



SHINHAN CARD CO., LTD. AND SUBSIDIARIES

Consolidated Financial Statements

December 31, 2022 and 2021

(With Independent Auditor's Report Thereon)

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Independent Auditor's Report

English translation of a Report Originally Issued in Korean

To the Board of Directors and Shareholder of Shinhan Card Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Shinhan Card Co., Ltd. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2022 and 2021, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS).

Basis for Opinion

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

Other Matter

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

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

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

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

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

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

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

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

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

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

Seoul, Korea
March 6, 2023

This report is effective as of March 6, 2023, 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.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Financial Position
As of December 31, 2022 and 2021

(In millions of won, except share data)

	<i>Note</i>	2022	2021
Assets			
Cash and due from banks	10,40	₩ 664,928	435,662
Financial assets at fair value through profit or loss	11	389,326	353,562
Derivative assets	12	196,596	88,201
Credit card receivables at amortized cost and other	13	36,831,167	33,755,177
Lease assets	14	1,944,650	1,397,773
Financial assets at fair value through other comprehensive income	16	375,471	197,019
Property and equipment, net	15,17	646,555	646,873
Intangible assets	18	214,085	190,275
Investments in associates	19	88,692	71,391
Current tax assets	39	21,634	93
Deferred tax assets	39	124,738	140,651
Investment property	20	45,959	47,201
Net defined benefit assets	24	36,988	-
Other assets	21	1,469,532	1,148,350
Total assets		₩ 43,050,321	38,472,228
Liabilities			
Derivative liabilities	12	₩ 21,346	16,243
Borrowings	22	9,136,178	6,662,856
Debentures, net	23	21,502,816	20,841,868
Net defined benefit obligations	24	207	35,909
Current tax liabilities	39	80,550	181,483
Provisions	25	240,060	221,370
Other liabilities	15,26	4,610,410	3,777,496
Total liabilities		35,591,567	31,737,225
Equity			
Common stock	27	626,847	626,847
Hybrid bonds	27	399,901	-
Capital surplus	27	860,729	860,592
Capital adjustments	27	(1,550)	1,871
Accumulated other comprehensive loss	27	(17,253)	(42,190)
Retained earnings	27,28	5,582,516	5,291,390
Equity attributable to owner of the Company		7,451,190	6,738,510
Non-controlling interests	27	7,564	(3,507)
Total equity		7,458,754	6,735,003
Total liabilities and equity		₩ 43,050,321	38,472,228

See accompanying notes to the consolidated financial statements

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income
For the years ended December 31, 2022 and 2021

(In millions of won, except earnings per share)

	<u>Note</u>	<u>2022</u>	<u>2021</u>
Interest income		₩ 2,508,702	2,306,053
Interest expense		(710,697)	(506,900)
Net interest income	32	<u>1,798,005</u>	<u>1,799,153</u>
Fee and commission income		1,758,461	1,618,369
Fee and commission expense		(1,221,388)	(1,156,732)
Net fee and commission income	33	<u>537,073</u>	<u>461,637</u>
Dividend income	34	415	430
Net gain on financial assets at fair value through profit or loss	11	19,867	10,544
Net gain (loss) on derivatives	12	191,068	216,006
Net gain (loss) on foreign currency transactions	7	(160,792)	(188,036)
Provision for credit loss allowance	35	(560,265)	(442,669)
General administrative expenses	36	(741,626)	(749,337)
Other operating expense, net	37	<u>(318,704)</u>	<u>(204,238)</u>
Operating income		765,041	903,490
Non-operating income, net	38	64,575	4,505
Share of gain (loss) of associates	18	7,115	(1,109)
Profit before income tax		<u>836,731</u>	<u>906,886</u>
Income tax expense	39	(192,176)	(230,589)
Profit for the year		<u>₩ 644,555</u>	<u>676,297</u>
Other comprehensive income (loss):			
Items that will never be reclassified to profit or loss			
Remeasurement of the net defined benefit obligations	24,27	₩ 30,554	409
Net changes in the unrealized fair value of financial assets at fair value through other comprehensive income	7,27	6,047	5,474
Items that are or may be reclassified subsequently to profit or loss			
Loss on financial assets at fair value through other comprehensive income		(17,031)	(863)
Net changes in the unrealized fair value of cash flow hedges	12,27	(12,452)	22,740
Foreign currency translation adjustments for foreign operations	27	<u>19,440</u>	<u>6,033</u>
Other comprehensive income (loss) for the year, net of tax		<u>26,558</u>	<u>33,793</u>
Total comprehensive income for the year		<u>₩ 671,113</u>	<u>710,090</u>

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income (continued)
For the years ended December 31, 2022 and 2021

(In millions of won, except earnings per share)

	<u>Note</u>	<u>2022</u>	<u>2021</u>
Profit attributable to:			
Owner of the Company	30	₩ 641,368	674,997
Non-controlling interests		3,187	1,300
Profit		<u>₩ 644,555</u>	<u>676,297</u>
Total comprehensive income (loss) attributable to:			
Owner of the Company		₩ 666,304	708,892
Non-controlling interests		4,809	1,198
Total comprehensive income		<u>₩ 671,113</u>	<u>710,090</u>
Earnings per share			
Basic and diluted earnings per share (in won)	30	₩ 5,015	5,384

See accompanying notes to the consolidated financial statements

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Changes in Equity
For the year ended December 31, 2021

		2021								
		Common stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Sub total	Non-controlling interests	Total equity
<i>(In millions of won)</i>										
Balance at January 1, 2021	₩	626,847	-	860,592	2,219	(73,314)	5,007,909	6,424,253	(4,705)	6,419,548
Transactions with owner										
Dividends		-	-	-	-	-	(394,287)	(394,287)	-	(394,287)
Share-based payment transactions		-	-	-	(348)	-	-	(348)	-	(348)
Total comprehensive income for the year:										
Profit for the year		-	-	-	-	-	674,997	674,997	1,300	676,297
Remeasurement of the net defined benefit obligations		-	-	-	-	409	-	409	-	409
Net changes in the unrealized fair value of financial assets at fair value through other comprehensive income		-	-	-	-	1,840	2,771	4,611	-	4,611
Net changes in the unrealized fair value of cash flow hedges		-	-	-	-	22,740	-	22,740	-	22,740
Foreign currency translation adjustments for foreign operations		-	-	-	-	6,135	-	6,135	(102)	6,033
Balance at December 31, 2021	₩	<u>626,847</u>	<u>-</u>	<u>860,592</u>	<u>1,871</u>	<u>(42,190)</u>	<u>5,291,390</u>	<u>6,738,510</u>	<u>(3,507)</u>	<u>6,735,003</u>

See accompanying notes to the consolidated financial statements

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Changes in Equity (continued)
For the year ended December 31, 2022

		2022								
		Common stock	hybrid bonds	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Sub total	Non-controlling interests	Total equity
<i>(In millions of won)</i>										
Balance at January 1, 2022	₩	626,847	-	860,592	1,871	(42,190)	5,291,390	6,738,510	(3,507)	6,735,003
Transactions with owner										
Dividends		-	-	-	-	-	(337,620)	(337,620)	-	(337,620)
Share-based payment transactions		-	-	-	24	-	-	24	-	24
Issuance of hybrid bonds		-	399,901	-	-	-	-	399,901	-	399,901
Dividend on hybrid bonds		-	-	-	-	-	(12,622)	(12,622)	-	(12,622)
Net changes from business combination		-	-	137	-	-	-	137	-	137
Net change in non-controlling interests		-	-	-	(3,445)	-	-	(3,445)	6,263	2,818
Total comprehensive income for the year:										
Profit for the year		-	-	-	-	-	641,368	641,368	3,187	644,555
Remeasurement of the net defined benefit obligations		-	-	-	-	30,554	-	30,554	-	30,554
Net changes in the unrealized fair value of financial assets at fair value through other comprehensive income		-	-	-	-	(10,984)	-	(10,984)	-	(10,984)
Net changes in the unrealized fair value of cash flow hedges		-	-	-	-	(12,452)	-	(12,452)	-	(12,452)
Foreign currency translation adjustments for foreign operations		-	-	-	-	17,819	-	17,819	1,621	19,440
Balance at December 31, 2022	₩	<u>626,847</u>	<u>399,901</u>	<u>860,729</u>	<u>(1,550)</u>	<u>(17,253)</u>	<u>5,582,516</u>	<u>7,451,190</u>	<u>7,564</u>	<u>7,458,754</u>

See accompanying notes to the consolidated financial statements

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
For the years ended December 31, 2022 and 2021

(In millions of won)

	<u>2022</u>	<u>2021</u>
Cash flows from operating activities		
Profit before income tax	₩ 836,731	906,886
Adjustment for:		
Interest income	(2,508,702)	(2,306,053)
Interest expense	710,697	506,900
Dividend income	(415)	(430)
Fee and commission income	32,470	18,862
Fee and commission expense	670	107
Net gain on sales of financial assets at fair value through profit or loss	(7,129)	(3,024)
Net gain on valuation of financial assets at fair value through profit or loss	(4,414)	(959)
Net loss on valuation of financial assets at fair value through profit or loss	1,133	35
Net gain on valuation and transaction of derivatives	(234,298)	(224,689)
Net loss on valuation and transaction of derivatives	43,230	8,683
Net gain on foreign currency transaction	(32,691)	(11,489)
Net loss on foreign currency transaction	177,659	198,655
Provision for credit loss allowance	560,265	442,669
Employee expenses	24,577	26,135
Depreciation expenses	63,942	67,492
Increase (decrease) in restoration liabilities	20	16
Other operating income	(24)	(24,274)
Other operating expenses	351,264	256,594
Non-operating income	(62,987)	(626)
Non-operating expenses	2,012	2,398
Equity method loss (income), net	(7,114)	1,109
	<u>(889,835)</u>	<u>(1,041,889)</u>
Changes in assets and liabilities:		
Restricted due from banks	(84,988)	106,955
Financial assets at fair value through profit or loss	(19,956)	140,028
Credit card receivables at amortized cost and other	(3,447,311)	(3,048,946)
Lease assets	(898,312)	(638,131)
Other assets	(320,603)	(421,353)
Net defined benefit obligations	(51,013)	(26,339)
Provisions	(22,251)	(8,712)
Other liabilities	543,472	(26,698)
	<u>(4,300,962)</u>	<u>(3,923,196)</u>
Income taxes paid	(300,946)	(83,021)
Interest received	2,337,839	2,163,666
Interest paid	(667,545)	(494,396)
Dividend received	415	430
Net cash outflow from operating activities	₩ (2,984,303)	(2,471,520)
Cash flows from investing activities		
Proceeds from disposal of financial assets at fair value through profit or loss	₩ 37,269	3,024
Acquisition of financial assets at fair value through profit or loss	(42,663)	(4,922)

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Cash Flows (continued)
For the years ended December 31, 2022 and 2021

(In millions of won)

	<u>2022</u>	<u>2021</u>
Proceeds from disposal of financial assets at fair value through other comprehensive income	₩ -	4,368
Acquisition of financial assets at fair value through other comprehensive income	(192,894)	(162,623)
Acquisition of investments in associates	(22,350)	(72,370)
Proceeds from disposal of investments in associates	12,163	-
Proceeds from disposal of property and equipment	77,157	378
Acquisition of property and equipment	(33,905)	(48,356)
Proceeds from disposal of intangible assets	679	-
Acquisition of intangible assets	(34,453)	(47,939)
Decrease in security deposits paid	4,558	50,365
Increase in security deposits paid	(4,236)	(55,327)
Net cash outflows from business combination	(4,260)	-
Net cash outflow from investing activities	₩ (202,935)	(333,402)
Cash flows from financing activities		
Proceeds from borrowings	₩ 5,062,702	4,370,535
Repayment of borrowings	(2,622,384)	(1,850,395)
Proceeds from debentures	7,446,370	4,842,948
Repayment of debentures	(6,909,706)	(4,387,295)
Cash inflows from cash flow hedges	2,391,500	1,221,382
Cash outflows from cash flow hedges	(2,319,927)	(1,210,366)
Repayment of lease liabilities	(12,629)	(8,878)
Dividends paid	(337,620)	(394,287)
Increase in security deposits received	215,385	91,498
Issuance of hybrid bonds	399,901	-
Payment of dividend on hybrid bonds	(12,042)	-
Increase in other financial liabilities	25,622	-
Increase in paid-in capital	3,158	-
Net cash inflow from financing activities	3,330,330	2,675,142
Effect of exchange rate fluctuations on cash and cash equivalents	854	796
Net increase (decrease) in cash and cash equivalents	143,946	(128,984)
Cash and cash equivalents at the beginning of year	319,868	448,852
Cash and cash equivalents at the end of year (Note 40)	₩ 463,814	319,868

See accompanying notes to the consolidated financial statements

SHINHAN CARD CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In millions of won)

1. Reporting Entity

General information of Shinhan Card Co., Ltd. (the “Company” or the “Controlling Company”) and its subsidiaries (collectively the “Group”) is as follows.

(a) The Controlling Company

The Controlling Company was incorporated on December 17, 1985. The address of the Company’s registered office is Eulji-Ro 100, Building A, Jung-Gu, Seoul (Pine Avenue Eulji-Ro 2 Ga). The Group provides credit card services, factoring, installment financing and lease financing under the Specialized Credit Finance Business Act.

As of December 31, 2022, the Group has approximately 20.75 million (actual member criteria) personal credit card holders, 1.96 million merchants in its network and 33 branch offices (including the headquarter office). The Group is a wholly owned subsidiary of Shinhan Financial Group Co., Ltd. (“Shinhan Financial Group”).

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements (continued)
For the years ended December 31, 2022 and 2021
(In millions of won)

1. Reporting Entity (continued)

(b) Subsidiaries

As of December 31, 2022 and 2021, consolidated subsidiaries are summarized below.

Name of subsidiary	Location	Closing month	Operating activities	2022		2021	
				Controlling interest	Non-controlling interest	Controlling interest	Non-controlling interest
Shinhan Card 2018-2 (*1)(*2)	Korea	December	ABS	-	-	0.5%	99.5%
Shinhan Card 2019-1 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	0.5%	99.5%
Shinhan Card 2019-2 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	0.5%	99.5%
Shinhan Card 2019-3 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	0.5%	99.5%
Shinhan Card 2020-1 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	0.5%	99.5%
Shinhan Card 2021-1 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	0.5%	99.5%
Shinhan Card 2021-2 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	0.5%	99.5%
Shinhan Card 2022-1 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	-	-
Shinhan Card 2022-2 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	-	-
Shinhan Card 2022-3 (*1)(*2)	Korea	December	ABS	0.5%	99.5%	-	-
Shinhan Credit Information Co., Ltd. (*3)	Korea	December	Debt collection, credit investigation, complaints service	100.0%	-	-	-
Shinhan Finance LLC	Kazakhstan	December	agency Installment, credit loan	100.0%	-	100.0%	-
Shinhan Indo Finance (*4)	Indonesia	December	lease financing Installment, credit card and lease financing	76.33%	23.67%	50%+1 of the shares	50%-1 of the shares
Shinhan Microfinance Co., Ltd.	Myanmar	September	Credit loan	100.0%	-	100.0%	-
Shinhan Vietnam Finance Co., Ltd.	Vietnam	December	Credit loan	100.0%	-	100.0%	-
Specified money in trusts (*1) (As of December 31, 2022: 7 cases, as of December 31, 2021: 11 cases)	Korea	December	Trust asset management	100.0%	-	100.0%	-

(*1) The above subsidiaries are structured entities that are designed voting rights or similar rights are not major factors when determining control.

(*2) Although the Controlling Company's percentage of ownership in shares of structured entities is less than 50%, with consideration of the terms and conditions of structured entities' incorporate agreement, the Group obtains substantially all gains and losses from the operations of the structured entities, and the Group has the ability to direct the activities of structured entities that can significantly affect such gains and losses. Accordingly, the structured entities are included in the consolidation. The Group may trust credit card receivables additionally if these consolidated structured entities are unable to repay securitized debentures connected to the entities' underlying assets.

(*3) The Group has acquired 100% shares of Shinhan Credit Information Co., Ltd. from Shinhan Financial Group Co., Ltd. and Shinhan Credit Information Co., Ltd. became a wholly-owned subsidiary of the Group for the year ended December 31, 2022.

(*4) The percentage of ownership in this entity changed from 50%+1 of the shares to 76.33% because of a paid in capital increase for the year ended December 31, 2022.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements (continued)
For the years ended December 31, 2022 and 2021
(In millions of won)

1. Reporting Entity (continued)

(c) Changes in investments in subsidiaries during the year ended December 31, 2022 are as follows:

Status of change	Name of the subsidiary	Reason
Included	Shinhan card 2022-1	Newly invested subsidiary
	Shinhan card 2022-2	Newly invested subsidiary
	Shinhan card 2022-3	Newly invested subsidiary
Excluded	Shinhan Credit Information Co., Ltd.	Business combination
	Shinhan card 2018-2	Liquidation

(d) Condensed financial information of the Group's subsidiaries as of and for the years ended December 31, 2022 and 2021 are as follows:

Name of subsidiary	December 31, 2022				
	Total assets	Total liabilities	Total equity	Profit (loss) for the year	Total comprehensive income (loss)
Shinhan Card 2019-1	₩ -	-	-	-	-
Shinhan Card 2019-2	318,122	316,846	1,276	-	(1,127)
Shinhan Card 2019-3	175,049	175,049	-	-	-
Shinhan Card 2020-1	522,352	520,408	1,944	-	(2,973)
Shinhan Card 2021-1	350,076	350,076	-	-	-
Shinhan Card 2021-2	400,104	400,104	-	-	-
Shinhan Card 2022-1	400,246	400,246	-	-	-
Shinhan Card 2022-2	521,907	514,232	7,675	-	7,675
Shinhan Card 2022-3	327,155	329,924	(2,769)	-	(2,769)
Shinhan Credit Information Co., Ltd.	31,397	10,488	20,909	558	558
Shinhan Finance LLC	109,400	85,303	24,097	4,504	4,853
Shinhan Indo Finance	145,938	113,982	31,956	6,375	9,619
Shinhan Microfinance Co., Ltd.	11,434	11,804	(370)	(858)	(864)
Shinhan Vietnam Finance Co., Ltd.	647,313	511,926	135,387	17,303	20,534
Specified money in trusts	475,000	-	475,000	126	126

(*) It is disclosed as financial information after the consolidation for year ended December 31, 2022.

Name of subsidiary	December 31, 2021				
	Total assets	Total liabilities	Total equity	Profit (loss) for the year	Total comprehensive income (loss)
Shinhan Card 2018-2	₩ 443,447	443,261	186	-	8,054
Shinhan Card 2019-1	400,123	400,123	-	-	-
Shinhan Card 2019-2	595,191	592,789	2,402	-	8,431
Shinhan Card 2019-3	350,074	350,074	-	-	-
Shinhan Card 2020-1	490,323	485,405	4,918	-	3,953
Shinhan Card 2021-1	350,068	350,068	-	-	-
Shinhan Card 2021-2	400,092	400,092	-	-	-
Shinhan Finance LLC	41,425	22,181	19,244	2,098	1,735
Shinhan Indo Finance	110,131	117,145	(7,014)	2,601	2,396
Shinhan Microfinance Co., Ltd.	11,688	11,194	494	(9,784)	(11,581)
Shinhan Vietnam Finance Co., Ltd.	470,264	355,411	114,853	6,478	14,903
Specified money in trusts	570,000	-	570,000	59	59

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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2. Basis of Preparation

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

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

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

The consolidated financial statements were authorized for issue by the Board of Directors on February 7, 2023, which will be submitted for approval to the shareholder's meeting to be held on March 22, 2023.

(a) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the consolidated statements of financial position:

- Derivative financial instruments are measured at fair value;
- Financial instruments at fair value through profit or loss are measured at fair value;
- Financial instruments at fair value through other comprehensive income are measured at fair value;
- Liabilities recognized for cash-settled share-based payment; and
- Present value of liabilities recognized for defined benefit plans, net of the fair value of plan assets.

(b) Functional and presentation currency

The respective financial statements of the Group entities are prepared in the functional currency of the respective economic environment in which the Group entities operate. These consolidated financial statements are presented and reported in Korean won, which is the Controlling Company's functional currency and the currency of the primary economic environment in which the Group operates.

(c) Use of estimates and judgements

The preparation of the consolidated financial statements in conformity with Korean IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. If the estimates and assumptions based on management's best judgment as of December 31, 2022 are different from the actual environment, these estimates and actual results may be different.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have a significant effect on the amounts recognized in the consolidated financial statements and information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are described in Note 5.

The rapid spread of the COVID-19 epidemic is having a negative impact on the global economy. The Group uses forward-looking information to estimate expected credit loss in accordance with Korean IFRS 1109 'Financial Instruments'. For the year ended December 31, 2022, there have been significant changes on the forward-looking information due to the spread of the COVID-19. Accordingly, the economic recession is expected to be more severe than

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2. Basis of Preparation (continued)

(c) Use of estimates and judgements (continued)

the previous forecast, and the default rate forecast as of December 31, 2022 is re-estimated using the updated forward-looking information on the GDP growth rate, private consumption growth rate, which are major macroeconomic variables for calculating the default rate forecast. The Group will continue to monitor the economic effects of the COVID-19.

(d) Changes in accounting policies

Except for the following new accounting standards enacted or amended for the first time for their annual reporting period commencing January 1, 2022, the accounting policies applied by the Group in these consolidated financial statements are the same as those applied by the Group in its consolidated financial statements as of and for the year ended December 31, 2021.

There are other new standards applied from January 1, 2022, which does not have a significant impact on the Group's consolidated financial statements.

(i) New and amended standards and interpretations adopted by the Group

The Group has applied the following standards and interpretations for the first time for their annual reporting period commencing January 1, 2022.

1) Korean IFRS 1116 Leases – Covid-19-Related Rent Concessions beyond 30 June 2021

The amendments permit a lessee to apply the practical expedient regarding COVID-19-related rent concessions to rent concessions for which any reduction in lease payments affects only payments originally due on or before 30 June 2022. The lessee should apply practical expedient in a consistent manner, to the contracts with similar characteristics in similar situations. The amendments do not have a significant impact on the consolidated financial statements.

2) Korean IFRS 1103 'Business combination' amended – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities to be recognized in a business combination in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korea IFRS 1037 'Provisions, Contingent Liabilities and Contingent Assets', and Korean IFRS 2121 'Levies'. The amendments also clarify that contingent assets should not be recognized at the acquisition date. The amendments do not have a significant impact on the consolidated financial statements.

3) Korean IFRS 1016 'Property, Plant and Equipment' amended – Proceeds before the intended use

The amendments require the entity to recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss, and prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. The amendments do not have a significant impact on the consolidated financial statements.

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2. Basis of Preparation (continued)

(d) Changes in accounting policies (continued)

4) Korean IFRS 1037, 'Provisions, Contingent Liabilities and Contingent Assets' amended - Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendments do not have a significant impact on the consolidated financial statements.

5) Annual Improvements to Korean IFRSs 2018-2020 Cycle

For Annual Improvements to Korean IFRSs 2018-2020 Cycle, the amendments will take effect for annual periods beginning after January 1, 2022 and earlier application is permitted. The amendments do not have a significant impact on the consolidated financial statements.

- Korean IFRS 1101 'First-time Adoption of Korean IFRS' - First-time adopter subsidiaries
- Korean IFRS 1109 'Financial Instruments' - 10% test-related fee for financial liabilities removal
- Korean IFRS 1041 'Agriculture' - Fair value measurement

ii) New standards and interpretations not yet adopted by the Group

The following new accounting standards and interpretations have been published that are not mandatory for December 31, 2022 reporting periods and have not been early adopted by the Group.

1) Korean IFRS 1001 'Presentation of Financial Statements' amended - Classification of Liabilities as Current or Non-current

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

2) Korean IFRS 1001 'Presentation of Financial Statements' amended - Disclosure of Accounting Policies

The amendments require an entity to define and to disclose its material information about accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review of the impact on the amendments on the consolidated financial statements.

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2. Basis of Preparation (continued)

(d) Changes in accounting policies (continued)

ii) New standards and interpretations not yet adopted by the Group (continued)

3) Korean IFRS 1008 'Accounting Policies, Changes in Accounting Estimates and Errors' amended - Definition of Accounting Estimates

The amendments clarify the definition of accounting estimates and how distinguish it from a change in accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

4) Korean IFRS 1012 'Income Taxes' - Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction

Under the amendments, an entity does not apply the initial recognition exemption for transactions which involve the recognition of both an asset and liability – which in turn leads to equal taxable and deductible temporary differences. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

5) Korean IFRS 1117 'Insurance Contracts'

Korean IFRS 1117 'Insurance Contracts' supersedes Korean IFRS 1104 'Insurance Contracts'. According to Korean IFRS 1117, the Group estimates all cash flows under the insurance contract and measure insurance liabilities by using discount rates that reflect assumptions and risks at the reporting point, then recognizes insurance revenue on an accrual basis including services (insurance coverage) provided to the policyholder for each fiscal year. Investment components (such as refunds due to termination/maturity) repaid to a policyholder even if an insured event does not occur, are excluded from insurance revenue, and insurance financial income or expense and the investment income or expense are presented separately to enable users of the information to understand the sources of income or expenses.

This amendment is effective for annual periods beginning on or after January 1, 2023, an earlier application is permitted for companies which have adopted Korean IFRS 1109 'Financial instruments'. The Group expects that the amendments will have no significant impact on the consolidated financial statements.

6) Korean IFRS 1001 'Presentation of Financial Statements' – Classification of Debt with Covenants as Current or Non-current

The amendments require disclosure of the carrying amount of the financial liability and its related gains or losses if, all or part of a financial instrument subject to adjustment of the exercise price according to changes in the issuer's stock price. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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3. Significant Accounting Policies

Significant accounting policies applied by the Group in preparation of its consolidated financial statements are described below. The Group has consistently applied the following accounting policies to all periods presented in these consolidated financial statements, except if mentioned otherwise in Note 2 (d).

(a) Operating segment

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. All operating segments' operating results are reviewed regularly by the Group's CEO to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. The Group has a single reportable segment. Accordingly, information on segment assets, liabilities and profit or loss is not disclosed.

(b) Basis of consolidation

(i) Subsidiaries

Subsidiaries are investees controlled by the Group. The Group controls an investee when it is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

If a member of the Group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and other events in similar circumstances, the Group prepares the consolidated financial statements by making appropriate adjustments.

(ii) Structured entities

The Group has established a number of structured entities by transferring credit card receivables and others. A structured entity is consolidated if, based on an evaluation of the substance of its relationship with the Group and the structured entity's risks and rewards, it is concluded that the Group controls the structured entity.

(iii) Elimination of intra-group transactions

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. If intra-group losses indicate an asset impairment that requires recognition on the consolidated financial statements, the intra-group losses are recognized as a loss.

(iv) Non-controlling interests

Non-controlling interests in a subsidiary are accounted for separately from the parent's ownership interests in a subsidiary. Each component of net profit or loss and other comprehensive income is attributed to the owners of the parent and non-controlling interest holders, even when the allocation reduces the non-controlling interest balance below zero.

(c) Cash and cash equivalents

They are short-term investment assets with high liquidity, such as cash balances, foreign currencies, and call deposits, and short-term investment assets with a slight risk of value fluctuations are classified as cash and cash equivalents.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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3. Significant Accounting Policies (continued)

(d) Non-derivative financial assets

(i) Recognition and initial measurement

Issued debentures are initially recognized at the time of issue. Other financial instruments and financial liabilities are recognized only when the Group becomes a party to the contract for the financial instrument.

At initial recognition, financial assets or financial liabilities are measured at fair value, and transaction costs directly related to the acquisition of the financial assets or the issue of the financial liabilities are added to fair value unless they are measured at fair value through profit or loss.

(ii) Classification and subsequent measurement

Financial asset

On initial recognition, a financial asset is classified as measured at: amortized cost; fair value through other comprehensive income (“FVOCI”) – debt investment; FVOCI – equity investment; or fair value through profit or loss (“FVTPL”).

Unless the Group changes its business model for managing financial assets, after first recognition, the financial assets cannot be reclassified. When, and only when, the Group changes its business model for managing financial assets, it shall reclassify all affected financial assets on the first day of the Group’s next reporting period.

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- It is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- It is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

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3. Significant Accounting Policies (continued)

(d) Non-derivative financial assets (continued)

(ii) *Classification and subsequent measurement (continued)*

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets (See Note 6). On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial asset: Business model

The Group assesses the objective of the business model held at the portfolio level of financial assets because it best reflects the way the business is managed, and information is provided to management. Such information takes into account the following:

- The accounting policies and objectives specified for the portfolio and the actual operation of these policies. These include management's strategy focused on obtaining contractual interest revenue, maintaining the level of interest revenue, and financing the debt financing and matching the duration of the financial asset's duration and on the outflow or realization of expected cash flows through the sale of the asset;
- Assessment of the performance of financial assets held in a business model and reporting the assessment to key management personnel;
- The risks affecting the performance of the business model (and the financial assets held in the business model) and how they are managed;
- Compensation for management (e.g., compensation based on the fair value of the managed asset or on the contractual cash flows received); and
- The frequency, amount, timing, reasons and expectations of future sales activities of financial assets in prior periods.

For this purpose, transfers of financial assets from transactions that do not meet the derecognition requirements to third parties are not considered as sales.

A portfolio of financial assets that meets the definition of trading or whose performance is measured at fair value through profit or loss.

Financial asset: Contractual cash flows are solely payments of principal and interest on the principal amount outstanding

'Principal' amount is defined as the fair value on initial recognition of the financial asset. 'Interest' consists of profit as well as consideration for the time value of money, consideration for the credit risk associated with the principal balance in a particular period, and consideration for other basic loan risks and costs (such as liquidity risk and operating costs).

In assessing whether contractual cash flows consist solely of principal and interest payments, the Group considers the terms and conditions of the instrument. If a financial asset contains a contractual term that changes the timing or amount of contractual cash flows, the entity must determine whether the contractual cash flows that may arise over the life of the financial instrument are solely payments of principal and interest.

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3. Significant Accounting Policies (continued)

(d) Non-derivative financial assets (continued)

(ii) *Classification and subsequent measurement (continued)*

To make an assessment, the Group considers the following:

- Contractual terms that change the timing or amount of contractual cash flows;
- Terms that adjust the contractual interest rate, including variable interest rate features;
- Prepayment features and extension features; and
- Terms and conditions that limit the Group's claims on cash flows arising from specific assets. (e.g., non-recourse features)

If the prepayment amount represents interest on substantially outstanding principal and remaining principal and includes reasonable additional compensation for early termination of the contract, the early repayment characteristics are consistent with the terms of paying principal and interest on a specified date.

In addition, for financial assets acquired at a significant discount or premium to the contractual face value, the prepayment amount effectively represents the contractual face value and the contractual interest accrual (however unpaid), and the prepayment feature meets this condition when the fair value of the feature is insignificant on initial recognition of the financial asset.

Financial Asset: Subsequent measurement and profit or loss

The following accounting policies apply to the subsequent measurement of financial assets.

Category of financial instruments	Accounting policies
Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss. However, see Note 3 (e) for derivative financial assets designated as the hedging instruments.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses, impairment and any gain or loss on derecognition are recognized in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in other comprehensive income. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in OCI and are never reclassified to profit or loss.

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3. Significant Accounting Policies (continued)

(d) Non-derivative financial assets (continued)

(iii) Derecognition of financial assets

Financial asset

The Group derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or when it transfers the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all the risks and rewards of ownership and it does not retain control of the financial asset.

When the Group transfers a right on cash flow of a financial asset, but, retains substantially all of the risk and rewards of ownership relating the transferred asset, the transferred assets are continuously recognized, and the proceeds from the transfer are recognized as a liability.

(iv) Offsetting

Financial assets and liabilities are offset only when the Group has a legally enforceable right to offset the recognized amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(e) Derivative financial assets

(i) Derivatives and Hedge Accounting

The Group holds derivative financial instruments to hedge foreign exchange and interest rate exposures. If the host contract is not a financial asset and meets certain requirements, the embedded derivative is accounted for separately and separated from the host contract.

Derivatives are measured at fair value on initial recognition and subsequently measured at fair value and changes are generally recognized in profit or loss.

The Group designate specific derivatives and non-derivative financial liabilities as hedging instruments to hedge the variability of cash flows associated with future forecast transactions that are likely to arise from changes in exchange rates and interest rates, as the purpose of hedging exchange risk against net investments in foreign operations.

At the inception of the hedge, the Group documents the purpose and strategy of risk management to perform the hedge. The Group documents the economic relationship between the hedged item and the hedging instrument, including whether changes in the cash flows of the hedged item and the hedging instrument are expected to offset each other.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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3. Significant Accounting Policies (continued)

(e) Derivative financial assets (continued)

(ii) Cash flow hedge

When a derivative is designated as a cash flow hedge, an effective part of the change in the fair value of the derivative is recognized in other comprehensive income and accumulated in the hedge reserve. The effective portion of changes in the fair value of the derivative that is recognized in other comprehensive income is limited to the cumulative change in fair value of the hedged item, determined on the basis of present value from the inception of the hedge. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

If a hedged item that is a forecast transaction is subsequently recognized in a non-financial asset, the cumulative hedge reserve and the cost of the hedge are included directly in the initial cost of the non-financial asset when the non-financial asset is recognized.

For other hedged items that are forecast transactions, the accumulated hedge reserve and the cost of the hedge are reclassified to profit or loss in the same period or in the period during which the expected hedged future cash flows affect profit or loss.

If the hedge no longer meets the hedge accounting requirements or the hedging instrument is sold, decimated, terminated or exercised, the hedge accounting is discontinued prospectively.

If a non-financial item is a recognized hedge transaction and hedge accounting for cash flow hedges is discontinued, the amount that has been accumulated in the cash flow hedge reserve and the cost of the non-financial item remain in equity until the non-financial item is initially recognized and its amount is included in the cost of the non-financial item. For other cash flow hedges, the amounts are reclassified to profit or loss in the same period or periods as the hedged future cash flows affect profit or loss.

If the hedged future cash flows are no longer expected to occur, that amount shall be immediately reclassified from the cash flow hedge reserve to profit or loss as a reclassification adjustment.

(iii) Net-investment hedge

When a derivative instrument or a non-derivative financial liability is designated as the hedging instrument in a hedge of a net investment in a foreign operation, the effective portion of, for a derivative, changes in the fair value of the hedging instrument or, for a non-derivative, foreign exchange gains and losses is recognized in other comprehensive income and presented in the translation reserve within equity. Any ineffective portion of the changes in the fair value of the derivative or foreign exchange gains and losses on the non-derivative is recognized immediately in profit or loss.

The amount recognized in other comprehensive income is reclassified to profit or loss as a reclassification adjustment on disposal of the foreign operation.

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3. Significant Accounting Policies (continued)

(f) Fair value of financial instruments

Fair value is the amount for which an asset could be exchanged, or a liability settled, could be exchanged, between knowledgeable, willing parties in an arm's length transaction.

For financial instruments traded in active markets, the fair value of financial instruments is measured at quoted prices. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

If the market for a financial instrument is not active, the Group establishes fair value by using a valuation technique. Valuation techniques include using recent arm's length transactions between knowledgeable, willing parties, if available, reference to the current fair value of other instruments that are substantially the same. Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. Periodically, the Group calibrates the valuation technique and tests it for validity using prices from any observable current market transactions in the same instrument or based on any available and observable market data.

The fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. However, if part of the consideration given or received is for something other than the financial instrument, the fair value of the financial instrument is estimated, using a valuation technique. Any additional amount lent is an expense or a reduction of income unless it qualifies for recognition as some other type of asset.

The fair value of interest-free installment purchases (which is offered for marketing purpose to expand credit sales) is measured by using the discount rate considering the credit rating of the Group and the credit risk of customers. As the source of the yield and the purpose of customers using interest-free installment purchases are different from those of installment purchases with interest, the discount rate is calculated in that way.

(g) Impairment of financial assets

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

- Financial assets measured at amortized cost

The Group measures loss allowances at an amount equal to the lifetime expected credit losses (“ECLs”), except for the following, which are measured as twelve month ECLs:

- Financial instrument that are determined to have low credit risk at the reporting date; and

- Financial instrument for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

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3. Significant Accounting Policies (continued)

(g) Impairment of financial assets (continued)

The Group assumes that the credit risk on a financial asset has increased significantly when:

- Asset credit quality is cautionary or less;
- Significant changes in credit rating occur; or
- Specified overdue pool segment (Personal card receivables past due over seven days, etc.) incur.

The Group considers a financial asset to be in default when:

- The financial asset is more than 90 days past due.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

(i) Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

(ii) Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortized cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that financial assets are impaired includes observable information.

- Significant financial difficulty of the borrower or issuer
- Default or delinquency in interest or principal payments
- Restructuring of a loan or a concession granted by the Group, which the Group would not otherwise consider
- Indications that a borrower or issuer will enter bankruptcy or other financial reorganization
- The disappearance of an active market for a security
- Observable data that there is a measurable decrease in the estimated future cash flows from a group of financial assets, since the initial recognition of those assets, although individual cash flows cannot be discriminated

(iii) Presentation of impairment

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

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3. Significant Accounting Policies (continued)

(g) Impairment of financial assets (continued)

(iv) Write-off

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. The Group evaluates whether there is a reasonable expectation of recovering a financial asset based on historical experience of recoveries of similar assets. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

(h) Property and equipment

Items of property and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses. Costs include expenditures that are directly attributable to the acquisition of the assets. The cost of self-constructed assets includes the cost of materials and direct labor, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located. The Group elected to measure land and buildings at fair value at the date of transition and use those fair values as their deemed costs. After initial recognition, an item of property and equipment is recognized at its carrying amount, which is the amount of its acquisition cost less accumulated depreciation and accumulated impairment losses.

The cost of replacing a part of an item of property or equipment is recognized in its carrying amount if it is probable that the Group will economically benefit from the part and its cost can be measured reliably. The carrying amount of the replaced part is removed. The costs of the day-to-day servicing of items of property and equipment are recognized in profit or loss as incurred.

Land is not depreciated, and items of other property and equipment are depreciated using the straight-line method over their estimated useful lives, which most closely reflect the expected pattern of consumption of the future economic benefits embodied in the asset. When parts of an item of property or equipment have different useful lives, they are accounted for as separate items of property and equipment.

Gains and losses from disposing an item of property and equipment are the amount of difference between the carrying amount of the item and the proceeds from the disposal and are recognized as non-operating income.

The estimated useful lives and depreciation methods of property and equipment are as follows:

Descriptions	Useful lives	Depreciation method
Buildings	40 years	Straight-line method
Vehicles	5 years	Straight-line method
Other tangible assets	5 years	Straight-line method

Depreciation methods, useful lives and residual values are reviewed at each fiscal year-end and adjusted if appropriate. Such adjustments are accounted for as a change in an accounting estimate.

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3. Significant Accounting Policies (continued)

(i) Intangible assets

Intangible assets are measured initially at cost and, after initial recognition, are carried at cost less accumulated amortization and any accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line method over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as having indefinite useful lives and not amortized.

Descriptions	Useful lives
Membership	Indefinite
Development cost	5 years
Software	5 years
Other intangible assets	5 years or less

Amortization methods, useful lives and residual values are reviewed at each fiscal year-end and adjusted if appropriate. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support the indefinite useful life assessments for those assets. Such adjustments are accounted for as a change in an accounting estimate.

Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

(j) Leases

(i) Lessor

Where the Group is a lease provider, it classifies each lease as an operating lease and a financial lease. Lease income from operating leases where the Group is a lessor is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as expense over the lease term on the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature. In the case of financial leases, assets held under financial leases are recognized in the statement of financial position at the commencement of the lease, the assets are presented as receivables of the same amount as net lease investment, and financial returns are recognized over the lease period.

(ii) Lessee

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

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

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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3. Significant Accounting Policies (continued)

(j) Leases (continued)

(ii) Lessee (continued)

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

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

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

The lease payments shall be discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the lessee shall use the lessee's incremental borrowing rate, the rate of interest that a lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

To determine the incremental borrowing rate, the Group:

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

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

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

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

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

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

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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3. Significant Accounting Policies (continued)

(j) Leases (continued)

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life. Although the Group elected to apply the revaluation model to its land and buildings that are presented in property and equipment, the Group elected not to apply that revaluation model to buildings held by the Group that are presented in the right-of-use assets.

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

(k) Investment property

A property held for rental income or investment gains is classified as investment property. Investment property is measured at cost at initial recognition, and after initial recognition, it is presented as the accumulated depreciation and the accumulated impairment losses are deducted from the cost. Among properties, an investment property excluding land is depreciated with a straight-line method for 40 years of useful life.

(l) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from employee benefits, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

The Group estimates the recoverable amount of an individual asset, if it is impossible to measure the individual recoverable amount of an asset, then the Group estimates the recoverable amount of cash-generating unit ("CGU"). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets. The recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or the CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or the CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

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3. Significant Accounting Policies (continued)

(m) Non-derivative financial liabilities

The Group classifies financial liabilities based on the substance of the contractual agreement and the definition of a financial liability into financial liabilities at fair value through profit or loss and other financial liabilities and recognize them on the consolidated financial statements when the Group becomes the party to the contractual agreement.

(i) Financial liabilities at fair value through profit or loss

A financial liability is classified as at fair value through profit or loss if it is classified as held-for-trading, or it is designated as such on initial recognition. Financial liabilities at fair value through profit or loss are subsequently measured at fair value, and changes in the fair value are recognized in profit or loss. Transaction costs incurred for issuing such liabilities at initial recognition are immediately recognized in profit or loss as incurred.

(ii) Other financial liabilities

Non-derivative financial liabilities not classified as at fair value through profit or loss are classified as other financial liabilities. Other financial liabilities are measured at fair value less direct transactions costs incurred for issuing such liabilities at initial recognition. Other financial liabilities are subsequently measured at amortized cost using the effective interest method, and related interest expenses are recognized using the effective interest method.

(iii) Derecognition of financial liabilities

The Group derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value. On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

(n) Employee benefits

(i) Short-term employee benefits

Short-term employee benefits that are due for settlement within 12 months following the end of the reporting period during which the employees render the related service are recognized as the amount expected to be paid when the service is provided in profit or loss. Short-term employee benefits are measured undiscounted.

(ii) Post-employment benefit plan

The Group has introduced and manages both a defined benefit pension plan and a defined contribution pension plan. Employees have a right to choose one of the pension plans.

Defined contribution plans

With relations to defined contribution plans, when an employee rendered a service for a certain period of time, obligations for contributions to defined contribution plans are expensed in profit or loss, unless included in the cost of an asset. Obligations for contributions less prepaid contributions are recognized as a liability (accrued expenses). In addition, when prepaid contributions are exceed the obligations for contributions for the service provided before the end of reporting period, the Group recognizes the decrease in future payments or cash refunds as an asset (prepaid expense).

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3. Significant Accounting Policies (continued)

(n) Employee benefits (continued)

(ii) *Post-employment benefit plan (continued)*

Defined benefit plans

The Group recognizes defined benefit liabilities related to defined benefit plans at the present value of the defined benefit obligations less the fair value of plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets excluding interest and the effect of the asset ceiling excluding interest, are recognized immediately in other comprehensive income. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Group recognizes the gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iii) *Termination benefits*

Termination benefits are expensed when the Group is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy.

Termination benefits for voluntary redundancy are expensed if the Group has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably. If benefits are payable more than 12 months following the reporting period, then they are discounted at present value.

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3. Significant Accounting Policies (continued)

(o) Provisions

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

Provisions are measured at the best estimate of the expenditure required to settle the present obligation at the end of the reporting period and taken into account the risks and uncertainties that inevitably surround events and circumstances. Where the effect of the time value of money is material, the amount of a provision is measured at the present value of the expenditures expected to be required to settle the obligation.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognized when it is virtually certain that reimbursement will be received, and the reimbursement is recognized as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

The Group recognizes provisions related to litigations and unused credit commitments from credit card sales and cash services. Provisions for unused credit commitments from credit card sales and cash service are estimated using a valuation model that takes credit conversion factor, probability of default, and loss given default into account. In addition, when the Group bears the responsibility for restoration following the expiration of a rental contract, the Group recognizes the present value of the estimated restoration costs as a provision.

(p) Foreign currencies

(i) Transactions in foreign currencies

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the exchange rate at that date. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value is determined.

Foreign currency differences arising on the settlement of monetary items and on translating monetary items are recognized in profit or loss, except for differences arising on the retranslation of available-for-sale equity instruments, a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognized in other comprehensive income. When gains or losses on non-monetary items are recognized in other comprehensive income, exchange components of those gains or losses are recognized in other comprehensive income. Conversely, when gains or losses on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss.

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3. Significant Accounting Policies (continued)

(p) Foreign currencies (continued)

(ii) Foreign operations

When the functional currency of a foreign operation differs from the presentation currency of the Group, the Group translates the financial statements into the presentation currency using the following procedures.

The results and financial position of a foreign operation whose functional currency is not the currency of a hyperinflationary economy is translated into the presentation currency using the following procedures. The assets and liabilities for each statement of financial position presented (including comparatives) are translated at the closing rate at the date of that statement of financial position. The income and expenses for each statement presenting profit or loss and other comprehensive income (including comparatives) is translated at exchange rates at the dates of the transactions

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation is treated as assets and liabilities of the foreign operation. They are expressed in the functional currency of the foreign operation and translated at the closing rate.

On the disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation, recognized in other comprehensive income and accumulated in the separate component of equity, is reclassified from equity to profit or loss (as a reclassification adjustment) when the gain or loss on disposal is recognized. On the partial disposal of a subsidiary that includes a foreign operation, the Group re-attributes the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income to the non-controlling interests in that foreign operation. In any other partial disposal of a foreign operation the Group reclassifies to profit or loss only the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income.

(iii) Translation of net investment in foreign operations

An item for which settlement is neither planned nor likely to occur in the foreseeable future is, in substance, a part of the entity's net investment in that foreign operation, and is recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

(q) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares and share options are recognized as a deduction from equity, net of any tax effects.

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3. Significant Accounting Policies (continued)

(r) Share-based payment transactions

For equity-settled share-based payment transactions, the Group measures the goods or services received, and the corresponding increase in equity, directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. If the Group cannot estimate reliably the fair value of the goods or services received, the Group measures their value, and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date.

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

Shinhan Financial Group, which is the parent company, has granted shares or share options to the Group's employees. In accordance with a repayment arrangement with Shinhan Financial Group, the Group is required to pay Shinhan Financial Group for the provision of the share-based payments. The Group recognizes the costs as expenses and accrued expenses in liabilities for the service period. When vesting conditions are not satisfied because of death, retirement or dismissal of employees during the specified service period, no amount is recognized for goods or services received on a cumulative basis. Share-based payment agreements granted by Shinhan Financial Group to employees are accounted for as equity-settled share-based payment transactions, and share-based payment agreements granted by the Group to employees are accounted for as cash-settled share-based payment transactions, regardless of the repayment arrangement with Shinhan Financial Group.

(s) Revenue from Contracts with Customers

The Group recognizes fee income from cardholders and merchants on an accrual basis applying the following five steps: ① Identify the contracts with the customers, ② Identify the separate performance obligations, ③ Determine the transaction price of the contract, ④ Allocate the transaction price to each of the separate performance obligations, and ⑤ Recognize the revenue as each performance obligation is satisfied. However, the Group recognizes fee income related to delinquent receivables, whose probability of future economic benefits is low, on a cash basis.

The fair value of the consideration received or receivable in respect of an initial sale is allocated to reward points ("points") and other components of fee and commission income. The Group provides rewards in various forms including discounts on credit settlements and gifts. The amount allocated to points is estimated at the amount expected to be paid on points rewarded to cardholders in consideration of the expected redemption rate and is recognized as a deduction from the fee and commission income.

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3. Significant Accounting Policies (continued)

(t) Finance income and finance costs

The Group's finance income and finance costs consist of :

- Interest income;
- Interest expense;
- Dividend income;
- The net gain or loss on financial assets measured at fair value through profit or loss;
- The foreign currency gain or loss on financial assets and financial liabilities;
- Impairment losses (and reversals) on investments in debt securities carried at amortized cost;
- The gain on the remeasurement to fair value of any pre-existing interest in an acquire in a business combination;
- The fair value loss on contingent consideration classified as a financial liability;
- Hedge ineffectiveness recognized in profit or loss; and
- The reclassification of net gains and losses previously recognized in other comprehensive income on cash flow hedges of interest rate risk and foreign currency risk for borrowings.

Interest income or expense is recognized using the effective interest method. Dividend income is recognized in profit or loss on the date on which the Group's right to receive payment is established. In addition, handling fee income and incidental expenses related to loans are deferred and presented as a deduction from loan receivables. They are depreciated using the effective interest method during the loan period and recognized in income and expense.

The effective interest rate is the rate that exactly discounts estimate future cash payments or receipts through the expected life of the financial instrument to the gross carrying amount of the financial asset or the amortized cost of the financial liability.

When calculating interest income or interest expense, the effective interest rate is applied to the gross carrying amount of the asset (if the asset is not credit-impaired) or to the amortized cost of the liability. However, for financial assets that subsequently have been credit-impaired since initial recognition, interest revenue is calculated by applying an effective interest rate to the amortised cost of the financial asset. The Group calculates the interest revenue by applying the effective interest rate to the gross carrying amount if the financial asset is no longer credit impaired.

(u) Income taxes

Income tax expense comprises current and deferred tax. It is recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Shinhan Financial Group, the parent company of the Group, files its national income tax return with the Korean tax authorities under the consolidated corporate tax system, allowing it to make national income tax payments based on the consolidated profits or losses of the Shinhan Financial Group and its wholly owned domestic subsidiaries including the Group. Deferred taxes are measured based on the future tax benefits expected to be realized in consideration of the expected profits or losses of eligible companies in accordance with the consolidated corporate tax system. Consolidated corporate tax amounts, once determined, are allocated to each of the subsidiaries and are used as a basis for the income taxes to be recorded in their stand-alone financial statements.

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3. Significant Accounting Policies (continued)

(u) Income taxes (continued)

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

Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the tax laws that have been enacted or substantively enacted by the end of reporting period. The measurement of deferred tax liabilities and deferred tax assets reflect the tax consequences that would follow from the way The Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis, or their tax assets and liabilities will be realized simultaneously.

Tax uncertainty arises from the Group's claims for correction due to the complexity of transactions or differences in tax law interpretation, and refund lawsuits and tax investigations by tax authorities. Where the Group has paid tax according to Korean IFRS 2123, and there is a highly probable of having a tax refund in the future, it will be recognized as corporate tax assets, and the amount expected to be paid as a result of tax audits will be recognized as corporate tax liabilities.

If there are any additional corporate tax expenses incurred by dividend payments, it is recognized at the time the liability related to the dividend payments are recognized.

(v) Earnings per share

The Group calculates basic earnings per share (EPS) using profit or loss and presents it in the consolidated statements of comprehensive income. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shares by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

(w) Goodwill impairment test

The recoverable amounts of each CGU are evaluated based on their respective value in use (See Note 18).

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3. Significant Accounting Policies (continued)

(x) Insurance contracts

Insurance contracts are contracts under which the Group accepts significant insurance risk from a policyholder by agreeing to compensate the policyholder if a specified uncertain future event adversely affects the policyholder. A contract that meets the definition of an insurance contract remains an insurance contract until all rights and obligations are extinguished. The Group recognized assets and liabilities related to insurance contracts as other assets and liabilities in the consolidated statements of financial position and income and expenses related to insurance contracts as other commission income and expense in the consolidated statements of comprehensive income.

The Group recognizes insurance liabilities to provision the future payment that will be paid based on above insurance contracts, and details are as follows:

(i) *Premium reserves*

The Group reserves expected amount to be paid after the reporting period although the insured event had occurred before the reporting period.

(ii) *Unpaid premium reserves*

At the end of the reporting period, premiums that have paid due are calculated based on premiums and the liability reserve calculation method.

4. Financial Risk Management

(a) General information of risk management

The Group has exposure to the following risks from its use of financial instruments:

- Credit risk, Liquidity risk, Market risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies, and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

(i) *Organization for risk management*

Major decisions relating to risk management are made by the Risk Management Committee under the Board of Directors. To effectively implement the Risk Management Committee's determination and deliberation, the Group runs the Risk Management Council which includes the CRO (Chief Risk Officer) as chairman and consists of heads of relevant units and divisions. In order to assist the two committees, there is an independent risk executive team which is fully in charge of tasks related to risk management.

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4. Financial Risk Management (continued)

(a) General information of risk management (continued)

(i) Organization for risk management (continued)

In addition, the Group established a Credit Review Committee separately from the Risk Management Council to conduct credit evaluations of corporate customers with outstanding loans over a certain amount and other significant credit matters. The Credit Review Committee is led by the CRO and consists of heads of relevant divisions.

(ii) Risk management process

The Group measures credit risk, liquidity risk, market risk, and interest rate risk. The Group presents an acceptable level of risks before the establishment of an annual financial plan, and sets the upper growth limit as a guideline, which considers available capital and risk capital. On the basis of organized financial plans in accordance with established guidelines, the Group organizes risk plans and sets risk limits, which encompass the Group's entire risk appetite.

Risk limits are set on the basis of the risk capital in principle or set by the regulatory capital in case of absence of a risk capital calculation system. The Group manages total risk limits, risk limits for each type of risk and risk limits by product. If total risk exceeds 95% of its limit, the Group immediately reports the risk limits to the CRO of Shinhan Financial Group and to the Group Risk Management Committee. In case of risk limits for each type of risk, after consultation with the Shinhan Financial Group, it is adjustable by resolution of the Risk Management Committee within the range of total risk limits. In case of risk limits by product, after prepared countermeasures, it is adjustable by resolution of the Risk Management Council.

(iii) Risk monitoring

Risk Monitoring is performed by Shinhan Financial Group's risk dashboard for early detection of risk, regular risk measurement and monitoring systems the Risk Management Council and Risk Management Committee, and the Enterprise Risk Management System. The Group performs weekly monitoring on short-term credit quality indicators and leading economic indicators.

- Risk dashboard

The risk dashboard is a risk monitoring system to provide early detection and proactive response to portfolio risks and abnormal symptoms, and key monitoring targets of portfolios by business line and credit quality of members(credit ratings). It performs the pre-detection function on the risk factors such as increases in assets, and risks by each monitoring target. Regarding quantitative indicators such as increases in assets and increases in risks, the Group defines the determination level of risk detection by the statistical significance level. By regular monitoring, the risk management team together with relevant teams analyses the cause and prepares and implements a countermeasure.

- Risk measurement and monitoring reporting

The Group regularly reports the overall results of risk measurement and monitoring to the Risk Management Council and Risk Management Committee. Regular monitoring items consist of operational status of risk limits (total / type / product), portfolio guidelines, levels of enterprise crisis, economic / market trends, detailed indicators of credit quality, and financing and liquidity risks.

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4. Financial Risk Management (continued)

(a) General information of risk management (continued)

(iv) Enterprise crisis management system

The Group maintains a group wide risk management system to detect the signals of any risk crisis preemptively and, in the event of a crisis actually happening, to respond on a timely, efficient and flexible basis so as to ensure the Group's survival as a going concern. The Group maintains crisis planning for three levels of contingencies, namely, 'alert', 'imminent crisis' and 'crisis' determination of which is made based on quantitative and qualitative monitoring and impact analysis, and upon the happening of any such contingency, is required to respond according to a prescribed contingency plan.

Internal and external crisis indicators for each of credit risk and liquidity risk are divided into core indicators, and leading indicators and the stage of crisis is determined quantitatively. Risk management working-level committee performs analysis of qualitative information and risk management council, consisting heads of departments decides whether to perform entity-wide impact analysis.

Enterprise crisis stages consist of six stages, Normal 1, Normal 2, Cautionary 1, Cautionary 2, Crisis Impending and Crisis, which are determined by a scoring system based on internal and external indicators.

Based on the assessment of crisis stage, appropriate action items for each crisis stage are set up and implemented. For the purpose of efficient operation of the Enterprise Crisis Management System, detailed roles and responsibilities for each organization are predefined. Crisis management organizations consist of a Risk management working-level committee which performs daily monitoring, risk management council, consisting heads of departments which is convened when the crisis stage is assessed as above the Cautionary 2 two times in succession. In addition, the Group has Risk Management Council and Crisis Management Council headed by the CEO, and Group Crisis Management Council headed by the CEO of the Shinhan Financial Group. These organizations and their detailed roles and responsibilities enable the Group to cope with crisis systematically.

(v) Evaluation process

The Group sets and operates the standards on credit card issuance pursuant to the standard of review for payment ability prescribed by the Regulation on Supervision of Specialized Credit Finance Business. If the basic qualification standards are not met, credit card issuance is prohibited. When standards are met, credit card issuance is possible only if the AS (Application Score) credit rating is above a certain degree, which is based on the Group's internal information, external information from Credit Bureaus, and personal information in the application form. The Group prohibits higher-risk customers from being issued a credit card by using supplementary information such as overdue history and Credit Bureaus' credit ratings.

The Group utilizes customer transaction records with Shinhan Financial Group's subsidiaries, internal or external credit information, and characteristics of each customer group to improve its assessment functions on credit card issuance for new customers. The Group performs various kinds of simulations to cope with the changes in surroundings such as market conditions and economic trends so that the Group is able to predict the potential risk of certain customer groups and establish the management policy for higher-risk groups.

The Group determines an optimized credit limit for new credit card holders according to their payment ability by considering occupation, income, property, debt, and transaction records with Shinhan Financial Group's subsidiaries. The Group operates a management system which enables the Group to monitor the changes in risk and prevent high-risk groups from being credit card holders by monitoring monthly indicators.

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4. Financial Risk Management (continued)

(a) General information of risk management (continued)

(vi) Credit Scoring System

The Group's Credit Scoring System consists of ASS (Application Scoring System) and BSS (Behavioural Scoring System). BS (Behavioural Score) evaluates the credit card holder's credit quality regularly. Credit card AS (Application Score) evaluates potential credit card holder's credit quality when they apply for credit card issuance. Card loan AS and installment AS evaluate potential customers' credit quality. The Group utilizes the Credit Scoring System in order to monitor its customers' and portfolios' risk exposures.

AS is mainly based on the application form information, and BS is based on history information such as card use and payment after issuing a card. Common use information is calculated by using internal information such as payment ability, assets, period of use of our company, financial institution transaction details of applicants, external information such as credit rating agencies (NICE, KCB), and banking association.

AS application work is approved if the applicant's credit rating is above a certain score and does not correspond to the policy refusal reason such as delinquency of other card companies. AS application is a long-term customer of Shinhan Financial Group and a card applicant with good credit history. In addition, the Group uses the elements of credit rating as the basis for setting the limit when issuing cards. The monthly recalculated BS predicts the delinquency rate of card members, and the Group uses it to monitor members and monitor portfolio risk exposures.

(b) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities. The Group complies with credit risk management procedures pursuant to internal guidelines and regulations and continually monitors and improves these guidelines and regulations. Application of credit risk management includes not only all the transactions in these consolidated financial statements but also off balance items such as guarantees, loan agreements and derivatives transactions that could possibly generate economic loss. The Group assesses credit risks of those transactions and sets a limit on expected credit risks in advance.

The Group estimates credit risks of financial instruments using PD (Probability of Default), LGD (Loss Given Default), and EAD (Exposure at Default) utilizing the risk estimation methodology of Basel II. The Group applies the Basel basis conservatively to reflect the credit card crisis of 2003 and the nature of the credit card business. Credit risks of derivatives, due from banks and securities are assessed using the modified standard methodology of Basel. Credit risks are divided into respective business segments and merchandise segments, and the Group sets limits for each segment, which are monitored by the risk control process, and established an action plan in case that credit risks get close to, or exceed limits.

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4. Financial Risk Management (continued)

(b) Credit risk (continued)

(i) Exposure to credit risk

The carrying amount of financial instruments represents the Group's maximum exposure to credit risk. Exposure to credit risk of the Group as of December 31, 2022 and 2021 are as follows. Cash held by the Group is excluded.

	<u>2022</u>	<u>2021</u>
Due from banks and credit card receivables at amortized cost and others(*)		
Banks	₩ 664,097	435,172
Retail	6,787,006	6,150,564
Government/ Public section/ Central bank	725	603
Corporations	2,960,420	2,778,119
Card receivable	<u>27,083,541</u>	<u>24,826,232</u>
	<u>37,495,789</u>	<u>34,190,690</u>
Financial assets at FVTPL		
Debt securities	9,924	3,803
Beneficiary certificates	<u>371,012</u>	<u>344,710</u>
	<u>380,936</u>	<u>348,513</u>
Financial assets at FVOCI		
Debt securities	302,693	161,494
Derivative financial assets	196,596	88,201
Other assets(*)		
Other financial assets	928,626	766,652
	<u>₩ 39,304,640</u>	<u>35,555,550</u>

(*) The maximum exposure to credit risk is measured as net of allowance for doubtful accounts, deferred loan origination costs (fees), and present value discount amount.

As of December 31, 2022 and 2021, the maximum exposure to credit risk caused by unused credit commitments amounted to ₩91,358,278 million and ₩87,060,206 million, respectively. As of December 31, 2022 and 2021, the securities purchase agreement signed by the Group are ₩104,546 million and ₩34,468 million, respectively.

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4. Financial Risk Management (continued)

(b) Credit risk (continued)

(ii) Credit risk exposure by measurement method

Details of the financial instruments based on measurement method of loss allowance by internal credit rating as of December 31, 2022 and 2021 are as follows:

	2022							
	12-month ECLs measurement		Lifetime ECLs measurement		Impaired assets	Subtotal	Allowance for doubtful accounts	Total
	Prime	Normal	Prime	Normal	Impaired			
Due from banks and credit card receivables at amortized cost								
Banks	₩ 664,066	36	-	-	-	664,102	(5)	664,097
Retail	5,561,921	909,560	215,491	165,159	74,844	6,926,975	(139,969)	6,787,006
Government								
/Public section								
/Central bank	725	-	-	-	-	725	-	725
Corporations	1,042,986	1,832,326	1,930	116,682	4,629	2,998,553	(38,133)	2,960,420
Card receivable	20,857,764	2,447,850	1,670,848	2,647,398	487,351	28,111,211	(1,027,670)	27,083,541
	28,127,462	5,189,772	1,888,269	2,929,239	566,824	38,701,566	(1,205,777)	37,495,789
Financial assets at FVOCI								
Debt securities(*)	302,693	-	-	-	-	302,693	-	302,693
	₩ 28,430,155	5,189,772	1,888,269	2,929,239	566,824	39,004,259	(1,205,777)	37,798,482

(*) As of December 31, 2022, the allowance for expected credit loss of debt securities at fair value through other comprehensive income is ₩98 million.

	2021							
	12-month ECLs measurement		Lifetime ECLs measurement		Impaired assets	Subtotal	Allowance for doubtful accounts	Total
	Prime	Normal	Prime	Normal	Impaired			
Due from banks and credit card receivables at amortized cost								
Banks	₩ 435,172	-	-	-	-	435,172	-	435,172
Retail	4,988,378	906,265	179,144	126,342	88,225	6,288,354	(137,790)	6,150,564
Government								
/Public section								
/Central bank	603	-	-	-	-	603	-	603
Corporations	1,185,515	1,508,038	1,377	106,002	2,255	2,803,187	(25,068)	2,778,119
Card receivable	18,795,883	2,329,609	1,829,345	2,335,646	421,813	25,712,296	(886,064)	24,826,232
	25,405,551	4,743,912	2,009,866	2,567,990	512,293	35,239,612	(1,048,922)	34,190,690
Financial assets at FVOCI								
Debt securities(*)	161,494	-	-	-	-	161,494	-	161,494
	₩ 25,567,045	4,743,912	2,009,866	2,567,990	512,293	35,401,106	(1,048,922)	34,352,184

(*) As of December 31, 2021, the allowance for expected credit loss of debt securities at fair value through other comprehensive income is ₩24 million.

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4. Financial Risk Management (continued)

(b) Credit risk (continued)

Details of the off-balance item based on measurement method of loss allowance by internal credit rating as of December 31, 2022 and 2021 are as follows:

		2022			
		Loan commitments and other credit-related liabilities			
		Prime	Normal	Impaired	Total
Loan commitments and other credit-related liabilities	₩				
12-month expected credit loss					
	₩	86,373,438	2,217,839	-	88,591,277
Lifetime expected credit loss					
		1,890,951	976,498	-	2,867,449
Impaired financial asset		-	-	4,098	4,098
	₩	<u>88,264,389</u>	<u>3,194,337</u>	<u>4,098</u>	<u>91,462,824</u>
		2021			
		Loan commitments and other credit-related liabilities			
		Prime	Normal	Impaired	Total
Loan commitments and other credit-related liabilities	₩				
12-month expected credit loss					
		80,299,149	2,333,776	-	82,632,925
Lifetime expected credit loss					
		3,469,031	988,835	-	4,457,866
Impaired financial asset		-	-	3,883	3,883
	₩	<u>83,768,180</u>	<u>3,322,611</u>	<u>3,883</u>	<u>87,094,674</u>

In the case of individual members, based on the internal credit rating, the Group manages the members with lower credit loss ratio compared to the profit ratio before impairment with prime, while others are classified as normal. In case of corporate members, AAA ~ BBB+ rating and non-rating of government/public section/central bank are classified as prime, while others are classified as normal.

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4. Financial Risk Management (continued)

(b) Credit risk (continued)

(iii) Concentration by geographic location

An analysis of concentration by geographic location for financial instrument, net of allowance, as of December 31, 2022 and 2021 are as follows:

	2022								
	Korea	USA	UK	Japan	Germany	Vietnam	China	Other	Total
Due from banks and credit card receivables at amortized cost:									
Banks	₩ 625,294	-	-	-	-	21,591	-	17,212	664,097
Retail	6,110,356	1,340	70	16	-	544,878	8,797	121,549	6,787,006
Government/Public section/									
Central bank	24	-	-	-	-	701	-	-	725
Corporations	2,848,312	-	-	-	-	-	-	112,108	2,960,420
Card receivable	27,007,623	10,055	337	2,225	254	5,326	38,312	19,409	27,083,541
	<u>36,591,609</u>	<u>11,395</u>	<u>407</u>	<u>2,241</u>	<u>254</u>	<u>572,496</u>	<u>47,109</u>	<u>270,278</u>	<u>37,495,789</u>
Securities measured at									
FVTPL	380,936	-	-	-	-	-	-	-	380,936
Securities at FVOCI	302,693	-	-	-	-	-	-	-	302,693
	<u>₩ 37,275,238</u>	<u>11,395</u>	<u>407</u>	<u>2,241</u>	<u>254</u>	<u>572,496</u>	<u>47,109</u>	<u>270,278</u>	<u>38,179,418</u>
Off-balance accounts									
Loan commitments and other liabilities related credit	₩ 91,272,312	33,083	1,021	10,685	769	4,132	93,353	47,469	91,462,824
	<u>₩ 91,272,312</u>	<u>33,083</u>	<u>1,021</u>	<u>10,685</u>	<u>769</u>	<u>4,132</u>	<u>93,353</u>	<u>47,469</u>	<u>91,462,824</u>
	2021								
	Korea	USA	UK	Japan	Germany	Vietnam	China	Other	Total
Due from banks and credit card receivables at amortized cost:									
Banks	₩ 417,001	-	-	-	-	9,706	-	8,465	435,172
Retail	5,589,064	2,201	84	15	-	425,368	8,196	125,636	6,150,564
Government/Public section/									
Central bank	77	-	-	-	-	526	-	-	603
Corporations	2,778,119	-	-	-	-	-	-	-	2,778,119
Card receivable	24,762,956	8,853	377	1,989	215	1,423	32,198	18,221	24,826,232
	<u>33,547,217</u>	<u>11,054</u>	<u>461</u>	<u>2,004</u>	<u>215</u>	<u>437,023</u>	<u>40,394</u>	<u>152,322</u>	<u>34,190,690</u>
Securities measured at									
FVTPL	348,513	-	-	-	-	-	-	-	348,513
Securities at FVOCI	161,494	-	-	-	-	-	-	-	161,494
	<u>₩ 34,057,224</u>	<u>11,054</u>	<u>461</u>	<u>2,004</u>	<u>215</u>	<u>437,023</u>	<u>40,394</u>	<u>152,322</u>	<u>34,700,697</u>
Off-balance accounts									
Loan commitments and other liabilities related credit	₩ 86,920,624	30,601	953	10,861	751	3,519	82,119	45,246	87,094,674
	<u>₩ 86,920,624</u>	<u>30,601</u>	<u>953</u>	<u>10,861</u>	<u>751</u>	<u>3,519</u>	<u>82,119</u>	<u>45,246</u>	<u>87,094,674</u>

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4. Financial Risk Management (continued)

(b) Credit risk (continued)

(iv) Concentration by industry sector

An analysis of concentration by industry sector of financial instrument, net of allowance, as of and December 31, 2022 and 2021 are as follows:

	2022								
	Finance and insurance	Manu facturing	Retail and wholesale	Real estate and business	Construction service	Lodging and Restaurant	Other	Retail customers	Total
Due from banks and credit card receivables at amortized cost:									
Banks	₩ 664,097	-	-	-	-	-	-	-	664,097
Retail	-	-	-	-	-	-	-	6,787,006	6,787,006
Government/ Public section/ Central bank	701	-	-	-	-	-	24	-	725
Corporations	542,222	355,412	359,662	208,190	175,029	8,190	1,311,715	-	2,960,420
Card receivable	64,346	274,169	255,931	45,030	45,936	19,473	1,053,766	25,324,890	27,083,541
	<u>1,271,366</u>	<u>629,581</u>	<u>615,593</u>	<u>253,220</u>	<u>220,965</u>	<u>27,663</u>	<u>2,365,505</u>	<u>32,111,896</u>	<u>37,495,789</u>
Securities measured at FVTPL	-	-	-	-	-	-	380,936	-	380,936
Securities at FVOCI	-	-	-	-	-	-	302,693	-	302,693
	<u>₩ 1,271,366</u>	<u>629,581</u>	<u>615,593</u>	<u>253,220</u>	<u>220,965</u>	<u>27,663</u>	<u>3,049,134</u>	<u>32,111,896</u>	<u>38,179,418</u>
Off-balance accounts									
Loan commitments and other liabilities related credit	292,848	735,625	531,173	177,612	125,114	89,081	1,863,103	87,648,268	91,462,824

	2021								
	Finance and insurance	Manu facturing	Retail and wholesale	Real estate and business	Construction service	Lodging and Restaurant	Other	Retail customers	Total
Due from banks and credit card receivables at amortized cost:									
Banks	₩ 435,172	-	-	-	-	-	-	-	435,172
Retail	-	-	-	-	-	-	-	6,150,564	6,150,564
Government/ Public section/ Central bank	526	-	-	-	-	-	77	-	603
Corporations	827,987	331,955	407,942	158,264	162,412	6,667	882,892	-	2,778,119
Card receivable	51,024	250,764	218,870	43,130	40,788	18,653	944,680	23,258,323	24,826,232
	<u>1,314,709</u>	<u>582,719</u>	<u>626,812</u>	<u>201,394</u>	<u>203,200</u>	<u>25,320</u>	<u>1,827,649</u>	<u>29,408,887</u>	<u>34,190,690</u>
Securities measured at FVTPL	-	-	-	-	-	-	348,513	-	348,513
Securities at FVOCI	-	-	-	-	-	-	161,494	-	161,494
	<u>₩ 1,314,709</u>	<u>582,719</u>	<u>626,812</u>	<u>201,394</u>	<u>203,200</u>	<u>25,320</u>	<u>2,337,656</u>	<u>29,408,887</u>	<u>34,700,697</u>
Off-balance accounts									
Loan commitments and other liabilities related credit	315,035	711,063	607,284	191,309	128,575	105,521	1,826,610	83,209,277	87,094,674

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4. Financial risk management (continued)

(b) Credit risk (continued)

(iv) Reflection of forward-looking information

The Group reflects the forward-looking information presented by the internal expert group based on various information when measuring expected credit losses. For the purpose of forecasting this forward-looking information, the Group utilizes the economic prospects disclosed by domestic and overseas research institutes or government and public institutions.

The Group reflects the future macroeconomic situation reflecting the weights calculated by the Group in the measurement of expected loss. The expected loss in this respect reflects the most likely outcome and is based on the same assumptions as the Group estimates based on its business plan and management strategy.

The Group analyzed data from the past to derive correlations between major macroeconomic variables and credit risk necessary for predicting credit risk and credit loss for each portfolio, and then reflected forward-looking information through regression equation estimation. To reflect the COVID-19 economic situation, the Group reviewed three scenarios: upside, central and downside, and reflected the final forward-looking information.

Major macroeconomic variables(*)	Correlation between credit risks
GDP growth rate	Negative correlation
Private consumption growth rate	Negative correlation
Facility investment growth rate	Negative correlation
Base rate	Positive correlation
Domestic consumption growth rate	Negative correlation

(*) In addition to the above table, the forecast for the composite stock index was additionally selected.

The predicted correlation between the macroeconomic variables used by the Group and the risk of default is derived based on long-term data over the past 10 years.

When estimating the default rate considering future economic prospects, the recent actual default rate is an important reference. Although various economic indicators deteriorated due to the economic contraction caused by COVID-19 in 2022, the actual measurement default rate of the Group is being maintained stably.

The Group has considered multiple economic scenarios in applying forward-looking information for measuring expected credit loss. If the weight of the upside, central, and downside scenarios is assumed to be 100% with all other assumptions held constant the sensitivity analysis according to the impact on the Group's expected credit loss provision is as follows.

Scenarios	100% Assumption	Difference to book amount
Upside	₩ 1,364,624	₩ (68,069)
Central	1,418,448	(14,245)
Downside	1,504,987	72,295

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4. Financial Risk Management (continued)

(c) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. Liquidity risk could be caused by maturity mismatch of financial assets and liabilities, or temporary insolvency by unexpected cash outflows. It includes economic losses that the Group will incur in the process of financing high interest rates, or disposing of invested assets in order to meet its obligations. The Group manages liquidity risk by considering all liquidity variation factors that can cause cash inflows and outflows.

The Group sets the goal of “month-end liquidity” as the liquidity level at which the Group could pay its obligations in the next three months. Real liquidity gap ratio of maturity of financial assets and liabilities, liquidity buffer ratio and ABS to borrowings ratio are major indices of liquidity risks monitored by the Group, defined as cautious, apprehensive, and risky. The Group has prepared contingency plans for various liquidity crises.

(i) Maturity analysis of non-derivative financial instruments

The maturity analysis for non-derivative financial assets and liabilities as of December 31, 2022 and 2021 are as follows: Such undiscounted contractual cash flows differ from the discounted amount included in the consolidated statements of financial position, as they include estimated interest payments.

The Group expects that there would be no significant changes in the timing of cash flows.

	2022						Total
	Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	Over 5 years	
Assets:							
Cash and due from banks (*1)	₩ 463,814	-	-	-	-	-	463,814
Credit card receivables at amortized cost and other	12,430,741	7,253,758	4,297,465	5,491,232	10,743,066	334,958	40,551,220
Financial assets at FVTPL	389,326	-	-	-	-	-	389,326
Financial assets at FVOCI	302,693	-	-	-	-	72,778	375,471
Other financial assets	882,130	12,263	3,647	23,240	24,725	3,024	949,029
	<u>₩ 14,468,704</u>	<u>7,266,021</u>	<u>4,301,112</u>	<u>5,514,472</u>	<u>10,767,791</u>	<u>410,760</u>	<u>42,728,860</u>
Liabilities:							
Borrowings	₩ 142,973	237,705	67,343	1,382,940	7,495,522	-	9,326,483
Debentures	545,094	1,524,512	1,656,389	3,853,963	14,683,000	370,933	22,633,891
Other financial liabilities	3,233,182	14,857	31,223	53,902	599,019	3,693	3,935,876
	<u>₩ 3,921,249</u>	<u>1,777,074</u>	<u>1,754,955</u>	<u>5,290,805</u>	<u>22,777,541</u>	<u>374,626</u>	<u>35,896,250</u>
Off-balance item (*2):							
Securities purchase agreement	104,546	-	-	-	-	-	104,546
Unused credit commitments	91,358,278	-	-	-	-	-	91,358,278
	<u>₩ 91,462,824</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>91,462,824</u>

(*1) Restricted due from banks as of December 31, 2022 are excluded.

(*2) Unused credit commitments are classified into the earliest possible period because the payment must be executed immediately if the counterparty requests payment.

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4. Financial Risk Management (continued)

(c) Liquidity risk (continued)

(i) Maturity analysis of non-derivative financial instruments (continued)

	2021						Total
	Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	Over 5 years	
Assets:							
Cash and due from banks (*1) ₩	319,868	-	-	-	-	-	319,868
Credit card receivables at amortized cost and other	11,340,382	6,525,297	4,526,182	5,284,745	8,974,750	255,068	36,906,424
Financial assets at FVTPL	353,562	-	-	-	-	-	353,562
Financial assets at FVOCI	161,494	-	-	-	-	35,525	197,019
Other financial assets	723,936	7,515	5,883	13,916	29,273	3,670	784,193
₩	<u>12,899,242</u>	<u>6,532,812</u>	<u>4,532,065</u>	<u>5,298,661</u>	<u>9,004,023</u>	<u>294,263</u>	<u>38,561,066</u>
Liabilities:							
Borrowings	₩ 480,214	700,334	273,377	213,314	5,168,660	-	6,835,899
Debentures	581,844	462,642	1,339,704	3,471,327	15,143,405	641,606	21,640,528
Other financial liabilities	2,648,347	15,365	24,206	41,213	403,993	12,167	3,145,291
₩	<u>3,710,405</u>	<u>1,178,341</u>	<u>1,637,287</u>	<u>3,725,854</u>	<u>20,716,058</u>	<u>653,773</u>	<u>31,621,718</u>
Off-balance item (*2):							
Securities purchase agreement	34,468	-	-	-	-	-	34,468
Unused credit commitments	87,060,206	-	-	-	-	-	87,060,206
₩	<u>87,094,674</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>87,094,674</u>

(*1) Restricted due from banks as of December 31, 2021 are excluded.

(*2) Unused credit commitments are classified into the earliest possible period because the payment must be executed immediately if the counterparty requests payment.

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4. Financial Risk Management (continued)

(c) Liquidity risk (continued)

(ii) Maturity analysis of derivative financial instruments

A maturity analysis including the remaining contractual maturities for the derivatives as of December 31, 2022 and 2021 are as follows:

The amounts shown in the table were calculated based on the information below.

- Gross settlement derivatives: gross amount of cash received or paid.

- Net settlement derivatives: net amount of cash received or paid.

		2022						
		Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	Over 5 years	Total
Net settlement								
cash inflow	₩	3,024	2,612	4,824	5,376	14,489	3,887	34,212
Gross settlement								
cash inflow		120,502	489,512	319,513	177,729	2,806,265	-	3,913,521
Gross settlement								
cash outflow		(110,037)	(450,357)	(297,352)	(162,889)	(2,645,364)	-	(3,665,999)
	₩	<u>13,489</u>	<u>41,767</u>	<u>26,985</u>	<u>20,216</u>	<u>175,390</u>	<u>3,887</u>	<u>281,734</u>
		2021						
		Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	Over 5 years	Total
Net settlement								
cash outflow	₩	(295)	(963)	(916)	(1,005)	(721)	(2,377)	(6,277)
Gross settlement								
cash inflow		91,090	184,648	222,232	435,312	2,057,776	-	2,991,058
Gross settlement								
cash outflow		(88,541)	(176,069)	(214,642)	(432,146)	(2,000,708)	-	(2,912,106)
	₩	<u>2,254</u>	<u>7,616</u>	<u>6,674</u>	<u>2,161</u>	<u>56,347</u>	<u>(2,377)</u>	<u>72,675</u>

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4. Financial Risk Management (continued)

(d) Market risk

Market risk from trading positions is the risk that changes in market prices, such as foreign exchange rates, interest rates, and equity prices will affect the Group's income or the value of its holdings of financial instruments. The Group is exposed to interest rate risk of financial assets and liabilities in the case of non-trading assets and interest rate risk of MMF (Money Market Fund) in the case of trading assets and only foreign exchange rate risk of foreign currency deposits because the Group hedges 100% cash flows of foreign currency liabilities with currency rate swaps.

The Group assesses risks of expected transactions and sets up limits to control market risks to the extent that the Group can handle. The Group assessed market risks on the basis of the Basel standard methodology and the Historical VaR (Value at Risk) method, established risk limits respectively, monitored, and established an action plan in case that market risks get close to, or exceed limits.

(i) Market risk management from trading positions

The Group assessed market risk from trading positions using the standard methodology of Financial Supervisory Service. The following represents the Group's assessment of its potential loss in financial assets at fair value through profit or loss as of December 31, 2022 and 2021 that are exposed to the respective risks:

		2022			
		<u>Average</u>	<u>Maximum</u>	<u>Low</u>	<u>December 31</u>
Interest rate risk (*)	₩	1,784	2,401	1,650	1,801

(*) Overseas subsidiaries were excluded from the calculation.

		2021			
		<u>Average</u>	<u>Maximum</u>	<u>Low</u>	<u>December 31</u>
Interest rate risk (*)	₩	1,996	2,350	1,700	1,700

(*) Overseas subsidiaries were excluded from the calculation.

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4. Financial Risk Management (continued)

(d) Market risk (continued)

(ii) VaR and EaR management from non-trading positions

-Interest rate risk from non-trading positions

The principal market risk from non-trading activities of the Group is interest rate risk. The Group makes an effort to minimize variations of net assets and profit by assessing and controlling interest rate risk of non-trading positions. Interest rate VaR and EaR, to which real interest rate variations of assets and liabilities are applied, are used to assess interest rate risk.

Interest rate VaR estimates, at a 99.9% confidence level, the expected maximum loss assuming a one-year holding period. The Group calculates the Interest rate VaR using an internal model which has been designed to apply historical interest rate scenarios provided by accompanying net asset value simulations due to interest rate changes.

Interest rate EaR (Earning at Risk) is the maximum expected loss of net interest income within the next year due to negative variations of interest rates. Interest rate EaR is computed using interest rate repricing gap, differences between expected interest rate variation timing and target period (one year) and expected interest rate variation, and also applied interest rate variation timing for each maturity level and interest rate shock (200bp) were suggested by Basel. However, interest rate shock was not applied for financial assets with low sensitivity from a conservative point of view.

Interest rate VaR and EaR of non-trading positions as of December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Interest rate VaR	₩	1,249,597	831,361
Interest rate EaR		693,911	672,303

-Equity price risk and foreign exchange rate risk from non-trading positions

The Group assessed equity price risk and foreign exchange rate risk from foreign currency equity securities of non-trading positions using the Historical VaR method. Assuming that asset returns are possible in case of crisis, historical VaR of the equity price and foreign currency rate is calculated at bottom 99% of 10 day holding period volatility for one year (250 trading days) in reporting date. Total VaR is calculated assuming that equity price risk and foreign exchange rate risk occur at the same time. Variance effect is calculated based on the difference between the total VaR and the sum of price risk and foreign exchange rate risk.

The Group does not have any non-trading positions that are exposed to equity risk and foreign exchange rate risk

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4. Financial Risk Management (continued)

(d) Market risk (continued)

(iii) Foreign exchange risk

The Group has been exposed to foreign exchange risk of financial assets and financial liabilities denominated in foreign currencies other than the functional currency, Korean won. Cash outflows of liabilities denominated by foreign currency were hedged by currency rate swap. Exposures to foreign exchange risk of foreign currency denominated assets and liabilities as of December 31, 2022 and 2021 are as follows:

	2022												KRW equivalent
	USD		SGD		KZT		IDR		MMK		VND		
	USD	KRW	SGD	KRW	KZT	KRW	IDR	KRW	MMK	KRW	VND	KRW	
Assets													
Cash	-	88	-	-	15	42	10	1	291	175	-	-	306
Deposit	-	252	-	-	843	2,319	180,340	14,589	501	303	411,082	22,075	39,538
Loans	-	-	-	-	37,509	103,150	1,502,239	121,531	15,040	9,076	10,202,907	547,896	781,653
Financial assets at FVOCI	23	29,379	-	-	-	-	-	-	-	-	-	-	29,379
Other financial assets	7	8,238	-	-	683	1,879	46,681	3,776	1,429	862	228,805	12,287	27,042
	30	37,957	-	-	39,050	107,390	1,729,270	139,897	17,261	10,416	10,842,794	582,258	877,918
Liabilities													
Debentures	(2,204)	(2,793,129)	(278)	(261,839)	-	-	-	-	-	-	(1,000,000)	(53,700)	(3,108,668)
Borrowings	(467)	(591,829)	-	-	(30,120)	(82,830)	(1,369,858)	(110,821)	(17,000)	(10,259)	(4,105,000)	(220,439)	(1,016,178)
Other financial liabilities	-	(16)	-	-	(432)	(1,187)	(32,417)	(2,623)	(2,663)	(1,607)	(875,846)	(47,033)	(52,466)
	(2,671)	(3,384,974)	(278)	(261,839)	(30,552)	(84,017)	(1,402,275)	(113,444)	(19,663)	(11,866)	(5,980,846)	(321,172)	(4,177,312)
On-balance exposure	(2,641)	(3,347,017)	(278)	(261,839)	8,498	23,373	326,995	26,453	(2,402)	(1,450)	4,861,948	261,086	(3,299,394)
Off-balance													
Derivative	2,659	3,369,751	278	261,839	-	-	-	-	-	-	-	-	3,631,590
Off-balance derivative exposure	2,659	3,369,751	278	261,839	-	-	-	-	-	-	-	-	3,631,590
Net position	18	22,734	-	-	8,498	23,373	326,995	26,453	(2,402)	(1,450)	4,861,948	261,086	332,196

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4. Financial Risk Management (continued)

(d) Market risk (continued)

(iii) Foreign exchange risk (continued)

	2021														KRW equivalent
	USD		SGD		EUR		KZT		IDR		MMK		VND		
	USD	KRW	SGD	KRW	EUR	KRW	KZT	KRW	IDR	KRW	MMK	KRW	VND	KRW	
Assets															
Cash	-	2	-	-	-	-	18	50	10	1	144	96	-	-	149
Deposit	-	15	-	-	-	-	316	858	77,095	6,407	1,802	1,202	196,389	10,232	18,714
Loans	-	-	-	-	-	-	14,594	39,549	1,409,917	117,164	29,790	19,863	8,549,188	445,413	621,989
Other financial assets	5	6,047	-	-	-	-	402	1,089	59,322	4,930	1,852	1,235	208,800	10,878	24,179
	5	6,064	-	-	-	-	15,330	41,546	1,546,344	128,502	33,588	22,396	8,954,377	466,523	665,031
Liabilities															
Debentures	(1,592)	(1,886,723)	(278)	(243,524)	(165)	(221,050)	-	-	-	-	-	-	(1,000,000)	(52,100)	(2,403,397)
Borrowings	(450)	(533,807)	-	-	-	-	(7,750)	(21,003)	(1,011,577)	(84,082)	(14,467)	(9,646)	(2,866,000)	(149,319)	(797,857)
Other financial liabilities	-	(133)	-	-	-	-	(47)	(128)	(66,239)	(5,504)	(453)	(302)	(253,650)	(13,215)	(19,282)
	(2,042)	(2,420,663)	(278)	(243,524)	(165)	(221,050)	(7,797)	(21,131)	(1,077,816)	(89,586)	(14,920)	(9,948)	(4,119,650)	(214,634)	(3,220,536)
On-balance exposure	(2,037)	(2,414,599)	(278)	(243,524)	(165)	(221,050)	7,533	20,415	468,528	38,916	18,668	12,448	4,834,727	251,889	(2,555,505)
Off-balance															
Derivative	2,042	2,420,530	278	243,524	165	221,050	-	-	-	-	-	-	-	-	2,885,104
Off-balance derivative exposure	2,042	2,420,530	278	243,524	165	221,050	-	-	-	-	-	-	-	-	2,885,104
Net position	5	5,931	-	-	-	-	7,533	20,415	468,528	38,916	18,668	12,448	4,834,727	251,889	329,599

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4. Financial Risk Management (continued)

(e) Capital risk management

The Group has exposure to credit risk, liquidity risk and market risk. By maintaining an optimal capital structure, the Group's objective is to control its financial risks, enhance its safety and soundness, stabilize the financial system, and advance the company's credit standing.

The Group operates the credit card business under the Specialized Credit Finance Business Act. Accordingly, the Group should obey the Regulations on Supervision of Specialized Credit Finance Business. The regulations require the Group to maintain an adjusted equity capital ratio of more than 8%. Adjusted total assets and adjusted equity capital for the ratio are based on the separate statements of financial position and adjusted by the regulation that considered standards of the Bank for International Settlements and the nature of credit card business. The Group observes ratios of adjusted equity capital requirements regulated by the Specialized Credit Finance Business and the Group complied with the regulatory requirement for the adjusted equity capital ratio.

5. Significant Estimates and Judgments

The preparation of consolidated financial statements requires the application of certain critical estimates and judgments relative to the future. These critical estimates and judgments are assessed continually based on the elements like historic experiences and reasonably predictable future events under current conditions. Management's estimated outcomes may differ from actual outcomes.

Information about judgments on accounting assumptions and estimates, including significant risk that may result in a material adjustment in the reported amounts of assets and liabilities within the financial year are included in the following notes.

(a) Valuation of financial instruments

The fair values of financial instruments which are not actively traded in the market are determined by using valuation techniques. The Group determines valuation methods and assumptions based on significant market conditions at the end of each reporting period. Diverse valuation techniques are used to determine the fair value of financial instruments, from generally accepted valuation models in the market to internally developed valuation model that incorporates various types of assumptions and variables.

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5. Significant Estimates and Judgments (continued)

(b) Allowance for doubtful accounts

(i) Individually assessed loan allowance

In assessing individual impairment, it is based on the best estimation of the Group's management about the present value of estimated future cash flows of secured financial assets. The present value is calculated by including cash flows from collateral after deducting costs to acquire and sell the collateral, regardless of probability of realization of such collateral.

(ii) Collectively assessed loan allowance

In assessing collective impairment, future cash flow of financial assets applicable to collective impairment assessment is estimated by using statistical methods of historical trends of the probability of default, and the loss rate at default, adjusted for management's judgment as to whether current economic and credit conditions are such that the impairment losses are likely to be greater or less than suggested by historical methods. In adjusting the future cash flow by historical methods, the result has to be in line with changes and trends of observable data (e.g. loan and borrower type, credit rating, EAD by periods, significant changes in credit rating, recovery period and other variables). Methodologies and assumptions used to estimate future cash flow are reviewed on regular basis in order to narrow down discrepancy between impairment loss estimation and actual loss.

(c) Qualifying hedge relationships

In designating financial instruments in qualifying hedge relationships, the Group has determined that it expects the hedges to be highly effective over the period of the hedging relationship. In accounting for derivatives as cash flow hedges, the Group has determined that the hedged cash flow exposure relates to highly probable future cash flows.

(d) Net defined benefit obligations

The present value of a defined benefit obligation that is measured by actuarial valuation methods uses various assumptions which can change according to various elements.

The rate used to discount post-employment benefit obligations is determined by reference to market yields at the end of the reporting period on high quality corporate bonds. The currency and term of the corporate bonds are consistent with the currency and estimated term of the post-employment benefit obligations. Actuarial gains and losses including experience adjustments and the effects of changes in actuarial assumptions are recognized in other comprehensive income.

(e) Income taxes

Within the normal business process, there are various types of transactions and different accounting methods that may add uncertainties to the realizability of tax assets. The Group has recognized current and deferred taxes that reflect tax consequences that would follow from the manner in which the entity expects, at the end of the reporting year, to recover or settle the carrying amount of its assets and liabilities. However, actual income tax in the future may not be identical to the recognized deferred tax assets and liabilities, and this difference can affect current and deferred taxes at the year when the final tax effect is conformed.

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6. Fair Value Measurement of Financial Instruments

The Group primarily uses the published price quotations in an active market for measurement of the fair value of financial instruments. If the market for a financial instrument is not active, fair value is established either by using a valuation technique or an independent third-party valuation service.

The Group uses diverse valuation techniques under reasonable assumptions which are based on the observable inputs in markets at the end of each reporting period.

Valuation techniques include using the recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models.

The Group measures fair values using the following fair value hierarchy that reflects the significance of the inputs used in making the measurements:

- Quoted market price (unadjusted) in an active market for an identical instrument (Level 1)
- Valuation techniques based on observable inputs, either directly or indirectly (Level 2)
- Valuation techniques using significant unobservable inputs (Level 3)

The level in the fair value hierarchy within which the fair value measurement is categorized in its entirety is determined on the basis of the lowest level input that is significant to the fair value measurement in its entirety. For this purpose, the significance of an input is assessed against the fair value measurement in its entirety. If a fair value measurement uses observable inputs that require significant adjustments based on unobservable inputs, that measurement is a Level 3 measurement. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgement, considering factors specific to the asset or liability.

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value

(i) *Fair value measurement methods of financial instruments that are measured at fair value are as follows:*

	<u>Fair value measurement methods</u>
Financial assets at FVTPL	In case that the market of a financial instrument is active, fair value is established at the closing quoted price as of the last day for the reporting period. Fair value of debt securities which are not quoted in an active market are determined at the amount which is present value of the future cash flow estimated reasonably discounted by the rate considering the counterparty's credit risk. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost as estimates of fair value.
Derivative assets Derivative liabilities	In case that the market of a financial instrument is active, fair value is established at the closing quoted price as of the last day for the reporting period. If the market is not active, fair value is determined at the amount which is present value of the future cash flow reasonably estimated considering the counterparty's credit risk and discounted by the appropriate rate such as a risk free rate. If observable market data for the valuation is not available enough, the valuation result of the qualified external institutes is used as fair value.
Financial assets at FVOCI	In case that the market of a financial instrument is active, fair value is established at the closing quoted price at the last day for the reporting period. Fair value of equity securities which are not quoted in an active market are measured by the valuation model of independent and professional institutes using reliable data. Equity instruments that do not have a quoted market price in an active market and whose fair values are not reliably measurable are measured at cost as an estimate of fair value.

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value (continued)

(ii) The fair value measurements classified by fair value hierarchy as of December 31, 2022 and 2021 are summarized as follows:

		2022			Total
		Level 1	Level 2	Level 3	
Financial assets					
Beneficiary certificates at FVTPL	₩	-	360,175	10,837	371,012
Debt securities at FVTPL		-	-	9,924	9,924
Equity securities at FVTPL		401	-	7,989	8,390
Derivative financial assets for hedging		-	196,596	-	196,596
Equity securities at FVOCI		-	-	72,778	72,778
Debt securities at FVOCI		266,994	35,699	-	302,693
	₩	<u>267,395</u>	<u>592,470</u>	<u>101,528</u>	<u>961,393</u>
Financial liabilities					
Derivative financial liabilities for hedging	₩	-	21,346	-	21,346
2021					
		Level 1	Level 2	Level 3	Total
Financial assets					
Beneficiary certificates at FVTPL	₩	-	341,051	3,659	344,710
Debt securities at FVTPL		-	-	3,803	3,803
Equity securities at FVTPL		1,363	-	3,686	5,049
Derivative financial assets for hedging		-	88,201	-	88,201
Equity securities at FVOCI		-	-	35,525	35,525
Debt securities at FVOCI		153,438	8,056	-	161,494
	₩	<u>154,801</u>	<u>437,308</u>	<u>46,673</u>	<u>638,782</u>
Financial liabilities					
Derivative financial liabilities for hedging	₩	-	16,243	-	16,243

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value (continued)

(iii) Changes in level 3 of the fair value hierarchy

Changes of fair value measurement in level 3 for the years ended December 31, 2022 and 2021 are as follows:

	2022				Total
	Beneficiary certificates at FVTPL	Debt securities at FVTPL	Equity securities at FVTPL	Equity securities at FVOCI	
Balance at January 1, 2022 ₩	3,659	3,803	3,686	35,525	46,673
Net gain on valuation of financial assets at FVTPL (*)	2	320	3,735	-	4,057
Net changes in the unrealized fair value of FVOCI	-	-	-	7,872	7,872
Acquisition	7,561	6,198	1,251	29,381	44,391
Disposal	(385)	(397)	(687)	-	(1,469)
Business combination	-	-	4	-	4
Balance at December 31, 2022 ₩	<u>10,837</u>	<u>9,924</u>	<u>7,989</u>	<u>72,778</u>	<u>101,528</u>

	2021				Total
	Beneficiary certificates at FVTPL	Debt securities at FVTPL	Equity securities at FVTPL	Equity securities at FVOCI	
Balance at January 1, 2022 ₩	-	3,128	3,715	32,143	38,986
Net gain on valuation of financial assets at FVTPL (*)	127	285	-	-	412
Net changes in the unrealized fair value of FVOCI	-	-	-	7,550	7,550
Acquisition	3,532	390	1,000	200	5,122
Reclassification to level 1	-	-	(900)	-	(900)
Transfer to investment stocks accounted for using the equity method	-	-	(129)	-	(129)
Disposal	-	-	-	(4,368)	(4,368)
Balance at December 31, 2021 ₩	<u>3,659</u>	<u>3,803</u>	<u>3,686</u>	<u>35,525</u>	<u>46,673</u>

(*) Recognized profit or loss of the changes in carrying amount of financial instruments classified as Level 3 for the years ended December 31, 2022 and 2021 are included in the accounts of the statements of comprehensive income, of which the amounts and the related accounts are as follows.

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value (continued)

(iii) *Changes in level 3 of the fair value hierarchy (continued)*

	2022	
	Amounts recognized in profit or loss	Recognized profit or loss from the financial instruments held as of December 31
Net gain on financial assets at fair value through profit or loss	₩ 4,057	4,057

	2021	
	Amounts recognized in profit or loss	Recognized profit or loss from the financial instruments held as of December 31
Net gain on financial assets at fair value through profit or loss	₩ 412	412

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value (continued)

(iv) Valuation techniques and inputs related to level 2

Information about valuation techniques and inputs in measuring financial instruments categorized as level 2 as of December 31, 2022 and 2021 are as follows:

		2022		
	Valuation techniques	Type of financial instruments	Carrying amount	Significant inputs
Financial assets at FVTPL:	Net asset value, etc.	Beneficiary certificates	₩ 360,175	Interest rate
Derivative assets:	Discounted cash flow	Interest rate swap, Currency swap	196,596	Discount rate exchange rate, etc.
Financial assets at FVOCI:	Discounted cash flow	Debt securities	₩ <u>35,699</u> <u>592,470</u>	Interest rate
Derivative liabilities:	Discounted cash flow	Interest rate swap, Currency swap	₩ 21,346	Discount rate exchange rate, etc.
		2021		
	Valuation techniques	Type of financial instruments	Carrying amount	Significant inputs
Financial assets at FVTPL:	Net asset value, etc.	Beneficiary certificates	₩ 341,051	Interest rate
Derivative assets:	Discounted cash flow	Interest rate swap, Currency swap	88,201	Discount rate, exchange rate, etc.
Financial assets at FVOCI:	Discounted cash flow	Debt securities	₩ <u>8,056</u> <u>437,308</u>	Interest rate
Derivative liabilities:	Discounted cash flow	Interest rate swap, Currency swap	₩ 16,243	Discount rate, exchange rate, etc.

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value (continued)

(v) *Valuation techniques and inputs related to level 3*

Information about valuation techniques and inputs in measuring financial instruments categorized as level 3 as of December 31, 2022 and 2021 are as follows:

		2022			
	Valuation techniques	Type of financial instruments	Carrying amount	Significant unobservable inputs	Range of estimates for unobservable inputs
Financial assets at FVTPL:	Net asset value, etc.	Beneficiary certificates	₩ 10,837	Asset value	-
		Debt securities	9,924		
		Equity securities	7,989		
Financial assets at FVOCI:	Discounted cash flow, etc.	Equity securities	72,778	Discount rate. Growth rate	9.25%~17.98%, 0.00%
			<u>₩ 101,528</u>		
		2021			
	Valuation techniques	Type of financial instruments	Carrying amount	Significant unobservable inputs	Range of estimates for unobservable inputs
Financial assets at FVTPL:	Net asset value, etc.	Beneficiary certificates	₩ 3,659	Asset value	-
		Debt securities	3,803		
		Equity securities	3,686		
Financial assets at FVOCI:	Discounted cash flow, etc.	Equity securities	35,525	Discount rate Growth rate	10.46%~13.66%, 1.00%
			<u>₩ 46,673</u>		

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6. Fair Value Measurement of Financial Instruments (continued)

(a) Financial instruments measured at fair value (continued)

(vi) *Sensitivity to changes on unobservable inputs*

For level 3 fair value measurement, a reasonably possible change in one or more of the unobservable inputs used to determine the fair value would have the following effect on profit or loss, or other comprehensive.

<u>Type of financial instrument</u>		<u>2022</u>	
		<u>Favorable change</u>	<u>Unfavorable change</u>
Financial assets at FVOCI (*)	₩	4,639	(3,353)

(*) Changes in fair value have been assessed by increasing or decreasing unobservable inputs such as growth rate (-1%~1%) and discount rate (-1%~1%).

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6. Fair Value Measurement of Financial Instruments (continued)

(b) Financial instruments measured at amortized cost

(i) *The methods of measuring the fair value of financial instruments measured at amortized cost are as follows:*

	<u>Fair value measurement methods</u>
Cash and due from banks	Carrying amount of cash is the same as fair value. Carrying amount (matured within three months at acquisition date) is used as approximation of fair value for cash equivalents. Fair value of other due from banks is present value of expected cash flows discounted by the rate considering market interest rate and spread.
Credit card receivables at amortized Cost and others	Fair value of credit card receivables measured at amortized cost and other is the present value of expected cash flows discounted by the rate considering market interest rate and counterparty's credit ratings. However, carrying amount is used as approximation of fair value for credit card receivables for lump-sum purchase and cash advances which contractual credit period granted is less than three months.
Other financial assets	Fair value of other financial assets is the present value of expected cash flows discounted by the rate considering market interest rate and counterparty's credit ratings. However, carrying amount is used as approximation of fair value for other financial assets when reliable expected cash flow is not available.
Borrowings	Fair value of borrowings is the present value of expected cash flows discounted by the rate considering market interest rate and the Group's credit ratings.
Debentures	Where the market of a financial instrument is active, fair value is established at the quoted price. Fair value of debentures which quoted market price is not available is determined to be the present value of contractual cash flows discounted by the rate considering market interest rate and the Group's credit ratings.
Other financial liabilities	Fair value of other financial liabilities is determined to be the present value of contractual cash flows discounted by the rate considering market interest rate and the Group's credit ratings. Carrying amount is used as approximation of fair value of liabilities when reliable expected cash flows are not available.

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6. Fair Value Measurement of Financial Instruments (continued)

(b) Financial instruments measured at amortized cost (continued)

(ii) The carrying amount and the fair value of financial instruments measured at amortized cost as of December 31, 2022 and 2021 are as follows:

		2022			
		Carrying amount			
	Balance	Deferred loan origination costs and others	Allowance for doubtful accounts	Total	Fair value
Financial assets					
Cash	₩ 306	-	-	306	306
Deposits	664,622	-	-	664,622	664,622
Credit card receivables	28,157,165	(45,954)	(1,027,670)	27,083,541	27,441,994
Loans	3,811,385	41,436	(112,058)	3,740,763	3,755,823
Installment assets	4,286,136	44,766	(48,796)	4,282,106	4,200,443
Lease assets	1,742,301	(291)	(17,253)	1,724,757	1,684,006
Other assets	949,029	(1,905)	(18,498)	928,626	927,706
	₩ 39,610,944	38,052	(1,224,275)	38,424,721	38,674,900
Financial liabilities					
Borrowings	₩ 9,136,178	-	-	9,136,178	8,612,624
Debentures in won	18,415,000	(9,093)	-	18,405,907	17,675,091
Debentures in foreign currency	3,108,669	(11,760)	-	3,096,909	2,953,336
Other liabilities	3,935,876	(65,117)	-	3,870,759	3,834,365
	₩ 34,595,723	(85,970)	-	34,509,753	33,075,416

		2021			
		Carrying amount			
	Balance	Deferred loan origination costs and others	Allowance for doubtful accounts	Total	Fair value
Financial assets					
Cash	₩ 149	-	-	149	149
Deposits	435,513	-	-	435,513	435,513
Credit card receivables	25,765,133	(52,837)	(886,064)	24,826,232	25,205,111
Loans	3,685,650	26,968	(93,125)	3,619,493	3,642,227
Installment assets	3,978,560	44,547	(41,777)	3,981,330	3,970,448
Lease assets	1,356,210	(132)	(27,956)	1,328,122	1,325,797
Other assets	784,193	(1,313)	(16,228)	766,652	766,373
	₩ 36,005,408	17,233	(1,065,150)	34,957,491	35,345,618
Financial liabilities					
Borrowings	₩ 6,662,856	-	-	6,662,856	6,607,721
Debentures in won	18,455,000	(8,560)	-	18,446,440	18,330,682
Debentures in foreign currency	2,403,397	(7,969)	-	2,395,428	2,399,729
Other liabilities	3,145,291	(24,202)	-	3,121,089	3,117,270
	₩ 30,666,544	(40,731)	-	30,625,813	30,455,402

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6. Fair Value Measurement of Financial Instruments (continued)

(b) Financial instruments measured at amortized cost (continued)

(iii) The fair value hierarchy of financial instruments which are measured at amortized cost in the consolidated statements of financial position as of December 31, 2022 and 2021 are as follows:

		2022			
		Level 1	Level 2	Level 3	Total
Financial assets					
Cash	₩	306	-	-	306
Deposits			664,622	-	664,622
Credit card receivables		-	-	27,441,994	27,441,994
Loans		-	-	3,755,823	3,755,823
Installment assets		-	-	4,200,443	4,200,443
Lease assets		-	-	1,684,006	1,684,006
Other assets		-	-	927,706	927,706
	₩	<u>306</u>	<u>664,622</u>	<u>38,009,972</u>	<u>38,674,900</u>
Financial liabilities:					
Borrowings	₩	-	-	8,612,624	8,612,624
Debentures in won		-	-	17,675,091	17,675,091
Debentures in foreign currency		-	-	2,953,336	2,953,336
Other liabilities		-	-	3,834,365	3,834,365
	₩	<u>-</u>	<u>-</u>	<u>33,075,416</u>	<u>33,075,416</u>
		2021			
		Level 1	Level 2	Level 3	Total
Financial assets					
Cash	₩	149	-	-	149
Deposits		-	435,513	-	435,513
Credit card receivables		-	-	25,205,111	25,205,111
Loans		-	-	3,642,227	3,642,227
Installment assets		-	-	3,970,448	3,970,448
Lease assets		-	-	1,325,797	1,325,797
Other assets		-	-	766,373	766,373
	₩	<u>149</u>	<u>435,513</u>	<u>34,909,956</u>	<u>35,345,618</u>
Financial liabilities:					
Borrowings	₩	-	-	6,607,721	6,607,721
Debentures in won		-	-	18,330,682	18,330,682
Debentures in foreign currency		-	-	2,399,729	2,399,729
Other liabilities		-	-	3,117,270	3,117,270
	₩	<u>-</u>	<u>-</u>	<u>30,455,402</u>	<u>30,455,402</u>

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7. Categories of Financial Instruments

(a) The carrying amounts of the categories of financial assets as of December 31, 2022 and 2021 are summarized as follows:

		2022				
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Derivative for hedge	Total
Cash and due from banks	₩	-	664,928	-	-	664,928
Financial assets at FVTPL		389,326	-	-	-	389,326
Derivative assets		-	-	-	196,596	196,596
Credit card receivables at amortized cost and other (*)		-	36,831,167	-	-	36,831,167
Financial assets at FVOCI		-	-	375,471	-	375,471
Other financial assets		-	928,626	-	-	928,626
	₩	<u>389,326</u>	<u>38,424,721</u>	<u>375,471</u>	<u>196,596</u>	<u>39,386,114</u>

(*) It includes ₩1,724,757 million in financial lease receivables under Korean IFRS 1116.

		2021				
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Derivative for hedge	Total
Cash and due from banks	₩	-	435,662	-	-	435,662
Financial assets at FVTPL		353,562	-	-	-	353,562
Derivative assets		-	-	-	88,201	88,201
Credit card receivables at amortized cost and other (*)		-	33,755,177	-	-	33,755,177
Financial assets at FVOCI		-	-	197,019	-	197,019
Other financial assets		-	766,652	-	-	766,652
	₩	<u>353,562</u>	<u>34,957,491</u>	<u>197,019</u>	<u>88,201</u>	<u>35,596,273</u>

(*) It includes ₩1,328,122 million in financial lease receivables under Korean IFRS 1116.

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7. Categories of Financial Instruments (continued)

(b) The carrying amounts of the categories of financial liabilities as of December 31, 2022 and 2021 are summarized as follows:

2022			
	Financial liabilities measured at amortized cost	Derivative for hedge	Total
Derivative liabilities	₩ -	21,346	21,346
Borrowings	9,136,178	-	9,136,178
Debentures	21,502,816	-	21,502,816
Other financial liabilities (*)	3,870,759	-	3,870,759
	₩ 34,509,753	21,346	34,531,099

(*) It includes ₩25,654 million in financial liabilities under Korean IFRS 1116.

2021			
	Financial liabilities measured at amortized cost	Derivative for hedge	Total
Derivative liabilities	₩ -	16,243	16,243
Borrowings	6,662,856	-	6,662,856
Debentures	20,841,868	-	20,841,868
Other financial liabilities (*)	3,121,089	-	3,121,089
	₩ 30,625,813	16,243	30,642,056

(*) It includes ₩25,801 million in financial liabilities under Korean IFRS 1116

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7. Categories of Financial Instruments (continued)

(c) Net gains (losses) of categories of financial instruments for the years ended December 31, 2022 and 2021 are as follows:

	2022								
	Interest income	Interest expense	Fee and commission income	Fee and commission expense	Dividend income	Provision for credit loss allowance	Other operating income, net	Net income (loss)	Other comprehensive income (loss)
Financial assets									
Financial assets at FVTPL	₩ -	-	-	-	35	-	19,867	19,902	-
Financial assets at amortized cost (*)	2,501,669	-	1,758,461	(1,221,388)	-	(556,691)	16,900	2,498,951	-
Financial assets at FVOCI	7,033	-	-	-	380	(74)	-	7,339	(10,984)
Derivative for hedge	-	-	-	-	-	-	191,068	191,068	(12,452)
	<u>2,508,702</u>	<u>-</u>	<u>1,758,461</u>	<u>(1,221,388)</u>	<u>415</u>	<u>(556,765)</u>	<u>227,835</u>	<u>2,717,260</u>	<u>(23,436)</u>
Financial liabilities									
Financial liabilities at amortized cost (*)	-	(710,697)	-	-	-	-	-	(710,697)	-
	<u>₩ 2,508,702</u>	<u>(710,697)</u>	<u>1,758,461</u>	<u>(1,221,388)</u>	<u>415</u>	<u>(556,765)</u>	<u>227,835</u>	<u>2,006,563</u>	<u>(23,436)</u>

(*) It includes finance income and costs occurred as a result of finance lease receivables and lease liability in accordance with Korean IFRS 1116 'Leases'

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7. Categories of Financial Instruments (continued)

(c) Net gains (losses) of categories of financial instruments for the years ended December 31, 2022 and 2021 are as follows: (continued)

	2021								
	Interest income	Interest expense	Fee and commission income	Fee and commission expense	Dividend income	Provision for credit loss allowance	Other operating income, net	Net income (loss)	Other comprehensive income (loss)
Financial assets									
Financial assets at FVTPL	₩ -	-	-	-	30	-	10,544	10,574	-
Financial assets at amortized cost (*)	2,304,525	-	1,618,369	(1,156,732)	-	(433,578)	14,918	2,347,502	-
Financial assets at FVOCI	1,528	-	-	-	400	(24)	-	1,904	4,611
Derivative for hedge	-	-	-	-	-	-	216,006	216,006	22,740
	<u>2,306,053</u>	<u>-</u>	<u>1,618,369</u>	<u>(1,156,732)</u>	<u>430</u>	<u>(433,602)</u>	<u>241,468</u>	<u>2,575,986</u>	<u>27,351</u>
Financial liabilities									
Financial liabilities at amortized cost (*)	-	(506,900)	-	-	-	-	-	(506,900)	-
	<u>₩ 2,306,053</u>	<u>(506,900)</u>	<u>1,618,369</u>	<u>(1,156,732)</u>	<u>430</u>	<u>(433,602)</u>	<u>241,468</u>	<u>2,069,086</u>	<u>27,351</u>

(*) It includes finance income and costs occurred as a result of finance lease receivables and lease liability in accordance with Korean IFRS 1116 'Leases'

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7. Categories of Financial Instrument (continued)

(d) The amounts of foreign exchange differences recognized in profit or loss for each category of financial instruments for the years ended December 31, 2022 and 2021 are as follows:

	2022			2021		
	Gain on foreign currency transaction	Loss on foreign currency transaction	Net amount	Gain on foreign currency transaction	Loss on foreign currency transaction	Net amount
Financial assets at amortized cost	₩ 48,492	(9,581)	38,911	35,152	(4,480)	30,672
Financial liabilities at amortized cost	27,609	(227,312)	(199,703)	3,655	(222,363)	(218,708)
	₩ <u>76,101</u>	<u>(236,893)</u>	<u>(160,792)</u>	<u>38,807</u>	<u>(226,843)</u>	<u>(188,036)</u>

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8. Offsetting Financial Assets and Financial Liabilities

Financial assets and financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2022 and 2021 are as follows:

	2022					
	Gross amounts recognized	Gross amounts recognized for offsetting	Net amounts of financial instruments	Amounts not subject to offsetting		Net amount
				Financial instruments	Cash collateral received	
Financial assets:						
Derivatives	₩ 196,596	-	196,596	7,469	-	189,127
Repurchase agreements (*)	385,000	-	385,000	385,000	-	-
Receivable spot exchange	8,238	-	8,238	8,238	-	-
Financial liabilities:						
Derivatives	21,346	-	21,346	7,469	-	13,877
Payable spot exchange	8,238	-	8,238	8,238	-	-

(*) The amounts not subject to offsetting are securities that are received as collaterals for repurchase agreements.

	2021					
	Gross amounts recognized	Gross amounts recognized for offsetting	Net amounts of financial instruments	Amounts not subject to offsetting		Net amount
				Financial instruments	Cash collateral received	
Financial assets:						
Derivatives	₩ 88,201	-	88,201	15,264	-	72,937
Repurchase agreements (*)	310,000	-	310,000	310,000	-	-
Receivable spot exchange	6,047	-	6,047	6,047	-	-
Financial liabilities:						
Derivatives	16,243	-	16,243	15,264	-	979
Payable spot exchange	6,047	-	6,047	6,047	-	-

(*) The amounts not subject to offsetting are securities that are received as collaterals for repurchase agreements.

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9. Operating Segments

The Group has a single reportable segment.

(a) Details of revenues by financial service type for the years ended December 31, 2022 and 2021 are as follows:

		2022				
		Credit card	Installment finance	Lease (*)	Others	Total
Interest incomes	₩	1,962,825	169,411	57,470	318,996	2,508,702
Fee and commission income		1,219,567	14,735	477,716	46,443	1,758,461
Other income		11,220	304	220	482,274	494,018

(*) It includes finance income and costs occurred from finance lease receivables and lease liabilities under Korean IFRS 1116.

		2021				
		Credit card	Installment finance	Lease (*)	Others	Total
Interest incomes	₩	1,878,220	138,472	47,711	241,650	2,306,053
Fee and commission income		1,202,500	14,142	364,448	37,279	1,618,369
Other income		10,032	213	173	424,787	435,205

(*) It includes finance income and costs occurred from finance lease receivables and lease liabilities under Korean IFRS 1116.

(b) Revenues from external customers for the years ended December 31, 2022 and 2021 are all attributed to the Republic of Korea, where the Group is domiciled.

(c) There is no single external customer with revenues amount to 10 percent or more of the Group's revenues for the years ended December 31, 2022 and 2021.

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10. Cash and Due from Banks

(a) Details of cash and due from banks as of December 31, 2022 and 2021 are as follows

	<u>2022</u>	<u>2021</u>
Cash	₩ 306	149
Deposits in won:		
Deposits on demand	363,235	297,719
Current deposits	47,470	841
Foreign currency deposits	38,838	18,187
Time deposits	13,951	5
Deposit for checking accounts	31	31
Deposits on demand of SPC	200,036	115,232
Deposits on foreign currency reserve	701	526
Installment payment	360	-
Others	-	2,972
	<u>₩ 664,928</u>	<u>435,662</u>

(b) Restricted due from banks as of December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>	<u>Restrictions</u>
Time deposits:			
Shinhan Bank	₩ 5	5	Pledged as collateral for cash advances
	341	-	Performance guarantee deposit
Other deposits:	<u>346</u>	<u>5</u>	
	₩ 31	31	Deposit for checking accounts
Woori Bank and others	200,036	115,232	Deposits on demand of SPC
	701	526	Deposits on foreign currency reserve
	<u>200,768</u>	<u>115,789</u>	
	<u>₩ 201,114</u>	<u>115,794</u>	

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11. Financial Assets at FVTPL

(a) Details of financial assets at FVTPL as of December 31, 2022 and 2021 are as follows and no financial assets are designated as at FVTPL.

	<u>2022</u>	<u>2021</u>
Beneficiary certificates	₩ 371,012	344,710
Debt securities	9,924	3,803
Equity securities	8,390	5,049
	<u>₩ 389,326</u>	<u>353,562</u>

(b) Details of gain or loss on financial assets at FVTPL for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Gain on valuation	₩ 4,414	959
Loss on valuation	(1,133)	(35)
Gain on disposal	9,752	4,042
Other income	6,834	5,578
	<u>₩ 19,867</u>	<u>10,544</u>

(c) Details of dividend income on financial assets at FVTPL for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Dividend income recognized in assets held at the end of the reporting period		
Equity securities	₩ 35	30
	<u>₩ 35</u>	<u>30</u>

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12. Derivatives

(a) Derivative assets and liabilities

The notional amounts and fair values of derivative assets and liabilities as of December 31, 2022 and 2021 are as follows:

		2022			2021		
		Notional amounts	Fair value		Notional amounts	Fair value	
			Assets	Liabilities		Assets	Liabilities
Currency swap	₩	3,631,590	164,998	21,346	2,885,104	83,128	5,187
Interest rate swap		1,240,000	31,598	-	1,695,000	5,073	11,056
	₩	<u>4,871,590</u>	<u>196,596</u>	<u>21,346</u>	<u>4,580,104</u>	<u>88,201</u>	<u>16,243</u>

(b) Gains (losses) on derivatives

Gains (losses) on derivatives for the years ended December 31, 2022 and 2021 are as follows:

		2022		2021	
		Gain (loss) on valuation	Gain (loss) on sale	Gain (loss) on valuation	Gain (loss) on sale
Fair value hedges:					
Currency forwards	₩	-	-	-	444
Cash flow hedges:					
Currency swaps		140,523	47,276	199,241	17,488
Interest rate swaps		3,334	(65)	(1,167)	-
	₩	<u>143,857</u>	<u>47,211</u>	<u>198,074</u>	<u>17,932</u>

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12. Derivatives (continued)

(c) Gain or Losses on Hedge accounting

i) Gains(losses) on fair value hedged items and hedging instruments attributable to the hedged ineffectiveness for the years ended December 31, 2022 and 2021 are as follows:

		2022		
		Gains (losses) on fair value hedges (hedged items)	Gains (losses) on fair value hedges (hedging instruments)	Hedge ineffectiveness recognized in profit or loss
Fair value hedges:				
Interest rate swaps	₩	-	-	-
Foreign exchange risk		-	-	-
	₩	-	-	-
		2021		
		Gains (losses) on fair value hedges (hedged items)	Gains (losses) on fair value hedges (hedging instruments)	Hedge ineffectiveness recognized in profit or loss
Fair value hedges:				
Interest rate swaps	₩	-	-	-
Foreign exchange risk		(444)	444	-
	₩	(444)	444	-

ii) Due to the ineffectiveness of hedge of cash flow risk and hedge of net investment in foreign operations during the year, the amounts recognized in profit or loss and other comprehensive income for the years ended December 31, 2022 and 2021, are as follows:

		2022		
		Gains (losses) on hedges recognized in other comprehensive income	Hedge ineffectiveness recognized in profit or loss	From cash flow hedge reserve to profit or loss Reclassified amount
Cash flow hedges:				
Interest rate risk	₩	34,312	3,334	(65)
Foreign exchange risk		(51,295)	(2,638)	190,437
	₩	(16,983)	696	190,372
		2021		
		Gains (losses) on hedges recognized in other comprehensive income	Hedge ineffectiveness recognized in profit or loss	From cash flow hedge reserve to profit or loss Reclassified amount
Cash flow hedges:				
Interest rate risk	₩	23,479	(1,167)	-
Foreign exchange risk		7,885	6,860	209,869
	₩	31,364	5,693	209,869

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12. Derivatives (continued)

(d) Hedging

i) Purpose and strategy of risk avoidance

The Group transacts with derivative financial instruments to hedge its interest rate risk and currency risk arising from the assets and liabilities of the Group. The Group applies the cash flow hedge accounting for interest rate swaps and currency swaps to hedge cash flow risk due to interest rates and foreign exchange rates of the Korean won debt, the Korean won bonds, foreign currency bonds, etc.

ii) Nominal amounts and average hedge ratios for hedging instruments as of December 31, 2022 and 2021 are as follows:

		2022						
		Within 1 year	1~2 years	2~3 years	3~4 years	4~5 years	More than 5 years	Total
Cash flow hedges :								
Currency swap (*)	₩	1,008,279	-	912,456	1,203,935	506,920	-	3,631,590
Interest rate swap		860,000	180,000	-	-	-	200,000	1,240,000
		<u>1,868,279</u>	<u>180,000</u>	<u>912,456</u>	<u>1,203,935</u>	<u>506,920</u>	<u>200,000</u>	<u>4,871,590</u>
Average hedge ratio:		100%	100%	100%	100%	100%	100%	100%
Average price condition- interest rate :		1.82%	1.10%	-	4.02%	-	2.52%	2.53%

(*) The average exchange rates conditions of Currency swap are USD/KRW 1,207.43, SGD/KRW 859.87.

		2021						
		Within 1 year	1~2 years	2~3 years	3~4 years	4~5 years	More than 5 years	Total
Cash flow hedges :								
Currency swap (*)	₩	597,778	1,078,116	-	853,560	355,650	-	2,885,104
Interest rate swap		435,000	890,000	170,000	-	-	200,000	1,695,000
		<u>1,032,778</u>	<u>1,968,116</u>	<u>170,000</u>	<u>853,560</u>	<u>355,650</u>	<u>200,000</u>	<u>4,580,104</u>
Average hedge ratio:		100%	100%	100%	100%	100%	100%	100%
Average price condition- interest rate :		1.85%	1.68%	0.99%	-	-	2.52%	1.74%

(*) The average exchange rates conditions of Currency swap are USD/KRW 1,159.22, SGD/KRW 859.87, EUR/KRW 1,284.35.

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12. Derivatives (continued)

(d) Hedging (continued)

iii) The effect that hedge accounting has had on the consolidated statements of financial position and consolidated statements of comprehensive income.

Ⓐ The effect that hedge instruments have had on the consolidated statements of financial position and consolidated statements of comprehensive income as of and for the years ended December 31, 2022 and 2021 are as follows:

		2022			
		Nominal amount	Carrying amount of asset	Carrying amount of liabilities	Changes in fair value in the period
Cash flow hedge					
	Interest rate swap	1,240,000	31,598	-	33,634
	Currency swap	3,631,590	164,998	21,346	90,756
	₩	4,871,590	196,596	21,346	124,390
		2021			
		Nominal amount	Carrying amount of asset	Carrying amount of liabilities	Changes in fair value in the period
Cash flow hedge					
	Interest rate swap	1,695,000	5,073	11,056	23,027
	Currency swap	2,885,104	83,128	5,187	204,350
	₩	4,580,104	88,201	16,243	227,377

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12. Derivatives (continued)

(d) Hedging (continued)

iii) The effect that hedge accounting has had on the consolidated statements of financial position and consolidated statements of comprehensive income. (continued)

ⓑ The effect that hedged items have had on the consolidated statements of financial position and consolidated statements of comprehensive income as of and for the years ended December 31, 2022 and 2021 are as follows:

		2022		
		<u>Carrying amount of liabilities</u>	<u>Changes in fair value</u>	<u>Cash flow hedge reserve</u>
Cash flow hedge				
Interest rate swap				
Borrowings and debentures in won	₩	1,239,605	33,236	21,680
Borrowings and debentures in foreign currency		3,620,014	89,613	(32,406)
	₩	<u>4,859,619</u>	<u>122,849</u>	<u>(10,726)</u>
		2021		
		<u>Carrying amount of liabilities</u>	<u>Changes in fair value</u>	<u>Cash flow hedge reserve</u>
Cash flow hedge				
Interest rate swap				
Borrowings and debentures in won	₩	1,694,329	22,432	(3,492)
Borrowings and debentures in foreign currency		2,877,414	202,382	5,218
	₩	<u>4,571,743</u>	<u>224,814</u>	<u>1,726</u>

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12. Derivatives (continued)

(d) Hedging (continued)

iv) Cash flow hedge activity

For cash flow hedges, the amount that was recognized in other comprehensive income and the amount that was reclassified from equity to profit or loss for the years ended December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Recognized in other comprehensive income	₩	173,389	241,233
Reclassified from equity to profit or loss		(190,372)	(209,869)
Deferred tax effect		4,531	(8,624)
Changes in accumulated other comprehensive income(loss), net	₩	<u>(12,452)</u>	<u>22,740</u>

(e) Hedge relationships affected by an interest rate index

The revised Standard requires exceptions to the analysis of future information in relation to the application of hedge accounting, while uncertainty exists due to movements of the interest rate index reform. The exception assumes that when assessing whether the expected cash flows that comply with existing interest rate index are highly probable, whether there is an economic relationship between the hedged item and the hedging instrument, and whether there is a high hedge effectiveness between the hedged item and the hedging instrument, the interest rate index that are based on the hedged item do not change due to the effect of the interest rate index reform.

The carrying amount of hedged item and the nominal amount of the hedging instrument related to the interest rate index exposed to the hedging relationship due to the Group's reform of the interest rate index as of December 31, 2022 is as follows:

		<u>2022</u>	
		<u>Notional amounts of hedging instruments</u>	<u>The book value of hedged liabilities</u>
KRW 3M CD (*1)	₩	1,240,000	1,239,605
USD 1M LIBOR (*2)		258,529	258,393

(*1) The notional amounts of hedging instrument for CMS interest rate, which is determined based on CD rate, are included.

(*2) Exclude the nominal amount of the hedging instrument that matures before the publication of LIBOR ceases.

The USD LIBOR interest rate will be replaced by a SOFR (Secured Overnight Financing Rate) based on actual transactions. In Korea, the "Korea Overnight Financing Repo Rate (KOFRR)" was finally selected as the risk-free index interest rate. The Group has assumed that in this hedging relationship, the spread changed on the basis of SOFR, KOFRR would be similar to the spread included in the interest rate swap and forward used as the hedging instrument after LIBOR rate is suspended. The Group does not assume any changes in other conditions.

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13. Credit Card Receivables at Amortized Cost and Other

(a) Details of credit card receivables at amortized cost and other as of December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Credit card receivables:		
Lump-sum purchases	₩ 7,969,699	6,966,688
Installment purchases	7,831,379	7,199,975
Cash advances	1,704,498	1,582,178
Revolving cash advances	88,869	90,274
Revolving purchases	2,623,203	2,272,233
Card loans	7,630,672	7,364,257
Restructured loans	308,382	289,165
Purchasing card	463	363
Less: Allowance for doubtful accounts	(1,027,670)	(886,064)
Present value discount account	(18,264)	(22,616)
Deferred loan origination fees	(27,690)	(30,221)
	<u>27,083,541</u>	<u>24,826,232</u>
Loans:		
General loans	3,192,297	2,769,061
Bonds purchased under repurchase agreements	385,000	310,000
Factoring receivables	113,584	109,137
Commercial paper	120,000	497,027
Others	504	425
Less: Allowance for doubtful accounts	(112,058)	(93,125)
Add : Present value premium	153	1,566
Add: Deferred loan origination costs	41,283	25,402
	<u>3,740,763</u>	<u>3,619,493</u>
Installment financing assets:		
Installment for cars	4,249,280	3,963,331
Installment for others	36,856	15,229
Less: Allowance for doubtful accounts	(48,796)	(41,777)
Less: Present value discount account	(110)	(282)
Add: Deferred loan origination costs	44,876	44,829
	<u>4,282,106</u>	<u>3,981,330</u>
Lease assets:		
Financing lease receivables	1,742,202	1,356,137
Cancelled financing lease receivables	99	73
Less: Allowance for doubtful accounts	(17,253)	(27,956)
Add : Present value premium	422	1,049
Less: Deferred loan origination fees	(713)	(1,181)
	<u>1,724,757</u>	<u>1,328,122</u>
	<u>₩ 36,831,167</u>	<u>33,755,177</u>

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13. Credit Card Receivables at Amortized Cost and Other (continued)

(b) Changes in the gross carrying amount of credit card receivables at amortized cost and other for the years ended December 31, 2022 and 2021 are as follows:

	2022			
	12 month expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 29,714,478	4,577,855	511,766	34,804,099
Reclassified to 12 month expected credit losses	534,895	(534,080)	(815)	-
Reclassified to lifetime expected credit losses	(981,688)	982,753	(1,065)	-
Reclassified to credit-impaired financial assets	(141,794)	(172,958)	314,752	-
Executed (Collected)	3,526,721	(36,062)	387,134	3,877,793
Write-offs	-	-	(644,948)	(644,948)
Ending balance	32,652,612	4,817,508	566,824	38,036,944
Allowance for doubtful accounts	(281,434)	(511,576)	(412,767)	(1,205,777)
Net carrying amount	₩ 32,371,178	4,305,932	154,057	36,831,167
	2021			
	12 month expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 27,106,059	4,320,246	516,694	31,942,999
Reclassified to 12 month expected credit losses	496,665	(496,028)	(637)	-
Reclassified to lifetime expected credit losses	(856,418)	857,518	(1,100)	-
Reclassified to credit-impaired financial assets	(130,460)	(175,834)	306,294	-
Executed (Collected)	3,098,632	71,953	319,913	3,490,498
Write-offs	-	-	(629,398)	(629,398)
Ending balance	29,714,478	4,577,855	511,766	34,804,099
Allowance for doubtful accounts	(270,548)	(432,720)	(345,654)	(1,048,922)
Net carrying amount	₩ 29,443,930	4,145,135	166,112	33,755,177

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13. Credit Card Receivables at Amortized Cost and Other (continued)

(c) Changes in allowance for credit card receivables at amortized cost and other for the years ended December 31, 2022 and 2021 are as follows:

Classification(*)	2022			
	12 month expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 270,548	432,720	345,654	1,048,922
Reclassified to 12 month expected credit losses	28,721	(28,397)	(324)	-
Reclassified to lifetime expected credit losses	(17,624)	18,215	(591)	-
Reclassified to credit-impaired financial assets	(1,224)	(2,312)	3,536	-
Provision(*)	1,013	91,350	702,133	794,496
Write-offs	-	-	(644,948)	(644,948)
Unwinding effect	-	-	7,307	7,307
Ending balance	₩ 281,434	511,576	412,767	1,205,777

(*) Provision has been increased in response to the economic recession caused by COVID-19 pandemic. The Group recognized additional provision amounting to ₩48,486 million by re-estimating the expected default rate in reflection of the modified forward-looking information available as of December 31, 2022.

Classification(*)	2021			
	12 month expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 258,989	397,841	350,429	1,007,259
Reclassified to 12 month expected credit losses	30,541	(30,240)	(301)	-
Reclassified to lifetime expected credit losses	(16,731)	17,338	(607)	-
Reclassified to credit-impaired financial assets	(1,013)	(2,179)	3,192	-
Provision (reversal)(*)	(1,238)	49,960	614,362	663,084
Write-offs	-	-	(629,398)	(629,398)
Unwinding effect	-	-	7,977	7,977
Ending balance	₩ 270,548	432,720	345,654	1,048,922

(*) Provision has been increased in response to the economic recession caused from COVID-19 pandemic. The Group recognized additional provision amounting to ₩2,616 million by re-estimating the expected default rate in reflection of the modified forward-looking information available as of December 31, 2021. An additional ₩17,449 million won was accumulated by readjusting the provision reserve rate for the portfolio of COVID 19 credit recovery support measures.

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13. Credit Card Receivables at Amortized Cost and Other (continued)

(d) Financing lease assets

Total investments in financing leases and the present value of minimum lease payments for each of the following periods as of December 31, 2022 and 2021 are as follows:

		2022		
		Total investment	Unrealized interest income	Present value of minimum lease payment
Less than one year	₩	586,109	77,697	508,412
One year to two years		429,719	53,958	375,761
Two year to three years		359,075	36,011	323,064
Three year to four years		312,012	20,816	291,196
Four year to five years		250,567	7,415	243,152
Over five years		1,142	4	1,138
	₩	<u>1,938,624</u>	<u>195,901</u>	<u>1,742,723</u>
2021				
		Total investment	Unrealized interest income	Present value of minimum lease payment
Less than one year	₩	530,952	56,679	474,273
One year to two years		396,899	35,094	361,805
Two year to three years		260,743	16,960	243,783
Three year to four years		171,527	6,345	165,182
Four year to five years		113,636	4,417	109,219
Over five years		3,029	32	2,997
	₩	<u>1,476,786</u>	<u>119,527</u>	<u>1,357,259</u>

(e) Changes in deferred loan origination costs (fees)

Changes in deferred loan origination costs (fees) for the years ended December 31, 2022 and 2021 are as follows:

		2022	2021
Beginning balance	₩	38,829	31,724
Increase		46,966	15,590
Decrease		(28,039)	(8,485)
Ending balance	₩	<u>57,756</u>	<u>38,829</u>

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14. Lease Assets

(a) Details of lease assets as of December 31, 2022 and 2021 are as follows:

	2022			
	Operating lease assets	Cancelled financing lease assets	Prepaid lease assets	Total
Acquisition cost	₩ 2,493,106	2,406	11,709	2,507,221
Accumulated depreciation	(562,454)	(117)	-	(562,571)
Carrying amount	₩ 1,930,652	2,289	11,709	1,944,650
	2021			
	Operating lease assets	Cancelled financing lease assets	Prepaid lease assets	Total
Acquisition cost	₩ 1,796,571	1,663	2,327	1,800,561
Accumulated depreciation	(402,721)	(67)	-	(402,788)
Carrying amount	₩ 1,393,850	1,596	2,327	1,397,773

(b) Future minimum lease payments as lessor under lease assets as of December 31, 2022 and 2021 are as follows:

	2022	2021
Less than one year	₩ 507,042	353,971
One year to two years	434,258	304,256
Two year to three years	316,642	236,946
Three year to four years	185,739	132,327
Four year to five years	69,167	40,926
Over five years	340	311
	₩ 1,513,188	1,068,737

(c) Changes in operating lease assets for the years ended December 31, 2022 and 2021 are as follows:

	2022	2021
Beginning balance	₩ 1,393,850	1,013,609
Acquisition	1,017,230	691,246
Disposal	(128,950)	(54,410)
Business combination	(214)	-
Depreciation	(351,264)	(256,595)
Ending balance	₩ 1,930,652	1,393,850

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15. Right-to-use Asset and Lease Liabilities

(a) Changes in right-of-use assets included in property and equipment for the years ended December 31, 2022 and 2021, are as follows:

	2022		2021
	Buildings	Others	Buildings
Beginning balance	₩ 26,973	-	21,414
Business combination	499	467	-
Acquisition	17,125	5	19,829
Disposal	(1,913)	-	(2,198)
Depreciation	(15,296)	(70)	(12,286)
Others	(97)	(232)	214
Ending balance	₩ 27,291	170	26,973

(b) Changes in lease liabilities included in other liabilities for the years ended December 31, 2022 and 2021, are as follows:

	2022		2021
	Buildings	Others	Buildings
Beginning balance	₩ 25,801	-	20,370
Business combination	402	442	-
Acquisition	14,256	5	17,559
Payments	(13,379)	(74)	(11,083)
Termination	(1,763)	-	(2,085)
Interest expense	839	3	921
Others	(663)	(215)	119
Ending balance	₩ 25,493	161	25,801

(c) Details of maturity of lease liabilities as of December 31, 2022 and 2021 are as follows:

Classification	2022						
	Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	Over 5 years	Total(*)
Buildings	₩ 1,447	1,929	2,741	4,132	14,253	2,477	26,979
Others	12	23	32	65	54	-	186
	₩ 1,459	1,952	2,773	4,197	14,307	2,477	27,165

(*) The amounts are undiscounted.

Classification	2021						
	Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	Over 5 years	Total(*)
Buildings	₩ 1,021	1,795	2,517	4,331	13,703	4,094	27,461

(*) The amounts are undiscounted.

(d) The amount of payments for leases of low-value assets are ₩886 million and ₩1,163 million for the years ended December 31, 2022 and 2021, respectively. There are no payments on short-term leases for the years ended December 31, 2022 and 2021.

(e) The amount of total cash outflow from leases recognized on the consolidated statements of cash flows are ₩14,339 million and ₩12,246 million, and the amount recognized as interest expenses are ₩842million and ₩921million for the years ended December 31, 2022 and 2021, respectively.

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16. Financial Assets at FVOCI

(a) Details of financial assets at FVOCI as of December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Financial Assets at FVOCI	₩	375,471	197,019

(b) The fair value of Financial assets at FVOCI investing in equity instruments as of December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Debt securities:			
Government bonds	₩	266,994	153,438
Corporation bonds and others		35,699	8,056
Equity securities (*):			
Debt securities		72,778	35,525
	₩	<u>375,471</u>	<u>197,019</u>

(*) The equity securities were exercised at the FVOCI option for the purpose of holding long term for the Group strategic purposes.

(c) Details of dividend income of financial assets at FVOCI for the years ended December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Dividend income recognized in assets held at the end of the reporting period:			
Equity securities	₩	380	400

(d) Changes of financial assets at FVOCI for the years ended December 31, 2022 and 2021 are as follows:

		<u>2022</u>		<u>2021</u>	
		<u>Debt securities</u>	<u>Equity securities</u>	<u>Debt securities</u>	<u>Equity securities</u>
Beginning balance	₩	161,494	35,525	-	32,143
Acquisition		163,513	29,381	162,423	200
Disposal		-	-	-	(4,368)
Changes in fair value (other comprehensive income)		(23,154)	7,872	(1,190)	7,550
Changes in fair value (profit or loss)		840	-	261	-
Ending balance	₩	<u>302,693</u>	<u>72,778</u>	<u>161,494</u>	<u>35,525</u>

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16. Financial Assets at FVOCI (continued)

(e) Changes in carrying amount of debt securities at fair value through other comprehensive income for the years ended December 31, 2022 and 2021 are as follows:

	2022		
	12-month expected credit loss	Life time expected credit loss	Total
Beginning balance	₩ 161,494	-	161,494
Reclassified to 12-month expected credit losses	-	-	-
Reclassified to lifetime expected credit losses	-	-	-
Reclassified to credit-impaired financial assets	-	-	-
Acquisition	163,513	-	163,513
Others (*)	(22,314)	-	(22,314)
Ending balance	₩ <u>302,693</u>	<u>-</u>	<u>302,693</u>

(*) Included the effects from amortization and fair value adjustments

	2021		
	12-month expected credit loss	Life time expected credit loss	Total
Beginning balance	₩ -	-	-
Reclassified to 12-month expected credit losses	-	-	-
Reclassified to lifetime expected credit losses	-	-	-
Reclassified to credit-impaired financial assets	-	-	-
Acquisition	162,423	-	162,423
Others (*)	(929)	-	(929)
Ending balance	₩ <u>161,494</u>	<u>-</u>	<u>161,494</u>

(*) Included the effects from amortization and fair value adjustments

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16. Financial Assets at FVOCI (continued)

(f) Changes in allowance for credit loss of debt securities at fair value through other comprehensive income for the years ended December 31, 2022 and 2021 are as follows:

		2022		
		12-month expected credit loss	Life time expected credit loss	Total
Beginning balance	₩	24	-	24
Reclassified to 12-month expected credit losses		-	-	-
Reclassified to lifetime expected credit losses		-	-	-
Reclassified to credit-impaired financial assets		-	-	-
Provisions		74	-	74
Ending balance	₩	98	-	98
2021				
		12-month expected credit loss	Life time expected credit loss	Total
Beginning balance	₩	-	-	-
Reclassified to 12-month expected credit losses		-	-	-
Reclassified to lifetime expected credit losses		-	-	-
Reclassified to credit-impaired financial assets		-	-	-
Provisions		24	-	24
Ending balance	₩	24	-	24

(g) There are no gains or losses on sales of financial assets at FVOCI for the years ended December 31, 2022 and 2021.

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17. Property and Equipment

(a) Details of property and equipment as of December 31, 2022 and 2021 are as follows:

		2022				
		Land	Buildings	Others	Right-of-use assets	Total
Acquisition cost	₩	432,770	89,401	395,372	59,413	976,956
Accumulated depreciation		-	(7,820)	(290,629)	(31,952)	(330,401)
Ending balance	₩	<u>432,770</u>	<u>81,581</u>	<u>104,743</u>	<u>27,461</u>	<u>646,555</u>
		2021				
		Land	Buildings	Others	Right-of-use assets	Total
Acquisition cost	₩	445,734	89,999	376,548	52,733	965,014
Accumulated depreciation		-	(5,670)	(286,711)	(25,760)	(318,141)
Ending balance	₩	<u>445,734</u>	<u>84,329</u>	<u>89,837</u>	<u>26,973</u>	<u>646,873</u>

(b) Changes in accounting estimates

In order to reflect the economic substance, the Group changed the estimates for the useful life of leased store facilities, computer equipment, and household appliances from 4 years to 5 years for the year ended December 31, 2022. As a result of the change in accounting estimates, depreciation expenses decreased by ₩9,941 million for year ended December 31, 2022, and other tangible assets and retained earnings increased by ₩9,941 million, respectively, as of December 31, 2022.

(c) Changes in property and equipment for the years ended December 31, 2022 and 2021 are as follows:

		2022				
		Land	Buildings	Others	Right-of- use assets	Total
Beginning balance	₩	445,734	84,329	89,837	26,973	646,873
Business combination		-	-	546	966	1,512
Acquisition		-	-	33,717	17,130	50,847
Disposal		(12,964)	(404)	(1,027)	(1,913)	(16,308)
Reclassification		-	-	6,551		6,551
Depreciation		-	(2,344)	(29,001)	(15,366)	(46,711)
Others		-	-	4,120	(329)	3,791
Ending balance	₩	<u>432,770</u>	<u>81,581</u>	<u>104,743</u>	<u>27,461</u>	<u>646,555</u>
		2021				
		Land	Buildings	Others	Right-of- use assets	Total
Beginning balance	₩	445,816	81,529	75,024	21,414	623,783
Business combination		-	-	-	-	-
Acquisition		-	1,216	46,881	19,829	67,926
Disposal		(82)	(104)	(455)	(2,198)	(2,839)
Reclassification		-	4,033	3,676	-	7,709
Depreciation		-	(2,345)	(36,682)	(12,286)	(51,313)
Others		-	-	1,393	214	1,607
Ending balance	₩	<u>445,734</u>	<u>84,329</u>	<u>89,837</u>	<u>26,973</u>	<u>646,873</u>

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17. Property and Equipment

(d) Insured assets

Details of insured assets as of December 31, 2022 are as follows:

Type of insurance	Assets covered	Insurance company	Amount covered
Property all risks policy	Buildings, etc.	DB Life Insurance Co., Ltd.	₩ 108,342
Business interruption policy			26,422
Property all risks policy	Buildings, etc.	Samsung Fire & Marine Insurance, Ltd.	46,703
Fire insurance policy	Buildings, etc.	Hanwha General Insurance Co., Ltd	17,745

In addition, the Group maintains transportation theft insurance, custody theft insurance for cash and securities and liability insurance, full insurance for vehicles.

18. Intangible Assets

(a) Details of intangible assets as of December 31, 2022 and 2021, are as follows:

		2022				
		Club memberships	Development cost	Goodwill	Others	Total
Acquisition cost	₩	17,737	137,820	119,379	44,526	319,462
Accumulated amortization		-	(66,009)	-	(38,127)	(104,136)
Impairment losses		(905)	(336)	-	-	(1,241)
Ending balance	₩	16,832	71,475	119,379	6,399	214,085

		2021				
		Club memberships	Development cost	Goodwill	Others	Total
Acquisition cost	₩	17,098	110,908	107,152	39,483	274,641
Accumulated amortization		-	(50,863)	-	(32,333)	(83,196)
Impairment losses		(834)	(336)	-	-	(1,170)
Ending balance	₩	16,264	59,709	107,152	7,150	190,275

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18. Intangible Assets (continued)

(b) Changes in accounting estimates

In order to reflect the economic substance, the Group changed the estimates for the useful life of 1 development costs from 4 years to 5 years for the year ended December 31, 2022. As a result of the change in accounting estimates, amortization expenses decreased by ₩6,375 million for year ended December 31, 2022, and intangible assets and retained earnings increased by ₩6,375 million, respectively, as of December 31, 2022.

(c) Changes in intangible assets for the years ended December 31, 2022 and 2021 are as follows, and amortization is included in general administrative expenses.

2022					
	Club memberships	Development cost	Goodwill	Others	Total
Beginning balance	₩ 16,264	59,709	107,152	7,150	190,275
Business combination	787	-	-	1,284	2,071
Acquisition	544	33,254	-	737	34,535
Disposal	(705)	-	-	-	(705)
Reclassification	-	(6,337)	-	-	(6,337)
Amortization	-	(15,146)	-	(2,085)	(17,231)
Impairment losses	(59)	-	-	-	(59)
Reversal of impairment losses	1	-	-	-	1
Others	-	(5)	12,227	(687)	11,535
Ending balance	₩ 16,832	71,475	119,379	6,399	214,085

2021					
	Club memberships	Development cost	Goodwill	Others	Total
Beginning balance	₩ 15,727	29,444	107,152	10,276	162,599
Acquisition	537	46,037	-	1,365	47,939
Disposal	-	-	-	-	-
Reclassification	-	(3,676)	-	-	(3,676)
Amortization	-	(12,058)	-	(4,120)	(16,178)
Others	-	(38)	-	(371)	(409)
Ending balance	₩ 16,264	59,709	107,152	7,150	190,275

(c) Goodwill

(i) Details of goodwill distributed to each cash-generating unit as of December 31, 2022 and 2021 are as follows:

	2022	2021
Shinhan Vietnam Finance Co., Ltd.	₩ 119,379	107,152

(ii) The recoverable amount of all cash-generating units required for impairment testing was based on value in use. When assessing recoverable amount based on value in use, DCF was applied among traditional approaches, taking into account the characteristics of financial institutions.

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18. Intangible Assets (continued)

(c) Goodwill (continued)

The evaluation base date for evaluating recoverable amount is June 30, 2022. When evaluating the value of use, the forecast period was 5.5 years (July 2022 to December 2027) considering the synergy effect after the acquisition, and the value after the forecast period was reflected using permanent value.

The expected future cash flows of the cash-generating unit considered the growth rate of the Consumer Price Index (CPI), market size and share of the Group, and the main financial assumptions applied during the forecast period is as follows:

	<u>The growth of net interest income</u>	<u>The growth of net fee income</u>	<u>The growth of General Administrative Expenses</u>	<u>The growth of net income</u>
Shinhan Vietnam Finance Co., Ltd.	₩ 9.11	8.64	10.89	19.04

The discount rate was applied by calculating the shareholder's required return and equity cost, and the equity cost was calculated using the Group's systematic risk in the market risk premium paid in return for the risk along with the risk-free interest rate. The permanent growth rate was estimated based on the inflation rate and did not exceed the expected long-term average growth rate of the relevant industry report.

	<u>The discount rates</u>	<u>The permanent growth rate</u>
Shinhan Vietnam Finance Co., Ltd.	13.90	2.00

The recoverable amount and the carrying amount of the cash-generating unit holding goodwill as of the valuation basis date is as follows:

	<u>Shinhan Vietnam Finance Co., Ltd.</u>	
Recoverable amount	₩	286,880
Carrying amount		<u>251,745</u>
		<u>35,126</u>

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19. Investments in associates

(a) Details of investments in associates as of December 31, 2022 and 2021 are as follows:

Name of associates(*)	Location	Closing month	Ownership	
			December 31, 2022	December 31, 2021
Wave Technology	Korea	December	49%	49%
One Shinhan Connect Fund 1	Korea	December	30%	30%
One Shinhan Connect Fund 2 (*)	Korea	December	25%	-

(*) It is newly acquired for the year ended December 31, 2022.

(b) Changes in investments in associates for the years ended December 31, 2022 and 2021 are as follows:

2022						
Name of associates	Acquisition cost	Beginning balance	Acquisition	Disposal (*)	Share of profit (loss) of associates	Ending balance
Wave Technology	₩ 500	451	-	-	(6)	445
One Shinhan Connect Fund 1	70,937	70,940	11,100	(12,163)	7,632	77,509
One Shinhan Connect Fund 2	11,250	-	11,250	-	(512)	10,738
	<u>82,687</u>	<u>71,391</u>	<u>22,350</u>	<u>(12,163)</u>	<u>7,114</u>	<u>88,692</u>

(*) This is the amount of principal distribution received from One Shinhan Connect Fund 1 for the year ended December 31, 2022.

2021						
Name of associates	Acquisition cost	Beginning balance	Acquisition	Share of profit (loss) of associates	Reclassification (*)	Ending balance
Wave Technology	₩ 500	-	370	(49)	130	451
One Shinhan Connect Fund 1	72,000	-	72,000	(1,060)	-	70,940
	<u>72,500</u>	<u>-</u>	<u>72,370</u>	<u>(1,109)</u>	<u>130</u>	<u>71,391</u>

(*) This is the amount reclassified from securities at fair value through profit or loss to investments in associates for the year ended December 31, 2021.

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19. Investments in associates (continued)

(c) Condensed financial statements of associates for the years ended December 31, 2022 and 2021 are as follows:

		2022				
Name of associates		Total assets	Total liabilities	Total equity	Profit (loss) for the quarter	Total comprehensive income (loss)
Wave Technology	₩	483	95	388	(13)	(13)
One Shinhan Connect Fund 1		258,363	-	258,363	25,439	25,439
One Shinhan Connect Fund 2		42,953	-	42,953	(2,047)	(2,047)

		2021				
Name of associates		Total assets	Total liabilities	Total equity	Profit (loss) for the year	Total comprehensive income (loss)
Wave Technology	₩	402	4	398	(142)	(142)
One Shinhan Connect Fund 1		236,479	11	236,468	(3,532)	(3,532)

(d) Reconciliation of the financial information to the carrying amount of its interests in the associates as of December 31, 2022 and 2021 are as follows:

		2022					
Investees		Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying amount
Wave Technology(*)	₩	388	49%	190	-	255	445
One Shinhan Connect Fund 1		258,363	30%	77,509	-	-	77,509
One Shinhan Connect Fund 2		42,953	25%	10,738	-	-	10,738

(*) Other represents the adjustments of fair value when acquired.

		2021					
Investees		Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying amount
Wave Technology(*)	₩	398	49%	195	-	255	450
One Shinhan Connect Fund 1		236,468	30%	70,940	-	-	70,940

(*) Other represents the adjustments of fair value when acquired.

(e) There is no unrecognized equity loss amount and no cumulative unrecognized equity loss amount as a result of discontinuing the use of the equity method.

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20. Investment Properties

(a) Investment properties as of December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Acquisition cost	₩ 48,857	48,857
Accumulated depreciation	(2,898)	(1,656)
Ending balance	<u>₩ 45,959</u>	<u>47,201</u>

(b) Changes in investment properties for the years ended December 31, 2022 and 2021 are as follows:

Building:	<u>2022</u>	<u>2021</u>
Beginning balance	₩ 47,201	52,477
Reclassification	-	(4,033)
Amortization	(1,242)	(1,243)
Ending balance	<u>₩ 45,959</u>	<u>47,201</u>

(c) Rental revenue from operating leases arising from investment property during the years ended December 31, 2022 and 2021 are ₩ 12,144 million and ₩ 12,304 million, and management expenses directly related to investment property (including maintenance costs) are ₩ 4,395 million and ₩ 4,238 million.

(d) As of December 31, 2022 and 2021, the fair value of the investment property are ₩ 59,983 million and ₩ 59,983 million, and the fair value assessment was performed by an independent appraiser.

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21. Other Assets

(a) Details of other assets as of December 31, 2022 and 2021 are as follows:

	2022	2021
Security deposits paid	₩ 81,115	76,148
Present value discount account	(1,905)	(1,313)
Accounts receivable	659,372	516,005
Allowance for doubtful accounts	(5,679)	(6,480)
Accrued income	207,225	190,642
Allowance for doubtful accounts	(12,819)	(9,748)
Advance payments	113,930	124,190
Prepaid expenses	410,271	244,770
Others(*)	18,022	14,136
	₩ <u>1,469,532</u>	<u>1,148,350</u>

(*) Includes insurance assets of ₩3,095 million and ₩3,649 million as of December 31, 2022 and 2021, which are classified in accordance with Korean-IFRS No. 1104.

(b) Changes in allowance for other assets for the years ended December 31, 2022 and 2021 are as follows:

	2022	2021
Beginning balance	₩ 16,228	16,345
Provision	22,326	23,848
Write-offs	(20,087)	(23,965)
Business combination	31	-
Ending balance	₩ <u>18,498</u>	<u>16,228</u>

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22. Borrowings

Details of borrowings as of December 31, 2022 and 2021 are as follows

	<u>Interest rate (%)</u>		<u>2022</u>		<u>Interest rate (%)</u>		<u>2021</u>
Borrowings denominated in Korean won:							
Others	1.24~6.22	₩	8,120,000		0.92~3.43	₩	5,865,000
			<u>8,120,000</u>				<u>5,865,000</u>
Borrowings denominated in foreign currencies:							
Others	1.53~21.20		1,016,178		0.00~12.29		797,856
		₩	<u>9,136,178</u>			₩	<u>6,662,856</u>

23. Debentures

Details of debentures as of December 31, 2022 and 2021 are as follows:

	<u>Interest rate (%)</u>		<u>2022</u>		<u>Interest rate (%)</u>		<u>2021</u>
Debt securities issued in Korean won:							
Debt securities issued	1.10~6.54	₩	18,415,000		0.96~3.02	₩	18,455,000
Discount on debt securities issued			<u>(9,093)</u>				<u>(8,560)</u>
			<u>18,405,907</u>				<u>18,446,440</u>
Debt securities issued in foreign currencies:							
Debt securities issued	1.11~7.59		3,108,669		1.11~7.59		2,403,397
Discount on debt securities issued			<u>(11,760)</u>				<u>(7,969)</u>
			<u>3,096,909</u>				<u>2,395,428</u>
		₩	<u>21,502,816</u>			₩	<u>20,841,868</u>

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24. Defined benefit obligations

The Group operates defined benefit pension plans. The level of benefits provided depends on employees' length of service and their salary in the final years leading up to retirement. The pension is fully funded and operated by an external trust company.

(a) Defined benefit plan assets and liabilities as of December 31, 2022 and 2021 are as follows:

		2022	2021
Present value of defined benefit obligations	₩	285,061	322,692
Fair value of plan assets (*1)		(321,842)	(286,783)
Net defined benefit liabilities (assets)	₩	(36,781)	35,909

(*1) The fair value of plan assets as of December 31, 2022 and 2021 includes the existing Contribution to National Pension Plan of ₩332 million and ₩402 million.

(b) Changes in the present value of defined benefit obligations and plan assets for the years ended December 31, 2022 and 2021 are as follows:

		2022		
		Defined benefit obligations	Plan assets	Net defined benefit liabilities
Beginning balance	₩	322,692	(286,783)	35,909
Recognized in profit or loss as incurred:				
Current service cost		20,104	-	20,104
Interest expense (income)		9,963	(8,998)	965
		30,067	(8,998)	21,069
Recognized in other comprehensive income:				
Remeasurement loss				
- Actuarial losses				
Demographic assumptions		79	-	79
Financial assumptions		(40,650)	-	(40,650)
Experience adjustments		(5,857)	-	(5,857)
- Return on plan assets		-	3,779	3,779
		(46,428)	3,779	(42,649)
Others:				
Contributions paid into the plan		-	(58,996)	(58,996)
Benefits paid by the plan		(26,270)	33,626	7,356
Others (*)		617	-	617
Exchange rate differences		10	-	10
Business combination		4,373	(4,470)	(97)
		(21,270)	(29,840)	(51,110)
Ending balance	₩	285,061	(321,842)	(36,781)

(*) Transfer from/to related parties.

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24. Defined benefit obligations (continued)

(b) Changes in the present value of defined benefit obligations and plan assets for the years ended December 31, 2022 and 2021 are as follows, continued:

	2021		
	Defined benefit obligations	Plan assets	Net defined benefit liabilities
Beginning balance	₩ 314,324	(273,434)	40,890
Recognized in profit or loss as incurred:			
Current service cost	20,835	-	20,835
Interest expense (income)	8,268	(7,181)	1,087
	<u>29,103</u>	<u>(7,181)</u>	<u>21,922</u>
Recognized in other comprehensive income:			
Remeasurement loss			
- Actuarial losses			
Financial assumptions	(7,426)	-	(7,426)
Experience adjustments	3,549	-	3,549
- Return on plan assets	-	3,313	3,313
	<u>(3,877)</u>	<u>3,313</u>	<u>(564)</u>
Others:			
Contributions paid into the plan	-	(25,000)	(25,000)
Benefits paid by the plan	(16,341)	15,519	(822)
Others (*)	(565)	-	(565)
Exchange rate differences	48	-	48
	<u>(16,858)</u>	<u>(9,481)</u>	<u>(26,339)</u>
Ending balance	₩ <u>322,692</u>	<u>(286,783)</u>	<u>35,909</u>

(*) Transfer from/to related parties.

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24. Defined benefit obligations (continued)

(c) Details of the amounts included in the fair value of plan assets for each category of financial instruments as of December 31, 2022 and 2021 are as follows:

		2022	2021
		Amounts	Amounts
Time deposit	₩	321,510	286,381
Others		332	402
Fair value of plan assets	₩	<u>321,842</u>	<u>286,783</u>

(d) Actuarial assumptions as of December 31, 2022 and 2021 are as follows:

	2022	2021
Discount rate (AA0)	5.62%	3.19%
Future salary increasing rate	2.50%+ step-up rate	2.10% + step-up rate
Weighted average maturity	6.75 years~	7.56 years

(e) Sensitivity analysis

As of December 31, 2022, reasonably possible changes in one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

		2022	
		Defined benefit obligation	
		Increase	Decrease
Discount rate (1%p movement)	₩	(17,526)	18,934
Future salary increase rate (1%p movement)		19,345	(18,189)

Sensitivity analyses do not consider the variance of all cash flows expected to occur in the plan but provide approximation of the sensitivity to the assumptions.

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

The Group reviews the level of accumulation of funds every year, and has a policy to compensate for any loss in funds. The estimated contribution for the year ending December 31, 2023 (the next annual reporting period) is ₩17,600 million. The weighted average maturity of the defined benefit obligation as of December 31, 2022 and 2021 are 6.75 years and 7.56 years. The maturity analysis of non-discounted benefits paid by the plan as of December 31, 2022 and 2021 are as follows:

		2022					
		Less than 1 year	1~2 years	2~5 years	5 ~ 10 years	over 10years	Total
Benefits paid by the plan	₩	14,903	21,008	78,238	144,062	167,175	425,386

		2021					
		Less than 1 year	1~2 years	2~5 years	5 ~ 10 years	over 10years	Total
Benefits paid by the plan	₩	12,800	19,120	72,549	132,596	179,319	416,384

(g) The amounts recognized as expenses for defined contribution plans are ₩3,654 million and ₩3,043 million for the years ended December 31, 2022 and 2021, respectively.

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25. Provisions

(a) Changes of provisions for the years ended December 31, 2022 and 2021 are as follows:

		2022				
		Allowance for litigation	Allowance for unused credit commitments	Asset retirement	Others	Total
Beginning balance	₩	264	204,917	5,020	11,169	221,370
Provision		516	3,500	158	33,115	37,289
Payment		(68)	-	(125)	(22,058)	(22,251)
Others (*)		-	-	20	-	20
Business combination		3,528	-	-	104	3,632
Ending balance	₩	<u>4,240</u>	<u>208,417</u>	<u>5,073</u>	<u>22,330</u>	<u>240,060</u>

(*) This is the amount of increase in the current year over the period of the provision evaluated as present value.

		2021				
		Allowance for litigation	Allowance for unused credit commitments	Asset retirement	Others	Total
Beginning balance	₩	33	195,849	4,785	26,212	226,879
Provision		283	9,068	219	(6,383)	3,187
Payment		(52)	-	-	(8,660)	(8,712)
Others (*)		-	-	16	-	16
Ending balance	₩	<u>264</u>	<u>204,917</u>	<u>5,020</u>	<u>11,169</u>	<u>221,370</u>

(*) This is the amount of increase in the current year over the period of the provision evaluated as present value.

(b) Details of allowance for unused credit commitments as of December 31, 2022 and 2021 are as follows:

		2022	2021
Unused credit commitments	₩	91,358,278	87,060,206
Allowance		208,417	204,917
Ratio (%)		0.23	0.24

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25. Provisions (continued)

(c) Changes in unused credit commitments for the years ended December 31, 2022 and 2021 are as follows:

	2022			
	12 month expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 79,592	123,710	1,615	204,917
12 month expected credit losses substitution	63,630	(63,351)	(279)	-
Lifetime expected credit losses substitution	(7,664)	7,697	(33)	-
Credit-impaired financial assets substitution	(270)	(1,179)	1,449	-
Provision (reversal) (*)	(44,482)	48,960	(978)	3,500
Ending balance	₩ 90,806	115,837	1,774	208,417

(*) Provision has been increased in response to economic recession caused from COVID-19 pandemic. The Group recognized additional provision amounting to ₩19,583 million by re-estimating the expected default rate in reflection of the modified forward-looking information available as of December 31, 2022.

	2021			
	12 month expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 77,276	117,312	1,261	195,849
12 month expected credit losses substitution	58,636	(58,552)	(84)	-
Lifetime expected credit losses substitution	(8,389)	8,409	(20)	-
Credit-impaired financial assets substitution	(213)	(849)	1,062	-
Provision (reversal) (*)	(47,718)	57,390	(604)	9,068
Ending balance	₩ 79,592	123,710	1,615	204,917

(*) Provision has been increased in response to economic recession caused by COVID-19 pandemic. The Group recognized additional provision amounting to ₩669 million by re-estimating the expected default rate in reflection of the modified forward-looking information available as of December 31, 2021. Additional ₩4,878 million was accumulated by re-adjusting the provisioning ratio for the portfolio applying the COVID-19 credit recovery support plan.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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26. Other Liabilities

(a) Details of other liabilities as of December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Accounts payable	₩	2,118,717	1,950,790
Accrued expenses		293,337	294,921
Advances from customers		133,613	132,675
Unearned revenue		177,614	133,540
Withholdings		441,951	422,463
Security deposits received		694,550	479,166
Present value discount account		(63,606)	(22,542)
Advances of gift card and others		415,510	35,697
Lease liabilities		27,165	27,461
Present value discount account		(1,511)	(1,660)
Others (*)		373,070	324,985
	₩	<u>4,610,410</u>	<u>3,777,496</u>

(*) Includes point liabilities of ₩323,836 million and ₩315,286 million as of December 31, 2022 and 2021 respectively, which are classified in accordance with Korean IFRS 1115 and includes insurance liabilities of ₩3,095 million and ₩3,649 million as of December 31, 2022 and 2021, which are classified in accordance with Korean IFRS 1104.

(b) Details of insurance liabilities and reinsurance assets as of December 31, 2022 and 2021 are as follows

		<u>2022</u>					
		<u>Insurance Liabilities</u>			<u>Reinsurance Assets</u>		
		<u>Reserve for payment</u>	<u>Retained Earnings for Undrawn Insurance</u>	<u>Total</u>	<u>Reserve for payment</u>	<u>Retained Earnings for Undrawn Insurance</u>	<u>Total</u>
Debt Cancellation & Debt Suspension	₩	2,125	970	3,095	2,125	970	3,095

		<u>2021</u>					
		<u>Insurance Liabilities</u>			<u>Reinsurance Assets</u>		
		<u>Reserve for payment</u>	<u>Retained Earnings for Undrawn Insurance</u>	<u>Total</u>	<u>Reserve for payment</u>	<u>Retained Earnings for Undrawn Insurance</u>	<u>Total</u>
Debt Cancellation & Debt Suspension	₩	2,631	1,018	3,649	2,631	1,018	3,649

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26. Other Liabilities (continued)

(c) The income and expenses related to insurance contracts for the years ended December 31, 2022 and 2021 are as follows:

2022							
Insurance income				Insurance Expense			
Premium Revenues	Reinsurance Revenues	Contribution to reinsurance asset	Total	Insurance premium	Insurance cost	Contribution to insurance liability ~	Total
28,616	3,171	(554)	31,233	5,469	3,178	(554)	8,093
2021							
Insurance income				Insurance Expense			
Premium Revenues	Reinsurance Revenues	Contribution to reinsurance asset	Total	Insurance premium	Insurance cost	Contribution to insurance liability ~	Total
29,301	3,415	(1,108)	31,608	5,717	3,423	(1,108)	8,032

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27. Equity

(a) Details of equity as of December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Common stock	₩ 626,847	626,847
Hybrid bonds	399,901	-
Capital surplus		
Gains on capital reduction	852,646	852,646
Gains on sale of treasury stock	2	2
Other additional capital	8,081	7,944
	<u>860,729</u>	<u>860,592</u>
Capital adjustments		
Stock options	1,895	1,871
Other capital adjustments	(3,445)	-
	<u>(1,550)</u>	<u>1,871</u>
Accumulated other comprehensive income		
Unrealized gain on valuation of financial assets at FVOCI	7,061	18,045
Effective portion of valuation loss on cash flow hedges	(10,724)	1,728
Remeasurements of the net defined benefit obligations	(27,716)	(58,270)
Foreign currency translation adjustments for foreign operations	14,126	(3,693)
	<u>(17,253)</u>	<u>(42,190)</u>
Retained earnings		
Legal reserve	313,424	313,424
Reserve for credit losses (Note 28 reference)(*)	847,036	816,703
Voluntary reserve	12,316	11,216
Retained earnings(*)	4,409,740	4,150,047
	<u>5,582,516</u>	<u>5,291,390</u>
Non-controlling interests	7,564	(3,507)
	<u>₩ 7,458,754</u>	<u>6,735,003</u>

(*) The Group plans to transfer ₩76,421 million of retained earnings as reserve for credit losses for the year ended December 31, 2022 and ₩30,333 million of retained earnings for the year ended December 31, 2021 was transferred into the reserve for credit losses.

(b) Capital stock and capital surplus

As of December 31, 2022, 2021, par value of common stock is ₩5,000 and the Group authorized 2,000,000,000 shares and issued outstanding shares amounted to 125,369,403 shares.

(c) Hybrid bonds

Hybrid bonds classified as other equity instruments of December 31, 2022 and 2021 are as follows:

<u>Issue date</u>	<u>Currency</u>	<u>Maturity date</u>	<u>Interest rate (%)</u>	<u>December 31, 2022</u>
March 17, 2022	KRW	March 17, 2052	4.01	399,901

The hybrid bonds above can be repaid early after 5 years from the date of issuance, and the Group has an unconditional right to extend the maturity under the same condition.

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27. Equity (continued)

(d) Changes in accumulated other comprehensive income for the years ended December 31, 2022 and 2021 are as follows

	2022					Total
	Items that will be reclassified to profit or loss			Items that will never be reclassified to profit or loss		
	Valuation of financial assets at FVOCI	Foreign currency translation adjustments for foreign operations	Valuation of cash flow hedges	Remeasurements of the defined benefit plan	Valuation of financial assets at FVOCI	
Beginning balance ₩	(863)	(3,693)	1,728	(58,270)	18,908	(42,190)
Change due to fair value	(23,154)	-	-	-	7,872	(15,282)
Reclassification:	-	-	(190,372)	-	-	(190,372)
Effect of hedge accounting	-	-	173,389	-	-	173,389
Effects from changes in foreign exchange rate	-	19,440	-	-	-	19,440
Remeasurements of the defined benefit obligations	-	-	-	42,649	-	42,649
Effect of tax	6,123	-	4,531	(12,095)	(1,825)	(3,266)
Non-controlling interests	-	(1,621)	-	-	-	(1,621)
Ending balance ₩	<u>(17,894)</u>	<u>14,126</u>	<u>(10,724)</u>	<u>(27,716)</u>	<u>24,955</u>	<u>(17,253)</u>

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27. Equity (continued)

(d) Changes in accumulated other comprehensive income for the years ended December 31, 2022 and 2021 are as follows

	2021					Total
	Items that will be reclassified to profit or loss			Items that will never be reclassified to profit or loss		
	Valuation of financial assets at FVOCI	Foreign currency translation adjustments for foreign operations	Valuation of cash flow hedges	Remeasurements of the defined benefit plan	Valuation of financial assets at FVOCI	
Beginning balance ₩	-	(9,828)	(21,012)	(58,679)	16,205	(73,314)
Change due to fair value	(1,190)	-	-	-	7,550	6,360
Reclassification:	-	-	(209,869)	-	-	(209,869)
Hedging	-	-	241,233	-	-	241,233
Effects from changes in foreign exchange rate	-	8,573	-	-	-	8,573
Remeasurements of the defined benefit plans	-	-	-	564	-	564
Amount transferred to retained earnings due to disposal etc.	-	-	-	-	(2,771)	(2,771)
Deferred income taxes	327	(2,540)	(8,624)	(155)	(2,076)	(13,068)
Non-controlling interests	-	102	-	-	-	102
Ending balance ₩	<u>(863)</u>	<u>(3,693)</u>	<u>1,728</u>	<u>(58,270)</u>	<u>18,908</u>	<u>(42,190)</u>

(e) Earned surplus reserves

The Korean Commercial Act requires the Group to accumulate, as it earned surplus reserve, at least 10% of cash dividend in each period for the settlement of accounts until its reserve reaches half of the Group's capital. No reserve shall be disposed of, except in recovery from deficit in capital or capitalizing its reserve as approved in the shareholder's meeting.

(f) Voluntary reserve

The Group elected to measure an item of land and buildings at the date of transition to Korean IFRSs at its fair value and use that fair value as its deemed cost at that date. Revaluation surplus as a result of revaluation was classified as dividend restriction by the Board of Directors. Also, in accordance with amended Credit Information Use and Protection Act, the Group is liable to compensate the owners of credit information for inflicted damage and reserved voluntary reserve for fulfillment by the Act.

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27. **Equity (continued)**

(e) Voluntary reserve (continued)

Details of discretionary reserve as of December 31, 2022 and 2021 are as follows:

		<u>2022</u>	<u>2021</u>
Revaluation surplus of property and equipment	₩	10,216	10,216
Claim reserves for on-line transactions		2,000	1,000
Other voluntary reserve		100	-
	₩	<u>12,316</u>	<u>11,216</u>

(f) Statements of appropriation of retained earnings for the years ended December 31, 2022 and 2021 based on separate financial statements of the Group are as follows:

(In millions of won, except dividends per share)

		<u>2022</u>	<u>2021</u>
Unappropriated retained earnings			
Balance at beginning of year	₩	3,733,308	3,441,370
Effect of changes in accounting policies		-	2,771
Profit for the year		609,613	658,120
Dividend on hybrid bond		(12,622)	-
		<u>4,330,299</u>	<u>4,102,261</u>
Reversal of Reserve for credit losses		-	-
Balance at end of year before appropriation		<u>4,330,299</u>	<u>4,102,261</u>
Appropriation of retained earnings			
Transfer to reserve for credit losses		76,421	30,333
Reserves for electronic finance and credit information liability		-	1,000
Cash dividends		256,631	337,620
Dividends per share (dividend as a percentage of par value):			
₩2,047 (40.94%) for 2022			
₩2,693 (53.86%) for 2021		<u>333,052</u>	<u>368,953</u>
Unappropriated retained earnings to be carried over to subsequent year	₩	<u>3,997,247</u>	<u>3,733,308</u>

(*) These statements of appropriation of retained earnings were based on the separate financial statements of Shinhan card.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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28. Reserve for credit losses

In accordance with Regulations on Supervision of Specialized Credit Finance Business, the Group reserves the difference between allowance for credit losses recognized under Korean IFRS and Regulations on Supervision of Specialized Credit Finance Business in the account of reserve for legal reserve for credit losses.

(a) Reserve for credit losses as of December 31, 2022 and 2021 are summarized as follows:

	2022	2021
Accumulated reserve for credit losses	₩ 847,036	816,703
Reserve for credit losses, scheduled		
- Changes in 2022 and 2021	76,421	30,333
Ending balance of reserve for credit losses	₩ 923,457	847,036

(b) Details of profit for the year attributable to owner of the Company after adjusting for reversal of credit losses and provision for reserve for credit losses for the years ended December 31, 2022 and 2021 are as follows:

	2022	2021
Profit for the year attributable to owner of the Company	₩ 641,368	674,997
Reversal for credit losses, scheduled	(76,421)	(30,333)
Profit for the year attributable to owner of the Company after adjusting for reserve for credit losses	564,947	644,664
Earnings per share after adjusting credit losses (*) (in won)	₩ 4,406	5,142

(*) Dividend on hybrid bonds is deducted.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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29. Operating Revenue and Contract Liabilities

(a) Details of operating revenues for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Revenue from contracts with customers		
Fee and commission income	₩ 1,219,567	1,202,500
Revenue from others		
Interest income	2,508,702	2,306,053
Fee and commission income		
Loans	5,863	4,252
Installment loans	14,735	14,142
Leases	477,716	364,448
Other	40,580	33,027
Dividend income	415	430
Net income on financial assets at FVTPL	20,999	10,579
Gains on derivatives instruments	234,298	224,689
Gains on foreign currency transactions	76,101	38,807
Other operating income	162,205	160,700
	<u>₩ 4,761,181</u>	<u>4,359,627</u>

(b) Classification of revenue from contracts with customers for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Revenue from contracts with customers		
Credit sales commission, etc.	₩ 977,355	978,286
Insurance agency fee	76,132	80,656
Others	166,080	143,558
	<u>1,219,567</u>	<u>1,202,500</u>
Timing of revenue recognition		
Transferred at a point in time	985,759	988,306
Transferred over time	233,808	214,194
	<u>₩ 1,219,567</u>	<u>1,202,500</u>

(c) The contract liabilities recognized by the Group in relation to revenue from contracts with customers are as follows:

	<u>2022</u>	<u>2021</u>
Point liabilities	₩ 323,836	301,329
Unearned revenue of annual fee	106,530	101,643
	<u>₩ 430,366</u>	<u>402,972</u>

(*) Recognized as other liabilities in the consolidated statements of financial position

(d) Among the revenue recognized in the years ended December 31, 2022 and 2021, the amount related to the contract liabilities carried forward in the prior term are ₩ 101,643 million and ₩ 92,226 million.

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30. Earnings per Share

Earnings per share for the years ended December 31, 2022 and 2021 are as follows:

(In millions of won, except shares outstanding and earnings per share)

	<u>2022</u>	<u>2021</u>
Profit for the year attributable to owner of the Company	₩ 641,368	674,997
Dividend on hybrid bond	(12,622)	-
Profit for the year attributable to common stocks	628,746	674,997
Weighted average number of common stocks outstanding	<u>125,369,403</u>	<u>125,369,403</u>
Earnings per share (in won)	₩ 5,015	5,384

The Group has no dilutive potential ordinary shares in the calculation of diluted earnings per share for the reporting periods. Accordingly, diluted earnings per share equals basic earnings per share for the years ended December 31, 2022 and 2021.

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31. Share-Based Payment

Share-based payment as of December 31, 2022 is summarized as follows:

(a) Share-based payment arrangements with performance conditions

(i) Performance share granted as of December 31, 2022 are as follows:

a) Shinhan Card Co., Ltd

	Granted in 2016	Granted in 2017	Granted in 2018	Granted in 2019	Granted in 2020	Granted in 2021	Granted in 2022
Type	Equity-settled type(*)	Equity-settled type(*)	Equity-settled type(*)	Equity-settled type(*)	Cash-settled type	Cash-settled type	Equity-settled type
Vesting period	2016	2017	2018	2019	2020	2021	2022
Performance condition	Based on relative stock price (20.0%) Based on 4 year management index (80.0%)						
Estimated number of shares granted	67,660	68,377	60,378	84,004	72,210	101,408	99,784
Number of shares granted	51,560	62,011	58,878	-	-	-	-
Remaining number of shares granted	16,100	6,366	1,500	84,004	72,210	101,408	99,784

(*) Financial Group. According to the commitment, the amount that the Group pays to the Shinhan Financial Group is recognized as liabilities, and the difference between the amount recognized as liabilities and the compensation cost based on equity-settled share-based payments is recognized in equity.

b) Shinhan Credit Information Co., Ltd.

	Granted in 2019	Granted in 2020	Granted in 2021	Granted in 2022
Type	Equity-settled type(*)	Cash-settled type	Cash-settled type	Cash-settled type
Vesting period	2019	2020	2021	2022
Performance condition	Based on relative stock price (20.0%) Based on 4 year management index (80.0%)			
Estimated number of shares granted	3,463	2,918	4,105	1,597
Number of shares granted	-	-	-	-
Remaining number of shares granted	3,463	2,918	4,105	1,597

(*) The Group granted shares of Shinhan Financial Group. According to the commitment, the amount that Shinhan Credit Information Co., Ltd. pays to the Shinhan Financial Group is recognized as liabilities, and the difference between the amount recognized as liabilities and the compensation cost based on equity-settled share-based payments is recognized in equity.

SHINHAN CARD CO., LTD. AND SUBSIDIARIES
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31. Share-Based Payment (continued)

(a) Share-based payment arrangements with performance conditions (continued)

(ii) Granted shares and the fair value of grant date as of December 31, 2022 are as follows:

a) Shinhan Card Co., Ltd.

Grant date	Grant shares	Fair value (in won) (*1)	Estimated shares (*2)	Paid shares	Remained shares
January 1, 2016	74,200 ₩	39,000	50,300	34,200	16,100
February 4, 2016	15,400	38,150	13,204	13,204	-
June 3, 2016	5,200	38,800	2,901	2,901	-
August 1, 2016	1,900	40,650	742	742	-
October 31, 2016	3,100	43,850	513	513	-
January 1, 2017	70,200	45,300	59,879	53,513	6,366
March 7, 2017	10,600	46,950	8,498	8,498	-
January 1, 2018	59,900	49,400	60,378	58,878	1,500
January 1, 2019	84,266	39,600	84,004	-	84,004
January 1, 2020	80,215	32,050	72,210	-	72,210
January 1, 2021	111,887	36,800	101,408	-	101,408
January 1, 2022	110,355	35,200	99,784	-	99,784
	<u>627,223 ₩</u>		<u>553,821</u>	<u>172,449</u>	<u>381,372</u>

(*1) The fair value per share was evaluated based on the closing price of Shinhan Financial Group at each grant date.

(*2) Grant shares at grant date were adjusted pursuant to relative increase ratio of stock price and achievement of management index based on standard quantity applicable to the days of service among specified period of service, which allows for the determination of acquired quantity at the end of the operation period.

b) Shinhan Credit Information Co., Ltd.

Grant date	Grant shares	Fair value (in won) (*1)	Estimated shares (*2)	Paid shares	Remained shares
January 1, 2019	3,696 ₩	39,600	692	-	692
March 15, 2019	3,696	44,200	2,771	-	2,771
January 1, 2020	3,391	32,050	2,918	-	2,918
January 1, 2021	4,528	36,800	4,105	-	4,105
January 1, 2022	1,765	35,200	1,597	-	1,597
	<u>17,076 ₩</u>		<u>12,083</u>	<u>-</u>	<u>12,083</u>

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31. Share-Based Payment (continued)

(ii) Granted shares and the fair value of grant date as of December 31, 2022 are as follows:

(b) Share-based compensation expense for the years ended December 31, 2022 and 2021 are as follows: (continued)

	<u>2022</u>	<u>2021</u>
Share-based payment arrangements with performance conditions	₩ 3,508	4,213

(c) Details of accrued expenses and the intrinsic value as of December 31, 2022 are as follows:

	<u>Accrued expense related to compensation expenses associated with share-based payments</u>	<u>Intrinsic values (*1)</u>
Share-based payment arrangements with performance conditions (*2)	₩ 13,843	13,843

(*1) The fair value of share-based arrangements with performance conditions is considered as intrinsic value.

(*2) Payments according to arrangements with Shinhan Financial Group are calculated on the basis of the closing price on December 31, 2022, and have been recognized as liabilities.

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32. Net Interest Income

Details of net interest income for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Interest income		
Cash and due from banks	₩ 10,375	7,508
Credit card receivables	1,962,825	1,878,220
Loans	299,768	231,234
Installment loans	169,411	138,472
Financing leases(*)	57,470	47,711
Others	8,853	2,908
	<u>2,508,702</u>	<u>2,306,053</u>
Interest expense		
Borrowings	(210,024)	(102,651)
Debentures	(431,801)	(347,047)
Securitized debentures	(55,730)	(48,934)
Lease liabilities(*)	(842)	(921)
Others	(12,300)	(7,347)
	<u>(710,697)</u>	<u>(506,900)</u>
Net interest income	<u>₩ 1,798,005</u>	<u>1,799,153</u>

(*) It includes finance income and costs in financial lease receivables and lease liabilities under Korean IFRS 1116.

Interest income on impaired financial assets for the years ended December, 2022 and 2021 are ₩12,798 million and ₩11,071 million, respectively.

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33. Net Fee and Commission Income

Details of net fee and commission income for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Fee and commission income		
Credit card receivables	₩ 1,219,567	1,202,500
Loans	5,863	4,252
Installment loans	14,735	14,142
Leases	477,716	364,448
Others (*)	40,580	33,027
	<u>1,758,461</u>	<u>1,618,369</u>
Fee and commission expense		
Credit card receivables	(1,070,725)	(1,016,144)
Installment loans	(33,323)	(32,639)
Leases	(2,459)	(1,647)
Others (*)	(114,881)	(106,302)
	<u>(1,221,388)</u>	<u>(1,156,732)</u>
Net fee and commission income	<u>₩ 537,073</u>	<u>461,637</u>

(*) Other fee and commission income or expense includes profit or loss associated with Shinhan Credit Service (Debt exemption and debt suspension) given to credit card members. For the years ended December 31, 2022 and 2021, the amount of income related to debt exemption and debt suspension are ₩31,787 million and ₩32,716 million, respectively, and the amount of expense are ₩ 8,751 million and ₩ 9,235 million, respectively.

34. Dividend Income

Details of dividend income for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Financial assets at FVTPL in Korean currency	₩ 35	30
Financial assets at FVOCI in Korean currency	380	400
	<u>₩ 415</u>	<u>430</u>

35. Provision for Credit Loss Allowance

Details of provision for credit loss allowance for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Changes in credit card receivables at amortized cost and other	₩ (536,672)	(411,456)
Other assets	(20,019)	(22,122)
Allowance for unused loan commitments	(3,500)	(9,067)
Financial instruments at FVOCI	(74)	(24)
	<u>₩ (560,265)</u>	<u>(442,669)</u>

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36. General Administrative Expenses

Details of general administrative expenses for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Relate to employees		
Salaries and wages	₩ 209,064	198,569
Bonus	50,887	52,731
Incentive of results	20,062	36,240
Share-based compensation expense	3,508	4,213
Employee benefits	96,500	95,935
Travel	5,792	5,455
Defined benefit	21,069	21,922
Defined contribution	3,654	3,043
Honorary retirement allowance	8,223	26,211
	<u>418,759</u>	<u>444,319</u>
Depreciation and amortization		
Depreciation	46,711	51,314
Amortization	17,231	16,178
	<u>63,942</u>	<u>67,492</u>
Other general administrative expenses		
Communication	41,520	42,269
Utility	21,304	19,408
Maintenance of vehicles	3,092	2,872
Supplies	11,576	12,548
Rent	886	1,163
Insurance	41,350	36,771
Repairs	518	84
Entertainment	2,074	1,512
Advertising	34,207	35,378
Sales promotion	44,507	40,596
Training	2,956	2,052
Publication	526	494
Freight	760	642
(Reversal of) Provision for asset retirement obligation	20	16
Taxes and dues	53,629	41,721
	<u>258,925</u>	<u>237,526</u>
	<u>₩ 741,626</u>	<u>749,337</u>

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37. Other Operating Income and Expenses

Details of other operating income and expenses for the years ended December 31, 2022 and 2021 are as follows

	<u>2022</u>	<u>2021</u>
Other operating income		
Gains on recovery of bad debt(*)	₩ 14,328	14,918
Reversal of other allowances	24	24,274
Others	147,853	121,508
	<u>162,205</u>	<u>160,700</u>
Other operating expenses		
Depreciation of lease assets	(351,264)	(256,595)
Others	(129,645)	(108,343)
	<u>(480,909)</u>	<u>(364,938)</u>
	₩ <u>(318,704)</u>	<u>(204,238)</u>

(*) Gains on recovery of bad debt is the amount of interest received from the bad debt.

38. Non-operating Income and Expenses

Details of non-operating income and expenses for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Non-operating income		
Gains on disposal of property and equipment	₩ 62,932	507
Others	13,630	14,753
Miscellaneous income	653	537
	<u>77,215</u>	<u>15,797</u>
Non-operating expenses		
Donations	(10,490)	(9,540)
Provision for allowance for litigation	(516)	(283)
Losses on disposal of property and equipment	(170)	(40)
Impairment loss on intangible assets, and property and equipment	(59)	-
Miscellaneous losses	(138)	(186)
Others	(1,267)	(1,243)
	<u>(12,640)</u>	<u>(11,292)</u>
	₩ <u>64,575</u>	<u>4,505</u>

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39. Income Taxes

(a) The components of income tax expense for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Current income taxes payable	₩ 196,162	241,917
Adjustments to the income tax expense for prior period	(16,637)	(3,661)
Changes in deferred tax due to changes in temporary differences (*)	17,527	10,613
Income tax expense associated with items recorded in equity	(3,229)	(12,884)
Others	(1,647)	(5,396)
Income tax expense	₩ <u>192,176</u>	<u>230,589</u>

(*) The tax rate was changed due to amendments of the tax law at the end of 2022, reflecting the effect of changing the tax rate on deferred tax assets (liabilities) expected to be realized after 2023.

(b) The relationship between income tax expense and profit before income taxes for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Profit before income taxes (A)	₩ 836,731	906,886
Income taxes at applicable tax rate	230,101	249,394
Adjustments:		
Non-taxable income	(1,195)	(498)
Non-deductible expense	752	979
Tax deductions	(1,233)	(149)
Consolidated tax return effect and others	(36,249)	(19,137)
Income tax expense (B)	₩ <u>192,176</u>	<u>230,589</u>
Effective tax rate (B/A)	22.97%	25.43%

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39. Income Taxes (continued)

(c) Changes in deferred tax assets (liabilities) for the years ended December 31, 2022 and 2021 are as follows:

	2022				Ending deferred tax assets (liabilities)
	Beginning deferred tax assets (liabilities)	Changes in profit or loss	Change in other comprehensive income	Change in business combination	
Accounts receivable	₩ 79	(3)	-	-	76
Financial assets at FVOCI	1,194	(742)	-	-	452
Valuation on financial assets at FVOCI	(6,845)	-	4,298	-	(2,547)
Valuation on property and equipment, depreciation and others	(2,068)	(679)	-	3	(2,744)
Deferred loan origination costs	(14,393)	(1,505)	-	-	(15,898)
Derivative assets	(754)	66	4,531	-	3,843
Accrued expenses	18,726	(942)	-	460	18,244
Net defined benefit obligations	72,223	16,278	(12,762)	1,231	76,970
Plan assets	(66,334)	(18,247)	667	(1,265)	(85,179)
Other provisions	153,856	(1,678)	-	1,065	153,243
Others	(15,033)	(6,731)	-	42	(21,722)
	<u>₩ 140,651</u>	<u>(14,183)</u>	<u>(3,266)</u>	<u>1,536</u>	<u>124,738</u>

	2021				Ending deferred tax assets (liabilities)
	Beginning deferred tax assets (liabilities)	Changes in profit or loss	Change in other comprehensive income	Change in business combination	
Accounts receivable	₩ 79	-	-	-	79
Financial assets at FVOCI	1,424	(230)	-	-	1,194
Valuation on financial assets at FVOCI	(6,147)	-	(698)	-	(6,845)
Valuation on property and equipment, depreciation and others	(2,176)	108	-	-	(2,068)
Deferred loan origination costs	(13,094)	(1,299)	-	-	(14,393)
Derivative assets	7,870	-	(8,624)	-	(754)
Accrued expenses	17,592	1,134	-	-	18,726
Net defined benefit obligations	66,411	6,878	(1,066)	-	72,223
Plan assets	(57,754)	(9,491)	911	-	(66,334)
Other provisions	152,442	1,414	-	-	153,856
Others	(15,383)	2,890	(2,540)	-	(15,033)
	<u>₩ 151,264</u>	<u>1,404</u>	<u>(12,017)</u>	<u>-</u>	<u>140,651</u>

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39. Income Taxes (continued)

(d) Deferred income taxes associated with items, which are not recognized as profit (loss) for the years ended December 31, 2022 and 2021 are as follows:

	2022				
	December 31, 2022		January 1, 2022		Changes in tax effect
	Amount	Tax effect	Amount	Tax effect	
Changes in fair value of financial assets at FVOCI	₩ 7,061	(2,547)	18,044	(6,845)	4,298
Effective portion of valuation gain or loss on cash flow hedges	(10,724)	3,777	1,726	(754)	4,531
Remeasurements of defined benefit obligations	(27,716)	10,008	(58,271)	22,103	(12,095)
	₩ (31,379)	11,238	(38,501)	14,504	(3,266)
	2021				
	December 31, 2021		January 1, 2021		Changes in tax effect
	Amount	Tax effect	Amount	Tax effect	
Changes in fair value of financial assets at FVOCI	₩ 18,044	(6,845)	16,205	(6,147)	(698)
Effective portion of valuation gain or loss on cash flow hedges	1,726	(754)	(21,014)	7,870	(8,624)
Overseas operations translation credit (debit)	(3,689)	-	(9,825)	2,540	(2,540)
Remeasurements of defined benefit obligations	(58,271)	22,103	(58,678)	22,258	(155)
	₩ (42,190)	14,504	(73,312)	26,521	(12,017)

(e) The Group offsets a deferred tax asset against a deferred tax liability of the same taxable entity if, and only if, they relate to income taxes levied by the same taxation authority and the Group has a legally enforceable right to set off current tax assets against current tax liabilities. Deferred tax assets and liabilities before offsetting as of December 31, 2022 and 2021 are as follows:

	2022	2021
Deferred tax assets	₩ 252,828	246,078
Deferred tax liabilities	(128,090)	(105,427)
	₩ 124,738	140,651

(f) Deferred tax assets have been recognized as the Group has determined it is probable that future profits will be available against which the Group can utilize the related benefit.

(g) As of December 31, 2022 and 2021 current tax liabilities are ₩80,550 million and ₩181,483 million, respectively. For consolidated tax return, the amount is paid to the taxation authorities through the Parent company of the Group.

(h) The Group is in the process of filing an administrative lawsuit against one case (claim amount: ₩ 21,611 million) as of the end of the year, which has tax uncertainty, but it is considered likely to win, so it was reflected as current tax assets and tax expenses.

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40. Consolidated Statements of Cash Flows

(a) Details of cash and cash equivalents as of December 31, 2022 and 2021 are summarized as follows:

	<u>2022</u>	<u>2021</u>
Cash	₩ 306	149
Available deposits from bank		
Deposits on demand	363,235	297,719
Current deposits	47,470	841
Foreign currency deposits	38,838	18,187
Others	-	2,972
Time deposits · Installment payment	13,965	-
Cash and cash equivalents	<u>₩ 463,814</u>	<u>319,868</u>

(b) The Group presents the cash inflows and outflows of bank overdrafts and call money as net amounts, because the turnover of transactions is quick, the amounts are large, and the maturities are short.

(c) Reconciliations of the amounts of cash and cash equivalents in the statements of cash flows with the equivalent items reported in the statements of financial position as of December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Cash and cash equivalents in the statements of financial position	₩ 664,928	435,662
Adjustment:		
Restricted due from banks	<u>(201,114)</u>	<u>(115,794)</u>
Cash and cash equivalents in the statements of cash flows	<u>₩ 463,814</u>	<u>319,868</u>

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40. Statements of Cash Flows (continued)

(d) The consolidated statements of cash flows of the Group is prepared by using indirect method. Significant transactions without cash inflows and outflows for the years ended December 31, 2022 and 2021:

		<u>2022</u>	<u>2021</u>
Transaction related right-of-use assets	₩	17,130	19,829
Valuation of financial assets at FVOCI		(15,282)	6,360
Valuation of derivatives		(16,983)	31,365

(e) Changes in assets and liabilities arising from financing activities for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>						
	<u>Balance at January 1, 2022</u>	<u>Changes from cash flows</u>	<u>Changes in foreign currency exchange rate</u>	<u>Amortization of discount on borrowings and debentures, etc.</u>	<u>Changes in fair value</u>	<u>Others</u>	<u>Balance at December 31, 2022</u>
Assets							
Net derivative assets	₩ 71,958	(71,573)	-	-	174,084	781	175,250
Liabilities							
Borrowings	(6,662,856)	(2,440,318)	(35,174)	-	-	2,170	(9,136,178)
Debentures	(20,841,868)	(536,664)	(119,008)	(3,580)	-	(1,696)	(21,502,816)
Lease liabilities(*)	(25,801)	13,453	-	(842)	-	(12,464)	(25,654)
	₩ <u>(27,530,525)</u>	<u>(2,963,529)</u>	<u>(154,182)</u>	<u>(4,422)</u>	<u>-</u>	<u>(11,990)</u>	<u>(30,664,648)</u>

(*) The amount of change in cash flow includes ₩824 million in interest payments indicated as operating activities in the cash flow statement at the time of payment.

	<u>2021</u>						
	<u>Balance at January 1, 2021</u>	<u>Changes from cash flows</u>	<u>Changes in foreign currency exchange rate</u>	<u>Amortization of discount on borrowings and debentures, etc.</u>	<u>Changes in fair value</u>	<u>Others</u>	<u>Balance at December 31, 2021</u>
Assets							
Net derivative assets	₩ (163,403)	(11,016)	-	-	247,372	(995)	71,958
Liabilities							
Borrowings	(4,084,495)	(2,520,140)	(40,881)	-	-	(17,340)	(6,662,856)
Debentures	(20,215,457)	(455,653)	(157,774)	(6,813)	-	(6,171)	(20,841,868)
Lease liabilities(*)	(20,370)	9,279	-	(921)	-	(13,789)	(25,801)
	₩ <u>(24,320,322)</u>	<u>(2,966,514)</u>	<u>(198,655)</u>	<u>(7,734)</u>	<u>-</u>	<u>(37,300)</u>	<u>(27,530,525)</u>

(*) The amount of change in cash flow includes ₩908 million in interest payments indicated as operating activities in the cash flow statement at the time of payment.

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41. Contingent Liabilities and Commitments

(a) Contingent liabilities

The Group has 26 pending lawsuits as a defendant including collection of overdue credit card receivables, as of December 31, 2022 for a total claim amount of ₩8,740 million. A legal provision of ₩4,240 million is recognized in the accompanying consolidated financial statements for expected loss due to lost litigation cases. Additional losses may be incurred from these legal actions, however the result of such the lawsuits cannot be predicted. Management believes that the result of the lawsuits would not have significant impact on the consolidated financial statements.

(b) ABS commitments

In trust-type asset securitizations, trust company can demand the Group to transfer additional assets if the transferred assets are below the agreed minimum amount. As prescribed by the respective asset transfer agreements and other contracts, the Group has an obligation to early redeem the asset-backed securities in certain cases, such as when outstanding balance of securitized assets falls below the agreed amount at each settlement period or when portfolio profitability ratio is less than primary cost ratio for three consecutive settlement periods. Investor Interest based on transferred assets is provided as collateral for asset-backed securities. As of December 31, 2022, the Group has no additional obligation for the asset-backed securities.

The Group has entered into an agreement with the trust company to provide asset management services for the transferred assets. Under the agreement, the Controlling Company provides various services such as billing, collection, and management of delinquencies, and receives service fees from the trust company recorded as asset securitization income.

(c) Other commitments

i) The Group has entered an agreement with Shinhan bank for the trust and consignment in order to perform various credit card services including recruitment of credit card members and merchants.

ii) The Group is subject to take necessary measures, including accumulation of required reserve or subscription to insurances or deductions, pursuant to Article 43-3 of the Use and Protection of the Credit Information Act. Accordingly, the Group has accumulated ₩2 billion as liability reserve for electronic banking and credit information.

iii) As of December 31, 2022, the Group has limit loan commitments amounting to ₩9,698 billion with banks including Hana bank and SC bank. In addition, the Group has entered into loan overdraft agreements (including daily check) amounting to ₩1,425 billion with banks including Shinhan bank and KB Kookmin bank.

iv) As of December 31, 2022, the uncollectible bad debts, for which right to claim is still effective, amounts to ₩3,490,964 million.

v) The unused credit provided by the Group as of December 31, 2022 and 2021 are ₩91,358,278 and ₩87,060,206, respectively. As of December 31, 2022, and 2021, the securities purchase agreement signed by the Group are ₩104,546 million and ₩34,468 million.

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42. Asset Backed Securitization (ABS)

(a) The initial transfer price of the credit card receivables sold by *Asset-Backed Securitization Act* as of December 31, 2022 and 2021 are as summarized as follows:

	Transfer date		2022	2021
Shinhan Card 2021-1	2021.01.21	₩	-	630,000
Shinhan Card 2021-2	2021.09.09		-	678,947
Shinhan Card 2022-1	2022.04.28		679,988	-
Shinhan Card 2022-2	2022.08.18		870,072	-
Shinhan Card 2022-3	2022.12.22		581,594	-
		₩	2,131,654	1,308,947

(b) Details of uncollected transferred assets, which were sold by act on ABS, as of December 31, 2022 and 2021 are summarized as follows:

	List of disposal asset	Transfer date		2022	2021
Shinhan Card 2018-2	Credit card receivables	2018.08.30	₩	-	696,709
Shinhan Card 2019-1	Credit card receivables	2019.02.27		-	618,393
Shinhan Card 2019-2	Credit card receivables	2019.07.10		650,493	893,906
Shinhan Card 2019-3	Credit card receivables	2019.12.17		371,115	518,082
Shinhan Card 2020-1	Credit card receivables	2020.04.23		772,162	726,495
Shinhan Card 2021-1	Credit card receivables	2021.01.21		597,833	569,914
Shinhan Card 2021-2	Credit card receivables	2021.09.09		759,603	721,925
Shinhan Card 2022-1	Credit card receivables	2022.04.28		669,963	-
Shinhan Card 2022-2	Credit card receivables	2022.08.18		823,128	-
Shinhan Card 2022-3	Credit card receivables	2022.12.22		519,466	-
			₩	5,163,763	4,745,424

(c) Securitization of financial assets

The Group uses the securitization of financial assets as a means of financing and to transfer risk. Generally, these securitization transactions result in the transfer of contractual cash flows to the debt securities holders issued from the financial asset portfolio. The Group recognizes debt securities issued without derecognition of assets under individual agreements, partially recognizes assets to the extent of the Group's level of involvement in assets, or recognizes rights and obligations arising from the derecognition and transfer of assets as separate assets and liabilities. The Group derecognizes the entire asset only if it transfers contractual rights to the cash flows of financial assets or if it holds contractual rights but bears contractual obligations to pay cash flows to the other party without significant delays or reinvestment and transfers most of the risks and benefits of ownership (e.g., credit risk, interest rate risk, prepayment risk, etc.). For the years ended December 31, 2022 and 2021, the carrying amount of financial assets related to securitization transactions that have neither been transferred nor derecognized are ₩5,163,763 million and ₩4,745,424 million, respectively; the carrying amount of related liabilities are ₩2,981,836 million and ₩3,018,648 million, respectively.

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43. Related Parties and related Parties Transactions

(a) As of December 31, 2022, related parties of the Group are summarized as follows. Intra-group balances, and income and expenses arising from intra-group transactions are eliminated in preparing the consolidated financial statements.

Name of company	Control relationship
Shinhan Financial Group Co., Ltd.	Parent company
Wave Technology	Associates
One Shinhan Connect Fund 1	Associates
One Shinhan Connect Fund 2	Associates
Shinhan Bank	Other related parties
Shinhan Life Insurance Co., Ltd.	Other related parties
Shinhan DS Co., Ltd.	Other related parties
Shinhan Securities Co., Ltd.(*1)	Other related parties
Jeju Bank	Other related parties
BNP Paribas Cardif Life Insurance	Other related parties
Shinhan Savings Bank	Other related parties
Shinhan Aitas Co., Ltd.	Other related parties
Shinhan Capital Co., Ltd.	Other related parties
Shinhan Asset Management Co., Ltd.(*2)	Other related parties
SHC Management Co., Ltd.	Other related parties
Shinhan EZ General Insurance Co., Ltd.(*3)	Other related parties
Shinhan REITs Management Co., Ltd.	Other related parties
Shinhan AI Co., Ltd.	Other related parties
Shinhan Asset Trust Co., Ltd.(*4)	Other related parties
Shinhan Venture Investment Co, Ltd	Other related parties
One Shinhan Futures New Technology Investment Association 1	Other related parties
One Shinhan Futures New Technology Investment Association 2	Other related parties
One Shinhan Futures New Technology Investment Association 3	Other related parties
Shinhan global flagship venture fund 1	Other related parties
SH Real Estate Loan Investment Type Private Real Estate Investment Trust No.2	Other related parties

(*1) Shinhan Investment Co., Ltd. has changed its name to Shinhan Securities Co., Ltd. for the year ended December 31, 2022.

(*2) Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc. merged on January 5, 2022. The company name after the merger is Shinhan Asset Management Co., Ltd. The comparative information of Shinhan Asset Management Co., Ltd. includes both amounts of Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc. as of December 31, 2021.

(*3) During the period, BNP Paribas Cardif General Insurance has changed its name to Shinhan EZ General Insurance Co., Ltd.

(*4) During the period, Asia Trust Co., Ltd. has changed its name to Shinhan Asset Trust Co., Ltd.

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43. Related Parties and Transactions (continued)

(b) Significant transactions with the related parties for years ended December 31, 2022 and 2021 are as follows:

Related party / Account	2022	2021
Shinhan Financial Group Co., Ltd.		
Interest expense	₩ 48,105	40,904
Fee and commission income	31	11
Fee and commission expense	14,251	12,255
Other general and administrative expense	83	-
Shinhan Bank (*1)		
Interest income	409	265
Interest expense	8,505	4,054
Fee and commission income	5,865	3,584
Fee and commission expense	165,869	172,881
Other operating income	60	65
Other general and administrative expense	3,614	3,020
Gain on derivatives	45,322	41,689
Loss on derivatives	-	6,850
(Reversal of) Provision for credit loss allowance	6	(4)
Shinhan Credit Information Co., Ltd. (*2)		
Fee and commission income	37	55
Fee and commission expense	12,650	26,120
Shinhan Life Insurance Co., Ltd.		
Interest income	747	563
Interest expense	1,181	761
Fee and commission income	17,919	15,222
Fee and commission expense	29	274
Other general and administrative expense	13	70
Provision for (Reversal of) credit loss allowance	1	(1)
Shinhan DS Co., Ltd. (*3)		
Interest income	-	1
Fee and commission income	2	2
Fee and commission expense	63,908	57,561
Other operating income	3	1
Other general and administrative expense	19	25
(Reversal of) Provision for credit loss allowance	(3)	(1)
Shinhan Securities Co., Ltd. (*1)		
Interest income	132	53
Interest expenses	-	42
Fee and commission income	141	154
Fee and commission expense	213	293
Other operating expense	18	26
(Reversal of) Provision for credit loss allowance	2	-

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43. Related Parties and Transactions (continued)

(b) Significant transactions with the related parties for the years ended December 31, 2022 and 2021 are as follows:
(continued)

Related party / Account	2022	2021
Jeju Bank		
Fee and commission income	₩ 13	14
Fee and commission expense	4	9
BNP Paribas Cardif Life Insurance		
Fee and commission income	40	42
Shinhan Savings Bank		
Interest income	208	-
Fee and commission income	372	12
Other general and administrative income	1,379	11
Shinhan Aitas Co., Ltd.		
Fee and commission income	1	2
Shinhan Asset Management Co., Ltd.		
Fee and commission income	1	5
Fee and commission expense	-	2
Other general and administrative income	5	2
Interest income	5	-
(Reversal of) Provision for credit loss allowance	(3)	1
SHC Management Co., Ltd.		
Other operating income	55	55
Shinhan EZ General Insurance Co., Ltd.		
Fee and commission income	1	4
Other operating expense	1	-
(Reversal of) Provision for credit loss allowance	(5)	6
Shinhan REITs Management Co., Ltd.		
Fee and commission income	16	16
Shinhan Asset Trust Co., Ltd.		
Provision for (Reversal of) credit loss allowance	1	1
Shinhan AI Co., Ltd.		
Interest income	-	2
Fee and commission income	16	2
Fee and commission expense	-	180
Other general and administrative expense	40	107
(Reversal of) Provision for credit loss allowance	(2)	1

(*1) For years ended December 31, 2022 and 2021, the Group recognized the right-of-use assets and lease liabilities amounting to ₩10,335 million and ₩11,203 million, respectively, according to the lease contract with the other related amounting to ₩9,953 million and ₩11,200 million. In relation to this, the Group recognized interest expense amounting to ₩22 million and ₩299 million.

(*2) For year ended December 31, 2022, it was included as a wholly-owned subsidiary of the Group, the amount before it was included as a wholly-owned subsidiary of the Group is disclosed.

(*3) As of December 31, 2022 and 2021, the Group acquired a tangible asset amounting to ₩1,915 million and ₩470 million, and an intangible asset from other related parties amounting to ₩10,947million and ₩8,600 million.

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43. Related Parties and related Parties Transactions (continued)

(c) Significant balances with the related parties as of December 31, 2022 and 2021 are summarized as follows:

Related party / Account	2022	2021
Shinhan Financial Group Co., Ltd.		
Credit card receivables	₩ 579	435
Financing lease assets	-	9
Consolidated tax accounts	21,634	93
Shinhan Bank(*1)		
Cash and due from banks	123,259	31,428
Credit card receivables	8,674	9,308
Financing lease assets	39	391
Allowance for Doubtful Accounts	(6)	(4)
Derivative assets	44,644	23,090
Accounts receivable	8,702	9,843
Accrued income	33	3
Security deposits paid	11,345	9,284
Shinhan Credit Information Co., Ltd. (*2)		
Credit card receivables	-	112
Shinhan Life Insurance Co., Ltd. (*1)		
Credit card receivables	2,557	2,303
Allowance for Doubtful Accounts	(2)	(1)
Accounts receivable	42	1,574
Plan assets	33,236	32,555
Shinhan DS Co., Ltd.		
Credit card receivables	744	475
Financing lease assets	-	10
Allowance for Doubtful Accounts	(3)	(4)
Shinhan Securities Co., Ltd. (*1)		
Cash and due from banks	1,436	942
Credit card receivables	2,606	2,382
Accounts receivable	-	1,449
Allowance for Doubtful Accounts	(2)	(2)
Security deposits paid	300	300
Jeju Bank		
Cash and due from banks	731	214
Finance lease assets	-	8
BNP Paribas Cardif Life Insurance		
Credit card receivables	117	87
Shinhan Saving Bank		
Cash and due from banks	13,615	-
Credit card receivables	173	96
Allowance for Doubtful Accounts	202	-
Accrued income	64	-
Allowance for Doubtful Accounts	(1)	(1)
Shinhan Aitas Co., Ltd.		
Credit card receivables	187	131
Shinhan Capital Co., Ltd.		
Credit card receivables	426	377
Shinhan Asset Management Co., Inc.		
Credit card receivables	295	268
Finance lease assets	64	-
Allowance for Doubtful Accounts	-	(2)

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43. Related Parties and Transactions (continued)

(c) Significant balances with the related parties as of December 31, 2022 and 2021 are summarized as follows, continued:

Related party / Account	2022	2021
Shinhan REITs Management Co., Ltd.		
Credit card receivables	₩ 65	67
Shinhan AI Co., Ltd.		
Credit card receivables	38	34
Finance lease assets	-	4
Prepaid expenses	27	27
Allowance for Doubtful Accounts	-	(2)
Shinhan Asset Trust Co., Ltd.		
Credit card receivables	349	384
Allowance for Doubtful Accounts	(1)	(1)
Shinhan EZ General Insurance Co., Ltd.		
Credit card receivables	55	24
Allowance for unused credit commitments	-	(2)
Shinhan Venture Investment Co, Ltd.		
Credit card receivables	62	40
Total accounts receivable	₩ 276,285	127,728

(*1) The Group has paid ₩7,426 million to Shinhan Financial Group, the parent company, in connection with the group joint business during the previous term. Of these, ₩6,820 million will be preserved by Shinhan Bank, Shinhan Investment and Shinhan Life Insurance and is included in the receivables and debts of related parties.

(*2) For the year ended December 31, 2022, it was included as a wholly-owned subsidiary of the Group.

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43. Related Parties and Transactions (continued)

(c) Significant balances with the related parties as of December 31, 2022 and 2021 are summarized as follows, continued:

Related party / Account	2022	2021
Shinhan Financial Group Co., Ltd.		
Borrowings	₩ 2,224,939	2,189,765
Current tax liabilities	79,310	181,290
Accrued expenses	25,487	21,542
Allowance for unused credit commitments	1	-
Shinhan Bank		
Derivative liabilities	1,046	2,493
Borrowings	494,608	96,149
Provision for restoration	550	550
Accounts payable	8,618	6,071
Accrued expenses	969	1,390
Lease liabilities	9,953	11,200
Allowance for unused credit commitments	11	7
Shinhan Credit Information Co., Ltd.(*)		
Accounts payable	-	2,955
Shinhan Life Insurance Co., Ltd.		
Debentures	30,000	30,000
Accounts payable	966	57
Accrued expenses	539	144
Other liabilities	24,971	-
Allowance for unused credit commitments	1	1
Shinhan Securities Co., Ltd.		
Allowance for unused credit commitments	2	2
Shinhan DS Co., Ltd.		
Accrued expenses	1,080	336
Accounts payable	-	5
Allowance for unused credit commitments	1	2
Shinhan Capital Co., Ltd.		
Allowance for unused credit commitments	1	-
Shinhan Asset Trust Co., Ltd.		
Allowance for unused credit commitments	1	-
Shinhan Saving Bank		
Allowance for unused credit commitments	-	1
Shinhan EZ General Insurance Co., Ltd.		
Allowance for unused credit commitments	-	4
Shinhan Asset Management Co., Inc.		
Accounts payable	-	1
Allowance for unused credit commitments	-	1
Total accounts payable	₩ 2,903,055	2,543,966

(*) For the year ended December 31, 2022, it was included as a wholly-owned subsidiary of the Group.

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43. Related Parties and Transactions (continued)

(d) Fund transactions between the related parties for the years ended December 31, 2022 and 2021 are summarized as follows:

(i) Borrowing · Repayment

Control relationship	Related party	2022			2021	
		Borrowing	Repayment	Issuance of Hybrid bonds (*2)	Borrowing	Repayment
Parent Company	Shinhan Financial Group Co., Ltd.	₩ 300,000	(300,000)	400,000	513,684	(300,000)
Other related parties (*1)	Shinhan Bank Co., Ltd.	535,849	(140,791)	-	107,462	(103,221)
Other related parties	Shinhan Life Insurance Co., Ltd.	25,622	-	-	-	-

(*1) During the years ended December 31, 2022 and 2021, the amount of borrowing of lease liabilities under lease contracts concluded with other related parties is ₩ 212 million and ₩ 14,597 million, and the repayment amount is ₩ 1,791 million and ₩ 1,796 million, respectively.

(*2) It is the amount before deducting the costs associated with issuance of hybrid bonds. For the year ended December 31, 2022, the Group has paid dividend of ₩12,042 from hybrid bonds.

(ii) Investment – collection

Control relationship	Related party	2022		2021	
		Investment	Collection	Investment	Collection
Other related party	One-Shinhan Futures New Technology Investment Association 1	₩ -	(397)	-	-
Other related party	One-Shinhan Futures New Technology Investment Association 2	-	-	390	-
Other related party	One-Shinhan Futures New Technology Investment Association 3	198	-	-	-
Other related party	Shinhan global flagship venture fund 1	6,000	-	-	-
Other related party	SH Real Estate Loan Investment Type Private Real Estate Investment Trust No.2	7,561	(386)	3,532	-
Investments in associates	Wave Technology(*)	-	-	500	-
Investments in associates	One-Shinhan Connect Fund 1	11,100	(12,163)	72,000	-
Investments in associates	One-Shinhan Connect Fund 2	11,250	-	-	-

(*) For the year ended December 31, 2022, ₩130 million replaced by fair value financial assets through profit or loss is included as investments asset in associates.

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43. Related Parties and Transactions (continued)

(d) Fund transactions between the related parties for the years ended December 31, 2022 and 2021 are summarized as follows, continued:

(iii) *The transaction of payment and deposit that occurs due to business reasons between related parties is excluded.*

(e) Key management personnel compensations for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Salaries and wages	₩ 3,703	2,984
Post-employment benefits	111	50
Share-based payments	1,247	1,658
	<u>₩ 5,061</u>	<u>4,692</u>

(f) Details of the guarantee provided by related parties as of December 31, 2022 and 2021 are as follows:

<u>Guarantor</u>	<u>Guaranteed Party</u>		<u>Amount of guarantee</u>		<u>Details</u>
			<u>2022</u>	<u>2021</u>	
Shinhan Bank	Shinhan Card Co., Ltd	₩	300,000	500,000	Daily check overdraft agreement
			42,592	41,993	Unused credit commitment
			36,878	16,716	Financial guarantee (letter of credit)

(g) The main agreement with related parties as of December 31, 2022 and 2021 are as follows:

<u>Related Party</u>		<u>Amount of commitment</u>		<u>Details</u>
		<u>2022</u>	<u>2021</u>	
Shinhan Bank	₩	1,037,409	1,301,098	Derivative facilities
Shinhan Financial Group Co., Ltd.		3,421	3,565	Unused credit card commitment
Shinhan Bank		58,225	58,263	Unused credit card commitment
Shinhan Life Insurance Co., Ltd.		5,943	5,198	Unused credit card commitment
Shinhan DS Co., Ltd.		756	1,025	Unused credit card commitment
Shinhan Securities Co., Ltd.		7,894	8,118	Unused credit card commitment
BNP Paribas Cardif Life Insurance		883	913	Unused credit card commitment
Shinhan Savings Bank		77	154	Unused credit card commitment
Shinhan Aitas Co., Ltd.		813	869	Unused credit card commitment
Shinhan Capital Co., Ltd.		2,164	2,213	Unused credit card commitment
Shinhan Asset Management		705	301	Unused credit card commitment
Shinhan EZ General Insurance Co., Ltd.		195	226	Unused credit card commitment
Shinhan REITs Management Co., Ltd.		135	33	Unused credit card commitment
Shinhan Asset Trust Co., Ltd.		951	616	Unused credit card commitment
Shinhan Credit Information Co., Ltd. (*1)		-	288	Unused credit card commitment
Shinhan AI Co., Ltd.		62	16	Unused credit card commitment
Structured Entities (*2)		104,546	34,468	Securities purchase commitments

(*1) For the year ended December 31, 2022, it was included as a wholly-owned subsidiary of the Group.

(*2) The amount is for the Group's associates and other structured entities that are other related parties.

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43. Related Parties and Transactions (continued)

(h) The collateral provided to related parties as of December 31, 2022 and 2021 are as follows.

Related Party	Collateral asset	Set amount of collateral	
		2022	2021
Shinhan Bank	Bond(*) ₩	520,000	-
Shinhan Bank	Cash and due from banks	180	-
Shinhan Savings Bank	Cash and due from banks	50	-
Shinhan Life Insurance Co., Ltd.	Cash and due from banks	10	-

(*) The Group provides lease bonds classified as operating leases and financial leases as collateral.

(i) During the year ended December 31, 2022, the receivables acquired and sold through Shinhan Securities Co., Ltd. amounted to ₩312,439 million and ₩342,915 million, respectively, of which Shinhan Securities Co., Ltd. acquired debentures issued by the Group for ₩190,000 million.

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44. Interests in Unconsolidated Structured Entities

(a) The nature and extent of interests in unconsolidated structured entities

The Group involved in assets-backed securitization, beneficiary certificates and characteristics of these structured entities are as follows:

	Description
Assets-backed securitization	Securitization vehicles are established to buy the assets from the originators and issue the asset-backed securities in order to facilitate the originators' funding activities and enhance their financial soundness. The Group is involved in the securitization vehicles as the asset manager.
Investment fund	Investment funds are investment trusts, private investment companies, and associations that raise funds by issuing profit (investment) securities to investors and distribute the profits to investors by investing in stocks or bonds. The Group is an investor in an investment fund and may be exposed to principal losses if the value of the investment fund falls.

(i) The size of unconsolidated structured entities as of December 31, 2022 and 2021 are as follows:

	2022	2021
Assets-backed securitization	₩ 260,986	227,072
Investment fund	29,314,199	22,164,647
Total assets	₩ 29,575,185	22,391,719

(ii) Gain or loss recognized in relation to the Group's interests in unconsolidated structured entities for the years ended December 31, 2022 and 2021 are as follows:

	2022		
	Asset-backed securitization	Investment fund	Total
Gain			
Gain on valuation	₩ 135	533	668
Other income	6,159	675	6,834
	₩ 6,294	1,208	7,502
Loss	₩ -	171	171
	2021		
	Asset-backed securitization	Investment fund	Total
Gain			
Gain on valuation	₩ 320	175	495
Other income	5,578	-	5,578
	₩ 5,898	175	6,073
Loss	₩ -	35	35

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44. Interests in Unconsolidated Structured Entities (continued)

(b) Nature of risks

(i) The carrying amounts of the assets and liabilities recognized relating to the Group's interests in unconsolidated structured entities as of December 31, 2022 and 2021 are as follows:

		2022		
		Asset-backed securitization	Investment fund	Total
Assets:				
Financial assets at FVTPL	₩	1,526	379,411	380,937

		2021		
		Asset-backed securitization	Investment fund	Total
Assets:				
Financial assets at FVTPL	₩	1,390	347,123	348,513

(ii) Maximum exposure to risk relating to the Group's interests in unconsolidated structured entities as of December 31, 2022 and 2021 are as follows:

		2022		
		Asset-backed securitization	Investment fund	Total
Assets held	₩	1,526	379,411	380,937
Purchase commitments		-	33,896	33,896

		2021		
		Asset-backed securitization	Investment fund	Total
Assets held	₩	1,390	347,123	348,513
Purchase commitments		-	16,468	16,468

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45. Interest Rate Index Reform

In relation to interest rate index reform, the amendments provide exceptions including adjust effective interest rate instead of carrying amounts when interest rate index of financial instruments at amortized costs is replaced and apply hedge accounting without discontinuance although the interest rate index is replaced in hedging relationship.

Regarding the suspension of LIBOR interest rate calculation, the financial instruments that have not been converted to replaced interest rate index among the LIBOR interest rates as of December 31, 2022 are as follows:

(a) Non-derivative financial liabilities

	<u>Carrying amount</u>
	<u>USD LIBOR (*)</u>
Financial liabilities at amortized cost:	
Debentures	₩ 258,393

(*) Products due before the end of June 2023 have been excluded

(b) Derivative financial assets

	<u>Notional amount</u>
	<u>USD LIBOR (*)</u>
For hedge:	
Currency related	₩ 258,529

(*) Products due before the end of June 2023 have been excluded.

46. Uncertainty due to Changes in Domestic and Global Economic Conditions

The outbreak of COVID-19 has had a significant impact on the global economy including Korea. Financial and economic conditions arising may have a negative impact on the Group's results of operations by increasing a potential impairment on assets and the expected credit losses of certain asset portfolio.

The risk exposure of the portfolio, which is determined to be highly affected by the COVID-19 virus, is as follows.

	<u>Business</u>		<u>Financial assets</u>		<u>Total limit</u>
			<u>at amortized cost</u>		
Credit card assets	Credit Sales	₩	439,882		870,572
	Short-term card loans		187,652		
	Long-term card loans		424,445		-
		₩	<u>1,051,979</u>		<u>870,572</u>

In comprehensive consideration of the above circumstances, the Group reassessed the forward-looking information used to estimate expected credit losses allowances in applying Korean IFRS 1109 'Financial Instrument'.

In a statistical model that assumes the correlation between the default rates used in estimating the expected credit losses and the major economic factors, the Group reassessed forecasting default rates by applying estimates from major economic factors.

The Group will continue to monitor forward-looking information, taking into account the duration of COVID-19 pandemic impact to the economy and the government's policies.

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47. Business combination

(a) Business combination

On December 23, 2020, the Group entered into a stock purchase agreement to purchase all issued shares of Shinhan Credit Information Co., Ltd. from Shinhan Financial Group Co., Ltd. After obtaining approval for dealing in stocks in accordance with the relevant laws, all issued shares were acquired on July 28, 2022. As the transaction is a business combination between the controlling subsidiaries, the assets and liabilities of Shinhan Credit Information acquired by the consolidated company were reflected in the carrying amount, and the difference between consideration of transfer of stocks of ₩20,354 million and the acquired net asset value of ₩20,491 million was adjusted to the capital surplus.

(b) Acquisition assets and Liabilities

<u>Account</u>	<u>Amount</u>
Assets	
Cash and due from banks	₩ 16,426
Financial assets at fair value through profit or loss	4
Property and equipment, net	1,512
Intangible assets	2,071
Deferred tax assets	1,536
Net defined benefit assets	97
Other assets	9,204
	<u>30,850</u>
Liabilities	
Provisions	3,632
Other liabilities	6,727
	<u>10,359</u>
Net assets	₩ <u>20,491</u>

(c) Net cash outflows from business combination

<u>Classification</u>	<u>Amount</u>
Consideration paid in cash	₩ 20,354
Cash and cash equivalents acquired(*)	(16,094)
	₩ <u>4,260</u>

(*) The amount of cash and cash equivalents acquired is the amount of cash and due from banks excluding restricted deposits.