WOORI BANK AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEAR ENDED
DECEMBER 31, 2023

WOORI BANK

KPMG SAMJONG

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INDEPENDENT AUDITORS' REPORT

(Based on a report originally issued in Korean)

The Board of Directors and Shareholder of
Woori Bank

Opinion

We have audited the consolidated financial statements of Woori Bank and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2023, and the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising of material accounting policy information and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Korean International Financial Reporting Standards (K-IFRS).

Basis for Opinion

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

Other Matters

The consolidated financial statements of the Group for the year ended December 31, 2022, were audited by another auditor who expressed an unmodified opinion on those statements on March 7, 2023.

The procedures and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

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

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

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used in the preparation of the consolidated financial statements and the reasonableness of accounting estimates and related disclosures made by management.

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

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

KPMG Samjong Accounting Corp.

KPMG Samjong Accounting Corp.

Seoul, Korea

March 6, 2024

This report is effective as of March 6, 2024, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

WOORI BANK AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2023 AND 2022

The accompanying consolidated financial statements including all footnote disclosures were prepared by and are the responsibility of the management of Woori Bank

Byung Kyu Cho
President and Chief Executive Officer

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WOORI BANK AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2023 AND 2022

	December 31, 2023	December 31, 2022
	(Korean Won in millions)	
ASSETS		
Cash and cash equivalents (Notes 2, 6 and 45)	29,286,730	32,418,295
Financial assets at fair value through profit or loss (“FVTPL”) (Notes 4, 7, 11, 12, 18, 26 and 45)	20,561,927	18,489,573
Financial assets at fair value through other comprehensive income (“FVTOCI”) (Notes 4, 8, 11, 12 and 18)	37,811,173	33,000,262
Securities at amortized cost (Notes 4, 9, 11, 12 and 18)	23,996,172	28,268,516
Loans and other financial assets at amortized cost (Notes 2, 3, 4, 10, 11, 12, 18 and 45)	340,740,764	325,919,599
Investments in joint ventures and associates (Note 13)	1,029,697	917,581
Investment properties (Note 14)	592,528	603,211
Properties and equipment (Notes 15 and 18)	2,728,961	2,700,817
Intangible assets (Note 16)	519,781	438,484
Assets held for sale (Note 17)	11,573	9,589
Current tax assets (Note 42)	152,898	38,913
Deferred tax assets (Note 42)	44,312	55,732
Derivative assets (Designated for hedging) (Notes 4, 11, 12 and 26)	698	-
Net defined benefit assets(Note 24)	221,545	287,673
Other assets (Notes 18, 19 and 45)	318,307	192,734
Total assets	458,017,066	443,340,979
LIABILITIES		
Financial liabilities at FVTPL (Notes 4, 11, 12, 20, 26 and 45)	6,023,306	8,988,077
Deposits due to customers (Notes 4, 11, 21 and 45)	353,851,379	338,923,832
Borrowings (Notes 4, 11, 12, 22 and 45)	25,254,732	23,028,206
Debentures (Notes 4, 11 and 22)	21,277,033	24,639,433
Provisions (Notes 23, 44 and 45)	705,964	466,524
Net defined benefit liability (Note 24)	2,426	2,321
Current tax liabilities (Note 42)	58,085	716,936
Deferred tax liabilities (Note 42)	479,614	29,356
Derivative liabilities (Designated for hedging) (Notes 4, 11, 12, and 26)	135,263	193,831
Other financial liabilities (Notes 4, 11, 12, 25 and 45)	23,230,152	20,359,019
Other liabilities (Notes 25 and 45)	295,660	236,258
Total liabilities	431,313,614	417,583,793

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WOORI BANK AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2023 AND 2022
(CONTINUED)

	December 31, 2023	December 31, 2022
	(Korean Won in millions)	
EQUITY		
Owners' equity:	26,581,075	25,646,249
Share capital (Note 28)	3,581,392	3,581,392
Hybrid securities (Note 29)	1,546,447	2,344,816
Capital surplus (Note 28)	1,096,194	1,096,194
Other equity (Note 30)	(1,568,050)	(2,324,321)
Retained earnings (Notes 31 and 32)	21,925,092	20,948,168
(Regulatory reserve for credit loss)	(2,307,974)	(2,443,576)
(Regulatory reserve for credit loss to be reversed)	402,620	135,602
(Planned reversal of regulatory reserve for credit loss)	402,620	135,602
Non-controlling interests	122,377	110,937
Total equity	26,703,452	25,757,186
Total liabilities and equity	458,017,066	443,340,979

The accompanying notes are part of these consolidated financial statements.

WOORI BANK AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022

	2023	2022
	(Korean Won in millions, except for per share data)	
Interest income	18,385,867	12,742,404
Financial assets at FVTPL	116,203	63,515
Financial assets at FVTOCI	999,407	632,615
Financial assets at amortized cost	17,270,257	12,046,274
Interest expense	(10,949,611)	(5,324,680)
Net interest income (Notes 11, 34 and 45)	7,436,256	7,417,724
Fees and commissions income	1,103,298	1,151,974
Fees and commissions expense	(223,121)	(224,860)
Net fees and commissions income (Notes 11, 35 and 45)	880,177	927,114
Dividend income (Notes 11, 36 and 45)	255,084	151,113
Net gain on financial instruments at FVTPL (Notes 11, 37 and 45)	482,005	214,666
Net loss on financial assets at FVTOCI (Notes 11 and 38)	(37,641)	(21,498)
Net gain on financial assets at amortized cost	101,788	35,003
Net gain on disposals of loans and other financial assets at amortized cost (Note 11)	101,788	35,003
Provision for expected credit loss allowance (Notes 11, 39 and 45)	(993,519)	(458,812)
General and administrative expenses (Notes 40 and 45)	(3,799,282)	(3,914,672)
Other net operating expenses (Notes 40 and 45)	(1,007,910)	(567,451)
Operating income	3,316,958	3,783,187
Gain on valuation of investments in associates (Note 13)	88,788	73,958
Net other non-operating income (expenses)	(76,312)	5,563
Non-operating income (Note 13 and 41)	12,476	79,521
Net income before income tax expense	3,329,434	3,862,708
Income tax expense (Note 42)	(814,354)	(959,299)
Net income (Net income after the provision of regulatory reserve for credit loss for the years ended December 31, 2023 and 2022 are 2,917,700 million Won and 3,039,011 million Won, respectively) (Note 32)	2,515,080	2,903,409

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WOORI BANK AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022 (CONTINUED)

	2023	2022
	(Korean Won in millions, except for per share data)	
Net gain (loss) on valuation of equity securities at FVTOCI	195,032	(35,432)
Remeasurement of the net defined benefit liability	(65,720)	226,843
Changes in capital due to equity method	8,603	(4,527)
Items that will not be reclassified to profit or loss	137,915	186,884
Net gain (loss) on valuation of debt securities at FVTOCI	532,334	(463,724)
Changes in capital due to equity method	(2,611)	5,413
Gain on foreign currency translation of foreign operations	48,711	47,258
Loss on evaluation of hedge of net investment in foreign operations	(14,049)	(20,701)
Items that may be reclassified to profit or loss	564,385	(431,754)
Other comprehensive income (loss), net of tax	702,300	(244,870)
Total comprehensive income	3,217,380	2,658,539
Net income attributable to:	2,515,080	2,903,409
Net income attributable to owners	2,505,587	2,892,165
Net income attributable to non-controlling interests	9,493	11,244
Total comprehensive income attributable to:	3,217,380	2,658,539
Comprehensive income attributable to owners	3,203,098	2,651,873
Comprehensive income attributable to non-controlling interests	14,282	6,666
Earnings per share (Note 43)		
Basic and diluted earnings per share (Unit : In Korean Won)	3,366	3,880

The accompanying notes are part of these consolidated financial statements.

WOORI BANK AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022

	Share capital	Hybrid securities	Capital surplus	Other equity	Retained earnings	Owner's equity	Non-controlling interests	Total equity
				(Korean Won in millions)				
January 1, 2022	3,581,392	2,555,166	1,096,194	(2,061,097)	19,383,229	24,554,884	106,635	24,661,519
Net income	-	-	-	-	2,892,165	2,892,165	11,244	2,903,409
Dividends on common stocks	-	-	-	-	(1,175,672)	(1,175,672)	(2,365)	(1,178,037)
Net loss on valuation of financial assets at FVTOCI	-	-	-	(498,681)	-	(498,681)	(475)	(499,156)
Net gain(loss) due to disposal of financial assets at FVTOCI	-	-	-	10,473	(10,473)	-	-	-
Changes in capital due to equity method	-	-	-	886	-	886	-	886
Gain(loss) on foreign currency translation of foreign operations	-	-	-	51,381	-	51,381	(4,122)	47,259
Loss on evaluation of hedges of net investment in foreign operations	-	-	-	(20,701)	-	(20,701)	-	(20,701)
Disposal of assets held for sale	-	-	-	(279)	279	-	-	-
Remeasurement of the net defined benefit liability	-	-	-	226,823	-	226,823	20	226,843
Dividends on hybrid securities	-	-	-	-	(113,995)	(113,995)	-	(113,995)
Issuance to hybrid securities	-	349,215	-	-	-	349,215	-	349,215
Redemption of hybrid securities	-	(559,565)	-	(60,491)	-	(620,056)	-	(620,056)
Appropriation of retained earnings	-	-	-	27,365	(27,365)	-	-	-
December 31, 2022	3,581,392	2,344,816	1,096,194	(2,324,321)	20,948,168	25,646,249	110,937	25,757,186
January 1, 2023	3,581,392	2,344,816	1,096,194	(2,324,321)	20,948,168	25,646,249	110,937	25,757,186
Net income	-	-	-	-	2,505,587	2,505,587	9,493	2,515,080
Dividends on common stocks	-	-	-	-	(1,372,572)	(1,372,572)	(2,842)	(1,375,414)
Net gain on valuation of financial assets at FVTOCI	-	-	-	727,312	-	727,312	54	727,366
Net gain(loss) due to disposal of financial assets at FVTOCI	-	-	-	(87)	87	-	-	-
Changes in capital due to equity method	-	-	-	5,992	-	5,992	-	5,992
Equity method capital adjustment	-	-	-	50	(50)	-	-	-
Gain on foreign currency translation of foreign operations	-	-	-	44,048	-	44,048	4,663	48,711
Loss on evaluation of hedges of net investment in foreign operations	-	-	-	(14,049)	-	(14,049)	-	(14,049)
Remeasurement of the net defined benefit liability	-	-	-	(65,792)	-	(65,792)	72	(65,720)
Dividends on hybrid securities	-	-	-	-	(95,637)	(95,637)	-	(95,637)
Issuance to hybrid securities	-	299,327	-	-	-	299,327	-	299,327
Redemption of hybrid securities	-	(1,097,696)	-	(1,694)	-	(1,099,390)	-	(1,099,390)
Appropriation of retained earnings	-	-	-	60,491	(60,491)	-	-	-
December 31, 2023	3,581,392	1,546,447	1,096,194	(1,568,050)	21,925,092	26,581,075	122,377	26,703,452

The accompanying notes are part of these consolidated financial statements.

WOORI BANK AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022

	For the years ended December 31	
	2023	2022
	(Korean Won in millions)	
Cash flows from operating activities:		
Net income	2,515,080	2,903,409
Adjustments:		
Income tax expense	814,354	959,299
Interest income	(18,385,867)	(12,742,404)
Interest expense	10,949,611	5,324,680
Dividend income	(255,084)	(151,113)
	(6,876,986)	(6,609,538)
Additions of expenses not involving cash outflows:		
Loss on financial instruments at FVTPL	-	827,247
Loss on financial assets at FVTOCI	46,335	23,836
Provision for expected credit loss allowance	993,519	458,812
Loss on valuation of investments in joint ventures and associates	13,016	9,481
Loss on disposal of investments in joint ventures and associates	441	116
Loss on derivatives (designated for hedging)	8,819	250,267
Loss on fair value hedge	72,601	-
Retirement benefits	88,694	136,942
Losses related to other provisions	72,213	24,540
Depreciation and amortization	425,070	456,336
Loss on disposal of Properties and equipment, intangible asset and other assets	1,694	2,875
Impairment loss on Properties and equipment, intangible asset and other assets	22	144
Loss on foreign currency translation	342,930	-
Other losses	-	63,354
Other operating expenses	169,357	-
	2,234,711	2,253,950
Deductions of incomes not involving cash inflows:		
Gain on financial instruments at FVTPL	553,797	-
Gain on financial assets at FVTOCI	8,694	2,338
Gain on valuation of investments in joint ventures and in associates	101,804	83,440
Gain on disposal of investments in joint ventures and in associates	32,766	560
Gain on derivatives (designated for hedging)	69,479	1,288
Gain on fair value hedge	8,986	257,910
Gain related to other provisions	14,498	53,796
Gain on disposal of Properties and equipment, intangible assets and other assets	1,853	25,503
Reversal of impairment loss on Properties and equipment, intangible asset and other assets	47	-
Gain on disposal of assets held for sale	3,027	28,525
Loss on foreign currency translation	-	90,522
Other incomes	-	15,880
	794,951	559,762
Changes in operating assets and liabilities:		
Financial instruments at FVTPL	(2,035,979)	(1,698,435)
Loans and other financial assets at amortized cost	(15,140,110)	(1,626,419)
Other assets	(122,039)	(35,651)
Deposits due to customers	14,424,924	23,476,007
Provisions	(31,852)	(23,692)
Net defined benefit liability	(112,056)	(103,248)
Other financial liabilities	1,523,574	(3,414,341)
Other liabilities	55,886	64,488
	(1,437,652)	16,638,709
Cash received from operating activities:		
Interest income received	18,037,691	12,293,383
Interest expense paid	(9,800,116)	(4,332,006)
Dividends received	255,176	151,148
Income tax paid	(1,355,888)	(856,220)
Net cash inflow from operating activities	2,777,065	21,883,073

WOORI BANK AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022
(CONTINUED)

	For the years ended December 31	
	2023	2022
	(Korean Won in millions)	
Cash flows from investing activities:		
Disposal of financial instruments at FVTPL	10,598,578	10,072,904
Acquisition of financial instruments at FVTPL	(12,980,735)	(11,297,246)
Disposal of financial assets at FVTOCI	20,648,897	21,713,901
Acquisition of financial assets at FVTOCI	(24,211,511)	(16,109,821)
Redemption of securities at amortized cost	8,727,124	5,872,961
Acquisition of securities at amortized cost	(4,244,256)	(16,873,194)
Cash inflow from Changes in subsidiaries	-	17,648
Cash outflow from Changes in subsidiaries	-	(100,000)
Disposal of investments in joint ventures and associates	31,030	40,273
Acquisition of investments in joint ventures and associates	(68,711)	(18,272)
Disposal of Properties and equipment	18,849	11,913
Acquisition of Properties and equipment	(129,723)	(104,825)
Disposal of intangible assets	1,028	7
Acquisition of intangible assets	(179,648)	(108,127)
Disposal of assets held for sale	3,547	52,417
Net increase in other assets	8,277	62,440
Net cash outflow from investing activities	(1,777,254)	(6,767,021)
Cash flows from financing activities:		
Net increase of derivatives (designated for hedging)	1,394	19,669
Net Increase in borrowings	2,034,234	927,904
Issuance of debentures	12,859,755	10,943,580
Redemption of debentures	(16,412,140)	(12,778,811)
Redemption of lease liabilities	(172,682)	(168,519)
Net increase of other liabilities	30	453
Dividends paid to common stocks	(1,372,572)	(1,175,672)
Issuance of hybrid securities	299,327	349,215
Redemption of hybrid securities	(1,100,000)	(643,000)
Dividends paid to hybrid securities	(95,637)	(113,995)
Dividends paid to non-controlling interest	(2,842)	(2,365)
Net cash outflow from financing activities	(3,961,133)	(2,641,541)
Effects of exchange rate changes on cash and cash equivalents	(170,243)	31,240
Net increase (decrease) in cash and cash equivalents	(3,131,565)	12,505,751
Cash and cash equivalents, the beginning of the period	32,418,295	19,912,544
Cash and cash equivalents, the end of the period	29,286,730	32,418,295

The accompanying notes are part of these consolidated financial statements.

1. GENERAL

(1) Summary of the Parent company

Woori Bank (hereinafter referred to as the "Bank"), which is a parent company in accordance with K-IFRS No.1110 – *Consolidated Financial Statements*, was established in 1899 and is engaged in the commercial banking business under the Banking Act, trust business and foreign exchange business under the Financial Investment Services and Capital Market Act.

As of December 31, 2023, the Bank's shares are wholly owned by Woori Financial Group Inc. ("Woori Financial Group") which was established in accordance with the Financial Holding Companies Act on January 11, 2019. The Bank has 716 million shares and ordinary share capital amounting to 3,581,392 million Korean Won.

The headquarters of the Bank is located at 51, Sogong-ro, Jung-gu, Seoul, Korea. The Bank has 711 branches and offices in Korea, and 14 branches, 8 branch offices and 4 offices overseas as of December 31, 2023.

(2) The consolidated financial statements for Woori Bank and its subsidiaries (the "Group") include the following subsidiaries:

Subsidiaries	Main business	Percentage of ownership (%) December 31, 2023	Percentage of ownership (%) December 31, 2022	Location	Financial statements as of (2023)
Woori Bank:					
Woori America Bank	Finance	100.0	100.0	U.S.A.	December 31
Woori Global Markets Asia Limited	Finance	100.0	100.0	Hong Kong	December 31
Woori Bank China Limited	Finance	100.0	100.0	China	December 31
AO Woori Bank(*4)	Finance	100.0	100.0	Russia	December 31
PT Bank Woori Saudara Indonesia 1906 Tbk	Finance	84.2	84.2	Indonesia	December 31
Banco Woori Bank do Brasil S.A.	Finance	100.0	100.0	Brazil	December 31
Korea BTL Infrastructure Fund	Finance	99.9	99.9	Korea	December 31
Woori Finance Myanmar Co., Ltd.	Finance	100.0	100.0	Myanmar	December 31
Wealth Development Bank	Finance	51.0	51.0	Philippines	December 31
Woori Bank Vietnam Limited	Finance	100.0	100.0	Vietnam	December 31
Woori Bank (Cambodia) PLC	Finance	100.0	100.0	Cambodia	December 31
Woori Bank Europe	Finance	100.0	100.0	Germany	December 31
Kumho Trust First Co., Ltd. (*5)	Asset securitization	-	0.0	Korea	-
Asiana Saigon Inc. (*5)	Asset securitization	-	0.0	Korea	-
KAMCO Value Recreation First Securitization Specialty Co., Ltd. (*1)	Asset securitization	15.0	15.0	Korea	December 31
Jeonju Iwon Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Wonju I one Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Heitz Third Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woorihansoop 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori International First Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Wibihansoop 1st Co., Ltd. (*5)	Asset securitization	-	0.0	Korea	-
Woori QS 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Display 2nd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Dream 2nd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori H 1st Co., Ltd. (*5)	Asset securitization	-	0.0	Korea	-
Woori K 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori S 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Display 3rd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
TY 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori KC No.1 Co., Ltd. (*5)	Asset securitization	-	0.0	Korea	-

Subsidiaries	Main business	Percentage of ownership (%) December 31, 2023	Percentage of ownership (%) December 31, 2022	Location	Financial statements as of (2023)
Quantum Jump the 2nd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
ATLANTIC TRANSPORTATION 1 S.A. (*5)	Asset securitization	-	0.0	Marshall Islands	-
Woori Gongdeok First Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
HD Project Co., Ltd. (*5)	Asset securitization	-	0.0	Korea	-
Woori HW 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HC 2nd Co., Ltd. (*5)	Asset securitization	-	0.0	Korea	-
Woori Dream 3rd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori SJS 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Steel 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
SPG the 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori-HWC 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HC 3rd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Park I 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori DS 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HC 4th Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori SKR 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori H chemical 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
HE the 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Hub The 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori K The 3rd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori KF 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori TS 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori H Square 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori L Yongsan 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HC 5th Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Ladena 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HR 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Lotte Dongtan 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HC 6th Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori ECO 1st Co. Ltd. (*5)	Asset securitization	-	0.0	Korea	-
Woori HO 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori ESG 1st Co.,Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Osiria 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori Eco 2nd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Gangnam Landmark 2nd Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori HP the 1st Co., Ltd. (*1)	Asset securitization	0.0	0.0	Korea	December 31
Woori KF 2nd Co., Ltd. (*1)	Asset securitization	0.0	-	Korea	December 31
Woori HD 1st Co., Ltd. (*1)	Asset securitization	0.0	-	Korea	December 31
Woori ST 1st Co., Ltd. (*1)	Asset securitization	0.0	-	Korea	December 31
Woori High End 1st Co., Ltd. (*1)	Asset securitization	0.0	-	Korea	December 31
Woori HW 2nd Co., Ltd. (*1)	Asset securitization	0.0	-	Korea	December 31
Woori Mirae 1st Co., Ltd. (*1)	Asset securitization	0.0	-	Korea	December 31
Heungkuk Global Private Placement Investment Trust No. 1 (*2)	Securities investment	98.8	98.8	Korea	December 31
AI Partners UK Water Supply Private Investment Trust No. 2 (*2)	Securities investment	97.3	97.3	UK	December 31
Multi Asset Global Real Estate Investment Trust No. 5-2 (*2)	Securities investment	99.0	99.0	Korea	December 31
IGIS Australia Investment Trust No. 209-1 (*2)	Securities investment	99.4	99.4	Korea	December 31
Woori G North America Infra Private Placement Investment Trust No. 1 (*2)	Securities investment	99.3	99.3	Korea	December 31
Woori Global Development Infrastructure Synergy Company Private Placement Investment Trust No. 1 (*2)	Securities investment	99.9	99.9	Korea	December 31
Woori G Infrastructure New Deal General Type Private Investment Trust No. 1 (*2)	Securities investment	99.5	99.5	Korea	December 31
Woori G Global Secondary Private Placement Investment Trust No. 1 (*2)	Securities investment	98.6	98.3	Korea	December 31
Woori G ESG Infrastructure Development General Type Private Investment Trust No.1 (*2)	Securities investment	95.2	95.2	Korea	December 31
Kiwoom Harmony Private Placement Investment Trust No. 2 (*2)	Securities investment	97.2	97.1	Korea	December 31
Kiwoom Harmony Private Placement Investment Trust No. 1 (*2)	Securities investment	97.4	97.2	Korea	December 31

Subsidiaries	Main business	Percentage of ownership (%) December 31, 2023	December 31, 2022	Location	Financial statements as of (2023)
JB Airline Private Placement Investment Trust No.8 (*2)	Securities investment	97.0	97.0	Korea	December 31
Kiwoom Frontier Private Investment Trust No.23[Bond] (*5)	Securities investment	-	99.8	Korea	-
Kiwoom Harmony Private Placement Investment Trust No. 4 (*2)	Securities investment	96.2	-	Korea	December 31
Principal Guaranteed Trust (*3)	Trust	0.0	0.0	Korea	December 31
Principal and Interest Guaranteed Trust (*3)	Trust	0.0	0.0	Korea	December 31
Multi Asset Global Real Estate Investment Trust No. 5-2: MAGI No.5 LuxCo S.a.r.l.	Asset securitization	54.6	54.6	Luxembourg	December 31
MAGI No.5 LuxCo S.a.r.l: ADP 16 Brussels	Asset securitization	100.0	100.0	Belgium	December 31

(*1) The entity is a structured entity for the purpose of asset securitization. Although the Group is not a majority shareholder, the Group 1) has the power over the investee, 2) is exposed to or has rights to variable returns from its involvement with the investee, and 3) has the ability to use its power to affect its returns.

(*2) The entity is a structured entity for the purpose of investment in securities. Although the Group is not a majority shareholder, the Group 1) has the power over the investee, 2) is exposed to or has rights to variable returns from its involvement with the investee, and 3) has the ability to use its power to affect its returns.

(*3) It was determined that the consolidated entity controlled the monetary trust under the Capital Markets Act, taking into account the power of less than half of the ownership stake in investment-related activities, exposure to variable returns, and the ability to use power to affect the variable returns of the consolidated entity.

(*4) Following Russia's further invasion of Ukraine in February 2022, various countries, including the United States, have imposed additional sanctions on a number of Russian individuals and entities, and restricted or prohibited certain activities relating to Russia such as making new investments or the provision of certain services. These sanctions may result in a decrease in the value of financial or operating assets held by banks in relation to the disputed country, an increase in the collection period, restrictions on capital transfers, and a decrease in profits. As a result, the Group expect future financial impacts on the business of its subsidiary, AO Woori Bank of Russia, as of December 31, 2023, but it is difficult to assess the maximum potential exposure or the ultimate adverse impact with any degree of certainty.

(*5) Excluded from the consolidation due to the end of the credit facilities for the years ended December 31, 2023.

(3) The Group has not consolidated the following entities as of December 31, 2023 and 2022 despite having more than 50% ownership interest:

Subsidiaries	As of December 31, 2023 Location	Main Business	Percentage of ownership (%)
Mirae Asset Maps Clean Water Private Equity Investment Trust 7th (*1)	Korea	Securities Investment	59.7
Kiwoom Yonsei Private Equity Investment Trust (*1)	Korea	Securities Investment	88.9
IGIS Europe Private Placement Real Estate Fund No. 163-2 (*2)	Korea	Securities Investment	97.9
IGIS Global Private Placement Real Estate Fund No. 148-1 (*1)	Korea	Securities Investment	69.0
IGIS Global Private Placement Real Estate Fund No. 148-2 (*1)	Korea	Securities Investment	69.0
Mirae Asset Seoul Ring Expressway Private Special Asset Fund No. 1 (*1)	Korea	Securities Investment	66.7
Hangkang Sewage Treatment Plant Fund (*1)	Korea	Securities Investment	55.6
Korea Investment Pocheon-Hwado Highway Infra Private Placement Special Asset Fund (*1)	Korea	Securities Investment	55.1
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 1 (*1)	Korea	Securities Investment	55.0
Midas Global Private Placement Real Estate Investment Trust No. 7-2 (*1)	Korea	Securities Investment	58.3
Together-Korea Government Private Pool Private Securities Investment Trust No. 3 (*3)	Korea	Securities Investment	100.0
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 2 (*1)	Korea	Securities Investment	55.0
WooriG Woori Bank Partners Private Placement Investment Trust No. 1 (*1)	Korea	Securities Investment	92.6
WooriG Private Investment Trust No. 1 (*1)	Korea	Securities Investment	84.3
INMARK France Private Placement Investment Trust No. 18-1 (*1)	Korea	Securities investment	93.8
Kiwoom Vibrato Private Placement Investment Trust 1-W (EUR) (*2)	Korea	Securities investment	99.5
WooriG Global Mid-market Secondaries Private Placement Investment Trust No. 1 (*1)	Korea	Securities investment	80.0
KOTAM Global Infrastructure Private Equity Investment Trust No.1-4 (*2)	Korea	Securities investment	99.7
Hana UBS Class One Private Equity No. 3 C2 (*1)	Korea	Securities investment	51.0
Consus Gyeongju Green Private Equity Investment Trust No. 1 (*1)	Korea	Securities investment	50.0
Woori G Woori Bank Partners Private Placement Investment Trust No. 2 (*1)	Korea	Securities investment	90.9
Woori G Equity Bridge Loan Private Placement Investment Trust No. 1 (*1)	Korea	Securities investment	65.0
WooriG Private Investment Trust No. 5 (*1)	Korea	Securities investment	87.0
Kiwoom Harmony Private Placement Investment Trust No. 3 (*1)	Korea	Securities investment	76.7
Consus Solar Energy Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	50.0
Woori Innovative Growth New Deal Private Placement Investment Trust No.3 (*1)	Korea	Securities investment	79.8
Woori G Renewable New Deal Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	55.0
Woori G Policy-type New Deal (Infra Investment) Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	66.7
IGIS ESG General Private Investment Trust No.1 (*1)	Korea	Securities investment	60.0
Woori G GP Commitment Loan Private Placement Investment Trust No. 2 (*1)	Korea	Securities investment	80.0
Kiwoom Aurora General Type Private Placement Investment Trust No. 2 (*1)	Korea	Securities investment	60.0
NH-Amundi WSCP VIII Private Fund 2 (USD) (*1)	Korea	Securities investment	65.2
AI Partners Global Infrastructure Specialized Privately Placed Feeder Fund Trust No. 2 (USD) (*2)	Korea	Securities investment	98.0
WooriG Equity Investment General Type Private Investment Trust No.1 (*1)	Korea	Securities investment	93.8
Hangang new deal infra BTL fund 4 (HNBF4) (*1)	Korea	Securities investment	60.0
Woori Busan Logistics Infra Private Placement Special Asset Investment Trust (*1)	Korea	Securities investment	66.7
Woori Financial Digital Investment Association No. 1 (*1)	Korea	Securities investment	88.0
Woori G GP Commitment Loan Private Placement Investment Trust No. 3 (*1)	Korea	Securities investment	85.0
IGIS Global Private Placement Real Estate Fund No. 316-1 (*2)	Korea	Securities investment	99.3
INMARK Spain Private Placement Real Estate Investment Trust	Korea	Securities investment	97.7

Subsidiaries	Location	Main Business	Percentage of ownership (%)
	As of December 31, 2023		
No. 26-2 (*2)			
Woori G Japan Private Placement Real Estate Investment Trust No. 1-2 (*2)	Korea	Securities investment	98.8
Woori G Japan Blind General Type Private Real Estate Feeder Investment Trust No.1 (*2)	Korea	Securities investment	99.9
WooriG Private Investment Trust No.6 (*1)	Korea	Securities investment	85.0
Woori New Growth Credit Fund 1 (*1)	Korea	Securities investment	70.9
Woori Asset Global Partnership Fund No. 5 (*1)	Korea	Securities investment	57.7
Woori PE Secondary Private Placement Investment Trust No. 1 (*1)	Korea	Securities investment	82.6
Kiwoom Harmony Private Placement Investment Trust No. 6 (*1)	Korea	Securities investment	76.9

(*1) Since the investee is a discretionary funds, the Group does not have power over the investee because the fund manager has the sole authority to decide the relevant activities of the investee. The fund manager's delegated power is exercised not only for the Group, but also for other investors as well. The Group does not have the power over the fund's activities even though it holds more than 50% of ownership interest.

(*2) The investment target for the fund was predefined, and the disposition of investment assets cannot be determined by the Group, and as a fund of funds, the Group does not have ability to make decisions regarding investment assets in parent funds. The Group does not have the power over the fund's activities even though it holds more than 50% of ownership interest.

(*3) Since the investee is a stock market stabilization fund, the Group does not have power over such fund as the fund's relevant activities are determined by the investment management committee, over which the Group does not have substantive rights. The Group does not have the power over the fund's relevant activities even though the Group holds more than 50% of ownership interest.

Subsidiaries	Location	Main Business	Percentage of ownership (%)
	As of December 31, 2022		
Mirae Asset Maps Clean Water Private Equity Investment Trust 7th (*1)	Korea	Securities Investment	57.6
Kiwoom Yonsei Private Equity Investment Trust (*1)	Korea	Securities Investment	88.9
IGIS Europe Private Placement Real Estate Fund No. 163-2 (*2)	Korea	Securities Investment	97.8
IGIS Global Private Placement Real Estate Fund No. 148-1 (*1)	Korea	Securities Investment	69.0
IGIS Global Private Placement Real Estate Fund No. 148-2 (*1)	Korea	Securities Investment	69.0
Mirae Asset Seoul Ring Expressway Private Special Asset Fund No. 1 (*1)	Korea	Securities Investment	66.7
Hangang Sewage Treatment Plant Fund (*1)	Korea	Securities Investment	55.6
Korea Investment Pocheon Hwado Expressway Professional Investment Fund (*1)	Korea	Securities Investment	55.2
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 1 (*1)	Korea	Securities Investment	55.0
Midas Global Private Placement Real Estate Fund No. 7-2 (*1)	Korea	Securities Investment	58.3
Together-Korea Government Private Pool Private Securities Investment Trust No. 3 (*3)	Korea	Securities Investment	100.0
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 2 (*1)	Korea	Securities Investment	55.0
WooriG Woori Bank Partners Private Placement Investment Trust No. 1 (*1)	Korea	Securities Investment	92.6
WooriG Private Investment Trust No. 1 (*1)	Korea	Securities Investment	80.0
INMARK France Private Investment Trust No. 18-1 (*1)	Korea	Securities investment	93.8
Kiwoom-Vibrato Private Investment Trust 1-W(EUR) (*2)	Korea	Securities investment	99.5
WooriG Global Mid-market Secondaries Private Placement Investment Trust No. 1 (*1)	Korea	Securities investment	80.0
KOTAM Global Infrastructure Private Equity Investment Trust No.1-4 (*2)	Korea	Securities investment	99.7
Hana UBS Class One Private Equity No. 3 C2 (*1)	Korea	Securities investment	51.0
Consus Gyeongju Green Private Equity Investment Trust No. 1 (*1)	Korea	Securities investment	50.0
Woori G Woori Bank Partners Private Placement Investment Trust No. 2 (*1)	Korea	Securities investment	90.9
Woori G Equity Bridge Loan Private Placement Investment Trust No. 1(*1)	Korea	Securities investment	65.0
WooriG Private Investment Trust No. 5 (*1)	Korea	Securities investment	86.8
Kiwoom Harmony Private Placement Investment Trust No. 3 (*1)	Korea	Securities investment	76.7
Consus Solar Energy Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	50.0
Woori Innovative Growth New Deal Private Investment Trust No.3 (*1)	Korea	Securities investment	79.8

Subsidiaries	As of December 31, 2022 Location	Main Business	Percentage of ownership (%)
Woori G Renewable New Deal Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	55.0
Woori G Policy-type New Deal (Infra Investment) Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	66.7
IGIS ESG Private Placement Investment Trust No.1 (*1)	Korea	Securities investment	60.0
Woori G GP Commitment Loan Private Placement Investment Trust No.2 (*1)	Korea	Securities investment	80.0
Kiwoom-Aurora Private Securities Investment Trust No. 2 (*1)	Korea	Securities investment	60.0
NH-Amundi WSCP VIII Private Fund 2 (USD) (*1)	Korea	Securities investment	65.2
AI Partners Global Infrastructure Specialized Privately Placed Feeder Fund Trust No. 2 (USD) (*2)	Korea	Securities investment	98.0
WooriG Equity Investment General Type Private Investment Trust No.1 (*1)	Korea	Securities investment	93.8
Hangang new deal infra BTL fund 4 (HNBF4) (*1)	Korea	Securities investment	60.0
Woori Busan Logistics Infra Private Placement Special Asset Investment Trust (*1)	Korea	Securities investment	66.7
Woori Financial Digital Investment Association No. 1 (*1)	Korea	Securities investment	88.0

(*1) Since the investee is a Discretionary funds, the Group does not have power over the investee because the fund manager has the sole authority to decide the relevant activities of the investee. The fund manager's delegated power is exercised not only for the group, but also for other investors as well. The Group does not have the power over the fund's activities even though it holds more than 50% of ownership interest.

(*2) Since the investee is a Fund of funds, the Group does not have power over such funds because the group cannot decide the relevant activities of the fund through the related contract. The Group does not have the power over the fund's activities even though it holds more than 50% of ownership interest.

(*3) Since the investee is a Stock market stabilization fund, the Group does not have power over such fund as the fund's relevant activities are determined by the management committee, over which the Group does not have substantial control. The Group does not have the power over the fund's activities even though it holds more than 50% of ownership interest.

(4) The summarized financial information of the major subsidiaries is as follows. The financial information of each subsidiary was prepared on the basis of consolidated financial statements. (Unit: Korean Won in millions):

	December 31, 2023				
	Assets	Liabilities	Operating revenue	Net income (loss) attributable to owners	Comprehensive income (loss) attributable to owners
Woori America Bank	4,380,793	3,780,732	213,835	32,412	43,019
Woori Global Markets Asia Limited	639,748	453,289	49,928	14,507	18,354
Woori Bank China Limited	5,812,416	5,141,122	262,453	33,872	32,226
AO Woori Bank	420,219	345,751	29,542	8,091	(3,140)
PT Bank Woori Saudara Indonesia 1906 Tbk	4,665,074	3,804,207	348,081	60,277	87,745
Banco Woori Bank do Brasil S.A.	281,784	255,717	25,196	(3,233)	3,205
Korea BTL Infrastructure Fund	735,206	286	29,905	26,446	25,938
Woori Finance Myanmar Co., Ltd.	37,844	19,132	9,091	2,379	2,629
Wealth Development Bank	294,157	251,010	25,164	(138)	781
Woori Bank Vietnam Limited	3,533,036	2,926,359	300,630	59,692	54,322
Woori Bank (Cambodia) PLC	1,902,011	1,466,719	244,041	25,194	31,906
Woori Bank Europe	1,187,246	1,071,453	40,621	(5,149)	1,290
Money trust under the FISCM Act	1,267,803	1,244,632	66,917	9,652	9,652
Structured entity for securitization of financial assets	2,461,932	2,836,902	90,353	(23,767)	(20,577)
Structured entity for the investments in securities	1,793,892	53,093	129,183	83,807	97,661

	December 31, 2022				
	Assets	Liabilities	Operating revenue	Net income (loss) attributable to owners	Comprehensive income (loss) attributable to owners
Woori America Bank	3,942,049	3,385,007	149,340	36,239	58,319
Woori Global Markets Asia Limited	597,632	429,526	26,399	9,855	19,296
Woori Bank China Limited	6,329,901	5,690,833	295,576	35,860	15,689
AO Woori Bank	785,215	707,608	78,727	12,060	14,700
PT Bank Woori Saudara Indonesia 1906 Tbk	4,220,574	3,429,714	299,256	68,412	42,455
Banco Woori Bank do Brasil S.A.	228,126	205,264	24,029	(1,267)	854
Korea BTL Infrastructure Fund	735,956	286	26,760	24,193	23,450
Woori Finance Myanmar Co., Ltd.	34,739	18,655	9,787	1,937	244
Wealth Development Bank	285,931	243,565	22,474	819	(155)
Woori Bank Vietnam Limited	3,388,002	2,835,647	209,756	63,216	73,449
Woori Bank (Cambodia) PLC	1,839,386	1,436,001	229,166	59,836	80,978
Woori Bank Europe	882,891	768,388	15,878	1,329	1,802
Money trust under the FISCM Act	1,312,239	1,298,719	32,957	(16,761)	(16,761)
Structured entity for securitization of financial assets	2,735,333	3,082,643	85,171	(996)	2,720
Structured entity for the investments in securities	1,971,254	136,433	64,550	57,437	58,476

(5) The financial support that the Group provides to consolidated structured entities is as follows:

- Structured entity for asset securitization
  The structured entity which is established for the purpose of securitization of project financing loans, corporate bonds, and other financial assets. The Group is involved with the structured entity through provision of credit facility over asset-backed commercial papers issued by the entity, originating loans directly to the structured entity, or purchasing 100% of the subordinated debts issued by the structured entity.

- Structured entity for the investments in securities
  The structured entity is established for the purpose of investments in securities. The Group acquires beneficiary certificates through its contribution of funding to the structured entity by the Group, and it is exposed to the risk that it may not be able to recover its fund depending on the result of investment performance of asset managers of the structured entity.

- Monetary trust under the Financial Investment Services and Capital Markets Act
  The Group provides with financial guarantee of principal and interest or solely principal to some of its trust products. Due to the financial guarantees, the Group may be obliged when the principal and interest or principal of the trust product sold is short of the guaranteed amount depending on the result of investment performance of the trust product.

As of December 31, 2023 and 2022, the Group provides 2,445,644 million Won and 231,309 million Won of credit facilities for the structured entities mentioned above. As of December 31, 2023 and 2022, the purchase commitment amount is 1,049,936 million Won and 753,756 million Won, respectively.

(6) The Group has entered into various agreements with structured entities such as asset securitization, structured finance, investment fund, and trust contract. The characteristics and the nature of risks related to unconsolidated structured entities over which the Group does not have control in accordance with K-IFRS No.1110 - Consolidated Financial Statements are as follows:

The ownership interests on unconsolidated structured entities that the Group hold are classified into asset securitization vehicles, structured finance and investment fund, based on the nature and the purpose of the structured entities.

Unconsolidated structured entities classified as ‘asset securitization vehicles’ are entities that issue asset-backed securities, pay the principal and interest or distribute dividends on asset-backed securities through borrowings or profits from the management, operation and sale of securitized assets. The Group bears related risks by the purchase commitments of asset-backed securities or issuance of asset-backed securities through credit facilities, and the structured entities recognize related interest or fee revenue. There are entities that provide additional funding and conditional debt acquisition commitments before the Group’s financial support, but the Group is still exposed to losses arising from the purchase of financial assets issued by the structured entities when it fails to renew the securities.

Unconsolidated structured entities classified as ‘structured financing’ include real estate project financing investment vehicle, social overhead capital companies, and special purpose vehicles for ship (aircraft) financing. Each entity is incorporated as a separate company with a limited purpose in order to efficiently pursue business goals. ‘Structured financing’ is a financing method for large-scale risky business, with investments made based on feasibility of the specific business or project, instead of credit of business owner or physical collaterals. The investors receive profits from the operation of the business. The Group recognizes interest revenue, profit or loss from evaluation or transactions of financial instruments, or dividend income. With regard to uncertainties involving structured financing, there are entities that provide financial support such as additional fund, guarantees and prioritized credit facilities prior to the Group’s intervention, but the Group is exposed to possible losses due to loss of principal from reduction in investment value or irrecoverable loans arising from failure to collect scheduled cash flows and cessation of projects.

Unconsolidated structured entities classified as ‘investment funds’ include investment trusts and private equity funds. An investment trust orders the investment and operation of funds to the trust manager in accordance with trust contract with profits distributed to the investors. Private equity funds raise funding required to acquire equity securities to enable direction of management and/or improvement of ownership structure, with profit distributed to the investors. The Group recognizes pro rata amount of dividend income as an investor in the same way as 'structured finance', and may be exposed to losses due to reduction in investment value. As of December 31, 2023 and 2022, the investment value in MMF(Money Market Fund) amounted to 1,450,252 million Won and 945,795 million Won, respectively, and there are no additional MMF-related commitments.

Total assets of the unconsolidated structured entities held by the Group, the carrying value of the related items recorded, the maximum exposure to risks, and the loss recognized in conjunction with the unconsolidated structured entities as of December 31, 2023 and 2022 are as follows: The maximum exposure to risks includes the amounts that are recognized in the consolidated financial statements and will be confirmed when certain conditions are met in the future such as investments, purchase commitments, credit facilities and others. (Unit: Korean Won in millions):

	December 31, 2023		
	Asset securitization vehicle	Structured finance	Investment funds
Total asset of the unconsolidated structured entities	9,012,541	55,525,814	164,334,970
Assets recognized in the consolidated financial statements related to the unconsolidated structured entities	8,868,621	2,637,529	7,732,375
Financial assets at FVTPL	-	2,111	7,576,233
Financial assets at FVTOCI	2,802,592	43,696	-
Financial assets at amortized cost	6,066,029	2,591,598	-
Investments in joint ventures and associates	-	-	153,958
Derivative assets	-	124	2,184
Liabilities recognized in the consolidated financial statements related to the unconsolidated structured entities	99	3,207	2,006
Derivative liability	-	1,243	2,006
Other liabilities (provisions)	99	1,964	-
The maximum exposure to risks	8,928,381	3,481,625	13,490,033
Investments	8,868,621	2,637,529	7,732,374
Purchase agreement	-	-	5,757,659
Credit facilities	59,760	844,096	-
Loss recognized on unconsolidated structured entities	-	299	63,614

	December 31, 2022		
	Asset securitization vehicle	Structured finance	Investment funds
Total asset of the unconsolidated structured entities	8,127,552	54,808,596	125,754,166
Assets recognized in the consolidated financial statements related to the unconsolidated structured entities	7,500,222	3,124,717	5,495,064
Financial assets at FVTPL	-	2,518	5,315,937
Financial assets at FVTOCI	3,213,331	45,735	-
Financial assets at amortized cost	4,286,891	3,076,341	31,023
Investments in joint ventures and associates	-	-	147,359
Derivative assets	-	123	745
Liabilities recognized in the consolidated financial statements related to the unconsolidated structured entities	808	6,373	2,091
Derivative liability	729	4,974	2,091
Other liabilities (provisions)	79	1,399	-
The maximum exposure to risks	7,579,502	3,438,402	11,495,473
Investments	7,500,222	3,124,717	5,495,064
Purchase agreement	-	-	6,000,409
Credit facilities	79,280	313,685	-
Loss recognized on unconsolidated structured entities	-	956	74,913

(7) The share of non-controlling interests on the net income and equity of subsidiaries of which non-controlling interests that are significant to the Group's consolidated financial statements as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

1) Accumulated non-controlling interests at the end of the reporting period

	December 31, 2023	December 31, 2022
PT Bank Woori Saudara Indonesia 1906 Tbk	103,176	92,118
Wealth Development Bank	21,142	20,759

2) Net income or loss attributable to non-controlling interests

	2023	2022
PT Bank Woori Saudara Indonesia 1906 Tbk	9,521	10,806
Wealth Development Bank	(68)	401

3) Dividends to non-controlling interests

	2023	2022
PT Bank Woori Saudara Indonesia 1906 Tbk	2,802	2,330

2. BASIS OF PREPARATION AND MATERIAL ACCOUNTING POLICIES

(1) Basis of presentation

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

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

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

The material accounting policies applied in the preparation of consolidated financial statements as of and for the year ended December 31, 2023 are stated below, and the accounting policies applied are identical to ones used in the preparation of previous year's consolidated financial statements, except for the effects of adopting new standards or interpretations as explained below.

The consolidated financial statements are prepared at the end of each reporting period on the historical cost basis, except for certain non-current assets and financial assets that are either revalued or measured in fair value. Historical cost is generally measured at the fair value of consideration given to acquire assets.

Meanwhile, the consolidated financial statements of the Group was initially approved by the board of directors on February 6, 2024, and were revised and approved on February 29, 2024, and is planned for an approval in the annual shareholder's meeting on March 21, 2024.

1) From the accounting period beginning on January 1, 2023, the Group has newly applied the following amendments and interpretations.

i) Amendments to K-IFRS No.1001 '*Presentation of Financial Statements'* and IFRS Practice Statement 2 '*Making Materiality Judgements'* – Disclosure of Accounting Policy

In order to define and disclose important accounting policies and to provide guidance on how to apply the concept of materiality the IFRS Practice Statement 2 ' Disclosure of Accounting Policies' has been revised. The Group expects that there is no significant impact on the consolidated financial statement of the Group due to this amendment.

ii) Amendments to K-IFRS No.1008 '*Accounting Policies, Changes in Accounting Estimates and Errors'* – Definition of 'Accounting Estimates'

The Group defined accounting estimates and clarified the way to distinguish changes in accounting policies from changes in accounting estimates. The Group expects that there is no significant impact on the consolidated financial statement of the Group due to this amendment.

iii) Amendments to K-IFRS No.1001 *'Presentation of Financial Statements'*—Disclosure of gains or losses on valuation of financial liabilities with conditions for exercise price adjustment

The amendments require disclosure of valuation gains or losses (limited to those recognized in the profit or loss) of the conversion options or warrants (or financial liabilities including them), if all or part of the financial instrument with exercise price that is adjusted depending on the issuer's share price change is classified as financial liability as defined in paragraph 11 (2) of K-IFRS No.1032. The Group expects that there is no significant impact on the consolidated financial statement of the Group due to this amendment.

iv) Annual Improvements to K-IFRS No.1012 '*Income Taxes'* - deferred tax related to assets and liabilities arising from a single transaction.

Additional phrase 'the temporary difference to be added and the temporary difference to be deducted do not occur in the same amount' has been added to initial recognition exception for a transaction in which an asset or liability is initially recognized. The Group expects that there is no significant impact on the consolidated financial statement of the Group due to this amendment.

v) New Standard: K-IFRS No.1117 '*Insurance Contract'*

K-IFRS No.1117 *Insurance Contracts* replaces K-IFRS No.1104 *Insurance Contracts*. This Standard estimates future cash flows of an insurance contract and measures insurance liabilities using discount rates applied with assumptions and risks at the measurement date. The entity recognizes insurance revenue on an accrual basis including services (insurance coverage) provided to the policyholder by each annual period. In addition, investment components (Refunds due to termination/maturity) repaid to a policyholder even if an insured event does not occur, are excluded from insurance revenue, and insurance financial income or expense and the investment income or expense are presented separately to enable users of the information to understand the sources of income or expenses. The Group expects that there is no significant impact on the consolidated financial statement of the Group due to this amendment.

vi) K-IFRS No.1012 *'Income Taxes'* - International Tax Reform – Pillar Two Model Rules

The amendments provide a temporary relief from the accounting for deferred taxes arising from legislation enacted to implement the Pillar Two model rules, which aim to reform international corporate taxation for multinational enterprises, and require disclosure of related current tax effects, etc.

The Group applies the exception to recognizing and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes. Since the Pillar Two legislation is scheduled to be effective from January 1, 2024, the Group has no current tax expense related to Pillar Two. The impact of the Pillar Two income taxes is described in Note 42.

2) The details of K-IFRS that have been issued and published as of January 1, 2023 but have not yet reached the effective date, and which the Group has not applied at an earlier date are as follows :

i) Amendments to K-IFRS No.1001 *'Presentation of Financial Statements'* – Classification of Liabilities as Current or Non-current, Non-current Liabilities with Covenants

The amendments clarify that the classification of either current or non-current liabilities is based on the entity's rights existing at the end of the reporting period and highlight that the entity is not expected to exercise its right to defer settle the liabilities. At the end of the reporting period, if the borrowing arrangement is in compliance, the right is explained and the definition is clarified by transferring cash, equity instruments, or other assets or services to the counterparty.

The amendments also stipulate that only certain conditions in the borrowing arrangement that must be complied with before the end of the reporting period (hereinafter referred to as the 'agreement') affect an entity's right to defer settlement of the liability for at least 12 months after the reporting period.

Although compliance with the arrangement is assessed only after the reporting period, these arrangements affect the existence of rights as of the end of the reporting period.

In addition. stipulates that agreements that must be followed only after the reporting period do not affect the right to defer payment. However, if an entity's right to defer settlement of a liability depends on the arrangements it complies with within 12 months of the reporting period, it shall disclose information to users of financial statements to understand the risk that the liability may be repaid within 12 months of the reporting period. This information includes information about the arrangement (including the nature of the arrangement, when the entity should comply with the arrangement), the carrying amount of the liability involved, and facts and circumstances indicating that the arrangement may be difficult to comply with.

The above amendments shall be applied retrospectively for annual periods beginning on or after 1 January 2024 and shall be permitted for early application.

The above enacted or amended standards will not have a significant impact on the consolidated financial statements of the Group.

ii) Amendments to K-IFRS No.1007 *Statement of Cash Flows*, K-IFRS No.1107 *Financial Instruments: Disclosures* – Supplier finance arrangements

When applying supplier finance arrangements, an entity shall disclose information about its supplier finance arrangements that enables users of financial statements to assess the effects of those arrangements on the entity's liabilities and cash flows and on the entity's exposure to liquidity risk. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted.

The above enacted or amended standards will not have a significant impact on the consolidated financial statements of the Group.

iii) Amendments to K-IFRS No.1116 *Leases* - Lease Liability in a Sale and Leaseback

When subsequently measuring lease liabilities arising from a sale and leaseback, a seller-lessee shall determine lease payments or revised lease payments in a way that the seller-lessee would not recognize any amount of the gain or loss that relates to the right of use retained by the seller-lessee. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted.

The above enacted or amended standards will not have a significant impact on the consolidated financial statements of the Group.

iv) Amendments to K-IFRS No.1001 *Presentation of Financial Statements* – Disclosure of Cryptographic Assets

The amendments require for an additional disclosure if an entity holds cryptographic assets, or holds cryptographic assets on behalf of the customer, or issues cryptographic assets. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted.

The above enacted or amended standards will not have a significant impact on the consolidated financial statements of the Group.

(2) Basis of consolidated financial statement presentation

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

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

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

Income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary. Profit or loss and each component of other comprehensive income are attributed to the owner of the Group and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owner of the Group and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

If a subsidiary uses accounting policies other than those of the Group for like transactions and events in similar circumstances, if necessary, adjustments shall be made to make the subsidiary's accounting policies conform to those of the Group to prepare the consolidated financial statements.

All intra-group transactions and, related assets and liabilities, income and expenses are eliminated in full when preparing the consolidated financial statements.

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

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

(3) Business combinations

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

At the acquisition date, the acquiree's identifiable assets, liabilities and contingent liabilities that meet the condition for recognition under K-IFRS No.1103 are recognized at their fair value, except that:

- deferred tax assets or liabilities and assets or liabilities related to employee benefit arrangements are recognized and measured in accordance with K-IFRS No.1012 *Income Taxes* and K-IFRS No.1019 *Employee Benefits*, respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with K-IFRS No.1102 *Share-based Payment at the acquisition date*; and
- non-current assets (or disposal groups) that are classified as held for sale in accordance with K-IFRS No.1105 *Non-current Assets Held for Sale and Discontinued Operations* are measured at the lower of their previous carrying amounts and fair value less costs to sell.

Any excess of the sum of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest (if any) in the acquiree over the net of identifiable assets and liabilities assumed of the acquiree at the acquisition date is recognized as goodwill which is included in intangible assets.

If, after reassessment, the Group's interest in the fair value of the acquiree's identifiable net assets exceeds the sum of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value.

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

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration other than the above is remeasured at subsequent reporting dates as appropriate, with the corresponding gain or loss being recognized in profit or loss.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured at fair value at the acquisition date (i.e., the date when the Group obtains control) and the resulting gain or loss, if any, is recognized in profit or loss (or other comprehensive income, if applicable). Amounts arising from changes in value of interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are recognized, identical to the treatment assuming interests are sold directly.

(4) Investments in joint ventures and associates

An associate is an entity over which the Group has significant influence, and that is not a subsidiary or a joint venture. Significant influence is the power to participate in making decision on the financial and operating policy of the investee but is not control or joint control over those policies.

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

The net income of the current period and the assets and liabilities of the joint ventures and associates are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with K-IFRS No.1105 *Non-current Assets Held for Sale and Discontinued Operations*. Under the equity method, an investment in the joint ventures and associates is initially recognized in the consolidated statements of financial position at cost and adjusted thereafter to recognize the Group's share of the net assets of the joint ventures and associates and any impairment. When the Group's share of losses of the joint ventures and associates exceeds the Group's interest in the associate, the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the joint ventures and associates.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of the joint ventures and associates recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group’s share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition is recognized immediately in profit or loss.

Upon a loss of significant influence over the joint ventures and associates, the Group discontinues the use of the equity method and measures at fair value of any investment that the Group retains in the former joint ventures and associates from the date when the Group loses significant influence. The fair value of the investment is regarded as its fair value on initial recognition as a financial asset in accordance with K-IFRS No.1109 *Financial Instruments; Recognition and Measurement*. The Group recognized differences between the carrying amount and fair value in profit or loss and it is included in determination of the gain or loss on disposal of joint ventures and associates. The Group accounts for all amounts recognized in other comprehensive income in relation to that joint ventures and associates on the same basis as would be required if the joint ventures and associates had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by an associate would be reclassified to net income on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to net income as a reclassification adjustment.

When the Group’s ownership of interest in an associate or a joint venture decreases but the Group continues to maintain significant influence over an associate or a joint venture, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that decrease in ownership interest if the gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities. Meanwhile, if interest on associate or joint venture meets the definition of non-current asset held for sale, it is accounted for in accordance with K-IFRS No.1105.

The requirements of K-IFRS No.1028 - *Investments in Associates and Joint Ventures* to determine whether there has been a loss event are applied to identify whether it is necessary to recognize any impairment loss with respect to the Group’s investment in the joint ventures and associates. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with K-IFRS No.1036 - *Impairment of Assets* as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognized is not allocated to any asset (including goodwill), which forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with K-IFRS No.1036 to the extent that the recoverable amount of the investment subsequently increases.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no remeasurement to fair value upon such changes in ownership interests.

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

(5) Investment in Joint operation

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

When the Group operates as a joint operator, it recognizes in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with K-IFRSs applicable to the particular assets, liabilities, revenues and expenses.

When the Group enters into a transaction with a joint operation in which it is a joint operator, such as a sale or contribution of assets, it is conducting the transaction with the other parties to the joint operation and, as such, the Group recognizes gains and losses resulting from such a transaction only to the extent of the other parties' interests in the joint operation.

When the Group enters into a transaction with a joint operation in which it is a joint operator, such as a purchase of assets, it does not recognize proportional share of profit or loss until the asset is sold to a third party.

(6) Revenue recognition

K-IFRS No.1115 requires the recognition of revenues based on transaction price allocated to the performance obligation when or as the Group performs that obligation to the customer. Revenues other than those from contracts with customers, such as interest revenue and loan origination fee (cost), are measured through effective interest rate method.

1) Revenues from contracts with customers

The Group recognizes revenue when the Group satisfies a performance obligation by transferring a promised good or service to a customer. When a performance obligation is satisfied, the Group shall recognize as a revenue the amount of the transaction price that is allocated to that performance obligation. The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties.

The Group is recognizing revenue by major sources as shown below:

① Fees and commission received for brokerage

The fees and commission received for agency are the amount of consideration or fee expected to be entitled to receive in return for providing goods or services to the other parties with the Group acting as an agency, such as in the case of sales of bancassurance and beneficiary certificates. The majority of these fees and commission received for brokerage are from the business activities relevant to Consumer banking segment.

② Fees and commission received related to credit

The fees and commission received related to credit mainly include the lending fees received from the loan activity and the fees received in the L/C transactions. Except for the fees and commission accounted for in calculating the effective interest rate, it is generally recognized when the performance obligation has been performed. The majority of these fees and commission received related to credit are from the business activities relevant to Consumer banking and Corporate banking segment.

③ Fees and commission received for electronic finance

The fees and commission received for electronic finance include fees received in return for providing various kinds of electronic financial services through firm-banking and CMS. These fees are recognized as revenue immediately upon the completion of services. The majority of these fees and commission received for electronic finance are from the business activities relevant to Consumer banking and Corporate banking segment.

④ Fees and commission received on foreign exchange handling
The fees and commission received on foreign exchange handling consist of various fees incurred when transferring foreign currency. The point of processing the customer's request is the time when performance obligation is satisfied, and revenue is immediately recognized when fees and commission are received after requests are processed. The business activities relevant to these fees and commission received on foreign exchange handling are substantially attributable to Corporate banking segment.

⑤ Fees and commission received on foreign exchange
The fees and commission received on foreign exchange consist of fees related to the issuance of various certificates, such as exchange, import and export performance certificates, purchase certificates, etc. The point of processing the customer's request is the time when performance obligation is satisfied, and revenue is immediately recognized when fees and commission are received after requests are processed. The business activities relevant to these fees and commission received on foreign exchange are substantially attributable to Corporate banking segment.

⑥ Fees and commission received for guarantee
The fees and commission received for guarantee include the fees received for the various warranties. The activities related to the warranty consist mainly of performance obligations satisfied over time and fees and commission are recognized over the guarantee period. The business activities relevant to these fees and commission received for guarantee are substantially attributable to Corporate banking segment.

⑦ Fees and commission received on securities business
The fees and commission received on securities business consist mainly of fees and commission for the sale of beneficiary certificates, and these fees are recognized when the beneficiary certificates are sold to customers. The business activities relevant to these fees and commission received on securities business are substantially attributable to Consumer banking segment.

⑧ Fees and commission from trust management
The fees and commission from trust management consist of fees and commission received in return for the operation and management services for entrusted assets. These operation and management services are performance obligations satisfied over time, and revenue is recognized over the service period. Among the fees and commission from trust management, variable considerations such as profit commission that are affected by the value of entrusted assets and base return of the future periods are recognized as revenue when limitations to the estimates are lifted. The majority of these fees and commission received for brokerage are from the business activities relevant to Consumer banking segment.

⑨ Other fees
Other fees are usually fees related to remittances, but include fees related to various other services provided to customers by the Group. These fees are recognized when transactions occur at the customers' request and services are provided, at the same time when commission are received. These other fees occur across all operating segments and no single operating segment represents majority of other fees.

2) Revenues from sources other than contracts with customers

① Interest income
Interest income on financial assets measured at FVTPL, FVTOCI and financial assets at amortized costs is measured using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating the interest income over the expected life of the asset. The effective interest rate is the rate that exactly discounts estimated future cash flows to the instrument's initial unamortized cost over the expected period, or shorter if appropriate. Future cash flows include commissions and cost of reward points(limited to the primary component of effective interest rate) and other premiums or discounts that are paid or received between the contractual parties when calculating the effective interest rate, but does not include expected credit losses. All contractual terms of a financial instrument are considered when estimating future cash flows.

For purchased or originated credit-impaired financial assets, interest revenue is recognized by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition. Even if the financial asset is no longer impaired in the subsequent periods due to credit improvement, the basis of interest revenue calculation is not changed from amortized cost to unamortized cost of the financial assets.

② Loan origination fees and costs

The commission fees earned on loans, which is part of the effective interest of loans, is accounted for as deferred origination fees. Incremental costs related to the origination of loans are accounted for as deferred origination costs and is being added or deducted to/from interest income on loans using effective interest rate method.

(7) Accounting for foreign currencies

The Group's consolidated financial statements are presented in Korean Won, which is the functional currency of the Group. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at its prevailing exchange rates at the date. The effective portion of the changes in fair value of a derivative that qualifies as a cash flow hedge and the foreign exchange differences on monetary items that form part of net investment in foreign operations are recognized in equity.

Assets and liabilities of the foreign operations subject to the consolidation are translated into Korean Won at foreign exchange rates at the end of the reporting period. Except for situations in which it is required to use exchange rates at the date of transaction due to significant changes in exchange rates during the period, items that belong to profit or loss shall be measured by average exchange rate, with foreign exchange differences recognized as other comprehensive income and added to equity (allocated to non-controlling interests, if appropriate). When foreign operations are disposed, the controlling interest's share of accumulated foreign exchange differences related to such foreign operations will be reclassified to profit or loss, while non-controlling interest's corresponding share will not be reclassified.

Adjustments to fair value of identifiable assets and liabilities, and goodwill arising from the acquisition of foreign operations will be treated as assets and liabilities of the corresponding foreign operation and is translated using foreign exchange rates at the end of the period. The foreign exchange differences are recognized in equity.

(8) Cash and cash equivalents

The Group is classifying cash on hand, demand deposits, interest-earning deposits with original maturities of up to three months on acquisition date, and highly liquid investments that are readily convertible to known amounts of cash and subject to an insignificant risk of changes in value as cash and cash equivalents.

(9) Financial assets and financial liabilities

1) Financial assets

A regular way purchase or sale of financial assets is recognized or derecognized on the trade date. A regular way purchase or sale is a purchase or sale of a financial asset under a contract whose term requires delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned.

On initial recognition, financial assets are classified into financial assets at FVTPL, financial assets at FVTOCI, and financial assets at amortized cost.

a) Business model

The Group evaluates the way business is being managed, and the purpose of the business model for managing a financial asset best reflects the way information is provided to the management at its portfolio level. Such information considers the following:

- The accounting policies and purpose specified for the portfolio, the actual operation of such policies. This includes strategy of the management focusing on the receipt of contractual interest revenue, maintaining a certain level of interest income, matching the duration of financial assets and the duration of corresponding liabilities to obtain the asset, and outflow or realization of expected cash flows from disposal of assets
- The way the performance of a financial asset held under the business model is evaluated, and the way such evaluation is being reported to the management
- The risk affecting the performance of the business model (and financial assets held under the business model), and the way such risk is being managed
- The compensation plan for the management (e.g. whether the management is being compensated based on the fair value of assets or based on contractual cash flows received)
- Frequency, amount, timing and reason for sale of financial assets in the past and forecast of future sale activities

b) Contractual cash flows

The principal is defined to be the fair value of a financial asset at initial recognition. Interest is not only composed of consideration for the time value of money, consideration for the credit risk related to remaining principal at a certain period of time, and consideration for other cost (e.g. liquidity risk and cost of operation) and fundamental risk associated with lending, but also profit.

When evaluating whether contractual cash flows are solely payments of principal and interests, the Group considers the contractual terms of the financial instrument. When a financial asset contains contractual conditions that modify the timing and amount of contractual cash flows, it is required to determine whether contractual cash flows that arise during the remaining life of the financial instrument due to such contractual condition are solely payments of principal and interest. The Group considers the following elements when evaluating the above:

- Conditions that lead to modification of timing or amount of cash flows
- Contractual terms that adjust contractual nominal interest, including floating rate features
- Early payment features and maturity extension features
- Contractual terms that limit the Group’s claim on cash flows arising from certain assets (e.g. non-recourse feature)
- Terms of holding multiple contractually linked financial tranche that concentrate credit risk.
  In such case, credit risk comparison information of the instrument itself, the contractual cash flow characteristics of underlying financial instrument group and the underlying financial instrument group

① Financial assets at FVTPL
The Group is classifying those financial assets that are not classified as either financial assets at amortized cost or financial assets at FVTOCI, and those designated to be measured at FVTPL, as financial assets at FVTPL. Financial assets at FVTPL are measured at fair value, and fair value gains or losses are recognized in profit or loss. Transaction costs related to acquisition at initial recognition is recognized as expense immediately upon its occurrence.

The Group may, at initial recognition, irrevocably designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

② Financial assets at FVTOCI
When financial assets are held under a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and when contractual cash flows from such financial assets are solely payments of principal and interest, the financial assets are classified as financial assets at FVTOCI. Also, for investments in equity instruments that are not held for short-term trade, an irrevocable election is available at initial recognition to present subsequent changes in fair value as other comprehensive income.

At initial recognition, financial assets at FVTOCI is measured at its fair value plus any direct transaction cost and is subsequently measured in fair value. The changes in fair value except for profit or loss items such as impairment losses (reversals), interest revenue calculated by using effective interest method, and foreign exchange gain or loss, and related income tax effects are recognized as other comprehensive income until the asset's disposal. Upon derecognition, the accumulated other comprehensive income is reclassified from equity to net income for FVTOCI (debt instrument) and reclassified within the equity for FVTOCI (equity instruments).

③ Financial assets at amortized cost

When financial assets are held under a business model whose objective is to hold financial assets in order to collect contractual cash flows, and when contractual cash flows from such financial assets are solely payments of principal and interest, the financial assets are classified as financial assets at amortized cost. At initial recognition, financial assets at amortized cost are recognized at fair value plus any direct transaction cost. Financial assets at amortized cost is presented at amortized cost using effective interest method, less any loss allowance.

2) Financial liabilities

At initial recognition, financial liabilities are classified into either financial liabilities at FVTPL or financial liabilities at amortized cost.

Financial liabilities are usually classified as financial liabilities at FVTPL when they are acquired with a purpose to repurchase them within a short period of time, when they are part of a certain financial instrument portfolio that is actually and recently being managed with a purpose of short-term profit and joint management by the Group at initial recognition, and when they are derivatives that do not qualify as hedging instruments. Financial liabilities at FVTPL are measured at fair value plus direct transaction cost at initial recognition and are subsequently measured at fair value. Gain or loss arising from financial liabilities at FVTPL is recognized in profit or loss when occurred.

It is possible to designate a financial liability as financial liability at FVTPL if at initial recognition: (a) it is possible to remove or significantly reduce recognition or measurement mismatch that may otherwise have occurred if not for its designation as financial liability at FVTPL; (b) the financial asset forms part of the Group's financial instrument group (a group composed of a combination of financial asset or liability) according to the Group's documented risk management or investment strategy, is measured at fair value and is being evaluated for its performance, and such information is provided internally; and (c) the financial liability is part of a contract that contains one or more of embedded derivatives, and is a hybrid contract in which designation as financial liability at FVTPL is allowed under K-IFRS No.1109 *Financial Instruments*.

Financial liabilities designated as at FVTPL are initially recognized at fair value, with any direct transaction cost recognized in profit or loss and are subsequently measured at fair value. Any profit or loss from financial liabilities at FVTPL are recognized in profit or loss.

Financial liabilities not classified as financial liabilities at FVTPL are measured at amortized cost.

3) Reclassification

Financial assets are not reclassified after initial recognition unless the Group modifies the business model used to manage financial assets. When the Group modifies the business model used to manage financial assets, all affected financial assets are reclassified on the first day of the first reporting period after the modification.

4) Derecognition

Financial assets are derecognized when contractual rights to cash flows from the financial assets are expired, or when substantially all of risk and reward for holding financial assets is transferred to another entity as a result of a sale of financial assets. If the Group does not have and does not transfer substantially all of the risk and reward of holding financial assets with control of the transferred financial assets retained, the Group recognizes financial assets to the extent of its continuing involvement. If the Group holds substantially all the risk and reward of holding a financial asset, it continues to recognize that asset and proceeds are accounted for as collateralized borrowings.

When a financial asset is fully derecognized, the difference between the book value and the sum of proceeds and accumulated other comprehensive income is recognized as profit or loss in case of FVTOCI (debt instruments), and as retained earnings for FVTOCI (equity instruments).

In case when a financial asset is not fully derecognized, the Group allocates the book value into amounts retained in the books and removed from the books, based on the relative fair value of each portion at the date of sale, and based on the degree of continuing involvement. For the derecognized portion of the financial assets, the difference between its book value and the sum of proceeds and the portion of accumulated other comprehensive income attributable to that portion will be recognized in profit or loss in case of debt instruments and recognized in retained earnings in case of equity instruments. The accumulated other comprehensive income is distributed to the portion of book value retained in the books, and to the portion of book value removed from the books.

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

When the Group exchanges with the existing lender one debt instrument into another one with substantially different terms, such exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Group accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate is at least 10 percent different from the discounted present value of the remaining cash flows of the original financial liability

5) Fair value of financial instruments

Financial assets at FVTPL and financial assets at FVTOCI are measured and presented in the consolidated financial statements at their fair values, and all derivatives are also subject to fair value measurement.

Fair value is defined as the price that would be received to exchange an asset or paid to transfer a liability in a recent transaction between independent parties that are reasonable and willing. Fair value is the transaction price of identical financial assets or financial liabilities generated in an active market. An active market is a market where trade volume is sufficient and objective price information is available due to the fact that bid and ask price differences are small.

When trade volume of a financial instrument is low, when transaction prices within the market show large differences among them, or when it cannot be concluded that a financial instrument is being traded within an active market due to disclosures being extremely shallow, fair value is measured using valuation techniques based on alternative market information or using internal valuation techniques based on general and observable information obtained from objective sources. Market information includes maturity and characteristics, duration, similar yield curve, and variability measurement of financial instruments of similar nature. Fair value amount contains unique assumptions on each entity (the Group concluded that it is using assumptions applied in valuing financial instruments in the market, or risk-adjusted assumptions in case marketability does not exist).

The market approach and income approach, which are valuation techniques used to estimate the fair value of financial instruments, both require significant judgment. Market approach measures fair value using either a recent transaction price that includes the financial instrument, or observable information on comparable firm or assets. Income approach measures fair value through discounting future cash flows with a discount rate reflecting market expectations, and revenue, operating income, depreciation, capital expenditures, income tax, working capital and estimated residual value of financial investments are being considered when deriving future cash flows. Valuation techniques such as the above include estimates based on the financial instruments' complexity and usefulness of observable information in the market.

The valuation techniques used in the evaluation of financial instruments are explained below.

a) Financial assets at FVTPL and Financial assets at FVTOCI

The fair value of equity securities included in financial assets at FVTPL and financial assets at FVTOCI category is recognized in the statement of financial position at its available market price. Debt securities traded in the over-the-counter market are generally recognized at an amount computed by an independent appraiser. When the Group uses the fair value determined by independent appraisers, the Group usually obtains three values from three different appraisers for each financial instrument and selects the minimum amount without making additional adjustments. For equity securities without marketability, the Group uses the amount determined by the independent appraiser. The Group verifies the prices obtained from appraisers in various ways, including the evaluation of independent appraisers' competency, indirect verification through comparison between appraisers' price and other available market information, and reperformed by employees who have knowledge of valuation models and assumptions that appraisers used.

b) Derivatives

The Group's transactions involving derivatives such as futures and exchange traded options are measured at market value. For exchange traded derivatives classified as level 2 in the fair value hierarchy, the fair value is estimated using internal valuation techniques. If there are no publicly available market prices because they are traded over-the-counter, fair value is measured through internal valuation techniques. When using internal valuation techniques to derive fair value, the types of derivatives, base interest rate or characteristics of prices, or stock market indices are considered. When variables used in the internal valuation techniques are not observable information in the market, such variables may contain significant estimates.

c) Adjustment of valuation amount

The Group is exposed to credit risk when a counterparty to a derivative contract does not perform its contractual obligation, and the exposure amount is equal to the amount of derivative asset recognized in the statement of financial position. When the Group earns income through valuation of derivatives, such income is recognized as derivative asset in the statement of financial position. Some of the derivatives are traded in the market, but most of the derivatives are measured at estimated fair value derived from internal valuation models that use observable information in the market. As such, in order to estimate the fair value there should be an adjustment made to incorporate counterparty's credit risk, and credit risk adjustment is being considered when valuing derivative assets such as over-the counter derivatives. The amount of financial liabilities is also adjusted by the Group's own credit risk when valuing them.

The amount of adjustment is derived from counterparty's probability of default and loss given default. This adjustment considers contractual matters that are designed to reduce the Group's exposure to each counterparty's credit risk. When derivatives are under master netting arrangement, the exposure used in the computation of credit risk adjustment is a net amount after adding/deducting cash collateral received (or paid) from loss(or gain) position derivatives with the same counterparty.

6) Expected credit losses on financial assets

The Group recognizes loss allowance on expected credit losses for the following assets:

- Financial assets at amortized cost
- Debt instruments measured at FVTOCI
- Contract assets as defined by K-IFRS No.1115

Expected credit losses are weighted-average value of a range of possible results, considering the time value of money, and are measured by incorporating information on current conditions and forecasts of future economic conditions that are available without undue cost or effort.

The methods to measure expected credit losses are classified into following three categories in accordance with K-IFRS:

- General approach: Financial assets that do not belong to below two models and unused loan commitments
- Simplified approach: When financial assets are either trade receivables, contract assets or lease receivables

- Credit impairment model: Purchased or originated credit-impaired financial assets

The measurement of loss allowance under general approach is differentiated depending on whether the credit risk has increased significantly after initial recognition. That is, loss allowance is measured based on 12-month expected credit loss when the credit risk has not increased significantly after initial recognition, while loss allowance is measured at lifetime expected credit loss when credit risk has increased significantly. Lifetime is the expected remaining life of the financial instrument up to the maturity date of the contract.

The measurement of loss allowance under simplified approach is always based on lifetime expected credit loss, and loss allowance under credit impairment model is measured as the cumulative change in lifetime expected credit loss since initial recognition.

a) Measurement of expected credit losses on financial asset at amortized cost

The expected credit losses on financial assets at amortized cost is measured by the difference between the contractual cash flows during the period and the present value of expected cash flows. Expected cash inflows are computed for individually significant financial assets in order to calculate expected credit losses.

Financial assets that are not individually significant, they are included in a group of financial assets with similar credit risk characteristics and expected credit losses of the group are calculated collectively.

Expected credit losses are deducted through loss allowance account, and when the financial asset is determined to be uncollectible, the loss allowance is written off from the books along with the related financial asset. Changes in loss allowance due to subsequent recoveries of amounts previously written off are recognized in profit or loss.

b) Measurement of expected credit losses on financial asset at FVTOCI

The measurement method of expected credit loss is identical to financial asset at amortized cost, but changes in the loss allowance is recognized in other comprehensive income. When financial assets at FVTOCI is disposed or repaid, the related loss allowance is reclassified from other comprehensive income to net income.

(10) Offsetting financial instruments

Financial assets and liabilities are presented as a net amount in the statements of financial position when the Group has an enforceable legal right and an intention to settle on a net basis or to realize an asset and settle the liability simultaneously.

(11) Investment properties

The Group classifies a property held to earn rentals and/or for capital appreciation as an investment property. Investment properties are measured initially at cost, including transaction costs, less subsequent depreciation and impairment.

Subsequent costs are included in the carrying amount of the asset or recognized as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably, and the book value of a portion of an asset that are replaced by a subsequent expenditure is removed from the books. Routine maintenance and repairs are expensed as incurred.

While land is not depreciated, all other investment properties are depreciated based on the depreciation method and useful lives of Properties and equipment. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, and when it is deemed appropriate to change them, the effect of any change is accounted for as a change in accounting estimates.

An investment property is derecognized from the consolidated financial statements on disposal or when it is permanently withdrawn from use and no future economic benefits are expected even from its disposal. The gain or loss on derecognition of an investment property is calculated as the difference between the net disposal proceeds and the carrying amount of the property and is recognized in profit or loss in the period of derecognition.

(12) Properties and equipment

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

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

While land is not depreciated, for all other Properties and equipment, depreciation is charged to net income on a straight-line basis by applying the following estimated economic useful lives on the amount of cost or revalued amount less residual value.

	Useful life
Buildings used for business purpose	35 to 57 years
Structures in leased office	4 to 5 years
Properties for business purpose	4 to 5 years

The Group reassesses the depreciation method, the estimated useful lives and residual values of Properties and equipment at the end of each reporting period. If changes in the estimates are deemed appropriate, the changes are accounted for as a change in an accounting estimate. When there is an indicator of impairment and the carrying amount of a Properties and equipment item exceeds the estimated recoverable amount, the carrying amount of such asset is reduced to the recoverable amount.

(13) Intangible assets and goodwill

The Group is recognizing intangible assets measured at the manufacturing cost or acquisition cost plus additional incidental expenses less accumulated amortization and accumulated impairment losses. The Group's intangible asset are amortized over the following economic lives using the straight-line method. The estimated useful life and amortization method are reviewed at the end of each reporting period. If changes in the estimates are deemed appropriate, the changes are accounted for as a change in an accounting estimate.

	Useful life
Industrial property rights	5 to 10 years
Development costs	5 years
Software and others	4 to 5 years or contract period

In addition, when an indicator that intangible assets are impaired is noted, and the carrying amount of the asset exceeds the estimated recoverable amount of the asset, the carrying amount of the asset is reduced to its recoverable amount.

Goodwill acquired in a business combination is included in intangible assets. Goodwill is not amortized, but is subject to an impairment test at the cash-generating unit level every year, and whenever there is an indicator that goodwill is impaired.

Goodwill is allocated to each of the Group's cash-generating unit (or groups of cash-generating units) that is expected to benefit from the synergies of the combination. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro rata basis based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

(14) Impairment of non-monetary assets

Intangible assets with indefinite useful lives or intangible assets that are not yet available for use are tested for impairment annually, regardless of whether or not there is any indication of impairment. All other assets are tested for impairment by estimating the recoverable amount when there is an objective indication that the carrying amount may not be recoverable. Recoverable amount is the higher of value in use or net fair value, less costs to sell. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount and such impairment loss is recognized immediately in profit or loss.

(15) Leases

The Group determines whether the agreement is a lease or includes a lease at the time of the agreement. In exchange for consideration in the contract, if the control over the use of the identified asset is transferred for a period of time, the contract is a lease or includes a lease. In determining whether a contract transfers control of the use of the identified asset, the Group uses the definition of a lease in K-IFRS No.1116.

1) The Group as a lessee

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

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

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

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

- Fixed payments (including in-substance fixed payments)
- Variable lease payments that depend on an index(or a rate), initially measured using the index or rate as at the commencement date
- Amounts expected to be payable by the lessee under residual value guarantees
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option, lease payments of the extended period if the lessee is reasonably certain to exercise extension option, and payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease

The lease liability is subsequently increased by the interest expense recognized for the lease liability and decreased by reflecting the payment of the lease payments. The lease liability is remeasured if the future lease payments change depending on changes in the index(or a rate), changes in the expected amount to be paid under the residual value guarantee, and changes in the assessment of whether the purchase or extension option is reasonably certain to be exercised or not to exercise the terminate option.

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

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

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

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

During the current financial year, the financial effect of revising lease terms to reflect the effect of exercising extension and termination options was an increase in recognized lease liabilities and right-of-use assets of 7,373 million Won.

In the statement of financial position, the Group classified the right-of-use assets that do not meet the definition of investment property as 'Properties and equipment' and the lease liabilities as 'other financial liabilities.'

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

2) The Group as a lessor

At the date of the agreement or the effective date of the modification containing the lease element, the Group allocates the consideration of the contract to each lease element on the basis of its relative stand-alone price.

As a lessor, the Group classifies its leases as either an operating lease or a finance lease at the commencement date.

The Group subsequently judges whether the lease transfers substantially all the risks and rewards incidental to ownership of an underlying asset. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset, otherwise a lease is classified as an operating lease.

If the agreement contains both lease and non-lease elements, the Group applies K-IFRS No.1115 to allocate the consideration of the contract.

The Group applies derecognition and impairment provisions of K-IFRS No.1109 to its net investment in the lease. The Group also carries out regular review of the unguaranteed residual value used to calculate total lease investment.

The Group recognizes lease payments from operating lease as income on a straight-line basis.

The accounting policy that the Group has applied as a lessor is not different from K-IFRS No.1116.

(16) Derivative instruments

Derivative instruments are classified as forwards, futures, options and swaps, depending on the types of transactions and are classified at the point of transaction as either trading or hedging based on its purpose.

Derivatives are initially recognized at fair value at the date of contract and are subsequently measured at fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument. If derivatives have been designated as hedging instruments and if it is effective, the point of recognition of gain or loss depends on the characteristics of hedging relationship.

1) Embedded derivatives

Embedded derivatives are components of a hybrid financial instrument that includes a non-derivative host contract. It has an effect of modifying part of cash flows of the hybrid financial instrument similar to an independent derivative.

Embedded derivatives that are part of a hybrid contract of which the host contract is a financial asset within the scope of K-IFRS No.1109 is not separated. The classification is done by considering the hybrid contract as a whole, and subsequent measurement is either at amortized cost or fair value.

If embedded derivatives are part of a hybrid contract of which the host contract is not a financial asset within the scope of K-IFRS No.1109 (e.g. financial liability), then these are treated as separate derivatives if embedded derivatives meet the definition of a derivative, characteristics & risk of the embedded derivatives are not closely related to that of host contract, and if the host contract is not measured at FVTPL.

2) Hedge accounting

The Group is designating certain derivatives as hedging instrument against fair value changes in relation to the interest rate risk, foreign currency translation and interest rate risk, and foreign currency translation risk.

The Group is documenting the relationship between hedging instruments and hedged items at the commencement of hedging in accordance with their purpose and strategy. Also, the Group documents at the commencement and subsequent dates whether the hedging instrument effectively counters the changes in fair value of hedged items. A hedging instrument is effective only when it meets all the following criteria:

- When there is an economic relationship between the hedged items and hedging instruments.
- When the effect of credit risk is not stronger than the change in value due to the economic relationship between the hedged items and hedging instruments.
- When the hedge ratio of hedging relationship is equal to the proportion of the number of items that the group actually hedges and the number of hedging instruments that the Group actually uses to hedge the number of hedged items

When a hedging relationship no longer meets the hedging effectiveness requirements related to hedge ratio, but when the purpose of risk management on designated hedging relationship is still maintained, the hedge ratio of the hedging relationship is adjusted so that hedging relationship may meet the requirements again (Hedge ratio readjustment).

The Group has designated derivatives as hedging instrument except for the portion on foreign currency basis spread. The fair value change due to foreign currency basis spread is recognized in other comprehensive income and is accumulated in equity. If the hedged item is related to transactions, the accumulated other comprehensive income is reclassified to profit or loss when the hedged item affects the profit or loss. However, when non-monetary items are subsequently recognized due to hedged items, the accumulated equity is removed from the equity directly, and is included in the initial book value of the recognized non-monetary items. Such transfers does not affect other comprehensive income. But if part or all of accumulated equity is not expected to be recovered in the future periods, the amount not expected to be recovered is immediately reclassified to profit or loss. If the hedged item is time-related, then the foreign currency basis spread on the day the derivative is designated as a hedging instrument that is related to the hedged item is reclassified to profit or loss over the term of the hedge.

3) Fair value hedge

Gain or loss arising from valid hedging instrument is recognized in profit or loss. However, when the hedging instrument mitigates risks on equity instruments designated as financial assets at FVTOCI, related gain or loss is recognized in other comprehensive income.

The book value of hedged items that are not measured in fair value is adjusted by the changes in fair value arising from the hedged risk, with resulting gain or loss reflected in profit or loss. In case of debt instruments measured at FVTOCI, book value is an amount that is already adjusted to fair value and thus gain or loss arising from the hedged risk is recognized in profit or loss instead of other comprehensive income without adjustments in book value. When the hedged item is equity instruments measured at FVTOCI, the gain or loss arising from hedged risk is retained at other comprehensive income in order to match the gain or loss with hedging instruments.

Hedge accounting ceases to apply only when hedging relationship (or part of it) does not meet the requirements of hedge accounting (even after hedging relationship readjustment, if applicable). This treatment holds in case of lapse, disposal, expiry and exercise of hedging instruments, and this cease of treatment applies prospectively. The fair value adjustments made to book value of hedged item due to hedged risk is amortized from the date of discontinuance of hedge accounting and is recognized in profit or loss.

4) Cash flow hedge

The Group recognizes the effective portion of changes in the fair value of derivatives and other valid hedging instruments that are designated and qualified as cash flow hedges in other comprehensive income, to the extent of cumulative fair value changes of the hedged item from the date of hedge accounting. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to net income when the hedged item affects net income. However, when non-monetary assets or liabilities are subsequently recognized due to expected transactions involving hedged items, the valuation gain or loss accumulated in the equity as other comprehensive income is removed from the equity and included in the initial book value of the recognized non-monetary assets or liabilities. Such transfers do not affect other comprehensive income. Also, if accumulated other comprehensive income is a loss and part or all of the losses are not expected to be recovered in the future periods, the said amount is immediately reclassified to profit or loss.

Hedge accounting ceases to apply only when hedging relationship (or part of it) does not meet the requirements of hedge accounting (even after hedging relationship readjustment, if applicable). This treatment holds in case of lapse, disposal, expiry and exercise of hedging instruments, and this cease of treatment applies prospectively. At the point of cessation of cash flow hedge, the valuation gain or loss recognized as accumulated other comprehensive income continues to be recognized as equity, and is reclassified to profit or loss when the expected transaction is ultimately recognized as profit or loss. However, when transactions are no longer expected to occur, the valuation gain or loss of hedging instrument recognized as accumulated other comprehensive income is immediately reclassified to profit or loss.

(17) Assets (or disposal group) 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. Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

(18) Provisions

Provisions are recognized if it has present or contractual obligations as a result of the past event, it is probable that an outflow of resources will be required to settle the obligation and the amount of the obligation is reliably estimated. Provisions are not recognized for the future operating losses.

The Group recognizes provision related to the payment guarantees, loan commitment and litigations. Under the terms of lease agreement, the cost incurred by the Group to recover the leased asset to its original state are recognized as provisions at the commencement of the lease or during a specific period in which the obligation is incurred as a result of the using the asset. The provisions are measured as the best estimate of the expenditure required to recover the asset, which is regularly reviewed and sated to the new situation.

Where there are a number of similar obligations, the probability that an outflow will be required in settlement is determined by considering the obligations as a whole. Although the likelihood of outflow for any one item may be small, if it is probable that some outflow of resources will be needed to settle the obligations as a whole, a provision is recognized.

(19) Capital and compound financial instruments

The Group classifies a financial instrument that it issues as a financial liability or an equity instrument in accordance with the substance of the contractual arrangement. A financial liability is a contractual obligation to deliver cash or another financial asset to another entity. An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

If the Group reacquires its own equity instruments, the consideration paid including the direct transaction costs (net of tax expense) are presented as a deduction from total equity until such instruments are retired or reissued. When these instruments are reissued, the consideration received (net of direct transaction costs) is included in the shareholder’s equity.

(20) Financial guarantee contracts

A financial guarantee contract is a contract where the issuer must pay a certain amount of money in order to compensate losses suffered by the creditor when debtor defaults on a debt instrument in accordance with original or modified contractual terms.

A financial guarantee is initially measured at fair value and is subsequently measured at the higher of the amounts below unless it is designated to be measured at FVTPL or when it arises from disposal of an asset.

- Loss allowance in accordance with K-IFRS No.1109
- Initial book value less accumulated profit measured in accordance with K-IFRS No.1115

(21) Employee benefits and pensions

The Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for the services rendered by the employees. Also, the Group recognizes expenses and liabilities in the case of accumulating compensated absences when the employees render services that entitle their right to future compensated absences. Similarly, the Group recognizes expenses and liabilities for customary profit distribution or bonuses when the employees render services, even though the Group does not have legal obligation to do so because it can be construed as constructive obligation.

The Group is operating defined contribution plans and defined benefit plans. Contributions to defined contribution plans are recognized as an expense when employees have rendered services entitling them to receive the benefits. For defined benefit plans, the defined benefit liability is calculated through an actuarial assessment using the projected unit credit method every end of the reporting period, conducted by professional actuaries. Remeasurement, comprising actuarial gains and losses, the return on plan assets (excluding interest), and the effect of the changes to the asset ceiling (if applicable) is reflected immediately in the separate statement of financial position with a charge or credit recognized in other comprehensive income in the period in which they occur.

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

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

The retirement benefit obligation recognized in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is recognized as an asset limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

Liabilities for termination benefits are recognized at the earlier of either the date when the Group is no longer able to cancel its proposal for termination benefits or the date when the Group has recognized the cost of restructuring that accompanies the payment of termination benefits.

(22) Hedge accounting of net investment in a foreign operation

When applying hedge accounting of net investment in a foreign operation, the effective portion of changes in fair value of the hedging instrument is recognized in other comprehensive income and the ineffective portion of the hedge is recognized as current profit or loss in order to offset changes in the fair value of the hedged item caused by the hedging with changes in the fair value of the hedging instrument. The effective portion of hedge recognized in other comprehensive income will be reclassified from other comprehensive income to current profit or loss in accordance with K-IFRS No.1021 The Effects of Changes in Foreign Exchange Rates at the time of disposal of a foreign operation or disposal of a portion of its foreign operations in the future.

(23) Income taxes

Income tax expense is composed of current tax and deferred tax. That is, income tax expense is composed of taxes payable or refundable during the period and deferred taxes calculated by applying asset-liability method to taxable and deductible temporary differences arising from operating loss and tax credit carryforwards. Temporary differences are the differences between the carrying values of assets and liabilities for financial reporting purposes and their tax bases. Deferred income tax benefit or expense is recognized for the change in deferred tax assets or liabilities. Deferred tax assets and liabilities are measured as of the reporting date using the enacted or substantively enacted tax rates expected to apply in the period in which the liability is settled or asset realized. Deferred tax assets, including the carryforwards of unused tax losses, are recognized to the extent it is probable that the deferred tax assets will be realized.

Deferred income tax assets and liabilities are offset if, and only if, the Group has a legally enforceable right to offset current tax assets against current tax liabilities, and the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority or when the entity intends to settle current tax liabilities and assets on a net basis with different taxable entities.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred liabilities are not recognized if the temporary difference arises from the initial recognition of goodwill. Deferred tax assets or liabilities are not recognized if they arise from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity or when it arises from business combination.

The tax uncertainty arises from the compensation claim filed by the Group, and the refund litigation for the amount of tax levied by the tax authority due to differences in tax law analysis. In response, the Group paid taxes in accordance with K-IFRS No.2123 due to the tax authority's claim but recognized as a corporate tax asset if it is highly probable of a refund in the future.

(24) Criteria of calculating earnings per share (“EPS”)

Basic EPS is a calculation of net income per each common stock. It is calculated by dividing net income attributable to ordinary shareholders by the weighted-average number of common shares outstanding. Diluted EPS is calculated by adjusting the earnings and number of shares for the effects of all dilutive potential common shares.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND ASSUMPTIONS

The significant accounting estimates and assumptions are continuously being evaluated based on numerous factors including historical experiences and expectations of future events that are reasonably considered probable. Actual results can differ from those estimates based on such definitions. The accounting estimates and assumptions that contain significant risk of materially changing current book values of assets and liabilities in the next accounting periods are as follows:

The Korean government implemented support measures such as loan repayment deferment to mitigate the negative impact of COVID-19. The Group determined that the credit risk of loans affected by the repayment deferment has significantly increased, with a high possibility of default. The Group will continue to evaluate the adequacy of forecast information regarding the duration of the economic aftermath of COVID-19 and future government policies even after the end of the financial support. The Group also manages credit risk on loans with extended maturities.

The Group recognizes additional expected credit loss allowance for loans subject to payment holiday and extended maturities due to the assessment of the high possibility of default.

Total loans subject to payment holiday(loans, payment guarantees) on December 31, 2023 and 2022, among which credit risk has increased significantly due to payment holiday, total loans transferred from 12-month expected credit loss measurement to lifetime expected credit losses (Stage2) and additionally recognized expected credit loss allowance are as follows (Unit: Korean Won in millions):

			December 31, 2023	December 31, 2022
Total loans (loan receivables, payment guarantees) that are subject to payment holiday	Loans	Corporate	1,453,314	1,958,133
		Retail	130,090	216,487
	Off-balance accounts		22,038	2,391
	Total		1,605,442	2,177,011
Total loans that changed its stage from 12-month to lifetime (Stage 2) expected credit losses	Loan	Corporate	1,367,603	1,774,717
		Retail	101,422	169,851
	Off-balance accounts		6,642	2,391
	Total		1,475,667	1,946,959
The expected credit loss allowance that are additionally recognized	Loan	Corporate	210,386	312,054
		Retail	9,318	12,643
	Off-balance accounts		1,734	317
	Total		221,438	325,014

Total loans subject to extended maturities and additionally expected credit loss allowance as of December 31, 2023 are as follows (Unit: Korean Won in millions):

			December 31, 2023
Total loans subject to maturities are extended	Loans	Corporate	5,227,017
		Retail	2,124,207
	Off-balance accounts		31,976
	Total		7,383,200
The expected credit loss allowance that are additionally recognized	Loan	Corporate	58,545
		Retail	35,515
	Off-balance accounts		115
	Total		94,175

In addition, as of December 31, 2023, the Group reflects the forward-looking information in the estimated probability of default rate and loss given default and recognizes additional expected credit loss allowance appropriations by adjusting the forward-looking indicators in consideration of the Korean government financial providing policies due to COVID-19, increased economic uncertainty, and potential insolvency due to market interest rate hikes.

The impact of changes including methodology for estimating the risk components(RC) during the current period is as follows (Unit: Korean Won in millions):

		Impact of changes in estimates
Expected credit loss allowance	Loans and other financial assets at amortized cost	323,597
	Guarantees and unused commitments	34,473
	Financial assets at FVTOCI	1,489
	Securities at amortized cost	592
	Total	360,151

(*) The impact of changes including methodology for estimating probability of default rate and loss given default are 212,428 million Won and 147,723 million Won, respectively.

(1) Income taxes

The Group has recognized current and deferred taxes based on best estimates of expected future income tax effect arising from the Group's operations until the end of the current reporting period. However, actual tax payment may not be identical to the related assets and/or liabilities already recognized, and these differences may affect current taxes and deferred tax assets/liabilities at the time when income tax effects are finalized. Deferred tax assets relating to tax losses carried forward and deductible temporary differences are recognized only to the extent that it is probable that future taxable profit will be available against which the tax losses carried forward and the deductible temporary differences can be utilized. In this case the Group's evaluation considers various factors such as estimated future taxable profit based on forecasted operating results, which are based on historical financial performance. The Group is reviewing the book value of deferred tax assets every end of the reporting period and in the event that the possibility of earning future taxable income changes, the deferred tax assets are adjusted up to taxable income sufficient to use deductible temporary differences.

(2) Valuation of financial instruments

Financial assets at FVTPL and FVTOCI are recognized in the consolidated financial statements at fair value. All derivatives are measured at fair value. Valuation techniques are required in order to determine fair values of financial instruments where observable market prices do not exist. Financial instruments that are not actively traded and have low price transparency will have less objective fair value and require broad judgment in liquidity, concentration, uncertainty in market factors and assumption in price determination and other risks.

As described in Note 2. Basis of Preparation and material Accounting Policies (9) 5), 'Fair value of financial assets and liabilities', when valuation techniques are used to determine the fair value of a financial instrument, various general and internally developed techniques are used, and various types of assumptions and variables are incorporated during the process.

(3) Impairment of financial instruments

The accuracy of the provision for credit losses is determined by the estimation of the expected cash flows for each tenant for estimating the individually assessed loan-loss allowance, and the assumptions and variables in the model used for estimating the collectively assessed loan-loss, allowance payment guarantee and unused commitment.

The Group has estimated the allowance for credit losses based on reasonable and supportable information that was available without undue cost or effort the end of the current reporting period about past events, current conditions and forecasts of future economic conditions.

The measurement of expected credit loss is described in 4. Risk management (1) 3) Measurement of expected credit loss.

(4) Defined benefit plan

The Group operates a defined benefit pension plan. Defined benefit obligation is calculated at every end of the reporting period by performing actuarial valuation, and estimation of assumptions such as discount rate, expected wage growth rate and mortality rate is required to perform such actuarial valuation. The defined benefit plan, due to its long-term nature, contains significant uncertainties in its estimates.

4. RISK MANAGEMENT

The Group's operating activity is exposed to various financial risks. The Group is required to analyze and assess the level of complex risks and determine the permissible level of risks and manage such risks. The Group's risk management procedures have been established to improve the quality of assets for holding or investment purposes by making decisions as how to avoid or mitigate risks through the identification of the source of the potential risks and their impact.

The Group has established an approach to manage the acceptable level of risks and reduce the excessive risks in financial instruments in order to maximize the profit given risks present, for which the group has implemented risk management processes of identification, measurement, assessment, control, monitoring and reporting of risk.

The risk is managed by the risk management department in accordance with the Group's risk management policy. The Risk Management Committee, at the top decision-making level, makes decisions on the risk strategies such as the allocation of internal capital and the establishment of acceptable level of risk.

(1) Credit risk

Credit risk represents the potential financial losses that may incur in the future when the counterparty refuses to fulfill or lost the ability to fulfill its contractual obligations. The goal of credit risk management is to maintain the Group's credit risk exposure to a permissible degree and to optimize its rate of return considering such credit risk.

i) Credit risk management

a. Credit facilities limit management

The Group calculates and manages the appropriate borrowing limits by aggregation, business and industry through management of aggregation, total exposure and portfolio.

b. Credit risk monitoring organization and role

① Large enterprise loan credit department

- Examination, approval, and maintenance of loans to large enterprises (including small and medium enterprises affiliated with major debt group)
- Examination, approval, and maintenance of loans to government agencies, Public institutions (more than 50% of investments and contributions by the Group) and other corporations
- Examination, approval, and maintenance of overseas branches and local corporations of domestic corporations
- Examination, approval, and maintenance of relevant real estate PF (large or non-confirmed construction enterprises)
- Operation control, etc. 'the Credit Management for Affiliate Enterprise Groups' as specified by the Regulation on Supervision of Bank Business, etc.

② Small and medium-sized enterprise loan credit department

- Examination, approval, and follow-up management of loans to small and medium-sized enterprises (excluding small and medium enterprises affiliated with major debt affiliates)
- Examination, approval, and follow-up management of loans to Public institutions (less than 50% of investments and contributions) and other corporations
- Consultation on loan examination, and agreement on the approval (including follow-up) of overseas branches and local corporations of the enterprises
- Examination, approval, and follow-up management of relevant real estate PF (Small- and medium- construction enterprises or non-confirmed)
- Examination, approval, and follow-up management, etc. of business loans related to National Housing and Urban Fund

③ Personal loan credit department

- Examination, approval, and maintenance of personal and individual business loans
- Examination and approval of collective loans (including cases where construction enterprise is subject to workout)

④ Corporation workout department

- General management of enterprises subject to workout, etc.
- General management of enterprises subject to pre-workout, etc. with the management on the borrower in the course of corporate rehabilitation procedures
- Workout activities such as the establishment and implementation of corporate workout plans performed for relevant enterprise
- Pre-workout activities such as the establishment and implementation of corporate management diagnosis and management plans performed for relevant enterprise
- Credit examination, approval, setting total exposure limit and follow-up management for relevant enterprise
- Examination and execution of loans for sound post-management of rehabilitation bonds such as examination, approval, and follow-up management of overseas branches and local corporations of the relevant enterprise

⑤ Global IB Monitoring Department

- Credit examination, approval and maintenance related to IB Group Investment Banking
- Credit examination, approval, and maintenance of overseas branches or subsidiaries of local companies, foreign companies
- Support for related tasks such as credit screening and follow-up management of overseas review centers
- Establishing and managing total exposure limits for affiliated companies
- Management of approved loans (deferred, asset soundness, portfolio, etc.)
- Credit limit management designated by the Banking Act for the affiliated companies

c. Credit screening and post monitoring or post management

① Objective

- To maintain appropriate credit ratings and improve asset quality

② Main activities

- Review the adequacy of credit and credit ratings, and maintain the consistency in application of ratings
- Review the appropriateness of asset classification by quality and the provision for credit losses
- Overall analysis of loan portfolio quality
- Inspection of compliance with loan policies and relevant regulations, and recommendation for modification of policies
- Review the appropriateness of loan approval and compliance with loan commitments.
- Post-inspection of the branches' discretionary decisions for loans
- Assessing the accuracy of the identification of bad loans and the timeliness of action by the person in charge of the loans

ii) Current status by measurement method

a. Method of calculating risk-weighted assets

① The Group calculates the risk-weighted assets of the credit risk by obtaining approval of the internal rating based approach.

② The internal rating based approach meets the qualitative and quantitative requirements set by the Financial Supervisory Service, including the use of advanced techniques in risk measurement, as well as the establishment of an internal control and risks management system. It enables more accurate measurement and management of credit risk than the standard method.

- The internal rating based approach
  Risk-weighted assets are calculated by applying self-estimated risk measurement factors such as probability of default (PD), loss given default (LGD), exposure at default (EAD), and effective maturity (M) according to the internal rating of the Group.

b. Overview and utilization scope of credit rating evaluation model

<Overview of corporate credit rating model>

① Definition of corporate credit rating model

The corporate credit rating is the assessment of the possibility of default by the counterparty. It includes both scoring assessments that are evaluated according to quantitative methods using financial statements, etc., representative assessments that are evaluated according to quantitative methods using loans, deposit transactions, etc. of the representative's the Bank itself and other financial institutions, and judgment evaluations that are evaluated by the evaluator's subjective judgment. This represents that the degree of credit risk assessed is presented in a systematic manner.

② Operation of corporate credit rating model

- General corporate evaluation model: Classified to external audit based on K-IFRS, external audit based on GAAP, non-external audit 1, non-external audit 2 and personal business based on their total assets, sales volume, accounting standards, whether subject to external audit or not, loan size and types of business; such as individuals or corporations.
- Evaluation model of local governments
- Evaluation model of public institutions
- Evaluation model of financial institutions: Banks, insurance companies, financial investment, and other financing
- Evaluation model of overseas companies
- Evaluation model of non-profit organization: Private schools, medical institutions, religious organizations, and other organizations
- Specialized lending evaluation model: PF(Project Financing), OF(Object Financing), CF(Commodities Financing), real estate financing for sale , Real estate financing for rent , fund financing, acquisition financing , asset securitization

③ Corporate credit rating system

The corporate credit rating system is divided into 14 grades (13 normal, 1 default) system, and each credit rating is presented in English (AAA~D).

<Overview of retail credit rating model>

① Definition of retail credit scoring model

This is a model that determines credit rating of retail loan customers by calculating credit score statistically using the customer information and operates two types of scoring system which are Application Scoring System and Behavior Scoring System according to applicable borrowers' loan types.

- Application Scoring System(ASS) : The model determines credit rating by statistically calculating credit score for new retail loan applications using personal information, transaction information and credit information.

- Behavior Scoring System(BSS) : The model determines credit rating by statistically calculating credit score for existing retail loans using transaction information and credit information.

② Operation of retail credit scoring model

- SOHO loan credit scoring model : ASS / BSS scoring model

- Household loan credit scoring model : ASS / BSS scoring model

③ Retail credit scoring model evaluation system : Presented in number from grade 1 to 10.

<Utilization score of credit rating evaluation model>

① Utilizes as a key component in calculating BIS credit risk-weighted assets

② Supports prompt loan decision-making by applying for interest rate (pricing), and discretionary decision-making, etc.

③ Utilizes to measure overall risk such as asset quality and provisions for the credit losses

④ Utilizes as an indicator of Risk Adjusted Performance Measurement! and relevant performance measurement.

c. Control structure for credit evaluation system (including content related to grade change)

① Securing the independence of granting credit rating

The credit rating is granted through the evaluation department (large enterprise, small and medium-sized enterprise, personal, etc.) that is independent from the sales department, but the head of the branch has authority to grant credit ratings to small-scale loans according to the size of the loans. The Group clearly defines and operates procedures such as override, check list, authority and procedures, and review when granting credit ratings. For credit ratings granted by a sales branch and the evaluation department, periodic and regular loan reviews are performed by the credit supervision department to assess the consistency and timeliness of credit ratings.

② Securing independence of credit risk control operations

The credit risk management department within the risk management group that is independent of the sales department is responsible for the design, monitoring/supervision of operation and performance, on-going review and modification. The credit risk management department conducts self-validation and monitoring of credit ratings, development and implementation of credit rating models.

③ Validation of credit evaluation systems by an independent third party

To secure the adequacy of credit evaluation system, the risk management group risk model validation department that is independent from the credit evaluation system department conducts validation of credit evaluation system. The risk model validation department conducts periodic validation to assess the design adequacy of credit evaluation system, to determine whether BIS satisfies with minimum requirements and to validate the utilization and calculation methods of risk measurement components (PD, LGD, EAD, etc.).

A third-party review is conducted in head office audit department for the development/ implementation of credit risk management department's credit risk model, estimation of risk measurement factors, and the third party's validation activities of the risk model validation department.

④ Strengthen the role of the Board of Directors and management

Major decision-making related to the credit evaluation system and risk measurement factors are carried out in the approval process of the Risk Management Council and the Committee (Board of Directors). Issues related to validation and monitoring of credit evaluation systems and risk measurement elements are regularly reported to the Risk Management Council and the Committee (Board of Directors).

d. Scope of application of internal rating method

BIS Ratio calculation method		Exposure category	Date of approval
Standard method	Permanent standard method	Government, public institutions, banks	October 30, 2008
	Standard method	Subsidiaries, overseas branches, other assets	October 30, 2008
Internal rating based model		Large/small, medium-sized enterprise exposure (external audit IFRS, external audit GAAP, non-external audit1, non-external audit2, personal business model), retail exposure, asset-backed exposure (Credit Rating Act)	October 30, 2008 February 13, 2015
Stepwise application		Special financing, financial institutions, non-profit organizations, and public institutions	October 30, 2008

iii) Measurement of expected credit loss

K-IFRS No.1109 - Financial Instruments requires entities to measure loss allowance equal to 12-month expected credit losses or lifetime expected credit losses after classifying financial assets into one of the three stages, depending on the degree of increase in credit risk since their initial recognition.

Classification	Stage 1	Stage 2	Stage 3
Definition	No significant increase in credit risk after initial recognition (*)	Significant increase in credit risk after initial recognition	Credit-impaired
Loss allowance	12-month expected credit losses	Lifetime expected credit losses	
	Expected credit losses that result from those default events on the financial instrument that are possible within 12 months after the reporting date	Expected credit losses that result from all possible default events over the life of the financial instrument	

(*) If the financial instrument has low credit risk at the end of the reporting period, the Group may assume that the credit risk has not increased significantly since initial recognition.

At the end of each reporting period, the Group assesses whether the credit risk has increased significantly since initial recognition by using credit rating, assets soundness, early warning system, days past due and other. For financial assets whose contractual cash flows have been modified, the Group assesses whether there is a significant increase in credit risk on the same basis. The Group performs the above assessment to both corporate and retail exposures, and indicators of significant increase in credit risk are as follows:

Corporate Exposures	Retail Exposures
Asset quality level 'Precautionary' or lower	Asset quality level 'Precautionary' or lower
More than 30 days past due	More than 30 days past due
'Warning' level in early warning system	Significant decrease in credit rating (*)
Debtor experiencing financial difficulties (Capital impairment, Adverse opinion or Disclaimer of opinion by external auditors)	Deferment of repayment of principal and interest
Significant decrease in credit rating (*)	Deferment of interest
Deferment of repayment of principal and interest	
Deferment of interest	

(*) The Group has applied the indicators of significant decrease in credit rating since the initial recognition as follows, and the estimation method is regularly being monitored.

Classification	Credit rating	Indicators of significant decrease in credit rating
Corporate	AAA ~ A+	More than 4 steps
	A- ~ BBB	More than 3 steps
	BBB- ~ BB+	More than 2 steps
	BB ~ BB-	More than 1 step
Retail	1 ~ 3	More than 3 steps
	4 ~ 5	More than 2 steps
	6 ~ 9	More than 1 step

The Group determined that there was no significant increase in credit risk after the initial recognition for debt securities, etc. with a credit rating of A + or higher, which are deemed to have low credit risk at the end of the reporting period.

The Group concludes that credit is impaired when financial assets are under conditions stated below:

- When principal of loan is overdue for 90 days or longer due to significant deterioration in credit
- For loans overdue for less than 90 days, when it is determined that not even a portion of the loan will be recovered unless claim actions such as disposal of collaterals are taken
- When other objective indicators of impairment have been noted for the financial asset

The Group has estimated the expected credit loss allowances using an estimation model that additionally reflects the forward looking information based on the past experience loss rate data.

Probability of default (PD) and loss given default (LGD) for each category of financial asset are being calculated by considering factors such as debtor type, credit rating and portfolio. The estimates are regularly being reviewed in order to reduce discrepancies with actual losses.

In measuring the expected credit losses, the Group is reasonably using supportable macroeconomic indicators such as GDP growth rate, Personal consumption expenditures increase/decrease rate, Won-dollar exchange rate, etc., in order to forecast forward looking information conditions.

The Group applies the following forward-looking model and reviews the results regularly.

- Development of estimation models through regression analysis of borrower(corporate/retail), year-by-year default rate and macroeconomic indicator data by year

Major macroeconomic indicators	Correlation between credit risk and macroeconomic indicators
GDP growth rate	Negative (-) Correlation
Personal consumption expenditures increase/decrease rate	Negative (-) Correlation
Won-dollar exchange rate	Positive (+) Correlation

- Calculation of estimated default rate incorporating future economic forecasts by applying estimated macroeconomic indicators provided by institutions verified to be reliable such as Bank of Korea and National Assembly Budget Office to the estimation model developed

- Forecast of macroeconomic variables

① Probability weight
As of December 31, 2023, the probability weights applied to the scenarios of the forecasts of macroeconomic variables is as follows (Unit: %):

	Base Scenario	Upside Scenario	Downside Scenario	Worst Scenario
Probability weight	44.36	9.41	26.23	20.00

② Economic forecast of each major macroeconomic variables by scenario (prospect period: 2024)
As of December 31, 2023, the forecasts of major macroeconomic variables by scenario are as follows (Unit: Won, %):

	Base Scenario	Upside Scenario	Downside Scenario	Worst Scenario
GDP growth rate	2.10	2.29	1.76	(-)5.10
Personal consumption expenditures increase/decrease rate	1.90	2.27	1.23	(-)12.22
Won-dollar exchange rate	1,263	1,255	1,277	1,560

As of December 31, 2023 and 2022, the sensitivity of the provision for expected credit losses due to changes in macroeconomic indicators is as follows (Unit: Korean Won in millions):

			December 31, 2023 (*1)	December 31, 2022 (*1)
Corporate	Personal consumption expenditures increase/decrease rate	Increase by 1% point	(46,211)	(59,987)
		Decrease by 1% point	52,862	68,036
Retail	Consumer price index change rate (*2)	Increase by 1% point	-	(24,164)
		Decrease by 1% point	-	28,042

(*1) The sensitivity of GDP growth rate and won-dollar exchange rate to the Group's expected credit loss allowance is not significant.
(*2) The consumer price index was excluded from the estimation model of the future economic forecast for the year ended December 31, 2023.

- When reflecting the predicted default rate, the increase rate is used as a future economic forecast adjustment coefficient and reflected in the estimate applied for the current year.

iv) Maximum exposure to credit risk

The Group's maximum exposure to credit risk refers to net book value of financial assets net of expected credit loss allowances, which shows the uncertainties of maximum changes of net value of financial assets attributable to a particular risk without considering collateral and other credit enhancements obtained. However, the maximum exposure is the fair value amount (recorded on the books) for derivatives, maximum contractual obligation for payment guarantees loan commitment Additionally, loan commitments are the unused commitment amounts that represent the maximum exposure to credit risk for each loan.

The maximum exposure to credit risk as of December 31, 2023 and 2022 is as follows (Unit: Korean Won in millions):

		December 31, 2023	December 31, 2022
Loans and other financial assets at amortized cost	Korean treasury and government agencies	2,269,614	2,871,872
	Banks	20,630,733	19,407,690
	Corporates	144,719,788	131,310,782
	Retail	173,120,629	172,329,255
	Sub-total	340,740,764	325,919,599
Financial assets at FVTPL (*1)	Due from banks	39,241	34,995
	Debt securities	5,039,784	3,192,217
	Loans	-	19,169
	Derivative assets	5,798,327	8,204,737
	Sub-total	10,877,352	11,451,118
Financial assets at FVTOCI	Debt securities and others	36,694,110	32,145,758
Securities at amortized cost	Debt securities	23,996,172	28,268,516
Derivative assets (Designated for hedging)		698	-
Off-balance accounts	Guarantees (*2)	13,628,841	11,899,320
	Loan commitments	84,159,332	76,081,523
	Sub-total	97,788,173	87,980,843
	Total	510,097,269	485,765,834

(*1) Puttable instruments are not included.
(*2) Those guarantees include financial guarantees of 3,497,197 million Won and 3,072,827 million Won as of December 31, 2023 and 2022, respectively.

a) Credit risk exposure by geographical areas

The following tables analyze credit risk exposure by geographical areas (Unit: Korean Won in millions):

	December 31, 2023						
	Korea	China	USA	UK	Japan	Others (*)	Total
Loans and other financial assets at amortized cost	313,519,402	5,068,762	5,527,148	260,834	608,258	15,756,360	340,740,764
Securities at amortized cost	22,529,414	111,832	1,049,669	-	-	305,257	23,996,172
Financial assets at FVTPL	8,117,966	519	1,440,175	355,478	143,229	819,985	10,877,352
Financial assets at FVTOCI	32,422,652	724,786	2,367,997	7	32,194	1,146,474	36,694,110
Derivative assets (Designated for hedging)	-	-	-	-	698	-	698
Off-balance accounts	93,453,166	921,904	745,832	20,045	26,351	2,620,875	97,788,173
Guarantees	11,756,361	428,666	182,740	20,045	26,351	1,214,678	13,628,841
Loan commitments	81,696,805	493,238	563,092	-	-	1,406,197	84,159,332
Total	470,042,600	6,827,803	11,130,821	636,364	810,730	20,648,951	510,097,269

(*) Others consist of financial assets in Indonesia, Hong Kong, Germany, Australia and other countries.

	December 31, 2022						
	Korea	China	USA	UK	Japan	Others (*)	Total
Loans and other financial assets at amortized cost	301,855,215	5,188,826	4,721,439	215,174	714,182	13,224,763	325,919,599
Securities at amortized cost	26,883,967	642,089	421,248	16,658	-	304,554	28,268,516
Financial assets at FVTPL	7,311,349	2,607	2,210,580	318,323	168,013	1,440,246	11,451,118
Financial assets at FVTOCI	27,780,323	806,320	2,297,076	1,726	41,421	1,218,892	32,145,758
Off-balance accounts	84,418,210	981,139	380,209	25,644	16,987	2,158,654	87,980,843
Guarantees	10,100,103	446,502	145,084	25,644	16,987	1,165,000	11,899,320
Loan commitments	74,318,107	534,637	235,125	-	-	993,654	76,081,523
Total	448,249,064	7,620,981	10,030,552	577,525	940,603	18,347,109	485,765,834

(*) Others consist of financial assets in Indonesia, Hong Kong, Germany, Australia and other countries.

b) Credit risk exposure by industries

① The following tables analyze credit risk exposure by industries, which are service, manufacturing, finance and insurance, construction, individuals and others in accordance with the Korea Standard Industrial Classification Code as of December 31, 2023 and 2022 (Unit: Korean Won in millions):

	December 31, 2023						
	Service	Manufacturing	Finance and insurance	Construction	Individuals	Others	Total
Loans and other financial assets at amortized cost	78,336,718	42,610,153	26,776,372	3,894,430	170,434,257	18,688,834	340,740,764
Securities at amortized cost	189,193	-	14,151,799	69,720	-	9,585,460	23,996,172
Financial assets at FVTPL	124,622	174,464	6,013,642	21,687	2,600	4,540,337	10,877,352
Financial assets at FVTOCI	453,694	408,377	25,832,327	290,856	-	9,708,856	36,694,110
Derivative assets (Designated for hedging)	-	-	698	-	-	-	698
Off-balance accounts	20,480,798	22,137,750	14,342,704	2,475,491	33,375,382	4,976,048	97,788,173
Guarantees	5,817,599	4,318,602	2,145,967	541,769	5,768	799,136	13,628,841
Loan commitments	14,663,199	17,819,148	12,196,737	1,933,722	33,369,614	4,176,912	84,159,332
Total	99,585,025	65,330,744	87,117,542	6,752,184	203,812,239	47,499,535	510,097,269

	December 31, 2022						
	Service	Manufacturing	Finance and insurance	Construction	Individuals	Others	Total
Loans and other financial assets at amortized cost	72,068,928	35,480,453	27,562,669	4,063,427	169,426,005	17,318,117	325,919,599
Securities at amortized cost	239,141	-	16,198,175	199,924	-	11,631,276	28,268,516
Financial assets at FVTPL	81,836	150,178	8,222,518	10,296	1,167	2,985,123	11,451,118
Financial assets at FVTOCI	417,877	231,132	22,249,839	48,225	-	9,198,685	32,145,758
Off-balance accounts	16,531,999	21,764,034	11,011,217	2,820,360	30,340,751	5,512,482	87,980,843
Guarantees	4,647,666	4,500,906	955,466	779,950	5,801	1,009,531	11,899,320
Loan commitments	11,884,333	17,263,128	10,055,751	2,040,410	30,334,950	4,502,951	76,081,523
Total	89,339,781	57,625,797	85,244,418	7,142,232	199,767,923	46,645,683	485,765,834

v) Credit risk exposure

a) Financial assets

The maximum exposure to credit risk by asset quality, except for financial assets at FVTPL and derivative asset (designated for hedging) as of December 31, 2023 and 2022 is as follows (Unit: Korean Won in millions):

	December 31, 2023							
	Stage 1		Stage 2					
	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Stage 3	Total	Expected credit loss allowance	Total, net
Loans and other financial assets at amortized cost	296,033,576	21,955,372	12,050,634	11,626,681	1,217,842	342,884,105	(2,143,341)	340,740,764
Korean treasury and government agencies	2,271,866	-	-	-	-	2,271,866	(2,252)	2,269,614
Banks	20,513,289	122,383	21,770	-	15,295	20,672,737	(42,004)	20,630,733
Corporates	122,509,007	16,455,436	2,334,156	4,305,144	643,838	146,247,581	(1,527,793)	144,719,788
General business	83,348,441	9,863,108	1,739,452	2,982,436	489,033	98,422,470	(1,090,112)	97,332,358
Small- and medium-sized enterprise	30,845,647	6,444,048	575,487	1,235,856	154,805	39,255,843	(365,748)	38,890,095
Project financing and others	8,314,919	148,280	19,217	86,852	-	8,569,268	(71,933)	8,497,335
Consumers	150,739,414	5,377,553	9,694,708	7,321,537	558,709	173,691,921	(571,292)	173,120,629
Securities at amortized cost	24,010,113	-	-	-	-	24,010,113	(13,941)	23,996,172
Financial assets at FVTOCI (*3)	36,481,027	213,083	-	-	-	36,694,110	(27,379)	36,694,110
Total	356,524,716	22,168,455	12,050,634	11,626,681	1,217,842	403,588,328	(2,184,661)	401,431,046

	December 31, 2023			
	Collateral value			
	Stage 1	Stage 2	Stage 3	Total
Loans and other financial assets at amortized cost	220,651,829	20,719,969	606,984	241,978,782
Korean treasury and government agencies	39,199	-	-	39,199
Banks	2,136,530	-	-	2,136,530
Corporates	89,560,890	5,469,252	247,006	95,277,148
General business	52,943,946	4,053,318	169,218	57,166,482
Small- and medium-sized enterprise	31,327,521	1,415,934	77,788	32,821,243
Project financing and others	5,289,423	-	-	5,289,423
Consumers	128,915,210	15,250,717	359,978	144,525,905
Securities at amortized cost	-	-	-	-
Financial assets at FVTOCI (*3)	-	-	-	-
Total	220,651,829	20,719,969	606,984	241,978,782

(*1) Credit grade of corporates are AAA ~ BBB, and consumers are grades 1 ~ 6.

(*2) Credit grade of corporates are BBB- ~ C, and consumers are grades 7 ~ 10.

(*3) Financial assets at FVTOCI were disclosed as the amount before deducting credit loss allowances as it does not reduce the carrying amount.

	December 31, 2022							
	Stage 1		Stage 2					
	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Stage 3	Total	Expected credit loss allowance	Total, net
Loans and other financial assets at amortized cost	285,080,318	19,138,437	12,261,349	10,210,653	952,021	327,642,778	(1,723,179)	325,919,599
Korean treasury and government agencies	2,873,282	-	-	-	-	2,873,282	(1,410)	2,871,872
Banks	19,038,873	372,788	2,125	-	17,333	19,431,119	(23,429)	19,407,690
Corporates	111,501,463	14,240,708	2,282,095	4,071,452	530,069	132,625,787	(1,315,005)	131,310,782
General business	72,886,649	9,059,573	1,697,255	2,971,706	389,139	87,004,322	(975,675)	86,028,647
Small- and medium-sized enterprise	29,502,710	5,103,110	563,717	1,062,575	125,930	36,358,042	(286,520)	36,071,522
Project financing and others	9,112,104	78,025	21,123	37,171	15,000	9,263,423	(52,810)	9,210,613
Consumers	151,666,700	4,524,941	9,977,129	6,139,201	404,619	172,712,590	(383,335)	172,329,255
Securities at amortized cost	28,276,901	-	-	-	-	28,276,901	(8,385)	28,268,516
Financial assets at FVTOCI (*3)	31,914,193	231,565	-	-	-	32,145,758	(11,805)	32,145,758
Total	345,271,412	19,370,002	12,261,349	10,210,653	952,021	388,065,437	(1,743,369)	386,333,873

	December 31, 2022			
	Collateral value			
	Stage 1	Stage 2	Stage 3	Total
Loans and other financial assets at amortized cost	208,651,926	19,055,225	485,156	228,192,307
Korean treasury and government agencies	24,276	-	-	24,276
Banks	1,858,588	-	-	1,858,588
Corporates	78,709,348	4,756,502	239,365	83,705,215
General business	44,447,616	3,389,896	154,617	47,992,129
Small- and medium-sized enterprise	30,114,649	1,366,606	69,748	31,551,003
Project financing and others	4,147,083	-	15,000	4,162,083
Consumers	128,059,714	14,298,723	245,791	142,604,228
Securities at amortized cost	-	-	-	-
Financial assets at FVTOCI (*3)	-	-	-	-
Total	208,651,926	19,055,225	485,156	228,192,307

(*1) Credit grade of corporates are AAA ~ BBB, and consumers are grades 1 ~ 6.

(*2) Credit grade of corporates are BBB- ~ C, and consumers are grades 7 ~ 10.

(*3) Financial assets at FVTOCI were disclosed as the amount before deducting credit loss allowances as it does not reduce the carrying amount.

b) Guarantees and loan commitments

The credit quality of the guarantees and loan commitments as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023					
	Stage 1		Stage 2			
Financial assets	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Stage 3	Total
Off-balance accounts						
Guarantees	12,351,077	1,150,185	73,192	40,890	13,497	13,628,841
Loan commitments	79,417,178	2,613,884	1,938,972	189,268	30	84,159,332
Total	91,768,255	3,764,069	2,012,164	230,158	13,527	97,788,173

(*1)Credit grade of corporates are AAA ~ BBB, and consumers are grades 1 ~ 6.

(*2)Credit grade of corporate are BBB- ~ C, and consumers are grades 7 ~ 10.

Financial assets	December 31, 2022					
	Stage 1		Stage 2			
	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Above appropriate credit rating (*1)	Lower than a limited credit rating (*2)	Stage 3	Total
Off-balance accounts						
Guarantees	10,768,204	846,997	25,826	245,061	13,232	11,899,320
Loan commitments	72,267,461	1,885,280	1,486,009	442,773	-	76,081,523
Total	83,035,665	2,732,277	1,511,835	687,834	13,232	87,980,843

(*1) Credit grade of corporates are AAA ~ BBB, and consumers are grades 1 ~ 6.
(*2) Credit grade of corporate are BBB- ~ C, and consumers are grades 7 ~ 10.

vi) Collateral and other credit enhancements
For the year ended December 31, 2023, there have been no significant decreases in the value of collateral or other credit enhancements held by the Group or significant changes in collateral or other credit enhancements due to changes in the collateral policy of the Group.

vii) Among the financial assets that have measured expected credit loss allowances in terms of lifetime expected credit losses, amortized costs before changes in contractual cash flows for the year ended December 31, 2023 is 120,681 million Won, with loss effect of the change recognized 1,283 million Won and for the year end December 31, 2022 is 86,747 million Won, respectively, with net losses recognized along with the changes 4,539 million Won.

viii) The Group determines which loan is subject to write-off in accordance with internal guidelines and writes off loan receivables when it is determined that the loans are practically irrecoverable. For example, loans are practically irrecoverable when application is made for rehabilitation under the Debtor Rehabilitation and Bankruptcy Act. and loans are confirmed as irrecoverable by the court's decision to waive debtor's obligation, or when it is not possible to recover the loan amount through legal means such as selling debtor's assets via auctions or through any other means available. Notwithstanding the write-off, the Group may still exercise its right of collection after the asset has been written off in accordance with its collection policies.

As the Group manages receivables that have not lost the right of claim to the debtor for the grounds of incomplete statute limitation and uncollected receivables under the related laws as receivable charge-offs, the balance as of December 31, 2023 and 2022 is 8,642,906 million Won and 8,434,449 million Won respectively. In addition, the contractual uncollected amount of financial assets written off during the period ended December 31, 2023, but still in the process of recovery is 388,816 million Won.

(2) Market risk

Market risk is the possible risk of loss arising from trading activities and non-trading activities in the volatility of market factors such as interest rates, stock prices and foreign exchange rates. Market risk occurs as a result of changes in the interest rates and foreign exchange rates for financial instruments that are not yet settled, and all contracts are exposed to a certain level of volatility according to changes in the interest rates, credit spreads, foreign exchange rates and the price of equity securities.

Market risk management refers to the process of making and implementing decisions for the avoidance, acceptance or mitigation of risks by identifying the underlying source of the risks and measuring its level, and evaluating the appropriateness of the level of accepted market risks.

i) Market risk management for trading activities

The Group has introduced and applied the Basel III standard method according to Detailed Enforcement Regulations for Supervision of Banking Business <The attached table 3-2> as a measurement method of market risk since 2023. The consolidated equity capital required by sensitivity method, default risk required equity capital, and residual risk required equity capital is combined to calculate the market risk required equity capital used to calculate the BIS ratio and are managed within the set internal capital limit of internal capital.

The sensitivity method measures linear and nonlinear losses that may occur due to unfavorable fluctuations such as interest rates, credit spreads, stock prices, exchange rates, and general commodity prices, and measures losses that may occur due to sudden bankruptcy not considered in the sensitivity method. Other losses not considered in the sensitivity method and default risk are measured in the residual risk required equity capital.

In addition, in the event of extreme situations such as the IMF crisis and the global financial crisis, stress tests are conducted every month to measure the size of losses to prepare for crises.

Market risk limits such as internal capital, loss, and VaR limits are given annually by the Risk Management Committee and the Risk Management Council, and limits for lower business units, excluding derivatives books, are set by the position management department. Compliance with the limit is monitored by the Risk Management Department independently of the operation department, and the details of the limit monitoring are regularly reported to the Risk Management Council and the Risk Management Committee.

a) Trading activities

The market risk required equity capital at the end of the reporting period by risk group is as follows (Unit: Korean Won in millions):

	Risk group	December 31, 2023
Sensitivity-based risk	General interest rate risk	37,832
	Equity risk	9,376
	General commodity risk	12
	Foreign exchange risk	249,044
	Non-securitization credit spread risk	27,371
	Securitization (excluding correlation trading portfolio, CTP) credit spread risk	-
	CTP credit spread risk	-
Default risk	Non-Securitization bankruptcy risk	-
	Securitization (excluding CTP) default risk	-
	CTP default risk	-
Residual risk	Residual risk	692
	Total	324,327

The minimum, maximum and average VaR for the year ended December 31, 2022 and the VaR as of December 31, 2022 are as follows (Unit: Korean Won in millions):

Risk factor	December 31, 2022	For the year ended December 31, 2022		
		Average	Maximum	Minimum
Interest rate	11,800	8,847	11,987	4,298
Stock price	7,055	6,590	12,448	1,806
Foreign currencies	17,608	14,002	22,251	5,421
Diversification	(17,354)	(12,725)	(19,640)	(4,201)
Total VaR (*)	19,109	16,714	27,046	7,324

(*) VaR (Value at Risk): Retention period of 1 day, Maximum expected losses under 99% level of confidence.

ii) Market risk management for non-trading activities

For non-trading sectors of the Group, NII (Net Interest Income) and NPV (Net Present Value) simulations are operated through ALM (Asset Liability Management) system, and then, interest rate risks are managed and measured by various analysis methods such as calculating △NII(change in Net Interest Income) and △EVE(change in Economic Value of Equity).

NII is primarily an indicator of changes in profit from short-term changes in interest rates and is measured by deducting the interest expenses on the liability from the interest income from the asset. NPV is primarily an indicator of the risk of an economic value perspective resulting from unfavorable changes in interest rates and is measured by subtracting the present value of the liability from the present value of the asset.

△NII represents a change in net interest income that may occur over a certain period (E.g., 1 year) due to unfavorable changes in interest rates, and △EVE indicates the economic value changes in equity capital that could be caused by changes in interest rates affecting the present value of asset, liabilities, and others.

Applying six scenarios of interest rate risk shocks (parallel increase and decrease, steepener, flattener and short-term interest rate increase and decrease), the interest rate risks of IRRBB (Interest Rate Risk in the Banking Book) are calculated. Based on the above six scenarios, the change in economic value of equity (△EVE) is measured, the maximum of which is the final △EVE. Also, applying two scenarios(parallel increase and decrease), Based on the two scenarios (parallel increase and decrease) likewise, the maximum is calculated as the final △NII.

For assets and liabilities as of December 31, 2023 and 2022 that include the Bank and consolidated trusts and subsidiaries of the Bank, details of △EVE and △NII calculated based on interest rate risk in banking book (IRRBB) are as follows (Unit: Korean Won in millions):

December 31, 2023		December 31, 2022	
△EVE(*1)	△NII(*2)	△EVE(*1)	△NII(*2)
683,660	743,489	411,447	448,509

(*1) △EVE: change in Economic Value of Equity

(*2) △NII: change in Net Interest Income

The Group measures and manages the risks resulting from interest rate fluctuations caused by mismatches in interest rates and maturities of assets and liabilities. At the interest rate re-pricing date, cash flows (both principal and interest) of interest bearing assets and liabilities, which is the basis of non-trading position interest rate risk management are as follows (Unit: Korean Won in millions):

,

	December 31, 2023						
	Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
Asset:							
Loans and other financial assets at amortized cost	231,931,189	51,219,278	15,180,818	10,039,801	41,683,691	2,846,339	352,901,116
Financial assets at FVTPL	1,384,444	-	-	-	-	-	1,384,444
Financial assets at FVTOCI	5,976,531	3,489,341	2,425,700	3,008,905	22,852,783	756,272	38,509,532
Securities at amortized cost	1,451,409	1,230,486	3,335,565	1,416,082	15,907,380	2,171,914	25,512,836
Total	240,743,573	55,939,105	20,942,083	14,464,788	80,443,854	5,774,525	418,307,928
Liability:							
Deposits due to customers	167,780,980	52,405,606	32,440,904	45,399,091	59,988,159	34,406	358,049,146
Borrowings	18,995,694	3,650,406	1,086,213	1,394,729	2,989,361	437,839	28,554,242
Debentures	6,011,955	3,550,214	1,214,427	2,854,877	6,761,968	2,296,383	22,689,824
Total	192,788,629	59,606,226	34,741,544	49,648,697	69,739,488	2,768,628	409,293,212

	December 31, 2022						
	Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
Asset:							
Loans and other financial assets at amortized cost	213,438,844	53,466,078	12,210,591	13,203,873	45,890,269	5,429,302	343,638,957
Financial assets at FVTPL	945,818	27	27	27	8,838	13,024	967,761
Financial assets at FVTOCI	6,093,805	4,224,460	3,014,625	3,550,982	15,409,527	584,203	32,877,602
Securities at amortized cost	2,749,432	1,806,804	1,768,936	1,427,736	20,126,354	2,100,203	29,979,465
Total	223,227,899	59,497,369	16,994,179	18,182,618	81,434,988	8,126,732	407,463,785
Liability:							
Deposits due to customers	166,821,311	49,234,720	32,999,477	38,710,524	54,596,510	69,861	342,432,403

Borrowings	13,383,278	3,474,294	1,379,136	679,472	3,886,808	472,325	23,275,313
Debentures	7,511,274	3,066,434	2,307,509	3,114,290	7,582,817	2,349,306	25,931,630
Total	187,715,863	55,775,448	36,686,122	42,504,286	66,066,135	2,891,492	391,639,346

iii) Currency risk

Currency risk arises from the financial instruments denominated in foreign currencies other than the functional currency. Therefore, no currency risk arises from non-monetary items or financial instruments denominated in the functional currency.

Financial instruments in foreign currencies exposed to currency risk as of December 31, 2023 and 2022 are as follows (Unit: USD in millions, JPY in millions, CNY in millions, EUR in millions, and Korean Won in millions):

		December 31, 2023									
		USD		JPY		CNY		EUR		Others	Total
		Foreign currency	Korean Won equivalent	Foreign currency	Korean Won equivalent	Foreign Currency	Korean Won Equivalent	Foreign currency	Korean Won Equivalent	Korean Won Equivalent	Korean Won equivalent
Asset	Cash and cash equivalents	8,538	11,008,831	107,487	980,995	1,376	248,903	641	914,935	1,144,924	14,298,588
	Loans and other financial assets at amortized cost	24,461	31,540,624	134,948	1,231,612	30,536	5,522,075	1,791	2,554,780	4,590,795	45,439,886
	Financial assets at FVTPL	889	1,146,904	17,004	155,186	-	-	278	396,290	72,351	1,770,731
	Financial assets at FVTOCI	3,136	4,044,155	-	-	3,882	701,938	6	8,549	738,710	5,493,352
	Securities at amortized cost	1,223	1,576,690	-	-	618	111,839	68	97,393	184,938	1,970,860
	Total	38,247	49,317,204	259,439	2,367,793	36,412	6,584,755	2,784	3,971,947	6,731,718	68,973,417
Liability	Financial liabilities at FVTPL	350	451,700	23,806	217,266	-	-	209	297,521	98,885	1,065,372
	Deposits due to customers	23,962	30,896,252	279,393	2,549,912	23,162	4,188,690	2,122	3,027,521	5,531,315	46,193,690
	Borrowings	9,339	12,041,139	22,598	206,247	1,658	299,748	225	321,529	2,639,360	15,508,023
	Debentures	4,041	5,209,837	-	-	-	-	-	-	-	5,209,837
	Other financial liabilities	3,442	4,438,668	22,087	201,578	7,752	1,401,956	99	141,384	385,361	6,568,947
	Total	41,134	53,037,596	347,884	3,175,003	32,572	5,890,394	2,655	3,787,955	8,654,921	74,545,869
Off-balance accounts		6,977	8,996,028	30,143	275,101	2,043	369,483	601	857,974	568,935	11,067,521

		December 31, 2022									
		USD		JPY		CNY		EUR		Others	Total
		Foreign currency	Korean Won equivalent	Foreign currency	Korean Won equivalent	Foreign Currency	Korean Won Equivalent	Foreign currency	Korean Won Equivalent	Korean Won Equivalent	Korean Won equivalent
Asset	Cash and cash equivalents	9,036	11,450,762	64,816	617,810	1,542	279,779	484	653,841	1,015,664	14,017,856
	Loans and other financial assets at amortized cost	24,327	30,829,640	117,903	1,123,824	24,637	4,470,059	2,510	3,391,144	4,952,419	44,767,086
	Financial assets at FVTPL	947	1,199,983	26,769	255,155	-	-	357	481,910	176,057	2,113,105
	Financial assets at FVTOCI	3,307	4,191,383	-	-	3,999	725,511	2	2,573	725,271	5,644,738
	Securities at amortized cost	576	729,811	-	-	3,540	642,214	69	93,250	206,497	1,671,772
	Total	38,193	48,401,579	209,488	1,996,789	33,718	6,117,563	3,422	4,622,718	7,075,908	68,214,557
Liability	Financial liabilities at FVTPL	415	526,553	26,766	255,128	-	-	322	434,590	274,895	1,491,166
	Deposits due to customers	24,569	31,135,886	227,276	2,166,353	28,125	5,102,886	2,108	2,847,863	5,008,508	46,261,496
	Borrowings	6,894	8,737,229	41,765	398,093	1,023	185,652	431	582,034	2,179,502	12,082,510
	Debentures	3,524	4,465,501	-	-	-	-	-	-	339,188	4,804,689
	Other financial liabilities	3,040	3,851,992	8,213	78,281	4,295	779,233	380	513,272	200,249	5,423,027
	Total	38,442	48,717,161	304,020	2,897,855	33,443	6,067,771	3,241	4,377,759	8,002,342	70,062,888
Off-balance accounts		6,048	7,664,629	34,512	328,964	1,141	207,012	592	800,493	868,470	9,869,568

iv) As of December 31, 2023, there are 252,700 million Won in financial instruments that have not been converted to LIBOR-related alternative indicator interest rates, but the conversion to alternative indicator interest rates will be completed before the repricing date.

(3) Liquidity risk

Liquidity risk management prevents financial institutions from incurring losses due to lack of funds by effectively managing liquidity shortages that can occur due to inconsistent maturity of assets and liabilities or an unexpected outflow of funds. The entire assets and liabilities within the financial statements and off-balance sheet account that can generate cash-flow are subject to the liquidity risk management.

i) Liquidity risk management

a) Basel III regulatory response

Through the standard ALM system, liquidity risks are managed by dividing them into short-term (liquidity coverage ratio, within 30 days) and mid- to long-term (net stabilization fund procurement ratio, over one year). Daily Liquidity Coverage Ratio (LCR) and quarterly Net Stable Funding Ratio (NSFR) are calculated and monitored, and relevant information is provided in accordance with the disclosure standards of the Basel Committee on Banking Supervision (BCBS).

b) Analysis of financing and operation status by maturity

As assets and liabilities are grouped into ALM account (COA; Chart of account) according to their account characteristics, and the gap ratio is identified through cash flow reports by various time and segment (e.g., by remaining period, contract period, etc.), the Group manages the liquidity risk by keeping the target ratio (limited) set this year. In addition, the Group established and manages the target ratio of concentration of funding for specific funding sources that are highly likely to withdraw. The Group also provides a function through daily ALM system to search relevant maturity report by business group so that related departments (e.g., the Financial Planning Department, the Fund Department, each business group, etc.) can identify liquidity risk management indicators and status.

c) Establishment and implementation of Contingency Plan

Various inspection items related to liquidity risk are monitored on a daily or weekly basis by establishing and regularly inspecting the preceding Contingency Plan in order to effectively cope with the risk of capital outflow and procurement due to rapid and unexpected changes in market conditions. In addition, the Group has strengthened monitoring related to foreign currency liquidity by operating a foreign currency liquidity plan separately from January 2012.

- Inspection items related to liquidity risk on the Contingency Plan checklist

■ The amount of Won and foreign currency and insufficiency of funds
■ Liquidity coverage ratio (monthly average balance, daily balance)
■ The amount of deposits and withdrawals (saving deposit in Korean Won, depository)
■ Overdraft limit exhaustion rate
■ Percentage of reduction in the balance of deferred deposits
■ Percentage of concentration of funding by subject and period
■ Won and foreign currency funding spread

ii) Maturity analysis of non-derivative financial liabilities

a) Cash flows of principals and interests by remaining contractual maturities of non-derivative financial liabilities as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023						
	Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
Financial liabilities at FVTPL	39,524	-	-	-	-	-	39,524
Deposits due to customers	236,085,326	39,021,172	22,074,011	47,439,484	16,265,194	1,549,490	362,434,677
Borrowings	10,367,869	5,123,944	3,399,817	3,398,051	3,207,769	437,839	25,935,289
Debentures	3,783,034	3,692,866	2,496,132	3,723,968	6,761,968	2,296,383	22,754,351
Lease liabilities	69,274	37,159	53,277	30,493	133,291	25,084	348,578
Other financial liabilities	13,223,991	62,788	505	790	106,227	4,193,709	17,588,010
Total	263,569,018	47,937,929	28,023,742	54,592,786	26,474,449	8,502,505	429,100,429

	December 31, 2022						
	Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
Financial liabilities at FVTPL	35,161	-	-	-	-	-	35,161
Deposits due to customers	227,656,223	37,116,140	23,654,192	41,424,824	14,284,227	1,522,830	345,658,436
Borrowings	7,823,902	5,049,912	3,047,607	2,652,352	4,389,446	484,909	23,448,128
Debentures	4,790,601	5,002,086	2,885,404	3,366,882	7,582,817	2,349,306	25,977,096
Lease liabilities	62,982	32,055	30,231	24,680	124,194	33,007	307,149
Other financial liabilities	13,284,860	68,049	289	842	71,602	3,037,105	16,462,747
Total	253,653,729	47,268,242	29,617,723	47,469,580	26,452,286	7,427,157	411,888,717

b) Cash flows of principals and interests by expected maturities of non-derivative financial liabilities as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023						
	Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
Financial liabilities at FVTPL	39,524	-	-	-	-	-	39,524
Deposits due to customers	241,895,128	41,050,492	22,766,281	41,432,233	14,084,245	505,146	361,733,525
Borrowings	10,367,869	5,123,944	3,399,817	3,398,051	3,207,769	437,839	25,935,289
Debentures	3,783,034	3,692,866	2,496,132	3,723,968	6,761,968	2,296,383	22,754,351
Lease liabilities	69,274	38,403	54,639	31,871	145,039	25,746	364,972
Other financial liabilities	13,223,991	62,788	505	790	106,227	4,193,709	17,588,010
Total	269,378,820	49,968,493	28,717,374	48,586,913	24,305,248	7,458,823	428,415,671

	December 31, 2022						
	Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
Financial liabilities at FVTPL	35,161	-	-	-	-	-	35,161
Deposits due to customers	240,898,476	41,378,805	23,831,814	28,443,089	9,775,704	56,013	344,383,901
Borrowings	7,823,902	5,049,912	3,047,607	2,652,352	4,389,446	484,909	23,448,128
Debentures	4,790,601	5,002,086	2,885,404	3,366,882	7,582,817	2,349,306	25,977,096
Lease liabilities	63,048	32,060	30,472	24,982	130,176	38,584	319,322
Other financial liabilities	13,284,860	68,049	289	842	71,602	3,037,105	16,462,747
Total	266,896,048	51,530,912	29,795,586	34,488,147	21,949,745	5,965,917	410,626,355

iii) Maturity analysis of derivative financial liabilities

Derivatives held for trading purpose are not managed in accordance with their contractual maturity, since the Group holds such financial instruments with the purpose of disposing or redemption before their maturity. As such, those derivatives are incorporated as "within 3 months" in the table below. Derivatives designated for hedging purpose are estimated by offsetting cash inflows and cash outflows.

The cash flow by the maturity of derivative financial liabilities as of December 31, 2023 and 2022 is as follows (Unit: Korean Won in millions):

		Within 3 months	4 to 6 months	7 to 9 months	10 to 12 months	1 to 5 years	Over 5 years	Total
December 31, 2023	Fair value hedge	29,176	34,370	157	35,272	39,861	-	138,836
	Trading	5,983,782	-	-	-	-	-	5,983,782
December 31, 2022	Fair value hedge	25,048	16,175	31,974	18,540	118,027	(3,615)	206,149
	Trading	8,952,915	-	-	-	-	-	8,952,915

iv) Maturity analysis of off-balance accounts (Guarantees, loan commitments and others)

A financial guarantee represents an irrevocable undertaking that the Group should meet a customer's obligations to third parties if the customer fails to do so. The loan commitment represents the limit if the Group has promised a credit to the customer. Commitments to lend include commercial standby facilities and credit lines, liquidity facilities to commercial paper conduits and utilized overdraft facilities. The maximum limit to be paid by the Group in accordance with guarantees and loan commitment only applies to principal amounts. There are contractual maturities for financial guarantees, such as guarantees for debentures issued or loans, unused loan commitments, other credit facilities and commitments, however, under the terms of the guarantees and unused loan commitments, funds should be paid upon demand from the counterparty. Details of off-balance accounts as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Guarantees	13,628,841	11,899,320
Loan commitments	84,159,332	76,081,523
Other commitments	5,892,297	6,112,770

(4) Operational risk

i) Definition

The Group defines the operational risk as the risk of potential losses arising from inadequate or incorrect internal procedures, human resource and system, and/or external factors.

ii) Operational risk management

The Bank has been running the operational risk management system under Basel for reinforcement in foreign competitions, reducing the amount of risk capitals, managing the risk, and precaution for any unexpected occasions starting December 2005.

In July 2016, the operation risk capital calculation and operation risk management were elaborated through the advancement project of operation risk management, and the upgraded operating risk management system was opened in March 2021 to respond to the new Basel III global regulations introduced in 2023.

a) Strategy and procedures for operation risk management

The Bank carries out operational risk management according to eight management implementation systems: Risk Self Assessment (RSA), Key Risk Indicators (KRI), early warning system, loss case management, risk capital measurement, monitoring and reporting, cultural diffusion, and countermeasures. Operational risk management follows the procedures for risk recognition, evaluation, measurement, monitoring and reporting, risk control and mitigation.

b) Operational Risk Management Organization, Structure and Function

The Bank has 3 lines of defense for operational risk management.

- First line of defense : Self-operation risk management of unit business units (person in charge of business affairs, person in charge of risk management at each branch, head of each branch, and head of the group)

- Second line of defense : Proactive operation risk management of the operational risk management organization (Risk General Division, Risk Management Group, Risk Management Council, Risk Management Committee) and validate the adequacy of risk model validation department (Risk management group)

- Third line of defense : Independent third-party inspection of the audit organization(audit department, head office audit department, standing auditor, audit committee)

c) Status of Operational Risk Reporting System and Measurement System

The Bank has been performing operation risk capital calculation, monitoring, and reporting based on RSA/KRI/loss/response management, cultural diffusion, calculation of operation risk capital through the Basel III standard method through the operation risk management system established since December 2005.

d) Policies for reducing or hedging operational risks

In order to effectively control risks and establish mitigation policies, the Bank establishes policies for modifying operational risk profiles, selecting policies for acceptance levels, and establishing policies for performance management. In addition, the Bank carries out activities for strengthening control of each module (RSA, KRI, loss) and process improvement based on the relevant criteria, and utilizes them for risk identification and control mitigation activities through analysis of the collected loss data.

e) Persistent operational risk monitoring strategies and procedures

The Bank conducts monitoring of the progress of the response measures established for controlling and reducing operational risks to review the appropriateness and make remediation if necessary. In addition, the results are used for management activities of operational risks such as adding or modifying RSA/KRI/control activities.

f) Method of evaluating capital adequacy of operational risks

The Bank evaluates capital adequacy by comparing operational risk capital requirements with BIS-based equity capital, and utilizes the evaluation results for daily management and decision-making, such as limit management and performance evaluation.

iii) Management methods by assessment and measurement methods

a) Means of management

Risk Self Assessment (RSA) : Risk assessment (RSA) is a series of risk management activities that identify and evaluate important operational risks and control activities for them and remove or improve risks through countermeasures. This is done for all branches of the Bank.

Key Risk Indicator (KRI) : Key Risk Indicator (KRI) is used to identify and monitor risks and to observe trends in operational risks.

Loss data: The Bank establishes a system for collecting and managing internal loss data by operational risk management system. In addition, the Bank receives the Korea Operational Risk Data Exchange Committee (KOREC) as external loss data and use it risk identification.

Business Continuity Plan (BCP): The Bank establishes BCP plans that are divided into organization, risk assessment, business impact analysis, alternative business sites, and mock training so that banks can recover/re-open key business sectors in response to business disruptions caused by disasters and disasters.

b) Measurement Method

The Bank measures the amount of operating risk capital by applying the standard method

The standard method is to calculate operating risk equity by multiplying the business indicator (BI), a measure based on consolidated financial statements, by the coefficient, by the BIC, and the internal loss multiplier (ILM), an adjusted multiplier based on the average past loss and operating index.

- "Operational risk required equity capital" = Business indicator component (BIC) × internal loss multiplier (ILM)
- "Business Indicator Component (BIC)" = Business Index (BI) × Adjustment Coefficient

Bucket	Business Index Section	coefficient
1	1.4 trillion won or less	12%
2	More than 1.4 trillion won and less than or equal to 42 trillion won	15%
3	Over 42 trillion won	18%

- "Internal Loss Multiplier (ILM)" = ln (exp(1)-1+ (Loss Element (LC)/Business Index Element (BIC))^ 0.8)

(5) Capital management

The Group complies with the standard of capital adequacy provided by financial regulatory authorities. The capital adequacy standard is based on Basel III published by Basel Committee on Banking Supervision in Bank for International Settlement which has been implemented in Korea in December 2013. The capital adequacy ratio is calculated by dividing own capital by asset (weighted with a risk premium – risk weighted assets) based on the consolidated financial statements of the Group.

According to the regulations above, the Group is required to meet the following new minimum requirements: Common Equity Tier 1 capital ratio of 8.0% , a Tier 1 capital ratio of 9.5% and a minimum total capital ratio of 11.5% as of December 31, 2023 and 2022, respectively.

Details of the Group's capital adequacy ratio as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023 (*)	December 31, 2022
Risk-weighted assets for credit risk	155,484,214	145,358,395
Risk-weighted assets for market risk	4,054,084	8,416,430
Risk-weighted assets for operational risk	16,535,445	13,657,389
Total risk-weighted assets	176,073,743	167,432,214
Common Equity Tier 1 capital	23,183,323	21,236,314
Other Tier 1 capital	1,554,186	1,652,687
Tier 2 capital	3,500,420	3,230,135
Total risk-adjusted capital	28,237,929	26,119,136
Common Equity Tier 1 ratio	13.17%	12.68%
Tier 1 capital ratio	14.05%	13.67%
Total capital ratio	16.04%	15.60%

(*) Tier 1 capital ratio as of December 31, 2023 is estimation.

5. OPERATING SEGMENTS

In evaluating the results of the Group and allocating resources, the Group's Chief Operation Decision Maker (the "CODM") utilizes the information per type of customers. This financial information of the segments is regularly reviewed by the CODM.

(1) Segment by types of customers

The Group's reporting segments comprise the following customers: consumer banking, corporate banking, investment banking, capital market, and headquarters and others. The reportable segments are classified based on the target customers for whom the service is being provided.

- Consumer banking: Loans/deposits and financial services for retail and individual consumers, etc.
- Corporate banking: Loans/deposits and export/import, financial services for corporations, etc.
- Investment banking: Domestic/foreign investment, structured finance, M&A, Equity & fund investment related business, venture advisory related tasks, real estate SOC development practices, etc.
- Capital market: investment in securities and derivatives, etc.
- Headquarters and others: Segments that do not belong to operating segments above.

The details of operating income by each segment for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023							
	Consumer banking	Corporate banking	Investment banking	Capital market	Headquarters and others	Sub-total	Adjustments (*)	Continuing operations
Net interest income (expense)	2,910,670	3,536,366	(271,147)	(47,332)	410,823	6,539,380	896,876	7,436,256
Interest income	5,915,515	8,117,854	322,965	71,470	3,431,665	17,859,469	526,398	18,385,867
Interest expense	(2,977,982)	(6,288,716)	(101)	-	(2,053,290)	(11,320,089)	370,478	(10,949,611)
Inter-segment	(26,863)	1,707,228	(594,011)	(118,802)	(967,552)	-	-	-
Net non-interest income (expense)	431,388	410,272	439,925	40,981	250,165	1,572,731	(899,228)	673,503
Non-interest income	406,362	610,368	559,804	15,898,187	1,884,585	19,359,306	(17,454,772)	1,904,534
Non-interest expense	(62,751)	(279,579)	(119,879)	(15,857,206)	(1,467,160)	(17,786,575)	16,555,544	(1,231,031)
Inter-segment	87,777	79,483	-	-	(167,260)	-		-
Other expense	(1,960,531)	(1,801,606)	(29,120)	(27,055)	(853,187)	(4,671,499)	(121,302)	(4,792,801)
Administrative expense	(1,828,368)	(1,115,797)	(34,894)	(27,018)	(760,635)	(3,766,712)	(32,570)	(3,799,282)
Reversal of (provision for) allowance for credit loss	(132,163)	(685,809)	5,774	(37)	(92,552)	(904,787)	(88,732)	(993,519)
Operating income (expense)	1,381,527	2,145,032	139,658	(33,406)	(192,199)	3,440,612	(123,654)	3,316,958
Non-operating income (expense)	(13,561)	(206)	69,623	-	(74,573)	(18,717)	31,193	12,476
Gain on valuation of investments in associates	-	-	82,339	297	6,152	88,788	-	88,788
Other non-operating income (expense)	(13,561)	(206)	(12,716)	(297)	(80,725)	(107,505)	31,193	(76,312)
Net income (loss) before income tax expense	1,367,966	2,144,826	209,281	(33,406)	(266,772)	3,421,895	(92,461)	3,329,434
Income tax expense	(361,143)	(563,269)	(55,250)	8,819	182,083	(788,760)	(25,594)	(814,354)
Net income (loss)	1,006,823	1,581,557	154,031	(24,587)	(84,689)	2,633,135	(118,055)	2,515,080

(*) Adjustments were made for the presentation of profit or loss in accordance with K-IFRS from the reporting segments in accordance with the Managerial Accounting Standards.

	For the year ended December 31, 2022							
	Consumer banking	Corporate banking	Investment banking	Capital market	Headquarters and others	Sub-total	Adjustments (*)	Continuing operations
Net interest income (expense)	3,330,962	3,553,264	(175,020)	46,311	(150,696)	6,604,821	812,903	7,417,724
Interest income	4,401,332	5,139,910	221,413	27,759	2,500,292	12,290,706	451,698	12,742,404
Interest expense	(1,292,534)	(3,107,959)	(48)	72	(1,285,416)	(5,685,885)	361,205	(5,324,680)
Inter-segment	222,164	1,521,313	(396,385)	18,480	(1,365,572)	-	-	-
Net non-interest income (expense)	490,833	597,254	349,600	72,872	(1,609)	1,508,950	(770,003)	738,947
Non-interest income	443,632	637,055	487,778	23,384,730	958,704	25,911,899	(24,380,641)	1,531,258
Non-interest expense	(23,240)	(114,647)	(138,178)	(23,311,858)	(815,026)	(24,402,949)	23,610,638	(792,311)
Inter-segment	70,441	74,846	-	-	(145,287)	-	-	-
Other expense	(1,883,582)	(1,408,313)	(68,220)	(26,492)	(911,021)	(4,297,628)	(75,856)	(4,373,484)
Administrative expense	(1,848,880)	(1,047,214)	(33,256)	(24,908)	(929,890)	(3,884,148)	(30,524)	(3,914,672)
Reversal of (provision for) allowance for credit loss	(34,702)	(361,099)	(34,964)	(1,584)	18,869	(413,480)	(45,332)	(458,812)
Operating income (expense)	1,938,213	2,742,205	106,360	92,691	(1,063,326)	3,816,143	(32,956)	3,783,187
Non-operating income (expense)	(13,008)	42	38,208	455	26,551	52,248	27,273	79,521
Equity method income	-	-	66,374	(489)	8,073	73,958	-	73,958
Other non-operating income (expense)	(13,008)	42	(28,166)	944	18,478	(21,710)	27,273	5,563
Net income (loss) before income tax expense	1,925,205	2,742,247	144,568	93,146	(1,036,775)	3,868,391	(5,683)	3,862,708
Income tax expense	(529,431)	(745,082)	(39,756)	(25,615)	403,338	(936,546)	(22,753)	(959,299)
Net income (loss)	1,395,774	1,997,165	104,812	67,531	(633,437)	2,931,845	(28,436)	2,903,409

(*) Adjustments were made for the presentation of profit or loss in accordance with K-IFRS from the reporting segments in accordance with the Managerial Accounting Standards.

(2) Information about products and services

The products of the Group are classified as interest-bearing products such as loans, deposits and debt securities and non-interest bearing products such as loan commitment, credit commitment, equity securities, and credit card service. This classification of products has been reflected in the segment information presenting interest income and non-interest income.

(3) Information about geographic area

Among the Group’s revenue (interest income and non-interest income) from services, revenue from the domestic customers for the years ended December 31, 2023 and 2022 amounted to 17,406,079 million Won and 12,230,645 million Won, respectively, and revenue from the foreign customers amounted to 2,884,322 million Won and 2,043,017 million Won, respectively. Among the Group’s non-current assets (investments in joint ventures and associates, investment properties, Properties and equipment and intangible assets), non-current assets attributed to domestic customers as of December 31, 2023 and 2022 are 4,484,448 million Won and 4,291,808 million Won, respectively, and non-current assets attributed to foreign customers are 386,519 million Won and 368,284 million Won, respectively.

(4) Information about major customers

The Group does not have any single customer that generates 10% or more of the Group’s total revenue for the years ended December 31, 2023 and 2022, respectively.

6. CASH AND CASH EQUIVALENTS

(1) Details of cash and cash equivalents as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Cash	1,464,119	1,770,695
Foreign currencies	714,952	628,213
Demand deposits	26,989,563	29,929,373
Fixed deposits	118,096	90,014
Total	29,286,730	32,418,295

(2) Details of restricted due from banks as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	Counterparty	December 31, 2023	Reason of restriction
Due from banks in local currency:			
Due from Bank of Korea(BOK)	BOK	13,420,310	Reserve deposits under the BOK Act
Due from banks in foreign currencies:			
Due from banks on demand	Bank of Japan and others	957,627	Reserve deposits and others
Total		14,377,937	

	Counterparty	December 31, 2022	Reason of restriction
Due from banks in local currency:			
Due from Bank of Korea(BOK)	BOK	16,527,445	Reserve deposits under the BOK Act
Due from banks in foreign currencies:			
Due from banks on demand	BOK and others	6,437,717	Reserve deposits under the BOK Act and others
Total		22,965,162	

(3) Among the investing and financing activities, significant transactions not involving cash inflows and outflows for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Changes in other comprehensive income (loss) due to valuation of financial assets at FVTOCI	727,225	(488,209)
Changes in financial assets at FVTOCI due to debt-equity swap	206	56,274
Changes in other comprehensive income of investment stocks by equity method	5,992	(1,205)
Changes in other comprehensive loss related to hedges of net investment in foreign operations	(14,049)	(20,701)
Changes in other comprehensive income of foreign operations translation	44,048	51,381
Reclassify investment property to Properties and equipment	6,463	-
Reclassify Properties and equipment to investment property	-	19,190
Reclassify Properties and equipment to assets held for sale	2,504	13,109
Increase in the right-of-use assets and lease liabilities	175,932	154,689
Changes in accounts payable related to acquisition of intangible assets	10,146	7,382
Reclassify investments in associates to financial assets at FVTPL	49,341	-

(4) Adjustments of liabilities from financing activities are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023					
			Not involving cash inflows and outflows			
	January 1, 2023	Cash flow	Foreign Exchange	Changed in value of hedged items	Others	December 31, 2023
Borrowings	23,028,206	2,034,234	192,249	-	43	25,254,732
Debentures	24,639,433	(3,552,385)	78,287	63,615	48,083	21,277,033
Lease liabilities	271,868	(172,682)	1,180	-	199,255	299,621
Rental deposit	57,074	30	-	-	-	57,104
Total	47,996,581	(1,690,803)	271,716	63,615	247,381	46,888,490

	For the year ended December 31, 2022					
			Not involving cash inflows and outflows			
	January 1, 2022	Cash flow	Foreign Exchange	Changed in value of hedged items	Others	December 31, 2022
Borrowings	21,376,880	927,906	723,482	-	(62)	23,028,206
Debentures	26,478,289	(1,835,231)	240,460	(257,910)	13,825	24,639,433
Lease liabilities	294,626	(168,519)	4,645	-	141,116	271,868
Rental deposit	56,621	453	-	-	-	57,074
Total	48,206,416	(1,075,391)	959,297	(257,910)	164,169	47,996,581

7. FINANCIAL ASSETS AT FVTPL

Details of financial assets at FVTPL as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Due from banks:		
Gold banking assets	39,241	34,995
Securities:		
Debt securities		
Korean treasury and government agencies	3,654,404	2,507,689
Financial institutions	560,092	284,142
Corporates	108,324	309,652
Securities loaned	625,398	-
Others	91,566	90,734
Equity securities	294,170	301,621
Capital contributions	1,858,728	1,432,256
Beneficiary certificates	7,308,581	5,120,563
Others	180,690	142,335
Sub-total	14,681,953	10,188,992
Loans	-	19,169
Derivatives assets	5,798,327	8,204,737
Other assets	42,406	41,680
Total	20,561,927	18,489,573

Financial assets designated at FVTPL upon initial recognition is nil as of December 31, 2023 and 2022.

8. FINANCIAL ASSETS AT FVTOCI

(1) Details of financial assets at FVTOCI as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Debt securities:		
Korean treasury and government agencies	5,654,395	5,487,523
Financial institutions	20,885,924	16,870,619
Corporates	3,994,432	4,044,446
Bonds denominated in foreign currencies	5,010,558	5,061,945
Securities loaned	592,218	98,027
Mortgage-backed debt securities	556,583	583,198
Sub-total	36,694,110	32,145,758
Equity securities	1,117,063	854,504
Total	37,811,173	33,000,262

(2) Details of equity securities designated as financial assets at FVTOCI as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

Purpose of acquisition	December 31, 2023	December 31, 2022	Remarks
Investment for strategic business partnership purpose	960,080	698,629	
Debt-equity swap	156,977	155,869	
Others	6	6	Mutual Aid Association Insurance Subscription, etc.
Total	1,117,063	854,504	

(3) Changes in the expected credit loss allowance and gross carrying amount of financial assets at FVTOCI for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

1) Credit loss allowances

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(11,805)	-	-	(11,805)
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net reversal(provision) of expected credit loss allowance	(16,542)	-	-	(16,542)
Disposal	1,519	-	-	1,519
Others (*)	(551)	-	-	(551)
Ending balance	(27,379)	-	-	(27,379)

(*) Others consist of foreign currencies translation, etc.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(12,146)	-	-	(12,146)
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net reversal(provision) of expected credit loss allowance	827	-	-	827
Disposal	714	-	-	714
Others (*)	(1,200)	-	-	(1,200)
Ending balance	(11,805)	-	-	(11,805)

(*) Others consist of foreign currencies translation, etc.

2) Gross carrying amount

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	32,145,758	-	-	32,145,758
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	24,350,759	-	-	24,350,759
Disposal/Redemption	(20,823,293)	-	-	(20,823,293)
Gain on fair value valuation	707,739	-	-	707,739
Amortization on the effective interest method	166,401	-	-	166,401
Others (*)	146,746	-	-	146,746
Ending balance	36,694,110	-	-	36,694,110

(*) Others consist of foreign currencies translation, etc.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	38,126,977	-	-	38,126,977
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	16,108,426	-	-	16,108,426
Disposal/Redemption	(21,670,160)	-	-	(21,670,160)
Gain on fair value valuation	(669,936)	-	-	(669,936)
Amortization on the effective interest method	41,813	-	-	41,813
Others (*)	208,638	-	-	208,638
Ending balance	32,145,758	-	-	32,145,758

(*) Others consist of foreign currencies translation, etc.

(4) During the year ended December 31, 2023, the Group sold its equity securities, designated as financial assets at FVTOCI in accordance with decision of disposal by the creditors, and the fair values at disposal dates were 3,194 million Won and cumulative gains at disposal dates were 118 million Won, respectively. During the year ended December 31, 2022, the Group sold its equity securities, designated as financial assets at FVTOCI in accordance with decision of disposal by the creditors, and the fair values at disposal dates were 3,567 million Won and cumulative losses at disposal dates were 14,444 million Won, respectively.

9. SECURITIES AT AMORTIZED COST

(1) Details of securities at amortized cost as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Korean treasury and government agencies	8,143,586	8,983,600
Financial institutions	6,660,465	10,283,631
Corporates	7,235,201	6,237,547
Bonds denominated in foreign currencies	1,922,493	1,600,822
Mortgage-backed debt securities	48,368	1,171,300
Credit loss allowances	(13,941)	(8,384)
Total	23,996,172	28,268,516

(2) Changes in the expected credit loss allowance and gross carrying amount of securities at amortized cost for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

i) Credit loss allowances

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(8,384)	-	-	(8,384)
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net reversal (provision) of expected credit loss allowance	(5,549)	-	-	(5,549)
Others (*)	(8)	-	-	(8)
Ending balance	(13,941)	-	-	(13,941)

(*) Others consist of foreign currencies translation, etc.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(5,235)	-	-	(5,235)
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net reversal (provision) of expected credit loss allowance	(3,151)	-	-	(3,151)
Others (*)	2	-	-	2
Ending balance	(8,384)	-	-	(8,384)

(*) Others consist of foreign currencies translation, etc.

ii) Gross carrying amount

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	28,276,900	-	-	28,276,900
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	4,244,256	-	-	4,244,256
Disposal/Redemption	(8,727,124)	-	-	(8,727,124)
Amortization on the effective interest method	167,219	-	-	167,219
Others (*)	48,862	-	-	48,862
Ending balance	24,010,113	-	-	24,010,113

(*) Others consist of foreign currencies translation, etc.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	17,091,509	-	-	17,091,509
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	16,873,194	-	-	16,873,194
Disposal/Redemption	(5,871,234)	-	-	(5,871,234)
Amortization on the effective interest method	86,212	-	-	86,212
Others (*)	97,220	-	-	97,220
Ending balance	28,276,900	-	-	28,276,900

(*) Others consist of foreign currencies translation, etc.

10. LOANS AND OTHER FINANCIAL ASSETS AT AMORTIZED COST

(1) Details of loans and other financial assets at amortized cost as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Due from banks	1,715,223	2,673,618
Loans	327,065,921	315,029,858
Other financial assets	11,959,620	8,216,123
Total	340,740,764	325,919,599

(2) Details of due from banks as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Due from banks in local currency:		
Due from the Bank of Korea ("BOK")	-	160,000
Due from depository banks	20,008	140,035
Due from non-depository institutions	136	183
Others	27,107	137,784
Expected credit loss allowance	(56)	(115)
Sub-total	47,195	437,887
Due from banks in foreign currencies:		
Due from banks on demand	221,292	199,671
Due from banks on time	335,816	466,963
Others	1,126,707	1,581,298
Expected credit loss allowance	(15,787)	(12,201)
Sub-total	1,668,028	2,235,731
Total	1,715,223	2,673,618

(3) Details of restricted due from banks as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	Counterparty	December 31, 2023	Reason of restriction
Due from banks in local currency:			
Others	Morgan Stanley Bank INTL, SEL and others	27,104	Credit Support Annex (CSA) collateral and others
Sub-total		27,104	
Due from banks in foreign currencies:			
Due from banks on demand	National Bank of Cambodia and others	216,147	Reserve deposits and others
Due from banks on time	National Bank of Cambodia	321	Deposit using the fund settlement system and others
Others	People's Bank of China and others	1,062,130	Reserve deposits and others
Sub-total		1,278,598	
Total		1,305,702	

	Counterparty	December 31, 2022	Reason of restriction
Due from banks in local currency:			
Due from BOK	BOK	160,000	Reserve deposits under the BOK Act
Others	The Korea Exchange and others	137,782	Central counterparty KRW margin and others
Sub-total		297,782	
Due from banks in foreign currencies:			
Due from banks on demand	National Bank of Cambodia and others	193,507	Local capital requirements regulation and others
Due from banks on time	National Bank of Cambodia and others	253	Reserve deposits and others
Others	Yuanta Securities Korea Co., Ltd. and others	1,581,298	Foreign margin deposit for future or option and others
Sub-total		1,775,058	
Total		2,072,840	

(4) Changes in the expected credit loss allowance and gross carrying amount of due from banks for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

i) Credit loss allowances

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(12,316)	-	-	(12,316)
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net reversal (provision) of expected credit loss allowance	(4,911)	-	-	(4,911)
Others (*)	1,384	-	-	1,384
Ending balance	(15,843)	-	-	(15,843)

(*) Others consist of foreign currencies translation, etc.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(6,033)	-	-	(6,033)
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net reversal (provision) of expected credit loss allowance	(7,461)	-	-	(7,461)
Others (*)	1,178	-	-	1,178
Ending balance	(12,316)	-	-	(12,316)

(*) Others consist of foreign currencies translation, etc.

ii) Gross carrying amount

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	2,685,933	-	-	2,685,933
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net increase	(955,586)	-	-	(955,586)
Others (*)	719	-	-	719
Ending balance	1,731,066	-	-	1,731,066

(*) Others consist of foreign currencies translation, etc.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	2,622,513	-	-	2,622,513
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to lifetime expected credit losses	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Net increase	96,042	-	-	96,042
Others (*)	(32,622)	-	-	(32,622)
Ending balance	2,685,933	-	-	2,685,933

(*) Others consist of foreign currencies translation, etc.

(5) Details of loans as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Loans in local currency	284,135,456	268,812,961
Loans in foreign currencies	28,585,598	26,984,940
Domestic banker's usance	2,726,633	2,877,079
Credit card accounts	9,634	8,532
Bills bought in foreign currencies	4,215,955	3,650,792
Bills bought in local currency	62,448	423,329
Factoring receivables	812	15,350
Advances for customers on guarantees	6,393	14,326
Private placement bonds	167,282	63,019
Securitized loans	2,434,771	2,677,220
Call loans	2,719,545	3,586,226
Bonds purchased under repurchase agreements	3,256,392	6,793,938
Others	120	140
Loan origination costs and fees	747,993	712,521
Discounted present value	(75)	(139)
Expected credit loss allowance	(2,003,036)	(1,590,376)
Total	327,065,921	315,029,858

(6) Changes in expected credit loss allowance of loans for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023					
	Consumers			Corporates		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	(75,149)	(68,809)	(117,425)	(379,026)	(757,100)	(192,635)
Transfer to 12-month expected credit losses	(18,834)	16,383	2,451	(188,700)	188,292	408
Transfer to lifetime expected credit losses	5,803	(6,376)	573	18,587	(20,507)	1,920
Transfer to credit-impaired financial assets	634	17,399	(18,033)	13,874	26,984	(40,858)
Net reversal (provision) of expected credit loss allowance	(36,636)	(44,151)	(135,548)	(354,122)	9,823	(368,958)
Recovery	-	-	(55,913)	-	-	(42,288)
Write-off	-	-	182,495	-	-	214,695
Disposal	18	418	5,381	30	512	150,918
Interest income from impaired loans	-	-	9,297	-	-	15,474
Others	(218)	(215)	16,989	9,827	21,231	(11,661)
Ending balance	(124,382)	(85,351)	(109,733)	(879,530)	(530,765)	(272,985)

	For the year ended December 31, 2023					
	Credit card accounts			Total		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	(232)	-	-	(454,407)	(825,909)	(310,060)
Transfer to 12-month expected credit losses	-	-	-	(207,534)	204,675	2,859
Transfer to lifetime expected credit losses	-	-	-	24,390	(26,883)	2,493
Transfer to credit-impaired financial assets	-	-	-	14,508	44,383	(58,891)
Net reversal (provision) of expected credit loss allowance	4	-	-	(390,754)	(34,328)	(504,506)
Recovery	-	-	-	-	-	(98,201)
Write-off	-	-	-	-	-	397,190
Disposal	-	-	-	48	930	156,299
Interest income from impaired loans	-	-	-	-	-	24,771
Others	(62)	-	-	9,547	21,016	5,328
Ending balance	(290)	-	-	(1,004,202)	(616,116)	(382,718)

	For the year ended December 31, 2022					
	Consumers			Corporates		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	(75,119)	(67,312)	(104,968)	(305,511)	(538,473)	(211,998)
Transfer to 12-month expected credit losses	(18,183)	17,812	371	(68,222)	62,423	5,799
Transfer to lifetime expected credit losses	5,880	(6,506)	626	14,722	(17,464)	2,742
Transfer to credit-impaired financial assets	647	3,188	(3,835)	1,964	8,174	(10,138)
Net reversal (provision) of expected credit loss allowance	11,754	(16,304)	(59,357)	(9,688)	(273,692)	(83,628)
Recovery	-	-	(61,951)	-	-	(54,610)
Write-off	-	-	105,029	-	-	130,421
Disposal	-	62	747	-	128	32,374
Interest income from impaired loans	-	-	5,327	-	-	7,407
Others	(128)	251	586	(12,291)	1,804	(11,004)
Ending balance	(75,149)	(68,809)	(117,425)	(379,026)	(757,100)	(192,635)

	For the year ended December 31, 2022					
	Credit card accounts			Total		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	(183)	-	-	(380,813)	(605,785)	(316,966)
Transfer to 12-month expected credit losses	-	-	-	(86,405)	80,235	6,170
Transfer to lifetime expected credit losses	-	-	-	20,602	(23,970)	3,368
Transfer to credit-impaired financial assets	-	-	-	2,611	11,362	(13,973)
Net reversal (provision) of expected credit loss allowance	(46)	-	-	2,020	(289,996)	(142,985)
Recovery	-	-	-	-	-	(116,561)
Write-off	-	-	-	-	-	235,450
Disposal	-	-	-	-	190	33,121
Interest income from impaired loans	-	-	-	-	-	12,734
Others	(3)	-	-	(12,422)	2,055	(10,418)
Ending balance	(232)	-	-	(454,407)	(825,909)	(310,060)

(7) Changes in the gross carrying amount of loans for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023					
	Consumers			Corporates		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	125,597,372	13,557,617	362,977	167,743,636	8,913,295	436,805
Transfer to 12-month expected credit losses	3,932,438	(3,919,317)	(13,121)	2,162,460	(2,159,991)	(2,469)
Transfer to lifetime expected credit losses	(6,151,874)	6,166,603	(14,729)	(4,104,762)	4,111,752	(6,990)
Transfer to credit-impaired financial assets	(135,654)	(140,297)	275,951	(442,307)	(207,165)	649,472
Write-off	-	-	(182,495)	-	-	(214,695)
Disposal	(63)	(491)	(58,894)	(98)	(720)	(375,359)
Net increase (decrease)	4,432,434	(1,309,825)	82,126	11,320,492	(1,402,702)	157,911
Ending balance	127,674,653	14,354,290	451,815	176,679,421	9,254,469	644,675

	For the year ended December 31, 2023					
	Credit card accounts			Total		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	8,532	-	-	293,349,540	22,470,912	799,782
Transfer to 12-month expected credit losses	-	-	-	6,094,898	(6,079,308)	(15,590)
Transfer to lifetime expected credit losses	-	-	-	(10,256,636)	10,278,355	(21,719)
Transfer to credit-impaired financial assets	-	-	-	(577,961)	(347,462)	925,423
Write-off	-	-	-	-	-	(397,190)
Disposal	-	-	-	(161)	(1,211)	(434,253)
Net increase (decrease)	1,102	-	-	15,754,028	(2,712,527)	240,037
Ending balance	9,634	-	-	304,363,708	23,608,759	1,096,490

	For the year ended December 31, 2022					
	Consumers			Corporates		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	129,794,825	13,220,663	343,164	161,408,852	7,907,519	461,190
Transfer to 12-month expected credit losses	4,589,594	(4,576,158)	(13,436)	1,639,650	(1,624,016)	(15,634)
Transfer to lifetime expected credit losses	(6,103,333)	6,120,717	(17,384)	(3,513,134)	3,531,570	(18,436)
Transfer to credit-impaired financial assets	(82,867)	(82,848)	165,714	(218,744)	(97,728)	316,473
Write-off	-	-	(105,029)	-	-	(130,421)
Disposal	-	(259)	(16,447)	-	(391)	(128,197)
Net increase (decrease)	(2,600,847)	(1,124,498)	6,395	8,427,012	(803,659)	(48,170)
Ending balance	125,597,372	13,557,617	362,977	167,743,636	8,913,295	436,805

	For the year ended December 31, 2022					
	Credit card accounts			Total		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Beginning balance	7,122	-	-	291,210,799	21,128,182	804,354
Transfer to 12-month expected credit losses	-	-	-	6,229,244	(6,200,174)	(29,070)
Transfer to lifetime expected credit losses	-	-	-	(9,616,467)	9,652,287	(35,820)
Transfer to credit-impaired financial assets	-	-	-	(301,611)	(180,576)	482,187
Write-off	-	-	-	-	-	(235,450)
Disposal	-	-	-	-	(650)	(144,644)
Net increase (decrease)	1,410	-	-	5,827,575	(1,928,157)	(41,775)
Ending balance	8,532	-	-	293,349,540	22,470,912	799,782

(8) Details of other financial assets as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Receivables	8,808,023	5,216,354
Accrued income	1,681,248	1,449,112
Telex and telephone subscription rights and refundable deposits	798,856	806,923
Other assets (*)	795,953	864,223
Expected credit loss allowance	(124,460)	(120,489)
Total	11,959,620	8,216,123

(*) The amount included in other assets related employee incidents in prior fiscal year was 63,354 million Won, which was completely lost.

(9) Changes in the expected credit loss allowance on other financial assets for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(1,862)	(4,871)	(113,756)	(120,489)
Transfer to 12-month expected credit losses	(258)	157	101	-
Transfer to lifetime expected credit losses	83	(100)	17	-
Transfer to credit-impaired financial assets	7	55	(62)	-
Net reversal (provision) of expected credit loss allowance	(2,168)	143	(3,953)	(5,978)
Write-off	-	-	106	106
Disposal	-	-	1,750	1,750
Other increase (decrease)	4	(1)	148	151
Ending balance	(4,194)	(4,617)	(115,649)	(124,460)

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	(1,426)	(2,448)	(47,791)	(51,665)
Transfer to 12-month expected credit losses	(129)	115	14	-
Transfer to lifetime expected credit losses	97	(106)	9	-
Transfer to credit-impaired financial assets	7	955	(962)	-
Net reversal (provision) of expected credit loss allowance	(387)	(3,387)	(4,106)	(7,880)
Write-off	-	-	590	590
Disposal	-	-	726	726
Other increase (decrease) (*)	(24)	-	(62,235)	(62,259)
Ending balance	(1,862)	(4,871)	(113,756)	(120,489)

(*) The amount included in others related employee incidents was 63,354 million Won.

(10) Changes in the gross carrying amount of other financial assets for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	8,013,009	93,549	230,054	8,336,612
Transfer to 12-month expected credit losses	11,500	(11,395)	(105)	-
Transfer to lifetime expected credit losses	(22,672)	22,693	(21)	-
Transfer to credit-impaired financial assets	(1,400)	(928)	2,328	-
Write-off	-	-	(106)	(106)
Disposal	-	-	(2,164)	(2,164)
Net increase (decrease) and others	3,893,735	(35,364)	(108,633)	3,749,738
Ending balance	11,894,172	68,555	121,353	12,084,080

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	8,356,450	91,872	164,503	8,612,825
Transfer to 12-month expected credit losses	7,073	(7,057)	(16)	-
Transfer to lifetime expected credit losses	(15,045)	15,057	(12)	-
Transfer to credit-impaired financial assets	1,193	(1,579)	386	-
Write-off	-	-	1,657	1,657
Disposal	-	-	(911)	(911)
Net increase (decrease) and others	(336,662)	(4,744)	64,447	(276,959)
Ending balance	8,013,009	93,549	230,054	8,336,612

11. THE FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES

(1) The fair value hierarchy

The fair value hierarchy is determined by the level of market observable inputs. The market observable inputs reflect unique characteristics of a financial instrument or market condition (including transparency and whether there are transactions among market participants), and when a financial instrument is traded in an active market, the best estimate of its fair value is the quoted price in the active market. The Group maximizes the use of market observable inputs and minimizes the use of unobserved firm-specific inputs to selected valuation techniques. Fair value of the Group is measured based on the perspective of a market participant. As such, even when market observable inputs are not readily available, firm-specific inputs reflect factors that market participants would use for measuring the fair value of assets or liabilities.

The fair value measurement is described in one of the following three levels used to classify fair value measurements:

- Level 1—fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities. The types of financial assets or liabilities generally included in Level 1 are publicly traded equity securities, derivatives, and debt securities issued by governmental bodies.
- Level 2— fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., prices) or indirectly (i.e., derived from prices). The types of financial assets or liabilities generally included in Level 2 are debt securities not traded in active markets and derivatives traded in OTC but not required significant judgment.
- Level 3— fair value measurements are those derived from valuation technique that include inputs for the assets or liabilities that are not based on observable market data (unobservable inputs). The types of financial assets or liabilities generally included in Level 3 are non-public securities and derivatives and debt securities of which valuation techniques require significant judgments and subjectivity.

The inputs used to measure fair value may be categorized different levels of the fair value hierarchy. In such cases, the level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Group's assessment of the significance of a particular input to a fair value measurement in its entirety requires judgment and consideration of inherent factors of the asset or liability.

(2) Fair value hierarchy of financial assets and liabilities measured at fair value as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023			
	Level 1 (*)	Level 2 (*)	Level 3	Total
Financial assets:				
Financial assets at FVTPL				
Due from banks	39,241	-	-	39,241
Debt securities	4,242,901	796,883	-	5,039,784
Equity securities	19,095	-	275,075	294,170
Capital contributions	-	-	1,858,728	1,858,728
Beneficiary certificates	125,549	3,833,122	3,349,910	7,308,581
Derivative assets	112	5,669,880	128,335	5,798,327
Other financial assets in foreign currencies	-	-	42,406	42,406
Others	-	-	180,690	180,690
Sub-total	4,426,898	10,299,885	5,835,144	20,561,927
Financial assets at FVTOCI				
Debt securities	12,392,119	24,301,991	-	36,694,110
Equity securities	649,221	-	467,842	1,117,063
Sub-total	13,041,340	24,301,991	467,842	37,811,173
Derivative assets (designated for hedging)	-	698	-	698
Total	17,468,238	34,602,574	6,302,986	58,373,798

	December 31, 2023			
	Level 1 (*)	Level 2 (*)	Level 3	Total
Financial liabilities:				
Financial liabilities at FVTPL				
Deposits due to customers	39,524	-	-	39,524
Derivative liabilities	8,306	5,973,482	1,994	5,983,782
Sub-total	47,830	5,973,482	1,994	6,023,306
Derivative liabilities (designated for hedging)	-	135,263	-	135,263
Total	47,830	6,108,745	1,994	6,158,569

(*) There were no transfers between Level 1 and Level 2 of financial assets and liabilities measured at fair value. The Group recognizes transfers among levels at the end of the reporting periods in which events have occurred or conditions have changed.

	December 31, 2022			
	Level 1 (*)	Level 2 (*)	Level 3	Total
Financial assets:				
Financial assets at FVTPL				
Due from banks	34,995	-	-	34,995
Debt securities	2,451,239	740,978	-	3,192,217
Equity securities	30,731	-	270,890	301,621
Capital contributions	-	-	1,432,256	1,432,256
Beneficiary certificates	2,217	2,480,586	2,637,760	5,120,563
Loans	-	-	19,169	19,169
Derivative assets	69,316	8,045,083	90,338	8,204,737
Other financial assets in foreign currencies	-	-	41,680	41,680
Others	-	-	142,335	142,335
Sub-total	2,588,498	11,266,647	4,634,428	18,489,573
Financial assets at FVTOCI				
Debt securities	9,895,455	22,250,303	-	32,145,758
Equity securities	382,258	-	472,246	854,504
Sub-total	10,277,713	22,250,303	472,246	33,000,262
Total	12,866,211	33,516,950	5,106,674	51,489,835
Financial liabilities:				
Financial liabilities at FVTPL				
Deposits due to customers	35,161	-	-	35,161
Derivative liabilities	11,700	8,931,766	9,449	8,952,915
Sub-total	46,861	8,931,766	9,449	8,988,076
Derivative liabilities (designated for hedging)	-	193,831	-	193,831
Total	46,861	9,125,597	9,449	9,181,907

(*) Among financial assets and financial liabilities measured at fair value, the amount transferred from Level 2 to Level 1 is 2,835,187 million Won. The Group recognizes transfers among levels at the end of reporting period in which events have occurred or conditions have changed. There has been a shift between levels due to the change in whether the market in which the relevant financial product is traded is determined to be an active market.

Financial assets and liabilities at FVTPL, financial assets and liabilities designated as at FVTPL, financial assets at FVTOCI, and derivative assets and liabilities are recognized at fair value. Fair value is the amount that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date.

Financial instruments are measured at fair value using a quoted market price in active markets. If there is no active market for a financial instrument, the Group determines the fair value using valuation methods. Valuation methods and input variables for each type of financial instruments are as follows:

① Valuation methods and input variables for each type of financial instrument classified into level 2 in December 31, 2023 and 2022 are as follows:

	Valuation methods	Input variables
Debt securities	Fair value is measured by discounting the future cash flows of debt securities applying the risk-free market rate with credit spread	Risk-free market rate, Credit spread
Beneficiary certificates	The beneficiary certificates are measured with Net Asset Value.	Values of underlying assets such as bond
Derivatives	The fair value is measured through Option Pricing Model, etc.	Discount rate, Volatility, Exchange rate, Stock price, etc.

② Valuation methods and input variables for each type of financial instrument classified into level 3 in December 31, 2023 and 2022 are as follows:

	Valuation methods	Input variables
Loans	The fair value of Loans is measured by the DCF (Discounted Cash Flow) Model and T-F model given the values of underlying assets, and volatility	Values and volatility of underlying assets
Equity securities, capital contributions, Beneficiary certificates and others	Among DCF (Discounted Cash Flow) Model, FCFE (Free Cash Flow to Equity) Model, Comparable Company Analysis, Dividend Discount Model, Risk-adjusted Rate of Return Method, Net Asset Value Method and Least-Squares Monte Carlo and binomial tree, more than one method is used given the characteristic of the subject of fair value measurement.	Risk-free market rate, Market risk premium, Corporate Beta, Stock price, Volatility of underlying assets, etc.
Derivatives	The fair value is measured through Option Pricing Model, etc.	Correlation coefficient, etc.
Others	The fair value of the underlying asset, after calculating the fair value using the DCF model, etc., considering the price and volatility of the calculated underlying asset, is calculated using the Binomial tree, which are commonly used valuation techniques in the market.	Stock price, Volatility of underlying assets, etc.

Valuation methods of financial assets and liabilities measured at fair value and classified into Level 3 and significant but unobservable inputs are as follows:

① December 31, 2023

	Fair value measurement technique	Type	Significant but unobservable input variable	Range	Impact of changes in significant unobservable inputs on fair value measurement
Derivative assets	Option valuation model and others	Equity related	Correlation coefficient, etc.	0.32~0.68	Variation of fair value increases as correlation coefficient increases.
Derivative liabilities	Option valuation model and others	Equity related	Correlation coefficient, etc.	0.32~0.68	Variation of fair value increases as correlation coefficient increases.
Equity securities, capital contributions and Beneficiary certificates	Binominal Tree		Stock price, Volatility of underlying asset	27.34%	Variation of fair value increases as stock price and volatility of underlying asset increases.
	DCF model and Others		Discount rate	5.08%~19.90%	Fair value increases as discount rate decreases
			Terminal growth rate	0.00%, 1.00%	Fair value increases as terminal growth rate increases
			Liquidation value	-1.00%~1.00%	Fair value increases as liquidation value increases.
Others	Binominal Tree		Stock price, Volatility of underlying asset	15.48%~76.22%	Variation of fair value increases as stock price and volatility of underlying asset increases.

② December 31, 2022

	Fair value measurement technique	Type	Significant but unobservable input variable	Range	Impact of changes in significant unobservable inputs on fair value measurement
Loans	T-F model		Stock price, Volatility of underlying asset	46.53%	Variation of fair value increases as stock price and volatility of underlying asset increases.
Derivative assets	Option valuation model and others	Equity related	Correlation coefficient	0.21 ~ 0.67	Variation of fair value increases as correlation coefficient increases.
Derivative liabilities	Option valuation model and others	Equity related	Correlation coefficient	0.21 ~ 0.67	Variation of fair value increases as correlation coefficient increases.
Equity securities, capital contributions and Beneficiary certificates	Binominal Tree		Stock price, Volatility of underlying asset	28.40%	Variation of fair value increases as stock price and volatility of underlying asset increases
	DCF model and Others		Discount rate	0.00% ~ 19.14%	Fair value increases as discount rate decreases
			Terminal growth rate	0.00%, 1.00%	Fair value increases as terminal growth rate increases.
			Liquidation value	0.00%	Fair value increases as liquidation value increases.
Others	Binomial Tree		Stock price, Volatility of underlying asset	20.15% ~ 36.19%	Variation of fair value increases as stock price and volatility of underlying asset increases

Fair value of financial assets and liabilities classified into Level 3 is measured by the Group using its own valuation methods or using external specialists. Unobservable inputs used in the fair value measurements are produced by the internal system of the Group and the appropriateness of inputs is reviewed regularly.

(3) Changes in financial assets and liabilities measured at fair value classified into Level 3 for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023						
	January 1, 2023	Net income (loss) (*1)	Other comprehensive income	Purchases/ issuances	Disposal/ settlements	Transfer to or out of Level 3 (*2)	December 31, 2023
Financial assets:							
Financial assets at FVTPL							
Equity securities	270,890	(2,973)	-	15,580	(2,582)	(5,840)	275,075
Capital contributions	1,432,256	49,518	-	522,230	(145,276)	-	1,858,728
Beneficiary certificates	2,637,760	49,363	-	849,300	(186,513)	-	3,349,910
Loans	19,169	-	-	-	(19,169)	-	-
Derivative assets	90,338	41,737	-	2,271	(6,011)	-	128,335
Other financial assets in foreign currencies	41,680	726	-	-	-	-	42,406
Others	142,335	9,015	-	32,135	(2,795)	-	180,690
Sub-total	4,634,428	147,386	-	1,421,516	(362,346)	(5,840)	5,835,144
Financial assets at FVTOCI							
Equity securities	472,246	-	(4,020)	343	(704)	(23)	467,842
Loans	-	-	-	139,567	(139,567)	-	-
Sub-total	472,246	-	(4,020)	139,910	(140,271)	(23)	467,842
Total	5,106,674	147,386	(4,020)	1,561,426	(502,617)	(5,863)	6,302,986
Financial liabilities:							
Financial liabilities at FVTPL							
Derivative liabilities	9,449	1,994	-	-	(9,449)	-	1,994
Total	9,449	1,994	-	-	(9,449)	-	1,994

(*1) The losses that increase the financial liabilities are presented as positive amounts, and the gains that decrease the financial liabilities are presented as negative amounts. The gain amount to 89,906 million Won for the year ended December 31, 2023, which is from financial assets and liabilities that the Group holds as of December 31, 2023.

(*2) Changes in the availability of observable market data for the financial instrument have resulted in transfer between fair value hierarchy level, and the Group recognize changes in levels at the end of reporting period that result in changes in events or circumstances that result in transfer between fair value hierarchy level.

	For the year ended December 31, 2022						
	January 1, 2022	Net income (loss) (*1)	Other comprehensive income	Purchases/ issuances	Disposal/ settlements	Transfer to or out of Level 3 (*2)	December 31, 2022
Financial assets:							
Financial assets at FVTPL							
Equity securities	266,605	507	-	15,116	(11,306)	(32)	270,890
Capital contributions	930,376	76,479	-	524,007	(98,606)	-	1,432,256
Beneficiary certificates	1,902,453	3,971	-	910,810	(179,474)	-	2,637,760
Loans	10,623	11,346	-	-	(2,800)	-	19,169
Derivative assets	27,475	62,255	-	957	(349)	-	90,338
Derivative assets in foreign currencies	-	-	-	41,680	-	-	41,680
Others	94,673	16,744	-	39,838	(8,920)	-	142,335
Sub-total	3,232,205	171,302	-	1,532,408	(301,455)	(32)	4,634,428
Financial assets at FVTOCI							
Equity securities	503,718	-	(4,316)	1,677	(28,833)	-	472,246
Total	3,735,923	171,302	(4,316)	1,534,085	(330,288)	(32)	5,106,674
Financial liabilities:							
Financial liabilities at FVTPL							
Derivative liabilities	4,101	8,387	-	(351)	(2,688)	-	9,449
Total	4,101	8,387	-	(351)	(2,688)	-	9,449

(*1) The losses that increase the financial liabilities are presented as positive amounts, and the gains that decrease the financial liabilities are presented as negative amounts. The gain amount to 160,237 million Won for the year ended December 31, 2022, which is from financial assets and liabilities that the Group holds as of December 31, 2022.

(*2) Changes in the availability of observable market data for the financial instrument have resulted in transfer between fair value hierarchy level, and the Group recognize changes in levels at the end of each report that result in changes in events or circumstances that result in transfer between fair value hierarchy level.

(4) The results of a sensitivity analysis on the rational fluctuation in the unobservable inputs used for measuring Level 3 financial instruments are as follows.

Sensitivity analysis of financial instruments is performed by classifying the effect of changes in unobservable inputs on changes in the value of financial instruments into favorable and unfavorable changes. When the fair value of a financial instrument is affected by more than one unobservable input, the below table presents the most favorable or the most unfavorable circumstances. The sensitivity analysis was performed for two types of level 3 financial instruments: (1) interest rate related derivatives, currency related derivatives, equity related derivatives, equity-linked securities, beneficiary certificates and loans of which fair value changes are recognized as net income; (2) equity securities of which fair value changes are recognized as other comprehensive income.

Meanwhile, among the financial instruments that are classified as Level 3 amounting to 6,304,980 million Won and 5,116,123 million Won as of December 31, 2023 and 2022 respectively, equity investments of 5,778,111 million Won and 4,621,365 million Won that are considered to provide the best estimate of fair value are excluded from the sensitivity analysis.

The following table presents the sensitivity analysis to disclose the effect of reasonably possible volatility on the fair value of a Level 3 financial instruments as of December 31, 2023 and 2022 (Unit: Korean Won in millions):

	December 31, 2023			
	Net income (loss)		Other comprehensive income (loss)	
	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:				
Financial assets at FVTPL				
Derivatives assets (*1)	88	(95)	-	-
Equity securities (*2) (*3) (*4)	10,735	(8,417)	-	-
Beneficiary certificates (*4)	722	(722)	-	-
Others (*2) (*4)	4,098	(3,921)	-	-
Financial assets at FVTOCI				
Equity securities (*3) (*4)	-	-	17,970	(14,009)
Total	15,643	(13,155)	17,970	(14,009)
Financial liabilities:				
Financial liabilities at FVTPL				
Derivative liabilities (*1)	10	(7)	-	-
Total	10	(7)	-	-

(*1) Fair value changes in equity related derivatives assets and liabilities and equity-linked securities are calculated by increasing or decreasing correlation coefficient, which are major unobservable variables, by 10%.

(*2) The change in fair value is calculated by increasing or decreasing the share price (-10% to 10%) and volatility (-10%p to 10%p), the major unobservable inputs.

(*3) Fair value changes in equity securities are calculated by increasing or decreasing terminal growth rate (-0.5%p~0.5%p) and discount rate (-1%p~1%p) or liquidation value (-1%p~1%p). The growth rate, discount rate, and liquidation value are major unobservable variables.

(*4) Even if the sensitivity analysis of the capital contributions and beneficiary certificates is not possible in practice, fair value changes of beneficiary certificates and other securities whose major unobservable variables are composed of the real estate are calculated by increasing or decreasing price fluctuation of real estate which is underlying assets and discount rate by 1%p.

	December 31, 2022			
	Net income (loss)		Other comprehensive income (loss)	
	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:				
Financial assets at FVTPL				
Derivatives assets (*1)	1,886	(1,993)	-	-
Equity securities (*2) (*3) (*4)	9,710	(7,763)	-	-
Beneficiary certificates (*4)	737	(737)	-	-
Others (*2)	2,860	(2,790)	-	-
Financial assets at FVTOCI				
Equity securities (*3) (*4)	-	-	20,131	(13,734)
Total	15,193	(13,283)	20,131	(13,734)
Financial liabilities:				
Financial liabilities at FVTPL			-	-
Derivative liabilities (*1)	41	(39)	-	-
Total	41	(39)	-	-

(*1) Fair value changes in equity related derivatives assets and liabilities and equity-linked securities are calculated by increasing or decreasing historical volatility of the stock price and correlation, which are major unobservable variables, by 10%, respectively. In the case of interest rate related derivative assets and liabilities, fair value changes are calculated by increasing or decreasing the volatility of interest rate, which are major unobservable variables, by 10%.

(*2) The change in fair value is calculated by increasing or decreasing the share price (-10% to 10%) and volatility (-10% to 10%), the major unobservable inputs.

(*3) Fair value changes of equity securities are calculated by increasing or decreasing terminal growth rate (-0.5~0.5%) and discount rate (-1~1%) or liquidation value (-1~1%). The growth rate, discount rate, and liquidation value are major unobservable variables.

(*4) Even if the sensitivity analysis of the capital contributions and beneficiary certificates is not possible in practice, fair value changes of beneficiary certificates and other securities whose major unobservable variables are composed of the real estate are calculated by increasing or decreasing price fluctuation of real estate which is underlying assets and discount rate by 1%.

(5) Fair value and carrying amount of financial assets and liabilities that are recorded at amortized cost as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023				
	Fair value				Book value
	Level 1	Level 2	Level 3	Total	
Financial assets:					
Securities at amortized cost	2,361,628	21,303,099	-	23,664,727	23,996,172
Loans and other financial assets at amortized cost	-	9,092,255	332,000,571	341,092,826	340,740,764
Financial liabilities:					
Deposits due to customers	-	354,203,147	-	354,203,147	353,851,379
Borrowings	-	25,215,080	-	25,215,080	25,254,732
Debentures	-	21,253,938	-	21,253,938	21,277,033
Other financial liabilities (*)	-	22,928,043	-	22,928,043	22,930,531

(*) Lease liabilities are excluded as of December 31, 2023

	December 31, 2022				
	Fair value				Book value
	Level 1	Level 2	Level 3	Total	
Financial assets:					
Securities at amortized cost	2,652,449	24,623,370	-	27,275,819	28,268,516
Loans and other financial assets at amortized cost	-	5,597,813	316,058,637	321,656,450	325,919,599
Financial liabilities:					
Deposits due to customers	-	338,582,945	-	338,582,945	338,923,832
Borrowings	-	23,028,947	-	23,028,947	23,028,206
Debentures	-	24,154,895	-	24,154,895	24,639,433
Other financial liabilities	-	19,908,621	-	19,908,621	20,087,151

(*) Lease liabilities are excluded as of December 31, 2022

The fair values of financial instruments are measured using quoted market price in active markets. In case there is no active market for financial instruments, the Group determines the fair value using valuation techniques. Valuation techniques and input variables for financial assets and liabilities that are measured at amortized costs are given as follows:

	Valuation techniques	Input variables
Securities at amortized cost	The fair value is measured by discounting the projected cash flows of debt securities by applying risk-free market rate with credit spread.	Risk-free market rate and credit spread
Loans and other financial assets at amortized cost	The fair value is measured by discounting the projected cash flows of loan products by applying the market discount rate that has been applied to a proxy company that has similar credit rating to the debtor.	Risk-free market rate, credit spread and expected prepayment-rate
Deposits due to customers, borrowings, debentures and other financial liabilities	The fair value is measured by discounting the projected cash flows of debt products by applying the market discount rate that is reflecting credit rating of the Group.	Risk-free market rate and credit spread

(6) Financial instruments by category

Carrying amounts of financial assets and liabilities by each category as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023				
	Financial assets at FVTPL	Financial assets at FVTOCI	Financial assets at amortized cost	Derivative assets (designated for hedging)	Total
Financial assets:					
Due from banks	39,241	-	1,715,223	-	1,754,464
Securities	14,681,953	37,811,173	23,996,172	-	76,489,298
Loans	-	-	327,065,921	-	327,065,921
Derivative assets	5,798,327	-	-	698	5,799,025
Other financial assets	42,406	-	11,959,620	-	12,002,026
Total	20,561,927	37,811,173	364,736,936	698	423,110,734

	December 31, 2023			
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivative liabilities (designated for hedging)	Total
Financial liabilities:				
Deposits due to customers	39,524	353,851,379	-	353,890,903
Borrowings	-	25,254,732	-	25,254,732
Debentures	-	21,277,033	-	21,277,033
Derivative liabilities	5,983,782	-	135,263	6,119,045
Other financial liabilities (*)	-	22,930,531	-	22,930,531
Total	6,023,306	423,313,675	135,263	429,472,244

(*) Lease liabilities are excluded as of December 31, 2023

	December 31, 2022			
	Financial assets at FVTPL	Financial assets at FVTOCI	Financial assets at amortized cost	Total
Financial assets:				
Due from banks	34,995	-	2,673,618	2,708,613
Securities	10,188,993	33,000,262	28,268,516	71,457,771
Loans	19,169	-	315,029,858	315,049,027
Derivative assets	8,204,737	-	-	8,204,737
Other financial assets	41,679	-	8,216,123	8,257,802
Total	18,489,573	33,000,262	354,188,115	405,677,950

	December 31, 2022			
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivative liabilities (designated for hedging)	Total
Financial liabilities:				
Deposits due to customers	35,161	338,923,831	-	338,958,992
Borrowings	-	23,028,206	-	23,028,206
Debentures	-	24,639,433	-	24,639,433
Derivative liabilities	8,952,916	-	193,831	9,146,747
Other financial liabilities (*)	-	20,087,151	-	20,087,151
Total	8,988,077	406,678,621	193,831	415,860,529

(*) Lease liabilities are excluded as of December 31, 2022

(7) Income or expense from financial instruments by category

Income or expense from financial instruments by category for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023					
	Interest income (expense)	Fees and commissions income (expense)	Reversal (Provision) of credit loss	Gain (loss) on valuation and transaction	Dividend income	Total
Financial assets at FVTPL	116,203	423	-	482,005	239,332	837,963
Financial assets at FVTOCI	999,407	1,621	(16,542)	(37,641)	15,752	962,597
Securities at amortized cost	782,513	-	(5,549)	-	-	776,964
Loans and other financial assets at amortized cost	16,487,744	-	(940,477)	101,788	-	15,649,055
Financial liabilities at amortized cost	(10,940,804)	-	-	-	-	(10,940,804)
Net derivatives (designated for hedging)	-	-	-	(2,955)	-	(2,955)
Total	7,445,063	2,044	(962,568)	543,197	255,084	7,282,820

	December 31, 2022					
	Interest income (expense)	Fees and commissions income (expense)	Reversal (Provision) of credit loss	Gain (loss) on valuation and transaction	Dividend income	Total
Financial assets at FVTPL	63,515	-	-	214,666	130,295	408,476
Financial assets at FVTOCI	632,615	1,606	827	-	20,818	655,866
Securities at amortized cost	515,246	-	(3,151)	-	-	512,095
Loans and other financial assets at amortized cost	11,531,028	40,831	(446,302)	35,003	-	11,160,560
Financial liabilities at amortized cost	(5,318,502)	-	-	-	-	(5,318,502)
Net derivatives (designated for hedging)	-	-	-	8,932	-	8,932
Total	7,423,902	42,437	(448,626)	258,601	151,113	7,427,427

12. DERECOGNITION AND OFFSET OF FINANCIAL INSTRUMENTS

(1) Derecognition of financial instruments

i) Transferred financial assets that do not meet the condition of derecognition

a) Bonds sold under repurchase agreements

The financial instruments that were disposed but the Group agreed to repurchase at the fixed amounts at the same time, so that they did not meet the conditions of derecognition, as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		December 31, 2023	December 31, 2022
Assets transferred	Financial assets at FVTOCI	556,583	583,198
	Securities at amortized cost	48,368	1,171,300
Related liabilities	Bonds sold under repurchase agreements	527,291	1,654,544

b) Securities loaned

When the Group loans its securities to outside parties, the legal ownerships of the securities are transferred; however, they should be returned at the end of lending period. Therefore, the Group does not derecognize them from the consolidated financial statements as it owns majority of risks and benefits from the securities continuously, regardless of the transfer of legal ownership. The carrying amounts of the securities loaned as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		December 31, 2023	December 31, 2022	Loaned to
Securities at amortized cost	Korean treasury and government bonds and others	625,398	-	Korea Securities Finance Corporation and others
Financial assets at FVTOCI	Korean treasury and government bonds and others	592,218	98,027	Korea Securities Depository and others

The details of the transferred financial assets that do not meet the condition of derecognition in their entirety, such as disposal of securities under repurchase agreement or securities loaned, are also explained in Note 18.

c) Securitization of financial assets

As of December 31, 2023 and 2022 the structured entity subject to consolidation issued asset-backed securities using loans and corporate bonds held by the Group, and the Group bears related risks through purchase agreements or credit offerings. The details of the transfer transaction of financial instruments are as follows (Unit: Korean Won in millions):

		December 31, 2023	December 31, 2022
		Book value (*)	Book value (*)
Assets transferred	Loans at amortized cost	2,434,771	2,677,220
Related liabilities	Securitization borrowings	2,434,900	231,800
	Securitization bonds	4,006	4,006

(*) The carrying amount is the amount before the provision for credit losses is deducted.

(2) The offset of financial assets and liabilities

The Group possesses both the uncollected domestic exchange receivables and the unpaid domestic exchange payable, which satisfy offsetting criteria of K-IFRS No.1032. Therefore, the total number of uncollected domestic exchange receivables or unpaid domestic exchange payable has been offset with part of unpaid domestic exchange payable or uncollected domestic exchange receivables and has been disclosed in loans and other financial assets at amortized cost and other financial assets and other financial liabilities of the Group's statements of financial position, respectively

The Group possesses the derivative assets, derivative liabilities, receivable spot exchange and payable spot exchange that do not satisfy the offsetting criteria of K-IFRS No.1032, but provide the Group under the circumstances of the trading party's defaults, insolvency or bankruptcy, with the right of offsetting. Items such as cash collateral cannot satisfy the offsetting criteria of K-IFRS No.1032, but in accordance with the collateral arrangements and under the circumstances of the trading party's default, insolvency or bankruptcy, the net amount of derivative assets, derivative liabilities, receivable spot exchange and payable spot exchange can be offset.

The Group has entered into a sale and repurchase agreement and accounted it as a collateralized borrowing. The Group has also entered into a purchase and repurchase agreement and accounted it as a secured loan. The Group under the repurchase agreements has offsetting right only upon the counterparty's default, insolvency or bankruptcy; thus, the repurchase agreements are applied by the TBMA/ISMA Global Master Repurchase Agreement, which does not satisfy the offsetting criteria of K-IFRS No.1032. The Group disclosed bonds sold under repurchase agreements as borrowings and bonds purchased under repurchase agreements as loans and other financial assets at amortized cost.

As of December 31, 2023 and 2022, the financial instruments to be offset and covered by master netting agreements and similar agreements are as follows (Unit: Korean Won in millions):

	December 31, 2023					
				Related amounts not setoff in the consolidated statement of financial position		
	Gross amounts of recognized financial assets	Gross amounts of recognized financial assets setoff	Net amounts of financial assets presented	Netting agreements and others	Cash collateral received	Net amounts
Financial assets:						
Derivative assets (*1)	5,174,267	-	5,174,267	11,314,881	424,466	1,063,392
Receivable spot exchange (*2)	7,628,472	-	7,628,472			
Bonds purchased under resale agreements (*2)	3,256,392	-	3,256,392	3,256,392	-	-
Domestic exchanges settlement credits (*2)(*5)	49,020,044	48,575,856	444,188	-	-	444,188
Total	65,079,175	48,575,856	16,503,319	14,571,273	424,466	1,507,580

	December 31, 2023					
				Related amounts not setoff in the consolidated statement of financial position		
	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial liabilities setoff	Net amounts of financial liabilities presented	Netting agreements and others	Cash collateral pledged	Net amounts
Financial liabilities:						
Derivative liabilities (*1)	5,109,528	-	5,109,528	11,412,659	139,143	1,186,799
Payable spot exchange (*3)	7,629,073	-	7,629,073			
Bonds sold under repurchase agreements (*4)	527,291	-	527,291	527,291	-	-
Domestic exchanges settlement debits (*3) (*5)	49,943,565	48,575,856	1,367,709	1,367,709	-	-
Total	63,209,457	48,575,856	14,633,601	13,307,659	139,143	1,186,799

(*1) The items include derivatives held for trading and derivatives designated for hedging.
(*2) The items are included in loans and other financial assets at amortized cost.
(*3) The items are included in other financial liabilities.
(*4) The items are included in borrowings.
(*5) Certain financial assets and liabilities are presented as net amounts.

	December 31, 2022					
				Related amounts not setoff in the consolidated statement of financial position		
	Gross amounts of recognized financial assets	Gross amounts of recognized financial assets setoff	Net amounts of financial assets presented	Netting agreements and others	Cash collateral received	Net amounts
Financial assets:						
Derivative assets (*1)	6,953,283	-	6,953,283	9,109,524	748,981	1,537,651
Receivable spot exchange (*2)	4,442,873	-	4,442,873			
Bonds purchased under resale agreements (*2)	6,793,938	-	6,793,938	6,793,938	-	-
Domestic exchanges settlement credits (*2)(*5)	39,773,640	39,197,123	576,517	-	-	576,517
Total	57,963,734	39,197,123	18,766,611	15,903,462	748,981	2,114,168

	December 31, 2022					
				Related amounts not setoff in the consolidated statement of financial position		
	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial liabilities setoff	Net amounts of financial liabilities presented	Netting agreements and others	Cash collateral pledged	Net amounts
Financial liabilities:						
Derivative liabilities (*1)	7,644,704	-	7,644,704	9,977,200	145,268	1,965,068
Payable spot exchange (*3)	4,442,832	-	4,442,832			
Bonds sold under repurchase agreements (*4)	1,654,544	-	1,654,544	1,654,544	-	-
Domestic exchanges settlement debits (*3) (*5)	43,812,598	39,197,123	4,615,475	2,504,062	-	2,111,413
Total	57,554,678	39,197,123	18,357,555	14,135,806	145,268	4,076,481

(*1) The items include derivatives held for trading and derivatives designated for hedging.
(*2) The items are included in loans and other financial assets at amortized cost.
(*3) The items are included in other financial liabilities.
(*4) The items are included in borrowings.
(*5) Certain financial assets and liabilities are presented as net amounts.

13. INVESTMENTS IN ASSOCIATES

(1) Investments in joint ventures and associates accounted for using the equity method of accounting as of December 31, 2023 and 2022 are as follows:

Joint ventures and Associates	Main business	Percentage of ownership (%) December 31, 2023	Percentage of ownership (%) December 31, 2022	Location	Financial statements as of
Woori Bank:					
W Service Networks Co., Ltd. (*1)	Freight & staffing services	4.9	4.9	Korea	November 30, 2023 (*4)
Korea Credit Bureau Co., Ltd. (*2)	Credit information	9.9	9.9	Korea	December 31, 2023
Korea Finance Security Co., Ltd. (*2)	Security service	15.0	15.0	Korea	November 30, 2023 (*4)
Dongwoo C & C Co., Ltd. (*3)	Construction	23.2	23.2	Korea	-
SJCO Co., Ltd. (*3)	Aggregate transportation and wholesale	27.5	27.5	Korea	-
G2 Collection Co., Ltd. (*3)	Wholesale and retail sales	28.9	28.9	Korea	-
Kyesan Engineering Co., Ltd. (*3)	Construction	23.2	23.2	Korea	-
Good Software Lap Co., Ltd. (*3)	Service	28.9	28.9	Korea	-
Wongwang Co., Ltd. (*3)	Wholesale and real estate	29.0	29.0	Korea	-
Sejin Construction Co., Ltd. (*3)	Construction	29.6	29.6	Korea	-
DAEA SNC Co., Ltd. (*3)	Wholesale and retail sales	24.0	24.0	Korea	-
ARES-TECH Co., Ltd. (*3)	Electronic component manufacturing	23.4	23.4	Korea	-
POSTECH Co., Ltd. (*6)	Manufacturing	-	24.5	Korea	-
PREXCO Co., Ltd. (*3)	Manufacturing	28.1	28.1	Korea	-
Jiwon Plating Co., Ltd. (*3)	Plating	20.5	20.5	Korea	-
NK Eng Co., Ltd. (*3)	Manufacturing	23.1	23.1	Korea	-
Youngdong Sea Food Co., Ltd. (*3)	Processed sea food manufacturing	24.0	24.0	Korea	-
Beomgyo Co., Ltd. (*3)	Telecommunication equipment retail sales	23.1	23.1	Korea	-
Woori Growth Partnerships New Technology Private Equity Fund (*6)	Other financial services	-	23.1	Korea	-
2016KIF-IMM Woori Bank Technology Venture Fund(*6)	Other financial services	-	20.0	Korea	-
K BANK Co., Ltd. (*2)	Finance	12.6	12.6	Korea	November 30, 2023 (*4)
Woori Bank-Company K Korea Movie Asset Fund(*5)	Other financial services	-	25.0	Korea	-
Partner One Value Up I Private Equity Fund	Other financial services	23.3	23.3	Korea	December 31, 2023
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	Other financial services	20.0	20.0	Korea	December 31, 2023
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	Other financial services	25.0	25.0	Korea	December 31, 2023

Joint ventures and Associates	Main business	Percentage of ownership (%) December 31, 2023	December 31, 2022	Location	Financial statements as of
Woori-Shinyoung Growth-Cap Private Equity Fund I	Other financial services	24.5	24.5	Korea	December 31, 2023
LOTTE CARD Co., Ltd.	Credit card and installment financing	20.0	20.0	Korea	September 30, 2023 (*4)
Woori-Q Corporate Restructuring Private Equity Fund(*5)	Trust and collective investment	15.7	22.4	Korea	December 31, 2023
PCC-Woori LP Secondary Fund	Other financial investment services	26.9	26.9	Korea	December 31, 2023
Together-Korea Government Private Pool Private Securities Investment Trust No. 3	Other financial services	100.0	100.0	Korea	December 31, 2023
Union Technology Finance Investment Association	Other financial investment services	29.7	29.7	Korea	December 31, 2023
KUM HWA Co., Ltd(*3)	Telecommunication equipment retail sales	20.0	20.0	Korea	December 31, 2023
Paratus Woori Material Component Equipment joint venture company	Other financial investment services	20.8	20.8	Korea	December 31, 2023
Dicustody Co., Ltd.(*2)	Other information technology and computer-operation related services	1.0	1.0	Korea	December 31, 2023
Jinmyung Plus Co., Ltd.(*3)	Manufacturing	20.2	20.2	Korea	September 30, 2023 (*4)
Orient Shipyard Co., Ltd.(*3)	Manufacturing of ship components	22.7	22.7	Korea	November 30, 2023 (*4)
Joongang Network Solution Co., Ltd.(*3)	Other information technology and computer-operation related services	25.3	25.3	Korea	September 30, 2023 (*4)
BTS 2nd Private Equity Fund	Other financial services	20.0	20.0	Korea	December 31, 2023
Woori Financial Digital Investment Association No. 1	Other financial services	88.0	88.0	Korea	December 31, 2023
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	Other financial services	28.3	28.3	Korea	December 31, 2023
KG Fashion Co., Ltd. (*3) (*7)	Manufacturing	20.8	-	Korea	November 30, 2023 (*4)
Win Mortgage Co., Ltd. (*1) (*7)	Other financial services	4.5	-	Korea	September 30, 2023 (*4)
NH Woori Newdeal Growth Alpha Private Equity Fund 1 (*7)	Other financial services	22.7	-	Korea	December 31, 2023
SF CREDIT PARTNERS, LLC (*2) (*7)	Other financial services	10.0	-	Korea	December 31, 2023
Rea Company Ltd. (*3) (*7)	Other financial services	24.5	-	Korea	September 30, 2023 (*4)
Aram CMC Co., Ltd. (*3) (*7)	Other financial services	20.0	-	Korea	November 30, 2023 (*4)

(*1) Most of the significant business transactions of associates are with the Group as of December 31, 2023 and 2022.

(*2) The Group can participate in decision-making body and exercise significant influence over financial policies and operational policies.

(*3) There is no investment balance as of December 31, 2023 and 2022.

(*4) The equity method was applied using the most recent financial statements available because financial statement at the end of the reporting period cannot be obtained, and any significant transactions or events that occurred between the end of the reporting period of the associate and the end of the reporting period of the group were appropriately reflected.

(*5) It was classified as an associate through the Group holding voting rights based on the initial investment commitment ratio.

(*6) It was excluded from associates due to the sale liquidation and others for the period ended December 31, 2023.
(*7) It was added to associates during the period ended December 31, 2023.

(2) Changes in the carrying value of investments in joint ventures and associates accounted for using the equity method of accounting for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023							
	Acquisition cost	January 1, 2023	Share of profits (losses)	Acquisition	Disposal and others	Dividends	Change in capital	December 31, 2023
W Service Networks Co., Ltd.	108	208	13	-	-	(5)	-	216
Korea Credit Bureau Co., Ltd.	3,313	5,709	814	-	-	(90)	-	6,433
Korea Finance Security Co., Ltd.	3,267	2,374	(99)	-	-	-	1,010	3,285
Woori Growth Partnerships New Technology Private Equity Fund	-	10,889	(51)	-	(10,838)	-	-	-
2016KIF-IMM Woori Bank Technology Venture Fund	-	9,474	539	-	(10,013)	-	-	-
K BANK Co., Ltd.	236,232	247,789	5,327	-	-	-	6,936	260,052
Woori Bank-Company K Korea Movie Asset Fund	-	239	52	-	(103)	(188)	-	-
Partner One Value Up I Private Equity Fund	5,039	4,278	(1,048)	-	-	-	-	3,230
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	4,356	10,285	1,162	-	(3,200)	-	-	8,247
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	4,436	4,355	-	82	-	-	-	4,437
Woori-Shinyoung Growth-Cap Private Equity Fund I	8,237	30,310	(6,814)	-	-	-	-	23,496
LOTTE CARD Co., Ltd.	346,810	514,131	91,533	-	-	(13,199)	(5,073)	587,392
Woori-Q Corporate Restructuring Private Equity Fund	8,435	16,926	1,873	273	(9,220)	-	-	9,852
PCC-Woori LP Secondary Fund	7,000	8,999	(1,701)	-	-	-	-	7,298
Together-Korea Government Private Pool Private Securities Investment Trust No. 3	10,000	10,243	297	-	-	-	-	10,540
Union Technology Finance Investment Association	13,449	14,462	(1,004)	-	(1,188)	-	-	12,270
KUM HWA Co., Ltd (*)	-	-	-	-	-	-	-	-
Paratus Woori Material Component Equipment joint venture company	12,300	11,987	(188)	-	-	-	-	11,799
Dicustody Co., Ltd.	1	1	-	-	-	-	-	1
Jinmyung Plus Co., Ltd.	-	10	4	-	-	-	-	14
Orient Shipyard Co., Ltd. (*)	-	-	-	-	-	-	-	-
BTS 2nd Private Equity Fund	5,226	2,881	(243)	2,200	-	-	-	4,838
Woori Financial Digital Investment Association No. 1	33,000	10,801	(338)	22,000	-	-	-	32,463
Joongang Network Solution Co., Ltd.	-	-	1	-	-	-	87	88
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	9,000	1,230	(324)	7,500	-	-	-	8,406
KG Fashion Co., Ltd. (*)	-	-	-	-	-	-	-	-
Win Mortgage Co., Ltd.	23	-	84	23	-	(2)	-	105
NH Woori Newdeal Growth Alpha Private Equity Fund 1	23,596	-	(1,206)	23,596	-	-	-	22,390
SF CREDIT PARTNERS, LLC	13,059	-	99	13,059	-	-	(313)	12,845
	746,887	917,581	88,782	68,733	(34,562)	(13,484)	2,647	1,029,697

(*) The amount for which no loss was recognized for associates due to discontinuation of the equity method was 2 million Won for KUM-HWA Co., Ltd., 28 million Won for Orient Shipyard Co., Ltd., 120 million Won in KG FASHION Co., Ltd. and the accumulated amount is 4 million Won for KUM- HWA Co., Ltd., 28 million Won for Orient Shipyard Co., Ltd., 120 million Won in KG FASHION Co., Ltd.

	For the year ended December 31, 2022							
	Acquisition cost	January 1, 2022	Share of profits (losses)	Acquisition	Disposal and others	Dividends	Change in capital	December 31, 2022
W Service Networks Co., Ltd.	108	183	29	-	-	(4)	-	208
Korea Credit Bureau Co., Ltd.	3,313	9,423	(3,714)	-	-	-	-	5,709
Korea Finance Security Co., Ltd.	3,267	3,101	(727)	-	-	-	-	2,374
Woori Growth Partnerships New Technology Private Equity Fund	12,942	12,448	490	-	(2,049)	-	-	10,889
2016 KIF-IMM Woori Bank Technology Venture Fund	7,594	12,630	(1,619)	-	(801)	(736)	-	9,474
K BANK Co., Ltd.	236,232	239,493	11,854	-	-	-	(3,558)	247,789
Woori Bank-Company K Korea Movie Asset Fund	-	345	71	-	-	(177)	-	239
Partner One Value Up I Private Equity Fund	5,039	6,576	(2,298)	-	-	-	-	4,278
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	7,556	11,153	1,312	-	(2,180)	-	-	10,285
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	4,354	4,254	1	100	-	-	-	4,355
Woori-Shinyoung Growth-Cap Private Equity Fund I	8,237	20,067	10,243	-	-	-	-	30,310
LOTTE CARD Co., Ltd.	346,810	458,295	58,400	-	-	(12,960)	10,396	514,131
Woori-Q Corporate Restructuring Private Equity Fund	17,043	33,493	(489)	396	(16,474)	-	-	16,926
PCC-Woori LP Secondary Fund	7,000	8,504	495	-	-	-	-	8,999
POSTECH Co., Ltd. (*)	-	-	56	-	-	-	(56)	-
Together-Korea Government Private Pool Private Securities Investment Trust No.3	10,000	10,070	173	-	-	-	-	10,243
Genesis Environmental Energy Company No. 1 Private Equity Partnership	-	4,126	(41)	-	(3,738)	(347)	-	-
Union Technology Finance Investment Association	14,637	12,388	187	2,250	(363)	-		14,462
KUM HWA Co., Ltd.(*)	-	-	-	-	-	-	-	-
Paratus Woori Material Component Equipment joint venture company	12,300	12,156	(169)	-	-	-	-	11,987
Dicustody Co., Ltd.	1	1	-	-	-	-	-	1
Jinmyung Plus Co., Ltd.	-	-	10	-	-	-	-	10
Orient Shipyard Co., Ltd.(*)	-	-	-	-	-	-	-	-
BTS 2nd Private Equity Fund	3,026	-	(145)	3,026	-	-	-	2,881
Woori Financial Digital Investment Association No. 1	11,000	-	(199)	11,000	-	-	-	10,801
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	1,500	-	(270)	1,500	-	-	-	1,230
	711,959	858,706	73,650	18,272	(25,605)	(14,224)	6,782	917,581

(*) The amount for which no loss was recognized for associates due to discontinuation of the equity method was 665 million Won for POSTECH Co., Ltd., 3,743 million Won for Orient Shipyard Co., Ltd., 0.2 million Won in KUM HWA Co., Ltd. and the accumulated amount is 1,462 million Won for POSTECH Co., Ltd., 3,743 million Won for Orient Shipyard Co., Ltd., 2 million Won in KUM HWA Co., Ltd.

(3) Summary financial information relating to investments in joint ventures and associates accounted for using the equity method of accounting as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	As of and for the year ended December 31, 2023					
Subsidiaries	Assets	Liabilities	Operating revenue	Net income (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
W Service Networks Co., Ltd.	6,887	2,496	19,350	1,069	-	1,069
Korea Credit Bureau Co., Ltd.	131,164	68,756	163,707	8,012	-	8,012
Korea Finance Security Co., Ltd.	36,185	14,287	44,709	(464)	6,730	6,266
K BANK Co., Ltd.	20,799,599	18,903,298	826,894	49,853	47,885	97,738
Partner One Value Up I Private Equity Fund	14,182	293	(4,107)	(4,505)	-	(4,505)
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	41,533	305	6,501	5,823	-	5,823
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	15,754	100	2	(388)	-	(388)
Woori-Shinyoung Growth-Cap Private Equity Fund I	97,265	1,522	(26,435)	(27,768)	-	(27,768)
LOTTE CARD Co., Ltd. (*1)	22,329,308	19,191,007	1,937,383	363,673	(19,888)	343,785
Woori-Q Corporate Restructuring Private Equity Fund	63,265	456	4,945	3,018	-	3,018
PCC-Woori LP Secondary Fund	27,773	668	908	(6,350)	-	(6,350)
Together-Korea Government Private Pool Private Securities Investment Trust No. 3	10,543	1	227	222	-	222
Union Technology Finance Investment Association	41,543	233	2,261	(838)	-	(838)
KUM HWA Co., Ltd	4	167	-	-	-	-
Paratus Woori Material Component Equipment joint venture company	58,298	1,510	-	(906)	-	(906)
Dicustody Co., Ltd.	92	-	-	(3)	-	(3)
Jinmyung Plus Co., Ltd.	519	454	146	(3)	-	(3)
Orient Shipyard Co., Ltd.	10,708	27,225	-	(124)	-	(124)
BTS 2nd Private Equity Fund	25,030	837	4	(1,213)	-	(1,213)
Woori Financial Digital Investment Association No. 1	37,084	195	401	(573)	-	(573)
Joongang Network Solution Co., Ltd.	1,505	3,156	5,758	5	-	5
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	30,014	312	95	(1,145)	-	(1,145)
KG Fashion Co., Ltd.	2,559	3,022	943	(569)	-	(569)
Win Mortgage Co., Ltd.	3,518	1,197	9,309	378	-	378
NH Woori Newdeal Growth Alpha Private Equity Fund 1	100,215	1,588	2	(3,605)	-	(3,605)
SF CREDIT PARTNERS, LLC	149,157	25,996	7,618	(4,610)	(2,819)	(7,429)
Rea Company Ltd.	2,248	3,736	802	(694)	-	(694)
Aram CMC Co., Ltd.	669	485	1,005	(254)	-	(254)

(*1) The amount is after reflecting the fair value adjustment that occurred when acquiring the shares and the adjustments that occurred by the difference of accounting policies with the Group.

Subsidiaries	Assets	Liabilities	Operating revenue	Net income (loss)	Other comprehensive income	Total comprehensive income
	As of and for the year ended December 31, 2022					
W Service Networks Co., Ltd.	7,052	2,825	19,697	1,215	-	1,215
Korea Credit Bureau Co., Ltd.	155,165	100,065	144,907	(37,475)	-	(37,475)
Korea Finance Security Co., Ltd.	28,792	12,964	47,043	(3,856)	-	(3,856)
Woori Growth Partnerships New Technology Private Equity Fund	47,394	208	2,978	2,185	-	2,185
2016KIF-IMM Woori Bank Technology Venture Fund	47,979	609	665	(7,839)	-	(7,839)
K BANK Co., Ltd.	16,694,289	14,896,426	491,880	91,059	(32,156)	58,903
Woori Bank-Company K Korea Movie Asset Fund (*2)	989	33	462	324	-	324
Partner One Value Up I Private Equity Fund	18,395	-	(9,431)	(9,831)	-	(9,831)
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	51,804	385	8,092	7,288	-	7,288
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	15,811	95	1	(383)	-	(383)
Woori-Shinyoung Growth-Cap Private Equity Fund I	123,824	312	41,780	40,544	-	40,544
LOTTE CARD Co., Ltd. (*1)	19,983,059	17,179,093	1,925,577	267,418	43,162	310,580
Woori-Q Corporate Restructuring Private Equity Fund	75,973	418	3,019	(4,696)	-	(4,696)
PCC-Woori LP Secondary Fund	33,591	168	6,127	1,152	-	1,152
POSTECH Co., Ltd.	10,489	24,804	25,182	(2,664)	-	(2,664)
Together-Korea Government Private Pool Private Securities Investment Trust No.3	10,246	1	177	170	-	170
Union Technology Finance Investment Association	48,991	299	2,300	632	-	632
KUM HWA Co., Ltd.	4	159	-	(8)	-	(8)
Paratus Woori Material Component Equipment joint venture company	58,311	617	7	(812)	-	(812)
Dicustody Co., Ltd.	95	-	-	(3)	-	(3)
Jinmyung Plus Co., Ltd.	696	649	177	(9)	-	(9)
Orient Shipyard Co., Ltd.	10,832	27,225	-	(16,467)	-	(16,467)
BTS 2nd Private Equity Fund	15,012	608	1	(725)	-	(725)
Woori Financial Digital Investment Association No. 1	12,482	209	19	(226)	-	(226)
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	4,660	313	37	(953)	-	(953)

(*1) The amount is after reflecting the fair value adjustment that occurred when acquiring the shares and the adjustments that occurred by the difference of accounting policies with the Group.
(*2) It is scheduled to be liquidated after disbanding for the year ended December 31, 2021.

(4) The entities that the Group excluded from the associates although the Group's ownership interest is more than 20% as of December 31, 2023 and 2022, are as follows:

Associate (*)	December 31, 2023 Number of shares owned	December 31, 2023 shareholding ratio (%)
CL Tech Co., Ltd.	10,191	28.6

(*) Although the Group's common stock ownership of the entity is more than 20%, the Group does not have significant influence over the entity since it is going through work-out process under receivership, accordingly it is excluded from the investment in joint ventures and associates.

Associate (*)	December 31, 2022 Number of shares owned	December 31, 2022 shareholding ratio (%)
CL Tech Co., Ltd.	10,191	28.6

(*) Although the Group's common stock ownership of the entity is more than 20%, the Group does not have significant influence over the entity since it is going through work-out process under receivership, accordingly it is excluded from the investment in joint ventures and associates.

(5) As of December 31, 2023 and 2022, the reconciliations from the net assets of the associates to the book value of the shares of the investment in joint ventures and associates are as follows (Unit: Korean Won in millions except for ownership):

	December 31, 2023					
Joint ventures and Associates	Total net asset	Ownership (%)	Ownership portion of net assets	Basis difference	Intercompany transaction and others	Book Value
W Service Networks Co., Ltd.	4,391	4.9	216	-	-	216
Korea Credit Bureau Co., Ltd.	62,408	9.9	6,186	247	-	6,433
Korea Finance Security Co., Ltd.	21,898	15.0	3,285	-	-	3,285
K BANK Co., Ltd. (*)	1,893,785	12.6	238,158	21,894	-	260,052
Partner One Value Up I Private Equity Fund	13,889	23.3	3,230	-	-	3,230
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	41,228	20.0	8,247	-	-	8,247
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	15,653	25.0	3,914	-	523	4,437
Woori-Shinyoung Growth-Cap Private Equity Fund I	95,743	24.5	23,496	-	-	23,496
LOTTE CARD Co., Ltd. (*)	2,936,964	20.0	587,392	-	-	587,392
Woori-Q Corporate Restructuring Private Equity Fund	62,809	15.7	9,852	-	-	9,852
PCC-Woori LP Secondary Fund	27,105	26.9	7,298	-	-	7,298
Together-Korea Government Private Pool Private Securities Investment Trust No. 3	10,542	100.0	10,540	-	-	10,540
Union Technology Finance Investment Association	41,311	29.7	12,270	-	-	12,270
KUM HWA Co., Ltd	(163)	20.0	(33)	-	33	-
Paratus Woori Material Component Equipment joint venture company	56,788	20.8	11,799	-	-	11,799
Dicustody Co., Ltd.	92	1.0	1	-	-	1
Jinmyung Plus Co., Ltd.	65	20.2	14	-	-	14
Orient Shipyard Co., Ltd.	(16,517)	22.7	(3,754)	-	3,754	-
BTS 2nd Private Equity Fund	24,193	20.0	4,838	-	-	4,838
Woori Financial Digital Investment Association No. 1	36,889	88.0	32,463	-	-	32,463
Joongang Network Solution Co., Ltd.	(1,651)	25.3	(419)	-	507	88
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	29,702	28.3	8,406	-	-	8,406
KG Fashion Co., Ltd.	(463)	20.8	(96)	-	96	-
Win Mortgage Co., Ltd.	2,321	4.5	105	-	-	105
NH Woori Newdeal Growth Alpha Private Equity Fund 1	98,627	22.7	22,390	-	-	22,390
SF CREDIT PARTNERS, LLC	123,161	10.0	12,316	-	529	12,845
Rea Company Ltd.	(1,488)	24.5	(365)	-	365	-
Aram CMC Co., Ltd.	184	20.0	37	-	(37)	-

(*) The net asset and e net asset equity amount is after the debt-for-equity swap, non-controlling etc.

Joint ventures and Associates	December 31, 2022					
	Total net asset	Ownership (%)	Ownership portion of net assets	Basis difference	Intercompany transaction and others	Book Value
W Service Networks Co., Ltd.	4,227	4.9	209	-	(1)	208
Korea Credit Bureau Co., Ltd.	55,100	9.9	5,462	246	1	5,709
Korea Finance Security Co., Ltd.	15,828	15.0	2,374	-	-	2,374
Woori Growth Partnerships New Technology Private Equity Fund	47,185	23.1	10,889	-	-	10,889
2016KIF-IMM Woori Bank Technology Venture Fund	47,370	20.0	9,474	-	-	9,474
K BANK Co., Ltd. (*)	1,796,269	12.6	225,894	21,894	1	247,789
Woori Bank-Company K Korea Movie Asset Fund	957	25.0	239	-	-	239
Partner One Value Up I Private Equity Fund	18,395	23.3	4,278	-	-	4,278
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	51,419	20.0	10,284	-	1	10,285
Crevisse LIME Impact 1st Startup Venture Specialist Private Equity Fund	15,716	25.0	3,929	-	426	4,355
Woori-Shinyoung Growth-Cap Private Equity Fund I	123,512	24.5	30,310	-	-	30,310
LOTTE CARD Co., Ltd. (*)	2,570,656	20.0	514,131	-	-	514,131
Woori-Q Corporate Restructuring Private Equity Fund	75,555	22.4	16,926	-	-	16,926
PCC-Woori LP Secondary Fund	33,423	26.9	8,999	-	-	8,999
POSTECH Co., Ltd.	(14,315)	24.5	(3,513)	-	3,513	-
Together-Korea Government Private Pool Private Securities Investment Trust No.3	10,245	100.0	10,244	-	(1)	10,243
Union Technology Finance Investment Association	48,692	29.7	14,463	-	(1)	14,462
KUM HWA Co., Ltd.	(155)	20.0	(31)	-	31	-
Paratus Woori Material Component Equipment joint venture company	57,694	20.8	11,987	-	-	11,987
Dicustody Co., Ltd.	95	1.0	1	-	-	1
Jinmyung Plus Co., Ltd.	47	20.2	10	-	-	10
Orient Shipyard Co., Ltd.	(16,393)	22.7	(3,726)	-	3,726	-
BTS Private Equity Fund No. 2	14,405	20.0	2,881	-	-	2,881
Woori Financial Digital Investment Association No. 1	12,273	88.0	10,801	-	-	10,801
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	4,347	28.3	1,230	-	-	1,230

(*) The net asset equity amount is after the debt-for-equity swap, non-controlling etc.

14. INVESTMENT PROPERTIES

(1) Details of investment properties as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Acquisition cost	657,606	659,897
Accumulated depreciation	(65,078)	(56,686)
Net carrying value	592,528	603,211

(2) Changes in investment properties are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Beginning balance	603,211	588,997
Depreciation	(6,599)	(6,483)
Transfer (*)	(6,463)	19,191
Foreign currencies translation adjustments	2,379	1,506
Ending balance	592,528	603,211

(*) Land and buildings were transferred from Properties and equipment to investment properties for the years ended December 31, 2023 and 2022.

(3) Fair value of investment properties amounted to 864,351 million Won and 861,628 million Won as of December 31, 2023 and 2022, respectively. The fair value of investment properties has been assessed on the basis of recent similar real estate market price and officially assessed land price in the area of the investment properties, is classified as level 3 on the fair value hierarchy.

(4) Rental fee earned from investment properties is amounting to 35,869 million Won and 35,102 million Won for the years ended December 31, 2023 and 2022, respectively. The expenses directly related to the investment properties where rental fee was earned are 6,599 million Won and 6,483 million Won, respectively.

(5) The minimum lease payments expected to be received in the future under the non-refundable lease agreement as of December 31, 2023 and 2022. (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Lease payments:		
Within a year	17,413	14,172
More than 1 year and within 2 years	7,114	9,234
More than 2 years and within 3 years	3,716	5,320
More than 3 years and within 4 years	3,144	3,201
More than 4 years and within 5 years	2,988	2,634
More than 5 years	2,944	2,568
Total	37,319	37,129

15. PROPERTIES AND EQUIPMENT

(1) Details of properties and equipment as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023					
	Land	Building	Properties for business use	Leasehold improvement	Construction in progress	Total
Properties and equipment (owned)	1,495,945	614,415	184,298	52,364	36,486	2,383,508
Right-of-use assets	-	327,554	17,899	-	-	345,453
Carrying value	1,495,945	941,969	202,197	52,364	36,486	2,728,961

	December 31, 2022					
	Land	Building	Properties for business use	Leasehold improvement	Construction in progress	Total
Properties and equipment (owned)	1,486,834	630,644	186,181	48,824	32,184	2,384,667
Right-of-use assets	-	303,387	12,763	-	-	316,150
Carrying value	1,486,834	934,031	198,944	48,824	32,184	2,700,817

(2) Details of properties and equipment (owned) as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023					
	Land	Building	Properties for business use	Leasehold improvement	Construction in progress	Total
Acquisition cost	1,495,945	949,578	908,937	459,661	36,486	3,850,607
Accumulated depreciation	-	(335,163)	(724,639)	(407,297)	-	(1,467,099)
Net carrying value	1,495,945	614,415	184,298	52,364	36,486	2,383,508

	December 31, 2022					
	Land	Building	Properties for business use	Leasehold improvement	Construction in progress	Total
Acquisition cost	1,486,834	940,449	881,398	445,397	32,184	3,786,262
Accumulated depreciation	-	(309,805)	(695,217)	(396,573)	-	(1,401,595)
Net carrying value	1,486,834	630,644	186,181	48,824	32,184	2,384,667

(3) Details of changes in properties and equipment (owned) for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023					
	Land	Building	Properties for business use	Leasehold improvement	Construction in progress	Total
Beginning balance	1,486,834	630,644	186,181	48,824	32,184	2,384,667
Acquisition	-	18,064	81,773	21,803	8,083	129,723
Disposal	(352)	(520)	(13,454)	(1,000)	(3,600)	(18,926)
Depreciation	-	(29,425)	(70,962)	(17,577)	-	(117,964)
Foreign currencies translation adjustment	492	241	187	192	(68)	1,044
Transfer (*)	9,907	(3,444)	-	-	-	6,463
Classification as held for sale	(936)	(1,568)	-	-	-	(2,504)
Others	-	423	573	122	(113)	1,005
Ending balance	1,495,945	614,415	184,298	52,364	36,486	2,383,508

(*) Land and buildings transferred from properties and equipment to investment properties for the year ended December 31, 2023.

	For the year ended December 31, 2022					
	Land	Building	Properties for business use	Leasehold improvement	Construction in progress	Total
Beginning balance	1,524,032	659,063	196,557	43,178	3,171	2,426,001
Acquisition	24	14,502	66,208	23,432	31,810	135,976
Disposal	(19,021)	-	(928)	(622)	-	(20,571)
Depreciation	-	(28,812)	(76,514)	(17,973)	-	(123,299)
Foreign currencies translation adjustment	(297)	(117)	764	554	225	1,129
Transfer (*)	(11,915)	(7,275)	-	-	-	(19,190)
Classification as held for sale	(6,405)	(6,704)	-	-	-	(13,109)
Others	416	(13)	94	255	(3,022)	(2,270)
Ending balance	1,486,834	630,644	186,181	48,824	32,184	2,384,667

(*) Land and buildings transferred from properties and equipment to investment properties for the year ended December 31, 2022.

(4) Details of right-of-use assets as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023		
	Building	Properties for business use	Total
Acquisition cost	639,005	32,565	671,570
Accumulated depreciation	(311,451)	(14,666)	(326,117)
Net carrying value	327,554	17,899	345,453

	December 31, 2022		
	Building	Properties for business use	Total
Acquisition cost	548,469	25,002	573,471
Accumulated depreciation	(245,082)	(12,239)	(257,321)
Net carrying value	303,387	12,763	316,150

(5) Details of changes in right-of-use assets for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions) :

	For the year ended December 31, 2023		
	Building	Properties for business use	Total
Beginning balance	303,387	12,763	316,150
New contracts	184,967	16,037	201,004
Changes in contracts	25,564	138	25,702
Termination	(17,277)	(1,056)	(18,333)
Depreciation	(179,709)	(10,039)	(189,748)
Others	10,622	56	10,678
Ending balance	327,554	17,899	345,453

	For the year ended December 31, 2022		
	Building	Properties for business use	Total
Beginning balance	320,613	15,096	335,709
New contracts	207,732	7,320	215,052
Changes in contracts	3,514	3	3,517
Termination	(43,175)	(824)	(43,999)
Depreciation	(192,305)	(8,806)	(201,111)
Others	7,008	(26)	6,982
Ending balance	303,387	12,763	316,150

16. INTANGIBLE ASSETS

(1) Details of intangible assets as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023							
	Goodwill	Software	Industrial property rights	Development cost	Others	Membership	Construction in progress	Total
Acquisition cost	163,517	49,674	2,118	541,977	987,320	23,270	7,167	1,775,043
Accumulated amortization	-	(28,095)	(1,629)	(378,299)	(812,555)	-	-	(1,220,578)
Accumulated impairment losses	-	-	-	-	(33,552)	(1,132)	-	(34,684)
Net carrying value	163,517	21,579	489	163,678	141,213	22,138	7,167	519,781

	December 31, 2022							
	Goodwill	Software	Industrial property rights	Development cost	Others	Membership	Construction in progress	Total
Acquisition cost	159,194	45,335	2,052	463,368	888,116	21,243	3,027	1,582,335
Accumulated amortization	-	(21,462)	(1,431)	(323,849)	(762,399)	-	-	(1,109,141)
Accumulated impairment losses	-	-	-	-	(33,552)	(1,158)	-	(34,710)
Net carrying value	159,194	23,873	621	139,519	92,165	20,085	3,027	438,484

(2) Details of changes in intangible assets for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023							
	Goodwill	Software	Industrial property rights	Development cost	Others	Membership	Construction in progress	Total
Beginning balance	159,194	23,873	621	139,519	92,165	20,085	3,027	438,484
Acquisition	-	3,915	66	78,619	98,886	2,022	6,287	189,795
Disposal	-	(1,028)	-	-	-	-	-	(1,028)
Amortization (*1)	-	(6,055)	(197)	(54,459)	(50,048)	-	-	(110,759)
Reversal of impairment loss(*2)	-	-	-	-	-	25	-	25
Foreign currencies translation adjustment	4,323	303	-	(3)	310	5	(28)	4,910
Others	-	571	(1)	2	(100)	1	(2,119)	(1,646)
Ending balance	163,517	21,579	489	163,678	141,213	22,138	7,167	519,781

(*1) Amortization of other intangible assets amounting to 22,349 million Won is included in other operating expenses.
(*2) Membership is an intangible asset with an indefinite useful life that recognizes an impairment loss if recoverable value is lower than its carrying amount, while the reversal of an impairment loss should be recognized when the recoverable value is higher than its carrying amount.

	For the year ended December 31, 2022							
	Goodwill	Software	Industrial property rights	Development cost	Others	Membership	Construction in progress	Total
Beginning balance	158,498	17,655	691	160,331	108,323	18,854	535	464,887
Acquisition	-	5,293	160	52,119	31,865	1,871	2,120	93,428
Disposal	-	-	-	-	(2)	(442)	-	(444)
Amortization (*1)	-	(5,221)	(231)	(72,852)	(47,140)	-	-	(125,444)
Provision of impairment loss(*2)	-	-	-	-	-	(144)	-	(144)
Foreign currencies translation adjustment	696	62	-	(6)	(101)	(42)	(53)	556
Others	-	6,084	1	(73)	(780)	(11)	425	5,646
Ending balance	159,194	23,873	621	139,519	92,165	20,086	3,027	438,485

(*1) Amortization of other intangible assets amounting to 14,664 million Won is included in other operating expenses.
(*2) The impairment test for other intangible assets indicates that the recoverable value is less than the carrying amount and thus the impairment loss is recognized. Also, membership is an intangible asset with an indefinite useful life that recognizes an impairment

loss if recoverable value is lower than its carrying amount, while the reversal of an impairment loss should be recognized when the recoverable value is higher than its carrying amount.

(3) Goodwill

1) Details of major goodwill as of December 31, 2023 and 2022 are as follows (Unit: Korea Won in millions):

Cash Generating Unit (*1)	December 31, 2023	December 31, 2022
PT Bank Woori Saudara Indonesia 1906 Tbk (*2)	100,267	97,029
Woori Bank (Cambodia) PLC (*3)	56,513	55,570
Total	156,780	152,599

(*1) The goodwill has been allocated to the cash-generating unit that will benefit from the synergies of the business combination, and the cash-generating unit generally consists of a sales unit or its sub-sector.
(*2) The Group has acquired Saudara Bank to expand retail sales in Indonesia, and recognized the goodwill as it is expected to strengthen our competitiveness by securing a local sales network in Indonesia.
(*3) The Group has acquired Vision Fund Cambodia to expand Cambodian retail sales, and recognized goodwill based on the economies of scale and acquired customer base.

2) Impairment test

The recoverable amount of the cash-generating unit is measured at larger amount among the net fair value or the value in use.

The net fair value is calculated by deducting costs of disposal from the amount received from the sale of the cash-generating unit in an arm’s length transaction between the parties with reasonable judgment and willingness to negotiate. In case of difficulty in measuring this amount, the sale amount of a similar cash-generating unit in the past market is calculated by reflecting the characteristics of the cash-generating unit. If reliable information related to fair value less costs to sell is not available, value in use is considered as recoverable amount. Value in use is the present value of future cash flows expected to be generated by the cash-generating unit. Future cash flows are estimated based on the latest financial budget approved by the management, with an estimated period of up to five years. PT Bank Woori Saudara Indonesia 1906 Tbk and Woori Bank (Cambodia) PLC applied growth rate for 1% to estimate future cash flow for the period over five years. The main assumptions used to estimate cash flows are about the size of the market and the share of the group. The appropriate discount rate for discounting future cash flows is the pre-tax discount rate, including assumptions about risk-free interest rates, market risk premium, and systemic risk of cash-generating units. The impairment test, which compares the carrying amount and recoverable amount of the cash-generating unit to which goodwill has been allocated, is conducted every year and every time an impairment sign occurs. (Unit: Korean Won in millions):

Category	PT Bank Woori Saudara Indonesia 1906 Tbk	Woori Bank (Cambodia) PLC
Discount rate (%)	11.39	17.72
Terminal growth rate (%)	1.00	1.00
Recoverable amount	979,387	586,446
Carrying amount	740,558	509,730

As a result of the impairment test on goodwill, it is determined that the carrying amount of the cash-generating unit to which the goodwill has been distributed will not exceed the recoverable amount.

3) Sensitivity analysis

The sensitivity of fair value measurements due to changes in significant but unobservable inputs used in measuring recoverable amount of PT Bank Woori Saudara Indonesia 1906 Tbk and Woori Bank (Cambodia) PLC as of December 31, 2023, is as follows (Unit: Korean Won in millions):

		PT Bank Woori Saudara Indonesia 1906 Tbk	Woori Bank (Cambodia) PLC
Discount rate	Increase by 1.0% point	(95,630)	(47,185)
	Decrease by 1.0% point	116,564	53,812
Terminal growth rate	Increase by 1.0% point	47,933	9,762
	Decrease by 1.0% point	(39,513)	(8,659)

17. ASSETS HELD FOR SALE

Assets held for sale as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Properties and equipment (*)	11,573	9,589

(*) The Group classifies above assets as assets held for sale that are highly likely to be sold within one year from December 31, 2023 and 2022, based on the management's decision.

18. ASSETS SUBJECT TO LIEN AND ASSETS ACQUIRED THROUGH FORECLOSURES

(1) Assets subjected to lien as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		December 31, 2023		
		Collateral given to	Amount	Reason for collateral
Loans and other financial assets at amortized cost	Due from banks in local currency	MORGAN STANLEY BANK INTL, SEL and others	26,854	CSA variable margin and others
	Due from banks in foreign currencies	Korea Investment & Securities Co., Ltd. and others	765,330	Overseas Futures Option Deposit and others
	Mortgage-backed securities	Public offering	1,242,963	Covered bonds
Financial assets at FVTPL	Korean financial institutions debt securities and others	Korea Exchange and others	385,394	CSA variable margin and others
Financial assets at FVTOCI	Korean treasury and government bonds	Korea Securities Depository	73,846	Related to bonds sold under repurchase agreements (*)
	Korean financial institutions debt securities and others	The BOK and others	8,182,907	Settlement risk and others
	Foreign financial institutions' debt securities	Postal Savings Bank of China and others	482,737	Related to bonds sold under repurchase agreements (*)
		Korea Investment & Securities Co., Ltd. and others	955,126	Substitute securities and others
Securities at amortized cost	Korean treasury and government bonds and others	The BOK and others	10,380,306	Settlement risk and others
	Foreign financial institutions' debt securities	NATIXIS	48,368	Related to bonds sold under repurchase agreements (*)
		Federal Reserve Bank	23,180	Collateral to receive a borrowing limit
		Total	22,567,011	

(*) The financial assets are not derecognized and provided as collaterals because the Group entered into an agreement to buy the transferred assets back at a predetermined price or the sale price plus a certain return rate. The Group continuously recognize the transferred assets as liabilities (bond sold under repurchase agreements) after the repurchase.

		December 31, 2022		
		Collateral given to	Amount	Reason for collateral
Loans and other financial assets at amortized cost	Due from banks in local currency	The Korea Exchange. and others	133,539	CCP variable margin and others
	Due from banks in foreign currencies	Korea Investment & Securities Co., Ltd. and others	1,142,784	Overseas Futures Option Deposit and others
	Mortgage-backed securities	Public offering	1,892,723	Covered Bonds
Financial assets at FVTPL	Korean financial institutions debt securities and others	Standard Chartered Bank Korea Limited and others	245,876	CSA variable margin and others
Financial assets at FVTOCI	Korean treasury and government bonds	Korea Securities Depository	460	Related to bonds sold under repurchase agreements (*)
	Korean financial institutions debt securities and others	The BOK and others	6,394,890	Settlement risk and others
	Foreign financial institutions debt securities	Standard Chartered Bank, Hong Kong and others	582,738	Related to bonds sold under repurchase agreements (*)
		BNP-PARIBAS and others	1,060,120	CSA variable margin and others
Securities at amortized cost	Korean treasury and government bonds	Korea Securities Depository	1,100,351	Related to bonds sold under repurchase agreements (*)
	Korean treasury and government bonds and others	The BOK and others	10,820,136	Settlement risk and others
	Debt securities in foreign currencies	NATIXIS and others	70,949	Related to bonds sold under repurchase agreements (*)
		FHLB Advance and others	10,570	Collateral to receive a borrowing limit
		Total	23,455,136	

(*) The financial assets are not derecognized and provided as collaterals because the Group entered into an agreement to buy the transferred assets back at a predetermined price or the sale price plus a certain return rate. The Group continuously recognize the transferred assets as liabilities (bond sold under repurchase agreements) after the repurchase.

(2) Assets acquired through foreclosures as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Non-operational real estates	37,596	25,405
Non-operational assets	997	1,047
Real estate assessment provision	(1,611)	(1,176)
Accumulated Depreciation	(2,358)	(1,937)
Total	34,624	23,339

(3) Securities loaned as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		December 31, 2023	December 31, 2022	Loaned to
Financial assets at FVTPL	Korea treasury and government bonds and others	625,398	-	Korea Securities Finance Corporation and others
Financial assets at FVTOCI	Korea treasury and government bonds and others	592,218	98,027	Korea Securities Depository and others

Securities loaned are lending of specific securities to borrowers who agree to return the same quantity of the same security at the end of lending period. As the Group does not derecognize these securities, there are no liabilities recognized through such transactions relates to securities loaned.

(4) Collaterals held that can be permitted to sell or repledge the collateral in the absence of default by the owner of the collateral

Fair values of collaterals held that can be disposed and re-subjected to lien regardless of defaults of counterparties as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	
	Fair values of collaterals	Fair values of collaterals disposed or re-subjected to lien
Securities	3,443,822	-

	December 31, 2022	
	Fair values of collaterals	Fair values of collaterals disposed or re-subjected to lien
Securities	7,109,933	-

19. OTHER ASSETS

Details of other assets as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Prepaid expenses	222,211	153,777
Advance payments	47,521	3,828
Non-operational assets	34,624	23,340
Others	13,951	11,789
Total	318,307	192,734

20. FINANCIAL LIABILITIES AT FVTPL

(1) Financial liabilities at FVTPL as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Financial liabilities at FVTPL	6,023,306	8,988,077

(2) Details of financial liabilities at FVTPL as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Deposits		
Gold banking liabilities	39,524	35,161
Derivative liabilities	5,983,782	8,952,916
Total	6,023,306	8,988,077

21. DEPOSITS DUE TO CUSTOMERS

Details of deposits due to customers by type are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Deposits in local currency:		
Deposits on demand	8,815,272	15,652,495
Deposits at termination	283,120,740	270,626,822
Mutual installment	21,602	22,995
Certificate of deposits	14,767,307	5,255,889
Other deposits	1,117,673	1,196,487
Sub-total	307,842,594	292,754,688
Deposits in foreign currencies:		
Deposits in foreign currencies	46,193,691	46,261,496
Present value discount	(184,906)	(92,352)
Total	353,851,379	338,923,832

22. BORROWINGS AND DEBENTURES

(1) Details of borrowings as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023		
	Lenders	Interest rate (%)	Amount
Borrowings in local currency:			
Borrowings from the BOK	The BOK	2.0 ~ 2.0	1,565,444
Borrowings from government funds	Small Enterprise And Market Service and others	0.0 ~ 3.4	1,996,579
Others	The Korea Development Bank and others	0.0 ~ 6.0	6,178,564
Sub-total			9,740,587
Borrowings in foreign currencies	The Export-Import Bank of Korea and others	0.0 ~ 10.0	13,865,152
Bills sold	Others	0.0 ~ 2.7	6,326
Call money	Bank and others	4.1 ~ 6.6	1,115,923
Bonds sold under repurchase agreements	Other financial institutions	1.0 ~ 11.7	527,291
Present value discount			(547)
Total			25,254,732

	December 31, 2022		
	Lenders	Interest rate (%)	Amount
Borrowings in local currency:			
Borrowings from the BOK	The BOK	0.3 ~ 1.8	3,040,877
Borrowings from government funds	Small Enterprise And Market Service and others	0.0 ~ 3.5	2,021,049
Others	The Korea Development Bank and others	0.0 ~ 6.1	4,792,000
Sub-total			9,853,926
Borrowings in foreign currencies	The Export-Import Bank of Korea and others	(0.1) ~ 10.0	11,112,940
Bills sold	Others	0.0 ~ 2.4	7,308
Call money	Bank and others	1.6 ~ 5.5	400,071
Bonds sold under repurchase agreements	Other financial institutions	0.2 ~ 6.4	1,654,544
Present value discount			(583)
Total			23,028,206

(2) Details of debentures as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023		December 31, 2022	
	Interest rate (%)	Amount	Interest rate (%)	Amount
Face value of bond (*):				
Ordinary bonds	0.8 ~ 7.1	17,029,358	0.8 ~ 5.9	19,778,506
Subordinated bonds	1.9 ~ 5.1	4,291,848	1.9 ~ 5.1	4,885,325
Other bonds	17.0	4,006	17.0	4,006
Sub-total		21,325,212		24,667,837
Discounts on bonds		(48,179)		(28,404)
Total		21,277,033		24,639,433

(*) Includes debentures under fair value hedge amounting to 3,943,224 million Won and 3,076,983 million Won as of December 31, 2023 and 2022, respectively.

23. PROVISIONS

(1) Details of provisions as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Provisions for guarantees (*1)	78,919	73,743
Provisions for unused commitments	82,491	55,077
Asset retirement obligation	86,290	75,202
Other provisions (*2)	458,264	262,502
Total	705,964	466,524

(*1) Provisions for guarantees include provisions for financial guarantees of 48,342 million Won and 45,203 million Won as of December 31, 2023 and 2022, respectively.
(*2) Other provisions consist of provisions for litigation, compensation for loss and others.

(2) Changes in provisions for guarantees and unused loan commitments for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

i) Provisions for guarantees

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	41,733	24,325	7,685	73,743
Transfer to 12-month expected credit loss	20,503	(20,503)	-	-
Transfer to expected credit loss for the entire period	(453)	453	-	-
Transfer to credit-impaired financial assets	(4)	(3)	7	-
Net provision (reversal) of unused amount	5,493	(1,470)	(467)	3,556
Other increase (decrease) (*)	1,622	(2)	-	1,620
Ending balance	68,894	2,800	7,225	78,919

(*) Includes the impact from change of financial guarantee liabilities.

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	45,669	15,267	6,767	67,703
Transfer to 12-month expected credit loss	1,206	(1,206)	-	-
Transfer to expected credit loss for the entire period	(119)	119	-	-
Transfer to credit-impaired financial assets	(3)	(338)	341	-
Net provision (reversal) of unused amount	(3,450)	10,484	577	7,611
Other increase (decrease) (*)	(1,570)	(1)	-	(1,571)
Ending balance	41,733	24,325	7,685	73,743

(*) Includes the impact from change of financial guarantee liabilities.

ii) Provisions for unused loan commitments

	For the year ended December 31, 2023			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	34,509	20,568	-	55,077
Transfer to 12-month expected credit loss	12,268	(12,268)	-	-
Transfer to expected credit loss for the entire period	(803)	803	-	-
Transfer to credit-impaired financial assets	(19)	(18)	37	-
Net provision (reversal) of unused amount	28,116	(684)	(37)	27,395
Other increase (decrease)	19	-	-	19
Ending balance	74,090	8,401	-	82,491

	For the year ended December 31, 2022			
	Stage 1	Stage 2	Stage 3	Total
Beginning balance	30,376	22,056	-	52,432
Transfer to 12-month expected credit loss	3,986	(3,986)	-	-
Transfer to expected credit loss for the entire period	(703)	703	-	-
Transfer to credit-impaired financial assets	(45)	(44)	89	-
Net provision (reversal) of unused amount	826	1,839	(89)	2,576
Other increase (decrease)	69	-	-	69
Ending balance	34,509	20,568	-	55,077

(3) Changes in asset retirement obligation for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Beginning balance	75,202	74,193
Provisions provided	4,312	2,605
Provisions used	(1,162)	(6,705)
Amortization	1,328	706
Increase in restoration costs and others	6,610	4,403
Ending balance	86,290	75,202

(*) The amount of the asset retirement obligation is the present value of the best estimate of future expected expenditure to settle the obligation – arising from leased properties as of end of reporting period discounted by appropriate discount rate. The restoration cost is expected to occur by the end of each premise's lease period, and the Group has used average lease period of each category of leases terminated during the past years in order to rationally estimate the lease period. In addition, the Group used average amount of actual recovery cost for the past 3 years and the inflation rate for the preceding year in order to estimate future recovery cost.

(4) Changes in other provisions for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
	Other provisions	Other provisions
Beginning balance	262,502	300,492
Provisions provided	239,228	24,538
Provisions used and others	(27,125)	(8,110)
Reversal of unused amount (*)	(14,497)	(53,796)
Foreign currencies translation adjustments	(1,844)	(622)
Ending balance	458,264	262,502

(*) The Group provided Korean won settlement services for trading transaction settlement between Korea and Iran before the prior year, investigated by U.S. prosecutors (federal prosecutors, New York state prosecutors) and New York State Department of Financial Services for violations of U.S. sanctions against Iran, Sudan, Syria and Cuba. In this regard, the Office of Foreign Assets Control concluded its investigation in December 2020 without taking any additional sanctions, and New York State Department of Financial Services concluded its investigation in February 2022 without taking any additional sanctions. Meanwhile, in June 2022, the Group reversed the provision related to the investigation of the U.S. Prosecutors, which have not been completed yet, in consideration of the opinion of an independent legal expert that the probability of sanctions by the U.S. Prosecutors in this case is low during the prior period.

(5) Others

① The Group recognized the estimated amount of compensation related to incomplete sales of Derivative Linked Fund (DLF) in 2019 and provisions for fines expected to be imposed by the Financial Services Commission as the best estimate of expenditure required to fulfill its current obligations at the end of the current period.

② The Group recognized provisions for estimated compensation amounts related to the prepayment arising from the delay in the redemption of funds before the prior fiscal year and the dispute settlement as the best estimate of the expenditure amounting to 180.2 billion won. In addition, The Group recognized provision amounting to 53.6 billion won for estimated compensation of expected customer loss related to delayed redemption of fund during the current period.

24. NET DEFINED BENEFIT LIABILITY(ASSET)

The retirement benefit of the group is based on the defined benefit retirement pension plan.
Employees and directors with one or more years of service are entitled to receive a payment upon termination of their employment, based on their length of service and rate of salary at the time of termination. The assets of the plans are measured at their fair value at the end of reporting date. The plan liabilities are measured using the projected unit method, which takes account of projected earnings increases, using actuarial assumptions that give the best estimate of the future cash flows that will arise under the plan liabilities.

The Group is exposed to various risks through defined benefit retirement pension plan, and the most significant risks are as follows:

Volatility of asset	The defined benefit obligation was estimated with discount rate calculated based on blue chip corporate bonds earnings. A deficit may occur if the rate of return of plan assets falls short of the discount rate.
Decrease in profitability of blue chip bonds	A decrease in profitability of blue chip bonds will be partially offset by some increase in the value of debt securities that the employee benefit plan owns but will bring an increase in the defined benefit obligation.
Risk of inflation	Most defined benefit obligations are related to inflation rate; the higher the inflation rate is, the higher the level of liabilities. Therefore, deficit occurs in the system if an inflation rate increases.

(1) Details of net defined benefit liability(asset) as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Present value of defined benefit obligations	1,358,687	1,188,957
Fair value of plan assets	(1,577,806)	(1,474,309)
Net defined benefit liability(asset)	(219,119)	(285,352)

(2) Changes in the carrying value of defined benefit obligation for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		For the year ended December 31, 2023	For the year ended December 31, 2022
Beginning balance		1,188,957	1,414,378
Current service cost		106,850	139,356
Interest cost		62,934	42,216
Remeasurements	Financial assumptions	61,885	(318,068)
	Experience adjustments	7,204	(9,685)
Foreign currencies translation adjustments		80	(69)
Retirement benefit paid		(76,465)	(80,245)
Effect of moving in and out of associates		6,895	974
Others		347	100
Ending balance		1,358,687	1,188,957

(3) Changes in the plan assets for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Beginning balance	1,474,309	1,424,725
Employer's contributions	120,000	100,000
Interest income	81,090	44,631
Remeasurements	(20,534)	(15,844)
Retirement benefit paid	(80,887)	(76,598)
Effect of moving in and out of associates	5,950	(296)
Other	(2,122)	(2,309)
Ending balance	1,577,806	1,474,309

(4) Plan assets wholly consist of time deposits as of December 31, 2023 and 2022. Among plan assets, realized returns on plan assets amount to 60,556 million Won and 28,787 million Won for the years ended December 31, 2023 and 2022, respectively.

Meanwhile, the contribution expected to be paid in the current accounting year amounts to 112,082 million Won.

(5) The amounts recognized in net income and total comprehensive income in relation to defined benefit plans for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Current service cost	106,850	139,356
Net interest income	(18,156)	(2,415)
Cost recognized in net income	88,694	136,941
Remeasurements	89,623	(311,909)
Cost recognized in total comprehensive income	178,317	(174,968)

Meanwhile, retirement benefits related to defined contribution plans recognized as expenses are 2,151 million Won and 2,112 million Won for the years ended December 31, 2023 and 2022, respectively.

(6) Key actuarial assumptions used in defined benefit liability measurement as of December 31, 2023 and 2022 are as follows:

	December 31, 2023	December 31, 2022
Discount rate	4.57%	5.35%
Future wage growth rate	5.18%	5.45%
Mortality rate	Issued by Korea Insurance Development Institute	Issued by Korea Insurance Development Institute
Retirement rate	Experience rate for each employment classification	Experience rate for each employment classification

The weighted average maturity of defined benefit liability is 10.07 years.

(7) The sensitivity to actuarial assumptions used in the assessment of defined benefit obligation as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		December 31, 2023(*)	December 31, 2022(*)
Discount rate	Increase by 1% point	(121,166)	(105,500)
	Decrease by 1% point	140,124	121,886
Future wage growth rate	Increase by 1% point	141,933	125,653
	Decrease by 1% point	(124,745)	(112,637)

(*) Although the above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant; in practice, more than one assumption are correlated. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized in the statement of financial position.

(8) The details of the maturity of the defined benefit obligation as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Less than 1 year	29,180	27,334
After 1 year but less than 2 years	34,093	29,474
After 2 years but less than 5 years	344,670	264,718
After 5 years but less than 10 years	474,739	504,582
After 10 years	1,335,246	1,303,544

25. OTHER FINANCIAL LIABILITIES AND OTHER LIABILITIES

Other financial liabilities and other liabilities are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Other financial liabilities:		
Accounts payable	9,087,137	5,343,227
Accrued expenses	4,033,440	2,960,084
Borrowings from trust accounts	5,207,791	3,475,118
Agency business revenue	271,944	213,844
Foreign exchange payables	887,817	822,446
Domestic exchange payables	1,367,709	4,615,475
Lease liabilities	299,621	271,868
Other miscellaneous financial liabilities	2,077,324	2,658,688
Present value discount	(2,631)	(1,731)
Sub-total	23,230,152	20,359,019
Other liabilities:		
Unearned income	103,118	89,449
Other miscellaneous liabilities	192,542	146,809
Sub-total	295,660	236,258
Total	23,525,812	20,595,277

26. DERIVATIVES

(1) Derivative assets and derivative liabilities as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023				
		Assets		Liabilities	
	Nominal amount	For fair value hedge	For trading	For fair value hedge	For trading
Interest rate:					
Futures	118,455	-	-	-	-
Forwards	3,960,000	-	83,199	-	169,527
Swaps	138,794,758	698	367,429	135,263	221,293
Purchase options	150,000	-	6,556	-	-
Written options	400,000	-	-	-	15,359
Currency:					
Forwards	97,701,656	-	1,935,734	-	886,638
Swaps	78,414,876	-	2,669,550	-	3,676,045
Purchase options	139,309	-	1,500	-	-
Written options	122,698	-	-	-	585
Equity:					
Forwards	137	-	36	-	-
Futures	480,311	-	-	-	-
Swaps	461,112	-	126,028	-	1,994
Purchase options	16,444,709	-	608,295	-	-
Written options	16,887,247	-	-	-	1,012,341
Total	354,075,268	698	5,798,327	135,263	5,983,782

	December 31, 2022				
		Assets		Liabilities	
	Nominal amount	For fair value hedge	For trading	For fair value hedge	For trading
Interest rate:					
Forwards	9,311	-	-	-	-
Futures	2,620,000	-	249,356	-	-
Swaps	136,690,518	-	440,540	193,831	487,258
Purchase options	170,000	-	9,308	-	-
Written options	310,000	-	-	-	16,752
Currency:					
Forwards	90,119,960	-	3,081,638	-	1,363,423
Swaps	96,627,189	-	3,105,901	-	5,532,774
Purchase options	487,852	-	23,182	-	-
Written options	570,982	-	-	-	7,929
Equity:					
Forwards	183	-	100	-	-
Futures	958,589	-	-	-	-
Swaps	568,835	-	90,237	-	673
Purchase options	29,801,478	-	1,204,475	-	-
Written options	29,874,836	-	-	-	1,544,107
Total	388,809,733	-	8,204,737	193,831	8,952,916

Derivatives held for trading are classified into financial assets at FVTPL (Note 7) and financial liabilities at FVTPL (Note 20), and derivatives held for hedging are presented as derivative assets and derivative liabilities in the consolidated statements of financial position.

(2) Overview of the Group's hedge accounting

1) Fair value hedge

As of December 31, 2023, the Group has applied fair value hedge on fixed interest rate foreign currency denominated debentures amounting to 3,682,140 million Won, and Korean Won denominated loans amounting to 261,084 million Won. The purpose of the hedging is to avoid fair value volatility risk of fixed interest rate foreign currency and Korean Won denominated debentures derived from fluctuations of market interest rate, and as such the Group entered into interest rate swap agreements designated as hedging instruments.

According to the interest rate swap contract, an amount computed by multiplying the difference between the fixed and variable interest rate to the predetermined nominal amount will be exchanged. As a result, the fixed interest rate condition in the foreign currency and Korean Won denominated debentures will practically be converted into variable interest rate, thereby eliminating the risk of fair value fluctuation. Pursuant to the interest rate swap agreement, hedge ratio is determined by matching the nominal value to the face value of the hedging instrument.

In this hedging relationship, only the market interest rate fluctuation, which is the most significant part of the fair value change of the hedged item, is designated as the hedged risk, and other risk factors including credit risk are not included in the hedged risk. Therefore, the ineffective portion of the hedge could arise from fluctuations in the timing of the cash flow of the hedged item, price margin set by counterparty of hedging instrument, and unilateral change in credit risk of any party of hedging instrument.

The interest rate swap agreements and the hedged items are subject to fluctuations in the underlying market rate of interest and the Group expects the value of the interest rate swap contract and the value of the hedged item to generally change in the opposite direction.

The fair value of the interest rate swap at the end of the reporting period is determined by discounting future cash flows estimated using the yield curve at the end of the reporting period and the credit risk embedded in the contract and the average interest rate is determined based on the outstanding balance at the end of the reporting period. The variable interest rate applied to the interest rate swap is Compounding SOFR or CD 3M plus spread. In accordance with the terms of each interest rate swap contract designated as a hedging instrument, the Group receives interest at a fixed interest rate and pays interest at a variable interest rate.

2) Hedges of net investment

The foreign currency exposure comes from the Group's net investment in Woori America Bank, Woori Bank(Cambodia) PLC. and Woori Global Markets Asia Limited, which use USD as functional currency. The risk arises from fluctuation in the spot exchange rate between USD and KRW. This may change the net investment amount.

The risk avoided in Hedges of net investment in foreign operations is the weakness of KRW against USD, which could reduce Group's carrying amount of net investment in Woori America Bank, Woori Ban(Cambodia) PLC. and Woori Global Markets Asia Limited.

Part of the Group's net investments in Woori America bank, Woori Bank(Cambodia) PLC. and Woori Global Markets Asia Limited are hedged with foreign currency bonds denominated in USD (Carrying amount as of December 31, 2023 : USD 863,959,317) and mitigate the exchange risk arising from the subsidiary's net assets. The loan has been designated as a hedging instrument for the value change of net investments, which arises from fluctuation in the spot exchange rate between USD and KRW.

To evaluate the effectiveness of the hedge, the Group determines the economic relationship between the hedging instrument and hedged item by comparing(offsetting) changes in the amount of foreign investments due to spot exchange rate fluctuation and in the carrying amount of the liabilities due to spot exchange rate fluctuation. The Group's policy is to hedge the net investment amount only within the principal range of the liabilities.

(3) The nominal amounts of the hedging instrument as of December 31, 2023 and 2022 are as follows (Unit: USD, AUD, and Korean Won in millions):

	December 31, 2023			
	1 year or less	1 year to 5 years	More than 5 years	Total
Fair value hedge				
Interest rate risk				
Interest rate swap (USD)	1,000,000,000	1,975,000,000	-	2,975,000,000
Interest rate swap (KRW)	240,000	-	20,000	260,000
Hedges of net investment in foreign operations				
Foreign exchange risk				
Foreign currency denominated debentures (USD)	400,000,000	463,959,317	-	863,959,317

	December 31, 2022			
	1 year or less	1 year to 5 years	More than 5 years	Total
Fair value hedge				
Interest rate risk				
Interest rate swap (USD)	-	2,075,000,000	300,000,000	2,375,000,000
Interest rate swap (AUD)	150,000,000	-	-	150,000,000
Interest rate swap (KRW)	150,000	-	-	150,000
Hedges of net investment in foreign operations				
Foreign exchange risk				
Foreign currency denominated debentures (USD)	272,390,437	592,000,000	-	864,390,437

(4) The average interest rate and average exchange rate of the hedging instrument as of December 31, 2023 and 2022 are as follows:

	December 31, 2023
	Average interest rate and average currency rate
Fair value hedge	
Interest rate risk	
Interest rate swaps (USD)	Fixed 3.60% receipt and C.SOFR+1.47% floating paid
Interest rate swaps (KRW)	Fixed 4.13% receipt and CD 3M floating paid
Hedges of net investment in foreign operations	
Foreign exchange risk	
Foreign currency denominated debentures(USD/KRW)	1,306.12

	December 31, 2022
	Average interest rate and average currency rate
Fair value hedge	
Interest rate risk	
Interest rate swaps (USD)	Fixed 3.62% receipt and Libor 3M+1.45% floating paid
Interest rate swaps (USD)	Fixed 2.05% receipt and C.SOFR+0.65% floating paid
Interest rate swaps (AUD)	Fixed 0.84% receipt and BBSW 3M+0.72% floating paid
Interest rate swaps (KRW)	Fixed 3.13% receipt and CD 3M floating paid
Hedges of net investment in foreign operations	
Foreign exchange risk	
Foreign currency denominated debentures(USD/KRW)	1,334.37

(5) Fair value hedge

1) The amounts related to items designated as fair value hedging instruments as of December 31, 2023 and 2022 are as follows (Unit: USD, AUD and Korean Won in millions):

	December 31, 2023				
		Carrying amounts of the hedging instrument			
	Nominal amounts of the hedging instrument	Assets	Liabilities	Line item in the statement of financial position where the hedging instrument is located	Changing in fair value used for calculating hedge ineffectiveness
Fair value hedge					
Interest rate risk					
Interest rate swaps	USD 2,975,000,000 260,000	698	135,263	Derivative assets (designated for hedging) Derivative liabilities (designated for hedging)	55,651

	December 31, 2022				
		Carrying amounts of the hedging instrument			
	Nominal amounts of the hedging instrument	Assets	Liabilities	Line item in the statement of financial position where the hedging instrument is located	Changing in fair value used for calculating hedge ineffectiveness
Fair value hedge					
Interest rate risk					
Interest rate swaps	USD 2,375,000,000 AUD 150,000,000 150,000	-	193,841	Derivative assets (designated for hedging) Derivative liabilities (designated for hedging)	(247,765)

2) Details of carrying amount to fair value hedge and amount due to hedge accounting as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023					
	Carrying amounts of the hedging item		Accumulated amount of fair value hedge adjustments on the hedged item included in the carrying amount of the hedged item		Line item in the statement of financial position in which the hedged item is included	Changing in fair value used for calculating hedge ineffectiveness
	Assets	Liabilities	Assets	Liabilities		
Fair value hedge						
Interest rate risk						
Foreign currency denominated debentures	-	3,682,140	-	141,818	Debentures	(57,222)
Korean Won denominated debentures	-	261,084	-	1,084	Debentures	(1,084)

	December 31, 2022					
	Carrying amounts of the hedging item		Accumulated amount of fair value hedge adjustments on the hedged item included in the carrying amount of the hedged item		Line item in the statement of financial position in which the hedged item is included	Changing in fair value used for calculating hedge ineffectiveness
	Assets	Liabilities	Assets	Liabilities		
Fair value hedge						
Interest rate risk						
Foreign currency denominated debentures	-	2,928,127	-	(199,804)	Debentures	256,767
Korean Won denominated debentures	-	148,856	-	-	Debentures	1,144

3) Amounts recognized in profit or loss due to the ineffective portion of fair value hedges are as follows (Unit: Korean Won in millions):

		For the year ended December 31, 2023	
		Hedge ineffectiveness recognized in profit or loss	Line item in the profit or loss that includes hedge ineffectiveness
Fair value hedge	Interest rate risk	(2,655)	Other net operating income(expense)

		For the year ended December 31, 2022	
		Hedge ineffectiveness recognized in profit or loss	Line item in the profit or loss that includes hedge ineffectiveness
Fair value hedge	Interest rate risk	10,146	Other net operating income(expense)

(6) Hedges of net investments in foreign operations

1) The amounts related to items designated as hedges of net investments in foreign operations instruments as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions, USD):

	December 31, 2023				
	Nominal amounts of the hedging instrument	Carrying amounts of the hedging instrument		Line item in the statement of financial position where the hedging instrument is located	Changing in fair value used for calculating hedge ineffectiveness
		Assets	Liabilities		
Hedges of net investment in foreign operations					
Foreign exchange risk					
Foreign currency debentures	USD 863,959,317	-	1,113,989	Foreign currency debentures	(19,088)

	December 31, 2022				
		Carrying amounts of the hedging instrument			
	Nominal amounts of the hedging instrument	Assets	Liabilities	Line item in the statement of financial position where the hedging instrument is located	Changing in fair value used for calculating hedge ineffectiveness
Hedges of net investment in foreign operations					
Foreign exchange risk					
Foreign currency debentures	USD 864,390,437	-	1,095,442	Foreign currency debentures	(28,553)

2) The amounts related to items designated as hedges of net investment in foreign operations hedged items as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions, USD):

	December 31, 2023	
	Changing in fair value used for calculating hedge ineffectiveness	Balance of foreign currency translation reserve in hedge accounting
Hedges of net investment in foreign operations		
Foreign exchange risk		
Foreign operations net assets	19,088	(34,750)

	December 31, 2022	
	Changing in fair value used for calculating hedge ineffectiveness	Balance of foreign currency translation reserve in hedge accounting
Hedges of net investment in foreign operations		
Foreign exchange risk		
Foreign operations net assets	28,553	(20,701)

3) The amounts recognized in profit or loss, and other comprehensive income related to hedges of net investment in foreign operations for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023				
	Other comprehensive income			Profit or loss	
	Hedge gain or loss recognized in other comprehensive income	Income tax effect	Sub-total	Hedge ineffectiveness recognized in profit or loss	Line item recognizing ineffectiveness
Hedges of net investment in foreign operations					
Foreign exchange risk	(19,088)	5,039	(14,049)	-	-

	December 31, 2022				
	Other comprehensive income			Profit or loss	
	Hedge gain or loss recognized in other comprehensive income	Income tax effect	Sub-total	Hedge ineffectiveness recognized in profit or loss	Line item recognizing ineffectiveness
Hedges of net investment in foreign operations					
Foreign exchange risk	(28,553)	7,852	(20,701)	-	-

No amount was reclassified from reserve of hedges of net investment in foreign operations to profit or loss for the years ended December 31, 2023 and 2022.

27. DEFERRED DAY 1 PROFITS OR LOSSES

Changes in deferred day 1 profits or losses for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Beginning balance	17,964	29,111
New transactions	-	21,656
Amounts recognized in profits or losses	(10,116)	(32,803)
Ending balance	7,848	17,964

In case some variables to measure fair values of financial instruments are not observable in the market, valuation techniques are utilized to evaluate such financial instruments. Those financial instruments are recorded at the transaction price, even though there are differences noted between the transaction price and the fair value price produced by the valuation techniques at the time of acquisition. In addition, the difference between fair value and transaction price is deferred and amortized to maturity and reflected in profit or loss. The table above presents the difference yet to be realized as profit or losses.

28. SHARE CAPITAL AND CAPITAL SURPLUS

(1) The number of authorized shares and others as of December 31, 2023 and 2022 are as follows:

	December 31, 2023	December 31, 2022
Shares of common stock authorized	5,000,000,000 Shares	5,000,000,000 Shares
Par value per share	5,000 Won	5,000 Won
Shares of common stock issued	716,000,000 Shares	716,000,000 Shares
Share capital	3,581,392 million Won	3,581,392 million Won

(2) Details of capital surplus as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Capital in excess of par value	1,068,420	1,068,420
Other capital surplus	27,774	27,774
Total	1,096,194	1,096,194

29. HYBRID SECURITIES

The bond-type hybrid securities classified as owner's equity as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	Issue date	Maturity date	Interest rate (%)	December 31, 2023	December 31, 2022
Hybrid securities in local currency	April 25, 2013	April 25, 2043	4.4	-	500,000
	November 13, 2013	November 13, 2043	5.7	-	200,000
	June 3, 2015	June 3, 2045	4.4	240,000	240,000
	July 26, 2018	-	4.4	-	400,000
	September 21, 2022	-	5.2	320,000	320,000
	September 21, 2022	-	5.5	30,000	30,000
	October 16, 2023		5.4	300,000	-
Hybrid securities in foreign currencies	October 4, 2019	-	4.3	662,035	662,035
	Issuance cost			(5,588)	(7,219)
	Total			1,546,447	2,344,816

The hybrid securities mentioned above are either without a maturity date or its maturity can be extended indefinitely at the maturity date without changing terms, and early redemption may be made after 5, 7 or 10 years from the issuance date (Issuer Call). In addition, interest payments can be deferred at the Group's discretion.

30. OTHER EQUITY

(1) Details of other equity as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Accumulated other comprehensive income:		
Net gain (loss) on valuation of financial assets at FVTOCI	53,020	(674,205)
Gain (loss) on evaluation of investment stocks by equity method	6,697	655
Gain (loss) on foreign currency translation of foreign operations	34,352	(9,696)
Gain (loss) on evaluation of hedge of net investment in foreign operations	(34,750)	(20,701)
Remeasurement gain (loss) related to defined benefit plan	(17,068)	48,724
Sub-total	42,251	(655,223)
Other capital adjustments	(1,610,301)	(1,669,098)
Total	(1,568,050)	(2,324,321)

(2) Changes in the accumulated other comprehensive income for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023				
	Beginning balance	Increase (decrease) (*)	Reclassification adjustments	Income tax effect (*)	Ending balance
Net gain (loss) on valuation of financial assets at FVTOCI	(674,205)	785,432	200,976	(259,183)	53,020
Gain (loss) on evaluation of investment stocks by equity method	655	2,698	-	3,344	6,697
Gain (loss) on foreign currency translation of foreign operations	(9,696)	45,235	-	(1,187)	34,352
Gain (loss) on evaluation of hedge of net investment in foreign operations	(20,701)	(19,088)	-	5,039	(34,750)
Remeasurement gain (loss) related to defined benefit plan	48,724	(89,623)	-	23,831	(17,068)
Total	(655,223)	724,654	200,976	(228,156)	42,251

(*) Net gain (loss) on valuation of financial assets at FVTOCI includes 87 million Won which was transferred to retained earnings due to disposal of equity securities.

	For the year ended December 31, 2022				
	Beginning balance	Increase (decrease) (*)	Reclassification adjustments	Income tax effect (*)	Ending balance
Net gain (loss) on valuation of financial assets at FVTOCI	(185,997)	(682,400)	29,567	164,625	(674,205)
Gain (loss) on evaluation of investment stocks by equity method	(231)	6,888	-	(6,002)	655
Gain (loss) on foreign currency translation of foreign operations	(61,077)	51,222	-	159	(9,696)
Gain (loss) on evaluation of hedges of net investment in foreign operations	-	(28,553)	-	7,852	(20,701)
Remeasurement gain (loss) related to defined benefit plan	(178,099)	311,909	-	(85,086)	48,724
Equity related to non-current asset held for sale	279	(385)	-	106	-
Total	(425,125)	(341,319)	29,567	81,654	(655,223)

(*) Net gain (loss) on valuation of financial assets at FVTOCI includes 10,472 million Won which was transferred to retained earnings due to disposal of equity securities.

31. RETAINED EARNINGS

(1) Details of retained earnings as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

		December 31, 2023	December 31, 2022
Legal reserve	Legal Reserves in Korea	2,821,754	2,566,754
	Other legal reserve	33,239	33,239
	Sub-total	2,854,993	2,599,993
Voluntary reserve	Business rationalization reserve	8,000	8,000
	Reserve for financial structure improvement	235,400	235,400
	Additional reserve	8,576,104	8,576,104
	Regulatory reserve for credit loss	2,307,974	2,443,576
	Revaluation reserve	700,915	709,137
	Sub-total	11,828,393	11,972,217
Retained earnings before appropriation		7,241,706	6,375,958
Total		21,925,092	20,948,168

1) Legal reserve

In accordance with the Article 40, Banking Act of Korea, earned surplus reserve is appropriated at least one tenth of the earnings after tax on every dividend declaration, not exceeding the paid in capital. This reserve may not be used other than for offsetting a deficit or transferring to capital.

2) Other legal reserve

Other legal reserves were appropriated in the branches located in Japan, India and Bangladesh according to the banking laws of Japan, India and Bangladesh, and may be used to offset any deficit incurred in those branches.

3) Business rationalization reserve

Pursuant to the Restriction of Special Taxation Act, the Group was previously required to appropriate, as a reserve for business rationalization, amounts equal to tax reductions arising from tax exemptions and tax credits up to December 31, 2001. The requirement was no longer effective from 2002.

4) Reserve for financial structure improvement

From 2002 to 2014, the Finance Supervisory Services recommended banks in Korea to appropriate at least 10 percent of net income after accumulated deficit for financial structure improvement, until tangible common equity ratio equals 5.5 percent. This reserve is not available for payment of cash dividends; however, it can be used to reduce a deficit or be transferred to capital. The reserve and appropriation are an autonomous judgment matter of the Group since 2015.

5) Additional reserve

Additional reserve is a voluntary reserve to retain earnings for capital adequacy and soundness of the Group's operation.

6) Regulatory reserve for credit loss

In accordance with paragraph 1 and 2 of Article 29 of the Regulation on Supervision of Banking Business (“RSBB”), if provisions for credit loss under K-IFRS for the accounting purpose are lower than provisions for credit loss under RSBB, the Group is prohibited to provide dividends with the regulatory reserve.

7) Revaluation reserve

Revaluation reserve is the amount of limited dividends set by the Board of Directors to be recognized as complementary capital when the gain or loss occurred in the property revaluation by adopting K-IFRS.

32. REGULATORY RESERVE FOR CREDIT LOSS

In accordance with Paragraph 1 and 2 of Article 29 of the Regulation on Supervision of Banking Business, the Group calculates and discloses the regulatory reserve for credit loss.

(1) Balance of the regulatory reserve for credit loss as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Regulatory reserve for credit loss	2,307,974	2,443,576
Planned provision of regulatory reserve (reversal) for credit loss	(402,620)	(135,602)
Ending balance	1,905,354	2,307,974

(2) Planned reserves provided, adjusted net income after the planned reserves provided and adjusted EPS after the planned reserves provided for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions, except for EPS amount):

	For the years ended December 31	
	2023	2022
Net income	2,515,080	2,903,409
Provision of regulatory reserve for credit loss	(402,620)	(135,602)
Adjusted net income after the provision of regulatory reserve	2,917,700	3,039,011
Adjusted EPS after the provision of regulatory reserve (Unit: Korean Won)(*)	3,941	4,085

(*) For the years ended December 31, 2023 and 2022, it was calculated by deducting 95,637 million Won and 113,995 million Won, respectively, of dividends on hybrid securities from adjusted net income after the provision of regulatory reserve.

33. DIVIDENDS

Dividends for the years ended December 31, 2023 and 2022 are 1,581 Won and 1,917 Won per share, respectively, and the total amount of dividends approved are 1,131,996 million Won and 1,372,572 million Won, respectively. Dividends as of December 31, 2023 will be proposed at the regular shareholders' meeting scheduled on March 21, 2024.

34. NET INTEREST INCOME

(1) Interest income recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Financial assets at FVTPL	116,203	63,515
Financial assets at FVTOCI	999,407	632,615
Securities at amortized cost	782,513	515,246
Loans and other financial assets at amortized cost:		
Interest on due from banks	488,039	219,063
Interest on loans	15,964,114	11,291,027
Interest on other receivables	35,591	20,938
Sub-total	16,487,744	11,531,028
Total	18,385,867	12,742,404

(2) Interest expense recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Interest on deposits due to customers	8,593,095	4,036,407
Interest on borrowings	1,112,286	469,310
Interest on debentures	907,765	632,488
Interest on lease liabilities	8,807	6,178
Other interest expense	327,658	180,297
Total	10,949,611	5,324,680

35. NET FEES AND COMMISSIONS INCOME

(1) Details of fees and commissions income recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Fees and commission received for brokerage	239,254	289,265
Fees and commission received related to credit	159,597	154,868
Fees and commission received for electronic finance	127,153	131,795
Fees and commission received on foreign exchange handling	55,993	56,812
Fees and commission received on foreign exchange	99,071	96,663
Fees and commission received for guarantee	88,580	85,340
Fees and commission received on credit card	2,313	2,071
Fees and commission received on securities business	37,689	40,811
Fees and commission from trust management	155,140	144,756
Other fees	138,508	149,593
Total	1,103,298	1,151,974

(2) Details of fees and commissions expense incurred for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Fees and commissions paid	218,798	220,674
Credit card commission	949	734
Brokerage commission	23	26
Others	3,351	3,426
Total	223,121	224,860

36. DIVIDEND INCOME

(1) Details of dividend income recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Dividend income related to financial assets at FVTPL		
Dividends on stock	33,395	14,895
Dividends on equity capital	67,082	19,221
Dividends on mutual funds	138,855	96,180
Sub-total	239,332	130,296
Dividend income related to financial assets at FVTOCI		
Dividends on stock	15,618	20,669
Dividends on equity capital	134	148
Sub-total	15,752	20,817
Total	255,084	151,113

(2) Details of dividends related to financial assets at FVTOCI for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Dividend income recognized from assets held		
Equity securities	15,752	20,817

37. NET GAIN OR LOSS ON FINANCIAL INSTRUMENTS AT FVTPL

(1) Details of net gain or loss on financial instruments at FVTPL for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Net gain or loss on financial instruments at FVTPL	482,005	214,666

(2) Details of net gain or loss on financial instruments at FVTPL for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

			For the years ended December 31	
			2023	2022
Financial instruments at FVTPL	Securities	Gain on transactions and valuation	821,976	243,715
		Loss on transactions and valuation	(141,270)	(476,751)
		Sub-total	680,706	(233,036)
	Loans	Gain on transactions and valuation	1,282	11,346
		Sub-total	1,282	11,346
	Other financial instruments	Gain on transactions and valuation	3,512	7,666
		Loss on transactions and valuation	(3,240)	(7,396)
		Sub-total	272	270
	Sub-total		682,260	(221,420)
Derivatives (for trading)	Interest rate derivatives	Gain on transactions and valuation	4,716,309	5,191,619
		Loss on transactions and valuation	(4,961,720)	(3,612,074)
		Sub-total	(245,411)	1,579,545
	Currency derivatives	Gain on transactions and valuation	7,675,013	14,593,539
		Loss on transactions and valuation	(7,525,701)	(15,723,544)
		Sub-total	149,312	(1,130,005)
	Equity derivatives	Gain on transactions and valuation	3,169,071	2,836,844
		Loss on transactions and valuation	(3,273,202)	(2,850,334)
		Sub-total	(104,131)	(13,490)
	Other derivatives	Gain on transactions and valuation	14	49
		Loss on transactions and valuation	(39)	(13)
		Sub-total	(25)	36
	Sub-total		(200,255)	436,086
	Total		482,005	214,666

38. NET GAIN OR LOSS ON FINANCIAL ASSETS AT FVTOCI

Details of net gain or loss on financial assets at FVTOCI recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Gain(loss) on redemption of securities	104	(7)
Gain(loss) on disposal of securities	(37,745)	(21,491)
Total	(37,641)	(21,498)

39. REVERSAL OF (PROVISION FOR) EXPECTED CREDIT LOSS ALLOWANCE

Reversal of (provision for) expected credit loss allowance for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Reversal of (provision for) expected credit loss allowance on financial assets measured at FVTOCI	(16,542)	827
Reversal of (provision for) expected credit loss allowance on securities at amortized cost	(5,549)	(3,151)
Reversal of (provision for) expected credit loss allowance on loans and other financial assets at amortized cost	(940,477)	(446,302)
Reversal of (provision for) provision on guarantee	(3,556)	(7,611)
Reversal of (provision for) unused loan commitments	(27,395)	(2,575)
Total	(993,519)	(458,812)

40. GENERAL ADMINISTRATIVE EXPENSES AND OTHER NET OPERATING INCOME (EXPENSES)

(1) Details of general and administrative expenses recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

			For the years ended December 31	
			2023	2022
Employee benefits	Short-term employee benefits	Salaries	1,453,641	1,604,396
		Employee fringe benefits	503,927	499,501
	Share-based payments		10,584	7,475
	Retirement benefit service costs		90,845	139,053
	Termination benefits		140,419	154,697
		Sub-total	2,199,416	2,405,122
Depreciation and amortization			396,122	435,189
Other general and administrative expenses	Rent		97,117	55,218
	Taxes and public dues		157,550	126,477
	Service charges		230,279	219,178
	Computer and IT related		322,331	282,564
	Telephone and communication		53,986	51,524
	Operating promotion		40,758	40,424
	Advertising		153,648	148,859
	Printing		5,664	6,414
	Traveling		10,546	7,763
	Supplies		7,416	6,388
	Insurance premium		11,669	19,021
	Compensation of actual expense		12,807	7,714
	Maintenance		19,315	19,013
	Water, light and heating		18,301	15,528
	Vehicle maintenance		11,919	12,280
	Others(*)		50,438	55,996
		Sub-total	1,203,744	1,074,361
	Total		3,799,282	3,914,672

(*) It includes 40,047 million Won and 40,200 million Won in in-house welfare fund contributions for the year ended December 31, 2023 and 2022, respectively.

(2) Details of other operating income recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Gain on transactions of foreign exchange	1,353,794	1,377,629
Gain on derivatives (designated for hedging)	69,479	1,288
Gains on fair value hedged items	8,986	257,910
Others	28,087	35,411
Total	1,460,346	1,672,238

(3) Details of other operating expenses recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Losses on transactions of foreign exchange	1,206,638	1,072,933
KDIC deposit insurance premium	450,183	411,833
Contribution to miscellaneous funds	450,145	402,057
Loss on derivatives (designated for hedging)	8,819	250,267
Loss on fair value hedged items	72,601	-
Others (*)	279,871	102,599
Total	2,468,257	2,239,689

(*) 'Others' for the years ended December 31, 2023 and 2022 includes 22,349 million Won and 14,664 million Won, respectively, of amortization expenses for intangible assets.

(4) Share-based Payment

Details of share-based payment of the Group as of December 31, 2023 and 2022 are as follows.

i) Performance condition share-based payment

Subject to		Shares granted for the year 2019(*4)
Type of payment		Cash-settled
Vesting period		January 1, 2019 ~ December 31, 2022
Date of payment		January 1, 2023
Fair value (Unit: Korean Won) (*1)		-
Valuation method		-
Dividend yield		-
Expected maturity		-
Number of shares measured as of the closing date (*2),(*3), (*4)	As of December 31, 2023	-
	As of December 31, 2022	524,746 shares

Subject to		Shares granted for the year 2020
Type of payment		Cash-settled
Vesting period		January 1, 2020 ~ December 31, 2023
Date of payment		January 1, 2024
Fair value (Unit: Korean Won) (*1)		12,885
Valuation method		Black-Scholes Model
Dividend yield		6.25%
Expected maturity		0 year
Number of shares measured as of the closing date (*2),(*3)	As of December 31, 2023	755,073 shares
	As of December 31, 2022	755,073 shares

Subject to		Shares granted for the year 2021
Type of payment		Cash-settled
Vesting period		January 1, 2021 ~ December 31, 2024
Date of payment		January 1, 2025
Fair value (Unit: Korean Won) (*1)		12,105
Valuation method		Black-Scholes Model
Dividend yield		6.25%
Expected maturity		1 year
Number of shares measured as of the closing date (*2),(*3)	As of December 31, 2023	865,717 shares
	As of December 31, 2022	865,717 shares

Subject to		Shares granted for the year 2022
Type of payment		Cash-settled
Vesting period		January 1, 2022 ~ December 31, 2025
Date of payment		January 1, 2026
Fair value (Unit: Korean Won) (*1)		11,371
Valuation method		Black-Scholes Model
Dividend yield		6.25%
Expected maturity		2 years
Number of shares measured as of the closing date (*2),(*3)	As of December 31, 2023	744,943 shares
	As of December 31, 2022	744,943 shares

Subject to		Shares granted for the year 2023
Type of payment		Cash-settled
Vesting period		January 1, 2023 ~ December 31, 2026
Date of payment		January 1, 2027
Fair value (Unit: Korean Won) (*1)		10,683
Valuation method		Black-Scholes Model
Dividend yield		6.25%
Expected maturity		3 years
Number of shares measured as of the closing date (*2),(*3)	As of December 31, 2023	763,148 shares
	As of December 31, 2022	-

(*1) As of December 31, 2023, the fair value calculated using the Black-Scholes model was used to measure liabilities by reflecting the average dividend rate for the past four years to the stock price of the weighted average of Woori Financial Group's trading volume for the past week, month and two months.

(*2) The number of payable stocks is granted at the initial contract date and the payment rate is determined based on the achievement of the pre-determined performance targets. Performance is evaluated as long-term performance indication including relative shareholder return, net income, return on equity (ROE), C/I ratio, non-performing loan ratio and job performance.

(*3) As of December 31, 2023, the remaining quantity and granted quantity are the same.

(*4) It has been fully paid during the year ended December 31, 2023.

ii) The Group accounts for performance condition share-based payments according to the cash-settled method and the fair value of the liabilities is reflected in the compensation costs by re-measuring per every closing period. As of December 31, 2023 and 2022, the book value of the liabilities related to the performance condition share-based payments recognized by the Group is 37,142 million Won and 33,068 million Won, respectively.

41. OTHER NON-OPERATING INCOME (EXPENSES)

(1) Details of gains or losses on valuation of investments in joint ventures and associates for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Gains on valuation of investments in associates	101,804	83,440
Losses on valuation of investments in associates	(13,016)	(9,482)
Total	88,788	73,958

(2) Details of other non-operating income and expenses recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Other non-operating income	118,720	163,881
Other non-operating expenses	(195,032)	(158,318)
Total	(76,312)	5,563

(3) Details of other non-operating income recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Rental fee income	37,526	36,098
Gains on disposal of assets held for sale	3,027	28,525
Gain on disposal of investments in joint ventures and associates	32,766	6
Gains on disposal of properties and equipment, intangible assets and other assets	1,853	25,759
Others (*)	43,548	73,493
Total	118,720	163,881

(*) Other special gains related to other provisions for the years ended December 31, 2023 and 2022 include 14,060 million Won and 46,536 million Won, respectively.

(4) Details of other non-operating expenses recognized for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Depreciation on investment properties	6,599	6,483
Interest expenses of rent leasehold deposits	1,657	997
Losses on disposal of investments in joint ventures and associates	441	116
Losses on disposal of properties and equipment, intangible assets and other assets	1,694	2,875
Impairment losses of properties and equipment, intangible assets and other assets	22	144
Donation	55,752	42,435
Others (*)	128,867	105,268
Total	195,032	158,318

(*) Other special losses related to other provisions for the years ended December 31, 2023 and 2022 are 66,910 million Won and 18,458 million Won, respectively, and other special losses related to employee incidents for the year ended December 31, 2022 are 63,354 million Won.

42. INCOME TAX EXPENSE

(1) Details of income tax expenses for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Current tax expense		
Current tax expense in respect of the current year	600,647	1,131,459
Adjustments recognized in the current period in relation to the current tax of prior periods	(19,816)	(13,003)
Current tax charged to equity and others directly	5,039	7,852
Sub-total	585,870	1,126,308
Deferred tax expense		
Changes in deferred tax assets(liabilities) relating to the temporary differences	461,679	(240,812)
Current tax charged to equity and others directly:	(233,195)	73,803
Sub-total	228,484	(167,009)
Income tax expense	814,354	959,299

(2) Income tax expense reconciled to net income before income tax expense for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Net income before income tax expense	3,329,434	3,862,708
Tax calculated at statutory tax rate (*1) (*2)	858,247	1,022,243
Adjustments		
Effect of income that is exempt from taxation	(32,743)	(63,839)
Effect of expense not deductible in determining taxable profit	7,324	22,250
Adjustments recognized in the current period in relation to the current tax of prior periods	(19,816)	(13,003)
Effect of income tax expense that is resulting from consolidated tax return	(49,020)	(35,482)
Others	50,362	27,130
Sub-total	(43,893)	(62,944)
Income tax expense	814,354	959,299
Effective tax rate	24.5%	24.8%

(*1) The applicable income tax rate; 1) For the year ended December 31, 2023; 9.9% for below 200 million Won, 2) 20.9% for above 200 million Won and below 20 billion Won, 3) 23.1% for above 20 billion Won and below 300 billion Won, 4) 26.4% for above 300 billion Won.

(*2) The applicable income tax rate; 1) For the year ended December 31, 2022; 11% for below 200 million Won, 2) 22% for above 200 million Won and below 20 billion Won, 3) 24.2% for above 20 billion Won and below 300 billion Won, 4) 27.5% for above 300 billion Won.

(3) Changes in cumulative temporary differences for the years ended December 31, 2023 and 2022, are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023			
	Beginning balance	Recognized as income (expense)	Recognized as other comprehensive income (expense)	Ending Balance
Gain(loss) on financial assets	501,163	(387,565)	(259,183)	(145,585)
Gain(loss) on valuation using the equity method of accounting	22,447	(35,675)	3,344	(9,884)
Loss on valuation of derivatives	28,338	21,218	-	49,556
Accrued income	(87,672)	(40,836)	-	(128,508)
Provision for loan losses	(45,917)	42,551	-	(3,366)
Loan and receivables written off	4,399	(17)	-	4,382
Loan origination costs and fees	(130,929)	(14,535)	-	(145,464)
Defined benefit liability	323,225	26,447	23,831	373,503
Deposits with employee retirement insurance trust	(410,763)	(34,968)	-	(445,731)
Provision for guarantee	7,596	207	-	7,803
Other provision	65,443	85,518	-	150,961
Others	(250,954)	109,171	(1,186)	(142,969)
Net deferred tax assets (liabilities)	26,376	(228,484)	(233,194)	(435,302)

	For the year ended December 31, 2022			
	Beginning balance	Recognized as income (expense)	Recognized as other comprehensive income (expense)	Ending Balance
Gain(loss) on financial assets	282,317	62,459	156,387	501,163
Gain(loss) on valuation using the equity method of accounting	17,422	(871)	5,896	22,447
Loss on valuation of derivatives	(149,001)	177,339	-	28,338
Accrued income	(79,519)	(8,153)	-	(87,672)
Provision for loan losses	(52,807)	6,890	-	(45,917)
Loan and receivables written off	4,565	(166)	-	4,399
Loan origination costs and fees	(156,730)	25,801	-	(130,929)
Defined benefit liability	397,954	10,357	(85,086)	323,225
Deposits with employee retirement insurance trust	(395,249)	(15,514)	-	(410,763)
Provision for guarantee	5,725	1,871	-	7,596
Other provision	78,322	(12,879)	-	65,443
Others	(167,435)	(80,125)	(3,394)	(250,954)
Net deferred tax assets (liabilities)	(214,436)	167,009	73,803	26,376

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(4) Unrealizable temporary differences are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Deductible temporary differences	294,669	319,962
Taxable temporary differences	(1,217,755)	(981,217)
Total	(923,086)	(661,255)

No deferred income tax asset has been recognized for the deductible temporary difference of 294,669 million Won associated with investments in subsidiaries and associates as of December 31, 2023, because it is not probable that the temporary differences will be reversed in the foreseeable future.

No deferred income tax liability has been recognized for the taxable temporary difference of 1,217,755 million Won associated with investment in subsidiaries and associates as of December 31, 2023, due to the following reasons:

- The Group is able to control the timing of the reversal of the temporary difference.
- It is probable that the temporary difference will not be reversed in the foreseeable future.

(5) Details of accumulated deferred tax charged directly to equity and others as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Net gain (loss) on valuation of financial assets at FVTOCI	(26,538)	232,645
Share of other comprehensive expense of investment stocks by equity method	(2,738)	(6,082)
Gain (loss) on foreign currency translation of foreign operations	3,650	4,837
Gain (loss) on valuation of hedges of net investments in foreign operations	12,891	7,852
Remeasurements of the net defined benefit liability	5,396	(18,435)
Total	(7,339)	220,817

(6) Current tax assets and liabilities are as follows (Unit: Korean Won in millions)

	December 31, 2023	December 31, 2022
Current tax assets	152,898	38,913
Current tax liabilities	58,085	716,936

(7) Impact of Pillar Two income taxes

The amendments provide a temporary relief from the accounting for deferred taxes arising from legislation enacted to implement the Pillar Two model rules, which aim to reform international corporate taxation for multinational enterprises, and require disclosure of related current tax effects, etc. The Group applies the exception to recognizing and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes. Since the Pillar Two legislation is scheduled to be effective from January 1, 2024, the Group has no current tax expense related to Pillar Two. The Group is in review for the impact of these amendments on the financial statements and does not expect that the impact will be significant.

43. EARNINGS PER SHARE (“EPS”)

(1) Basic EPS is calculated by dividing net income by weighted average number of common shares outstanding for the years ended December 31, 2023 and 2022. (Unit: Korean Won in millions, except for EPS and number of shares):

	For the years ended December 31	
	2023	2022
Net income for the period attributable to common shareholders	2,505,587	2,892,165
Dividends to hybrid securities	(95,637)	(113,995)
Net income attributable to common shareholders	2,409,950	2,778,170
Weighted average number of common shares outstanding	716	716
Basic EPS (Unit: Korean Won)	3,366	3,880

(2) The weighted average number of common shares outstanding for the years ended December 31, 2023 and 2022 are as follows:

	For the year ended December 31, 2023			
	Period	Number of shares	Dates	Accumulated number of shares outstanding during period
Common shares issued at the beginning of the period	2023-01-01 ~ 2023-12-31	716,000,000	365	261,340,000,000
	Sub-total (①)			261,340,000,000
Weighted average number of common shares outstanding (②=(①/365)				716,000,000

	For the year ended December 31, 2022			
	Period	Number of shares	Dates	Accumulated number of shares outstanding during period
Common shares issued at the beginning of the period	2022-01-01 ~ 2022-12-31	716,000,000	365	261,340,000,000
	Sub-total (①)			261,340,000,000
Weighted average number of common shares outstanding (②=(①/365)				716,000,000

Diluted EPS is equal to basic EPS because there is no dilution effect for the years ended December 31, 2023 and 2022.

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44. CONTINGENT LIABILITIES AND COMMITMENTS

(1) Details of guarantees as of December 31, 2023 and December 31, 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023(*)	December 31, 2022(*)
Confirmed guarantees		
Guarantee for loans	58,205	39,684
Acceptances	467,964	501,921
Guarantees in acceptances of imported goods	74,916	97,920
Other confirmed guarantees	7,886,356	6,825,448
Sub-total	8,487,441	7,464,973
Unconfirmed guarantees		
Local letter of credit	161,608	150,075
Letter of credit	2,873,350	3,014,228
Other unconfirmed guarantees	1,516,585	1,144,498
Sub-total	4,551,543	4,308,801
Commercial paper purchase commitments and others	589,857	125,546
Total	13,628,841	11,899,320

(*) Includes financial guarantees of 3,497,197 million Won and 3,072,827 million Won as of December 31, 2023 and 2022, respectively.

(2) Details of loan commitments and others are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Loan commitments	84,159,332	76,081,523
Other commitments	5,892,297	6,112,770

(3) Litigation case

Legal cases where the Group is involved as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions except for number of cases):

	December 31, 2023		December 31, 2022	
	As plaintiff	As defendant	As plaintiff	As defendant
Number of cases(*)	34 cases	142 cases	40 cases	164 cases
Amount of litigation	295,733	164,334	287,854	335,196
Provisions for litigations		16,053		16,453

(*) The number of cases as of December 31, 2023 and 2022 does not include cases such as loan-related execution or simple extension of loan prescription, litigation where the substantive party is not the Group, or fraudulent lawsuits.

(4) Others

During the year ended December 31, 2023, there was an investigation by the Korea Fair Trade Commission regarding the loan-to-value ratio, and the Group received the examination report in January 2024 but the estimation of the impact on the Group's financial statements as of December 31, 2023 cannot be reasonably estimated.

45. RELATED PARTY TRANSACTIONS

Related parties of the Group as of December 31, 2023 and its assets and liabilities recognized as of December 31, 2023 and 2022 and major transactions with related parties for the years ended December 31, 2023 and 2022 and compensation to key management are as follows:

(1) Related parties

	Related parties
Parent company	Woori Financial Group Inc.
Associates	W Service Networks Co., Ltd., Korea Credit Bureau Co., Ltd., Korea Finance Security Co., Ltd., Lotte Card Co., Ltd., K BANK Co., Ltd., and others (Dongwoo C & C Co., Ltd. and 36 associates)
Other related parties	Woori Card Co., Ltd. and its subsidiaries, Woori Investment Bank Co., Ltd. and its subsidiaries and associates, Woori FIS Co., Ltd., Woori Private Equity Asset Management Co., Ltd. and its associates, Woori Finance Research Institute Co., Ltd., Woori Credit Information Co., Ltd., Woori Fund Service Co., Ltd., Woori Asset Management Co., Ltd. and its subsidiaries and associates, Woori Global Asset Management Co., Ltd. and its subsidiaries and associates, Woori Asset Trust Co., Ltd., Woori Financial Capital Co., Ltd. and its subsidiaries and associates, Woori Financial F&I Co., Ltd. and its subsidiaries, Woori Savings Bank, Woori G Japan General Type Private Real Estate Feeder Investment Trust No.1-1 and its subsidiaries, Godo Kaisha Oceanos I, WOORI ZIP 1, WOORI ZIP 2, JC Assurance No.2 Private Equity Fund, IGEN 2022 Private Equity Fund No.1 , Woori Venture Partners, Woori G Japan Private Placement Real Estate Master Investment Trust No.2-1

(2) Major assets and liabilities from transactions with related parties are as follows (Unit: Korean Won in millions):

Related parties		A title of account	December 31, 2023	December 31, 2022
Parent company	Woori Financial Group Inc.	Other assets	125,489	15,917
		Deposits due to customers	1,363,507	1,613,361
		Other liabilities	20,635	645,807
Associates	W Service Networks Co., Ltd.	Deposits due to customers	3,245	3,298
		Other liabilities	40	8
	Korea Credit Bureau Co., Ltd.	Deposits due to customers	771	4,450
		Other liabilities	-	40
	Korea Finance Security Co., Ltd.	Loans	3,197	3,397
		Loss allowance	(71)	(45)
		Other liabilities	5	3
		Deposits due to customers	1,323	1,764
	Lotte Card Co., Ltd.	Loans	12,209	50,000
		Loss allowance	(269)	(30)
		Other assets	2	-
		Deposits due to customers	62,587	35,986
		Other liabilities	289	74
	K BANK Co., Ltd.	Other assets	18	-
		Other liabilities	214,135	108,156
	Others (*)	Loans	41	251
		Loss allowance	-	(1)
		Deposits due to customers	3,632	2,807
		Other liabilities	992	1
Other related parties	Woori Card Co., Ltd. and its subsidiaries	Loans	12,138	5,486
		Loss allowance	(61)	(10)
		Derivative assets	95	-

Related parties	A title of account	December 31, 2023	December 31, 2022
	Other assets	4,580	15,891
	Deposits due to customers	42,569	59,237
	Borrowing liabilities	24,002	-
	Derivative liabilities	38,286	42,875
	Other liabilities	25,500	21,653
Woori Investment Bank Co., Ltd. and its subsidiaries and associates	Other assets	-	10,124
	Deposits due to customers	230,276	38,237
	Borrowing liabilities	39	-
	Other liabilities	16,870	26,955
Woori FIS Co., Ltd.	Other assets	514	121
	Deposits due to customers	14,157	21,183
	Other liabilities	27,091	21,287
Woori Private Equity Asset Management Co., Ltd. and its associates	Deposits due to customers	28,824	45,635
	Derivative liabilities	1,249	-
	Other liabilities	248	320
Woori Finance Research Institute Co., Ltd.	Deposits due to customers	1,718	1,338
	Other liabilities	503	479
Woori Credit Information Co., Ltd.	Other assets	-	5
	Deposits due to customers	10,537	8,984
	Other liabilities	10,038	10,066
Woori Fund Service Co., Ltd.	Deposits due to customers	18,019	16,395
	Other liabilities	1,724	1,663
Woori Asset Management Co., Ltd. and its subsidiaries and associates	Deposits due to customers	3,969	12,393
	Other liabilities	-	167
Woori Global Asset Management Co., Ltd. and its subsidiaries and associates	Deposits due to customers	794	1,408
	Other liabilities	33	86
Woori Asset Trust Co., Ltd.	Deposits due to customers	93,742	142,088
	Other liabilities	386	408
Woori Finance Capital and its subsidiaries and associates	Deposits due to customers	41,786	29,392
	Derivative liabilities	455	1,453
	Other liabilities	1,187	166
Woori Financial F&I Inc. and its subsidiaries	Loans	165,800	-
	Loss allowance	(855)	-
	Other assets	71	-
	Deposits due to customers	20,012	12,298
	Other liabilities	39	-
Woori G Japan General Type Private Real Estate Feeder Investment Trust No.1-1 and its subsidiaries	Loans	19,589	20,459
	Loss allowance	(14)	(8)
	Other assets	24	25
	Deposits due to customers	153	157
	Derivative liabilities	186	2,914
Woori Savings Bank	Other assets	11	29
Woori Venture Partners	Deposits due to customers	23,000	-
	Other liabilities	151	-
Godo Kaisha Oceanos No. 1	Loans	38,122	39,814
	Loss allowance	(58)	(32)

Related parties	A title of account	December 31, 2023	December 31, 2022
	Other assets	33	35
WOORI ZIP 1	Loans	11,317	11,819
	Loss allowance	(1)	-
	Other assets	21	22
WOORI ZIP 2	Loans	16,063	16,776
	Loss allowance	(1)	(1)
	Other assets	30	31
JC Assurance Private Equity Partnership No. 2	Deposits due to customers	74	93
IGEN 2022 Private Equity Fund No. 1	Deposits due to customers	506	722
Woori G Japan General Type Private Real Estate Feeder Investment Trust No. 2-1	Derivative liabilities	587	-

(*) Others include Partner One Value Up I Private Equity Fund, Dongwoo C & C Co., Ltd. and others as of December 31, 2023 and 2022.

(3) Major gain or loss from transactions with related parties are as follows (Unit: Korean Won in millions):

Related parties		A title of account	For the years ended December 31	
			2023	2022
Parent company	Woori Financial Group	Fees income	34	12
		Other income	4,315	4,376
		Interest expenses	63,806	25,614
		Fees expenses	1,625	1,596
Associates	W Service Networks Co., Ltd.	Interest expenses	35	14
	Korea Credit Bureau Co., Ltd.	Interest expenses	9	40
	Korea Finance Security Co., Ltd.	Interest income	181	141
		Interest expenses	3	3
		Provision(Reversal) of impairment losses due to credit loss	28	42
	Lotte Card Co., Ltd.	Interest income	10	83
		Fees income	3,903	7,624
		Interest expenses	5,665	1,902
		Provision(Reversal) of impairment losses due to credit loss	455	(27)
	Others (*)	Interest expenses	9,332	10
		Provision(Reversal) of impairment losses due to credit loss	-	1
Other related parties	Woori Card Co., Ltd. and its subsidiaries	Interest income	990	413
		Fees income	96,666	106,763
		Gain on derivatives	6,162	-
		Other income	303	415
		Interest expenses	409	275

Related parties	A title of account	For the years ended December 31 2023	2022
	Fees expenses	512	645
	Loss on derivatives	1,827	27,065
	Provision(Reversal) of impairment losses due to credit loss	76	14
Woori Investment Bank Co., Ltd. and its subsidiaries and associates	Interest income	82	41
	Fees income	2,100	1,590
	Other income	577	15
	Interest expenses	105	63
	Fees expenses	338	477
	Provision(Reversal) of impairment losses due to credit loss	114	11
	Other expenses	55	-
Woori FIS Co., Ltd.	Fees income	600	548
	Other income	10,622	9,907
	Interest expenses	2	1
	Other expenses	271,907	238,922
Woori Private Equity Asset Management Co., Ltd. and its subsidiaries and associates	Fees income	18	11
	Interest expenses	1,094	325
	Loss on derivatives	675	-
Woori Finance Research Institute Co., Ltd.	Fees income	18	18
	Other income	732	752
	Interest expenses	78	38
Woori Credit Information Co., Ltd.	Fees income	83	79
	Other income	751	637
	Interest expenses	449	328
	Fees expenses	16,399	12,735
Woori Fund Service Co., Ltd.	Fees income	288	239
	Other income	284	371
	Interest expenses	551	323
	Fees expenses	328	302
Woori Asset Management Co., Ltd. and its subsidiaries and associates	Fees income	55	52
	Interest expenses	64	177
Woori Global Asset Management Co., Ltd. and its subsidiaries and associates	Fees income	23	20
	Interest expenses	1	-
	Fees expenses	167	797
Woori Asset Trust Co., Ltd.	Fees income	277	188
	Interest expenses	2,966	1,480
	Fees expenses	7,652	4,640
Woori Finance Capital and its subsidiaries and associates	Interest income	18	-
	Fees income	3,401	2,867
	Gain on derivatives	999	-

Related parties	A title of account	For the years ended December 31 2023	2022
	Interest expense	49	34
	Provision(Reversal) of impairment losses due to credit loss	85	(29)
	Loss on derivatives	-	1,112
	Other expenses	787	1,060
Woori Savings Bank	Fees income	989	1,155
Woori Venture Partners	Fees income	78	-
	Interest expenses	598	-
Woori Financial F&I and its subsidiaries	Interest income	533	-
	Fees income	180	-
	Interest expense	15	275
	Provision(Reversal) of impairment losses due to credit loss	892	-
Woori G Japan General Type Private Real Estate Feeder Investment Trust No. 1-1 and its subsidiaries	Interest income	280	286
	Gain on derivatives	-	-
	Provision(Reversal) of impairment losses due to credit loss	6	2
	Loss on derivatives	186	1,394
Godo Kaisha Oceanos No. 1	Interest income	381	398
	Provision(Reversal) of impairment losses due to credit loss	26	(92)
IGEN 2022 Private Equity Partnership No. 1	Interest expense	1	1
WOORI ZIP 1	Interest income	124	130
WOORI ZIP 2	Interest income	177	185
	Provision(Reversal) of impairment losses due to credit loss	1	-
Woori G Japan General Type Private Real Estate Feeder Investment Trust No. 2-1	Loss on derivatives	541	-

(*) Others include Partner One Value Up I Private Equity Fund, Dongwoo C & C Co., Ltd. and others as of December 31, 2023 and 2022.

(4) Major fund transactions with related parties for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

Related parties		For the year ended December 31, 2023				
		Beginning balance	Loan	Collection	Others	Ending balance (*)
Associates	Lotte Card Co., Ltd.	50,000	226,318	264,109	-	12,209
	Korea Finance Security Co., Ltd	3,397	2,497	2,697	-	3,197
	Others	251	41	251	-	41
Other related parties	Woori Investment Bank Co., Ltd. and its subsidiaries and associates	-	1,522	1,522	-	-
	Woori Card Co., Ltd and its subsidiaries	5,486	6,564	-	88	12,138
	Woori Financial F&I and its subsidiaries	-	216,300	50,500	-	165,800
	Woori G Japan General Type Private Real Estate Feeder Investment Trust No.1-1 and its subsidiaries	20,459	-	-	(870)	19,589
	Godo Kaisha Oceanos No. 1	39,814	-	-	(1,692)	38,122
	WOORI ZIP 1	11,819	-	-	(502)	11,317
	WOORI ZIP 2	16,776	-	-	(713)	16,063

(*) Settlement payment from normal operation among the related parties were excluded, and in the case of a limited loan, it was presented as a net increase or decrease.

Related parties		For the year ended December 31, 2022				
		Beginning balance	Loan	Collection	Others	Ending balance (*)
Associates	Lotte Card Co., Ltd.	3,750	50,000	3,750	-	50,000
	Korea Finance Security Co., Ltd	3,397	2,000	2,000	-	3,397
	Others	251	-	-	-	251
Other related parties	Woori Card Co., Ltd and its subsidiaries	4,742	417	-	327	5,486
	Woori G Japan Private Real Estate Investment Trust No. 1	21,939	-	-	(1,480)	20,459
	Godo Kaisha Oceanos No. 1	43,033	41,467	43,033	(1,653)	39,814
	WOORI ZIP 1	12,775	-	-	(956)	11,819
	WOORI ZIP 2	18,132	-	-	(1,356)	16,776

(*) Settlement payment from normal operation among the related parties were excluded, and in the case of a limited loan, it was presented as a net increase or decrease.

(5) Changes in major deposits due to customers with related parties for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

Related parties		For the year ended December 31, 2023			
		Beginning balance	Borrowings	Repayment and others	Ending balance (*)
Parent company	Woori Financial Group	1,595,000	5,379,000	5,620,000	1,354,000
Associates	W Service Networks Co., Ltd.	1,200	1,000	1,200	1,000
	Partner One Value Up No.1 Private Equity Fund	100	-	100	-
	Korea Credit Bureau Co., Ltd.	3,000	-	3,000	-
	Win Mortgage Co., Ltd.	-	1,200	600	600
Other related parties	Woori Credit Information Co., Ltd.	4,699	4,600	3,100	6,199
	Woori Fund Service Co., Ltd	14,500	17,000	14,500	17,000
	Woori Investment Bank Co., Ltd. and its subsidiaries and associates	2,000	-	-	2,000
	Woori Finance Research Institute Co., Ltd.	-	14,100	14,100	-
	Woori Asset Trust. Ltd	96,000	605,286	645,286	56,000
	Woori Private equity	42,000	53,000	73,000	22,000
	Woori Asset Management Co., Ltd. and its subsidiaries and associates	10,000	-	10,000	-
	Woori Venture Partners	-	97,000	74,000	23,000

(*) The details of payments made between related parties and the deposits due to customers that can be taken in and out easily are excluded.

Related parties		For the year ended December 31, 2022			
		Beginning balance	Borrowings	Repayment and others	Ending balance (*)
Parent company	Woori Financial Group	520,000	3,930,000	2,855,000	1,595,000
Associates	W Service Networks Co., Ltd.	1,180	1,200	1,180	1,200
	Partner One Value Up No.1 Private Equity Fund	329	550	779	100
	Korea Credit Bureau Co., Ltd.	-	3,000	-	3,000
Other related parties	Woori Investment Bank Co., Ltd. and its subsidiaries and associates	2,000	-	-	2,000
	Woori Finance Research Institute Co., Ltd.	800	8,900	9,700	-
	Woori Credit Information Co., Ltd.	11,699	2,500	9,500	4,699
	Woori Fund Service Co., Ltd	11,500	14,500	11,500	14,500
	Woori Asset Trust. Ltd	6,000	379,918	289,918	96,000
	Woori Finance F&I	-	270,000	270,000	-
	Woori Private Equity Asset Management Co., Ltd.	-	42,000	-	42,000
	Woori Asset Management Co., Ltd. and its subsidiaries and associates	-	10,000	-	10,000

(*) The details of payments made between related parties and the deposits due to customers that can be taken in and out easily are excluded.

(6) Major borrowing transactions with related parties for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

Related parties		For the year ended December 31, 2023				
		Beginning balance	Borrowing	Repayment	Others	Ending balance
Other related parties	Woori Card Co., Ltd. and its subsidiaries	20,918	312,746	309,662	-	24,002
	Woori Investment Bank Co., Ltd. and its subsidiaries and associates	-	77	38	-	39
	LOTTE CARD Co. Ltd.	-	18,183	18,183	-	-

Related parties		For the year ended December 31, 2022				
		Beginning balance	Borrowing	Repayment	Others	Ending balance
Other related parties	Woori Card Co., Ltd. and its subsidiaries	13,051	196,531	188,664	-	20,918

(7) Guarantees with the related parties are as follows:

1) The amount of Guarantees provided to the related parties as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	Warranty	December 31, 2023	December 31, 2022
LOTTE CARD Co. Ltd.	Confirmed guarantees in foreign currencies	1,483	-

2) The amount of Guarantees and unused loan commitments provided by the related parties to the Group as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	Warranty	December 31, 2023	December 31, 2022
Woori Card Co., Ltd and its subsidiaries	Loan commitment in local currency	124,091	128,964

(8) Amount of commitments with the related parties (Unit: Korean Won in millions):

	Warranty	December 31, 2023	December 31, 2022
Woori Private Equity Asset Management Co., Ltd. and its associates	Derivative	9,471	-
Woori Card Co., Ltd. and its subsidiaries	Derivative	417,880	543,460
	Unsettled commitment	505,559	503,628
Woori Investment Bank Co., Ltd. and its subsidiaries and associates	Unsettled commitment	150,000	150,000
Woori Finance Capital and its subsidiaries and associates	Derivative	40,000	40,000
	Unsettled commitment	200,000	150,000
Woori Financial F&I Inc. and its subsidiaries	Unsettled commitment	67,800	-
Korea Finance Security Co., Ltd	Unsettled commitment	403	403
LOTTE CARD Co. Ltd.	Unsettled commitment	498,400	450,000
IBK KIP Seongjang Dideemdol 1st Private Investment Limited Partnership	Securities purchase commitment	4,664	4,664
Crevisse Raim Impact 1st Startup Venture Specialist Private Equity Fund	Securities purchase commitment	243	325
Together Korea Government Private Securities Investment Trust No.3	Securities purchase commitment	990,000	990,000
Woori-Q Corporate Restructuring Private Equity Fund	Securities purchase commitment	9,011	9,284
STASSETS NO. 3 Private Equity Investment Limited Specialized In Start-up Ventures	Securities purchase commitment	6,000	13,500
NH Woori Newdeal Growth Alpha Private Equity Fund 1 (*)	Securities purchase commitment	26,404	-

	Warranty	December 31, 2023	December 31, 2022
BTS 2nd Private Equity Fund	Securities purchase commitment	4,774	6,974
Woori Financial Digital Investment Association No. 1	Securities purchase commitment	11,000	33,000
Green ESG Growth No.1 Private Equity Fund	Securities purchase commitment	24,264	-
Woori Busan Logistics Infra Private Placement Special Asset Investment Trust	Securities purchase commitment	13,099	19,799
Woori G Equity Bridge Loan Private Placement Investment Trust No. 1	Securities purchase commitment	29,835	39,000
Woori G GP Commitment Loan Private Placement Investment Trust No. 1	Securities purchase commitment	4,448	6,274
Woori G GP Commitment Loan Private Placement Investment Trust No. 2	Securities purchase commitment	5,320	9,560
Woori G GP Commitment Loan Private Placement Investment Trust No. 3	Securities purchase commitment	16,477	-
Woori G Global Mid-market Secondaries Private Placement Investment Trust No. 1	Securities purchase commitment	8,546	12,105
Woori G Senior Loan Private Placement Investment Trust No. 2	Securities purchase commitment	80,750	180,000
Woori G Renewable New Deal Private Placement Investment Trust No.1	Securities purchase commitment	32,366	35,025
Woori G Woori Bank Partners Private Placement Investment Trust No. 1	Securities purchase commitment	332,452	349,177
Woori G Woori Bank Partners Private Placement Investment Trust No. 2	Securities purchase commitment	431,226	626,215
Woori G Private Investment Trust No. 1	Securities purchase commitment	137,163	251,940
Woori G Private Investment Trust No. 5	Securities purchase commitment	106,758	117,223
Woori G Japan General Type Private Real Estate Feeder Investment Trust No.1-1 and its subsidiaries	Derivatives	16,826	16,644
Woori G Japan General Type Private Real Estate Feeder Investment Trust No. 2-1	Derivatives	7,075	-
Woori G Japan Blind General Type Private Real Estate Feeder Investment Trust No.1	Securities purchase commitment	323	-
Woori G Infrastructure New Deal General Investment Private Equity Investment Trust No. 1	Securities purchase commitment	20,056	35,220
Woori G Equity Investment General Type Private Investment Trust No.1	Securities purchase commitment	456	456
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 3	Securities purchase commitment	27,300	41,300
Woori Seoul Beltway Private Special Asset Fund No.1	Securities purchase commitment	34,437	37,146
JC Assurance No.2 Private Equity Fund	Securities purchase commitment	859	859
Woori Asset Global Partnership Fund No. 5	Securities purchase commitment	127,500	-
Woori New Growth Credit Fund 1	Securities purchase commitment	25,177	-
Woori G Clean Energy General Type Private Placement Investment Trust No.2	Securities purchase commitment	8,647	-
WooriG Innovation Growth(Infrastructure) General Type Private Investment Trust No.2	Securities purchase commitment	28,272	-
WooriG General Type private Real Estate Investment Trust No. 6	Securities purchase commitment	275,940	-
WooriG ESG Infrastructure Development General Type Private Investment Trust No.2	Securities purchase commitment	8,694	-
Synaptic Future Growth Private Equity Fund I	Securities purchase commitment	4,389	-

(*) It was added to associates through acquisition during the year ended December 31, 2023.

As of December 31, 2023 and 2022, the recognized payment guarantee provisions are 755 million Won and 278 million Won, respectively, in relation to the guarantees provided to the related parties above.

(9) Major investment and Recovery transactions

The details of major investment and recovery transactions with related parties for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	
The same parent company and its associates	Investment and others (*)	Recovery and others (*)
Green ESG Growth No.1 Private Equity Fund	5,736	-
Woori Busan Logistics Infra Private Placement Special Asset Investment Trust	6,700	-
Woori G Equity Bridge Loan General Type Private Investment Trust No.1	41,015	32,054
Woori G GP Commitment Loan General Type Private Investment Trust No.1	1,826	5,253
Woori G GP Commitment Loan General Type Private Investment Trust No.2	4,240	961
Woori G GP Commitment Loan General Type Private Investment Trust No.3	523	-
Woori G Global Mid-market Secondary General Type Private Investment Trust No.1 (EUR)	4,014	646
Woori G Senior Loan General Type Private Investment Trust No.2	99,250	6,718
Woori G Renewable New Deal Fund No.1	2,659	66
Woori G Woori Bank Partners General Type Private Investment Trust No.1	16,725	-
Woori G Woori Bank Partners General Type Private Investment Trust No.2	194,990	-
Woori G Private Real Estate Investment Trust No. 1	114,776	-
Woori G Private Real Estate Investment Trust No. 5	10,465	-
Woori G Japan Blind General Type Private Real Estate Feeder Investment Trust No.1	-	2,938
Woori G Policy-Type New Deal (Infrastructure Investment) Private Placement Investment Trust No.1	15,164	-
Woori G Equity Investment General Type Private Investment Trust No.1	-	1,726
Woori Short Term Government and Special Bank Bond Active ETF	19,013	19,013
Woori Innovative Growth New Deal Private Investment Trust No.3	14,000	-
Woori BIG2 Plus Securities Investment Trust(Balanced Bond)	2,000	-
Woori G Senior Loan Private Placement Investment Trust No.1	-	3,915
Woori Short-term Bond Securities Investment Trust(Bond) ClassC-F	-	10,119
Woori Seoul Beltway Private Special Asset Fund No.1	2,709	-
Woori Smart General Private Equity Investment Trust 1 (bond)	40,000	-
Woori General Private Securities Investment Trust (Bond) No.1	50,000	-
Woori General Private Securities Investment Trust (Bond) No.2	30,000	-
Woori Big Satisfaction Money Market Fund (Government & Agency Bonds) ClassicC-F	-	441,470
Woori New Growth Credit Fund 1	24,823	-
Woori G Clean Energy General Type Private Placement Investment Trust No.2	1,353	-
Woori Together Government & Agency Bonds USD Money Market Fund 2	15,128	-
Woori G Government Bond Dollar MMF No. 1 (USD)	65,195	-
WooriG General Type private Real Estate Investment Trust No. 6	24,060	-
WooriG ESG Infrastructure Development General Type Private Investment Trust No.2	1,306	-
Woori General Private Equity Investment Trust 3 (bond)	50,000	-
Woori Asset Global Partnership Fund No. 5	22,500	-
Synaptic Future Growth Private Equity Fund I	5,611	-
Woori PE Secondary Private Placement Investment Trust No. 1	8,678	-
WooriI25-09 Bond(above AA-) Active ETF	29,001	-

(*) Investment and recovery transactions of associates are described in Note 13.(2).

The same parent company and its associates	For the year ended December 31, 2022	
	Investment and others (*)	Recovery and others (*)
Synaptic Green Material Component Equipment No.1 Private Equity Partnership	5,000	-
IGEN 2022 Private Equity Fund No. 1	5,000	297
Orchestra Private Equity No.4 Private Equity Partnership	5,000	-
Woori G Equity Bridge Loan Private Equity Investment Trust No. 1	7,800	-
Woori G GP Commitment Loan Private Placement Investment Trust No. 2	10,440	-
Woori G GP Commitment Loan Private Placement Investment Trust No. 1	3,846	816
Woori G Senior Loan Private Placement Investment Trust No.1	13,403	18,975
Woori G Renewable New Deal Private Placement Investment Trust No. 1	19,975	118
Woori G Woori Bank Partners Private Placement Investment Trust No. 2	272,990	266,047
Woori G Woori Bank Partners Private Placement Investment Trust No. 1	401,667	295,825
Woori G Private Real Estate Investment Trust No. 1	129,035	80,736
Woori G Private Real Estate Investment Trust No. 5	82,307	15,611
Woori G Policy-Type New Deal (Infrastructure Investment) Private Placement Investment Trust No.1	24,780	647
Woori G Equity Investment General Type Private Investment Trust No.1	14,644	-
Woori G Senior Loan Private Placement Investment Trust No.2	70,000	-
Woori Seoul Expressway Private Placement Investment Trust No. 1	2,312	-
Woori Innovative Growth New Deal General Private Equity Investment Trust No. 3	14,000	-
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 1	10,450	2,490
Woori Innovative Growth General Private Equity Special Asset Investment Trust No. 2	21,450	-
WooriG Global Mid-market Secondaries Private Placement Investment Trust No. 1	2,439	-
Woori Short-term Bond Securities Investment Trust(Bond) ClassC-F	50,000	200,649
Woori Busan Logistics Infrastructure General Private Equity Investment Trust	201	-
WooriG Government Bond MMF	420,273	480,168
Woori big satisfaction hybrid Money Market Fund No. 3	300,000	-
Woori High Plus Short-Term ESG Bond Securities Investment Trust (Bond)	-	88,552

(*) Investment and recovery transactions of associates are described in Note 13.(2).

(10) Compensation to key management is as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Short-term employee benefits	11,810	9,748
Share-based payment	3,582	2,398
Retirement benefit service costs	632	350
Total	16,024	12,496

Key management includes registered executives and non-registered executives. Outstanding assets from transactions with key management amount to 3,932 million Won and 3,620 million Won, as of December 31, 2023 and 2022 respectively and with respect to the assets, the Group has not recognized any allowance nor related impairment loss due to credit losses. Liabilities from transaction with key management amount to 34,054 million Won and 12,660 million Won, respectively, as of December 31, 2023 and 2022.

(11) The Group, Woori Credit Card Co., Ltd. and its subsidiaries are jointly and severally liable to reimburse the Group's debts before the split.

(12) Among the bonds issued by the Group during the year ended December 31, 2023, Woori Investment Bank Co., Ltd. acquired 30,000 million Won in hybrid capital securities and sold them all on the date of issuance. For the year ended December 31, 2022, the Group purchased 50,000 million Won of bonds held by Woori Investment Bank Co., Ltd. Among the bonds issued by the Group during the prior year, Woori Investment Bank Co., Ltd. acquired 35,000 million Won in hybrid capital securities and 40,000 million Won in debentures, and sold them all on the date of issuance.

46. TRUST ACCOUNTS

(1) Trust accounts of the Group as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	Total assets		Operating income	
			For the years ended December 31	
	December 31, 2023	December 31, 2022	2023	2022
Trust accounts	75,636,483	71,677,258	2,296,627	1,121,069

(2) Receivables and payables from the transactions between the Group and trust accounts as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Receivables		
Trust fees receivables	48,383	42,337
Payables		
Deposits due to customers	166,241	170,417
Borrowings from trust accounts	3,769,913	1,804,847
Total	3,936,154	1,975,264

(3) Significant transactions between the Group and trust accounts for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the years ended December 31	
	2023	2022
Revenue:		
Trust fees	141,314	131,656
Termination fees	1,116	1,158
Total	142,430	132,814
Expense:		
Interest expenses on deposits due to customers	957	619
Interest expenses on borrowings from trust accounts	88,099	38,583
Total	89,056	39,202

(4) Principal guaranteed trusts and principal and fixed interest of return guaranteed trusts

As of December 31, 2023 and 2022, the carrying of principal guaranteed trusts and principal and fixed rate of return guaranteed trusts are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Partial principal guaranteed trusts:		
Household money	7,767	8,230
Corporate money	217	446
Installment plan purpose	1,515	1,551
Sub-total	9,499	10,227
Principal guaranteed trusts:		
Old-age pension trusts	2,582	2,790
Personal pension trusts	429,068	460,839
Pension trusts	642,756	687,971
Retirement trusts	26,082	26,563
New personal pension trusts	6,441	6,792
New old-age pension trusts	892	950
Sub-total	1,107,821	1,185,905
Principal and interest guaranteed trusts:		
Development trusts	19	19
Unspecified money trusts	334	335
Sub-total	353	354
Total	1,117,673	1,196,486

47. LEASES

(1) The future lease payments under the lease contracts as of December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	December 31, 2023	December 31, 2022
Lease payments		
Within one year	190,203	149,948
After one year but within five years	133,291	124,194
After five years	25,084	33,007
Total	348,578	307,149

(2) Total cash outflows from lease for the years ended December 31, 2023 and 2022 are as follows (Unit: Korean Won in millions):

	For the year ended December 31, 2023	For the year ended December 31, 2022
Cash outflows from leases	172,682	168,519

(3) There are no lease charges, not included in the measurement of lease liabilities due to small assets or short-term leases for the years ended December 31, 2023 and 2022. The variable lease fee not included in the current lease liability for the years ended December 31, 2023 and 2022 are 32,016 million Won and 5,465 million Won, respectively.