344	–	27,771
Future	5,114,440	1,332	936	1,333	936
Subtotal	173,540,542	544,399	493,092	1,155,177	1,009,310
Stock:					
Swap	4,461,906	80,899	171,167	387,013	749,728
Call option	2,953,391	72,708	23,797	141,499	–
Put option	5,512,212	61,996	27,342	–	114,742
Future	572,116	5,097	2,134	5,097	2,134
Subtotal	13,499,625	220,700	224,440	533,609	866,604
Credit:					
Swap(CDS)	14,998,965	38,611	50,834	117,178	123,795
Total revenue swap (TRS)	936,946	19,120	27,089	19,489	29,643
Subtotal	15,935,911	57,731	77,923	136,667	153,438
Others:					
Credit risk valuation adjustment	–	–	3,214	(14,188)	–
Profit or loss on the trade date (unamortized)	–	–	–	30,516	58,223
Other forwards	490,780	10,996	13,526	10,996	13,526
Other swaps	1,469,088	41,509	60,578	93,604	130,015
Other call options	397,801	13,850	10,128	14,431	–
Other put options	56,435	194	645	–	11,449
Subtotal	2,414,104	66,549	88,091	135,359	213,213
Total	493,281,738	9,684,811	9,462,902	10,789,275	10,694,157

17-2 Unsettled derivative contracts held for hedging purpose as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Notional amounts	Net valuation gain	Net valuation loss	Assets	Liabilities
Fair value hedge					
Currency forward	59,324	359	4,057	359	2,834
Currency swap	1,138,491	3,532	67,910	19,281	61,752
Interest swap	2,940,680	222	99,231	49,389	49,439
Subtotal	4,138,495	4,113	171,198	69,029	114,025
Cash flow hedge					
Currency swap	577,341	34,077	3,242	8,359	3,242
Interest swap	130,000	824	1,332	119	1,332
Subtotal	707,341	34,901	4,574	8,478	4,574
Total	4,845,836	39,014	175,772	77,507	118,599

<December 31, 2020>

Classification	Notional amounts	Net valuation gain	Net valuation loss	Assets	Liabilities
Fair value hedge					
Currency forward	50,050	3,152	–	2,796	89
Currency swap	502,941	27,719	–	28,125	395
Interest swap	2,805,680	60,929	2,088	110,542	7,830
Subtotal	3,358,671	91,800	2,088	141,463	8,314
Cash flow hedge					
Currency swap	326,400	–	4,418	–	25,718
Interest swap	80,000	–	584	–	705
Subtotal	406,400	–	5,002	–	26,423
Total	3,765,071	91,800	7,090	141,463	34,737

For derivative transactions involving both Korean won and foreign currency such as currency forwards, currency futures and currency swap, the fair value of the unsettled amount for such transaction is presented using the proper foreign exchange rate of the contract amount in foreign currency at the reporting date. For a derivative transaction involving only foreign currency, the fair value of the unsettled amount is presented using the proper foreign exchange rate of the foreign currency purchased at the reporting date.

Non derivative contracts held for hedging purpose as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021		December 31, 2020	
	Book value	Net valuation gain or loss	Book value	Net valuation gain or loss
Fair value hedge accounting:				
Foreign currency loans	237,100	(19,500)	217,600	(13,960)
Net investment in foreign operations hedge accounting:				
Foreign currency loans	779,483	(56,259)	732,885	36,615

17-2-1 Details of fair value hedge as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Risk	Hedged item	Book value		Accumulated Fair value hedge amount		Adjusted Fair value hedge amount	
		Asset	Liability	Asset	Liability	Asset	Liability
Foreign currency risk	Securities measured at FVOCI	36,956	-	17,694	-	20,674	-
Foreign currency risk	Securities measured at amortized cost	41,949	-	1,530	-	1,894	-
Interest rate risk	Depository liabilities in Korean won	-	233,822	-	(16,178)	-	(12,659)
Interest rate risk	Depository liabilities in foreign currency	-	131,765	-	1,360	-	(3,899)
Interest rate risk	Financial debentures in Korean won	-	119,503	-	(10,497)	-	(6,345)
Interest rate risk	Financial debentures in foreign currency	-	2,455,251	-	24,976	-	(76,182)
Interest rate and Foreign currency risk	Financial debentures in foreign currency	-	1,129,830	-	(8,662)	-	(17,439)
Total		78,905	4,070,171	19,224	(9,001)	22,568	(116,524)

<December 31, 2020>

Risk	Hedged item	Book value		Accumulated Adjusted Fair value hedge amount		Adjusted Fair value hedge amount	
		Asset	Liability	Asset	Liability	Asset	Liability
Foreign currency risk	Securities measured at FVOCL	84,531	–	(1,390)	–	(16,497)	–
Foreign currency risk	Securities measured at amortized cost	28,350	–	172	–	190	–
Interest rate risk	Depository liabilities in Korean won	–	376,907	–	(3,093)	–	1,637
Interest rate risk	Depository liabilities in foreign currency	–	124,939	–	5,259	–	3,552
Interest rate risk	Financial debentures in Korean won	–	125,848	–	(4,152)	–	(796)
Interest rate risk	Financial debentures in foreign currency	–	2,280,266	–	104,266	–	54,562
Interest rate and Foreign currency risk	Financial debentures in foreign currency	–	511,736	–	8,795	–	1,028
Total		112,881	3,419,696	(1,218)	111,075	(16,307)	59,983

17-2-2 The details of the fair value hedge target items and the fair value hedge method of the consolidated entity as of the end of the year December 31, 2021 and 2020 are as follows (Korean won in millions) :

<December 31, 2021>

Hedged item	Hedging instrument	Gain (loss) on valuation of hedged item	Gain (loss) on valuation of hedging instrument	Ineffective portion of hedge recognized in profit or loss
Securities measured at FVOCL	Financial debentures in foreign currency	19,500	(19,500)	–
Securities measured at FVOCL	Currency forwards	1,174	(2,112)	(938)
Securities measured at amortized cost	Currency forwards	1,894	(1,586)	308
Depository liabilities in Korean won	Interest swap	12,659	(12,659)	–
Depository liabilities in foreign currency	Interest swap	3,899	(3,899)	–
Financial debentures in Korean won	Interest swap	6,345	(6,345)	–
Financial debentures in foreign currency	Interest swap	76,182	(76,328)	(146)
Financial debentures in foreign currency	Currency swap	17,439	(64,377)	(11)
Total		139,092	(186,806)	(787)

<December 31, 2020>

Hedged item	Hedging instrument	Gain (loss) on valuation of hedged item	Gain (loss) on valuation of hedging instrument	Ineffective portion of hedge recognized in profit or loss
Securities measured at FVOCL	Financial debentures in foreign currency	(13,960)	13,960	—
Securities measured at FVOCL	Currency forwards	(2,537)	3,020	483
Securities measured at amortized cost	Currency forwards	190	132	322
Depository liabilities in Korean won	Interest swap	(1,637)	1,637	—
Depository liabilities in foreign currency	Interest swap	(3,552)	3,552	—
Financial debentures in Korean won	Interest swap	796	(796)	—
Financial debentures in foreign currency	Interest swap	(54,562)	54,448	(114)
Financial debentures in foreign currency	Currency swap	(1,028)	27,719	13
Total		(76,290)	103,672	704

17-2-3 Details of items subject to cash flow hedge as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Risk	Hedged item	Book value		Accumulated cash flow hedge adjustments		Cash flow hedging effect	
		Asset	Liability	Asset	Liability	Asset	Liability
Interest rate risk	Variable interest rate debentures denominated in Korean won	—	129,946	—	559	526	—
Interest rate and foreign exchange risk	Variable interest rate debentures denominated in foreign currency	—	355,382	8,487	—	—	33,874
Foreign exchange risk	Fixed interest rate debentures denominated in foreign currency	—	221,322	—	750	3,242	—
Total		—	706,650	8,487	1,309	3,768	33,874

<December 31, 2020>

Risk	Hedged item	Book value		Accumulated cash flow hedge adjustments		Cash flow hedging effect	
		Asset	Liability	Asset	Liability	Asset	Liability
Interest rate risk	Variable interest rate debentures denominated in Korean won	–	79,983	–	(704)	–	(584)
Interest rate and foreign exchange risk	Variable interest rate debentures denominated in foreign currency	–	325,883	–	(25,718)	–	(4,441)
Total		–	405,866	–	(26,422)	–	(5,025)

17-2-4 Cash flow hedged items and gain or loss on valuation of items subject to cash flow hedge for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Hedged item	Hedging instrument	Gain (loss) on valuation of hedged item	Gain (loss) on valuation of hedging instrument (*)	Ineffective portion of hedge recognized in profit or loss
Variable interest rate debentures denominated in Korean won, Borrowings	Interest swap	526	(508)	18
Interest rate and foreign exchange risk	Currency swap	(33,874)	34,077	203
Currency risk	Currency swap	3,242	(3,242)	–
Total		(30,106)	30,327	221

(*) Gain (loss) on valuation of hedging instrument effective for hedging are included in other comprehensive income.

<December 31, 2020>

Hedged item	Hedging instrument	Gain (loss) on valuation of hedged item	Gain (loss) on valuation of hedging instrument (*)	Ineffective portion of hedge recognized in profit or loss
Variable interest rate debentures denominated in Korean won, Borrowings	Interest swap	584	(584)	–
Variable interest rate debentures denominated in foreign currency	Currency swap	4,441	(4,441)	–
Total		5,025	(5,025)	–

(*) Gain (loss) on valuation of hedging instrument effective for hedging are included in other comprehensive income.

17-2-5 Net investment hedged items and gain or loss on valuation of items subject to net investment hedge for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Hedged item	Hedging instrument	Gain (loss) on valuation of hedged item	Gain (loss) on valuation of hedging instrument	Ineffective portion of hedge recognized in profit or loss
Net investment in foreign operation (Foreign currency risk)	Debentures denominated in foreign currencies	56,259	(56,259)	–

<December 31, 2020>

Hedged item	Hedging instrument	Gain (loss) on valuation of hedged item	Gain (loss) on valuation of hedging instrument	Ineffective portion of hedge recognized in profit or loss
Net investment in foreign operation (Foreign currency risk)	Debentures denominated in foreign currencies	(36,615)	36,615	–

17-3 Details of the average hedging ratio of future cash flow as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	1 year	2 years	2 years	4 years	5 years	After 5 years	Total
Fair value hedge:							
Nominal value of hedged items	409,380	467,116	1,304,256	–	1,382,470	806,780	4,370,002
Nominal value of hedging instrument	414,974	467,116	1,304,256	–	1,382,470	806,780	4,375,596
Rate of average hedging	98.65%	99.75%	99.66%	–	99.90%	100.00%	99.77%
Cash flow hedge:							
Nominal value of cash flow hedge	228,188	207,463	–	–	221,691	50,000	707,342
Nominal value of hedging instrument	228,188	207,463	–	–	221,691	50,000	707,342
Rate of average hedging	100.00%	100.00%	–	–	100.00%	100.00%	100.00%
Net investment hedges of foreign operations:							
Nominal value of hedged items	–	–	–	–	–	779,488	779,488
Nominal value of hedging instrument	–	–	–	–	–	779,488	779,488
Rate of average hedging	–	–	–	–	–	100.00%	100.00%

<December 31, 2020>

Classification	1 year	2 years	2 years	4 years	5 years	After 5 years	Total
Fair value hedge:							
Nominal value of hedged items	987,834	326,400	432,501	979,200	—	847,280	3,573,215
Nominal value of hedging instrument	990,891	326,400	432,501	979,200	—	847,280	3,576,272
Rate of average hedging	99.88%	100.00%	99.81%	99.65%	—	100.00%	99.90%
Cash flow hedge:							
Nominal value of cash flow hedge	—	216,000	190,400	—	—	—	406,400
Nominal value of hedging instrument	—	216,000	190,400	—	—	—	406,400
Rate of average hedging	—	100.00%	100.00%	—	—	—	100.00%
Net investment hedges of foreign operations:							
Nominal value of hedged items	—	—	—	—	—	732,885	732,885
Nominal value of hedging instrument	—	—	—	—	—	732,885	732,885
Rate of average hedging	—	—	—	—	—	100.00%	100.00%

17-4 Hedging relationships affected by IBOR Reform

17-4-1 The exposure to hedging relationships due to the Group's IBOR Reform as of December 31, 2021 is as follows (Korean won in millions):

The USD LIBOR interest rate will be replaced by a Secure Overnight Financing Rate (SOFR) based on actual transactions. And the KRW CD rate can be replaced by the RFR (Risk Free Rate) rate in case of an emergency in the long run. In this hedging relationship, the Group assumed that the spread based on a SOFR would be similar to that included in the interest rate swap used as a hedging instrument and no other changes were assumed.

Interest index	Currency	Book value of non-derivative financial liabilities (*)	Nominal value of hedging instruments (*)
KRW 91 CD	KRW	433,317	460,000
USD 1M LIBOR	USD	355,382	355,650

Interest index	Currency	Book value of non-derivative financial liabilities (*)	Nominal value of hedging instruments (*)
USD 3M LIBOR	USD	3,716,846	3,699,172

(*) It contains the amount prior to the time when the LIBOR rate calculation

17-4-2 The nominal amount and weighted average maturity of derivatives that will be affected by the IBOR reform for transition to a SOFR basis as of December 31, 2021 (Korean won in millions, Year):

Interest index	Currency	Nominal value of derivatives	Weighted average of remaining life
KRW 91 CD	KRW	460,000	14.80
USD 1M LIBOR	USD	355,650	1.07
USD 3M LIBOR	USD	3,699,172	4.03

(*) It contains the amount prior to the time when the LIBOR rate calculation

18. Investments in associates and joint ventures

18-1 Details of investments in associates and joint ventures

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

<December 31, 2021>

Classification	Type	Country	Ownership (%)	Book value
Bank of Jilin (*1)	Associates	China	11.9	853,877
Korea Credit Bureau (*1)	Associates	Korea	9.0	8,997
CM International Financing Leases	Associates	China	25.0	2,149
Beijing Langa Asset Management Co., Ltd.	Associates	China	21.9	96,672
Company KStartup Winwin Fund	Associates	Korea	23.8	5,215
KEB Hana-KMC Unicorn Fund of Funds (*4)	Associates	Korea	90.9	72,528
Bank for Investment and Development of Vietnam (*1)	Associates	Vietnam	15.0	1,441,797
PT. SINARMAS HANA FINANCE (*3)	Joint ventures	Indonesia	85.0	22,338
Hana UBS Asset Management	Associates	Korea	49.0	35,674
Hana Power Infra 1st Private Equity Fund (*1)	Associates	Korea	7.0	21,204
Previously, KOCREF REIT 30 (*1)	Associates	Korea	19.1	36,107
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associates	Korea	20.0	5,187
2018 HANA-MAGNA start-up fund	Associates	Korea	21.9	6,556
Dream Island (*1)(*2)	Associates	Korea	10.2	6,817
Hana Digital Transformation Fund (*4)	Associates	Korea	57.9	51,169
Mirae Credit Information Services Corp	Associates	Korea	31.0	11,481
Finnq Co., Ltd. (*3)	Joint ventures	Korea	51.0	7,664
Lakebridge The Growth Capital PEF1	Associates	Korea	23.5	5,749
All Together Korea Fund5 (*4)	Associates	Korea	100.0	10,070
HORIZON PRIVATE EQUITY FUND (*4)	Associates	Korea	71.0	233,270
TossBank Corp. (Previously, TOSS INNOVATION CO., LTD.) (*1)(*5)	Associates	Korea	10.0	49,125
Curious Solution Financial Stability Private Investment Joint Company No.1	Associates	Korea	32.7	15,972
YH Leisure Development Co., Ltd. (*1)(*2)	Associates	Korea	12.8	11,081
Civic Center PFV (*1)(*2)	Associates	Korea	13.7	8,441
Hana-History No1 Investment Fund	Associates	Korea	36.5	5,452
Templeton Hana Asset Management Co., Ltd. (Previously, Darby Hana Infrastructure Fund Management)	Associates	Korea	29.8	3,828
Dream Island Leisure Co., Ltd. (*1)	Associates	Korea	19.9	5,392

Classification	Type	Country	Ownership (%)	Book value
F&U Credit Information Co., Ltd.	Associates	Korea	40.0	5,722
Others	Associates			242,508
Total				3,282,042

- (*1) The Group exercises significant influence on the investee's Board of Directors and therefore, is included as part of affiliated companies under the equity method.
- (*2) The financial statements for the current period were not available therefore the financial statements from the recent period were used and the effect from all material transactions or events from the current period were evaluated and appropriately reflected.
- (*3) Equity method is applied since the Group cannot individually control the investees, and other shareholders' consent is required to make important decisions for the company.
- (*4) Because the Group cannot exercise control over the company in the decision-making body, it was classified as an investment in the associates.
- (*5) The Group has an obligation to supply Tossbank Corp. if it needs a liquidity supply. In the fourth quarter of 2021, the Group participated in the capital increase through shareholder allocation and the stake was changed from 7.5% to 10%.

<December 31, 2020>

Classification	Type	Country	Ownership (%)	Book value
Bank of Jilin (*1)	Associates	China	12.7	758,816
Korea Credit Bureau (*1)	Associates	Korea	9.0	7,819
CM International Financing Leases	Associates	China	25.0	2,777
Beijing Langa Asset Management Co., Ltd.	Associates	China	21.9	82,176
Company KStartup Winwin Fund	Associates	Korea	23.8	5,487
KEB Hana-KMC Unicorn Fund of Funds (*4)	Associates	Korea	90.9	55,812
Orcrowd International Invest Co., Ltd. (*2)	Associates	Virgin Island	22.2	13,970
Bank for Investment and Development of Vietnam (*1)	Associates	Vietnam	15.0	1,194,183
PT. SINARMAS HANA FINANCE (*3)	Joint ventures	Indonesia	85.0	20,213
Hana UBS Asset Management	Associates	Korea	49.0	35,107
Hana Power Infra 1st Private Equity Fund (*1)	Associates	Korea	7.0	22,469
KOCREF REIT 30 (*1)	Associates	Korea	19.1	36,609
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associates	Korea	20.0	5,229
Petra 6's Alpa Private Equity Fund (*4)	Associates	Korea	55.7	14,503
Myoungshin Co., Ltd. (*1)(*2)	Associates	Korea	9.1	22,059
2018 HANA-MAGNA start-up fund	Associates	Korea	21.9	6,616
Dream Island (*1)(*2)	Associates	Korea	10.2	6,910
Fresheasy Co., Ltd. (*1)(*2)	Associates	Korea	16.9	20,811
Hana Digital Transformation Fund (*4)	Associates	Korea	57.9	52,880
Mirae Credit Information Services Corp	Associates	Korea	31.0	10,072
Finnq Co., Ltd. (*3)	Joint ventures	Korea	51.0	13,716
Lakebridge The Growth Capital PEF1	Associates	Korea	23.5	5,949
All Together Korea Fund5 (*4)	Associates	Korea	100.0	10,023
HORIZON PRIVATE EQUITY FUND (*4)	Associates	Korea	80.2	215,652
Others	Associates			111,520
Total				2,731,378

(* 1) The Group exercises significant influence on the investee's Board of Directors and therefore, is included as part of affiliated companies under the equity method.

(* 2) The financial statements for the current period were not available therefore the financial statements from the recent period were used and the effect from all material transactions or events from the current period were evaluated and appropriately reflected.

(* 3) Equity method is applied since the Group cannot individually control the investees, and other shareholders' consent is required to make important

decisions for the company.

(*4) Because the Group cannot exercise control over the company in the decision-making body, it was classified as an investment in the associates.

Balances of investment accounts became zero so equity method was no longer applied. In this regard, unrecognized amount of changes in equity for the year ended December 31, 2021 and unrecognized accumulated amount of changes in equity for the prior year ended December 31, 2020 are as follows (Korean won in millions):

Classification	Ownership (%)	Unrecognized changes in equity as of December 31, 2021	Unrecognized accumulated changes in equity as of December 31, 2020
Somsevit Co., Ltd.	1.9	(112)	(1,346)
Midan City Development Co.,	2.2	–	(523)
Gunsan Bio Energy Co., Ltd.	18.9	(426)	(3,438)
GMHB Co., Ltd.	19.9	(18,999)	(3,287)
Creative Innovation	7.3	(970)	–
Forest of Suseong	10.0	(3,718)	–
People Korea Two Co., Ltd.	13.0	(2,721)	–
Imgok Rental Housing CO., Ltd.	19.9	(514)	–
Odn 2 LLC	26.7	58,069	(58,062)

18-2 Financial information of investments in associates and joint ventures

The financial information of investments in associates and joint ventures as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Assets	Liabilities	Equity	Revenue	Net income (loss)	Other comprehensive income (loss)	Comprehensive income (loss)
Bank of Jilin	88,184,828	81,116,728	7,068,100	3,702,700	371,737	54,571	426,308
Korea Credit Bureau	113,859	21,284	92,575	127,751	20,486	—	20,486
OM International Financing Leases	2,007,878	1,951,718	56,160	73,361	(56,735)	4,997	(51,738)
Beijing Langa Asset Management Co., Ltd.	474,244	26,676	447,568	28,444	32,066	300	32,366
Company KStartup Winwin Fund	22,160	257	21,903	747	484	(368)	116
KEB Hana-KMC Unicorn Fund of Funds	79,960	179	79,781	59	(340)	—	(340)
Bank for Investment and Development of Vietnam	92,956,813	87,629,602	5,327,211	6,348,533	800,354	9,760	810,114
PT. SINARMAS Hana Finance	98,012	71,762	26,250	13,618	1,804	—	1,804
Hana UBS Asset Management	125,496	52,693	72,803	28,873	8,618	(273)	8,345
Hana Power Infra 1st Private Equity Fund	303,524	606	302,918	9,043	(11,523)	—	(11,523)
KOCREF REIT 30	521,373	407,750	113,623	2,181	296	—	296
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	19,800	717	19,083	4,192	522	(1,389)	(867)
2018 HANA-MAGNA start-up fund	31,147	1,245	29,902	3,796	2,994	—	2,994
Dream Island	274,059	208,573	65,486	—	(972)	—	(972)
Hana Digital Transformation Fund	89,365	915	88,450	15,691	12,531	—	12,531
Mirae Credit Information Services Corp	48,985	14,948	34,037	57,391	2,355	—	2,355
Finnq Co., Ltd.	26,718	8,827	17,891	4,258	(8,999)	—	(8,999)
Lakebridge The Growth Capital PEF1	24,480	2	24,478	570	277	—	277
All Together Korea Fund5	10,073	1	10,072	53	47	—	47
HORIZON PRIVATE EQUITY FUND	292,739	2,743	289,996	—	(3,002)	—	(3,002)
TossBank Corp. (Previously, TOSS INNOVATION CO., LTD.)	14,348,062	13,906,113	441,949	37,066	(81,653)	3,753	(77,900)
Curious Solution Financial Stability Private Investment Joint Company No.1	49,159	344	48,815	4,392	3,697	—	3,697
YH Leisure Development Co., Ltd.	206,221	119,788	86,433	21,022	13,111	—	13,111
Civic Center PFV	51,389	177	51,212	—	(3,820)	—	(3,820)
Hana History No1 Investment Fund	14,920	—	14,920	1	(130)	—	(130)
Templeton Hana Asset Management Co., Ltd. (Previously, Darby Hana Infrastructure Fund Management)	16,414	3,569	12,845	6,954	2,164	—	2,164
Dream Island Leisure Co., Ltd.	27,097	2	27,095	—	485	—	485
F&J Credit Information Co., Ltd.	29,394	15,088	14,306	67,668	1,953	(331)	1,622

<December 31, 2020>

Classification	Assets	Liabilities	Equity	Revenue	Net income (loss)	Other comprehensive income (loss)	Comprehensive income (loss)
Bank of Jilin	70,071,749	64,195,991	5,875,758	7,432,297	211,144	132	211,276
Korea Credit Bureau	117,077	37,599	79,478	107,810	13,391	–	13,391
CM International Financing Leases	2,776,436	2,218,213	558,223	68,082	(26,177)	(628)	(26,805)
Beijing Langa Asset Management Co., Ltd.	413,249	33,896	379,353	47,452	25,703	–	25,703
Company KStartup Winwin Fund	23,506	459	23,047	2	(991)	1,270	279
KEB Hana-KMC Unicorn Fund of Funds	61,618	224	61,394	5	(439)	–	(439)
Ourcrowd International Invest Co., Ltd.	58,528	638	57,890	830	339	(2,686)	(2,347)
Bank for Investment and Development of Vietnam	71,582,341	67,812,198	3,770,143	6,368,462	365,761	(8,692)	357,069
PT. SINARMAS Hana Finance	78,266	54,771	23,495	13,032	(1,534)	(2,280)	(3,814)
Hana UBS Asset Management	124,528	52,882	71,646	27,655	8,130	21	8,151
Hana Power Infra 1st Private Equity Fund	321,598	619	320,979	10,785	8,305	–	8,305
KOREF REIT 30	523,621	407,376	116,245	12,708	(3,819)	–	(3,819)
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	19,930	640	19,290	2,514	(308)	57	(251)
Petra 6th Alpa Private Equity Fund	26,410	367	26,043	902	57	–	57
Myoungshin Co., Ltd.	432,393	293,183	139,210	553,665	24,572	2,956	27,528
2018 HANA-MAGNA start-up fund	30,246	–	30,246	178	(664)	–	(664)
Dream Island	127,537	61,138	66,399	–	(432)	–	(432)
Fresheasy Co., Ltd.	152,266	97,427	54,839	97,836	(31,118)	–	(31,118)
Hana Digital Transformation Fund	91,460	50	91,410	1,112	(2,596)	–	(2,596)
Mirae Credit Information Services Corp	44,606	12,115	32,491	73,893	2,153	–	2,153
Finnq Co., Ltd.	35,311	8,416	26,895	3,937	(19,302)	–	(19,302)
Lakebridge The Growth Capital PEF1	25,235	–	25,235	429	38	–	38
All Together Korea Fund5	10,025	1	10,024	187	150	–	150
HORIZON PRIVATE EQUITY FUND	269,280	279	269,001	–	(3,276)	–	(3,276)

18-3 Changes in investments in associates and joint ventures

Details of changes in investments in associates and joint ventures for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Owner-ship (%)	Initial book value	Purchase	Replacem-ent	Dividend	Book value before valuation	Valuation of equity method		Disposal	Impair-ent loss	Book Value
							Gain or loss	Changes in equity			
Bank of Jilin	11.9	758,816	—	—	—	758,816	4,656	94,111	(3,706)	—	853,877
Korea Credit Bureau	9.0	7,819	—	—	(90)	7,729	1,268	—	—	—	8,997
CM International Financing Leases	25.0	2,777	—	—	—	2,777	—	—	—	(628)	2,149
Beijing Langa Asset Management Co., Ltd.	21.9	82,176	—	—	(2,281)	79,895	7,747	9,030	—	—	96,672
Company KStartup Winwin Fund	23.8	5,487	—	—	—	5,487	116	(88)	(300)	—	5,215
KEB Hana-KMC Unicorn Fund of Funds	90.9	55,812	18,000	—	—	73,812	(1,284)	—	—	—	72,528
OurCrowd International Invest	—	13,970	—	—	—	13,970	—	—	(13,970)	—	—
Bank for Investment and Development of Vietnam	15.0	1,194,183	—	—	(6,262)	1,187,921	120,053	133,823	—	—	1,441,797
PT. SINARMAS Hana Finance	85.0	20,213	—	—	—	20,213	1,062	1,063	—	—	22,338
Hana UBS Asset Management	49.0	35,107	—	—	(3,523)	31,584	4,224	(134)	—	—	35,674
Hana Power Infra 1st Private Equity Fund	7.0	22,469	—	(458)	—	22,011	(807)	—	—	—	21,204
KOCREF REIT 30	19.1	36,609	—	—	(1,036)	35,573	262	272	—	—	36,107
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	20.0	5,229	—	—	—	5,229	236	(278)	—	—	5,187
Petra 6th Alpa Private Equity Fund	—	14,503	—	—	—	14,503	—	—	(14,503)	—	—
Myoungshin Co., Ltd.	—	22,059	—	(17,141)	—	4,918	—	(4,918)	—	—	—
2018 HANA-MAGNA start-up fund	21.9	6,616	—	—	—	6,616	625	—	(685)	—	6,556
Dream Island	10.2	6,910	—	—	—	6,910	(93)	—	—	—	6,817
Fresheasy Co., Ltd.	—	20,811	—	—	—	20,811	(9,612)	(1,956)	(9,243)	—	—
Hana Digital Transformation Fund	57.9	52,880	—	—	—	52,880	7,250	—	(8,961)	—	51,169
Mirae Credit Information Services Corp	31.0	10,072	—	—	(186)	9,886	1,595	—	—	—	11,481
Finnq Co., Ltd.	51.0	13,716	—	—	—	13,716	(6,263)	211	—	—	7,664
Lakebridge The Growth Capital PEF1	23.5	5,949	—	—	(33)	5,916	43	—	(210)	—	5,749
All Together Korea Fund5	100.0	10,023	—	—	—	10,023	47	—	—	—	10,070
HORIZON PRIVATE EQUITY FUND	71.0	215,652	25,655	—	—	241,307	(1,876)	19,427	(25,588)	—	233,270
TossBank Corp. (Previously, TOSS INNOVATION CO., LTD.)	10.0	7,500	47,500	—	—	55,000	(6,124)	249	—	—	49,125
Curious Solution Financial Stability Private Investment Joint Company No.1	32.7	15,995	—	—	(1,232)	14,763	1,209	—	—	—	15,972
YH Leisure Development Co., Ltd.	12.8	9,956	—	—	—	9,956	1,125	—	—	—	11,081
Civic Center PFV	13.7	7,973	—	—	—	7,973	468	—	—	—	8,441
Hana History No1 Investment Fund	36.5	—	5,500	—	—	5,500	(48)	—	—	—	5,452
Templeton Hana Asset Management Co., Ltd. (Previously, Darby Hana Infrastructure Fund Management)	29.8	5,937	—	—	(2,980)	2,957	871	—	—	—	3,828

Classification	Owner-ship (%)	Initial book value	Purchase	Replace-ent	Dividend	Book value before valuation	Valuation of equity method		Disposal	Impair-ent loss	Book Value
							Gain or loss	Changes in equity			
Dream Island Leisure Co., Ltd.	19.9	2	5,969	–	–	5,971	(489)	(90)	–	–	5,392
F&U Credit Information Co., Ltd.	40.0	5,067	–	–	–	5,067	787	(132)	–	–	5,722
Others		59,090	300,043	5,899	(5,578)	359,454	3,932	6,148	(141,196)	14,170	242,508
Total		2,731,378	402,667	(11,700)	(23,201)	3,099,144	130,980	256,738	(218,362)	13,542	3,282,042

<2020>

Classification	Owner-ship (%)	Initial book value	Purchase	Replace-ent	Dividend	Book value before valuation	Valuation of equity method		Disposal	Impair-ent loss	Book Value
							Gain or loss	Changes in equity			
Bank of Jilin	12.7	731,457	–	–	–	731,457	28,358	4,028	(5,027)	–	758,816
Korea Credit Bureau	9.0	6,657	–	–	(90)	6,567	1,252	–	–	–	7,819
CM International Financing Leases	25.0	6,429	–	–	–	6,429	–	–	–	(3,652)	2,777
Beijing Langa Asset Management Co., Ltd.	21.9	77,084	–	–	(1,719)	75,365	6,553	373	(115)	–	82,176
Company KStartup Winwin Fund	23.8	5,621	–	–	–	5,621	(237)	303	(200)	–	5,487
KEB Hana-KMC Unicorn Fund of Funds	90.9	5,669	50,670	–	–	56,339	(527)	–	–	–	55,812
OurCrowd International Invest	22.2	14,971	–	–	(308)	14,663	75	(426)	(342)	–	13,970
Bank for Investment and Development of Vietnam	15.0	1,272,969	–	–	(22,829)	1,250,140	20,441	(76,398)	–	–	1,194,183
PT. SINARMAS Hana Finance	85.0	8,975	14,216	–	–	23,191	(1,372)	(1,606)	–	–	20,213
Hana UBS Asset Management	49.0	35,477	–	–	(4,239)	31,238	3,859	10	–	–	35,107
Hana Power Infra 1st Private Equity Fund	7.0	22,337	–	–	–	22,337	591	(459)	–	–	22,469
KOCREF REIT 30	19.1	19,285	20,000	–	(1,506)	37,779	794	16,869	(18,833)	–	36,609
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	20.0	5,358	–	–	–	5,358	(141)	12	–	–	5,229
Petra 6th Alpa Private Equity Fund	55.7	46,406	–	–	–	46,406	189	–	(32,092)	–	14,503
Myoungshin Co., Ltd.	9.1	25,851	1,481	11,753	(400)	38,685	3,942	4,624	(25,192)	–	22,059
2018 HANA-MAGNA start-up fund	21.9	6,761	–	–	–	6,761	(145)	–	–	–	6,616
Dream Island	10.2	6,822	–	–	–	6,822	88	–	–	–	6,910
Fresheasy Co., Ltd.	16.9	10,928	15,421	–	–	26,349	(7,494)	1,956	–	–	20,811
Hana Digital Transformation Fund	57.9	34,135	20,248	–	–	54,383	(1,503)	–	–	–	52,880
Mirae Credit Information Services Corp	31.0	9,591	–	–	(186)	9,405	667	–	–	–	10,072
Finnq Co., Ltd.	51.0	23,683	–	–	–	23,683	(9,844)	(123)	–	–	13,716
Lakebridge The Growth Capital PEF1	23.5	–	–	5,940	–	5,940	9	–	–	–	5,949
All Together Korea Fund5	100.0	–	100,000	–	–	100,000	23	–	(90,000)	–	10,023
HORIZON PRIVATE EQUITY FUND	80.2	–	222,598	–	–	222,598	(2,432)	(4,514)	–	–	215,652
Others		63,661	101,265	5,712	(1,591)	169,047	2,522	284	(60,388)	55	111,520
Total		2,440,127	545,899	23,405	(32,868)	2,976,563	45,668	(55,067)	(232,189)	(3,597)	2,731,378

18-4 The details of net assets of related companies as of December 31, 2021 and 2020 are as follows (Korean won in million) :

<December 31, 2021>

Classification	Net assets	Ownership (%)	Interest in net assets	Goodwill and others	Book value
Bank of Jilin	7,068,100	11.9	842,518	11,359	853,877
Korea Credit Bureau	92,575	9.0	8,332	665	8,997
CM International Financing Leases	56,160	25.0	14,040	(11,891)	2,149
Beijing Langa Asset Management Co., Ltd.	447,568	21.9	98,152	(1,480)	96,672
Company KStartup Winwin Fund	21,903	23.8	5,215	—	5,215
KEB Hana-KMC Unicorn Fund of Funds	79,781	90.9	72,528	—	72,528
Bank for Investment and Development of Vietnam	5,327,211	15.0	799,082	642,715	1,441,797
PT. SINARMAS Hana Finance	26,250	85.0	22,313	25	22,338
Hana UBS Asset Management	72,803	49.0	35,674	—	35,674
Hana Power Infra 1st Private Equity Fund	302,918	7.0	21,204	—	21,204
Previously, KOCREF REIT 30	113,623	19.1	21,746	14,361	36,107
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	19,083	20.0	3,813	1,374	5,187
2018 HANA-MAGNA start-up fund	29,902	21.9	6,541	15	6,556
Dream Island	65,486	10.2	6,662	155	6,817
Hana Digital Transformation Fund	88,450	57.9	51,169	—	51,169
Mirae Credit Information Services Corp	34,037	31.0	10,551	930	11,481
Finnq Co., Ltd.	17,891	51.0	9,124	(1,460)	7,664
Lakebridge The Growth Capital PEF1	24,478	23.5	5,749	—	5,749
All Together Korea Fund5	10,070	100.0	10,070	—	10,070
HORIZON PRIVATE EQUITY FUND	289,996	71.0	205,804	27,466	233,270
TossBank Corp. (Previously, TOSS INNOVATION CO., LTD.)	441,949	10.0	44,195	4,930	49,125
Curious Solution Financial Stability Private Investment Joint Company No.1	48,815	32.7	15,972	—	15,972
YH Leisure Development Co., Ltd.	86,433	12.8	11,081	—	11,081
Civic Center PFV	51,211	13.7	7,008	1,433	8,441
Hana-History No1 Investment Fund	14,920	36.5	5,452	—	5,452
Templeton Hana Asset Management Co., Ltd . (Previously, Darby Hana Infrastructure Fund Management)	12,845	29.8	3,828	—	3,828
Dream Island Leisure Co., Ltd.	27,095	19.9	5,392	—	5,392
F&U Credit Information Co., Ltd.	14,306	40.0	5,722	—	5,722
Others	—	—	—	—	242,508
Total					3,282,042

<December 31, 2020>

Classification	Net assets	Ownership (%)	Interest in net assets	Goodwill and others	Book value
Bank of Jilin	5,875,758	12.7	747,984	10,832	758,816
Korea Credit Bureau	79,478	9.0	7,153	666	7,819
CM International Financing Leases	558,223	25	139,556	(136,779)	2,777
Beijing Langa Asset Management Co., Ltd.	379,352	21.9	83,192	(1,016)	82,176
Company KStartup Winwin Fund	23,047	23.8	5,487	—	5,487
KEB Hana-KMC Unicorn Fund of Funds	61,394	90.9	55,812	—	55,812
Our Crowd International Invest III	57,890	22.2	12,846	1,124	13,970
Bank for Investment and Development of Vietnam	3,770,142	15	565,521	628,662	1,194,183
PT. SINARMAS Hana Finance	23,495	85	19,971	242	20,213
Hana UBS Asset Management	71,646	49	35,107	—	35,107
Hana Power Infra 1st Private Equity Fund	320,979	7	22,469	—	22,469
KOCREF REIT 30	116,245	19.1	22,248	14,361	36,609
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	19,291	20	3,854	1,375	5,229
Petra 6th Alpa Private Equity Fund	26,044	55.7	14,503	—	14,503
Myoung Shin Industrial Co.,Ltd.	139,210	9.1	12,629	9,430	22,059
2018 HANA-MAGNA start-up fund	30,246	21.9	6,616	—	6,616
Dream Island	66,400	10.2	6,755	155	6,910
Fresheasy Co., Ltd.	54,839	16.9	9,251	11,560	20,811
Hana Digital Transformation Fund	91,410	57.9	52,880	—	52,880
Mirae Credit Information Services Corp	32,492	31	10,072	—	10,072
Finnq Co., Ltd.	26,895	51	13,716	—	13,716
Lakebridge The Growth Capital PEF1	25,235	23.5	5,926	23	5,949
All Together Korea Fund5	10,024	100	10,023	—	10,023
HORIZON PRIVATE EQUITY FUND	269,001	80.2	215,652	—	215,652
Others	—	—	—	111,520	111,520
Total					2,731,378

18-5 The details of marketable investment shares in related companies as of the end of the year December 31, 2021 and 2020 are as follows

(Korean won in million, price per share in won) :

<December 31, 2021>

Classification	Market price	Price per share
Bank for Investment and Development of Vietnam(*)	1,466,651	1,983
Hana Must Seven Special Purpose Acquisition Company	9	2,160
Hana Financial Fourteen Special PurposeAcquisition Company	21	2,115
Hana Financial Fifteenth Special Purpose Acquisition Company	21	2,130
Hana Financial Sixteenth Special PurposeAcquisition Company	22	2,160
Hana Financial Seventeen Special Purpose AcquisitionCompany	28	2,810
Hana Financial Nineteen Special Purpose Acquisition Company	11	2,240
Hana Financial Twentieth Special PurposeAcquisition Company	3	2,885

(*) Bank for Investment and Development of Vietnam(BIDV) has decided to distribute stock dividends in December 2021. As a result, the number of shares held by the Group increased from 603 million to 759 million.

<December 31, 2020>

Classification	Market price	Price per share
Bank for Investment and Development of Vietnam	1,361,105	2,256

18-6 Companies that hold more than 20% of shares but excluded from investments in associates as of December 31, 2021 is as follow:

Company (*)	Country	Industry	Ownership (%)
YEISAN STEEL CO. LTD. (*1),	Korea	Steel manufacturing	21.06
PAJU PFV Co.,Ltd (*2)	Korea	Real estate development and supply	23.10

(*1) Although the YEISAN STEEL CO. LTD., holds equity interest of more than 20%, it is excluded from associates because its significant influence on related activities is limited due to the ongoing corporate rehabilitation process.

(*2) Although the PAJU PFV Co.,Ltd, holds equity interest of more than 20%, it is excluded from associates because it does not have voting rights and has limited significant influence on related activities.

Investment trusts that have limited significant influence on related activities under trust contracts are excluded from investments in associates and joint ventures.

19. Property and equipment

19-1 Details of property and equipment as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Property and equipment				
Land	985,424	—	(3,831)	981,593
Buildings	996,078	(240,761)	(8,660)	746,657
Leasehold improvements	374,240	(298,322)	—	75,918
Vehicles, furniture and fixtures	1,127,887	(897,495)	—	230,392
Construction in progress	34,825	—	—	34,825
Operating lease assets	1,443,369	(374,641)	—	1,068,728
Subtotal	4,961,823	(1,811,219)	(12,491)	3,138,113
Right-of-use Assets				
Real estate for business	878,018	(492,393)	—	385,625
Vehicles	29,310	(14,202)	—	15,108
Others	1,177	(354)	—	823
Subtotal	908,505	(506,949)	—	401,556
Total	5,870,328	(2,318,168)	(12,491)	3,539,669

<December 31, 2020>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Property and equipment				
Land	1,045,200	—	(6,451)	1,038,749
Buildings	1,027,736	(216,314)	(5,365)	806,057
Leasehold improvements	369,780	(295,450)	—	74,330
Vehicles, furniture and fixtures	1,097,101	(866,874)	—	230,227
Construction in progress	25,421	—	—	25,421
Operating lease assets	1,066,559	(358,926)	—	707,633
Subtotal	4,631,797	(1,737,564)	(11,816)	2,882,417
Right-of-use Assets				
Real estate for business	786,640	(379,992)	—	406,648
Vehicles	27,892	(12,638)	—	15,254
Others	1,518	(1,101)	—	417
Subtotal	816,050	(393,731)	—	422,319
Total	5,447,847	(2,131,295)	(11,816)	3,304,736

19-2 Changes in property and equipment for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	January 1	Acquisition	Disposal	Depreciation	Impairment loss	Transfer in (out)	Others	December 31
Property and equipment								
Land	1,038,749	1,515	(39,031)	—	(1,867)	(12,519)	(5,254)	981,593
Buildings	806,057	16,392	(17,491)	(32,276)	(5,170)	(16,012)	(4,843)	746,657
Leasehold improvements	74,330	31,750	(1,399)	(30,255)	—	488	1,004	75,918
Vehicles, furniture and fixtures	230,227	100,656	(20,826)	(92,860)	—	14,520	(1,325)	230,392
Construction in progress	25,421	228,340	(1,000)	—	—	(217,911)	(25)	34,825
Operating lease assets	707,633	789,791	(246,661)	(182,035)	—	—	—	1,068,728
Subtotal	2,882,417	1,168,444	(326,408)	(337,426)	(7,037)	(231,434)	(10,443)	3,138,113
Right-of-use Assets								
Real estate for business	406,648	228,254	(53,142)	(207,385)	—	—	11,250	385,625
Vehicles	15,254	9,638	(3,108)	(7,761)	—	—	1,085	15,108
Others	417	—	(10)	(711)	—	—	1,127	823
Subtotal	422,319	237,892	(56,260)	(215,857)	—	—	13,462	401,556
Total	3,304,736	1,406,336	(382,668)	(553,283)	(7,037)	(231,434)	3,019	3,539,669

<2020>

Classification	January 1	Due to business combination	Acquisition	Disposal	Depreciation	Impairment loss	Transfer in (out)	Others	December 31
Property and equipment									
Land	1,111,731	32,319	1,149	(69,378)	—	—	(38,659)	1,587	1,038,749
Buildings	837,802	19,798	24,145	(14,507)	(31,201)	(6)	(29,330)	(644)	806,057
Leasehold improvements	81,931	570	21,170	(1,233)	(28,173)	—	2,269	(2,204)	74,330
Vehicles, furniture and fixtures	233,403	6,862	77,818	(4,637)	(88,978)	—	7,237	(1,478)	230,227
Construction in progress	19,049	278	24,892	—	—	—	(17,651)	(1,147)	25,421
Operating lease assets	766,565	—	231,703	(113,910)	(176,725)	—	—	—	707,633
Subtotal	3,050,481	59,827	380,877	(203,665)	(325,077)	(6)	(76,134)	(3,886)	2,882,417
Right-of-use Assets									
Real estate for business	561,589	1,803	118,682	(24,288)	(221,728)	—	—	(29,410)	406,648
Vehicles	16,336	96	8,360	(1,640)	(7,467)	—	—	(431)	15,254
Others	981	—	—	—	(556)	—	—	(8)	417
Subtotal	578,906	1,899	127,042	(25,928)	(229,751)	—	—	(29,849)	422,319
Total	3,629,387	61,726	507,919	(229,593)	(554,828)	(6)	(76,134)	(33,735)	3,304,736

20. Investment properties

20-1 Details of investment properties as of December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

<December 31, 2021>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Land	557,686	–	(5,912)	551,774
Buildings	618,917	(111,111)	(3,861)	503,945
Total	1,176,603	(111,111)	(9,773)	1,055,719

<December 31, 2020>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Land	671,418	–	(5,761)	665,657
Buildings	343,781	(106,283)	(3,809)	233,689
Total	1,015,199	(106,283)	(9,570)	899,346

20-2 Changes in investment properties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	January 1	Acquisition	Disposal	Depreciation	Impairment loss	Transfer in (out)	Others	December 31
Land	665,657	76,604	(56,194)	–	(2,415)	(131,878)	–	551,774
Buildings	233,689	95,382	(33,086)	(19,103)	(1,602)	229,514	(849)	503,945
Total	899,346	171,986	(89,280)	(19,103)	(4,017)	97,636	(849)	1,055,719

<2020>

Classification	January 1	Due to business combination	Acquisition	Disposal	Depreciation	Impairment loss	Transfer in (out)	Others	December 31
Land	616,232	20,174	16,802	(27,270)	–	(444)	39,028	1,135	665,657
Buildings	606,350	9,548	2,775	(404,409)	(17,224)	(1,082)	37,605	126	233,689
Total	1,222,582	29,722	19,577	(431,679)	(17,224)	(1,526)	76,633	1,261	899,346

20-3 Rental income and operating expenses arising from the Group's investment properties for the years ended December 31, 2020 and 2019 are as follows
(Korean won in millions):

Classification	2021	2020
Rental income	14,675	16,871
Operating expenses	3,339	6,931

20-4 Details and fair value, Valuation method, Input variables of investment properties for the years ended December 31, 2021 and 2020 are as follows
(Korean won in millions):

<December 31, 2021>

Classification	Fair value(*)	Valuation method	Input variables
Land and Buildings	1,097,528	Officially appraised land price and Estimated value by cost method	Officially appraised land price and Re-procurement cost

(*) The fair value of the investment property was measured on the basis of market-based value by an independent appraisal agency with professional qualifications. All investment properties are classified as level 3 in the fair value hierarchy described in Note 5-1.

<December 31, 2020>

Classification	Fair value(*)	Valuation method	Input variables
Land and Buildings	907,978	Officially appraised land price and Estimated value by cost method	Officially appraised land price and Re-procurement cost

(*) The fair value of the investment property was measured on the basis of market-based value by an independent appraisal agency with professional qualifications. All investment properties are classified as level 3 in the fair value hierarchy described in Note 5-1.

21. Financial lease and operating lease

21-1 The total amount of investment in leases on financial lease receivables and the net investment in leases and the minimum lease payments to be recovered as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Description	Present value of minimum lease payments	Direct cost	Net investment in lease	Unrealized interest income	Total amount of investment
Within 1 year	733,876	2,928	736,804	104,347	841,151
After 1 year ~ but no later than 2 years	590,296	9,126	599,422	70,966	670,388
After 2 years ~ but no later than 3 years	558,362	22,336	580,698	42,906	623,604
After 3 years ~ but no later than 5 years	491,164	64,528	555,692	25,733	581,425
After 5 years	91	286	377	8	385
Total	2,373,789	99,204	2,472,993	243,960	2,716,953

(*) Interest income on finance lease receivables recognized for the year ended December 31, 2021 is ₩105,787 million.

<December 31, 2020>

Description	Present value of minimum lease payments	Direct cost	Net investment in lease	Unrealized interest income	Total amount of investment
Within 1 year	477,645	2,322	479,967	94,751	574,718
After 1 year ~ but no later than 2 years	367,595	9,374	376,969	64,574	441,543
After 2 years ~ but no later than 3 years	1,097,844	17,640	1,115,484	38,225	1,153,709
After 3 years ~ but no later than 5 years	109,188	56,126	165,314	22,976	188,290
After 5 years	693	352	1,045	15	1,060
Total	2,052,965	85,814	2,138,779	220,541	2,359,320

(*) Interest income on finance lease receivables recognized for the year ended December 31, 2020 is ₩95,186 million.

21-2 The details of operating lease assets for each type of underlying asset as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Real estate for business	Vehicles	Equipment	Other assets	Total
Operating lease assets(*)	–	1,443,369	–	–	1,443,369
Accumulated depreciation	–	(374,641)	–	–	(374,641)
Accumulated impairment loss	–	–	–	–	–
Total	–	1,068,728	–	–	1,068,728

(*) The operating lease asset includes the direct cost of commencing the lease of ₩95,436 million.

<December 31, 2020>

Classification	Real estate for business	Vehicles	Equipment	Other assets	Total
Operating lease assets(*)	–	1,066,559	–	–	1,066,559
Accumulated depreciation	–	(358,926)	–	–	(358,926)
Accumulated impairment loss	–	–	–	–	–
Total	–	707,633	–	–	707,633

(*) The operating lease asset includes the direct cost of commencing the lease of ₩61,882 million.

21-3 The details of operating lease assets by type of underlying asset classified by industry based on acquisition costs as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Real estate for business	Vehicles	Equipment	Other assets	Total
Manufacturing	–	256,783	–	–	256,783
Wholesale & retail, Lodging	–	199,054	–	–	199,054
Logistics, Storaging	–	1,748	–	–	1,748
Private service	–	37,159	–	–	37,159
Others	–	948,625	–	–	948,625
Total	–	1,443,369	–	–	1,443,369

<December 31, 2020>

Classification	Real estate for business	Vehicles	Equipment	Other assets	Total
Manufacturing	–	160,480	–	–	160,480
Wholesale & retail, Lodging	–	127,115	–	–	127,115
Logistics, Storaging	–	1,196	–	–	1,196
Private service	–	4,750	–	–	4,750
Others	–	773,018	–	–	773,018
Total	–	1,066,559	–	–	1,066,559

21-4 The details of changes in operating lease assets by type of underlying asset for the year ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Beginning	Acquisition	Disposal	Depreciation	Impairment	Ending
Real estate for business	–	–	–	–	–	–
Vehicles	707,633	789,339	(246,209)	(182,035)	–	1,068,728
Equipment	–	–	–	–	–	–
Other assets	–	–	–	–	–	–
Total	707,633	789,339	(246,209)	(182,035)	–	1,068,728

<2020>

Classification	Beginning	Acquisition	Disposal	Depreciation	Impairment	Ending
Real estate for business	–	–	–	–	–	–
Vehicles	766,565	231,703	(113,910)	(176,725)	–	707,633
Equipment	–	–	–	–	–	–
Other assets	–	–	–	–	–	–
Total	766,565	231,703	(113,910)	(176,725)	–	707,633

21-5 The annual lease collection plan for operating lease contracts executed as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Description	Real estate for business	Vehicles	Equipment	Other Assets	Total
Within 1 year	–	228,312	–	–	228,312
After 1 year ~ but no later than 2 years	–	169,404	–	–	169,404
After 2 years ~ but no later than 3 years	–	125,490	–	–	125,490
After 3 years ~ but no later than 5 years	–	123,902	–	–	123,902
After 5 years	–	168	–	–	168
Total	–	647,276	–	–	647,276

<December 31, 2020>

Description	Real estate for business	Vehicles	Equipment	Other Assets	Total
Within 1 year	–	181,229	–	–	181,229
After 1 year ~ but no later than 2 years	–	124,228	–	–	124,228
After 2 years ~ but no later than 3 years	–	68,656	–	–	68,656
After 3 years ~ but no later than 5 years	–	36,775	–	–	36,775
After 5 years	–	11	–	–	11
Total	–	410,899	–	–	410,899

22. Intangible assets

22-1 Details of intangible assets as of December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

<December 31, 2021>

Classification	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Goodwill	102,929	–	(18,722)	84,207
Industrial property	58,837	(58,323)	–	514
Core deposits	992,144	(986,713)	(3,116)	2,315
Client relationship	423,113	(339,975)	–	83,138
Software and system development	1,860,302	(1,448,709)	(18)	411,575
Membership	46,894	(214)	(6,270)	40,410
Others	303,581	(177,403)	–	126,178
Total	3,787,800	(3,011,337)	(28,126)	748,337

<December 31, 2020>

Classification	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Goodwill	104,066	–	(18,722)	85,344
Industrial property	58,711	(58,055)	–	656
Core deposits	991,739	(986,149)	(3,116)	2,474
Client relationship	423,113	(309,520)	–	113,593
Software and system development	1,680,295	(1,313,375)	(368)	366,552
Membership	44,521	(162)	(6,526)	37,833
Others	278,666	(145,980)	–	132,686
Total	3,581,111	(2,813,241)	(28,732)	739,138

22-2 Details of goodwill as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

<December 31, 2021>

Classification	Acquisition cost	Accumulated impairment loss	Book value
Hana Savings Bank	75,229	(18,722)	56,507
Hana Asset Trust (*1)	22,377	–	22,377
HFI	4,431	–	4,431
KEB Hana Bank	892	–	892
Total	102,929	(18,722)	84,207

(*1) Includes goodwill relating to Hana Alternative Asset Management Co., Ltd.

(*2) Includes goodwill relating to Bareun Food Factory Co.,Ltd., a subsidiary of HFI.

(*3) Includes goodwill relating to PT Bank KEB hana, a subsidiary of KEB Hana Bank.

<December 31, 2020>

Classification	Acquisition cost	Accumulated impairment loss	Book value
Hana Savings Bank	75,229	(18,722)	56,507
Hana Asset Trust (*1)	22,377	–	22,377
HFI	5,568	–	5,568
KEB Hana Bank	892	–	892
Total	104,066	(18,722)	85,344

(*1) Includes goodwill relating to Hana Alternative Asset Management Co., Ltd.

(*2) Includes goodwill relating to Bareun Food Factory Co.,Ltd., a subsidiary of HFI.

(*3) Includes goodwill relating to PT Bank KEB hana, a subsidiary of KEB Hana Bank.

22-3 The method of goodwill impairment test

The Group allocated goodwill to cash-generating units which are composed of operating segments or its sub-segments. Impairment test was performed regularly on an annual basis and at times there is any indication of impairment through comparing the carrying amount of cash-generating units including goodwill with its recoverable amount.

The recoverable amount of a cash-generating unit is estimated to be the higher of the cash-generating unit's fair value and its value in use. The fair value is based on the best information available to reflect the amount that the Group could obtain, at the end of the reporting period, from the disposal of the assets or the transfer of the liabilities in formal transaction between participants, after deducting the costs of disposal. However, if the fair value could not be measured with sufficient reliability, it is possible applying the value in use which is present value of future cash flows. The Group estimates future cash flows based on the financial budget authorized by management. The estimation period cannot exceed 5 years without reasonable causes.

22-4 Result of goodwill impairment test

The goodwill allocated by cash-generating unit for the impairment test as of December 31, 2021 is as follows (Korean won in millions):

Classification	Hana Savings Bank	HFI	Hana Asset Trust	Hana Alternative Asset Management
Value in use (recoverable amount)	388,251	33,420	578,683	242,075
Carrying amount of net assets	359,068	32,664	432,991	193,695
Value in use which exceeds carrying amount of net assets	29,183	756	145,693	48,380
Discount rate (%)	16.42	12.49	14.28	14.28
Permanent growth rate (%)	1.00	0.00	0.50	0.50

The Group estimates future cash flows based on the assumption that cash flows will continue to grow at 0.0%~1.0% over 5 years referred to a recent macroeconomic indicator provided by EIU (Economist Intelligence Unit). The pre-tax discount rate used for discounting future cash flows is calculated based on the assumption of risk-free interest rate, market risk premium, systematic risk of cash generating unit and other factors.

22-5 Changes in the carrying amount of intangible assets for the years ended December 31, 2021 and 2020 are as follows

<2021>

Classification	January 1	Acquisition	Disposal	Amortization	Impairment loss	Reclassification	Others (*)	December 31
Goodwill	85,344	–	–	–	–	–	(1,137)	84,207
Industrial property	656	214	(70)	(279)	–	–	(7)	514
Core deposits	2,474	–	–	(340)	–	–	181	2,315
Client relationship	113,593	–	–	(30,455)	–	–	–	83,138
Software and system development	366,552	162,904	(8,348)	(135,847)	–	25,418	886	411,575
Membership	37,833	2,926	(1,010)	(52)	(73)	220	785	40,629
Others	132,686	48,818	(298)	(29,428)	–	(23,685)	(2,134)	125,959
Total	739,138	214,862	(9,726)	(196,401)	(73)	1,953	(1,416)	748,337

(*) Includes the effect of exchange rate differences.

<2020>

Classification	January 1	Due to business combination	Acquisition	Disposal	Amortization	Impairment loss	Reclassification	Others (*)	December 31
Goodwill	85,172	799	–	(628)	–	–	–	1	85,344
Industrial property	687	–	278	–	(309)	–	–	–	656
Core deposits	2,998	–	–	–	(350)	–	–	(174)	2,474
Client relationship	116,060	34,627	–	–	(37,094)	–	–	–	113,593
Software and system development	289,189	9,828	183,557	(278)	(126,448)	–	9,817	887	366,552
Membership	35,678	101	2,619	(808)	(24)	32	–	235	37,833
Others	125,450	1,616	37,885	(623)	(24,523)	–	(6,671)	(448)	132,686
Total	655,234	46,971	224,339	(2,337)	(188,748)	32	3,146	501	739,138

(*) Includes the effect of exchange rate differences.

23. Non-current assets held for sale

Book value of Non-current assets held for sale as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Property and equipment	292,863	82,506
Other assets	119,731	-
Total	412,594	82,506

(*) The Group measures a non-current asset classified as held for sale at the lower of its carrying amount and fair value less costs to sell and there are no non-current assets held for sale for which impairment losses have been recognized as of December 31, 2021 and 2020.

As of December 31, 2021, Non-current assets held for sale consist of 155 collateral acquired by Hana Bank, etc, a subsidiary of the group, for the purpose of repaying loans and include Non-current assets held for sale held by Hana Alternative Special Investment Private Trust No.123-1(USD), a subsidiary of the Group. These assets were classified as held for sale in accordance with the management's decision to sell, but were not disposed as of December 31, 2021.

24. Other assets

24-1 Other assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Guarantee deposits	766,155	834,126
Accounts receivable	9,154,921	8,741,038
Accrued income	1,148,592	1,069,599
Prepaid expenses	252,178	140,581
Advance payments	286,130	103,600
Reinsurance assets	29,001	25,895
Unamortized new contract	41,369	32,552
Separate account assets	1,647,534	1,270,056
Domestic exchange un settlement debts	3,784,224	2,787,399
Merchant banking account assets	4,741,939	3,465,306
Others	459,457	421,000
Allowance for possible losses	(28,343)	(31,486)
Total	22,283,157	18,859,666

24-2 Details of merchant banking account assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
On balance accounts:		
Financial assets measured at FVTPL-Loans	758,436	69,987
Financial assets measured at FVTPL-Debt securities	3,334,493	2,985,286
CMA asset FVTPL debt instruments	649,010	410,033
Total	4,741,939	3,465,306
Off balance accounts:	-	
Commitment	790,000	950,000

24-3 Changes in the allowance for possible losses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Beginning balance	31,486	32,926
Increase due to business combination	–	307
Write-offs	(2,525)	(3,552)
Debt-for-equity swap/dispose non-performing loans	(280)	(375)
Provision for possible losses	(2,467)	(1,234)
Interest income from impaired assets	22	(19)
Others	2,107	3,433
Ending balance	28,343	31,486

24-4 Changes in reinsurance assets and unamortized new contract fee for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	January 1	Increase	Decrease	December 31
Reinsurance assets	25,895	8,115	(5,009)	29,001
Unamortized new contract fee	32,552	25,036	(16,219)	41,369
Total	58,447	33,151	(21,228)	70,370

<2020>

Classification	January 1	Increase due to business combination	Increase	Decrease	December 31
Reinsurance assets	3,427	27,378	47,404	(52,314)	25,895
Unamortized new contract fee	25,301	–	24,331	(17,080)	32,552
Total	28,728	27,378	71,735	(69,394)	58,447

24-5 Details of greenhouse gas emission rights held to obtain short-term profit as of December 31, 2021 is as follows (Korean won in millions):

Classification	December 31, 2021	
	Emission rights(tCO2-eq)	Book value
Beginning balance	–	–
Purchase(Disposal)	417,865	9,722
Redclassification	–	–
Valuation		4,945
Ending balance	417,865	14,667

25. Financial liabilities measured at FVTPL

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

Classification	December 31, 2021	December 31, 2020
Derivative liabilities held-for-trading (*)	5,889,434	10,694,157
Securities sold	882,866	165,661
Total	6,772,300	10,859,818

(*) Refer to Note 17. Derivatives Reference

26. Financial liabilities designated as measured at FVTPL

26-1 Financial liabilities designated as measured at FVTPL as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Derivatives linked securities sold	8,330,544	9,388,375
Deposits	195,600	325,258
Borrowings	473,741	—
Deferred day 1 profit or loss	104,738	89,068
Total	9,104,623	9,802,701

With respect to derivative linked securities and structured deposits, the Group does not separate embedded derivatives from main contracts but designates them as fair value through profit or loss.

26-2 The difference between the book value and the maturity repayment amount as of the December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Book Value	9,104,623	9,802,701
Maturity repayment amount	9,444,298	9,985,879
Difference	(339,675)	(183,178)

26-3 Credit risk for the financial liabilities designated as measured at FVTPL as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Financial liabilities designated at FVTPL OCI:		
Changes in FV price from credit risk fluctuation	(14,284)	(7,498)
Changes in FV price from credit risk fluctuation (Accumulated)	(35,001)	(25,137)

27. Deposits

27-1 Details of deposits as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Demand deposits:		
Demand deposits in Korean won	19,104,577	16,033,393
Demand deposits in foreign currency	34,959,125	29,772,610
Subtotal	54,063,702	45,806,003
Time and saving deposits:		
Time and saving deposits in Korean won	248,140,611	234,021,045
Time and saving deposits in foreign currency	16,563,802	15,534,007
Subtotal	264,704,413	249,555,052
Certificate of deposits	6,380,980	148,559
Total	325,149,095	295,509,614

27-2 Allocations of deposits by customer as of December 31, 2021 and 2020 are listed as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Individuals	106,227,659	105,403,829
Corporations	112,055,878	101,165,167
Other banks	18,707,709	19,593,678
Public institutions	13,265,257	9,291,447
Other financial institutions	48,443,041	34,337,061
Government	5,924,293	7,768,929
Non-profit corporations	12,346,117	11,102,641
Foreign corporations	3,130,833	2,016,383
Others	5,048,308	4,830,479
Total	325,149,095	295,509,614

28. Borrowings

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

Type	Lender	Interest rate (%)	December 31, 2021	December 31, 2020
Borrowings in Korean won:				
BOK borrowings	BOK	0.3~0.3	4,473,504	3,838,276
Government borrowings	Korea Development Bank, etc	0.5~2.2	1,932,544	1,597,040
Other borrowings	Korean Energy Management Corporation, etc.	0~4.5	8,865,274	6,401,150
Subtotal			15,271,322	11,836,466
Borrowings in foreign currencies:				
Bank overdrafts	Foreign bank, etc.	0.6~10	313,417	932,610
Other borrowings	OCBC, SMBC Bank, etc	-0.6~14.5	5,378,973	5,706,480
Subtotal			5,692,390	6,639,090
Call money:				
Call money in foreign currencies	Shinhan bank, etc.	-0.3~17.7	1,091,728	701,536
Subtotal			1,091,728	701,536
Bonds sold under repurchase agreements:				
Bonds sold under repurchase agreements in Korean won	General customers, etc	0~3	5,862,774	5,447,188
Bonds sold under repurchase agreements in foreign currencies	BBVA, etc	0.2~1.1	2,317,774	1,836,211
Subtotal			8,180,548	7,283,399
Other borrowings:				
Bills sold	General customers, etc	0~1.7	25,610	33,825
Total			30,261,598	26,494,316

29. Debentures

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

Type of debentures	Lender	Interest rate (%)	December 31, 2021	December 31, 2020
Korean won:				
Debentures	Financial institutions, etc	0.7~10	41,541,547	36,849,706
Subordinated bonds	Financial institutions, etc	2.1~7.8	6,265,139	6,380,859
Net gain (loss) on fair value hedges (this term)			(6,345)	(796)
Net gain (loss) on fair value hedges (before the previous period)			(4,152)	(3,356)
Present value discount			(34,907)	(30,594)
Subtotal			47,761,282	43,195,819
Foreign currencies:				
Debentures	Financial institutions, etc	0.5~1.7	5,728,806	4,505,089
Subordinated bonds	Financial institutions, etc	1.9~10	977,378	956,960
Net gain on fair value hedges (this period)			(93,621)	55,590
Net gain (loss) on fair value hedges (before the previous period)			109,935	57,471
Present value discount			(7,619)	(9,091)
Subtotal			6,714,879	5,566,019
Total			54,476,161	48,761,838

30. Net defined benefit liabilities

30-1 Actuarial assumptions as of December 31, 2021 and 2020 are as follows:

Classification	December 31, 2021 (%)	December 31, 2020 (%)	Notes
Demographic assumptions:			
Mortality	0.0~0.2	0.0~0.1	Table from Korea insurance development institute, etc.
Rates of employee turnover	0.0~45.2	0.0~49.5	Table from Korea insurance development institute, etc.
Financial assumptions:			
Expected salary increase rate	0.0~7.0	0.0~9.3	The average of the past five years, etc.
Discount rate	2.3~3.0	1.7~2.3	Return on corporate bond with the same credit rating

30-2 Details of net defined benefit liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Present value of defined benefit obligation	2,297,307	2,328,212
Fair value of plan assets (-)	(2,099,287)	(2,003,043)
Net defined benefit liabilities	198,020	325,169

30-3 Changes in present value of defined benefit obligation for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Beginning balance	2,328,212	2,175,101
Acquired in business combination	-	28,731
Current service cost	187,088	194,364
Past service cost	121	-
Interest cost on benefit obligation	43,884	42,027
Remeasurements of the net defined benefit liability	(63,647)	34,030
Benefits paid	(198,085)	(145,917)
Others	(266)	(124)
Ending balance	2,297,307	2,328,212

30-4 Details of losses incurred from severance and retirement benefit plan for the years ended December 31, 2021 and 2020 are as follows
 (Korean won in millions):

Classification	2021	2020
Current service cost	187,088	194,364
Past service cost	121	–
Net interest on the net defined benefit liability	7,665	9,372
Subtotal	194,874	203,736
Benefits paid for the defined contribution plan	5,391	3,581
Long-term employee payment and others	256	(444)
Total	200,521	206,873

30-5 Plan assets for severance benefit as of December 31, 2021 and 2020 consist of the followings (Korean won in millions):

<December 31, 2021>

Classification	Existence of active market price	Inexistence of active market price	Total
Time deposit	–	1,900,282	1,900,282
ELB	–	27,437	27,437
Beneficiary certificates	–	6,695	6,695
Others	–	164,873	164,873
Total	–	2,099,287	2,099,287

<December 31, 2020>

Classification	Existence of active market price	Inexistence of active market price	Total
Time deposit	–	1,860,356	1,860,356
ELB	–	32,200	32,200
Beneficiary certificates	–	1,262	1,262
Others	–	109,225	109,225
Total	–	2,003,043	2,003,043

30-6 Changes in the fair value of plan assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Beginning balance of fair value of plan assets	2,003,043	1,812,165
Acquired in business combination	—	21,595
Employer contributions	195,140	243,758
Expected return on plan assets	36,219	32,655
Remeasurements of the plan assets	(9,576)	(688)
Benefits paid	(125,678)	(106,658)
Others	139	216
Ending balance of fair value of plan assets	2,099,287	2,003,043

30-7 Details of remeasurement accompanied by the application of actuarial assumptions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Actual gains (losses):		
Changes in demographic assumptions	(1,768)	24,800
Changes in financial assumptions	98,323	(60,163)
Experience adjustments	(32,908)	1,333
Subtotal	63,647	(34,030)
Income on planned assets:		
Actual income on planned assets	26,631	33,987
Amounts included in net interest on the net defined benefit liability	(36,207)	(34,675)
Subtotal	(9,576)	(688)
Total	54,071	(34,718)

30-8 The quantitative sensitivity analysis for significant actuarial assumptions as of December 31, 2021 and 2020 is as follows (Korea won in millions):

30-8-1 Discount rate

⟨December 31, 2021⟩

Classification	December 31, 2021	1% point increase	1% point decrease
Present value of defined benefit obligation	2,297,307	2,059,725	2,498,056

⟨December 31, 2020⟩

Classification	December 31, 2020	1% point increase	1% point decrease
Present value of defined benefit obligation	2,328,212	2,072,426	2,533,744

30-8-2 Expected rate of salary increase

⟨December 31, 2021⟩

Classification	December 31, 2021	1% point increase	1% point decrease
Present value of defined benefit obligation	2,297,307	2,495,863	2,063,275

⟨December 31, 2020⟩

Classification	December 31, 2020	1% point increase	1% point decrease
Present value of defined benefit obligation	2,328,212	2,530,394	2,071,076

The sensitivity analyses above has been determined based on a method that extrapolates the impact on defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period.

30-8-3 Employer contributions for the years ended December 31, 2021 and 2020 are reasonably estimated to be ₩185,510 million and ₩185,727 million, respectively, and the average durations of the defined benefit plan obligation as of December 31, 2021 and 2020 are 5.91~10.17 years and 6.42~11.26 years, respectively.

31. Provisions and Commitments

31-1 Details of provisions as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Allowance for possible losses on acceptances and guarantees:		
Financial acceptances and guarantees (*)	1,682	2,310
Non-financial acceptances and guarantees	34,887	32,527
Bills endorsed	15	13
Subtotal	36,584	34,850
Allowances for unused commitments	114,094	131,001
Other allowance:		
Allowances for restoration cost	65,312	75,257
Allowances for reward points	–	1
Allowance for lawsuits	77,742	62,500
Others	293,690	251,630
Subtotal	436,744	389,388
Total	587,422	555,239

(*) The Group recognizes the amount of financial guarantee contracts subsequently measured that exceed the unamortized balance as provisions for acceptances and guarantees on initial recognition. The unamortized balance amounts to ₩12,096 million and ₩17,516 million as of December 31, 2021 and 2020 respectively and is categorized as financial guarantee contract liability.

31-2 Changes in allowances for unused commitments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Allowances for unused commitments			Total	
	12month expected credit loss	Lifetime expected credit losses			
		Non credit-impaired financial assets	Credit-impaired financial assets		
Beginning balance	87,148	39,521	4,332	131,001	
Transfer to 12 month expected credit loss	11,504	(9,051)	(2,453)	—	
Transfer to non credit-impaired financial assets	(3,328)	3,425	(97)	—	
Transfer to credit-impaired financial assets	(226)	(120)	346	—	
Provision (reversal)	(18,236)	(859)	2,007	(17,088)	
Exchange rate fluctuation	109	73	(1)	181	
Ending balance	76,971	32,989	4,134	114,094	

<2020>

Classification	Allowances for unused commitments			Total	
	12month expected credit loss	Lifetime expected credit losses			
		Non credit-impaired financial assets	Credit-impaired financial assets		
Beginning balance	71,569	33,905	8,540	114,014	
Increase due to business combination	12	—	—	12	
Transfer to 12 month expected credit loss	9,028	(7,723)	(1,305)	—	
Transfer to non credit-impaired financial assets	(2,291)	4,798	(2,507)	—	
Transfer to credit-impaired financial assets	(264)	(140)	404	—	
Provision (reversal)	8,998	8,693	(800)	16,891	
Used	96	(12)	—	84	
Ending balance	87,148	39,521	4,332	131,001	

31-3 Changes in provision for financial guarantees for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Provision for financial guarantees			Total	
	12month expected credit loss	Lifetime expected credit losses			
		Non credit-impaired financial assets	Credit-impaired financial assets		
Beginning balance	2,296	14	-	2,310	
Transfer to 12 month expected credit loss	1	(1)	-	-	
Transfer to non credit-impaired financial assets	(1)	1	-	-	
Transfer to credit-impaired loan	-	-	-	-	
Provision (reversal)	(695)	-	-	(695)	
Exchange rate fluctuation	18	1	-	19	
Others	48	-	-	48	
Ending balance	1,667	15	-	1,682	

<2020>

Classification	Provision for financial guarantees			Total	
	12month expected credit loss	Lifetime expected credit losses			
		Non credit-impaired financial assets	Credit-impaired financial assets		
Beginning balance	3,488	17	-	3,505	
Transfer to 12 month expected credit loss	5	(5)	-	-	
Transfer to non credit-impaired financial assets	(1)	1	-	-	
Transfer to credit-impaired loan	(26)	26	-	-	
Provision (reversal)	36	2	-	38	
Used	(1,192)	(26)	-	(1,218)	
Exchange rate fluctuation	(14)	(1)	-	(15)	
Ending balance	2,296	14	-	2,310	

31-4 Changes in other provisions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	January 1, 2021	Provision (reversal)	Allowance used	Others	December 31, 2021
Non-financial acceptances and guarantees	32,540	(1,025)	–	3,387	34,902
Other allowance:					
Allowances for restoration cost	75,257	683	(16,426)	5,798	65,312
Allowances for reward points	1	(1)	–	–	–
Allowance for lawsuits	62,500	17,642	(2,771)	371	77,742
Others	251,630	64,128	(22,153)	85	293,690
Subtotal	389,388	82,452	(41,350)	6,254	436,744
Total	421,928	81,427	(41,350)	9,641	471,646

<2020>

Classification	January 1, 2020	Increase due to business combination	Provision (reversal)	Allowance used	Others	December 31, 2020
Non-financial acceptances and guarantees	46,494	–	(11,557)	–	(2,397)	32,540
Other allowance:						
Allowances for restoration cost	80,814	49	(219)	(7,404)	2,017	75,257
Allowances for reward points	121	–	(119)	(1)	–	1
Allowance for lawsuits	52,639	–	10,141	(59)	(221)	62,500
Others	279,779	–	224,259	(197,584)	(54,824)	251,630
Subtotal	413,353	49	234,062	(205,048)	(53,028)	389,388
Total	459,847	49	222,505	(205,048)	(55,425)	421,928

31-5 Details of guarantees as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

Classification	Amount of guarantee	
	December 31, 2020	December 31, 2020
Financial acceptances and guarantees in Korean won:		
Private bond issue payment guarantee	71,000	45,000
Collateral for loans	45,253	122,229
Loans for purchase	249,240	302,218
Loan commitment	110,944	1,042,630
Commitment to acquire securities	972,857	641,667
Subtotal	1,449,294	2,153,744
Financial acceptances and guarantees in foreign currencies	2,549	2,883
Confirmed acceptances and guarantees in Korean won	1,857,587	1,620,210
Confirmed acceptances and guarantees in foreign currencies:		
Acceptance on letter of credit	2,189,408	1,786,159
Acceptance on letter of guarantees	91,942	80,787
Others	7,437,488	6,407,983
Subtotal	9,718,838	8,274,929
Contingent acceptances and guarantees:		
Letters of credit	4,114,571	3,236,751
Others	730,840	558,248
Subtotal	4,845,411	3,794,999
Bills endorsed	12,082	8,735
Total	17,885,761	15,855,500

31-6 Unused commitments

Details of unused commitments as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Unused commitments	
	December 31, 2021	December 31, 2020
Commitments on loans in Korean won	84,870,711	84,757,913
Commitments on loans in foreign currencies	23,829,960	22,060,087
Commitments on credit lines on asset-backed securities	247,596	279,496
Commitments on purchase of securities	9,523,616	9,428,533
Merchant banking account-commitment	790,000	950,000
Others	593	544
Total	119,262,476	117,476,573

31-7 As of December 31, 2021, the Group is involved in 896 lawsuits as a plaintiff and 539 lawsuits as a defendant. The aggregate amounts of claims as a plaintiff and a defendant are approximately ₩365,065 million and ₩599,912 million, respectively. The Group's material lawsuits in progress as a defendant are as follows (Korean won in millions):

Defendant	Plaintiff	Amount	Status of lawsuit				Content
			First trial	second trial	third trial	retrial	
Hana Bank	PT *****	102,566	Some loss in a litigation	Won	Loss	In-progress	Compensation for damages
Hana Bank	F*****Bankruptcy administrator	39,825	Won	In-progress	-	-	Return of an illicit gain
Hana Bank	****Securities Co., Ltd.	37,136	Won	In-progress	-	-	Compensation for damages
Hana Bank	****Investments Co., Ltd.	16,798	Won	In-progress	-	-	Compensation for damages
Hana Bank	****Cooperation Co., Ltd.	15,000	In-progress	-	-	-	Return of an illicit gain
Hana Bank	**INVESTMENT & SECURITIES CO.,LTD	10,000	In-progress	-	-	-	Compensation for damages
HFI	H*****, etc.	6,178	In-progress	-	-	-	Request for collection.

31-8 COVID-19 impact

Due to the spread of COVID-19 in 2021, major economic factors are expected to worsen due to the domestic and international economic slowdown in domestic and ripple effects of financial instability. Considering the possibility of entering a global recession caused by the global spread of COVID-19, the economic forecast scenario used to estimate expected credit losses for financial instruments has been reset. As of December 31, 2021, the Group has remeasured forward-looking information by using macro variables and estimated default rates based on the scenario. In addition, the key assumptions used by financial instruments were based on fair values calculated based on the estimated assumptions taking into account the impact of COVID-19 as of the end of the current year. The Group has prepared the consolidated financial statements by reasonably estimating the impact of COVID-19 on the consolidated financial statements for the reporting period ending on December 31, 2021. However, the ultimate impact of the future spread of COVID-19 on the consolidated financial position, financial performance and cash flows of the Group's cannot be predicted.

31-9 Uncertainty related to overseas subsidiaries.

31-9-1 Hana Microfinance LTD, the Group's overseas subsidiary, is experiencing a contraction in normal operation due to movement restrictions in 2021 due to spread and disruption of COVID-19 and Myanmar unrest. If this situation continues for a long time, the uncertainty of loan receivable collection may increase, and it is difficult to predict the ultimate effect on the consolidated financial position, consolidated financial performance and consolidated cash flows as of December 31, 2021. The Group is responding to possible crises by continuously monitoring economic conditions to minimize the impact on the Group.

31-9-2 The ongoing armed conflict in Ukraine area which began in February 2022 and international sanctions imposed against Russia may impact sanctioned entities, entities doing business with Ukraine or Russia, as well as entities exposed directly or indirectly to industries or economy of Ukraine or Russia. The events described above represent non-adjusting events after the reporting period. As of the reporting date, the Group expects to have financial impact on the business of KEB RUS LLC, a subsidiary, but the financial impact of such events cannot be estimated reasonably.

32. Other liabilities

32-1 Details of other liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Accounts payable	9,665,502	9,495,785
Accrued expense payables	1,693,293	1,741,694
Advances	208,385	163,967
Income in advance	672,439	664,182
Policy reserve	4,376,685	4,076,484
Separate account liabilities	1,781,403	1,314,178
Borrowing from trust accounts	5,874,089	6,003,766
Foreign exchange settlement credits	585,628	555,514
Domestic exchange settlement credits	6,172,698	4,089,270
Deposits for letter of guarantees and others	1,132,396	1,883,286
Taxes withheld	157,077	197,776
Security deposits received	74,371	75,440
Accounts for agency businesses	352,697	289,447
Agency	2,332,083	2,012,854
Lease liabilities	397,394	416,477
Merchant banking account liabilities	2,908,280	2,246,273
Others	944,114	1,077,613
Present value discount	(36,532)	(18,895)
Total	39,292,002	36,285,111

32-2 Details of merchant banking account liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Merchant banking account deposits	2,908,071	2,246,181
Merchant banking account others(*)	209	92
Total	2,908,280	2,246,273

(*) Merchant banking account others consist of accrued expense payables.

32-3 Details of policy reserve as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Premium reserve	3,934,235	3,669,316
Prepaid premium reserve	236,430	208,455
Guaranteed reserve	4,887	5,122
Outstanding claim	201,133	193,591
Total	4,376,685	4,076,484

32-4 Changes in the policy reserve for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	January 1, 2021	Changes	December 31, 2021
Premium reserve	3,669,316	264,919	3,934,235
Prepaid premium reserve	208,455	27,975	236,430
Guaranteed reserve	5,122	(235)	4,887
Outstanding claim	193,591	7,542	201,133
Total	4,076,484	300,201	4,376,685

<2020>

Classification	January 1, 2020	Increase due to business combination	Changes	December 31, 2020
Premium reserve	3,276,859	515,879	(123,422)	3,669,316
Prepaid premium reserve	1,390	214,510	(7,445)	208,455
Guaranteed reserve	4,909	—	213	5,122
Outstanding claim	57,037	97,634	38,920	193,591
Total	3,340,195	828,023	(91,734)	4,076,484

32-5 Insurance income and Insurance expense

Details of insurance income and unsurance expense as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification		2021	2020
Insurance income	premium income	1,038,187	690,242
	Reinsurance income	17,786	30,479
	Other insurance income	5,289	3,848
	Special account income	12,974	4,355
	Subtotal	1,074,236	728,924
Insurance expense	insurance expens	344,154	465,154
	Refund cost	395,376	331,094
	reinsurance cost	36,424	24,637
	Provision for policy reserve	296,375	(83,867)
	business expense	1,154	4,378
	Depreciation on new contract	26,063	14,309
	discount fee	7,205	3,894
	Special account expense	12,974	4,355
	Subtotal	1,119,725	763,954
Total		(45,489)	(35,030)

32-6 Details of lease liabilities as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

<December 31, 2021>

Classification	Nominal value	Present value discount	Book value
Real-estate	395,914	(14,220)	381,694
Vehicles	15,652	(403)	15,249
Others	462	(11)	451
Total	412,028	(14,634)	397,394

<December 31, 2020>

Classification	Nominal value	Present value discount	Book value
Real-estate	410,668	(10,441)	400,227
Vehicles	16,164	(343)	15,821
Others	435	(6)	429
Total	427,267	(10,790)	416,477

32-7 Changes in lease liabilities as of December 31, 2021 and 2020 are as follows
(Korea won in millions):

<2021>

Classification	January 1, 2021	Increase	Amortization	Payment (*)	Other	December 31, 2021
Real-estate	400,227	223,712	9,127	(214,347)	(37,025)	381,694
Vehicles	15,821	9,451	285	(9,512)	(796)	15,249
Others	429	–	25	(717)	714	451
Total	416,477	233,163	9,437	(224,576)	(37,107)	397,394

(*) The total cash outflow related to lease liabilities for the year ended December 31, 2021 is ₩224,509 million.

<2020>

Classification	January 1, 2020	Increase due to business combination	Increase	Amortization	Payment (*)	Other	December 31, 2020
Real-estate	565,293	1,436	106,067	10,640	(239,846)	(43,363)	400,227
Vehicles	16,740	41	8,341	300	(9,073)	(528)	15,821
Others	974	—	—	35	(572)	(8)	429
Total	583,007	1,477	114,408	10,975	(249,491)	(43,899)	416,477

(*) The total cash outflow related to lease liabilities for the year ended December 31, 2020 is ₩249,866 million.

32-8 The details of the composition by maturity of the contractual cash flows before discounting the lease liability as of December 31, 2021 and 2020 are as follows (Korea won in millions):

<December 31, 2021>

Classification	Not more than 1 month	Not more than 3 month	Not more than 6 month	Not more than 1 year	Not more than 5 year	More than 5 year	Total
Real-estate	19,376	35,594	48,464	84,960	170,367	37,153	395,914
Vehicles	699	1,227	1,606	2,901	9,192	27	15,652
Others	78	23	100	122	139	—	462
Total	20,153	36,844	50,170	87,983	179,698	37,180	412,028

<December 31, 2020>

Classification	Not more than 1 month	Not more than 3 month	Not more than 6 month	Not more than 1 year	Not more than 5 year	More than 5 year	Total
Real-estate	15,635	36,096	48,112	88,594	265,531	(43,300)	410,668
Vehicles	727	1,316	1,785	3,403	8,933	—	16,164
Others	22	44	66	133	170	—	435
Total	16,384	37,456	49,963	92,130	274,634	(43,300)	427,267

32-9 Assessment of the adequacy of liabilities

32-9-1 The experience rates and calculation basis used by the Group for the liability adequacy test are as follows

Classification		Calculation methodology
Hana Life Insurance	Discount rate	200 scenarios suggested by the Governor of the Financial Supervisory Service are applied.
	Business expense rate	Based on the last year experience statistics, business expense rate is estimated by calculating the ratio of detailed business expenses to total business expense categorized by types of product, premium payment method, business expense (new acquisition cost or maintenance cost) and elapsed time. Besides the experience statistics, the Group reasonably estimated the trend of business expense by considering the variability arising from inflation, changes in management policies. Temporary expenses that are not expected to incur is excluded from the assumption for calculation of the business expense rate.
	Surrender ratio	Based on the last five years' experience statistics, surrender ratio is estimated by calculating the ratios of elapsed or cancelled contracts to total contracts held by the Group by types of product, premium payment method, sales channel and lapse of time. The ratio is calculated on the basis of fifty or more historical data to ensure statistical reliability. If the historical data is insufficient, the Group applies surrender ratio of similar type of contract, uses trends by elapsed time or reclassifies the categories for the surrender ratio to ensure statistical reliability. The Group considers elapsed time, premium payment status, employee benefit policy, the period of tax benefit for an insurance contract, trend on the market interest rate which can be influential on surrender ratio. The Group applies the same surrender ratio after the specific period of elapsed time to the end of the projected period. If there are temporary increases in surrender ratio due to tax benefit, the Group calculates the final surrender ratio by eliminating the tax benefit effect or by applying the surrender ratio for the period in which there is no effect.
	Risk rate	Based on the last five years' experience statistics, risk rate is calculated based on the ratio of payment of premium to risk premium by collateral, time of sales (by experience life table), and elapsed time. Risk rate is reasonably calculated after reviewing and applying increase rate/trend rate compared to previous year or on a yearly basis. When risk rate is applied, at least 10 years of risk rate should be applied. But in case of decline in cash flow stability due to extreme fluctuation in risk rate by elapsed time caused by shortage of statistics after 5 years, risk rate can be calculated by adding statistics by elapsed time. In order to retain statistical reliability by category, there should be at least 50 experience statistics. For sections that are short of such experience statistics, similar risk rates of other categories are applied. In case the reliability of the calculation results is not guaranteed due to shortage of experience statistics, trends by elapsed time of similar risk rates or upper-level category may be applied.
	Discount rate	The discount rate for calculating the present value of future net cash flows is the future operating asset return rate, and the future operating asset return rate is calculated by reflecting future prospects, such as future trends, risk rates, and the Group's operational strategy.
		-Long-term insurance Based on the prior year experience statistics, business expense rate is estimated by calculating the ratio of detailed business expenses to total business expenses

Classification		Calculation methodology
Hana Insurance . Co., Ltd.	Business expense rate	<p>categorized by types of product, premium payment method, business expenses (new acquisition costs or maintenance costs) and elapsed time. Besides the experience statistics, the Group reasonably estimated the trend of business expenses by considering the variability arising from inflation and changes in management policies. Temporary expenses that are not expected to incur is excluded from the assumption for calculation of the business expense rate.</p> <p>-General insurance :</p> <p>General insurance is assessed based on the "large classification criteria set forth in <Appendix 2. Types of Insurance> in the standard business method of [Attachment 14] of the Insurance Business Supervision Regulations", as the evaluation unit, and the costs of maintaining the contract compared to the prior year's premium was calculated as an assumption of the business expense rate.</p> <p>Temporary expenses is excluded from the assumption for calculation of the business expense rate.</p> <p>-Automobile insurance</p> <p>For automobile insurance, the cost of maintaining the contract compared to the prior year's premium for each collateral (personal, property, descendant, vehicle, uninsured, etc.) was calculated as an assumption of business expense rate.</p> <p>Temporary expenses are excluded from the assumption for calculation of the business expense rate.</p>
	Surrender ratio	<p>Based on the last five years' experience statistics, surrender ratio is estimated by calculating the ratios of elapsed or cancelled contracts to total contracts held by the Group by types of product, premium payment method, sales channel and lapse of time. The ratio is calculated on the basis of fifty or more historical data to ensure statistical reliability. If the historical data is insufficient, the Group applies surrender ratio of similar type of contract, uses trends by elapsed time or reclassifies the categories for the surrender ratio to ensure statistical reliability.</p> <p>The Group considers elapsed time, premium payment status, employee benefit policy, the period of tax benefit for an insurance contract, trend on the market interest rate which can be influential on surrender ratio. The Group applies the same surrender ratio after the specific period of elapsed time to the end of the projected period. If there are temporary increases in surrender ratio due to tax benefit, the Group calculates the final surrender ratio by eliminating the tax benefit effect or by applying the surrender ratio for the period in which there is no effect.</p>
	Risk rate	<p>Based on the last five years' experience statistics, risk rate is calculated based on the ratio of payment of premium to risk premium by collateral, time of sales (by experience life table), and elapsed time. Risk rate is reasonably calculated after reviewing and applying increase rate/trend rate compared to previous year or on a yearly basis.</p> <p>When risk rate is applied, at least 10 years of risk rate should be applied. But in case of decline in cash flow stability due to extreme fluctuation in risk rate by elapsed time caused by shortage of statistics after 5 years, risk rate can be calculated by adding statistics by elapsed time. In order to retain statistical reliability by category, there should be at least 50 experience statistics. For sections that are short of such experience statistics, similar risk rates of other categories are applied. In case the reliability of the calculation results is not guaranteed due to shortage of experience statistics, trends by elapsed time of similar risk rates or upper-level category may be applied.</p>
		<p>-General insurance :</p> <p>General insurance is assessed based on the "large classification criteria set forth in <Appendix 2. Types of Insurance> in the standard business method of [Attachment 14] of the Insurance Business Supervision Regulations", as the evaluation unit, and the loss ratio assumption was calculated by analyzing the</p>

Classification		Calculation methodology
	Loss ratio	<p>experience statistics for the previous five years and calculating the loss ratio applied to future cash flows and the cash-out ratio for each period of progress.</p> <p>-Automobile insurance</p> <p>Automobile insurance is assessed based on each collateral (personal, property, descendant, vehicle, uninsured, etc.), as the evaluation unit, and the loss ratio assumption was calculated by analyzing the experience statistics for the previous five years and calculating the loss ratio applied to future cash flows and the cash-out ratio for each period of progress.</p>
	Loss investigation ratio	<p>-General insurance :</p> <p>General insurance is assessed based on the "large classification criteria set forth in <Appendix 2. Types of Insurance> in the standard business method of [Attachment 14] of the Insurance Business Supervision Regulations", as the evaluation unit, and the loss investigation costs relative to the insurance payment for the previous three years are used as the assumption for the calculation of the loss investigation ratio.</p> <p>-Automobile insurance</p> <p>Automobile insurance is assessed based on each collateral (personal, property, descendant, vehicle, uninsured, etc.), as the evaluation unit, and the loss investigation costs relative to the insurance payment for the previous three years are used as the assumption for the calculation of the loss investigation ratio.</p>

32-9-2 The result of LAT as of December 31, 2021 and 2020 are as follows
(Korean won in millions):

<December 31, 2021>

Classification		Reserve for test	LAT base (*1)	Premium surplus (loss) (*2)
Hana Life Insurance	Interest rate-linked	2,458,818	2,399,609	59,209
	Interest rate-fixed	711,698	650,143	61,555
	Variable life insurance	(1,590)	(52,770)	51,180
Subtotal		3,168,926	2,996,982	171,944
Hana Insurance Co., Ltd.	General insurance	17,941	12,321	5,620
	Automobile insurance	207,265	209,410	(2,145)
	Long-term insurance (*3)	601,901	407,901	194,000
Subtotal		827,107	629,632	197,475
Total (*4)		3,996,033	3,626,614	369,419

(*1) LAT of the Group is conducted at the end of reporting period, and surplus to reserve for the test is calculated as of December 31, 2021.

(*2) Surplus= Reserve for test - LAT base((-) is loss, (+) is surplus)

(*3) For the long-term insurance calculation, the amount is calculated by adding

or subtracting new acquisition costs from the insurance premium reserve. For the calculation of general insurance and automobile insurance, unpaid insurance premiums based on the original insurance are considered.

(*4) The Group did not record additional reserve since the surplus exceeded the deficit based on the result of LAT.

<December 31, 2020>

Classification		Reserve for test	LAT base (*1)	Premium surplus (loss) (*2)
Hana Life Insurance	Interest rate-linked	2,418,796	2,364,513	54,283
	Interest rate-fixed	571,031	550,234	20,797
	Variable life insurance	(3,511)	(49,211)	45,700
Subtotal		2,986,316	2,865,536	120,780
Hana Insurance Co., Ltd.	General insurance	16,192	3,254	12,938
	Automobile insurance	183,949	184,418	(469)
	Long-term insurance (*3)	526,210	368,611	157,599
Subtotal		726,351	556,283	170,068
Total (*4)		3,712,667	3,421,819	290,848

(*1) LAT of the Group is conducted at the end of reporting period, and surplus to reserve for the test is calculated as of December 31, 2020.

(*2) Surplus= Reserve for test - LAT base((-) is loss, (+) is surplus)

(*3) For the long-term insurance calculation, the amount is calculated by adding or subtracting new acquisition costs from the insurance premium reserve. For the calculation of general insurance and automobile insurance, unpaid insurance premiums based on the original insurance are considered.

(*4) The Group did not record additional reserve since the surplus exceeded the deficit based on the result of LAT.

33. Capital stock and capital surplus

33-1 Details of capital stock as of December 31, 2021 and 2020 areas follows (Korean won):

Classification	December 31, 2021	December 31, 2020
Number of shares authorized	800,000,000 shares	800,000,000 shares
Par value per share	₩5,000	₩5,000
Number of shares issued	300,242,062 shares	300,242,062 shares

33-2 Changes in capital stock and capital surplus from December 1, 2005 (inception) to December 31, 2021 are as follows (Korean won in millions except for number of shares):

Classification	Date	Shares	Common stock	Capital surplus
Incorporation	Dec. 1, 2005	204,256,243	1,021,281	5,075,488
Stock dividends	Mar. 24, 2006	2,042,562	10,213	–
Shares swap (*1)	Oct. 13, 2006	5,552,788	27,764	215,427
Paid-in capital increase	Feb. 21, 2011	31,198,170	155,991	1,168,759
Shares swap (*2)	Apr. 5, 2013	46,844,299	234,221	1,511,856
Paid-in capital increase	Apr. 21, 2015	6,109,000	30,545	149,298
Paid-in capital increase	Mar. 9, 2018	4,239,000	21,195	178,688
Total		300,242,062	1,501,210	8,299,516

(*1) Represents transactions that the Group conducted to incorporate HFI (formerly, Hana IB) into its subsidiaries.

(*2) Represents transactions that the Group conducted to incorporate Hana bank into its wholly owned subsidiaries

33-3 Details of hybrid equity securities classified as equity attributable to equity holders of the parent company as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	Issuance date	Maturity	Interest rate (%)	Amount	
				December 31, 2021	December 31, 2020
The 1~2nd hybrid debentures (*2)	May 29, 2015	May. 29, 2045	4.445	190,000	190,000
The 2~2nd hybrid debentures (*2)	Nov 6, 2015	Nov. 6, 2045	4.612	20,000	–

Classification	Issuance date	Maturity	Interest rate (%)	Amount	
				December 31, 2021	December 31, 2020
The 3-1st hybrid debentures (*1)	Mar 9, 2018	–	4.225	192,000	20,000
The 3-2nd hybrid debentures (*2)	Mar 9, 2018	–	4.680	50,000	192,000
The 4 hybrid debentures (*1)	Nov 8, 2018	–	4.040	296,000	50,000
The 5 hybrid debentures (*1)	Apr 15, 2019	–	3.340	265,000	296,000
The 6-1st hybrid debentures (*1)	May 28, 2020	–	3.200	450,000	265,000
The 6-2nd hybrid debentures (*2)	May 28, 2020	–	3.500	50,000	450,000
The 7-1st hybrid debentures (*1)	Aug 28, 2020	–	3.200	410,000	50,000
The 7-2nd hybrid debentures (*2)	Aug 28, 2020	–	3.550	90,000	410,000
The 8st hybrid debentures (*1)	May 13, 2021	–	3.200	220,000	90,000
The 9-1st hybrid debentures (*1)	Sep 9, 2021	–	3.340	280,000	–
The 9-2nd hybrid debentures (*2)	Sep 9, 2021	–	3.770	120,000	–
Subtotal				2,633,000	2,013,000
Issuance cost				(6,541)	(5,073)
Total				2,626,459	2,007,927

(*1) 5 years after the hybrid equity securities are issued, these can be redeemed at any point before the maturity date with an approval of the governor of the Financial Supervisory Service.

(*2) 10 years after the hybrid equity securities are issued, these can be redeemed at any point before the maturity date with an approval of the governor of the Financial Supervisory Service.

33-4 Capital surplus as of December 31 2021 and 2020 consists of the followings (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Paid-in capital in excess of par value	8,299,516	8,299,516
Gain on disposal of treasury stock	76,372	76,372
Other capital surplus	2,200,699	2,204,057
Total	10,576,587	10,579,945

34. Capital adjustment

34-1 Details of capital adjustment as of December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Treasury stock	(299,996)	(299,996)
Stock option	2	-
Other capital adjustment	(15,612)	(15,034)
Total	(315,606)	(315,030)

34-2 Fluctuations of the Hana Financial Group stock and of subsidiary held by us during the current term as follows (Korean won in millions and number of shares in unit):

<2021>

Classification	January 1, 2021	Acquisition : Treasury stock	Disposal : Treasury stock	December 31, 2021
Number of shares	8,678,586	-	-	8,678,586
Amount	299,996	-	-	299,996

<2020>

Classification	January 1, 2020	Acquisition : Treasury stock	Disposal : Treasury stock	December 31, 2020
Number of shares	8,678,586	-	-	8,678,586
Amount	299,996	-	-	299,996

35. Accumulated other comprehensive income

Changes in accumulated other comprehensive income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	Gain (loss) on valuation of financial assets measured at FVOCI	Changes in equities of investments in associates	Gain (loss) on valuation of fair value hedges	Gain (loss) on valuation of net investment hedges of foreign operations	Gain (loss) on cash flow hedge	Credit risk fluctuation effect of financial liabilities designated at FVPL	Special account other comprehensive income	Gain (loss) on Exchange differences on translation of foreign operations	Remeasurement of the net defined benefit plan	Total
January 1, 2021	22,228	(344,273)	(83,317)	11,493	(1,840)	1,014	(618)	(37,531)	(569,109)	(1,001,953)
Changes in gain (loss) on valuation of financial assets measured at FVOCI	(441,417)	—	—	—	—	—	—	—	—	(441,417)
Reclassified from financial debt security measured at FVOCI to financial assets measured at FVPL	(92,994)	—	—	—	—	—	—	—	—	(92,994)
Reclassified from financial debt security measured at FVOCI to retained gain	(51,163)	—	—	—	—	—	—	—	—	(51,163)
Credit risk fluctuation of financial debt security measured at FVOCI	1,420	—	—	—	—	—	—	—	—	1,420
Changes in exchange differences on translation of foreign operations	—	292,617	—	—	—	—	—	—	—	292,617
Changes in unrealized gain on valuation of equity method investments	—	—	251,247	—	—	—	—	—	—	251,247
Changes in loss on valuation of net investment hedges of foreign operations	—	—	—	(56,259)	—	—	—	—	—	(56,259)
Changes in loss on cash flow hedge	—	—	—	—	2,612	—	—	—	—	2,612
Changes in loss on valuation of fair value hedges	—	—	—	—	—	(19,500)	—	—	—	(19,500)
Changes in special account other comprehensive income	—	—	—	—	—	—	(2,494)	—	—	(2,494)
Changes in credit risk fluctuation effect of financial liabilities designated at FVPL	—	—	—	—	—	—	—	(14,284)	—	(14,284)
Remeasurements of the net defined benefit liabilities (assets)	—	—	—	—	—	—	—	—	54,354	54,354
Tax effect	160,898	(18,472)	(68,589)	15,471	(713)	5,363	686	3,929	(14,986)	83,587
December 31, 2021	(401,028)	(70,128)	99,341	(29,295)	59	(13,123)	(2,426)	(47,886)	(529,741)	(994,227)

<2020>

Classification	Gain (loss) on valuation of financial assets measured at FVOCI	Changes in equities of investments in associates	Gain (loss) on valuation of fair value hedges	Gain (loss) on valuation of net investment hedges of foreign operations	Gain (loss) on cash flow hedge	Credit risk fluctuation effect of financial liabilities designated at FVTPL	Special account other comprehensive income	Gain (loss) on Exchange differences on translation of foreign operations	Remeasurement of the net defined benefit plan	Total
January 1, 2020	9,797	(217,584)	(46,249)	(15,053)	1,402	(9,107)	2	(32,095)	(544,659)	(853,546)
Changes in gain (loss) on valuation of financial assets measured at FVOCI	143,923	—	—	—	—	—	—	—	—	143,923
Reclassified from financial debt security measured at FVOCI to financial assets measured at FVPL	(118,351)	—	—	—	—	—	—	—	—	(118,351)
Reclassified from financial debt security measured at FVOCI to retained gain	(9,130)	—	—	—	—	—	—	—	—	(9,130)
Credit risk fluctuation of financial debt security measured at FVOCI	3,743	—	—	—	—	—	—	—	—	3,743
Changes in exchange differences on translation of foreign operations	—	(140,083)	—	—	—	—	—	—	—	(140,083)
Changes in unrealized gain on valuation of equity method investments	—	—	(53,227)	—	—	—	—	—	—	(53,227)
Changes in loss on valuation of net investment hedges of foreign operations	—	(142)	—	36,615	—	—	—	—	—	36,473
Changes in loss on cash flow hedge	—	—	—	—	(4,452)	—	—	—	—	(4,452)
Changes in loss on valuation of fair value hedges	—	—	—	—	—	13,960	—	—	—	13,960
Changes in special account other comprehensive income	—	—	—	—	—	—	(855)	—	—	(855)
Changes in credit risk fluctuation effect of financial liabilities designated at FVPL	—	—	—	—	—	—	—	(7,498)	—	(7,498)
Remeasurements of the net defined benefit liabilities (assets)	—	—	—	—	—	—	—	—	(33,908)	(33,908)
Tax effect	(7,754)	13,536	16,159	(10,069)	1,210	(3,839)	235	2,062	9,458	20,998
December 31, 2020	22,228	(344,273)	(83,317)	11,493	(1,840)	1,014	(618)	(37,531)	(569,109)	(1,001,953)

36. Retained earnings

36-1 Retained earnings as of December 31, 2021 and 2020 consist of the following (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Legal reserve (*)	813,400	781,200
compensation for damages	2,000	2,000
Voluntary reserve	3,653,230	3,653,670
Unappropriated retained earnings	16,355,582	13,504,714
Total	20,824,212	17,941,584

(*) In accordance with the Financial Holding Company Act, whenever dividends are paid, an amount equal to at least 10% of net income is required to be appropriated as a legal reserve until the reserve amount equals the aggregate par value of common stock. The legal reserve may not be utilized for cash dividends but may only be used to offset a deficit, if any, or be transferred to capital.

36-2 Changes in retained earnings for years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Beginning balance	17,941,584	15,965,055
Net income attributable to equity holders of the parent	3,526,068	2,637,242
Dividends	(597,705)	(612,284)
Dividends on hybrid equity securities	(80,083)	(54,598)
Reclassification of gain on valuation of FVOCI securities	37,096	6,412
Others	(2,748)	(243)
Ending balance	20,824,212	17,941,584

37. Regulatory reserve for bad debts

Regulatory reserve for bad debt is calculated and disclosed in accordance with Article 27, Section 1 and 2 of the Financial Holding Company Act.

37-1 Regulatory reserve for bad debt reserve as of December 31, 2021 and 2020 are as follows (Korean won in million):

Classification	December 31, 2021	December 31, 2020
Beginning balance	2,767,615	2,717,618
Additional planned reserve for bad debts	312,680	49,997
Ending balance	3,080,295	2,767,615
Attributable to equity holders of the parent	3,032,031	2,719,169
Attributable to non-controlling interests	48,264	48,446

37-2 Provisions for bad debt reserve and income adjusted for deductions of provisions for bad debt for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions and per share amounts in units):

Classification	2021	2020
Net income attributable to equity holders of the parent before deducting provisions for bad debt reserve	3,526,068	2,637,242
Provision of bad debt reserve	312,862	59,036
Adjusted income after deducting provisions for bad debt reserve	3,213,206	2,578,206
Basic earnings per share on adjustment (Korean won)	₩10,746	₩8,655
Diluted earnings per share on adjustment (Korean won)	₩10,746	₩8,655

38. Operating income and expenses

38-1 Total operating income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Interest income	10,867,491	10,705,196
Fee and commission income	2,653,186	2,596,945
Gains on financial instruments at FVPL	20,681,138	26,074,059
Gains on financial instruments designated at FVPL	367,518	644,351
Gains on financial instruments measured at FVOCl	113,978	367,604
Gains on disposal on securities measured at amortized cost	80,735	82,426
Gain on derivative instruments used for hedging	126,542	105,647
Gain on foreign currency transactions	5,197,457	6,458,759
Recovery of impairment loss on financial assets	2,530	1,234
Other operating income	1,587,197	1,179,797
Total	41,677,772	48,216,018

38-2 Total operating expense for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Interest expense	3,430,286	4,265,318
Fee and commission expense	911,469	1,062,762
Loss on financial instruments at FVTPL	19,824,144	25,478,128
Loss on financial instruments designated as measured at FVTPL	434,528	420,256
Loss on financial instruments measured at FVOCl	9,430	9,528
Loss on disposal on securities measured at amortized cost	3,905	12,258
Loss on derivative instruments used for hedging purpose	178,277	79,880
Loss on foreign currency transactions	5,159,135	6,172,038
Impairment loss on financial assets	535,748	872,173
General and administrative expense	4,050,460	3,917,656
Other operating expense	2,509,294	2,089,599
Total	37,046,676	44,379,596

39. Net interest income

39-1 Interest income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Interest income on due from banks	91,758	125,245
Interest income on financial assets measured atFVOCI	497,322	621,717
Interest income on financial assets measured atamortized cost	429,035	388,569
Interest income on loans receivable	9,478,602	9,168,582
Subtotal	10,496,717	10,304,113
Interest income on financial assets measured atFVTPL	305,319	341,856
Others	65,455	59,227
Total	10,867,491	10,705,196

39-2 Interest expense for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Interest expense on deposit liabilities	2,077,615	2,782,659
Interest expense on borrowings	216,650	274,374
Interest expense on debentures	942,719	983,085
Subtotal	3,236,984	4,040,118
Interest income on financial assets held-for-trading	127,027	103,219
Others	66,275	121,981
Total	3,430,286	4,265,318

40. Net fee and commission income

40-1 Fee and commission income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Fee and commission received from loans and others	1,653,450	1,692,599
Fee and commission received on credit card	680,608	599,159
Fee and commission received on guarantee	78,364	78,837
Fee and commission received from redemption before maturity	2,745	2,462
Fee and commission related foreign exchange	238,019	223,888
Total	2,653,186	2,596,945

40-2 Fee and commission expense for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Commission paid borrowings and others	457,240	593,554
Commission paid on credit card	417,064	429,650
Commission related foreign exchange	37,081	39,480
Commission paid trust	84	78
Total	911,469	1,062,762

41. Gain (loss) on financial instruments measured at FVTPL

Gain (loss) on financial instruments measured at FVTPL and held-for-trading for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Gain on financial instruments measured at FVTPL:		
Securities measured at FVTPL:		
Gain on valuation	345,917	544,258
Gain on disposal	317,933	346,145
Gain on redemption	6,691	17,591
Others	351,055	297,245
Subtotal	1,021,596	1,205,239
Loans measured at FVTPL:	25,777	23,419
Derivatives-linked securities	16,652	3,953
Derivatives held for trading:		
Gain on valuation of derivatives:		
Currency related derivatives	5,766,864	8,795,432
Interest related derivatives	517,650	544,399
Stock related derivatives	116,405	220,700
Credit related derivatives	26,910	57,731
Others related derivatives	91,018	66,549
Subtotal	6,518,847	9,684,811
Gain on transactions of derivatives:		
Currency related derivatives	8,271,115	11,198,299
Interest related derivatives	3,275,827	2,412,832
Stock related derivatives	1,052,100	1,109,571
Credit related derivatives	56,501	170,162
Others related derivatives	393,272	238,203
Subtotal	13,048,815	15,129,067
Gain on securities sold	34,751	14,241

Classification	2021	2020
Gain on other financial instruments measured at FVTPL	14,700	13,329
Total	20,681,138	26,074,059
Loss on financial instruments measured at FVTPL:		
Securities measured at FVTPL:		
Loss on valuation	451,072	168,697
Loss on disposal	295,190	285,566
Loss on redemption	22,869	8,420
Transaction cost	158	141
Subtotal	769,289	462,824
Loans measured at FVTPL:	10,860	7,937
Derivatives-linked securities	9,131	36,165
Derivatives held for trading:		
Loss on valuation of derivatives:		
Currency related derivatives	5,795,595	8,579,356
Interest related derivatives	763,471	493,092
Stock related derivatives	185,599	224,440
Credit related derivatives	47,228	77,923
Others related derivatives	79,967	88,091
Subtotal	6,871,860	9,462,902
Loss on transactions of derivatives:		
Currency related derivatives	7,926,967	11,225,942
Interest related derivatives	2,915,743	2,842,074
Stock related derivatives	900,568	1,070,139
Credit related derivatives	54,886	101,845
Others related derivatives	346,603	244,769
Subtotal	12,144,767	15,484,769
Loss on securities sold	18,237	23,531
Total	19,824,144	25,478,128
Net amount	856,994	595,931

42. Gain (loss) on financial instruments designated as measured at FVPL

Gain (loss) on financial assets and liabilities designated as measured at FVPL for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Gain on financial instruments designated as measured at FVTPL:		
Deposits:		
Gain on valuation	10,058	5,135
Gain on redemption	12	101
Borrowings:		
Gain on valuation	779	-
Gain on redemption	-	112
Derivatives linked securities sold:		
Gain on valuation	234,577	360,007
Gain on redemption	122,092	278,996
Total	367,518	644,351
Loss on financial instruments designated as measured at FVTPL:		
Deposits:		
Loss on valuation	-	12
Loss on redemption	412	3,228
Borrowings:		
Loss on valuation	320	-
Derivatives linked securities sold:		
Loss on valuation	101,675	164,334
Loss on redemption	332,121	252,682
Total	434,528	420,256
Net amount	(67,010)	224,095

43. Gain (loss) on financial assets measured at FVOCI

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

Classification	2021	2020
Gain on financial assets measured at FVOCI		
Gain on disposal	103,184	359,274
Dividend income	10,794	8,330
Total	113,978	367,604
Loss on financial assets measured at FVOCI		
Loss on disposal	9,430	9,501
Loss on redemption	–	27
Total	9,430	9,528
Net amount	104,548	358,076

44. Gains (losses) on disposal of financial assets measured at amortized cost

Gain(loss) on disposal of financial assets measured at amortized cost for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Gain on disposal of financial assets measured at amortized cost :		
Securities measured at amortized cost:		
Gain on disposal	20	-
Loans measured at amortized cost:		
Gain on disposal	80,715	82,426
Subtotal	80,735	82,426
Loss on disposal of financial assets measured at amortized cost :		
Loans measured at amortized cost:		
Loss on disposal	3,905	12,258
Net amount	76,830	70,168

45. Gains (losses) on derivative instruments used for hedging

Gain (loss) on derivative instruments used for hedging purpose for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Gain on derivative instruments used for hedging purposes:		
Hedged item:		
Gain on valuation of hedged item:		
Debentures	99,966	3,322
Deposits	16,558	473
Subtotal	116,524	3,795
Gain on disposal of hedged item:		
Debentures	4,012	866
Deposits	426	2,192
Subtotal	4,438	3,058
Derivative instruments used for hedging purposes:		
Gain on valuation of derivatives:		
Currency related derivatives	4,095	30,871
Interest related derivatives	18	60,929
Subtotal	4,113	91,800
Gain on settlement of derivatives:		
Currency related derivatives	1,459	726
Interest related derivatives	8	6,268
Subtotal	1,467	6,994
Total	126,542	105,647
Loss on derivative instruments used for hedging purposes:		
Hedged item:		
Loss on valuation of hedged item:		
Debentures	–	58,116
Deposits	–	5,662

Classification	2021	2020
Subtotal	—	63,778
Loss on disposal of hedged item:		
Debentures	887	869
Deposits	—	5,396
Subtotal	887	6,265
Derivative instruments used for hedging purposes:		
Loss on valuation of derivatives:		
Currency related derivatives	71,967	—
Interest related derivatives	99,231	2,088
Subtotal	171,198	2,088
Loss on settlement of derivatives:		
Currency related derivatives	2,428	5,526
Interest related derivatives	3,764	2,223
Subtotal	6,192	7,749
Total	178,277	79,880
Net amount	(51,735)	25,767

46. Impairment losses of financial instruments

Impairment loss on financial instruments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Provision(reversal) of credit loss on debt securities measured at FVOCI	(64)	3,589
Provision for loan losses on debt securities measured at amortized cost	10,286	7,341
Provision of allowances for possible loan losses for loans	525,462	861,243
Reversal of allowances for possible loan losses for other assets	(2,466)	(1,234)
Total	533,218	870,939

47. General and administrative expenses

General and administrative expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Salaries	2,268,294	1,935,492
Provision for severance and retirement benefits	194,745	201,712
Provision for severance (defined contributions)	6,726	4,725
Provision for severance (defined benefits)	188,019	196,987
Termination benefits	20,582	193,987
Employee benefits	115,882	112,331
Rental expenses(*)	66,822	75,304
Entertainment expenses	29,162	29,538
Depreciation on property and equipment	151,198	145,092
Depreciation on investment property	12,834	10,949
Amortization	168,648	186,489
Depreciation for right-of-use assets	215,000	228,683
Taxes and dues	145,956	154,689
Advertising expenses	156,634	148,140
Servicing expenses	221,574	228,396
Supplies expense	7,927	10,691
Others	275,202	256,163
Total	4,050,460	3,917,656

(*) It includes ₩2,515 million and ₩2,113 million of small lease expenses for the year ended December 31, 2021 and 2020.

48. Other operating income

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

Classification	2021	2020
Reversal of provisions for payment guarantees	1,720	12,738
Reversal of allowances for unused commitments	17,088	–
Reversal of allowance for restoration cost	–	219
Reversal of allowances for mileage points	1	119
Trust commissions	303,736	272,654
Insurance income	1,074,236	728,924
Non-controlling interest	23,615	22,813
Merchant banking accounts profit	46,395	54,644
Others	120,406	87,686
Total	1,587,197	1,179,797

49. Other operating expense

Other operating expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Provision of allowances for unused commitments	–	16,891
Provision of allowance for restoration cost	683	–
Provision of allowance for lawsuits	5,544	10,141
Provision of other allowance	12,000	3,693
Contribution to guarantee fund	241,764	207,911
Insurance fee on deposit	455,795	402,810
Contribution to housing credit guarantee fund	131,243	102,560
Insurance expense	823,350	847,821
Provision for (Reversal of) policy reserves	296,375	(83,867)
Non-controlling liability adjustment loss	68,960	134,892
Merchant banking accounts expense	20,853	20,535
Others	452,727	426,212
Total	2,509,294	2,089,599

50. Other non-operating income

Other non-operating income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Rental fee income	14,675	17,992
Gains of disposal of property, equipment and intangible assets	38,936	26,072
Gains of disposal of investment property	43,174	36,663
Gains on disposal of investment in associates	145,705	41,498
Reversal of impairment loss on investments in associates	14,170	55
Others	301,688	235,252
Total	558,348	357,532

51. Other non-operating expenses

Other non-operating expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Disposal of property, equipment and intangible assets	6,774	2,850
Disposal of investment property	4,608	7,097
Disposal of investment in associates	6,945	8,334
Contribution	85,029	87,153
Impairment loss on property, equipment and intangible assets	7,111	572
Impairment loss on stock of related parties	628	3,652
Commissions received on collection of special bond	7,781	7,285
Others	296,623	393,445
Total	415,499	510,388

52. Income taxes

52-1 The major components of income tax expense for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Tax burden		
Current income taxes	1,374,938	1,077,536
Additional refund of prior year's income tax	(7,156)	(27,004)
Changes of deferred income taxes due to the tax effect of temporary differences	(113,157)	(24,612)
Current and deferred income taxes recognized directly to equity	68,718	18,436
Income tax expense	1,323,343	1,044,356

52-2 Reconciliations of income tax expense applicable to income before income tax at the Korea statutory tax rate to income tax expense at the effective income tax rate of the Group for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	2021	2020
Income before income tax	4,904,925	3,729,234
Tax at domestic statutory income tax rate of 27.5%	1,273,037	961,744
Tax exempt income	(240,910)	(191,009)
Expenses not deductible for tax purposes	50,071	223,099
Tax deduction	(30,120)	(23,096)
Deduction of tax loss carryforwards	—	656
Income tax expense of foreign branches and subsidiaries	47,663	51,664
Tax effect of consolidated tax return	818	7,559
Additional refund of prior year's income tax	(7,156)	(28,957)
Effect of tax rates change	147	—
Non-recognition of deferred income tax assets and the effect of write off	(456)	
Others	230,249	42,696
Income tax expense	1,323,343	1,044,356
Effective income tax rate (%)	27.0	28.0

52-3 Temporary differences and deferred income tax assets (liabilities) as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Deductible (taxable) temporary differences	Deferred income tax assets (liabilities)
Loss on valuation of securities	238,329	65,459
Impairment loss on securities	75,291	19,454
Securities measured at FVOCI	498,990	137,002
Gain on valuation of investments in subsidiaries	(551,583)	(151,685)
Gain on valuation of derivatives	(397,233)	(109,279)
Deemed dividends	293,313	80,661
Deferred loan fees and expenses	(578,482)	(159,082)
Accrued income	(268,363)	(73,800)
Accrued expenses	276,610	74,047
Allowance for acceptance guarantees	31,300	8,608
Defined benefit obligation	2,237,548	610,680
Plan assets for severance benefit	(2,045,076)	(558,262)
Allowance for other losses	529,178	144,659
Bad debt expenses	745,180	204,009
Depreciation	17,208	4,709
Dormant deposits	25,284	6,953
Advanced depreciation provision	(180,315)	(49,587)
Deemed cost for property and equipment	(687,439)	(189,046)
Investment in kind	18,479	5,082
Financial acceptances and guarantees	4,127	1,135
Deferred point income	210,192	50,869
Fair value valuation resulting from merger	9,281	2,552
Fair value differences due to the business combination	(78,693)	(18,384)
Others	323,392	86,481
Tax loss carryforwards	76,869	17,095

Classification	Deductible (taxable) temporary differences	Deferred income tax assets (liabilities)
Total	823,387	210,330
Domestic deferred income tax assets		268,241
Domestic deferred income tax liabilities		(57,911)
Foreign deferred income tax assets		39,313
Foreign deferred income tax liabilities		(150,901)
Deferred income tax assets		98,742

<December 31, 2020>

Classification	Deductible (taxable) temporary differences	Deferred income tax assets (liabilities)
Loss on valuation of securities	340,960	93,572
Impairment loss on securities	75,703	19,554
Securities measured at FVOCI	(70,440)	(19,371)
Gain on valuation of investments in subsidiaries	(581,896)	(160,021)
Gain on valuation of derivatives	(705,494)	(194,180)
Deemed dividends	154,378	42,454
Deferred loan fees and expenses	(534,553)	(147,002)
Accrued income	(284,198)	(78,154)
Accrued expenses	260,701	70,378
Allowance for acceptance guarantees	85,669	23,559
Defined benefit obligation	2,021,203	555,923
Plan assets for severance benefit	(1,839,880)	(506,549)
Allowance for other losses	481,884	131,271
Bad debt expenses	733,659	199,512
Depreciation	10,568	2,827
Dormant deposits	21,356	5,873
Advanced depreciation provision	(180,315)	(49,587)
Deemed cost for property and equipment	(716,568)	(197,056)
Investment in kind	18,479	5,082

Classification	Deductible (taxable) temporary differences	Deferred income tax assets (liabilities)
Financial acceptances and guarantees	3,377	929
Deferred point income	214,612	51,940
Fair value valuation resulting from merger	11,750	3,231
Fair value differences due to the business combination	(98,963)	(23,986)
Others	579,184	158,483
Tax loss carryforwards	96,245	21,369
Total	97,421	10,051
Domestic deferred income tax assets		134,272
Domestic deferred income tax liabilities		(124,221)
Foreign deferred income tax assets (*)		32,346
Foreign deferred income tax liabilities (*)		(56,812)
Deferred income tax assets		(14,415)

(*) Deferred income tax assets of foreign branches are not offset against the deferred income tax liabilities due to differences in tax jurisdictions.

The effective income tax rate of 27.5% is applied when calculating deferred income tax assets or liabilities that will be realized. Also, deferred income tax assets are recognized when it is foreseeable that future taxable income will be incurred and that future tax credits will be realized

52-4 The unrealizable temporary differences on investments in associates as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Deductible temporary differences	368,746	366,338
Taxable temporary differences	(372,328)	(371,456)
Total	(3,582)	(5,118)

52-5 Details of deferred income taxes charged (credited) directly to equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

<December 31, 2021>

Classification	Before tax amounts	Deferred income tax assets (liabilities)
Gain (loss) on valuation of financial assets measured at FVOCI	57,156	(15,526)
Changes in valuation of equity method investments	86,280	(24,039)
Gain(loss) on fair value hedge	—	(1)
Profit or loss on hedge valuation of net investment in overseas operations	—	—
Gain (loss) on valuation of cash flow hedges	(2,175)	526
Changes in credit risk of financial liabilities designated as measured at FVTPL	14,284	(3,928)
Exchange differences on translation of foreign operations	(9,488)	2,609
Revaluation surplus	3,502	(963)
Remeasurements of the net defined benefit liability (asset)	(22,413)	5,380
Others	(462)	90
Total	126,684	(35,852)

<December 31, 2020>

Classification	Before tax amounts	Deferred income tax assets (liabilities)
Gain (loss) on valuation of financial assets measured at FVOCI	460,237	(126,324)
Changes in valuation of equity method investments	(138,795)	37,870
Gain/(loss) on fair value hedge	–	(1)
Profit or loss on hedge valuation of net investment in overseas operations	39	(5)
Gain (loss) on valuation of cash flow hedges	(5,123)	1,240
Changes in credit risk of financial liabilities designated as measured at FVTPL	(7,498)	2,062
Exchange differences on translation of foreign operations	(76,530)	20,946
Remeasurements of the net defined benefit liability (asset)	(26,481)	6,543
Others	(6,292)	1,692
Total	199,557	(55,977)

53. Dividends

53-1 Details of the Group's dividend including interim dividend for the years ended December 31, 2021 and 2020 are as follows (Korean won):

<2021>

Type of dividend	Number of shares	Dividend per share	Share ratio (%)	Dividends (Korea won in millions)
Cash dividend (interim)	291,563,476	700	14.0	204,094
Cash dividend (annual)	291,563,476	2,400	48.0	699,752
Total				903,846

<2020>

Type of dividend	Number of shares	Dividend per share	Share ratio (%)	Dividends (Korea won in millions)
Cash dividend (interim)	291,563,476	500	10.0	145,782
Cash dividend (annual)	291,563,476	1,350	27.0	393,611
Total				539,393

53-2 Details of the Group's dividend pay-out ration and dividend yield (Including interim dividends) for the years ended December 31, 2021 and 2020 are as follows (%):

Classification	Formula	2021	2020
Dividend pay-out ratio	Cash dividend amount/Net income	25.60	20.50
Dividend yield	Cash dividend per share/stock prices(closing price of the settlement date)	7.40	5.40

53-3 Details of dividends on hybrid equity securities for the years ended December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

Classification	2021	2020
Average balance of hybrid equity securities	2,278,370	1,125,552
Weighted-average interest rate	3.60%	3.88%
Total dividends	80,083	54,598

54. Earning per share

54-1 Weighted-average numbers of common shares for the years ended December 31, 2021 and 2020 are calculated as follows (shares in units):

Classification	2021	2020
Beginning	291,563,476	291,563,476
Acquisition of treasury shares	–	–
Weighted-average number of shares of common stocks outstanding	291,563,476	291,563,476

54-2 The Group's basic earnings per share for the years ended December 31, 2021 and 2020 are calculated as follows (Korean won in millions and per share amounts in units):

Classification	2021	2020
Net income attributable to equity holders of the parent	3,526,068	2,637,242
Dividends on hybrid equity securities	(80,083)	(54,598)
Net income attributable to common stock	3,445,985	2,582,644
Weighted-average number of shares of common stocks outstanding	291,563,476	291,563,476
Basic earnings per share (Korean won in units)	11,819	8,858

54-3 Weighted-average numbers of common shares adjusted for the effect of dilution for the years ended December 31, 2021 and 2020 are calculated as follows (shares in units):

Classification	2021	2020
Weighted-average number of common shares of outstanding for basic earnings per share	291,563,476	291,563,476
Dilution effect due to:		
Stock grants	–	–
Weighted-average number of common shares (diluted)	291,563,476	291,563,476

54-4 The Group's diluted earnings per share for the years ended December 31, 2021 and 2020 are computed as follows (Korean won in millions and number of shares in units):

Classification	2021	2020
Net income attributable to common stock holders	3,445,985	2,582,644
Weighted-average number of shares of common stocks outstanding (Diluted)	291,563,476	291,563,476
Diluted earnings per share (Korean won in units)	11,819	8,858

55. Share-based payment transactions

The Group has granted employees and directors of HFG and its subsidiaries the share options, which may be settled by the issuance of additional shares or by cash payment equal to the difference between the market value and exercise price.

55-1 Stock options

As of the end of the current term, there are no exercisable stock options granted to executives and employees.

55-2 Performance-based stock grants

55-2-1 The details of performance-based stock grants as of December 31, 2021 are summarized as follows (number of shares in units):

Classification	Grant date	Settlement method	Exercisable period (appraisal period)	Payment date	Estimated vested shares as of December 31, 2021
Grant in 2018(*1)	2018. 1. 1	Cash settlement	2018. 1. 1 ~ 2020. 12. 31	2020. 12. 31	355,093
Grant in 2019(*1)	2019. 1. 1	Cash settlement	2019. 1. 1 ~ 2021. 12. 31	2021. 12. 31	493,325
Grant in 2020(*1)	2020. 1. 1	Cash settlement	2020. 1. 1 ~ 2022. 12. 31	2022. 12. 31	382,720
Grant in 2021(*1)	2021. 1. 1	Cash settlement	2021. 1. 1 ~ 2023. 12. 31	2023. 12. 31	154,768

(*1) The maximum number of shares to be compensated is pre-determined before the grant date, and vested shares are determined by performance measures. Performance is evaluated as 40% of group performance (relative shareholder return), 55% of group performance (subsidiary ROE and net profit target achievement rate) and 5% of soundness evaluation.

55-2-2 The performance-based stock grant liabilities in accounts payable are in the amount ₩57,088 million and ₩49,748 million as of December 31, 2021 and 2020, respectively. The Group uses the cash settlement method in connection with the performance-based stock grant liabilities based on past practice, and compensation costs are recorded by re-measuring fair value of liabilities at the end of every vesting year.

55-2-3 Compensation costs for performance-linked stock compensation for the year ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	HFG	Subsidiary	Total
Compensation cost	5,130	23,582	28,712

<2020>

Classification	HFG	Subsidiary	Total
Compensation cost	2,555	14,688	17,243

55-3 Stock option

55-3-1 The details of stock option grants as of December 31, 2021 are summarized as follows:

Classification	Details
Granted by	GLN International Co., Ltd.
Grant shares	GLN International Co., Ltd.'s common stock.
Grant type	Issuance of new shares
Grant date	2021.11.04
Number of shares granted	400,000 shares
Available period	2024.11.04~2029.11.03
Price per shares	₩500
Evaluation model	LSMC(Least-Squares Monte Carlo) simulation.
Risk-free interest rate	Interest rate on treasury bonds
Stock price volatility	15.48%
Interest rate volatility	Volatility by period applied to the Hull and White interest rate model.
Fair value per share	₩109.03

55-3-2 The compensation costs related to the stock option for the years ended December 31, 2021 are ₩2 million and there is no stock option available for exercise as of December 31, 2021

56. Cash flow information

56-1 Cash and cash equivalents on hand as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020
Cash	2,031,147	2,198,981
Due from banks in Korean won	15,926,712	13,016,032
Due from banks in foreign currencies	13,448,737	12,314,802
Total	31,406,596	27,529,815
Restricted balances	24,367,225	19,270,280
Due from banks with original maturities exceeding three months from the date of acquisition	889,823	902,294
Total	25,257,048	20,172,574
Cash and cash equivalents	6,149,548	7,357,241

56-2 Significant non-cash transactions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Description	2021	2020
Changes in gain on valuation of financial assets measured at FVOCI, net	(584,154)	20,185
Debt-to-equity swap	–	3,811
Replacement from loan, etc. to non-current assets held for sale	10,489	39,094
Replacement from current assets to investment properties	97,636	76,633
Replacement from properties to prepaid assets	16,442	13,686
Changes in right-of-use assets	20,763	156,587
Changes in lease liability	205,493	81,484
Gain(loss) on conversion of overseas operations	208,262	153,753

56-3 Changes in liabilities arising from financing activities for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

<2021>

Classification	January 1, 2021	Cash flows	Foreign exchange movement	Changes in fair val ues	Other	December 31, 2021
Borrowings	26,494,316	2,827,521	939,761	–	–	30,261,598
Debentures	48,761,838	4,015,613	392,646	(24,207)	1,330,271	54,476,161
Lease liability	416,477	(224,509)	–	–	205,426	397,394
Total	75,672,631	6,618,625	1,332,407	(24,207)	1,535,697	85,135,153

<2020>

Classification	January 1, 2020	Cash flows	Foreign exchange movement	Changes in fair val ues	Other	December 31, 2020
Borrowings	20,699,402	5,339,390	313,581	–	141,943	26,494,316
Debentures	43,661,177	3,295,576	441,327	4,219	1,359,539	48,761,838
Lease liability	583,007	(249,866)	–	–	83,336	416,477
Total	64,943,586	8,385,100	754,908	4,219	1,584,818	75,672,631

56-4 The Group has changed the cash flows arising from the receipt and payment of interest and dividends, to be directly recorded in the consolidated statement of cash flows for the years ended December 31, 2021 and 2020

57. Related party transactions

57-1 Details of significant transactions with related parties for the years ended December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

<2021>

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and commission expenses	Other expenses
Bank of Jilin	Associate	62	3	1	—	—	—	2
CM International Financing Leases	Associate	2,282	—	—	7,590	—	—	—
Beijing Langa Asset Management Co., Ltd.	Associate	629	537	20	(50)	8	—	—
PT. SINARMAS Hana Finance	Joint venture	1,427	64	220	89	—	—	—
BSK-6 Patent Technology Investment Association	Associate	—	—	—	—	—	—	—
MIDAN City Development Co., Ltd.	Associate	—	—	—	—	—	—	—
Company KStartup Winwin fund	Associate	—	—	—	—	1	—	—
Somesevit Co., Ltd.	Associate	—	—	—	—	—	—	—
Korea Credit Bureau	Associate	—	48	—	—	13	4,081	—
KEB Hana-KMC Unicorn Fund of Funds	Associate	—	—	—	—	27	—	—
Templeton Hana Asset Management Co., Ltd.	Associate	—	3,092	5	—	127	—	—
Bank for Investment and Development of Vietnam (BIDV)	Associate	307	—	—	(105)	500	—	—
Harvest Private Equity Fund Specializing in Start-up and Venture Business I	Associate	—	—	—	—	—	—	—
All Together Korea Fund5	Associate	—	—	—	—	—	—	—
Toss Bank Co., Ltd. (formerly Toss INNOVATION CO., LTD)	Associate	12	2,049	—	—	330	—	—
Shinjin International Corporation	Associate	—	—	—	92	—	—	—
Inhee	Associate	—	2	—	—	—	—	—
KG fashion	Associate	—	—	—	—	—	—	—
Sinsa Station Complex Development PFV Co., Ltd.	Associate	497	1,041	—	713	—	—	—
Taurus Cloud Fund	Associate	—	—	—	—	—	—	—
NPX-Welcome Metaverse Contents fund	Associate	—	—	—	—	—	—	—
Cheongna Medipolis PFV Co., Ltd.	Associate	—	—	—	—	—	—	—
Finqq Co., Ltd.	Joint venture	—	437	80	7	19	1,094	140
Mirae Credit Information Services Corp.	Associate	18	10	19	(1)	18	9,979	—
Apollo Private Equity Fund	Associate	—	—	—	—	—	—	—
Heat Private Equity Fund	Associate	—	—	—	—	—	—	—
Lakebridge The Growth Capital PEF1	Associate	—	—	—	—	—	—	—
Hana-Capstone AI Platform Fund	Associate	—	—	—	—	8	—	—
Business Investment Fund KOCREF REIT 30	Associate	2,141	—	—	(20)	727	—	17,215
Gunsan BIO Energy Co., Ltd.	Associate	—	—	—	—	1	—	—

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and com mission expenses	Other expenses
GMHB Co., Ltd.	Associate	2,583	—	30	(158)	1	—	—
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associate	—	—	1	—	6	—	—
Hana Power Infra 1st Private Equity Fund	Associate	—	2,372	—	—	—	—	—
Hana UBS Asset Management	Associate	—	2,967	15	—	148	—	—
Axis Bio Fund	Associate	—	—	—	—	—	—	—
DA Value-up Fund No. 2	Associate	—	—	—	—	—	—	—
Smartscore Co., Ltd.	Associate	70	13	19	—	—	—	—
2018 Hana-Magna Startup Fund	Associate	—	388	—	—	—	—	—
Gwacheon Jisan Octa PFV., Ltd.	Associate	—	—	—	—	—	—	—
DangsandongPFV Co., Ltd.	Associate	—	95	—	—	—	—	—
World HansSang Dream Island	Associate	181	403	—	6	—	—	—
Dream Island Leisure	Associate	—	300	—	—	—	—	—
EBEST Hitech Fund No.1	Associate	—	—	—	—	—	—	—
UBI-HBIC New Technology Investment Partnership II	Associate	—	—	—	—	—	—	—
UNION Proptech Fund I	Associate	—	—	—	—	—	—	—
Daegu MBC development PFV Co. Ltd.	Associate	940	20,118	—	1,124	—	—	—
Genesis Environment No.1 Private Equity Fund	Associate	—	—	—	—	—	—	—
YH Leisure Development Co., Ltd.	Associate	3,994	55	—	(31)	3	—	—
Changjo Innovation CO., Ltd.	Associate	959	2,676	—	—	—	—	—
SMKCENTER PFV Co., Ltd.	Associate	—	—	—	—	—	—	—
Hana Bio New Technology Fund No.1	Associate	—	21	—	—	—	—	—
Dowon Asset development Co., Ltd.	Associate	353	734	—	4	1	—	—
HORIZON PRIVATE EQUITY FUND	Associate	—	2,640	—	—	—	—	—
Curious Solution N0.1 Corporate Recovery Private Equity Fund	Associate	—	—	—	—	—	—	—
MERITZ-KCLAMS Fund No.1	Associate	—	—	—	—	—	—	—
Hana Must Seven Special Purpose Acquisition Company	Associate	—	150	—	—	1	—	—
Hana Financial Fourteen Special Purpose Acquisition Company	Associate	—	—	—	—	1	—	—
Hana Financial Fifteenth Special Purpose Acquisition Company	Associate	—	—	—	—	2	—	—
Hana Financial Sixteenth Special Purpose Acquisition Company	Associate	—	—	—	—	1	—	—
Hana Financial Seventeen Special Purpose Acquisition Company	Associate	—	180	821	—	3	—	—
Synergy-Incus Venture Business Fund No.1	Associate	—	—	—	—	—	—	—
DGH New Technology Investment Association N o. 1	Associate	—	—	—	—	—	—	—
Hana Ever Best Corporation Financial Stability Private Investment Co., Ltd.	Associate	—	462	—	—	—	—	—
Hana Bio New Technology Fund No.2	Associate	—	27	—	—	—	—	—
Hana Bio New Technology Fund No.3	Associate	—	19	—	—	—	—	—
Genesis Environment N0.3 Private Equity Fund	Associate	—	—	—	—	—	—	—

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and com mission expenses	Other expenses
Forest of Suseong	Associate	604	1,485	—	—	—	—	—
BM Ventures Fund No.1	Associate	—	—	—	—	—	—	—
MC Southeast Asia Fund No.1	Associate	—	—	—	—	—	—	—
Hana Hoechang Private Equity Fund No.1	Associate	—	—	—	—	—	—	—
Hana Financial Nineteenth Special Purpose Acqui sition Company	Associate	—	165	—	—	9	—	—
Hana Bio New Technology Fund No.1~1	Associate	—	15	—	—	—	—	—
Smart Hana-K& Green New Deal No.1 Fund	Associate	—	40	—	—	—	—	—
Hana Smart Logistics New Technology Fund	Associate	—	36	—	—	—	—	—
Cornerstone Mutual Growth VI Fund	Associate	—	—	—	—	—	—	—
People Korea Two	Associate	457	7,681	—	182	1	—	—
Hana Financial Twentieth Special Purpose Acqui sition Company	Associate	—	150	—	—	—	—	—
C47 Investment-Contents Wavve Original Conte nts I Startup and Venture Private Equity Fund	Associate	—	—	—	—	—	—	—
New Deal Extension New Technology Fund No.1	Associate	—	172	—	—	—	—	—
GFI ESG the 1st Private Equity Fund	Associate	—	—	—	—	—	—	—
Imgok Rental Housing CO., Ltd.	Associate	539	299	—	39	—	—	—
Daeyoung Networks Co., Ltd.	Associate	—	4,410	—	—	—	—	—
Haba Finacial Twenty-One Special Purpose Acq uisition Company	Associate	—	—	—	—	—	—	—
S&S-Redwood India Agri-tech Fund	Associate	—	—	—	—	—	—	—
KCLAMS AIM Artificial Intelligence Fund No.1	Associate	—	—	—	—	—	—	—
K& Secondary No5 Fund	Associate	—	—	—	—	—	—	—
Genesis Environment Energy No.6 Private Equity Fund	Associate	—	—	—	—	—	—	—
Hana-Magna Growth Booster Fund	Associate	—	122	—	—	—	—	—
Odin 2 LLC	Associate	14,648	—	—	—	—	—	—
Hana Capital-Capstone Venture Fund III	Associate	—	—	—	—	—	—	—
Hana-KDBC, Capstone Venture Fund	Associate	—	—	—	—	—	—	—
KCLAMS-Meta Fund No.2	Associate	—	—	—	—	—	—	—
2019 Capstone Venture Fund	Associate	—	—	—	—	—	—	—
KAMCO Daegu Complex Development Fund	Associate	—	—	—	—	—	—	—
Hana Qualified Investor Private Real Estate Inve stment Trust No.41~2	Associate	—	7	—	—	—	—	—
Hana Alternative Special Investment Private Trust No.161	Associate	—	1,039	—	—	—	—	—
A&D credit information Co.,Ltd.	Associate	—	—	—	—	—	4	—
Hyoje PFC CO., LTD	Associate	—	240	—	—	—	—	—
F&U Credit Information	Associate	—	708	—	—	4	13,158	85
Hana Ventures No.1 Investment Fund	Associate	—	33	—	—	—	—	—
Hana Digital Transformation Fund	Associate	—	1,842	—	—	—	—	—
HS INVESTMENTS EU11 L.P.	Associate	—	—	—	—	—	—	—
Hana Ventures No.5 Investment Fund	Associate	—	90	—	—	1	—	—
Hana Innovation Venture Scale-up Fund	Associate	—	1,365	—	—	12	—	—

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and commission expenses	Other expenses
Digital Innovation Growth Fund	Associate	—	141	—	—	—	—	—
Hana History No1 Investment Fund	Associate	—	51	—	—	—	—	—
Gyeonggi Hana Turn around Fund No.2	Associate	—	264	—	—	—	—	—
Hana Uhtact Digital Innovation Fund	Associate	—	289	—	—	—	—	—
Hana Financial Strategic the 1st Private Equity Fund (*)	Associate	—	91	—	—	—	—	—
KORAMCO 73 Professional Investment Type Private Real Estate Investment (*)	Associate	—	—	—	—	—	—	—
KORAMCO 87 Professional Investment Type Private Real Estate Investment (*)	Associate	—	—	—	—	—	—	—
Our Crowd International Invest III (*)	Associate	—	—	137	—	—	—	27
Kwoom Securities – Friend 1 New Technology Business Investment Fund (*)	Associate	—	—	—	—	—	—	—
NPTK Emerging Asia Fund1 PEF (*)	Associate	—	—	—	—	—	—	—
Petra 6th Alpa Private Equity Fund (*)	Associate	—	—	—	—	—	—	—
Hana Must Sixth Special Purpose Acquisition Company (*)	Associate	—	—	—	—	1	—	—
K1 No. 13 Entrustment Management Real Estate Investment Company (*)	Associate	—	825	—	—	—	—	—
Gwangju Nurun Mirae Asset PFV Co., LTD. (*)	Associate	—	—	—	—	—	—	—
Genesis Environment Nb.4 Private Equity Fund (*)	Associate	—	—	—	—	—	—	—
Myoungshin Co., Ltd. (*)	Associate	44	—	—	—	—	—	—
Fresheasy Co., Ltd. (*)	Associate	378	17	—	—	41	—	—
CM International Financing Leases	Subsidiary of an associate	—	—	—	—	—	—	—
Alan (Hong Kong) Investment Management Limited	Subsidiary of a n associate	—	—	—	—	—	—	—
Hana Power Package LC	Subsidiary of an associate	528	60	—	(104)	17	—	—
MCKAYSON Co., Ltd.	Subsidiary of an associate	—	—	—	—	—	—	—
SIMWON DEVELOPMENT CO., LTD. (*)	Subsidiary of an associate	8	—	—	(9)	—	—	—
Shenzhen Zhijiguangdao Investment Co., Ltd.	Other related parties	—	—	—	—	—	—	—
Key management personnel		294	68	114	(2)	89	6	—
Total		33,955	62,608	1,482	9,366	2,121	28,322	17,469

(*) It is excluded from the related party for the year ended December 31, 2021.

<2020>

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and com mission expenses	Other expenses
Bank of Jilin	Associate	72	1	5	—	—	—	4
CM International Financing Leases	Associate	8,048	—	—	(14,785)	—	—	—
Beijing Langa Asset Management Co., Ltd.	Associate	1,412	243	85	4	37	—	40
PT. SINARMAS Hana Finance	Joint venture	2,023	1	340	2	97	—	5
BSK-6 Patent Technology Investment Association	Associate	—	—	—	—	—	—	—
MIDAN City Development Co., Ltd.	Associate	—	—	—	—	—	—	—
Company KStartup Winwin fund	Associate	—	—	—	—	—	—	—
Somesevit Co., Ltd.	Associate	—	—	—	—	—	—	—
Korea Credit Bureau	Associate	—	59	—	—	17	3,413	2
KORAMCO 73 Professional Investment Type Private Real Estate Investment	Associate	—	—	—	—	—	—	—
KEB Hana-KMC Unicorn Fund of Funds	Associate	—	—	—	—	5	—	—
KORAMCO 87 Professional Investment Type Private Real Estate Investment	Associate	—	—	—	—	—	—	—
Our Crowd International Invest III	Associate	—	—	319	—	—	—	—
Templeton Hana Asset Management Co., Ltd. (Previously, Darby Hana Infrastructure Fund Management)	Associate	—	7	1	—	254	—	—
Bank for Investment and Development of Vietnam	Associate	530	—	—	—	826	—	—
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	Associate	—	—	—	—	—	—	—
All Together Korea Fund5	Associate	—	—	—	—	—	—	—
TOSS INNOVATION CO., LTD.	Associate	—	—	—	—	—	—	—
Finqq Co., Ltd.	Joint venture	—	892	60	(4)	16	3	21
Mirae Credit Information Services Corp.	Associate	68	16	141	(1)	14	7,815	34
Apollon Private Equity Fund	Associate	—	—	—	—	—	—	—
Heat Private Equity Fund	Associate	—	—	—	—	—	—	—
Lakebridge The Growth Capital PEF1	Associate	—	—	—	—	—	—	—
Kwoom Securities – Friend 1 New Technology Business Investment Fund	Associate	—	—	—	—	—	—	—
KOREF REIT 30	Associate	75	10,591	—	—	107	—	14,992
Gunsan BIO Energy Co., Ltd.	Associate	—	—	—	—	2	—	—
GMHB Co., Ltd.	Associate	2,667	326	33	7	1	—	—
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associate	—	—	—	—	26	—	—
Hana Power Infra 1st Private Equity Fund	Associate	—	2,372	—	—	—	—	—
Hana UBS Asset Management	Associate	—	2,546	38	—	104	—	—
Axis Bio Fund	Associate	—	—	—	—	—	—	—
DA Value-up Fund No. 2	Associate	—	—	—	—	—	—	—
Smartscore Co., Ltd.	Associate	64	4	8	—	—	2	—
2018 Hana– Magna Startup Fund	Associate	—	398	—	—	—	—	—
Petra 6th Alpa Private Equity Fund	Associate	—	—	—	—	—	—	—

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and com mission expenses	Other expenses
Gwacheon Jisan Octa PFV., Ltd.	Associate	-	4,082	-	-	-	-	-
Hana Financial Strategic the 1st Private Equity Fund	Associate	-	277	-	-	-	-	-
DangsandongPFV Co., Ltd.	Associate	-	877	-	-	-	-	-
Fresheasy Co., Ltd.	Associate	510	85	-	(94)	3	-	-
World HansSang Dream Island	Associate	43	526	-	(5)	-	-	-
Dream Island Leisure	Associate	-	-	-	-	-	-	-
EBEST Hitech Fund No.1	Associate	-	-	-	-	-	-	-
UBI-HBIC New Technology Investment Partnership II	Associate	-	-	-	-	-	-	-
UNION Proptech Fund I	Associate	-	-	-	-	-	-	-
Daegu MBC development PPV Co. Ltd.	Associate	-	37	-	-	-	-	-
NPTK Emerging Asia Fund1 PEF	Associate	-	-	-	-	-	-	-
Genesis Environment No.1 Private Equity Fund	Associate	-	-	-	-	-	-	-
YH Leisure Development Co., Ltd.	Associate	1,725	1,219	-	363	1	-	-
Changjo Innovation OO., Ltd.	Associate	1,205	9,012	-	-	-	-	-
SMKCENTER PFV Co., Ltd.	Associate	-	-	-	-	-	-	-
Hana Bio New Technology Fund No.1	Associate	-	8	-	-	-	-	-
Down Asset development Co., Ltd.	Associate	-	26,751	-	-	-	-	-
HORIZON PRIVATE EQUITY FUND	Associate	-	2,765	-	-	-	-	-
Curious Solution N0.1 Corporate Recovery Private Equity Fund	Associate	-	-	-	-	-	-	-
MERITZ-KCLAMS Fund No.1	Associate	-	-	-	-	-	-	-
Hana Must Seven Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-
Hana Must Sixth Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-
Hana Financial Fourteen Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-
Hana Financial Fifteenth Special Purpose Acquisition Company	Associate	-	150	-	-	-	-	-
Hana Financial Sixteenth Special Purpose Acquisition Company	Associate	-	150	-	-	-	-	-
Hana Financial Seventeen Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-
Odin 2 LLC	Associate	-	-	-	-	-	-	-
Myoungshin Co., Ltd.	Associate	232	-	-	-	-	-	-
Hana Qualified Investor Private Real Estate Investment Trust No.41-2	Associate	-	7	-	-	-	-	-
A&D credit information Co.,Ltd.	Associate	-	-	-	-	-	6	-
Hyoje PFC CO., LTD	Associate	-	1,060	-	-	-	-	-
F&U Credit Information	Associate	-	764	-	(1)	6	18,444	5
Hana Ventures No.1 Investment Fund	Associate	-	33	-	-	-	-	-
Hana Digital Transformation Fund	Associate	-	2,000	-	-	-	-	-
HS INVESTMENTS EU11 L.P.	Associate	-	-	-	-	-	-	-
Hana Ventures No.5 Investment Fund	Associate	-	25	18	-	1	-	-

Related party	Type	Income			Provisions (reversals) of allowance for possible loan losses	Expenses		
		Interest income	Fee and commission income	Other income		Interest expenses	Fee and com mission expenses	Other expenses
Hana Innovation Venture Scale-up Fund	Associate	—	331	—	—	5	—	—
Synergy-Incus Venture Business Fund No.1	Associate	—	—	—	—	—	—	—
Fidelis-2 private equity joint venture (*)	Associate	—	—	—	—	—	—	—
Sprott Global Renewable Private Equity Fund II (*)	Associate	—	—	—	—	—	—	—
Dowon development Co., Ltd. (*)	Associate	295	4,853	—	(64)	—	—	—
Hana Lantern Energy Factory PEF (*)	Associate	—	431	—	—	—	—	—
2010 KF-Tube IT Professional Investment Partnership (*)	Associate	—	—	—	—	—	—	91
Genesis Environment No.2 Private Equity Fund (*)	Associate	—	—	—	—	—	—	—
Hana Cybernaut International Limited (*)	Associate	—	—	—	—	—	—	—
OM International Financing Leases	Subsidiary of an associate	—	—	—	—	—	—	—
Alan (Hong Kong) Investment Management Limited	Subsidiary of an associate	—	—	—	—	—	6	—
Hana Power Package LC	Subsidiary of an associate	565	60	—	(98)	11	—	—
SIMMWIN DEVELOPMENT CO., LTD.	Subsidiary of an associate	24	—	—	9	—	—	—
Wellfood Co., Ltd.	Subsidiary of an associate	—	—	—	—	—	—	—
MCKAYSON Co., Ltd.	Subsidiary of an associate	—	—	—	—	—	—	—
Eco 1st SPC LLC (*)	Subsidiary of an associate	—	—	—	—	—	—	—
Key management personnel	Subsidiary of an associate	28	106	124	1	11	8	—
Total		19,586	73,065	1,172	(14,666)	1,544	29,697	15,194

(*) It is excluded from the related party for the year ended December 31, 2020.

57-2 Outstanding balances with related parties arising from the below significant transactions as of December 31, 2021 and 2020 are summarized as follows
(Korean won in millions):

<December 31, 2021>

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrowings	Other payables
Bank of Jilin	Associate	6,300	11,573	—	3,492	—	—
CM International Financing Leases	Associate	63,341	—	35,184	18	—	—
Beijing Langa Asset Management Co., Ltd.	Associate	11,161	—	21	3	—	—
PT. SINARMAS Hana Finance	Joint venture	32,491	33	163	12	—	—
BSK-6 Patent Technology Investment Association	Associate	—	—	—	—	—	—
MIDAN City Development Co., Ltd.	Associate	—	—	—	2	—	—
Company KStartup Winwin fund	Associate	—	—	—	300	—	—
Somesevit Co., Ltd.	Associate	—	—	—	—	—	—
Korea Credit Bureau	Associate	55	—	—	141	—	217
KEB Hana-KMC Unicorn Fund of Funds	Associate	—	—	—	3,779	—	—
Templeton Hana Asset Management Co., Ltd.	Associate	—	—	—	11,694	—	—
Bank for Investment and Development of Vietnam (BIDV)	Associate	11,855	3,851	39	1,653	80,755	—
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	Associate	—	—	—	—	—	—
All Together Korea Fund5	Associate	—	—	—	—	—	—
Toss Bank Co., Ltd. (formerly Toss INNOVATION CO., LTD)	Associate	138	10,682	—	—	—	514
Shinjin International Corporation	Associate	1,444	1	107	—	—	—
Inhee	Associate	—	—	—	2	—	—
KG fashion	Associate	—	—	—	—	—	—
Sinsa Station Complex Development PFV Co., Ltd.	Associate	99,000	—	713	92	—	—
Taurus Cloud Fund	Associate	—	—	—	—	—	—
NPX-Welcome Metaverse Contents fund	Associate	—	—	—	—	—	—
Cheongna Medipolis PFV Co., Ltd.	Associate	—	—	—	—	—	—
Finq Co., Ltd.	Joint venture	88	13	12	15,289	—	47
Mirae Credit Information Services Corp.	Associate	253	246	—	4,631	—	100
Apollon Private Equity Fund	Associate	—	—	—	—	—	—
Heat Private Equity Fund	Associate	—	—	—	1	—	8
Lakebridge The Growth Capital PEF1	Associate	—	—	—	277	—	—
Hana-Capstone AI Platform Fund	Associate	—	—	—	2,129	—	48
Business Investment Fund KOOREF REIT 30	Associate	40,000	48,434	139	—	—	35,836
Gunsan BIO Energy Co., Ltd.	Associate	2	2,617	2,617	555	—	—
GMIB Co., Ltd.	Associate	52,500	—	336	100	—	169
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associate	—	—	—	777	—	—
Hana Power Infra 1st Private Equity Fund	Associate	—	598	—	—	—	—
Hana UBS Asset Management	Associate	19	689	—	16,328	—	—
Axis Bio Fund	Associate	—	—	—	—	—	—
DA Value-up Fund No. 2	Associate	—	—	—	—	—	—

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrowings	Other payables
Smartscore Co., Ltd.	Associate	1	2,077	—	188	—	37
2018 Hana- Magna Startup Fund	Associate	—	147	—	—	—	—
Gwacheon Jisan Octa PFV., Ltd.	Associate	—	—	—	—	—	—
DangsandongPFV Co., Ltd.	Associate	—	—	—	183	—	12
World HansSang Dream Island	Associate	4,750	8	18	52	—	122
Dream Island Leisure	Associate	—	—	—	—	—	—
EBEST Hitech Fund Nb.1	Associate	—	—	—	—	—	—
UBI-HBIC New Technology Investment Partnership II	Associate	—	—	—	—	—	—
UNION Proptech Fund I	Associate	—	—	—	—	—	—
Daegu MBC development PFV Co. Ltd.	Associate	123,325	—	1,163	2,402	—	104
Genesis Environment Nb.1 Private Equity Fund	Associate	—	—	—	—	—	1
YH Leisure Development Co., Ltd.	Associate	115,473	—	332	1,788	—	—
Chango Innovation CO., Ltd.	Associate	1	—	—	45	—	98
SMKCENTER PFV Co., Ltd.	Associate	—	—	—	—	—	—
Hana Bio New Technology Fund No.1	Associate	—	—	—	—	—	—
Downon Asset development Co., Ltd.	Associate	9,942	3,685	55	83	—	2
HORIZON PRIVATE EQUITY FUND	Associate	—	2,640	—	—	—	—
Curious Solution N0.1 Corporate Recovery Private Equity Fund	Associate	—	—	—	—	—	—
MERITZ-KCLAVS Fund No.1	Associate	—	—	—	—	—	—
Hana Must Seven Special Purpose Acquisition Company	Associate	—	796	—	1,405	—	—
Hana Financial Fourteen Special Purpose Acquisition Company	Associate	—	990	—	1,285	—	—
Hana Financial Fifteenth Special Purpose Acquisition Company	Associate	—	1,390	—	1,588	—	—
Hana Financial Sixteenth Special Purpose Acquisition Company	Associate	—	990	—	1,286	—	—
Hana Financial Seventeen Special Purpose Acquisition Company	Associate	—	2,611	—	2,535	—	—
Synergy-Incus Venture Business Fund No.1	Associate	—	—	—	—	—	—
DGH New Technology Investment Association Nb. 1	Associate	—	—	—	—	—	—
Hana Ever Best Corporation Financial Stability Private Investment Co., Ltd.	Associate	—	136	—	—	—	24
Hana Bio New Technology Fund No.2	Associate	—	—	—	—	—	—
Hana Bio New Technology Fund No.3	Associate	—	—	—	—	—	—
Genesis Environment Nb.3 Private Equity Fund	Associate	—	—	—	—	—	1
Forest of Suseong	Associate	—	—	—	—	—	—
BM Ventures Fund No.1	Associate	—	—	—	—	—	—
MC Southeast Asia Fund No.1	Associate	—	—	—	—	—	—
Hana Hoechang Private Equity Fund No.1	Associate	—	—	—	—	—	24
Hana Financial Nineteenth Special Purpose Acquisition Company	Associate	—	1,595	—	2,496	—	—
Hana Bio New Technology Fund No.1~1	Associate	—	—	—	—	—	—
Smart Hana-K & Green New Deal No.1 Fund	Associate	—	—	—	—	—	4
Hana Smart Logistics New Technology Fund	Associate	—	—	—	—	—	—
Cornerstone Mutual Growth VI Fund	Associate	—	—	—	—	—	—
People Korea Two	Associate	30,000	—	182	57	—	69

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrowings	Other payables
Hana Financial Twentieth Special Purpose Acquisition Company	Associate	–	700	–	817	–	–
C47 Investment-Contents Wavve Original Contents I Startup and Venture Private Equity Fund	Associate	–	–	–	–	–	–
New Deal Extension New Technology Fund No.1	Associate	–	–	–	–	–	22
GFI ESG the 1st Private Equity Fund	Associate	–	–	–	–	–	–
Irigok Rental Housing CO., Ltd.	Associate	12,000	239	39	308	–	901
Daeyoung Networks Co., Ltd.	Associate	–	–	–	–	–	23
Haba Finacial Twenty-One Special Purpose Acquisition Company	Associate	–	1,390	–	2,786	–	–
S&S-Redwood India Agri-tech Fund	Associate	–	–	–	–	–	–
KCLAMS AIM Artificial Inteligence Fund No.1	Associate	–	–	–	–	–	–
K& Secondary No5 Fund	Associate	–	–	–	–	–	–
Genesis Environment Energy No.6 Private Equity Fund	Associate	–	–	–	–	–	–
Hana-Magna Growth Booster Fund	Associate	–	122	–	–	–	28
Odin 2 LLC	Associate	–	–	–	–	–	–
Hana Capital-Capstone Venture Fund III	Associate	–	–	–	–	–	–
Hana-KDBC, Capstone Venture Fund	Associate	–	–	–	–	–	–
KCLAMS-Meta Fund No.2	Associate	–	–	–	–	–	–
2019 Capstone Venture Fund	Associate	–	–	–	–	–	–
KAMCO Daegu Complex Development Fund	Associate	–	–	–	–	–	–
Hana Qualified Investor Private Real Estate Investment Trust No.41-2	Associate	–	1	–	–	–	–
Hana Alternative Special Investment Private Trust No. 161	Associate	–	6	–	–	–	–
A&D credit information Co.,Ltd.	Associate	–	–	–	–	–	–
Hyoje PFC CO., LTD	Associate	–	–	–	–	–	–
F&U Credit Information	Associate	97	–	–	1,266	–	–
Hana Ventures No.1 Investment Fund	Associate	–	–	–	–	–	–
Hana Digital Transformation Fund	Associate	–	4,403	–	–	–	10
HS INVESTMENTS EU11 L.P.	Associate	–	–	–	–	–	–
Hana Ventures No.5 Investment Fund	Associate	–	–	–	661	–	–
Hana Innovation Venture Scale-up Fund	Associate	–	704	–	7,786	–	–
Digital Innovation Growth Fund	Associate	–	–	–	–	–	–
Hana-History No1 Investment Fund	Associate	–	–	–	–	–	–
Gyeonggi Hana Turn around Fund No.2	Associate	–	–	–	–	–	–
Hana Untact Digital Innovation Fund	Associate	–	–	–	–	–	–
CM International Financing Leases	Subsidiary of an associate	–	–	–	–	–	–
Alan (Hong Kong) Investment Management Limited	Subsidiary of an associate	–	–	–	9	–	–
Hana Power Package LC	Subsidiary of an associate	13,023	–	239	12,428	–	–
MCKAYSON Co., Ltd.	Subsidiary of an associate	–	–	–	–	–	–
Shenzhen Zhijiguangdao Investment Co., Ltd.	Other related parties	–	–	–	–	–	–
Key management personnel		11,216	–	4	16,036	–	3

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrowings	Other payables
Total		638,475	103,367	41,363	118,765	80,755	38,424

<December 31, 2020>

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrowings	Other payables
Bank of Jilin	Associate	10,600	—	—	2,348	—	—
CM International Financing Leases	Associate	56,793	—	24,409	16	—	—
Beijing Langa Asset Management Co., Ltd.	Associate	11,675	—	66	18,198	—	—
PT. SINARMAS Hana Finance	Joint venture	18,578	28	66	12	—	—
BSK-6 Patent Technology Investment Association	Associate	—	—	—	—	—	—
MIDAN City Development Co., Ltd.	Associate	—	—	—	2	—	—
Company KStartup Winwin fund	Associate	—	—	—	—	—	—
Somesevit Co., Ltd.	Associate	—	—	—	—	—	—
Korea Credit Bureau	Associate	63	7	—	3,322	—	194
KORAMCO 73 Professional Investment Type Private Real Estate Investment	Associate	—	—	—	—	—	—
KEB Hana-KMC Unicorn Fund of Funds	Associate	—	—	—	21,921	—	—
KORAMCO 87 Professional Investment Type Private Real Estate Investment	Associate	—	—	—	—	—	—
Our Crowd International Invest III	Associate	—	—	—	—	—	—
Darby-Hana Infrastructure Fund Management	Associate	—	—	—	19,045	—	—
Bank for Investment and Development of Vietnam	Associate	16,320	856	141	2,288	48,513	—
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	Associate	—	—	—	—	—	—
All Together Korea Fund5	Associate	—	—	—	—	—	—
TOSS INNOVATION CO., LTD.	Associate	60	—	—	30,327	—	—
Finqq Co., Ltd.	Joint venture	33	7	5	23,507	—	31
Mirae Credit Information Services Corp.	Associate	156	—	1	4,998	—	21
Apollon Private Equity Fund	Associate	—	—	—	—	—	—
Heat Private Equity Fund	Associate	—	—	—	1	—	9
Lakebridge The Growth Capital PEF1	Associate	—	—	—	235	—	—
Kwoom Securities – Friend 1 New Technology Business Investment Fund	Associate	—	—	—	—	—	—
KOCREF REIT 30	Associate	50,000	55,332	—	—	—	41,170
Gunsan BIO Energy Co., Ltd.	Associate	2	2,617	2,617	1,251	—	—
GMIB Co., Ltd.	Associate	52,500	35	410	100	—	239
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associate	—	—	—	1,140	—	—
Hana Power Infra 1st Private Equity Fund	Associate	—	596	—	—	—	—
Hana UBS Asset Management	Associate	8	687	—	18,163	—	—
Axis Bio Fund	Associate	—	—	—	—	—	—
DA Value-up Fund No. 2	Associate	—	—	—	—	—	—
Smartscore Co., Ltd.	Associate	2	2,308	—	102	—	35
2018 Hana-Magna Startup Fund	Associate	—	—	—	—	—	—
Petra 6th Alpa Private Equity Fund	Associate	—	—	—	—	—	—
Gwacheon Jisan Octa PFV., Ltd.	Associate	—	—	—	—	—	8

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrow -ings	Other payables
Hana Financial Strategic the 1st Private Equity Fund	Associate	—	472	—	—	—	162
DangsandongPFV Co., Ltd.	Associate	—	—	—	—	—	55
Fresheasy Co., Ltd.	Associate	9,353	18,030	7	1,213	—	—
World HansSang Dream Island	Associate	1,450	—	12	15	—	122
Dream Island Leisure Co., Ltd.	Associate	—	—	—	—	—	—
EBEST Hitech Fund No.1	Associate	—	—	—	—	—	—
UBI-HBIC New Technology Investment Partnership II	Associate	—	—	—	—	—	—
UNION Proptech Fund I	Associate	—	—	—	—	—	—
Daegu MBC development PFV Co. Ltd.	Associate	—	—	—	2	—	21
NPTK Emerging Asia Fund1 PEF	Associate	—	—	—	1,302	—	—
Genesis Environment No.1 Private Equity Fund	Associate	—	—	—	—	—	1
YH Leisure Development Co., Ltd.	Associate	116,949	—	363	1,210	—	—
Chango Innovation CO., Ltd.	Associate	40,008	—	—	28	—	66
SMKCENTER PFV Co., Ltd.	Associate	—	—	—	—	—	—
Hana Bio New Technology Fund No.1	Associate	—	—	—	—	—	—
Downon Asset development Co., Ltd.	Associate	8,000	3,685	—	1,015	—	9
HORIZON PRIVATE EQUITY FUND	Associate	—	—	—	—	—	—
Curious Solution N0.1 Corporate Recovery Private Equity Fund	Associate	—	—	—	—	—	—
MERITZ-KCLAMS Fund No.1	Associate	—	—	—	—	—	—
Hana Must Seven Special Purpose Acquisition Company	Associate	—	796	—	—	—	—
Hana Must Sixth Special Purpose Acquisition Company	Associate	—	760	—	—	—	—
Hana Financial Fourteen Special Purpose Acquisition Company	Associate	—	990	—	—	—	—
Hana Financial Fifteenth Special Purpose Acquisition Company	Associate	—	1,390	—	—	—	—
Hana Financial Sixteenth Special Purpose Acquisition Company	Associate	—	990	—	—	—	—
Hana Financial Seventeen Special Purpose Acquisition Company	Associate	—	1,790	—	—	—	—
Odin 2 LLC	Associate	—	—	—	—	—	—
Myoungshin Co., Ltd.	Associate	—	9,007	—	622	—	—
Hana Qualified Investor Private Real Estate Investment Trust No.41-2	Associate	—	1	—	—	—	—
A&D credit information Co.,Ltd.	Associate	—	—	—	—	—	—
Hyuje PFC CO., LTD	Associate	—	—	—	—	—	1,000
F&U Credit Information	Associate	96	—	—	1,321	—	—
Hana Ventures No.1 Investment Fund	Associate	—	—	—	—	—	—
Hana Digital Transformation Fund	Associate	—	3,800	—	—	—	13
HS INVESTMENTS EU11 L.P.	Associate	—	—	—	—	—	—
Hana Ventures No.5 Investment Fund	Associate	—	—	—	756	—	—
Hana Innovation Venture Scale-up Fund	Associate	—	331	—	3,867	—	—
Synergy-Incus Venture Business Fund No.1	Associate	—	—	—	—	—	—
CM International Financing Leases	Subsidiary of an associate	—	—	—	—	—	—
Alan (Hong Kong) Investment Management Limited	Subsidiary of an associate	—	—	—	9	—	—

Related party	Type	Assets		Allowance for possible loan losses	Liabilities		
		Loans receivables	Other receivables		Deposits	Borrow -ings	Other payables
Hana Power Package LC	Subsidiary of an associate	14,186	–	343	16,742	–	–
SIMWON DEVELOPMENT CO., LTD.	Subsidiary of an associate	1,000	–	9	40	–	–
Wellfood Co., Ltd.	Subsidiary of an associate	–	–	–	–	–	–
Key management personnel		12,155	–	–	17,186	–	3
Total		419,987	104,515	28,449	192,304	48,513	43,159

57-3 The Group engages in financing activities and transactions with related parties as part of normal business activities. Money transactions between related parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions).

<2021>

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution		
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference
Bank of Jilin	Associate	216,800	(221,100)	(4,300)	—	—	—	—	—	—
CM International Financing Leases	Associate	—	—	—	—	—	—	—	—	—
Beijing Langa Asset Management Co., Ltd.	Associate	—	(1,860)	(1,860)	—	—	—	—	(2,281)	(2,281)
PT. SINARMAS Hana Finance	Joint venture	15,062	(2,517)	12,545	23	(24)	(1)	—	—	—
BSK-6 Patent Technology Investment Association	Associate	—	—	—	—	—	—	—	—	—
MIDAN City Development Co., Ltd.	Associate	—	—	—	—	—	—	—	—	—
Company KStartup Winwin fund	Associate	—	—	—	300	—	300	—	(300)	(300)
Somesevit Co., Ltd.	Associate	—	—	—	—	—	—	—	—	—
Korea Credit Bureau	Associate	542	(550)	(8)	—	(3,000)	(3,000)	—	(90)	(90)
KEB Hana-KMC Unicorn Fund of Funds	Associate	—	—	—	15,000	(15,000)	—	18,000	—	18,000
Templeton Hana Asset Management Co., Ltd.	Associate	—	—	—	11,000	(18,000)	(7,000)	—	(990)	(990)
Bank for Investment and Development of Vietnam (BIDV)	Associate	898,147	(904,075)	(5,928)	647,603	(620,511)	27,092	—	(6,262)	(6,262)
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	Associate	—	—	—	—	—	—	—	(27)	(27)
All Together Korea Fund5	Associate	—	—	—	—	—	—	—	—	—
Toss Bank Co., Ltd. (formerly Toss INNOVATION CO., LTD)	Associate	1,555	(1,476)	79	180,000	(200,000)	(20,000)	47,500	—	47,500
Shinjin International Corporation	Associate	—	—	—	—	—	—	—	—	—
Inhee	Associate	—	—	—	—	—	—	—	—	—
KG fashion	Associate	—	—	—	—	—	—	—	—	—
Sinsa Station Complex Development PFV Co., Ltd.	Associate	99,000	—	99,000	—	—	—	450	—	450
Taurus Cloud Fund	Associate	—	—	—	—	—	—	9,401	—	9,401
NPX-Welcome Metaverse Contents fund	Associate	—	—	—	—	—	—	2,000	—	2,000
Cheongna Medipolis PFV Co., Ltd.	Associate	—	—	—	—	—	—	3,708	—	3,708
Finqq Co., Ltd.	Joint venture	890	(834)	56	—	—	—	—	—	—
Mirae Credit Information Services Corp.	Associate	2,868	(2,771)	97	310	(10)	300	—	(186)	(186)
Apollon Private Equity Fund	Associate	—	—	—	—	—	—	—	(3,817)	(3,817)
Heat Private Equity Fund	Associate	—	—	—	—	—	—	—	—	—
Lakebridge The Growth Capital PEF1	Associate	—	—	—	—	—	—	—	(243)	(243)
Hana-Capstone AI Platform Fund	Associate	—	—	—	42	—	42	25,000	—	25,000
Business Investment Fund KOCREF REIT 30	Associate	—	(10,000)	(10,000)	—	—	—	—	(1,036)	(1,036)
Gunsan BIO Energy Co., Ltd.	Associate	15	(16)	(1)	—	—	—	—	—	—
GMHB Co., Ltd.	Associate	—	—	—	—	—	—	—	—	—
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associate	—	—	—	1,500	(2,500)	(1,000)	—	—	—

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution		
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference
Hana Power Infra 1st Private Equity Fund	Associate	-	-	-	-	-	-	-	-	-
Hana UBS Asset Management	Associate	230	(219)	11	26,000	(28,000)	(2,000)	-	(3,523)	(3,523)
Axis Bio Fund	Associate	-	-	-	-	-	-	-	-	-
DA Value-up Fund No. 2	Associate	-	-	-	-	-	-	-	-	-
Smartscore Co., Ltd.	Associate	84	(84)	-	-	-	-	-	-	-
2018 Hana- Magna Startup Fund	Associate	-	-	-	-	-	-	-	(685)	(685)
Gwacheon Jisan Octa PFV., Ltd.	Associate	-	-	-	-	-	-	-	-	-
DangsandongPFV Co., Ltd.	Associate	-	-	-	-	-	-	-	-	-
World HansSang Dream Island	Associate	3,300	-	3,300	-	-	-	-	-	-
Dream Island Leisure	Associate	-	-	-	-	-	-	5,969	-	5,969
EBEST Hitech Fund No.1	Associate	-	-	-	-	-	-	-	-	-
UBI-HBIC New Technology Investment Partnership II	Associate	-	-	-	-	-	-	-	-	-
UNION Proptech Fund I	Associate	-	-	-	-	-	-	-	-	-
Daegu MBC development PFV Co. Ltd.	Associate	123,420	-	123,420	-	-	-	-	-	-
Genesis Environment No.1 Private Equity Fund	Associate	-	-	-	-	-	-	-	-	-
YH Leisure Development Co., Ltd.	Associate	250	(1,727)	(1,477)	-	-	-	-	-	-
Changjo Innovation CO., Ltd.	Associate	221	(40,227)	(40,006)	110	(100)	10	-	-	-
SMKCENTER PFV Co., Ltd.	Associate	-	-	-	-	-	-	-	-	-
Hana Bio New Technology Fund No.1	Associate	-	-	-	-	-	-	-	-	-
Downon Asset development Co., Ltd.	Associate	2,799	(857)	1,942	-	-	-	-	-	-
HORIZON PRVATE EQUITY FUND	Associate	-	-	-	-	-	-	26,171	(25,588)	583
Curious Solution N.0.1 Corporate Recovery Private Equity Fund	Associate	-	-	-	-	-	-	-	(1,232)	(1,232)
MERITZ-KCLAMS Fund No.1	Associate	-	-	-	-	-	-	-	-	-
Hana Must Seven Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-	-	-
Hana Financial Fourteen Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-	-	-
Hana Financial Fifteenth Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-	-	-
Hana Financial Sixteenth Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-	-	-
Hana Financial Seventeen Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	-	-	-
Synergy-Incus Venture Business Fund No. 1	Associate	-	-	-	-	-	-	-	-	-
DGH New Technology Investment Association No. 1	Associate	-	-	-	-	-	-	1,000	-	1,000
Hana Ever Best Corporation Financial Stability Private Investment Co., Ltd.	Associate	-	-	-	-	-	-	6,087	-	6,087
Hana Bio New Technology Fund No.2	Associate	-	-	-	-	-	-	1,000	-	1,000
Hana Bio New Technology Fund No.3	Associate	-	-	-	-	-	-	1,000	-	1,000
Genesis Environment No.3 Private Equity Fund	Associate	-	-	-	-	-	-	18,900	-	18,900
Forest of Suseong	Associate	-	-	-	-	-	-	110	-	110
BM Ventures Fund No.1	Associate	-	-	-	-	-	-	1,500	-	1,500
MC Southeast Asia Fund No.1	Associate	-	-	-	-	-	-	916	-	916
Hana Hoechang Private Equity Fund No.1	Associate	-	-	-	-	-	-	362	-	362

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution			
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference	
Hana Financial Nineteenth Special Purpose Acquisition Company	Associate	—	—	—	1,800	—	—	1,800	5	—	5
Hana Bio New Technology Fund No.1-1	Associate	—	—	—	—	—	—	2,000	—	—	2,000
Smart Hana-K& Green New Deal No.1 Fund	Associate	—	—	—	—	—	—	4,950	—	—	4,950
Hana Smart Logistics New Technology Fund	Associate	—	—	—	—	—	—	2,000	—	—	2,000
Cornerstone Mutual Growth VI Fund	Associate	—	—	—	—	—	—	1,000	—	—	1,000
People Korea Two	Associate	30,000	—	30,000	—	—	—	45	—	—	45
Hana Financial Twentieth Special Purpose Acquisition Company	Associate	—	—	—	—	—	—	1	—	—	1
C47 Investment-Contents Wavve Original Contents I Startup and Venture Private Equity Fund	Associate	—	—	—	—	—	—	1,000	—	—	1,000
New Deal Extension New Technology Fund No.1	Associate	—	—	—	—	—	—	11,000	—	—	11,000
GFI ESG the 1st Private Equity Fund	Associate	—	—	—	—	—	—	10,600	—	—	10,600
Imgok Rental Housing CO., Ltd.	Associate	12,000	—	12,000	—	—	—	20	—	—	20
Daeyoung Networks Co., Ltd.	Associate	—	—	—	—	—	—	245	—	—	245
Haba Finacial Twenty-One Special Purpose Acquisition Company	Associate	—	—	—	—	—	—	10	—	—	10
S&S-Redwood India Agri-tech Fund	Associate	—	—	—	—	—	—	2,000	—	—	2,000
KCLAMS AIM Artificial Inteligence Fund No.1	Associate	—	—	—	—	—	—	1,000	—	—	1,000
K& Secondary No5 Fund	Associate	—	—	—	—	—	—	1,000	—	—	1,000
Genesis Environment Energy No.6 Private Equity Fund	Associate	—	—	—	—	—	—	31,000	—	—	31,000
Hana-Magna Growth Booster Fund	Associate	—	—	—	—	—	—	7,500	—	—	7,500
Odin 2 LLC	Associate	—	—	—	—	—	—	—	—	—	—
Hana Capital-Capstone Venture Fund III	Associate	—	—	—	—	—	—	2,500	—	—	2,500
Hana-KDBC, Capstone Venture Fund	Associate	—	—	—	—	—	—	—	(1,102)	(1,102)	(1,102)
KCLAMS-Meta Fund No.2	Associate	—	—	—	—	—	—	5,000	—	—	5,000
2019 Capstone Venture Fund	Associate	—	—	—	—	—	—	500	—	—	500
KAMOO Daegu Complex Development Fund	Associate	—	—	—	—	—	—	19,000	(1,017)	—	17,983
Hana Qualified Investor Private Real Estate Investment Trust No.41-2	Associate	—	—	—	—	—	—	—	(107)	(107)	(107)
Hana Alternative Special Investment Private Trust No.161	Associate	—	—	—	—	—	—	800	(24)	—	776
A&D credit information Co.,Ltd.	Associate	—	—	—	—	—	—	—	(33)	(33)	(33)
Hyoje PFC CO., LTD	Associate	—	—	—	—	—	—	—	—	—	—
F&U Credit Information	Associate	1,297	(1,295)	2	3	—	3	—	—	—	—
Hana Ventures No.1 Investment Fund	Associate	—	—	—	—	—	—	—	—	—	—
Hana Digital Transformation Fund	Associate	—	—	—	—	—	—	—	(8,903)	(8,903)	(8,903)
HS INVESTMENTS EU11 L.P.	Associate	—	—	—	—	—	—	16	—	—	16
Hana Ventures No.5 Investment Fund	Associate	—	—	—	—	—	—	—	—	—	—
Hana Innovation Venture Scale-up Fund	Associate	—	—	—	—	—	—	12,000	—	—	12,000
Digital Innovation Growth Fund	Associate	—	—	—	—	—	—	3,000	—	—	3,000
Hana History No1 Investment Fund	Associate	—	—	—	—	—	—	5,500	—	—	5,500
Gyeonggi Hana Turn around Fund No.2	Associate	—	—	—	—	—	—	12,000	—	—	12,000

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution		
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference
Hana Untact Digital Innovation Fund	Associate	-	-	-	-	-	-	9,300	-	9,300
Hana Financial Strategic the 1st Private Equity Fund (*2)	Associate	-	-	-	-	-	-	-	(1,061)	(1,061)
KORAMCO 73 Professional Investment Type Private Real Estate Investment (*2)	Associate	-	-	-	-	-	-	-	-	-
KORAMCO 87 Professional Investment Type Private Real Estate Investment (*2)	Associate	-	-	-	-	-	-	-	-	-
Our Crowd International Invest III (*2)	Associate	-	-	-	-	-	-	-	(497)	(497)
Kwoom Securities – Friend 1 New Technology Business Investment Fund (*2)	Associate	-	-	-	-	-	-	-	(1,424)	(1,424)
NPTK Emerging Asia Fund1 PEF (*2)	Associate	-	-	-	-	-	-	-	-	-
Petra 6th Alpa Private Equity Fund (*2)	Associate	-	-	-	-	-	-	-	(47,978)	(47,978)
Hana Must Sixth Special Purpose Acquisition Company (*2)	Associate	-	-	-	-	-	-	-	-	-
KI No. 13 Entrustment Management Real Estate Investment Company (*2)	Associate	-	-	-	-	-	-	4,500	(122)	4,378
Gwangju Nurun Mirae Asset PFV Co., LTD. (*2)	Associate	-	-	-	-	-	-	995	-	995
Genesis Environment No.4 Private Equity Fund (*2)	Associate	-	-	-	-	-	-	55,402	-	55,402
Myoungshin Co., Ltd. (*2)	Associate	-	-	-	-	-	-	-	-	-
Fresheasy Co., Ltd. (*2)	Associate	4,682	(3,335)	1,347	450	-	450	-	-	-
OM International Financing Leases	Subsidiary of an associate	-	-	-	-	-	-	-	-	-
Alan (Hong Kong) Investment Management Limited	Subsidiary of an associate	-	-	-	-	-	-	-	-	-
Hana Power Package LC	Subsidiary of an associate	-	(1,163)	(1,163)	-	-	-	-	-	-
MOKAYSON Co., Ltd.	Subsidiary of an associate	-	-	-	-	-	-	-	-	-
SIMWON DEVELOPMENT CO., LTD. (*2)	Subsidiary of an associate	-	-	-	30	-	30	-	-	-
Shenzhen Zhijiguangdao Investment Co., Ltd.	Other related parties	-	-	-	-	-	-	-	-	-
Key management personnel (*3)		-	(955)	(955)	-	(2,864)	(2,864)	-	-	-
Total		1,413,162	(1,195,061)	218,101	884,171	(890,009)	(5,838)	374,963	(108,528)	266,435

(* 1) Overdrawn account in daily basis is excluded from the lending and collection of loans, and the amount of frequent deposits and borrowings is excluded from the changes in deposits.

(* 2) It is excluded from a related party for the year ended December 31, 2021.

(* 3) Financial transactions with key major management personnel are shown as net amounts.

<2020>

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution		
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference
Bank of Jilin	Associate	382,600	(375,400)	7,200	—	—	—	—	—	—
CM International Financing Leases	Associate	—	(24,749)	(24,749)	—	—	—	—	—	—
Beijing Langa Asset Management Co., Ltd.	Associate	—	(17,794)	(17,794)	—	—	—	—	—	—
PT. SINARMAS Hana Finance	Joint venture	9,343	(19,249)	(9,906)	14,009	(14,848)	(839)	9,410	—	9,410
BSK 6 Patent Technology Investment Partnership	Associate	—	—	—	—	—	—	900	(633)	267
MIDAN City Development Co., Ltd.	Associate	—	—	—	—	—	—	—	—	—
Company KStartup Winwin fund	Associate	—	—	—	—	—	—	—	(200)	(200)
Somesevit Co., Ltd.	Associate	—	—	—	—	—	—	—	—	—
Korea Credit Bureau	Associate	415	(355)	60	3,000	—	3,000	—	—	—
KORAMCO 73 Professional Investment Type Private Real Estate Investment	Associate	—	—	—	—	—	—	—	—	—
KEB Hana-KVC Unicorn Fund of Funds	Associate	—	—	—	—	—	—	50,670	—	50,670
KORAMCO 87 Professional Investment Type Private Real Estate Investment	Associate	—	—	—	—	—	—	—	—	—
Our Crowd International Invest III	Associate	—	—	—	—	—	—	—	(342)	(342)
Derby-Hana Infrastructure Fund Management	Associate	—	—	—	18,000	(16,500)	1,500	—	—	—
Bank for Investment and Development of Vietnam	Associate	814,258	(808,818)	5,440	1,246,409	(1,197,896)	48,513	—	—	—
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	Associate	—	—	—	—	—	—	—	—	—
All Together Korea Fund5	Associate	—	—	—	—	—	—	100,000	(90,000)	10,000
TOSS INNOVATION CO., LTD.	Associate	62	(2)	60	—	—	—	7,500	—	7,500
Finqq Co., Ltd.	Joint venture	538	(568)	(30)	—	—	—	—	—	—
Mirae Credit Information Services Corp	Associate	1,961	(4,019)	(2,058)	—	—	—	—	—	—
Apollon Private Equity Fund	Associate	—	—	—	—	—	—	—	—	—
Heat Private Equity Fund	Associate	—	—	—	—	—	—	—	—	—
Lakebridge The Growth Capital PEF1	Associate	—	—	—	—	—	—	—	—	—
Kiwoom Securities-Friend 1 New Technology Business Investment Fund	Associate	—	—	—	—	—	—	—	(2,148)	(2,148)
KOCREF REIT 30	Associate	50,000	—	50,000	—	—	—	20,000	(20,000)	—
Gunsan BIO Energy Co., Ltd.	Associate	39	(43)	(4)	—	—	—	—	—	—
GMIB Co., Ltd.	Associate	3,500	—	3,500	—	—	—	—	—	—
Lotte Ventures Corp. (Previously, Lotte Accelerator Corporation)	Associate	—	—	—	1,000	(3,000)	(2,000)	—	—	—
Hana Power Infra 1st Private Equity Fund	Associate	—	—	—	—	—	—	—	—	—
Hana UBS Asset Management	Associate	263	(276)	(13)	35,000	(26,000)	9,000	—	—	—
Axis Bio Fund	Associate	—	—	—	—	—	—	—	—	—
DA Value-up Fund No. 2	Associate	—	—	—	—	—	—	—	—	—
Smartscore Co., Ltd.	Associate	13	(11)	2	—	(72)	(72)	—	—	—
2018 Hana-Magna Startup Fund	Associate	—	—	—	—	—	—	—	—	—
Petra 6 Alpha Private Equity Fund	Associate	—	—	—	—	—	—	(31,921)	(31,921)	(31,921)

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution		
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference
Gwacheon Jisan Octa PFV., Ltd.	Associate	-	-	-	-	-	-	-	-	-
Hana Financial Strategic the 1st Private Equity Fund	Associate	-	-	-	-	-	-	-	-	-
DangsandongPFV Co., Ltd.	Associate	-	-	-	-	-	-	-	-	-
Fresheasy Co., Ltd.	Associate	20,961	(21,885)	(924)	90	-	90	-	-	-
World HansSang Dream Island	Associate	1,200	-	1,200	-	-	-	-	-	-
Dream Island Leisure	Associate	-	-	-	-	-	-	-	-	-
EBEST Hitech Fund No.1	Associate	-	-	-	-	-	-	-	-	-
UBI-HBIC New Technology Investment Partnership II	Associate	-	-	-	-	-	-	(130)	(130)	
UNION Proptech Fund I	Associate	-	-	-	-	-	-	-	-	-
Daegu MBC development PFV Co. Ltd	Associate	-	-	-	-	-	-	(1,990)	(1,990)	
NPTK Emerging Asia Fund1 PEF	Associate	-	-	-	-	-	-	-	-	-
Genesis Environment No.1 Private Equity Fund	Associate	-	-	-	-	-	-	8,168	(3,267)	4,901
YH Leisure Development Co., Ltd.	Associate	128,658	(11,709)	116,949	-	-	-	10,000	-	10,000
Chango Innovation OO., Ltd.	Associate	50,113	(10,105)	40,008	-	-	-	50	(10)	40
SMIKCENTER PFV Co., Ltd.	Associate	-	-	-	-	-	-	7,800	-	7,800
Hana Bio New Technology Fund No.1	Associate	-	-	-	-	-	-	1,000	-	1,000
Dowon Asset development Co., Ltd.	Associate	8,000	-	8,000	-	-	-	1,242	-	1,242
HORIZON PRIVATE EQUITY FUND	Associate	-	-	-	-	-	-	62,008	-	62,008
Curious Solution N.1 Corporate Recovery Private Equity Fund	Associate	-	-	-	-	-	-	16,000	-	16,000
MERITZ-KCLAMS Fund No.1	Associate	-	-	-	-	-	-	1,000	-	1,000
Hana Must Seven Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	4	-	4
Hana Must Sixth Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	86	-	86
Hana Financial Fourteen Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	21	-	21
Hana Financial Fifteenth Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	21	-	21
Hana Financial Sixteenth Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	21	-	21
Hana Financial Seventeen Special Purpose Acquisition Company	Associate	-	-	-	-	-	-	810	-	810
Odin 2 LLC	Associate	-	-	-	-	-	-	-	-	-
Myoungshin Co., Ltd.	Associate	-	-	-	-	-	-	-	-	-
Hana Qualified Investor Private Real Estate Investment Trust No.41-2	Associate	-	-	-	-	-	-	-	-	-
A&D credit information Co.,Ltd.	Associate	-	-	-	-	-	-	-	-	-
Hyoje PFV CO., LTD	Associate	-	-	-	-	-	-	5,000	-	5,000
F&U Credit Information	Associate	1,265	(1,364)	(99)	-	6	6	-	-	-
Hana Ventures No.1 Investment Fund	Associate	-	-	-	-	-	-	-	-	-
Hana Digital Transformation Fund	Associate	-	-	-	-	-	-	17,448	-	17,448
HS INVESTMENTS EU11 L.P.	Associate	-	-	-	-	-	-	2,934	-	2,934
Hana Ventures No.5 Investment Fund	Associate	-	-	-	-	-	-	2,025	-	2,025
Hana Innovation Venture Scale-up Fund	Associate	-	-	-	-	-	-	9,000	-	9,000
Synergy-Incus Venture Business Fund	Associate	-	-	-	-	-	-	(22)	(22)	

Related Party	Type	Loans Receivables(*1)			Deposits(*1) and Borrowings			Capital Contribution		
		Lend	Collect	Difference	Increase	Decrease	Difference	Increase	Decrease	Difference
No.1										
Fideliis-2 private equity joint venture (*2)	Associate	-	-	-	-	-	-	-	(3,009)	(3,009)
Sprott Global Renewable Private Equity Fund II(*2)	Associate	-	-	-	-	-	-	-	(10,000)	(10,000)
Dowon development Co., Ltd. (*2)	Associate	1,765	(17,080)	(15,315)	-	-	-	-	(149)	(149)
Hana Lantern Energy Factory PEF (*2)	Associate	-	-	-	-	-	-	-	(416)	(416)
2010 KF-Tube IT Professional Investment Partnership (*2)	Associate	-	-	-	-	-	-	-	855	855
Genesis Environment No.2 Private Equity Fund(*2)	Associate	-	-	-	-	-	-	28,488	(28,488)	-
Hana Cybernaut international Limited (*2)	Associate	-	-	-	-	-	-	-	-	-
Hana Power Package LC	Subsidiary of an associate	-	(1,163)	(1,163)	-	-	-	-	-	-
SIMMON DEVELOPMENT CO., LTD.	Subsidiary of an associate	1,000	-	1,000	40	-	40	-	-	-
Wellfood Co., Ltd.	Subsidiary of an associate	-	-	-	-	-	-	-	-	-
Key management personnel (*3)		4,880	-	4,880	3,314	-	3,314	-	-	-
Total		1,480,834	(1,314,590)	166,244	1,320,862	(1,258,310)	62,552	361,606	(191,870)	169,736

(*1) Overdrawn account in daily basis is excluded from the lending and collection of loans, and the amount of frequent deposits and borrowings is excluded from the changes in deposits.

(*2) It is excluded from a related party for the year ended December 31, 2020.

(*3) Financial transactions with key major management personnel are shown as net amounts.

57-4 tangible and intangible assets etc. acquired from related parties was ₩260 million for the year ended December 31, 2021 (no amount for the years ended December 31, 2020).

57-5 Significant guarantee contracts, Commitment and collateral provided between related parties as of December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

<December 31, 2021>

Related parties		Transactions	Amounts
Benefactor	Beneficiary		
KEB Hana Bank	GMHB Co., Ltd.	Unused limit (Loans in Korean won)	6,000
KEB Hana Bank	Hana Digital Transformation Fund	Securities purchase contract	1,000
KEB Hana Bank	Hana Innovation Venture Scale-up Fund	Securities purchase contract	1,560
KEB Hana Bank	All Together Korea Fund5	Securities purchase contract	990,000
KEB Hana Bank	KEB Hana-KMC Unicorn Fund of Funds	Securities purchase contract	25,130
KEB Hana Bank	TossBank Corp. (Previously, TOSS INNOVATION CO., LTD.)	Securities purchase contract	227,273
KEB Hana Bank	Taurus Cloud Fund	Securities purchase contract	599
KEB Hana Bank	Hana-Capstone AI Platform Fund	Securities purchase contract	15,000
KEB Hana Bank	Daegu MBC Site Complex Development PRV	Unused limit (Loans in foreign currency)	74,880
KEB Hana Bank	Smartscore Co., Ltd.	Unused limit (Loans in foreign currency)	7
Bank for Investment and Development of Vietnam (BIDV)	KEB Hana Bank	Foreign currency Payment Guarantee	26,782
Finqq Co., Ltd.	KEB Hana Bank	Collateral provided	50
PT Bank KEB Hana	PT. SINARMAS HANA FINANCE	Unused limit (Loans in foreign currency)	7,397
HFI	Hana Digital Transformation Fund	Securities purchase contract	400
HFI	Heat Private Equity Fund	Securities purchase contract	297
HFI	Genesis Environment Nb.1 Private Equity Fund	Securities purchase contract	1,099
HFI	Hana Ever Best Corporation Financial Stability Private Investment Co., Ltd.	Securities purchase contract	20,013
HFI	Genesis Environment Nb.3 Private Equity Fund	Securities purchase contract	900
HFI	Hana Hoechang(Shenzhen) Private Equity Fund No.1	Securities purchase contract	20,495
HFI	Hana-Capstone AI Platform Fund	Securities purchase contract	10,000
HFI	Smart Hana-K& Green New Deal Nb.1 Fund	Securities purchase contract	3,300
HFI	New Deal Extension New Technology Fund Nb.1	Securities purchase contract	8,400
HFI	Hana-Magna Growth Booster Fund	Securities purchase contract	10,500
KEB Hana Card	F&J Credit Information	Unused limit(Credit card)	893
KEB Hana Card	Finqq Co., Ltd.	Unused limit(Credit card)	132
KEB Hana Card	Korea Credit Bureau	Unused limit(Credit card)	245

Related parties		Transactions	Amounts
Benefactor	Beneficiary		
KEB Hana Card	Mirae Credit Information Services Corp.	Unused limit(Credit card)	747
KEB Hana Card	Gunsan BIO Energy Co., Ltd.	Unused limit(Credit card)	28
KEB Hana Card	Hana UBS Asset Management	Unused limit(Credit card)	481
KEB Hana Card	Smart score Co., Ltd.	Unused limit(Credit card)	6
KEB Hana Card	YH Leisure Development Co., Ltd.	Unused limit(Credit card)	10
KEB Hana Card	Chango Innovation CO., Ltd.	Unused limit(Credit card)	29
KEB Hana Card	Toss Bank Co., Ltd. (formerly Toss Innovation Preparation Corporation)	Unused limit(Credit card)	862
KEB Hana Card	Dowon Asset development Co., Ltd.	Unused limit(Credit card)	28
KEB Hana Card	Hana Financial Fourteen Special Purpose Acquisition Company	Unused limit(Credit card)	50
KEB Hana Card	Hana Financial Nineteenth Special Purpose Acquisition Company	Unused limit(Credit card)	50
KEB Hana Card	Hana Digital Transformation Fund	Securities purchase contract	250
KEB Hana Card	Gyeonggi Hana Turn around Fund No.2	Securities purchase contract	1,200
KEB Hana Card	Hana Untact Digital Innovation Fund	Securities purchase contract	2,450
Hana Capital	PT SINARMAS HANA FINANCE	Payment Guarantee	21,606
Hana Capital	Hana Digital Transformation Fund	Securities purchase contract	250
Hana Capital	Hana Innovation Venture Scale-up Fund	Securities purchase contract	1,800
Hana Capital	Genesis Environment Energy No.3 Private Equity Fund	Securities purchase contract	200
Hana Capital	Smart Hana-K& Green New Deal Nb.1 Fund	Securities purchase contract	2,750
Hana Capital	New Deal Extension New Technology Fund No.1	Securities purchase contract	5,600
Hana Capital	Gyeonggi Hana Turn around Fund No.2	Securities purchase contract	1,200
Hana Capital	Hana Untact Digital Innovation Fund	Securities purchase contract	2,100
Hana Life Insurance	Hana Digital Transformation Fund	Securities purchase contract	150
Hana Life Insurance	Hana Innovation Venture Scale-up Fund	Securities purchase contract	600
Hana Life Insurance	Dowon Asset development Co., Ltd.	Unused limit (Loans in Korean won)	100
Hana Savings Bank	World HansSang Dream Island	Unused limit (Loans in Korean won)	250
Hana Savings Bank	Hana Digital Transformation Fund	Securities purchase contract	200
Hana Savings Bank	Hana Innovation Venture Scale-up Fund	Securities purchase contract	300
Hana Asset Trust	Hana Digital Transformation Fund	Securities purchase contract	100
Hana Asset Trust	Hana Innovation Venture Scale-up Fund	Securities purchase contract	600
Hana Asset Trust	Hana Untact Digital Innovation Fund	Securities purchase contract	1,400
Hana Alternative Asset Management	Hana Digital Transformation Fund	Securities purchase contract	150
Hana Alternative Asset Management	Hana Innovation Venture Scale-up Fund	Securities purchase contract	300
Hana Ventures	Hana Digital Transformation Fund	Securities purchase contract	393
Hana Ventures	Hana Innovation Venture Scale-up Fund	Securities purchase contract	3,840
Hana Ventures	Gyeonggi Hana Turn around Fund No.2	Securities purchase contract	3,800
Hana Ventures	Hana Untact Digital Innovation Fund	Securities purchase contract	12,600
Total			1,518,832

<December 31, 2020>

Related parties		Transactions	Amounts
Benefactor	Beneficiary		
KEB Hana Bank	GMHB Co., Ltd.	Unused limit (Loans in Korean won)	25,000
KEB Hana Bank	All Together Korea Fund5	Securities purchase contract	990,000
KEB Hana Bank	Freasheasy	Unused limit (Loans in Korean won)	2
KEB Hana Bank	Hana Digital Transformation Fund	Securities purchase contract	1,000
KEB Hana Bank	Hana Innovation Venture Scale-up Fund	Securities purchase contract	3,640
KEB Hana Bank	Heat Private Equity Fund	Securities purchase contract	892
KEB Hana Bank	KEB Hana-KVC Unicorn Fund of Funds	Securities purchase contract	43,130
PT Bank KEB Hana	PT. SINARMAS HANA FINANCE	Unused limit (Loans in foreign currency)	10,834
HFI	GMHB Co., Ltd.	Commitments to purchase private equity	70,000
HFI	Hana Digital Transformation Fund	Securities purchase contract	400
KEB Hana Card	Gunsan BIO Energy Co., Ltd.	Unused limit(Credit card)	28
KEB Hana Card	Mirae Credit Information Services Corp.	Unused limit(Credit card)	394
KEB Hana Card	Smart score Co., Ltd.	Unused lirit(Credit card)	5
KEB Hana Card	F&J Credit Information	Unused limit(Credit card)	894
KEB Hana Card	YH Leisure Development Co., Ltd.	Unused lirit(Credit card)	15
KEB Hana Card	Changjo Innovation CO., Ltd.	Unused limit(Credit card)	22
KEB Hana Card	Korea Credit Bureau	Unused lirit(Credit card)	237
KEB Hana Card	TOSS INNOVATION CO., LTD.	Unused limit(Credit card)	940
KEB Hana Card	Freasheasy	Unused lirit(Credit card)	547
KEB Hana Card	Finqq Co., Ltd.	Unused limit(Credit card)	167
KEB Hana Card	Hana Digital Transformation Fund	Securities purchase contract	250
Hana Capital	Hana UBS Asset Management	Unused limit(Credit card)	492
Hana Savings Bank	World HansSang Dream Island	Unused lirit (Loans in Korean won)	3,550
Hana Savings Bank	Hana Digital Transformation Fund	Securities purchase contract	200
Hana Savings Bank	Hana Innovation Venture Scale-up Fund	Securities purchase contract	700
Hana Asset Trust	Hana Digital Transformation Fund	Securities purchase contract	100
Hana Asset Trust	Hana Innovation Venture Scale-up Fund	Securities purchase contract	1,400
Hana Capital	Hana Digital Transformation Fund	Securities purchase contract	250
Hana Capital	Hana Innovation Venture Scale-up Fund	Securities purchase contract	4,200
Hana Capital	PT SINARMAS HANA FINANCE	Payment Guarantee	20,124
Hana Life Insurance	Dowon Asset development Co., Ltd.	Loan Commitment	2,000
Hana Life Insurance	Hana Digital Transformation Fund	Securities purchase contract	150
Hana Life Insurance	Hana Innovation Venture Scale-up Fund	Securities purchase contract	1,400
Hana Alternative Asset Management	Hana Digital Transformation Fund	Securities purchase contract	150
Hana Alternative Asset Management	Hana Innovation Venture Scale-up Fund	Securities purchase contract	700
Hana Ventures	Hana Digital Transformation Fund	Securities purchase contract	393
Hana Ventures	Hana Innovation Venture Scale-up Fund	Securities purchase contract	8,960
Total			1,193,166

57-6 Details of compensation paid to key management personnel for the years ended December 31, 2021 and 2020 are summarized as follows (Korean won in millions):

Classification	2021	2020
Employee payment	58,302	36,674
Severance payment	2,684	2,525
Share-based compensation expenses	17,805	10,292
Total	78,791	49,491

57-7 The defined benefit plans between entities belonging to the Group as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Classification	December 31, 2021	December 31, 2020	Description
KEB Hana Bank	188,126	161,728	Trust account
HFI	133,408	119,766	Trust account
Total	321,534	281,494	

58. Approval of the consolidated financial statements

The Group's consolidated financial statements for the year ended December 31, 2021 were approved by the Board of Directors on March 7, 2022, and will receive final approval at the shareholders' meeting to be held on March 25, 2022.