



OTP BANK PLC

***CONSOLIDATED FINANCIAL STATEMENTS
IN ACCORDANCE WITH
INTERNATIONAL FINANCIAL REPORTING
STANDARDS AS ADOPTED BY THE EUROPEAN UNION***

***FOR THE YEAR ENDED
31 DECEMBER 2022***

Table of Contents

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022	5
CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2022 ...	6
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2022	8
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2022	9
CONSOLIDATED STATEMENT OF CASH-FLOWS FOR THE YEAR ENDED 31 DECEMBER 2022.....	10
NOTE 1: ORGANIZATION AND BASIS OF CONSOLIDATED FINANCIAL STATEMENTS	12
1.1. General information	12
1.2. Basis of Accounting	13
NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES.....	17
2.1. Basis of Presentation	17
2.2. Foreign currency translation.....	17
2.3. Principles of consolidation	18
2.4. Accounting for acquisitions	18
2.5. Securities at amortized cost.....	19
2.6. Financial assets at fair value through profit or loss	19
2.7. Hedge accounting.....	21
2.8. Offsetting	22
2.9. Embedded derivatives	22
2.10. Securities at fair value through other comprehensive income.....	22
2.11. Loans, placements with other banks, repo receivables and loss allowance for loan and placements and repo receivable losses	23
2.12. Modified assets.....	25
2.13. Purchased or originated credit impaired financial assets.....	25
2.14. Loss allowance	26
2.15. Sale and repurchase agreements, security lending	28
2.16. Associates and other investments.....	28
2.17. Property and equipment, Intangible assets	29
2.18. Inventories.....	30
2.19. Government grants and government assistance	30
2.20. Financial liabilities	30
2.21. Leases.....	31
2.22. Investment properties	32
2.23. Share capital	32
2.24. Treasury shares.....	32
2.25. Non-current assets held-for-sale and discontinued operations	33
2.26. Interest income and income similar to interest income and interest expense	33
2.27. Fees and Commissions	34
2.28. Profit from associates	34
2.29. Income tax	34
2.30. Banking tax	35

2.31.	Off-balance sheet commitments and contingent liabilities.....	35
2.32.	Share-based payment	35
2.33.	Employee benefits.....	35
2.34.	Biological assets and agricultural produce.....	36
2.35.	Consolidated Statement of Cash-flows	36
2.36.	Segment reporting	36
2.37.	Comparative balances	36
NOTE 3:	SIGNIFICANT ACCOUNTING ESTIMATES AND DECISIONS IN THE APPLICATION OF ACCOUNTING POLICIES	37
3.1.	Loss allowances on financial instruments exposed to credit risk.....	37
3.2.	Valuation of instruments without direct quotations	37
3.3.	Provisions.....	37
3.4.	Impairment on goodwill.....	38
3.5.	Business model.....	38
3.6.	Contractual cash-flow characteristics of financial assets	38
NOTE 4:	MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP	40
NOTE 5:	CASH, AMOUNTS DUE FROM BANKS AND BALANCES WITH THE NATIONAL BANKS (in HUF mn).....	50
NOTE 6:	PLACEMENTS WITH OTHER BANKS (in HUF mn).....	51
NOTE 7:	REPO RECEIVABLES (in HUF mn).....	52
NOTE 8:	FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (in HUF mn)	53
NOTE 9:	SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (in HUF mn)	55
NOTE 10:	SECURITIES AT AMORTIZED COST (in HUF mn).....	58
NOTE 11:	LOANS AT AMORTIZED COST AND AT FAIR VALUE (in HUF mn).....	60
NOTE 12:	ASSOCIATES AND OTHER INVESTMENTS (in HUF mn).....	63
NOTE 13:	PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn).....	64
NOTE 14:	INVESTMENT PROPERTIES (in HUF mn)	71
NOTE 15:	DERIVATIVE FINANCIAL ASSETS DESIGNATED AS HEDGE ACCOUNTING (in HUF mn)	73
NOTE 16:	OTHER ASSETS (in HUF mn).....	74
NOTE 17:	AMOUNTS DUE TO BANKS, THE NATIONAL GOVERNMENTS, DEPOSITS FROM THE NATIONAL BANKS AND OTHER BANKS (in HUF mn).....	76
NOTE 18:	REPO LIABILITIES (in HUF mn)	77
NOTE 19:	FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (in HUF mn).....	78
NOTE 20:	DEPOSITS FROM CUSTOMERS (in HUF mn).....	79
NOTE 21:	LIABILITIES FROM ISSUED SECURITIES (in HUF mn).....	80
NOTE 22:	DERIVATIVE FINANCIAL LIABILITIES HELD FOR TRADING (in HUF mn).....	84
NOTE 23:	DERIVATIVE FINANCIAL LIABILITIES DESIGNATED AS HEDGE ACCOUNTING (in HUF mn).....	85
NOTE 24:	PROVISIONS AND OTHER LIABILITIES (in HUF mn)	86
NOTE 25:	SUBORDINATED BONDS AND LOANS (in HUF mn).....	88
NOTE 26:	SHARE CAPITAL (in HUF mn)	89
NOTE 27:	RETAINED EARNINGS AND RESERVES (in HUF mn).....	90
NOTE 28:	TREASURY SHARES (in HUF mn).....	94
NOTE 29:	NON-CONTROLLING INTEREST (in HUF mn)	95

NOTE 30: INTEREST INCOME, INCOME SIMILAR TO INTEREST INCOME AND EXPENSE (in HUF mn)	96
NOTE 31: LOSS ALLOWANCES / IMPAIRMENT / PROVISIONS (in HUF mn)	97
NOTE 32: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn)	98
NOTE 33: GAIN AND LOSSES BY TRANSACTIONS (in HUF mn).....	101
NOTE 34: OTHER OPERATING INCOME AND EXPENSES AND OTHER ADMINISTRATIVE EXPENSES (in HUF mn).....	103
NOTE 35: INCOME TAXES (in HUF mn).....	105
NOTE 36: LEASES (in HUF mn).....	108
NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn).....	111
37.1. Credit risk.....	111
37.2. Maturity analysis of assets, liabilities and liquidity risk	128
37.3. Net foreign currency position and foreign currency risk.....	133
37.4. Interest rate risk management.....	134
37.5. Market risk	143
37.6. Capital management.....	147
NOTE 38: TRANSFER OF FINANCIAL INSTRUMENTS (in HUF mn).....	149
NOTE 39: OFF-BALANCE SHEET ITEMS AND DERIVATIVE FINANCIAL INSTRUMENTS (in HUF mn)	150
NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn)	152
NOTE 41: RELATED PARTY TRANSACTIONS (in HUF mn).....	158
NOTE 42: ACQUISITION (in HUF mn).....	161
NOTE 43: SIGNIFICANT SUBSIDIARIES AND ASSOCIATES (in HUF mn).....	163
NOTE 44: TRUST ACTIVITIES (in HUF mn).....	167
NOTE 45: CONCENTRATION OF ASSETS AND LIABILITIES	168
NOTE 46: EARNINGS PER SHARE.....	169
NOTE 47: NET GAIN OR LOSS REALIZED ON FINANCIAL INSTRUMENTS (in HUF mn)	171
NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn)	173
48.1. Fair value of financial assets and liabilities.....	174
48.2. Fair value of derivative instruments	175
48.3. Types of hedge accounting.....	178
48.4. Fair value levels	188
NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn)	195
NOTE 50: ASSET CLASSIFIED AS HELD-FOR-SALE AND DISCONTINUED OPERATIONS (in HUF mn)	208
NOTE 51: SIGNIFICANT EVENTS DURING THE YEAR ENDED 31 DECEMBER 2022.....	209
NOTE 52: POST BALANCE SHEET EVENTS.....	212

OTP BANK PLC
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022
(in HUF mn)

	Note	2022	2021
Cash, amounts due from banks and balances with the National Banks	5.	4,221,392	2,556,035
Placements with other banks	6.	1,351,082	1,584,861
Repo receivables	7.	41,009	61,052
Financial assets at fair value through profit or loss	8.	436,387	341,397
Securities at fair value through other comprehensive income	9.	1,739,603	2,224,510
Securities at amortized cost	10.	4,891,938	3,891,335
Loans at amortized cost	11.	16,094,458	13,493,183
Loans mandatorily at fair value through profit or loss	11.	1,247,414	1,068,111
Finance lease receivables	36.	1,298,752	1,182,628
Associates and other investments	12.	73,849	67,222
Property and equipment	13.	464,469	411,136
Intangible assets and goodwill	13.	237,031	248,631
Right-of-use assets	36.	58,937	50,726
Investment properties	14.	47,452	29,882
Derivative financial assets designated as hedge accounting	15.	48,247	18,757
Deferred tax assets	35.	75,421	15,109
Current income tax receivables	35.	5,650	29,978
Other assets	16.	471,119	276,785
Assets classified as held for sale	50.	-	2,046
TOTAL ASSETS		<u>32,804,210</u>	<u>27,553,384</u>
Amounts due to banks, the National Governments, deposits from the National Banks and other banks	17.	1,463,158	1,567,348
Repo liabilities	18.	217,369	79,047
Financial liabilities designated at fair value through profit or loss	19.	54,191	41,184
Deposits from customers	20.	25,188,805	21,068,644
Liabilities from issued securities	21.	870,682	436,325
Derivative financial liabilities held for trading	22.	385,747	202,716
Derivative financial liabilities designated as hedge accounting	23.	27,949	11,228
Leasing liabilities	36.	63,778	53,286
Deferred tax liabilities	35.	40,094	24,045
Current income tax payable	35.	28,866	36,581
Provisions	24.	131,621	119,799
Other liabilities	24.	707,654	598,081
Subordinated bonds and loans	25.	301,984	278,334
TOTAL LIABILITIES		<u>29,481,898</u>	<u>24,516,618</u>
Share capital	26.	28,000	28,000
Retained earnings and reserves	27.	3,395,215	3,109,509
Treasury shares	28.	(106,862)	(106,941)
Total equity attributable to the parent		<u>3,316,353</u>	<u>3,030,568</u>
Total equity attributable to non-controlling interest	29.	<u>5,959</u>	<u>6,198</u>
TOTAL SHAREHOLDERS' EQUITY		<u>3,322,312</u>	<u>3,036,766</u>
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		<u>32,804,210</u>	<u>27,553,384</u>

Budapest, 31 March, 2023

Dr. Sándor Csányi
Chairman and Chief Executive Officer

László Wolf
Deputy Chief Executive Officer

OTP BANK PLC
CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE
YEAR ENDED 31 DECEMBER 2022
(in HUF mn)

	Note	2022	2021
CONTINUING OPERATIONS			
Interest income calculated using the effective interest method	30.	1,508,050	922,539
Income similar to interest income	30.	<u>495,973</u>	<u>194,920</u>
Interest income and income similar to interest income		<u>2,004,023</u>	<u>1,117,459</u>
Interest expense		<u>(912,709)</u>	<u>(243,149)</u>
NET INTEREST INCOME		<u>1,091,314</u>	<u>874,310</u>
Loss allowance on loans, placements, amounts due from banks and on repo receivables	31.	(155,681)	(27,721)
Change in the fair value attributable to changes in the credit risk of loans mandatorily measured at fair value through profit of loss	31.	13,346	(16,289)
Loss allowance on securities at fair value through other comprehensive income and on securities at amortized cost	31.	(60,774)	(3,974)
Provision for commitments and guarantees given (Impairment) / Release of impairment of assets subject to operating lease and of investment properties	31.	(6,145)	(99)
	31.	<u>(1,204)</u>	<u>438</u>
Risk cost total		<u>(210,458)</u>	<u>(47,645)</u>
NET INTEREST INCOME AFTER RISK COST		<u>880,856</u>	<u>826,665</u>
(Loss) / Gain from derecognition of financial assets at amortized cost	31.	<u>(1,655)</u>	<u>1,885</u>
Modification loss	4.	<u>(39,997)</u>	<u>(13,672)</u>
Income from fees and commissions	32.	739,576	554,113
Expense from fees and commissions	32.	<u>(139,216)</u>	<u>(111,939)</u>
Net profit from fees and commissions		<u>600,360</u>	<u>442,174</u>
Foreign exchange result, net	33.	(14,989)	(4,075)
(Loss) / Gain on securities, net	33.	(4,488)	5,560
Fair value adjustment on financial instruments measured at fair value through profit or loss	33.	(4,164)	(532)
Net results on derivative instruments and hedge relationships	33.	10,558	6,798
Profit from associates	8., 9.	14,640	15,648
Goodwill impairment	13.	(67,715)	-
Other operating income	34.	125,415	81,328
Other operating expenses	34.	<u>(128,785)</u>	<u>(85,732)</u>
Net operating income		<u>(69,528)</u>	<u>18,995</u>
Personnel expenses	34.	(402,563)	(340,684)
Depreciation and amortization	13.	(107,588)	(94,996)
Other general expenses	34.	<u>(464,997)</u>	<u>(311,932)</u>
Other administrative expenses		<u>(975,148)</u>	<u>(747,612)</u>
PROFIT BEFORE INCOME TAX		<u>394,888</u>	<u>528,435</u>
Income tax expense	35.	<u>(59,251)</u>	<u>(72,123)</u>
PROFIT AFTER INCOME TAX FOR THE PERIOD			
FROM CONTINUING OPERATIONS		<u>335,637</u>	<u>456,312</u>

OTP BANK PLC
CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE
YEAR ENDED 31 DECEMBER 2022 [continued]
(in HUF mn)

	Note	2022	2021
PROFIT AFTER INCOME TAX FOR THE PERIOD			
FROM CONTINUING OPERATIONS		<u>335,637</u>	<u>456,312</u>
From this, attributable to:			
Non-controlling interest	29.	<u>727</u>	<u>836</u>
Owners of the company		<u>334,910</u>	<u>455,476</u>
DISCONTINUED OPERATIONS			
Gain from disposal of subsidiary classified as held for sale	50.	11,444	-
Gain from discontinued operations	50.	=	<u>116</u>
PROFIT AFTER INCOME TAX FROM CONTINUING AND			
DISCONTINUED OPERATION		<u>347,081</u>	<u>456,428</u>
From this, attributable to:			
Non-controlling interest	29.	<u>727</u>	<u>836</u>
Owners of the company		<u>346,354</u>	<u>455,592</u>
Earnings per share (in HUF)			
From continuing operations			
Basic	46.	1,246	1,738
Diluted	46.	1,246	1,738
From continuing and discontinued operations			
Basic	46.	1,289	1,738
Diluted	46.	1,288	1,738

OTP BANK PLC
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR
THE YEAR ENDED 31 DECEMBER 2022
(in HUF mn)

	Note	2022	2021
PROFIT AFTER INCOME TAX FOR THE YEAR		<u>347,081</u>	<u>456,428</u>
Items that may be reclassified subsequently to profit or loss:			
Fair value adjustment of securities at fair value through other comprehensive income	27.	(134,692)	(50,789)
Deferred tax related to fair value adjustment of securities at fair value through other comprehensive income	27.	10,816	3,526
Foreign currency translation difference	27.	179,623	61,729
Items that will not be reclassified subsequently to profit or loss:			
Fair value changes of equity instruments at fair value through other comprehensive income	27.	5,780	2,747
Deferred tax related to equity instruments at fair value through other comprehensive income	27.	(1,282)	(361)
Change of actuarial gain related to employee benefits	27.	1,059	53
Deferred tax related to change of actuarial gain related to employee benefits	27.	(43)	(11)
Subtotal		<u>61,261</u>	<u>16,894</u>
TOTAL COMPREHENSIVE INCOME		<u>408,342</u>	<u>473,322</u>
From this, attributable to:			
Non-controlling interest		647	1,041
Owners of the company		407,695	472,281

OTP BANK PLC
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2022
(in HUF mn)

	Note	Share capital	Capital reserve	Retained earnings and other reserves ¹	Treasury shares	Total attributable to shareholders	Non-controlling interest	Total
Balance as at 1 January 2021		28,000	52	2,629,024	(124,080)	2,532,996	4,116	2,537,112
Profit after income tax for the period		-	-	455,592	-	455,592	836	456,428
Other Comprehensive Income		=	=	<u>16,689</u>	=	<u>16,689</u>	<u>205</u>	<u>16,894</u>
Total comprehensive income		=	=	<u>472,281</u>	=	<u>472,281</u>	<u>1,041</u>	<u>473,322</u>
Increase due to business combination		-	-	-	-	-	1,041	1,041
Share-based payment	40.	-	-	3,589	-	3,589	-	3,589
Adjustment of previous years' reserves		-	-	1,034	-	1,034	-	1,034
Sale of Treasury shares	28.	-	-	-	293,572	293,572	-	293,572
Treasury shares - loss on sale	28.	-	-	(27,800)	-	(27,800)	-	(27,800)
Treasury shares - acquisition	28.	-	-	-	(276,433)	(276,433)	-	(276,433)
Payments to ICES holders	27.	-	-	(3,734)	-	(3,734)	-	(3,734)
Increase due to termination of ICES	27.	=	=	<u>35,063</u>	=	<u>35,063</u>	=	<u>35,063</u>
Balance as at 31 December 2021		<u>28,000</u>	<u>52</u>	<u>3,109,457</u>	<u>(106,941)</u>	<u>3,030,568</u>	<u>6,198</u>	<u>3,036,766</u>
	Note	Share capital	Capital reserve	Retained earnings and other reserves ¹	Treasury shares	Total attributable to shareholders	Non-controlling interest	Total
Balance as at 1 January 2022		28,000	52	3,109,457	(106,941)	3,030,568	6,198	3,036,766
Profit after income tax for the period		-	-	346,354	-	346,354	727	347,081
Other Comprehensive Income		=	=	<u>61,341</u>	=	<u>61,341</u>	<u>(80)</u>	<u>61,261</u>
Total comprehensive income		=	=	<u>407,695</u>	=	<u>407,695</u>	<u>647</u>	<u>408,342</u>
Purchasing of non-controlling interest		-	-	-	-	-	(886)	(886)
Decrease due to business combination		-	-	(1,321)	-	(1,321)	-	(1,321)
Share-based payment	40.	-	-	2,948	-	2,948	-	2,948
Paid dividends for years 2019, 2020, 2021	27.	-	-	(120,248)	-	(120,248)	-	(120,248)
Adjustment related to share-based payment		-	-	4,066	-	4,066	-	4,066
Sale of Treasury shares	28.	-	-	-	16,347	16,347	-	16,347
Treasury shares - loss on sale	28.	-	-	(7,434)	-	(7,434)	-	(7,434)
Treasury shares - acquisition	28.	=	=	=	<u>(16,268)</u>	<u>(16,268)</u>	=	<u>(16,268)</u>
Balance as at 31 December 2022		<u>28,000</u>	<u>52</u>	<u>3,395,163</u>	<u>(106,862)</u>	<u>3,316,353</u>	<u>5,959</u>	<u>3,322,312</u>

¹ See details in Note 27.

OTP BANK PLC
CONSOLIDATED STATEMENT OF CASH-FLOWS FOR THE
YEAR ENDED 31 DECEMBER 2022
(in HUF mn)

OPERATING ACTIVITIES	Note	2022	2021
Profit after income tax for the period			
(attributable to the owners of the company)		346,354	455,592
Net accrued interest		45,499	14,854
Dividend income	27.	(13,800)	(15,648)
Depreciation and amortization	13.	112,749	100,321
Goodwill impairment	13.	67,715	-
Loss allowance on securities	9.,10.	60,774	3,974
Loss allowance on loans and placements, amounts due from banks and on repo receivables	5-7., 11.	155,681	27,721
Loss allowance on investments	12.	901	6,640
Loss allowance / (Release of loss allowance) on investment properties	14.	1,326	(243)
Impairment on tangible and intangible assets	13.	468	2,772
Loss allowance on other assets	16.	15,973	1,986
Provision on off-balance sheet commitments and contingent liabilities	24.	8,589	10,856
Share-based payment	40.	2,948	3,589
Unrealized (gains) / losses on fair value change of financial instrument at fair value through profit or loss	33.	(84,641)	11,404
Non-realized foreign exchange (gain) / loss	33.	(296,986)	22,258
(Gain) / Loss from sale of tangible and intangible assets	13.	(1,281)	129
Unrealized losses on fair value change of derivative financial instruments	33.	81,440	18,982
Negative goodwill	42.	(3,784)	-
Gain on discontinued operations	50.	-	(116)
Net changes in assets and liabilities in operating activities			
Net increase in securities at fair value through profit or loss	8.	(133,548)	(126,364)
Net increase in compulsory reserves at the National Banks	5.	(769,233)	(96,936)
Decrease / (Increase) in placement with other banks, before loss allowance for placements	6.	412,510	(307,731)
Net increase in loans at amortized cost before loss allowance for loans and in loans at fair value	11.	(2,733,463)	(2,206,183)
Net increase in other assets before loss allowance	16.	(205,916)	(17,930)
Net (decrease) / increase in amounts due to banks, the National Governments, deposits from the National Banks and other banks and repo liabilities	17., 18.	(43,747)	299,138
Net increase in financial liabilities designated at fair value through profit or loss	19.	11,073	1,315
Net increase in deposits from customers	20.	3,787,573	3,125,494
Cash payments for the interest portion of the lease liability	36.	(2,386)	(935)
Net increase in other liabilities	24.	400,077	186,319
Income tax paid	35.	(74,411)	(47,876)
Net Cash Provided by Operating Activities		<u>1,148,454</u>	<u>1,473,382</u>

OTP BANK PLC
CONSOLIDATED STATEMENT OF CASH-FLOWS FOR THE YEAR
ENDED 31 DECEMBER 2022
(in HUF mn)
[continued]

	Note	2022	2021
INVESTING ACTIVITIES			
Purchase of securities at fair value			
through other comprehensive income	9.	(1,129,729)	(2,342,772)
Proceeds from sale of securities at fair value			
through other comprehensive income	9.	1,529,538	2,217,702
Purchase of investments	12.	(38,053)	(32,626)
Proceeds from sale of investments	12.	30,525	11,207
Dividends received	27.	13,800	15,648
Purchase of securities at amortized cost	10.	(32,573,247)	(6,249,137)
Redemption of securities at amortized cost	10.	31,625,182	4,997,215
Purchase of property, equipment and intangible assets	13.	(275,017)	(300,715)
Proceeds from disposals of property, equipment and intangible assets	13.	76,136	119,661
Purchase of investment properties	14.	(20,935)	(134)
Proceeds from sale of investment properties	14.	1,127	7,983
Net change in cash and cash equivalents from discontinued operation	50.	-	116
Net cash paid for acquisition	42.	<u>38,889</u>	=
Net Cash Used in Investing Activities		<u>(721,784)</u>	<u>(1,555,852)</u>
FINANCING ACTIVITIES			
Cash received from issuance of securities	21.	569,839	76,728
Cash used for redemption of issued securities	21.	(133,712)	(106,350)
Cash payments for the principal portion of the lease liability	36.	(24,632)	(14,149)
Cash received from issuance of subordinated bonds and loans	25.	6,418	2,676
Cash used for redemption of subordinated bonds and loans	25.	(4,646)	-
Payments to ICES holders	27.	-	71,688
Sale of Treasury shares	28.	8,913	293,572
Purchase of Treasury shares	28.	(16,268)	(276,433)
Dividends paid	27.	<u>(116,147)</u>	<u>(10)</u>
Net Cash Provided by Financing Activities		<u>289,765</u>	<u>47,722</u>
TOTAL NET CASH PROVIDED BY / (USED IN)		<u>716,435</u>	<u>(34,748)</u>
Cash and cash equivalents			
at the beginning of the period	5.	<u>1,701,564</u>	<u>1,674,777</u>
Foreign currency translation		179,689	61,533
Net change in cash and cash equivalent		716,435	(34,748)
Adjustment due to discontinued operation		=	<u>2</u>
Cash and cash equivalents			
at the end of the period	<u>5.</u>	<u>2,597,688</u>	<u>1,701,564</u>

NOTE 1: ORGANIZATION AND BASIS OF CONSOLIDATED FINANCIAL STATEMENTS

1.1. General information

OTP Bank Plc (the “Bank” or “OTP Bank”) was established on 31 December 1990, when the previously State-owned company was transformed into a limited liability company. The Bank’s registered office address is 16, Nador Street, Budapest 1051, Hungary.

Due to Hungarian legislation audit services are a statutory requirement for OTP Bank. Disclosure information about the auditor: Ernst & Young Audit Ltd. (001165), 1132 Budapest Váci Street 20. Registered under 01-09-267553 by Budapest-Capital Regional Court, as registry court. Statutory registered auditor: Zsuzsanna Nagyváradiné Szépfalvi, registration number: 005313.

These Consolidated Financial Statements were approved by the Board of Directors and authorised for issue on 31 March 2023. The Bank’s owners have the power to amend the Consolidated Financial Statements after issue if applicable.

The Bank’s owners have the power to amend the Consolidated Financial Statements after issue if applicable.

In 1995, the shares of the Bank were introduced on the Budapest and the Luxembourg Stock Exchanges and were also traded on the SEAQ board on the London Stock Exchange and on PORTAL in the USA.

The structure of the Share capital by shareholders (%):

	2022	2021
Domestic and foreign private and institutional investors	99%	98%
Employees	1%	1%
Treasury shares	-	<u>1%</u>
Total	<u>100%</u>	<u>100%</u>

The Bank’s Registered Capital consists of 280.000.010 pieces of ordinary shares with the nominal value of HUF 100 each, representing the same rights to the shareholders.

The Bank and its subsidiaries (“Entities of the Group“, together the “Group” or “OTP Group”) provide a full range of commercial banking services through a wide network of 1,392 branches in the following countries Hungary, Bulgaria, Serbia, Croatia, Russia, Romania, Ukraine, Albania, Montenegro, Moldova and Slovenia, as well as provides other services in the Netherlands and Malta.

The number of the active employees without long-term breaks, and with part-time employees taken into account proportionately, and the average number of active employees on monthly basis at the Group:

	2022	2021
The number of employees at the Group	35,976	37,866
The average number of employees at the Group	36,168	37,890

NOTE 1: ORGANIZATION AND BASIS OF CONSOLIDATED FINANCIAL STATEMENTS
[continued]

1.2. Basis of Accounting

These Consolidated Financial Statements were prepared based on the assumptions of the Management that the Bank will remain in business for the foreseeable future and that the Bank will not be forced to halt operations and liquidate its assets in the near term at what may be very low fire-sale prices.

The Entities of the Group maintain their accounting records and prepare their statutory accounts in accordance with the commercial, banking and fiscal regulations prevailing in Hungary and in case of foreign subsidiaries in accordance with the commercial, banking and fiscal regulations of the country in which they are domiciled.

The Bank's functional currency is the Hungarian Forint ("HUF"). It is also presentation currency for the Group. The financial statements of the subsidiaries used during the preparation of Consolidated Financial Statements of the Group have the same reporting period – starting from 1 January ending as at 31 December – like the reporting period of the Group.

Due to the fact that the Bank is listed on international and national stock exchanges, the Bank is obliged to present its financial statements in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union (the "EU").

Certain adjustments have been made to the Entities' statutory accounts in order to present the Consolidated Financial Statements of the Group in accordance with all standards and interpretations approved by the International Accounting Standards Board ("IASB").

These Consolidated Financial Statements have been prepared in accordance with IFRS as adopted by the EU. The accompanying Notes to these Consolidated Financial Statements form an integral part of these Consolidated Financial Statements prepared in accordance with International Financial Reporting Standards as adopted by EU.

1.2.1. The effect of adopting new and revised International Financial Reporting Standards effective from 1 January 2022

The following amendments to the existing standards and new interpretation issued by the International Accounting Standards Board (IASB) and adopted by the EU are effective for the current reporting period:

- **Amendments to IFRS 1 "First-time Adoption of International Financial Reporting Standards", IFRS 9 "Financial Instruments", IAS 41 "Agriculture" – "Annual Improvements to IFRSs 2018-2020 Cycle"** - adopted by EU on 28 June 2021 (effective for annual periods beginning on or after 1 January 2022):
 - **IFRS 1 First-time Adoption of International Financial Reporting Standards – Subsidiary as a first-time adopter:** The amendment permits a subsidiary that elects to apply paragraph D16(a) of IFRS 1 to measure cumulative translation differences using the amounts reported in the parent's consolidated financial statements, based on the parent's date of transition to IFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(a) of IFRS 1. These amendments had no impact on the consolidated financial statements of the Group as it is not a first-time adopter.
 - **IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities:** The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. There is no similar amendment proposed for IAS 39 Financial Instruments: Recognition and Measurement. In accordance with the transitional provisions, the Group applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no fees charged or incurred related to modifications during the period.

NOTE 1: ORGANIZATION AND BASIS OF CONSOLIDATED FINANCIAL STATEMENTS
[continued]

1.2. Basis of Accounting [continued]

1.2.1. The effect of adopting new and revised International Financial Reporting Standards effective from 1 January 2022 [continued]

- **IAS 41 Agriculture – Taxation in fair value measurements:** The amendment removes the requirement in paragraph 22 of IAS 41 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of IAS 41. These amendments had limited impact on the consolidated financial statements of the Group as it has limited assets in scope of IAS 41 as at the reporting date.
- **Amendments to IFRS 3 “Business Combinations”; IAS 16 “Property, Plant and Equipment”; IAS 37 “Provisions, Contingent Liabilities and Contingent Assets”** - adopted by the EU on 28 June 2021 Annual Improvements (effective for annual periods beginning on or after 1 January 2022):
 - **IFRS 3 Business Combinations (Amendments)** update a reference in IFRS 3 to the previous version of the IASB’s Conceptual Framework for Financial Reporting to the current version issued in 2018 without significantly changing the accounting requirements for business combinations.
 - **IAS 16 Property, Plant and Equipment (Amendments)** prohibit a company from deducting from the cost of property, plant and equipment any proceeds from the sale of items produced while bringing the asset to the location and condition necessary for it be capable of operating in the manner intended by management. Instead, a company recognizes such sales proceeds and related cost in profit or loss.
 - **IAS 37 Provisions, Contingent Liabilities and Contingent Assets (Amendments)** specify which costs a company includes in determining the cost of fulfilling a contract for the purpose of assessing whether a contract is onerous. The amendments clarify, the costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to the contract activities.

The adoption of these amendments to the existing standards has not led to any material changes in the Group’s Consolidated Financial Statements.

1.2.2. New and revised Standards and Interpretations issued by IASB and adopted by the EU but not yet effective

At the date of authorization of these financial statements there are new standards, amendments to the existing standards or interpretations which are issued by IASB and adopted by the EU which are not yet effective:

- **Amendments to IAS 1 “Presentation of Financial Statements” and IFRS Practice Statement 2 – Disclosure of Accounting policies** – adopted by the EU on 2 March 2022 (effective for annual periods beginning on or after 1 January 2023; earlier application permitted):
 - The amendments provide guidance on the application of materiality judgements to accounting policy disclosures. In particular, the amendments to IAS 1 replace the requirement to disclose ‘significant’ accounting policies with a requirement to disclose ‘material’ accounting policies. Also, guidance and illustrative examples are added in the Practice Statement to assist in the application of the materiality concept when making judgements about accounting policy disclosures.
- **Amendments to IAS 8 “Accounting policies, Changes in Accounting Estimates and Errors” – Definition of Accounting Estimates** – adopted in the EU on 2 March 2022 (effective for annual periods beginning on or after 1 January 2023 with earlier application permitted and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period):
 - The amendments introduce a new definition of accounting estimates, defined as monetary amounts in financial statements that are subject to measurement uncertainty, if they do not result from a correction of prior period error. Also, the amendments clarify what changes in accounting estimates are and how these differ from changes in accounting policies and corrections of errors.

NOTE 1: ORGANIZATION AND BASIS OF CONSOLIDATED FINANCIAL STATEMENTS
[continued]

1.2. Basis of Accounting [continued]

1.2.2. New and revised Standards and Interpretations issued by IASB and adopted by the EU but not yet effective [continued]

- **Amendments to IFRS 17 “Insurance Contracts”** – adopted by the EU on 19 November 2021 (effective for annual periods beginning on or after 1 January 2023).
- **Amendments to IFRS 17 “Insurance Contracts” – Initial application of IFRS 17 and IFRS 9 – Comparative Information** – adopted by the EU on 8 September 2022 (effective date for annual periods beginning on or after 1 January 2023 with earlier application permitted, provided the entity also applies IFRS 9 Financial Instruments on or before the date it first applies IFRS 17).
- **Amendments to IAS 12 “Income Taxes” – Deferred Tax related to Assets and Liabilities arising from a Single Transaction** – adopted by the EU on 11 August 2022 (effective for annual periods beginning on or after 1 January 2023; earlier application permitted):
 - The amendments narrow the scope of and provide further clarity on the initial recognition exception under IAS 12 and specify how companies should account for deferred tax related to assets and liabilities arising from a single transaction, such as leases and decommissioning obligations. The amendments clarify that where payments that settle a liability are deductible for tax purposes, it is a matter of judgement, having considered the applicable tax law, whether such deductions are attributable for tax purposes to the liability or to the related asset component. Under the amendments, the initial recognition exception does not apply to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences. It only applies if the recognition of a lease asset and lease liability (or decommissioning liability and decommissioning asset component) give rise to taxable and deductible temporary differences that are not equal.

The Group does not adopt these new standards and amendments to existing standards before their effective date. The Group anticipates that the adoption of these new standards, amendments to the existing standards and new interpretations will have no material impact on the Consolidated Financial Statements of the Group in the period of initial application.

1.2.3. Standards and Interpretations issued by IASB, but not yet adopted by the EU

At present, IFRS as adopted by the EU do not significantly differ from regulations adopted by the International Accounting Standards Board (IASB) except for the following new standards, amendments to the existing standards and new interpretation, which were not endorsed for use in EU as at the date of publication of these Consolidated Financial Statements:

- **Amendments to IAS 1 “Presentation of Financial Statements” - Classification of Liabilities as Current or Non-Current** (effective for annual periods beginning on or after 1 January 2024; earlier application permitted):
 - The objective of the amendments is to clarify the principles in IAS 1 for the classification of liabilities as either current or non-current. The amendments clarify the meaning of a right to defer settlement, the requirement for this right to exist at the end of the reporting period, that management intent does not affect current or non-current classification, that options by the counterparty that could result in settlement by the transfer of the entity’s own equity instruments do not affect current or non-current classification. Also, the amendments specify that only covenants with which an entity must comply on or before the reporting date will affect a liability’s classification. Additional disclosures are also required for non-current liabilities arising from loan arrangements that are subject to covenants to be complied with within twelve months after the reporting period.

NOTE 1: ORGANIZATION AND BASIS OF CONSOLIDATED FINANCIAL STATEMENTS
[continued]

1.2. Basis of Accounting [continued]

1.2.3. Standards and Interpretations issued by IASB, but not yet adopted by the EU [continued]

- **Amendments to IFRS 16 “Leases” – Lease Liability in a Sale and Leaseback** – issued by IASB on 22 September 2022 (effective for annual periods beginning on or after 1 January 2024; earlier application permitted):
 - The amendments are intended to improve the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction in IFRS 16, while it does not change the accounting for leases unrelated to sale and leaseback transactions. In particular, the seller-lessee determines ‘lease payments’ or ‘revised lease payments’ in such a way that the seller-lessee would not recognize any amount of the gain or loss that relates to the right of use it retains. Applying these requirements does not prevent the seller-lessee from recognizing, in profit or loss, any gain or loss relating to the partial or full termination of a lease. A seller-lessee applies the amendment retrospectively in accordance with IAS 8 to sale and leaseback transactions entered into after the date of initial application, being the beginning of the annual reporting period in which an entity first applied IFRS 16.
- **Amendments to IFRS 10 “Consolidated Financial Statements” and IAS 28 “Investments in Associates and Joint Ventures” – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture and further amendments** (effective date deferred indefinitely until the research project on the equity method has been concluded):
 - The amendments address an acknowledged inconsistency between the requirements in IFRS 10 and those in IAS 28, in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognized when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if these assets are housed in a subsidiary. In December 2015 the IASB postponed the effective date of this amendment indefinitely pending the outcome of its research project on the equity method of accounting.

The Group anticipates that the adoption of these new standards, amendments to the existing Standards and new interpretations will have no significant impact on the Consolidated Financial Statements of the Group in the period of initial application.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies applied in the preparation of the accompanying Consolidated Financial Statements are summarized below:

2.1. Basis of Presentation

These Consolidated Financial Statements have been prepared under the historical cost convention with the exception of certain financial instruments, which are recorded at fair value. Revenues and expenses are recorded in the period in which they are earned or incurred. The Group does not offset assets and liabilities or income and expenses unless it is required or permitted by an IFRS standard.

During the preparation of Consolidated Financial Statements assets and liabilities, income and expenses are presented separately, except in certain cases, when one of the IFRS standards prescribes net presenting related to certain items (see note 2.8. below).

The presentation of Consolidated Financial Statements in conformity with IFRS as adopted by the EU requires the Management of the Group to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and their reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Future changes in economic conditions, business strategies, regulatory requirements, accounting rules and other factors could result in a change in estimates that could have a material impact on future financial statements.

2.2. Foreign currency translation

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currencies are translated into functional currencies at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the exchange rates quoted by the National Bank of Hungary ("NBH"), or if there is no official rate, at exchange rates quoted by OTP Bank as at the date of the Consolidated Financial Statements.

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise except for:

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see note 2.7. below for hedging accounting policies); and
- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in Other Comprehensive Income and reclassified from equity to profit or loss on repayment of the monetary items.

For the purposes of presenting Consolidated Financial Statements, the assets and liabilities of the Group's foreign operations are translated into HUF using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in Other Comprehensive Income and accumulated in equity (attributed to non-controlling interests as appropriate).

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.2. Foreign currency translation [continued]

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Group are reclassified to profit or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognized in Other Comprehensive Income and accumulated in equity.

2.3. Principles of consolidation

As the ultimate parent, OTP Bank is preparing Consolidated Financial Statements of the Group.

These Consolidated Financial Statements combine the assets, liabilities, equity, income, expenses and cash flows of the Bank and of those subsidiaries of the Bank in which the Bank exercises control.

All intra-group transactions are consolidated fully on a line-by-line basis while under equity method other consolidation rules are applied. Determination of the entities which are involved into the consolidation procedures based on the determination of the Group's Control over another entity. Control exists when the Bank has power over the investee, is able to use this power and is exposed or has right to variable returns. Consolidation of a subsidiary should begin from the date when the Group obtains control and cease when the Group loses control. Therefore, income and expenses of a subsidiary should be included in the Consolidated Financial Statements from the date the Group gains control of the subsidiary until the date when the Group ceases to have control of the subsidiary.

The list of the major fully consolidated subsidiaries, the percentage of issued capital owned by the Bank and the description of their activities is provided in Note 43.

2.4. Accounting for acquisitions

Business combinations are accounted for using the acquisition method. Any goodwill arising on acquisition is recognized in the Consolidated Statement of Financial Position and accounted for as indicated below.

The acquisition date is the date on which the acquirer effectively obtains control over the acquiree. Before this date, it should be presented as Advance for investments within Other assets.

Goodwill, which represents the residual cost of the acquisition after obtaining the control over the acquiree in the fair value of the identifiable assets acquired and liabilities assumed is held as an intangible asset and recorded at cost less any accumulated impairment losses in the Consolidated Financial Statements. The Group tests goodwill for impairment by comparing its recoverable amount with its carrying amount, and recognising any excess of the carrying amount over the recoverable amount an impairment loss. The recoverable amount of goodwill is the higher of its fair value less costs of disposal and its value in use.

If the Group loses control of a subsidiary, derecognizes the assets (including any goodwill) and liabilities of the subsidiary at their carrying amounts at the date when control is lost and recognizes any difference as a gain or loss on the sale attributable to the parent in the Consolidated Statement of Profit or Loss on Net income from discontinued operations.

Goodwill acquired in a business combination is tested for impairment annually or more frequently if events or changes in circumstances indicate. The goodwill is allocated to the cash-generating units that are expected to benefit from the synergies of the combinations.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.4. Accounting for acquisition [continued]

The Group calculates the fair value of identified assets and liabilities assumed on discounted cash-flow model. The 3 year period explicit cash-flow model serves as a basis for the impairment test by which the Group defines the impairment need on goodwill based on the strategic factors and financial data of its cash-generating units.

The Group, in its strategic plan, has taken into consideration the effects of the present global economic situation, the present economic growth and outlook, the associated risks and their possible effect on the financial sector as well as the current and expected availability of wholesale funding.

Negative goodwill (gain from bargain purchase), when the interest of the acquirer in the net fair value of the acquired identifiable net assets exceeds the cost of the business combination, is recognized immediately in the Consolidated Statement of Profit or Loss as "Other income".

2.5. Securities at amortized cost

The Group measures at amortized cost those securities which are held for contractual cash collecting purposes, and contractual terms of these securities give rise to cash flows that are solely payment of principal and interest on the principal amount outstanding. The Group initially recognizes these securities at fair value. Securities at amortized cost are subsequently measured using the effective interest ("EIR") method and are subject to impairment. The amortisation of any discount or premium on the acquisition of a security at amortized cost is part of the amortized cost and is recognized as interest income so that the revenue recognized in each period represents a constant yield on the investment. Securities at amortized cost are accounted for on a trade date basis.

Such securities comprise mainly securities issued by the Hungarian and foreign Governments, corporate bonds, mortgage bonds and discounted treasury bills.

2.6. Financial assets at fair value through profit or loss

2.6.1. Securities held for trading

Investments in securities are accounted for on a trade date basis and are initially measured at fair value. Securities held for trading are measured at subsequent reporting dates at fair value, so unrealized gains and losses on held for trading securities are recognized in profit or loss and included in the Consolidated Statement of Profit or Loss for the period. The Group holds held for trading securities within the business model to obtain short-term gains, consequently realized and unrealized gains and losses are recognized in the net operating income, while interest income is recognized in income similar to interest income.

Such securities consist of equity instruments, shares in investment funds, Hungarian and foreign government bonds, corporate bonds, discounted treasury bills, mortgage bonds and other securities.

2.6.2. Financial assets designated as fair value through profit or loss

The Group may - at initial recognition - irrevocable designate a financial asset as measured at fair value through profit or loss that would otherwise be measured at fair value through other comprehensive income or at amortized cost.

The Group uses fair value designation if the classification eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases ('accounting mismatch').

The use of the fair value designation is based only on direct decision of management of the Group. The Group currently doesn't apply this method.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.6. Financial assets at fair value through profit or loss [continued]

2.6.3. Derivative financial instruments

In the normal course of business, the Group is a party to contracts for derivative financial instruments, which represent a low initial investment compared to the notional value of the contract and their value depends on value of underlying asset and are settled in the future. The derivative financial instruments used include interest rate forward or swap agreements and currency forward or swap agreements and options. These financial instruments are used by the Group both for trading purposes and to hedge interest rate risk and currency exposures associated with its transactions in the financial markets (it is the so-called economic hedge, accounting hedge is described later).

Derivative financial instruments are accounted for on a trade date basis and are initially measured at fair value and at subsequent reporting dates also at fair value. Fair values are obtained from quoted market prices, discounted cash-flow models and option pricing models as appropriate. The Group adopts a multi curve valuation approach for calculating the net present value of future cash-flows – based on different curves used for determining forward rates and used for discounting purposes. It shows the best estimation of such derivative deals that are collateralised as the Group has almost all of its open derivative transactions collateralised.

Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognized in profit or loss and are included in the Consolidated Statement of Profit or Loss for the period. Each derivative deal is determined as asset when fair value is positive and as liability when fair value is negative.

Certain derivative transactions, while providing effective economic hedges under the risk management policy of the Group, do not qualify for hedge accounting under the specific rules of IFRS 9 and are therefore treated as derivatives held for trading with fair value gains and losses charged directly to the Consolidated Statement of Profit or Loss.

Foreign currency contracts

Foreign currency contracts are agreements to exchange specific amounts of currencies at a specified rate of exchange, at a spot date (settlement occurs two days after the trade date) or at a forward date (settlement occurs more than two days after the trade date). The notional amount of these forward contracts does not represent the actual market or credit risk associated with these contracts.

Foreign currency contracts are used by the Group for risk management and trading purposes. The risk management foreign currency contracts of the Group were used to hedge the exchange rate fluctuations of loans and deposits to credit institutions denominated in foreign currency.

Foreign exchange swaps and interest rate swaps

The Group enters into foreign exchange swap and interest rate swap (“IRS”) transactions. The swap transaction is an agreement concerning the swap of certain financial instruments, which usually consists of spot and one or more forward contracts.

IRS transactions oblige two parties to exchange one or more payments calculated with reference to fixed or periodically reset rates of interest applied to a specific notional principal amount (the base of the interest calculation). Notional principal is the amount upon which interest rates are applied to determine the payment streams under IRS transactions. Such notional principal amounts often are used to express the volume of these transactions but are not actually exchanged between the counterparties.

IRS transactions are used by the Group for risk management and trading purposes.

Cross-currency interest rate swaps

The Group enters into cross-currency interest rate swap (CCIRS) transactions which have special attributes, i.e. the parties exchange the notional amount at the beginning and also at the maturity of the transaction. A special type of these deals is the mark-to-market CCIRS agreements. For these kind of transactions the parties – in accordance with the foreign exchange prices – revalue the notional amount during lifetime of the transaction.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.6. Financial assets at fair value through profit or loss [continued]

2.6.3 Derivative financial instruments [continued]

Equity and commodity swaps

Equity swaps obligate two parties to exchange more payments calculated with reference to periodically reset rates of interest and performance of indices. A specific notional principal amount is the base of the interest calculation. The payment of index return is calculated on the basis of current market price compared to the previous market price. In case of commodity swaps payments are calculated on the basis of the strike price of a predefined commodity compared to its average market price in a period.

Forward rate agreements (FRA)

A forward rate agreement is an agreement to settle amounts at a specified future date based on the difference between an interest rate index and an agreed upon fixed rate. Market risk arises from changes in the market value of contractual positions caused by movements in interest rates.

The Group limits its exposure to market risk by entering into generally matching or offsetting positions and by establishing and monitoring limits on unmatched positions. Credit risk is managed through approval procedures that establish specific limits for individual counterparties. The Group's forward rate agreements were transacted for management of interest rate exposures and have been accounted for at mark-to-market fair value.

Foreign exchange options

A foreign exchange option is a derivative financial instrument that gives the owner the right to exchange money denominated in one currency into another currency at a pre-agreed exchange rate at a specified future date. The transaction, for a fee, guarantees a worst-case exchange rate for the futures purchase of one currency for another. These options protect against unfavourable currency movements while preserving the ability to participate in favourable movements.

2.7. Hedge accounting

Derivative financial instruments designated as a fair-value hedge

Changes in the fair value of derivatives that are designated and qualify as hedging instruments in fair value hedges and that prove to be highly effective in relation to the hedged risk, are recorded in the Consolidated Statement of Profit or Loss along with the corresponding change in fair value of the hedged asset or liability that is attributable to the specific hedged risk. Changes in the fair value of hedging instrument in fair value hedges is charged directly to the Consolidated Statement of Profit or Loss.

The conditions of hedge accounting applied by the Bank are the following: formally designated as hedge relationship, proper hedge documentation is prepared, effectiveness test is performed and based on it the hedge is qualified as effective. In the case of a financial instrument measured at amortised cost the Group recognises the hedging gain or loss on the hedged item as the modification of its carrying amount and it is recognised in profit or loss. These adjustments of the carrying amount are amortised to the profit or loss using the effective interest rate method. The Group starts the amortisation when the hedged item is no longer adjusted by the hedging gains or losses. If the hedged item is derecognised, the Group recognises the unamortised fair value in profit or loss immediately. For fair value hedges inefficiencies and the net revaluation of hedged and hedging item are recognized in the Net results on derivative instruments and hedge relationships.

The Group implemented hedge accounting rules prescribed by IFRS 9 in 2018. For further details please see Note 48.3.

Derivative financial instruments designated as cash-flow hedge

Changes in the fair value of derivatives that are designated and qualify as hedging instrument in cash-flow hedges and that prove to be highly effective in relation to the hedged risk are recognized in their effective portion as reserve in Other Comprehensive Income. The ineffective element of the changes in fair value of hedging instrument is charged directly to the Consolidated Statement of Profit or Loss.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.7. Hedge accounting [continued]

Derivative financial instruments designated as cash-flow hedge [continued]

The Group terminates the hedge relationship if the hedging instrument expires or is sold, terminated or exercised, or the hedge no longer meets the criteria for hedge accounting. In the case of cash-flow hedges – in line with the standard - hedge accounting is still applied by the Group as long as the underlying asset is derecognized or terminated. When the Group discontinues hedge accounting to a cash-flow hedge the amount in the cash flow hedge reserve is reclassified to the profit or loss if the hedged future cash flows are no longer expected to occur. If the hedged future cash flows are still expected to occur, the amount remains in the cashflow hedge reserve and reclassified to the profit and loss only when the future cash flows occur.

Net investment hedge in foreign operations

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, shall be accounted for similarly to cash flow hedges.

On the disposal of a foreign operation, the cumulative value of any gains and losses recognized in Other Comprehensive Income is transferred to the Consolidated Statement of Profit or Loss. The Group has terminated these transactions since 2020.

2.8. Offsetting

Financial assets and liabilities are offset and the net amount is reported in the Consolidated Statement of Financial Position when the Group has a legally enforceable right to set off the recognized amounts and the transactions are intended to be reported in the Consolidated Statement of Financial Position on a net basis. In case of the derivative financial instruments the Group applies offsetting and net presentation in the Consolidated Statement of Financial Position when the Group has the right and the ability to settle these assets and liabilities on a net basis.

2.9. Embedded derivatives

Sometimes, a derivative may be a component of a combined or hybrid contract that includes a host contract and a derivative (the embedded derivative) affecting cash-flows or otherwise modifying the characteristics of the host instrument. An embedded derivative must be separated from the host instrument and accounted for as a separate derivative if, and only if:

- The economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract;
- A separate financial instrument with the same terms as the embedded derivative would meet the definition of a derivative as a stand-alone instrument; and
- The host instrument is not measured at fair value or is measured at fair value but changes in fair value are recognized in Other Comprehensive Income.

As long as a hybrid contract contains a host that is a financial asset the general accounting rules for classification, recognition and measurement of financial assets are applicable for the whole contract and no embedded derivative is separated.

Derivatives that are required to be separated are measured at fair value at initial recognition and subsequently. If the Group is unable to measure the embedded derivative separately either at acquisition or at the end of a subsequent financial reporting period, the Group shall designate the entire hybrid contract as at fair value through profit or loss. The Group shall assess whether an embedded derivative is required to be separated from the host contract and accounted for as a derivative when the Bank first becomes a party to the contract.

The separation rules for embedded derivatives are only relevant for financial liabilities.

2.10. Securities at fair value through other comprehensive income

Securities at fair value through other comprehensive income are held within a business model whose objective is achieved by both collecting of contractual cash flows and selling securities. Furthermore, the contractual terms of these securities give rise on specified dates to cash flows that are solely payment of principal and interest on the principal amount outstanding.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.10. Securities at fair value through other comprehensive income [continued]

Debt instruments

Investments in debt securities are accounted for on a trade date basis and are initially measured at fair value. Securities at fair value through other comprehensive income are measured at subsequent reporting dates at fair value. Unrealized gains and losses on securities at fair value through other comprehensive income are recognized directly in Other Comprehensive Income, except for interest and foreign exchange gains/losses on monetary items, unless such financial asset at fair value through other comprehensive income is part of an effective hedge. Such gains and losses are reported when realized in Consolidated Statement of Profit or Loss for the applicable period.

For debt securities at fair value through other comprehensive income the loss allowance is calculated based on expected credit loss model. The expected credit loss is accounted for against Other Comprehensive Income. Securities at fair value through other comprehensive income are remeasured at fair value based on quoted prices or amounts derived from cash-flow models. In circumstances where the quoted market prices are not readily available, the fair value of debt securities is estimated using the present value of future cash-flows and the fair value of any unquoted equity instruments are calculated using the EPS ratio.

Such securities consist of Hungarian and foreign government bonds, corporate bonds, mortgage bonds, interest-bearing Treasury bills, securities issued by the NBH and other securities.

Fair value through other comprehensive income option for equity instruments

The Group has elected to present in the Statement of Other Comprehensive Income changes of fair value of those equity instruments which are neither held for trading nor recognized as contingent consideration under IFRS 3. In some cases, the Group made an irrevocable election at initial recognition for certain equity instruments to present subsequent changes in fair value of these securities in the consolidated other comprehensive income instead of in profit or loss.

The use of the fair value option is based only on direct decision of management of the Group.

2.11. Loans, placements with other banks, repo receivables and loss allowance for loan and placements and repo receivable losses

The Group measures at amortized cost those Loans and placements with other banks and repo receivables, which are held to collect contractual cash flows, and contractual terms of these assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. These loans are recognized as Loans at amortized cost in the Consolidated Statement of Financial Position. The Group recognizes those financial assets which are not held for trading and do not give rise to contractual cash flows that are solely payments of principal and interest on the principal amount outstanding as loans measured at fair value through profit or loss. These loans are recognized as Loans mandatorily at fair value through profit or loss in the Consolidated Statement of Financial Position.

Those Loans and placements with other banks and repo receivables that are accounted at amortized cost, stated at the principal amounts outstanding (including accrued interest), net of allowance for loan or placement losses, respectively.

In case of the above mentioned financial assets measured at amortised cost transaction fees and charges adjust the carrying amount at initial recognition and are included in effective interest calculation. In case of loans at fair value through profit or loss fees and charges are recognised when incurred in the Consolidated Statement of Profit or Loss.

Loans and placements with other banks and repo receivables are derecognized when the contractual rights to the cash-flows expire or they are transferred. When a financial asset is derecognized the difference of the carrying amount and the consideration received is recognized in the profit or loss in case of financial assets at amortised cost the gains or losses from derecognition are presented in "Gains/losses from derecognition of financial assets at amortised cost" line while in case of loans at fair value through profit or loss the gains or losses from derecognition are presented in "Net operating income".

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.11. Loans, placements with other banks, repo receivables and loss allowance for loan and placements and repo receivable losses [continued]

Change in the fair value of loans at fair value through profit or loss is broken down into two components and presented in the Consolidated Statement of Profit or Loss as follows:

- Portion of the change in fair value arising from changes in credit risk are presented within “Risk cost” as “Change in the fair value attributable to changes in the credit risk of loans mandatorily measured at fair value through profit or loss”.
- The remaining component of the change is presented in fair value within “Net operating income” as “Fair value adjustment on financial instruments measured at fair value through profit or loss”.

Initially financial assets shall be recognized at fair value which is usually equal to transaction value in case of loans and placements. However, when the amounts are not equal, the initial fair value difference should be recognized.

If the fair value of financial assets is based on a valuation technique using only inputs observable in market transactions, the Group recognizes the initial fair value difference in the Consolidated Statement of Profit or Loss. When the fair value of financial assets is based on models for which inputs are not observable, the difference between the transaction price and the fair value is deferred and only recognized in profit or loss when the instrument is derecognized or the inputs became observable.

Initial fair value of loans lent at interest below market conditions is lower than their transaction price, the subsequent measurement of these loans is under IFRS 9.

The Group recognizes a loss allowance for expected credit losses on a financial asset at each reporting date. The loss allowance for a financial asset equals to 12-month expected credit loss or equals to the lifetime expected credit losses. The maximum period over which expected credit losses shall be measured is the maximum contractual period over which the Group is exposed to credit risk.

If the credit risk on a financial asset has not increased significantly since initial recognition then 12-month expected credit losses, otherwise (in case of significant credit risk increase) lifetime expected credit losses should be calculated. The expected credit loss is the present value of the difference between the contractual cash flows that are due to the Group under the contract and the cash flows that the Group expects to receive.

When the contractual cash flows of a financial asset are modified and the modification does not result in the derecognition of the financial asset the Group recalculates the gross carrying amount of the financial asset by discounting the expected future cash flows with the original effective interest rate of the asset. The difference between the carrying amount and the present value of the expected cash flows is recognized as a modification gain or loss in the profit or loss. Interest and amortized cost are accounted using effective interest rate method.

Write-offs are generally recorded after all reasonable restructuring or collection activities have taken place and the possibility of further recovery is considered to be remote. The loan is written off against the related account “Gain / (Loss) from derecognition of financial assets at amortized cost” in the Consolidated Statement of Profit or Loss.

The Group applies partial or full write-off for loans based on the definitions and prescriptions of financial instruments in accordance with IFRS 9. If the Group has no reasonable expectations regarding a financial asset (loan) to be recovered, it will be written off partially or fully at the time of emergence.

The gross amount and loss allowance of the loans shall be written off in the same amount to the estimated maximum recovery amount while the net carrying value remains unchanged. Subsequent recoveries for loans previously written-off partially or fully, which may have been derecognized from the books with no reasonable expectations for the recovery will be booked in the Consolidated Statement of Profit or Loss on “Income from recoveries of written-off, but legally existing loan” line in Risk cost.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.12. Modified assets

If the net present value of the contracted cash flows changes due to the modification of the contractual terms and it is not qualified as derecognition, modification gain or loss should be calculated and accounted for in the Consolidated Statement of Profit or Loss. Modification gain or loss is accounted in cases like restructuring – as defined in guidelines of the Group – prolongation, renewal with unchanged terms, renewal with shorter terms and prescribing capital repayment rate, if it doesn't exist or has not been earlier.

The changes of net present value should be calculated on portfolio level in case of retail exposures. Each retail contract is restructured based on restructuring frameworks. The Group has to evaluate these frameworks (and not individual contracts). The changes of net present value should be calculated individually on contract level in case of corporate portfolio.

Among the possible contract amendments, the Group considers as a derecognition and a new recognition when the discounted present value – discounted at the original effective interest rate – of the cash flows under the new terms is at least 10 per cent different from the discounted present value of the remaining cash flows. In case of derecognition and new recognition the unamortized fees of the derecognized asset should be presented as Income similar to interest income. The newly recognized financial asset is initially measured at fair value and is placed in stage 1 if the derecognized financial asset was in stage 1 or stage 2 portfolio. The newly recognized financial asset will be purchased or originated credit impaired financial asset (“POCI”) if the derecognized financial asset was in stage 3 portfolio or it was POCI.

The modification gain or loss shall be calculated at each contract amendments unless they are handled as a derecognition and new recognition. In case of modification the Group recalculates the gross carrying amount of the financial asset. To do this, the new contractual cash flows should be discounted using the financial asset's original effective interest rate (or credit-adjusted effective interest rate for POCI financial asset). Any costs or fees incurred adjust the carrying amount of the modified financial asset are amortized over the remaining term of the modified financial asset.

2.13. Purchased or originated credit impaired financial assets

Purchased or originated financial assets are credit-impaired on initial recognition. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

A purchased credit-impaired asset is likely to be acquired at a deep discount. In unusual circumstances, it may be possible that an entity originates a credit-impaired asset, for example, following a substantial modification of a distressed financial asset that resulted in the derecognition of the original financial asset.

In the case of POCI financial assets, interest income is always recognized by applying the credit-adjusted effective interest rate.

For POCI financial assets, in subsequent reporting periods an entity is required to recognize:

- the cumulative changes in lifetime expected credit losses since initial recognition as a loss allowance,
- the impairment gain or loss which is the amount of any change in lifetime expected credit losses.

An impairment gain is recognized (with the parallel increase of the net amortized cost of receivable) if due to the favourable changes after initial recognition the lifetime expected credit loss estimation is becoming lower than the original estimated credit losses at initial recognition.

The POCI qualification remains from initial recognition to derecognition in the Group's books.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.14. Loss allowance

A loss allowance for loans and placements with other banks and repo receivables is recognized by the Group based on the expected credit loss model in accordance with IFRS 9. Based on the three-stage model the recognized loss allowance equals to 12-month expected credit loss from the initial recognition. On financial assets with significantly increased credit risk or credit impaired financial assets (based on objective evidence) the recognized loss allowance is the lifetime expected credit loss.

In the case of purchased or originated credit impaired financial assets, a loss allowance is recognized in the amount of the lifetime expected credit loss since initial recognition. The impairment gain in the Consolidated Statement of Profit or Loss is recognized if lifetime expected credit loss for purchased or originated credit impaired financial assets at measurement date is less than the estimated credit loss at initial recognition.

A loss allowance for loans and placements with other banks and repo receivables represents Management's assessment for potential losses in relation to these activities.

Loss allowance for loan and placements are determined at a level that provides coverage for individually identified credit losses. For loans for which it is not possible to determine the amount of the individually identified credit loss in the absence of objective evidence, a collective impairment loss is recognized. With this, the Group reduces the carrying amount of financial asset portfolios with similar credit risk characteristics to the amount expected to be recovered based on historical loss experience.

At subsequent measurement the Group recognizes an impairment gain or loss through "Impairment gain on POCI loans" in the Consolidated Statement of Profit or Loss as part of "Risk cost" line as an amount of expected credit losses or reversal which is required to adjust the loss allowance at the reporting date to the amount that is required to be recognized in accordance with IFRS 9. If the reason for the impairment no longer exist the impairment is released in the Consolidated Statement of Profit or Loss for the current period.

If a financial asset, for which previously there were no indicators of significant increase in credit risk (i.e. classified in Stage 1) is subsequently classified in Stage 2 or Stage 3 then loss allowance is adjusted to lifetime expected credit loss. If a financial asset, which was previously classified in Stage 2 or Stage 3 is subsequently classified in Stage 1 then the loss allowance is adjusted to the level of 12 month expected credit loss.

Classification into risk classes

According to the requirements of the IFRS9 the Group classifies the financial assets measured at amortized cost, at fair value through other comprehensive income and loan commitments and financial guarantees into the following stages:

- Stage 1 – performing financial instruments without significant increase in credit risk since initial recognition
- Stage 2 – performing financial instruments with significant increase in credit risk since initial recognition but not credit-impaired
- Stage 3 – non-performing, credit-impaired financial instruments
- POCI – purchased or originated credit impaired

In the case of trade receivables the Group applies the simplified approach and calculates only lifetime expected credit loss. The simplified approach is the following:

- for the past 3 years the average annual balance of receivables under simplified approach is calculated,
- the written-off receivables under simplified approach are determined in the past 3 years,
- historical losses are adjusted to reflect information about current conditions and reasonable forecasts of future economic conditions,
- the loss allowance ratio is the sum of the written-off amounts divided by the sum of the average balances,
- the loss allowance is multiplied by the end-of-year balance, it is the actual loss allowance on these receivables,
- loss allowance should be recalculated annually.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.14. Loss allowance [continued]

Classification into risk classes [continued]

The Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial asset is determined to have low credit risk at the reporting date. This might occur if the financial asset has a low risk of default, the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Group considers sovereign exposures as having low credit risk.

Stage 1: financial instruments for which the events and conditions specified in respect of Stage 2 and Stage 3 do not exist on the reporting date.

A client or loan must be qualified as default if one or both the following two conditions occur:

- The client delays more than 90 days. This is considered a hard trigger.
- There is reasonable probability that the client will not pay all of its obligation. This condition is examined on the basis of probability criteria of default.

The subject of default qualification is that exposure (on-balance and off-balance) which originates credit risk (so originated from loan commitments, risk-taking contracts).

A financial instrument shows significant increase in credit risk, and is allocated to Stage 2, if in respect of which any of the following triggers exist on the reporting date, without fulfilling any of the conditions for the allocation to the non-performing stage (stage 3):

- the payment delay exceeds 30 days,
- it is classified as performing forborne,
- based on individual decision, its currency suffered a significant "shock" since the disbursement of the loan,
- the transaction/client rating exceeds a predefined value or falls into a determined range, or compared to the historic value it deteriorates to a predefined degree,
- in the case retail mortgage loans, the loan-to-value ratio exceeds a predefined rate,
- default on another loan of the retail client, if no cross-default exists,
- monitoring classification of corporate and municipal clients above different thresholds defined on group
 - financial difficulties at the debtor (capital adequacy, liquidity, deterioration of the instrument quality),
 - significant decrease of the liquidity or the activity on the active market of the financial instrument can be observed,
 - the rating of the client reflects high risk, but it is better than the default one,
 - significantly decrease in the value of the recovery from which the debtor would disburse the loan,
 - clients under liquidation.

A financial instrument is non-performing and it is allocated to Stage 3 when any of the following events or conditions exists on the reporting date:

- default (based on the group level default definition),
- classified as non-performing forborne (based on the group level forborne definition),
- the monitoring classification of corporate and municipal clients above different thresholds defined on group level (including but not limited to):
 - breaching of contracts,
 - significant financial difficulties of the debtor (like capital adequacy, liquidity, deterioration of the instrument quality),
 - bankruptcy, liquidation, debt settlement processes against debtor,
 - forced strike-off started against debtor,
 - termination of loan contract by the Bank,
 - occurrence of fraud event,
 - termination of the active market of the financial instrument.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.14. Loss allowance [continued]

Classification into risk classes [continued]

If the exposure is no longer considered as credit impaired, the Group allocates this exposure to Stage 2.

When loss allowance is calculated at exposures categorized into stages the following process is needed by stages:

- Stage 1 (performing): loss allowance at an amount equal to 12-month expected credit loss should be recognized,
- Stage 2 (significant increase in credit risk): loss allowance at an amount equal to lifetime expected credit loss should be recognized,
- Stage 3 (non-performing): loss allowance at an amount equal to lifetime expected credit loss should be recognized.

For lifetime expected credit losses, an entity shall estimate the risk of a default occurring on the financial instrument during its expected life. 12-month expected credit losses are a portion of the lifetime expected credit losses and represent the lifetime cash shortfalls that will result if a default occurs in the 12 months after the reporting date (or a shorter period if the expected life of a financial instrument is less than 12 months), weighted by the probability of that default occurring.

An entity shall measure expected credit losses of a financial instrument in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes
- the time value of money and
- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

2.15. Sale and repurchase agreements, security lending

Where debt or equity securities are sold under a commitment to repurchase them at a pre-determined price, they remain on the Consolidated Statement of Financial Position and the consideration received is recorded in Other liabilities or Amounts due to banks, the National Governments, deposits from the National Banks and other banks. Conversely, debt or equity securities purchased under a commitment to resell are not recognized in the Consolidated Statement of Financial Position and the consideration paid is recorded either in Placements with other banks or Deposits from customers. Interest is accrued based on the effective interest method evenly over the life of the repurchase agreement.

In the case of security lending transactions, the Group does not recognize or derecognize the securities because believes that the transferor retains substantially all the risks and rewards of the ownership of the securities. Only a financial liability or financial receivable is recognized for the consideration amount.

2.16. Associates and other investments

Companies where the Bank has the ability to exercise significant influence are accounted for using the equity method. Subsidiaries and associated companies that were not accounted for using the equity method and other investments where the Bank does not hold a significant interest are recorded according to IFRS 9. When an investment in an associate is held indirectly through an entity that is a venture capital fund, the Group elects to measure these investments in the associate at fair value through profit or loss in accordance with IFRS 9.

Under the equity method, the investment is initially recognized at cost, and the carrying amount is adjusted subsequently for:

- the Group's share of the post-acquisition profits or losses of the investee, which are recognized in the Group's Consolidated Statement of Profit or Loss; and
- the distributions received from the investee, which reduce the carrying amount of the investment.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.16. Associates and other investments [continued]

The Group's share of the profits or losses of the investee, or other changes in the investee's equity, is determined on the basis of its proportionate ownership interest. The Group recognizes its share of the investee's income and losses based on the percentage of the equity interest owned by the Group.

Gains and losses on the sale of investments are determined based on the specific identification of the cost of each investment.

2.17. Property and equipment, Intangible assets

Property and equipment and Intangible assets are measured at cost, less accumulated depreciation and amortization and impairment, if any.

Internally generated intangibles, excluding capitalized development costs, are not capitalized – the related expenditures are accounted as cost in the period in which they are incurred. Development costs are capitalized only when the technical and commercial feasibility of the asset has been clearly demonstrated, the Group has the intent and ability to complete the intangible asset and either use it or sell it and be able to demonstrate how the asset will generate future economic benefits. Amortization of these type of assets begins when development is completed, and the asset is available for use. During the period of development, the asset is tested for impairment annually.

The Group lists mainly self-developed software among internally generated intangible assets.

The depreciable amount (book value less residual value) of the non-current assets must be allocated over the useful lives.

Depreciation and amortization are computed usually by using the straight-line method over the estimated useful lives of the assets based on the following annual percentages:

	Annual percentages	Useful life period (years)
Intangible assets		
Software	6.3% - 50.0%	2 – 15
Property right	16.7% - 33.3%	3 – 6
Property	1.0% - 50.0%	2 – 100
Machinery and office equipment	3.3% - 50.0%	2 – 30
Vehicle	3.0% - 33.3%	3 – 33

Depreciation and amortization on Property and equipment and Intangible assets commence on the day such assets are ready to use.

At each balance sheet date, the Group reviews the carrying value of its Property and equipment and Intangible assets to determine if there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated to determine the extent (if any) of the impairment loss.

Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Where the carrying value of Property and equipment and Intangible assets is greater than the estimated recoverable amount, it is impaired immediately to the estimated recoverable amount.

The Group may conclude contracts for purchasing property, equipment and intangible assets, where the purchase price is settled in foreign currency. By entering into such agreements, firm commitment in foreign currency due on a specified future date arises at the Group.

Reducing the foreign currency risk caused by firm commitment, forward foreign currency contracts may be concluded to ensure the amount payable in foreign currency on a specified future date on one hand and to eliminate the foreign currency risk arising until settlement date of the contract on the other hand.

In the case of an effective hedge the realized profit or loss of the hedging instrument is stated as the part of the cost of the hedged asset as it has arisen until recognizing the asset.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.18. Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

The Group uses generally FIFO formulas to the measurement of inventories.

Inventories are removed from books when they are sold, unusable or destroyed. When inventories are sold, the carrying amount of those inventories are recognized as an expense in the period in which the related revenue is recognized.

Repossessed assets are classified as inventories. The Group's policy is to sell repossessed assets and not to use them for its internal operations.

2.19. Government grants and government assistance

The Group recognise government grants only when there is a reasonable assurance that the grant will be received, and all attached conditions will be complied with.

The Group presents grants relating to assets as deferred income in the Consolidated Statement of Financial Position, which is recognized in profit or loss on a systematic basis over the useful life of the asset.

Grants related to an expense item are recorded as another operating income in those periods when the related costs were recognized.

2.20. Financial liabilities

The financial liabilities are presented within these lines in the Consolidated Financial Statements:

- Amount due to banks, the National Governments, deposits from the National Banks and other banks
- Repo liabilities
- Financial liabilities designated at fair value through profit or loss
- Deposits from customers
- Liabilities from issued securities
- Derivative financial liabilities held for trading
- Derivative financial liabilities designated as hedge accounting
- Other financial liabilities

At initial recognition, the Group measures financial liabilities at fair value plus or minus – in the case of a financial liability not at fair value through profit or loss – transaction costs that are directly attributable to the acquisition or issue of the financial liability.

Usually, the initial fair value of financial liabilities equals to transaction value. However, when the amounts are not equal, the initial fair value difference should be recognized.

If the fair value of financial liabilities is based on a valuation technique using only inputs observable in market transactions, the Group recognizes the initial fair value difference in the Consolidated Statement of Profit or Loss. When the fair value of financial liabilities is based on models for which inputs are not observable, the difference between the transaction price and the fair value is deferred and only recognized in profit or loss when the instrument is derecognized or the inputs became observable.

Financial liabilities at fair value through profit or loss are either financial liabilities held for trading or they are designated upon initial recognition as at fair value through profit or loss.

In connection to the derivative financial liabilities measured at fair value through profit or loss, the Group presents the amount of change in their fair value originated from the changes of market conditions and business environment.

The Group designated some financial liabilities upon initial recognition to measure at fair value through profit or loss. This classification eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases (“accounting mismatch”). The changes in fair value of these liabilities are recognized in profit or loss, except the fair value changes attributable to credit risk which are recognized among other comprehensive income.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.20. Financial liabilities [continued]

In the case of financial liabilities measured at amortized cost fees and commissions related to the origination of the financial liability are recognized through profit or loss during the maturity of the instrument using effective interest method. In certain cases, the Group repurchases a part of financial liabilities (mainly issued securities or subordinated bonds) and the difference between the carrying amount of the financial liability and the amount paid for it is recognized in the net profit or loss for the period and included in other operating income.

2.21. Leases

The Group as a lessor

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. Lease classification is made at the inception date and is reassessed only if there is a lease modification.

Finance leases

At the commencement date, a lessor derecognizes the assets held under a finance lease in the Consolidated Statement of Financial Position and present them as a receivable at an amount equal to the net investment in the lease. The lessor shall use the interest rate implicit in the lease to measure the net investment in the lease. Direct costs such as commissions are included in the initial measurement of the finance lease receivables.

The Group as a lessor recognizes finance income over the lease term, based on a pattern reflecting a constant periodic rate of return on the Group's net investment in the lease. The Group applies the lease payments relating to the period against the gross investment in the lease to reduce both the principal and the unearned finance income. The Group applies the derecognition and impairment requirements in IFRS 9 to the net investment in the lease (for more details, see Note 2.14.).

Operating leases

The Group as a lessor recognizes lease payments from operating leases as income on either a straight-line basis or another systematic basis. Costs, including depreciation, incurred in earning the lease income are recognized as an expense.

Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as an expense over the lease term on the same basis as the lease income.

The depreciation policy for depreciable underlying assets subject to operating leases is consistent with the Group's normal depreciation policy for similar assets. The Group accounts for a modification to an operating lease as a new lease from the effective date of the modification, considering any prepaid or accrued lease payments relating to the original lease as part of the lease payments for the new lease.

The Group as a lessee

The Group recognizes a right-of-use asset and a lease liability at the commencement of the lease term except for short-term leases and leases, where the underlying asset is of low value (less than USD 5,000). For these leases, the Group recognizes the lease payments as an expense on either a straight-line basis over the lease term or another systematic basis if that basis is more representative of the pattern of the lessee's benefit.

Deferred tax implication if the Group is lessee: At the inception of the lease, there is no net lease asset or liability, no tax base and, therefore, no temporary difference. Subsequently, as depreciation on the right-of-use asset initially exceeds the rate at which the debt reduces, a net liability arises resulting in a deductible temporary difference on which a deferred tax asset should be recognized if recoverable. Assuming that the lease liability is not repaid in advance, the total discounted cash outflows should equal the total rental payments deductible for income tax purposes.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.21. Leases [continued]

Right-of-use asset

The right-of-use assets are presented separately in the Consolidated Statement of Financial Position and initially measured at cost, subsequently the Group applies the cost model and these assets are depreciated on a straight line basis from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. If the lease transfers ownership of the underlying asset to the Group by the end of the lease term or if the cost of the right-of-use asset reflects that the Group will exercise a purchase option, the right-of-use asset are depreciated from the commencement date to the end of the useful life of the underlying asset.

Lease liability

At the commencement date, the lease liability is measured at the present value of the lease payments that are not paid at that date discounted by using the rate implicit in the lease, or if this cannot be determined, by using the incremental borrowing rate of the Group. Variable lease payments that do not depend on an index or a rate but e.g. on revenues or usage are recognized as an expense. The Group always separates the non-lease components of the lease contracts and accounts them as an expense. Lease payments must be included in the measurement of the lease liability without value added taxes. Non-deductible VAT is recognized as other expense.

The lease liability is remeasured in the event of a reassessment of the lease liability or lease modification

2.22. Investment properties

Investment properties of the Group are land, buildings, part of buildings which held (as the owner or as the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for use in the production or supply of services or for administrative purposes or sale in the ordinary course of business. The Group measures the investment properties at cost less accumulated depreciation and impairment, if any.

The depreciable amount (book value less residual value) of the investment properties must be allocated over their useful lives. The depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets.

The Group discloses the fair value of the investment properties in Note 14 established mainly by external experts.

2.23. Share capital

Share capital is the capital determined in the Articles of Association and registered by the Budapest-Capital Regional Court. Share capital is the capital the Bank raised by issuing common stocks at the date the shares were issued. The amount of share capital has not changed over the current period.

2.24. Treasury shares

Treasury shares are shares which are purchased on the stock exchange and the over-the-counter market by the Bank and its subsidiaries and are presented in the Consolidated Statement of Financial Position at cost as a deduction from Consolidated Shareholders' Equity.

Gains and losses on the sale of treasury shares are credited or charged directly to shareholder's equity.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.25. Non-current assets held-for-sale and discontinued operations

A discontinued operation is a component of an entity that either has been disposed of or is classified as held-for-sale. Hereinafter non-current assets classified as held-for-sale, disposal group and discontinued operations are referred to as assets in accordance with IFRS 5.

The Group classifies assets under IFRS 5 if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. The Group does not account for an asset under IFRS 5 that has been temporarily taken out of use as if it had been abandoned.

The Group measures an asset under IFRS 5 at the lower of its carrying amount and fair value less costs to sell. When the sale is expected to occur beyond one year, the Group measures the costs to sell at their present value.

Any increase in the present value of the costs to sell that arises from the passage of time shall be presented in profit or loss. Immediately before the initial classification of the asset under IFRS 5, the carrying amounts of the asset (or all the assets and liabilities in the group) are measured in accordance with applicable IFRS.

The Group does not depreciate (or amortize) an asset under IFRS 5 while it is classified as asset in accordance with IFRS 5. Interest and other expenses attributable to the liabilities of the asset under IFRS 5 shall continue to be recognized.

If the Group has classified an asset under IFRS 5, but the criteria for that are no longer met, the Group ceases to classify the asset under IFRS 5. The Group measures these assets which cease to be classified as asset under IFRS 5 at the lower of:

- its carrying amount before the asset was classified as asset under IFRS 5, adjusted for any depreciation, amortisation or revaluations that would have been recognized had the asset not been classified as asset under IFRS 5, and
- its recoverable amount at the date of the subsequent decision not to sell.

The Group presents an asset classified as asset under IFRS 5 separately from other assets in the Consolidated Statement of Financial Position. The liabilities of the asset under IFRS 5 are presented separately from other liabilities in the Consolidated Statement of Financial Position. Those assets and liabilities shall not be offset and presented as a single amount. The major classes of assets and liabilities classified as held for sale or discontinued operations are separately disclosed in the Notes.

The Group presents separately any cumulative income or expense recognized in other comprehensive income relating to a non-current asset (or disposal group) classified as held for sale. Results from discontinued operations are reported separately in the Consolidated Statement of Profit or Loss as result from discontinued operations.

2.26. Interest income and income similar to interest income and interest expense

Interest income and expense are recognized in profit or loss in the period to which they relate, using the effective interest rate method.

For exposures categorized into Stage 1 and Stage 2 the interest income is recognized on a gross basis. For exposures categorized into Stage 3 (using effective interest rate) and for POCI (using credit-adjusted effective interest rate) the interest income is recognized on a net basis.

The time-proportional income similar to interest income of derivative financial instruments is calculated without using the effective interest method and the positive fair value adjustment of interest rate swaps are included in income similar to interest income.

Interest income of loans at fair value through profit or loss is calculated based on interest fixed in the contract and presented in "Income similar to interest income" line.

Interest from loans and deposits are accrued on a daily basis. Interest income and expense include certain transaction costs and the amortisation of any discount or premium between the initial carrying amount of an interest-bearing instrument and its amount at maturity calculated on an effective interest rate basis.

All interest income and expense recognized are arising from loans, placements with other banks, repo receivables, securities at fair value through other comprehensive income, securities at amortized cost and amounts due to banks, repo liabilities, deposits from customers, liabilities from issued securities, subordinated bonds and loans are presented under these lines of Consolidated Financial Statements.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.27. Fees and Commissions

Fees and commissions that are not involved in the amortized cost model are recognized in the Consolidated Statement of Profit or Loss on an accrual basis according to IFRS 15 Revenue from contracts with customers (see more details in Note 32). These fees are related to deposits, cash withdrawals, security trading, bank card etc.

The Group recognizes income if performance obligations related to the certain goods or services are satisfied, performed, and control over the asset is transferred to the customer, and it is probable that consideration payable will probably flow to the entity. In case of those services, where the Group transfers control over the asset continuously, income is recognised on accrual basis.

The Group provides foreign exchange trading services to its customers, the profit margin achieved on these transactions is presented as Net profit from fees and commissions in the Consolidated Statement of Profit or Loss.

2.28. Profit from associates

Profit from associates refers to any distribution of an entity earnings to shareholders from stocks or mutual funds that is owned by the Group. The Group recognizes profit from associates in the Consolidated Financial Statements when its right to receive payment is established.

2.29. Income tax

The Group considers corporate income tax as current tax according to IAS 12. The Group also considers local business tax and the innovation contribution as income tax in Hungary.

The annual taxation charge is based on the tax payable under fiscal regulations prevailing in the country where the company is incorporated, adjusted for deferred taxation. Deferred taxation is accounted for using the balance sheet liability method in respect of temporary differences between the tax bases of assets and liabilities and their carrying value for financial reporting purposes, measured at the tax rates that apply to the future period when the asset is expected to be realized or the liability is settled.

Current tax asset or current tax liability is presented related to income tax and innovation contribution separately in the Consolidated Statement of Financial Position.

Deferred tax assets are recognized by the Group for the amounts of income taxes that are recoverable in future periods in respect of deductible temporary differences as well as the carryforward of unused tax losses and the carryforward of unused tax credits.

The Group recognizes a deferred tax asset for all deductible temporary differences arising from investments in subsidiaries, branches and associates, and interests in joint arrangements, 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 utilised.

The Group considers the availability of qualifying taxable temporary differences and the probability of other future taxable profits to determine whether future taxable profits will be available according to IAS 12.

The Group recognizes a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint arrangements, except to the extent that both of the following conditions are satisfied:

- the Bank 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 only offsets its deferred tax liabilities against deferred tax assets when:

- there is a legally enforceable right to set-off current tax liabilities against current tax assets, and
- the taxes are levied by the same taxation authorities on either
 - the same taxable entity or
 - different taxable entities which intend to settle current tax liabilities and assets on a net basis.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.30. Banking tax

The Bank and some of its subsidiaries are obliged to pay banking tax based on Act LIX of 2006. As the calculation is not based on the taxable profit but on the adjusted total assets as reported in the Separate Financial Statements of the Bank and its entities for the second period preceding the current tax year, therefore, the banking tax is considered as another administrative expense, not as income tax. Pursuant to Government Decree No. 197/2022 published on 4 June 2022, the Hungarian Government decided to impose a windfall tax on credit institutions and financial enterprises temporarily, that is for 2022 and 2023. As for 2022, the base of the windfall tax is the net revenues based on the 2021 financial statements, calculated according to local tax law, whereas the tax rate is 10%.

2.31. Off-balance sheet commitments and contingent liabilities

In the ordinary course of its business, the Group enters into off-balance sheet commitments such as guarantees, letters of credit, commitments to extend credit and transactions with financial instruments. The provision for off-balance sheet commitments and contingent liabilities is maintained at a level adequate to absorb future cash outflows which are probable and relate to present obligations.

In the case of commitments and contingent liabilities, the Management determines the adequacy of the loss allowance based upon reviews of individual items, recent loss experience, current economic conditions, the risk characteristics of the various categories of transactions and other pertinent factors. The Group recognizes provision for off-balance sheet commitment and contingent liabilities in accordance with IAS 37 when it has a present 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 obligation. For financial guarantees and loan commitments given which are under IFRS 9 the expected credit loss model is applied when the provision is calculated (see more details in Note 2.14.). After initial recognition the Group subsequently measures those contracts at a higher of the amount of the loss allowance or of the amount initially recognised less the cumulative amount of income recognized in accordance with IFRS 15.

2.32. Share-based payment

The Group has applied the requirements of IFRS 2 Share-based Payment.

The Group issues equity-settled share-based payment to certain employees. Equity-settled share-based payment is measured at fair value at the grant date. The fair value determined at the grant date of the equity-settled share-based payment is expensed on a straight-line basis over the year, based on the Group's estimate of shares that will eventually vest. Share-based payment is recorded in Consolidated Statement of Profit or Loss as Personnel expenses.

Fair value is measured by use of a binomial model. The expected life used in the model has been adjusted, based on Management's best estimate, for the effects of non-transferability, exercise restrictions, and behavioural considerations.

2.33. Employee benefits

The Group has applied the requirement of IAS 19 Employee Benefits. These benefits are recognised as an expense and liability undiscounted in the Consolidated Financial Statements. Liabilities are regularly remeasured. Gains or losses due to the remeasurement are recognised in the Consolidated Statement of Profit or Loss.

Short-term employee benefits are employee benefits (other than termination benefits) that are expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service. These can be wages, salaries and bonuses, premium, paid annual leave and paid sick leave and other free services (health care, reward holiday). Long-term employee benefits are mostly the jubilee reward.

Post-employment benefits are employee benefits (other than termination and short-term employee benefits) that are payable after the completion of employment. Post-employment benefit plans are formal or informal arrangements under which an entity provides post-employment benefits for one or more employees. Post-employment benefit plans are classified as either defined contribution plans or defined benefit plans, depending on the economic substance of the plan as derived from its principal terms and conditions.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.33. Employee benefits [continued]

Defined benefit plan is post-employment benefit plans other than defined contribution plan. The Group's net obligation is calculated by estimating the amount of employee's future benefit based on their services for the current and prior periods. The future value of benefit is being discounted to present value.

Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of either: an entity's decision to terminate an employee's employment before the normal retirement date or an employee's decision to accept an offer of benefits in exchange for the termination of employment. Other long-term employee benefits are all employee benefits other than short-term employee benefits, postemployment benefits and termination benefits.

2.34. Biological assets and agricultural produce

The Group recognises a biological asset or agricultural produce according to IAS 41 only when it controls the asset as a result of past events, it is probable that future economic benefits will flow and the fair value or the cost can be measured reliably.

Biological assets are measured on initial recognition and at subsequent periods at fair value less estimated costs to sell unless fair value cannot be reliably measured.

Agricultural produce is measured at fair value less estimated costs to sell at the point of harvest.

The gain on initial recognition of biological assets at fair value less costs to sell, and changes in fair value less costs to sell of biological assets during a period are included in profit or loss for the period in which it arises as other operating income.

2.35. Consolidated Statement of Cash-flows

Cash flows arising from the operating, investing or financing activities are reported in the Statement of Cash-Flows of the Group primarily on a gross basis. Net basis reporting are applied by the Group in the following cases:

- when the cash flows reflect the activities of the customer rather than those of the Group, and
- for items in which the turnover is quick, the amounts are large, and the maturities are short.

For the purposes of reporting Consolidated Statement of Cash-flows, cash and cash equivalents include cash, due from banks and balances with the National Banks, excluding the compulsory reserve established by the National Banks. This line item shows balances of HUF and foreign currency cash amounts, and sight deposit from NBH and from other banks, furthermore, balances of current accounts.

Consolidated cash-flows from hedging activities are classified in the same category as the item being hedged. The unrealized gains and losses from the translation of monetary items to the closing foreign exchange rates and unrealized gains and losses from derivative financial instruments are presented net as operating activity separately in the Consolidated Statement of Cash-flows for the monetary items which have been revaluated.

2.36. Segment reporting

IFRS 8 Operating Segments requires operating segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the chief operating decision maker in order to allocate resources to the segments and to assess their performance.

Based on the above, the segments identified by the Group are the business and geographical segments.

The Group's operating segments under IFRS 8 are therefore as follows: OTP Core Hungary, Russia, Ukraine, Bulgaria, Romania, Serbia, Croatia, Montenegro, Albania, Moldova, Slovenia, Merkantil Group, Asset Management subsidiaries, Other subsidiaries, Corporate Center.

2.37. Comparative balances

These Consolidated Financial Statements are prepared in accordance with the same accounting policies in all respects as the Consolidated Financial Statements prepared in accordance with IFRS as adopted by the European Union for the year ended 31 December 2021.

NOTE 3: SIGNIFICANT ACCOUNTING ESTIMATES AND DECISIONS IN THE APPLICATION OF ACCOUNTING POLICIES

The presentation of financial statements in conformity with IFRS as adopted by EU requires the Management of the Group to make judgement about estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as at the date of the financial statements and their reported amounts of revenues and expenses during the reporting period. The estimates and associated assumptions are based on the expected loss and other factors that are considered to be relevant. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period. Actual results could differ from those estimates. Significant areas of subjective judgement include:

3.1. Loss allowances on financial instruments exposed to credit risk

The Group regularly assesses its financial instruments portfolio for loss allowance. Management determines the adequacy of the loss allowances based upon reviews of individual loans and placements, recent loss experience, current economic conditions, the risk characteristics of the various categories of loans and other pertinent factors. The use of the three-stage model was implemented for IFRS 9 purposes. The impairment methodology is used to classify financial instruments in order to determine whether credit risk has significantly increased since initial recognition and to identify the credit-impaired assets. For instruments with credit-impairment or significant increase of credit risk lifetime expected losses are recognized (see more details in Note 37.1.)

3.2. Valuation of instruments without direct quotations

Financial instruments without direct quotations in an active market are valued using the valuation model technique. The models are regularly reviewed and each model is calibrated for the most recent available market data. While the models are built only on available data, their use is subject to certain assumptions and estimates (e.g. correlations, volatilities, etc.). Changes in the model assumptions may affect the reported fair value of the relevant financial instruments.

IFRS 13 Fair Value Measurement seeks to increase the consistency and comparability in fair value measurements and related disclosures through a 'fair value hierarchy'. The hierarchy categorises the inputs used in valuation techniques into three levels. The hierarchy gives the highest priority to (unadjusted) quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The Group evaluates the levelling at each reporting period on an instrument-by-instrument basis and reclassifies instruments when necessary, based on the facts at the beginning of the reporting period. The objective of a fair value measurement is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions.

3.3. Provisions

Provision is recognized and measured for commitments to extend credit and for warranties arising from banking activities based on IFRS 9 Financial Instruments. Provision for these instruments is recognized based on the credit conversion factor, which shows the proportion of the undrawn credit line that will probably be drawn.

Other provisions are recognized and measured based on IAS 37 Provisions, Contingent Liabilities and Contingent Assets. The Group is involved in a number of ongoing legal disputes. Based upon historical experience and expert reports, the Group assesses the developments in these cases, and the likelihood and the amount of potential financial losses which are appropriately provided for. (See Note 24.)

Other provision includes provision for litigation, provision for retirement and expected liabilities and provision for confirmed letter of credit.

A provision is recognized by the Group when it has a present 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.

NOTE 3: SIGNIFICANT ACCOUNTING ESTIMATES AND DECISIONS IN THE APPLICATION OF ACCOUNTING POLICIES [continued]

3.4. Impairment on goodwill

Goodwill acquired in a business combination is tested for impairment annually or more frequently when there is an indication that the unit might be impaired, in accordance with IAS 36 “Impairment of assets”.

The Group calculates the fair value based on discounted cash-flow model. The 3-year period explicit cash-flow model serves as a basis for the impairment test by which the Group defines the impairment need on goodwill based on the strategic factors and financial data of its cash-generating units. In the calculation of the goodwill impairment, also the expectations about possible variations in the amount or timing of those future cash-flows, the time value of money, represented by the current market risk-free rate of interest and other factors are reflected.

3.5. Business model

A business model refers to how the Group manages its financial instruments in order to generate cash flows. It is determined at a level that reflects how groups of financial instruments are managed rather than at an instrument level.

The financial assets held by the Group are classified into three categories depending on the business model within the financial assets are managed.

- Business model whose objective is to hold financial assets in order to collect contractual cash flows. Some sales can be consistent with hold to collect business model and the Group assesses the nature, frequency and significance of any sales occurring. The Group does not consider the sale frequent when at least six months have elapsed between sales. The significant sales are those when the sales exceed 2% of the total hold to collect portfolio. Within this business model the Group manages mainly loans and advances and long-term securities and other financial assets.
- Business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Within this business model the Group only manages securities.
- Business model whose objective is to achieve gains in a short-term period. Within this business model the Group manages securities and derivative financial instrument.

If cash flows are realised in a way that is different from the expectations at the date that the Bank/Group assessed the business model, that does not give rise to a prior error in the Group’s financial statements nor does it change the classification of the remaining financial assets held in that business model.

When, and only when the Group changes its business model for managing financial assets it reclassifies all affected assets. Such changes are determined by the Group’s senior management as a result of external or internal changes and must be significant to the Group’s operations and demonstrable to external parties. The Group shall not reclassify any financial liability.

3.6. Contractual cash-flow characteristics of financial assets

Classification of a financial asset is based on the characteristics of its contractual cash flows if the financial asset is held within a business model whose objective is to hold assets to collect contractual cash flows or within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. The Group should determine whether the asset’s contractual cash flows are solely payments of principal and interest on the principal amount outstanding (SPPI test). Contractual cash flows that are solely payments of principal and interest on the principal amount outstanding are consistent with a basic lending arrangement.

NOTE 3: SIGNIFICANT ACCOUNTING ESTIMATES AND DECISIONS IN THE APPLICATION OF ACCOUNTING POLICIES [continued]

3.6. Contractual cash-flow characteristics of financial assets [continued]

Contractual terms that introduce exposure to risks or volatility in the contractual cash flows that is unrelated to a basic lending arrangement, such as exposure to changes in equity prices or commodity prices, do not give rise to contractual cash flows that are solely payments of principal and interest on the principal amount outstanding. The Group assesses whether contractual cash flows are solely payments of principal and interest on the principal amount outstanding for the currency in which the financial asset is denominated.

The time value of money is the element of interest that provides consideration for only the passage of time. However, in some cases, the time value of money element may be modified. In such cases, the Group assesses the modification to determine whether the contractual cash flows represent solely payments of principal and interest on the principal amount outstanding.

When assessing a modified time value of money element, the objective is to determine how different the undiscounted contractual cash flows could be from undiscounted cash flows that would arise if the time value of money element was not modified (the benchmark cash flows). The benchmark instrument can be an actual or a hypothetical financial asset. If the undiscounted contractual cash flows significantly – above 2% – differ from the undiscounted benchmark cash flows, the financial asset should be subsequently measured at fair value through profit or loss.

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP

The Covid-19 pandemic and the volatile economic environment in the post-Covid-19 era

Since the outbreak of the COVID-19 pandemic, OTP Group has regularly updated its forecasts in light of the pandemic and the impact of the pandemic on the operations of OTP Group. However, the continuance of new waves of the pandemic emerging may require further revision by OTP Group to such macroeconomic scenarios and its estimations of credit impairments.

Over the last 3 years, the COVID-19 pandemic severely impacted the evolution of the global economy. The supply-chain and logistic relationships were disrupted by periodic lockdowns and social distancing requirements and the supply of several key raw materials dropped significantly, leading to a more volatile economic environment compared to previous years. Raw material and energy prices rose steeply, leading to higher inflation and interest rates in some of OTP Group's operating countries. The conflict between Russian and Ukraine and the subsequent implementation of sanctions on Russia have accelerated supply shortages and resulted in higher energy prices and more broad-based inflation. Several major central banks have already raised or are considering raising interest rates earlier than previously expected. The Hungarian central bank has already hiked rates since the summer of 2021. The risk of local currency devaluations versus EUR or USD has increased and could lead to a more volatile operating environment for OTP Group.

This volatile environment could cause financial difficulties for OTP Group's customers. The deteriorating credit quality of OTP Group's customers may in particular result in increasing defaults and arrears in monthly payments on loans, higher credit impairments on the loan portfolios of OTP Group. Furthermore, lower demand for, and origination of, new loans could have a material adverse effect on the OTP Group's results of operations.

The OTP Group's activities and the profitability of its operations are strongly affected by the macroeconomic environment and the domestic and international perception of the economies in which it operates.

Furthermore, the OTP Group relies on models to support a broad range of business and risk management activities, including informing business decisions and strategies, measuring and limiting risk, valuing exposures, conducting stress testing and assessing capital adequacy. Models are, by their nature, imperfect and incomplete representations of reality because they rely on assumptions and inputs, and as such assumptions may later potentially prove to be incorrect, this can affect the accuracy of their outputs. This may be exacerbated when dealing with unprecedented scenarios, due to the lack of reliable historical reference points and data.

Any and all such events mentioned above could have a material adverse effect on the OTP Group's business, financial condition, results of operations, prospects, liquidity, capital position and credit ratings, as well as on the OTP Group's customers, employees and suppliers.

Macro economy and financial situation

Hungary

The rapid recovery following the Covid crisis has created capacity bottlenecks in many sectors, which, coupled with rising commodity and energy prices, have significantly increased inflation in advanced economies. In the USA, the rate of inflation has not been at this level since the 1970s. The rapidly rising and increasingly broad-based inflation prompted the Fed to take action and to become the first major central bank to start raising interest rates. This move has significantly strengthened the dollar, and US 10-year yields rose to 4.3%. In the USA, inflation clearly peaked in mid-2022, and has been on a downward trend since then. Inflation also rose rapidly in Europe, where the dramatically growing gas and electricity prices posed the bigger problem. However, inflation also peaked in the euro area by the end of 2022 and has been on a downward trend since October 2022. As the Russia-Ukraine war had a much stronger impact on Europe's economic outlook, and the labour market was much less tight than in the USA, the ECB was slower to react to the rise in inflation. Still, European short-term interest rates also rose to 2% by the end of 2022.

The USA went into a technical recession in the first half of 2022, but this turned out to be temporary, and the US economy resumed growth in the second half-year. Europe's economies proved more resilient than had been expected to the effects of the Russia-Ukraine war. In the first half of the year, growth benefited from the sectors that recovered after the pandemic, but the currency area also avoided recession in the second half of the year and grew by 3.5% in full year 2022.

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

Macro economy and financial situation [continued]

Hungary [continued]

The main factor that affected Hungary's economy in 2022 was the war in a neighbouring country. Although the Hungarian economy grew by 8.2% year-on-year in the first quarter and by 6.5% in the second, this was largely fuelled by massive one-off transfers at the beginning of 2022. By the second half of the year, however, the economy had lost steam and entered technical recession (two consecutive quarters of economic contraction) by the end of 2022. As a result, the Hungarian economy grew by 4.6% in 2022 as a whole. Inflation, which went beyond 20% by the end of the year, played a significant role in the downturn, significantly eroding real income, and turning its growth negative by the end of 2022.

The strong domestic demand at the beginning of the year allowed businesses to pass through the ongoing cost shocks to prices. From the second half of the year, a number of administrative measures (tightening of KATA tax rules, windfall taxes, increasing the public health product tax, scrapping some price caps, etc.) also boosted inflation. As a consequence, Hungary's inflation decoupled from the developments in the euro area, where inflation peaked around 10%, and from the CEE region, where it peaked at 15-17%. In Hungary, inflation did not peak in 2022.

Given that Hungary is a major net energy importer, the sharp rise in energy prices has significantly worsened the Hungarian economy's external balance, which put the forint under depreciation pressure. In addition, the continued delay in agreeing on EU funds has increased the risk premium on HUF assets, which also contributed to the forint's weakening – the MNB could reverse this only by a drastic interest rate hike, when the HUF/EUR was nearing 435. As a result, the effective reference rate rose to 18%. The falling gas prices, and the agreement reached with the EU at the end of 2022 had a benign effect on the HUF's exchange rate.

Falling real incomes and high interest rates have considerably slowed credit market growth. The housing loan market saw the sharpest slowdown: by the end of 2022 (as the Green Home Programme credit line ended), the contracted amount had fallen to half of the level seen in 2021.

Despite the rapidly eroding real incomes, household consumption was still relatively buoyant. But this came at a price: households' ability to save has sharply fallen. Outflows from demand deposits was particularly strong; these amounts flowed into foreign currency deposits and investment fund units.

The principles used in the preparation of the Consolidated Statement of Financial Position as at 31 December 2022 in connection with the evaluation of Russian and Ukrainian exposures

Going concern principle

Russia launched an operation against Ukraine on 24 February 2022, which has not ended even as of the date of these Consolidated Financial Statements. Because of the armed conflict, many countries and the European Union have imposed sanctions against Russia, Russian companies and citizens in several rounds. Russia responded to these sanctions with similar sanctions measures.

Armed conflict and international sanctions significantly affect business and economic activity worldwide.

Under an unexpected and extremely negative scenario of deconsolidating the Ukrainian entity and writing down the outstanding gross intragroup exposures as well, the effect for the consolidated CET1 ratio would be +1 bp, whereas in the case of Russia the impact would be -71 bps, based on the end of December 2022 numbers.

OTP Group's Ukrainian operation incorporates the Ukrainian bank, as well as the leasing and factoring companies. The country-consolidated Ukrainian total assets represented HUF 1,049 billion at the end of 2022 (3.2% of total consolidated assets), while net loans comprised HUF 414 billion (2.2% of consolidated net loans) and shareholders' equity HUF 122 billion (3.7% of the consolidated total equity).

At the end of 2022 the gross intragroup funding towards the Ukrainian operation represented HUF 84 billion.

In 2022 the Ukrainian operation posted an adjusted after-tax loss of HUF 15.9 billion. Regarding the trajectory of the quarterly results, following the loss of HUF 34.4 billion realized in the first quarter, the financial performance of the Ukrainian operation stabilized: in the second quarter around break-even result, then both in the third and the fourth quarter a positive result was achieved.

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

The principles used in the preparation of the Consolidated Statement of Financial Position as at 31 December 2022 in connection with the evaluation of Russian and Ukrainian exposures [continued]

Going concern principle [continued]

The total assets of the Group's Russian operation represented HUF 1,030 billion at the end of 2022 (3.1% of consolidated total assets), while net loans comprised HUF 612 billion (3.3% of consolidated net loans) and shareholders' equity HUF 306 billion (9.2% of consolidated total equity). As the Russian subsidiary repaid its maturing intragroup loans in the fourth quarter of 2022, the gross intragroup funding towards the Russian operation declined from HUF 75 billion equivalent at the end of 2021 to HUF 10 billion equivalent at the end of 2022 (these figures are practically the same as the net group funding due to the lack of deposits placement by Russia in the Group). The remaining intragroup exposure toward the Russian operation at the end of 2022 was a subordinated loan. The Russian operation posted HUF 42.5 billion adjusted profit in 2022. Within that, HUF 27.2 billion loss was suffered in the first quarter, followed by profitable quarters in the remaining part of the year.

In the case of Ukraine and Russia OTP management applies a „going concern” approach, however in Russia the management is still considering all strategic options, though a Russian Presidential decree in October 2022 prohibited the sale of foreign owned banks.

Based on the current evaluation of the Bank's management, the Ukrainian-Russian conflict does not have a significant negative impact on the OTP Group's business activities, financial situation, effectiveness of its activities, liquidity, and capital situation. Even after the recognition of the potential losses and write-offs outlined above, the Group's capital adequacy remains above the expected regulatory level. There is no sign of significant uncertainties having been arisen regarding carrying out its business as a going concern.

Significant estimates affected by the Russian-Ukrainian conflict during the preparation of these Consolidated Financial Statements

During the preparation of these Consolidated Financial Statements, the Group identified the following estimates, which were significantly affected by the Russian-Ukrainian conflict:

- 1) Evaluation of Russian sovereign exposures (government securities) and related reserves for expected credit losses
 - a) exposures of the Russian subsidiary bank
 - b) exposures of other members of the group (parent company and subsidiaries)
- 2) Evaluation of Ukrainian sovereign exposures (government securities) and related reserves for expected credit losses
 - a) exposures of the Ukrainian subsidiary bank
 - b) exposures of other members of the group (parent company and subsidiaries)
- 3) evaluation of derivative transactions denominated in Russian rubles
- 4) evaluation of derivative transactions denominated in the Ukrainian hryvnia
- 5) claims against Russian and Ukrainian central banks, provisions for expected credit losses related to Russian and Ukrainian interbank claims and customer loans
 - a) the impact of the deterioration of the Russian and Ukrainian macro-environment
 - b) following direct exposure to the Russian and Ukrainian markets, non-Russian and Ukrainian bank exposures
 - c) exposures of Russian and Ukrainian subsidiary banks
- 6) evaluation of goodwill
- 7) deferred tax assets

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP [continued]

The principles used in the preparation of the Consolidated Statement of Financial Position as at 31 December 2022 in connection with the evaluation of Russian and Ukrainian exposures [continued]

Significant estimates affected by the Russian-Ukrainian conflict during the preparation of these Consolidated Financial Statements [continued]

	Reference	Russia Gross value	Impairment / Depreciation	Reference	Ukraine Gross value	Impairment / Depreciation	Reference	Other countries Gross value	Impairment / Depreciation
Cash, amounts due from banks and balances with the National Banks		41,143	-		48,537	-		-	-
Placements with other banks	5	248,192	-	5	36,835	(250)		-	-
Financial assets at fair value through profit or loss - derivatives	3	366	-	4	14	-		-	-
Securities at fair value through other comprehensive income	1a	22,051	-	2a	26,601	-	1b; 2b	71,683	(43,003)
Securities at amortized cost		-	-	2a	309,128	(14)	1b; 2b	50,962	(17,635)
Loans at amortized cost	5	792,217	(180,364)	5	373,560	(87,860)	5	11,311	(6,929)
Finance lease receivables		-	-		153,090	(24,899)		-	-
Associates and other investments		58	(2)						
Property and equipment		39,583	(25,058)		14,132	(6,827)		-	-
Intangible assets and goodwill		37,524	(17,927)		9,760	(5,897)	6	40,866	(40,866)
Right-of-use assets		19,741	(10,555)		6,311	(3,007)		-	-
Investment properties		-	-		252	-		-	-
Deferred tax assets	7	20,719	-	7	-	-		-	-
Other assets		<u>36,237</u>	<u>(7,378)</u>		<u>13,231</u>	<u>(1,097)</u>		-	-
TOTAL ASSETS		<u>1,257,831</u>	<u>(241,284)</u>		<u>991,451</u>	<u>(129,851)</u>		<u>174,822</u>	<u>(108,433)</u>
Amounts due to banks, the National Governments, deposits from the National Banks and other banks		18,415	-		26,125	-		-	-

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

The principles used in the preparation of the Consolidated Statement of Financial Position as at 31 December 2022 in connection with the evaluation of Russian and Ukrainian exposures [continued]

Significant estimates affected by the Russian-Ukrainian conflict during the preparation of these Consolidated Financial Statements [continued]

During the evaluation of these assets, the Group applied the evaluation principles detailed below, which evaluation contains significant estimates on the part of the Management. The results of the estimates may vary significantly depending on the development of the situation in the Russian-Ukrainian conflict.

References

1a. Evaluation of Russian sovereign exposures and related reserves for expected credit losses - exposures of the Russian subsidiary bank

Within Russia, Russian government securities are marketable, and their repayment is expected to take place in accordance with the original conditions. The fair value calculation of securities is based on market prices available and observable on local trading platforms. Due to the increased credit risk, the Bank classified these securities in the Stage 2 category.

1b. Evaluation of Russian sovereign exposures and related reserves for expected credit losses - other exposures of the group

Outside of Russia, the marketability of Russian government securities is significantly limited due to sanctions and capital market participants turning away from Russian securities. The credit rating of the Russian state was withdrawn in 2022, the Group classifies the Russian state as non-performing, and in accordance with this, it assigned the affected exposures to the Stage 3 category. The Russian state not only recognizes its obligation and has the necessary financial reserves, but would also be willing to pay, so the increased loss potential is caused by non-traditional credit risks. In the case of a portfolio valued at fair value against other comprehensive income, the book value is determined based on the level 3 prices of IFRS13. Cash-flow estimation, current market benchmarks (provided by Bloomberg), liquidity and non-credit risk considerations were taken into account in fair value calculation.

2a. Valuation of Ukrainian sovereign exposures and related reserves for expected credit losses - exposures of the Ukrainian subsidiary bank

The marketability of local government securities and the liquidity of the market are limited in Ukraine. Ukrainian government securities can only be found in the books of the Ukrainian subsidiary, due to the increased credit risk, these exposures are classified as Stage 2. In the case of a portfolio valued at fair value against other comprehensive results, the book value is determined based on the level 3 prices of IFRS13. During the actual evaluation, the expected cash flow is discounted using yield curves observed based on current market benchmarks (published by the National Bank of Ukraine).

2b. Valuation of Ukrainian sovereign exposures and related reserves for expected credit losses - other exposures of the group

Ukrainian government securities are exclusively in the books of the Ukrainian subsidiary.

3. Valuation of Russian derivative transactions

Similar to the bond market, in 2022 the money market inside and outside Russia will also be separated. In the case of futures contracts concluded with local partners on the Russian market, the evaluation is carried out using yield curves available and observable on the local market. In cases where one of the partners is not Russian, the evaluation is done using yield curves available and observable on the international market. In 2022, there was one case of non-performance, the impact of which was HUF 13.8 billion.

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

The principles used in the preparation of the Consolidated Statement of Financial Position as at 31 December 2022 in connection with the evaluation of Russian and Ukrainian exposures [continued]

Significant estimates affected by the Russian-Ukrainian conflict during the preparation of these Consolidated Financial Statements [continued]

References [continued]

4. Valuation of Ukrainian derivatives

Similar to the bond market, in 2022 the liquidity and number of transactions in the Ukrainian money market were limited. The Treasury turnover of the Ukrainian bank is low, and a significant part of the derivative transactions are related to the bank's risk management and concluded with the parent company. During the actual evaluation, the expected cash-flow is discounted using yield curves observed based on current market benchmarks (published by the National Bank of Ukraine).

5. Claims against Russian and Ukrainian central banks, provisions for expected credit losses related to Russian and Ukrainian interbank claims and customer loans

As part of the continuous monitoring activity, OTP Group has explored and analyzed the secondary and tertiary negative effects of the war in the corporate segment for Group members outside of Russia and Ukraine, including the effects of the current sanctions policy. In the case of the affected customers, if the increased risk was substantiated, they were classified in the Stage 2 category, while in the case of non-performance, the Group classified the given exposures in the Stage 3 rating category.

In the case of Group members in Russia, the impact of the deteriorating economic environment compared to previous years was taken into account when determining the expected loss, however, the Bank does not expect any further substantial deterioration of the economic environment. As a result of the cessation of active corporate lending, the exposure of corporate loans in rubles decreased by 75% in 2022. The retail credit market started to pick up again from the second half of the year, although the dynamics of lending fell short of the similar period of the previous year.

In the case of Ukrainian Group members, the proportion of customers with increased risk (Stage2) and non-performing (Stage3) increased significantly in 2022. When determining the expected loss, the drastically deteriorating external environment in 2022 was taken into account, compared to which the Bank does not expect any further significant deterioration in 2023. The identification of the increased risk – given the special situation – extends to regionally different war activity. In addition, the territorial distribution of exposures was also taken into account when evaluating the expected loss, in the areas directly and indirectly affected by the war, the Bank does not expect a significant return for non-performing customers, regardless of economic trends. Adjusted for exchange rates, the stock of residential loans due in 2022 (Stage 1+2) fell by approximately half. New corporate lending is predominantly limited to the refinancing of existing frameworks, the corporate loan portfolio decreased by 20% and the leasing portfolio by 28% adjusted for exchange rates last year. In the residential segment, the Bank's activity dropped to a fraction from the end of February, and in the second half of the year, there was already a small recovery in commodity lending.

6. Evaluation of goodwill

In connection with the involvement in the Russian-Ukrainian conflict, as a result of the company value review, the Group considered it necessary to fully write off the existing goodwill in the case of the Russian subsidiary bank in the first quarter of 2022, the value of which as at 31 December 2021 was HUF 40.9 billion. The effect of goodwill write-off on the result was HUF 67.7 billion, and a HUF 26.8 billion loss was accounted for against equity. In the case of Ukraine, there was no goodwill write-off.

Based on current experience, the Group takes into account the macroeconomic effects of the current geopolitical situation in the mid- to long-term when determining the impairment of investments in the case of countries affected by the conflict. In the case of Russian and Ukrainian operations, we currently do not consider it likely that the estimated investment value before the conflict (2021) will be reached during the 3-year explicit period.

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

The principles used in the preparation of the Consolidated Statement of Financial Position as at 31 December 2022 in connection with the evaluation of Russian and Ukrainian exposures [continued]

Significant estimates affected by the Russian-Ukrainian conflict during the preparation of these Consolidated Financial Statements [continued]

References [continued]

7. Deferred tax

Due to the uncertainty of the expected return, the Group did not recognize deferred tax assets in Ukraine, while in Russia, the Group recognized HUF 20.7 billion in deferred tax assets. There is no limit to unused tax credits in Russia. In addition, if the bank's taxable loss were to increase (if the impairment calculated according to local rules approached the higher level of impairment according to IFRS), the difference between the settlement and the tax loss would decrease, thus reducing the deferred tax asset. As a result, the bank was able to utilize the temporary deferred tax asset both in the expected profitable operation and in a possible loss scenario.

Summary of economic policy measures made and other relevant regulatory changes in the period under review

In the section below, the measures and developments which have been made since the beginning of 2022, and – in OTP Bank's view – are relevant and have materially influenced / can materially influence the operation of the Group members.

OTP Bank excludes any liability for the completeness and accuracy of the measures presented herein.

Hungary

- On 5 April 2022 the National Bank of Hungary raised the available amount under the Green Home Programme by an additional HUF 100 billion, up from the originally announced HUF 200 billion.
- Pursuant to Government Decree No. 150/2022 published on 14 April 2022, effective from 29 April the intermediary and other fees paid by the State to commercial banks were amended in the case of the Housing Subsidy for Families (CSOK), the VAT refund subsidy for newly built homes, the repayment by the State of housing loan taken out by families with children, and the baby loans. These fees are now set as absolute amounts, instead of the previous percentage terms. Furthermore, the interest subsidy paid by the state was reduced by one percentage point in the case of baby loans requested after 29 April.
- According to the press release made by the National Bank of Hungary on 30 June 2022, the counter-cyclical capital buffer rate will be increased, for the first time since its introduction 6 years ago, to 0.5% effective from 1 July 2023.
- The baby loan programme which was originally meant to expire by the end of 2022 was extended by 2 years, till the end of 2024.

Interest rate cap

For the period between 1 January and 30 June 2022 the Hungarian Government introduced an interest rate cap for variable-rate retail mortgage loans, and with its decision announced on 18 February for housing purposes financial leasing contracts, too. Accordingly, the affected exposures' reference rate cannot be higher than the relevant contractual reference rate as at 27 October 2021. The modification loss related to the interest rate cap for variable rate mortgage loans announced was recognized in the Bank's 2021 financial accounts. The extension of the interest rate cap to housing purposes financial leasing contracts did not have a significant negative effect.

Pursuant to Government Decree No. 215/2022 (issued on 17 June) the Government extended the interest rate cap for variable-rate retail mortgage loans by an additional 6 months, i.e. until 31 December 2022. The expected one-off effect of the extension of the interest rate cap amounted to -HUF 10.1 billion (after tax) and was booked in the second quarter of 2022.

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

Interest rate cap [continued]

The details of the extension of the interest rate cap scheme were revealed on 14 October 2022. Firstly, the interest rate cap was further extended by 6 months, until the end of June 2023. Secondly, from 1 November 2022 the provisions of the interest rate cap must applied to the market-based mortgages with up to 5 years interest rate repricing period, too.

On 22 October 2022 the Government announced that starting from 15 November until 30 June 2023, the reference rate of certain MSE loans will also be capped, as set out by Government Decree 415/2022 (X. 26.) published on 26 October. Accordingly, the provisions shall be applied to HUF denominated, non-subsidized, floating rate loans to micro and small enterprises and financial lease contracts, excluding overdraft loan agreements. In this period, the reference rate of these exposures cannot be higher than the relevant reference rate as specified in the contract as at 28 June 2022 (on that day the 3M BUBOR stood at 7.77%). The financial burden of the MSE rate cap must be shouldered by the banks. The cost of the rate cap scheme is borne by the banks.

The expected negative after tax effect of the measures taken in October 2022 amounted to HUF 26.4 billion and was accounted for in the fourth quarter of 2022 in one sum.

Moratorium, one-off effect

In Hungary the first phase of the moratorium on loan payments was effective from 19 March 2020 to 31 December 2020. At the end of 2020 the moratorium was extended in unchanged form for the period between 1 January 2021 and 30 June 2021. Furthermore, according to Government Decree No. 317/2021. (VI. 9.) released on 9 June 2021 the payment moratorium was extended with unchanged conditions until 30 September 2021. Pursuant to Government Decree 536/2021. (IX. 15.) published on 15 September, the Government decided to extend the debt repayment moratorium: the blanket moratorium was extended by an additional month, until the end of October, in an unchanged form. Furthermore, from the beginning of November 2021 until 30 June 2022 only the eligible borrowers can participate in the moratorium provided that they submitted a request to their banks about their intention to stay. Similarly, with its Government Decree No. 216/2022 published on 17 June, the Government further extended the expiry of the moratorium, until the end of 2022. Eligible clients had to notify their bank about their intention to participate in the payment holiday until the end of July 2022. The general payment holiday expired at the end of 2022.

Starting from September 2022 to the end of 2023, due to the severe draught, agricultural companies can enjoy a payment moratorium on their working capital and investment loans. Eligible borrowers can decide whether to join the scheme or not. At the end of 2022, HUF 41 billion worth of loans were subject to the moratorium for agricultural companies, making up 0.6% of OTP Core's total gross loan volume.

During the term of the moratorium OTP Bank accrues the unpaid interest in its statement of recognized income, amongst the revenues. At the same time, due to the fact that interest cannot be charged on the unpaid interest, and the unpaid interest will be repaid later, in the course of 2020, 2021 and 2022 altogether HUF 44.1 billion one-off loss emerged in Hungary (after tax).

Financial assets modified during the period related to moratorium in the Group for the year ended 31 December 2022 (in HUF mn)

Modification due to prolongation of deadline of moratorium from 30 June until 31 July 2022

	Group
Gross carrying amount before modification	159,850
Loss allowance before modification	<u>(31,718)</u>
Net amortised cost before modification	<u>128,132</u>
Modification loss	<u>(471)</u>
Net amortised cost after modification	<u>127,661</u>

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

Financial assets modified during the period related to moratorium in the Group for the year ended 31 December 2022 (in HUF mn) [continued]

Modification due to prolongation of interest rate cap till 30 June 2022

	Group
Gross carrying amount before modification	289,630
Loss allowance before modification	<u>(7,771)</u>
Net amortised cost before modification	<u>281,859</u>
Modification loss	<u>(11,144)</u>
Net amortised cost after modification	<u>270,715</u>

Modification due to prolongation of deadline of moratorium till 30 September 2022

	Group
Gross carrying amount before modification	1,053
Loss allowance before modification	<u>(108)</u>
Net amortised cost before modification	<u>945</u>
Modification loss	<u>(5)</u>
Net amortised cost after modification	<u>940</u>

Modification due to moratorium related to agriculture and prolongation of deadline of existing moratorium till 30 September 2022

	Group
Gross carrying amount before modification	152,051
Loss allowance before modification	<u>(24,910)</u>
Net amortised cost before modification	<u>127,141</u>
Modification loss	<u>(2,122)</u>
Net amortised cost after modification	<u>125,019</u>

Modification due to prolongation of interest rate cap till 30 November 2022

	Group
Gross carrying amount before modification	154,421
Loss allowance before modification	<u>(6,184)</u>
Net amortised cost before modification	<u>148,237</u>
Modification loss	<u>(536)</u>
Net amortised cost after modification	<u>147,701</u>

Modification due to scope extension (mortgage loans with 5-year fixing without subsidy) and prolongation of the existing interest rate cap till 31 December 2022

	Group
Gross carrying amount before modification	422,201
Loss allowance before modification	<u>(12,604)</u>
Net amortised cost before modification	<u>409,597</u>
Modification loss	<u>(22,860)</u>
Net amortised cost after modification	<u>386,737</u>

NOTE 4: MACRO ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE GROUP
[continued]

Financial assets modified during the period related to moratorium in the Group for the year ended 31 December 2021 (in HUF mn)

Modification due to prolongation of deadline of covid moratoria until 30 September:

	Group
Gross carrying amount before modification	1,175,230
Loss allowance before modification	<u>(66,066)</u>
Net amortised cost before modification	<u>1,109,164</u>
Modification loss due to covid moratoria	<u>(6,620)</u>
Net amortised cost after modification	<u>1,102,544</u>

Modification due to prolongation of deadline of covid moratoria until 31 October:

	Group
Gross carrying amount before modification	1,166,115
Loss allowance before modification	<u>(69,415)</u>
Net amortised cost before modification	<u>1,096,700</u>
Modification loss due to covid moratoria	<u>(2,104)</u>
Net amortised cost after modification	<u>1,094,596</u>

In the case of credit card and overdraft loans interest charged during the moratoria period should be refunded to the debtors in amount determined as a difference between the charged interest and a pre-moratoria personal loan interest at 11,99%. The Bank has managed this government measure as loan agreement modification in the financial statements.

	Group
Gross carrying amount before modification	57,892
Loss allowance before modification	<u>(9,234)</u>
Net amortised cost before modification	<u>48,658</u>
Modification loss due to covid moratoria	<u>(1,983)</u>
Net amortised cost after modification	<u>46,675</u>

Modification due to prolongation of deadline of covid moratoria until 30 June 2022:

	Group
Gross carrying amount before modification	113,728
Loss allowance before modification	<u>(25,428)</u>
Net amortised cost before modification	<u>88,300</u>
Modification loss due to covid moratoria	<u>(2,838)</u>
Net amortised cost after modification	<u>85,462</u>

Modification due to temporarily fixing of loan with variable interest rate:

On 24 December 2021 new regulation was issued on fixing of retail loan product's interest, under that interest rates of mortgage loans with variable interest shall be fixed at reference rates of 27 October 2021, predictably till 30 June 2022.

	Group
Gross carrying amount before modification	321,323
Loss allowance before modification	<u>(9,317)</u>
Net amortised cost before modification	<u>312,006</u>
Modification loss due to covid moratoria	<u>(3,397)</u>
Net amortised cost after modification	<u>308,609</u>

NOTE 5: CASH, AMOUNTS DUE FROM BANKS AND BALANCES WITH THE NATIONAL BANKS (in HUF mn)

	2022	2021
Cash on hand		
In HUF	92,526	87,489
In foreign currency	<u>582,950</u>	<u>409,045</u>
	<u>675,476</u>	<u>496,534</u>
Amounts due from banks and balances with the National Banks		
	2022	2021
Within one year		
In HUF	732,956	83,540
In foreign currency	<u>2,814,663</u>	<u>1,977,069</u>
	<u>3,547,619</u>	<u>2,060,609</u>
Over one year		
In HUF	-	-
In foreign currency	=	=
	=	=
Loss allowance on amounts due from bank and balances with the National Banks	<u>(1,703)</u>	<u>(1,108)</u>
Total	<u>4,221,392</u>	<u>2,556,035</u>
Compulsory reserve set by the National Banks	<u>(1,623,704)</u>	<u>(854,474)</u>
Cash and cash equivalents	<u>2,597,688</u>	<u>1,701,561</u>

Foreign subsidiary banks within the Group have to comply with country specific regulation of local National Banks. Each country within the Group has its own regulation for compulsory reserve calculation and maintenance. Based on those banks are obliged to place compulsory reserve at their National Bank in a specified percentage of their liabilities considered in compulsory reserve calculation.

An analysis of the change in the loss allowance on amounts from banks and balances with the National Banks is as follows:

	2022	2021
Balance as at 1 January	1,108	-
Loss allowance for the period	8,072	952
Release of loss allowance for the period	(7,697)	-
Use of loss allowance for the period	-	-
Foreign currency translation difference	<u>220</u>	<u>156</u>
Closing balance	<u>1,703</u>	<u>1,108</u>

NOTE 6: PLACEMENTS WITH OTHER BANKS (in HUF mn)

	2022	2021
Within one year		
In HUF	681,892	851,053
In foreign currency	<u>447,648</u>	<u>523,205</u>
	<u>1,129,540</u>	<u>1,374,258</u>
Over one year		
In HUF	199,056	162,774
In foreign currency	<u>26,323</u>	<u>50,823</u>
	<u>225,379</u>	<u>213,597</u>
Loss allowance on placements	<u>(3,837)</u>	<u>(2,994)</u>
Total	<u>1,351,082</u>	<u>1,584,861</u>

An analysis of the change in the loss allowance on placements with other banks is as follows:

	2022	2021
Balance as at 1 January	2,994	1,489
Loss allowance for the period	38,314	25,133
Release of loss allowance for the period	(38,378)	(23,613)
Use of loss allowance for the period	(100)	(112)
Foreign currency translation difference	<u>1,007</u>	<u>97</u>
Closing balance	<u>3,837</u>	<u>2,994</u>

Interest conditions of placements with other banks:

	2022	2021
Interest rates on placements with other banks denominated in HUF	0.00% - 25.70%	(1.50)% - 5.90%
Interest rates on placements with other banks denominated in foreign currency	(1.5)% - 13.29%	(5.00)% - 29.00%
	2022	2021
Average interest rates on placements with other banks (%)	11.02%	1.52%

NOTE 7: REPO RECEIVABLES (in HUF mn)

	2022	2021
Within one year		
In HUF	41,250	33,710
In foreign currency	-	<u>27,632</u>
	<u>41,250</u>	<u>61,342</u>
Over one year		
In HUF	-	-
In foreign currency	-	-
	-	-
Loss allowance on repo receivables	<u>(241)</u>	<u>(290)</u>
Total	<u>41,009</u>	<u>61,052</u>

An analysis of the change in the loss allowance on repo receivables is as follows:

	2022	2021
Balance as at 1 January	290	292
Loss allowance for the period	4,744	1,112
Release of loss allowance for the period	(4,794)	(1,124)
Use of loss allowance	-	-
Foreign currency translation difference	<u>1</u>	<u>10</u>
Closing balance	<u>241</u>	<u>290</u>

Interest conditions of repo receivables (%):

	2022	2021
Interest rates on repo receivables denominated in HUF	10.70% - 18.00%	3.04% - 3.20 %
Interest rates on repo receivables denominated in foreign currency	-	(0.58)% - 9.62%

NOTE 8: FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (in HUF mn)

	2022	2021
Securities held for trading		
Government bonds	78,897	97,531
Equity instruments and fund units	385	1,173
Corporate bonds	119	740
Discounted Treasury bills	22,896	923
Mortgage bonds	72	101
Other interest-bearing securities	1,628	1,347
Other non-interest-bearing securities	<u>753</u>	<u>1,695</u>
	<u>104,750</u>	<u>103,510</u>
Non-trading securities mandatorily at fair value through profit or loss		
Equity instruments, shares and open-ended fund units	49,746	44,894
Bonds	<u>5,409</u>	<u>8,509</u>
	<u>55,155</u>	<u>53,403</u>
Debt securities designated at fair value through profit or loss	=	=
Total	<u>159,905</u>	<u>156,913</u>
Positive fair value of derivative financial assets held for trading		
	2022	2021
Foreign exchange swaps held for trading	79,395	38,728
Interest rate swaps held for trading	127,230	59,504
Commodity swaps	33,693	51,523
CCIRS and mark-to-market CCIRS held-for-trading ¹	20,512	11,758
Foreign exchange forward contracts held for trading	13,085	10,790
Held-for-trading option contracts	2,122	1,285
Held-for-trading forward security agreement	13	-
Other derivative transactions held for trading ²	<u>432</u>	<u>10,896</u>
Total	<u>276,482</u>	<u>184,484</u>
Total	<u>436,387</u>	<u>341,397</u>
¹ CCIRS: Cross Currency Interest Rate Swaps (See Note 2.6.3.)		
² Other category includes: fx spot, equity swaps, option and index futures.		
An analysis of securities held for trading portfolio by currency (%):		
	2022	2021
Denominated in HUF	81.47%	30.46%
Denominated in foreign currency	<u>18.53%</u>	<u>69.54%</u>
Total	<u>100.0%</u>	<u>100.0%</u>

NOTE 8: FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (in HUF mn)
[continued]

An analysis of government bond portfolio by currency (%):

	2022	2021
Denominated in HUF	78.42%	28.31%
Denominated in foreign currency	<u>21.58%</u>	<u>71.69%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

Interest conditions of held for trading securities (%):

	2022	2021
Interest rates on securities held for trading denominated in HUF	0.00% - 16.69%	0.00% - 6.75%
Interest rates on securities held for trading denominated in foreign currency	0.00% - 7.63%	0.00% - 9.57%

Interest conditions and the remaining maturities of **securities held for trading** can be analysed as follows:

	2022	2021
Within one year		
With variable interest	3,041	111
With fixed interest	<u>29,025</u>	<u>44,011</u>
	<u>32,066</u>	<u>44,122</u>
Over one year		
With variable interest	9,535	1,544
With fixed interest	<u>62,011</u>	<u>54,976</u>
	<u>71,546</u>	<u>56,520</u>
Non-interest-bearing securities	<u>1,138</u>	<u>2,868</u>
Total	<u>104,750</u>	<u>103,510</u>

	2022	2021
Profit from associates from shares measured at fair value through profit or loss	12,216	3,893

An analysis of **non-trading securities** mandatorily measured at fair value through profit or loss portfolio by currency (%):

	2022	2021
Denominated in HUF	60.69%	57.11%
Denominated in foreign currency	<u>39.31%</u>	<u>42.89%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

	2022	2021
Interest rates on non-trading securities mandatorily measured at fair value through profit or loss	0.00% - 0.00%	0.00% - 0.00%

NOTE 9: SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (in HUF mn)

	2022	2021
Securities at fair value through other comprehensive income		
Government bonds	1,301,179	1,765,172
Corporate bonds	82,651	88,519
Listed securities:		
<i>In HUF</i>	-	2,896
<i>In foreign currency</i>	<u>13,626</u>	<u>51,882</u>
	<u>13,626</u>	<u>54,778</u>
Non-listed securities:		
<i>In HUF</i>	14,304	15,487
<i>In foreign currency</i>	<u>54,721</u>	<u>18,254</u>
	<u>69,025</u>	<u>33,741</u>
Mortgage bonds	54,553	63,072
Discounted Treasury bills	-	96,625
Interest bearing treasury bills	182,726	63,115
Securities issued by the National Bank of Hungary	74,867	109,774
Other securities	3,470	3,257
Total	<u>1,699,446</u>	<u>2,189,534</u>

	2022	2021
Non-trading equity instruments to be measured at fair value through other comprehensive income		
Listed securities:		
<i>In HUF</i>	-	-
<i>In foreign currency</i>	<u>11,233</u>	<u>8,416</u>
	<u>11,233</u>	<u>8,416</u>
Non-listed securities:		
<i>In HUF</i>	403	403
<i>In foreign currency</i>	<u>28,521</u>	<u>26,157</u>
	<u>28,924</u>	<u>26,560</u>
	<u>40,157</u>	<u>34,976</u>
Total	<u>1,739,603</u>	<u>2,224,510</u>

An analysis of securities at fair value through other comprehensive income by currency (%):

	2022	2021
Denominated in HUF	36.47%	32.74%
Denominated in foreign currency	<u>63.53%</u>	<u>67.26%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

NOTE 9: SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME
(in HUF mn) [continued]

Detailed information of the non-trading equity instruments to be measured at fair value through other comprehensive income:

	2022	2021
Strategic investments closely related to banking activity		
Fair value	31,873	29,320
Dividend income from instruments held at the reporting date	1,120	438
Derecognition		
Fair value of derecognized equity instrument, fund units	-	65
Cumulative gain / loss on disposal transferred to retained earnings	-	29
Other strategic investments		
Fair value	8,284	5,656
Dividend income from instruments held at the reporting date	59	29
Derecognition		
Cumulative gain / loss on disposal transferred to retained earnings	-	196
Total		
Total fair values	<u>40,157</u>	<u>34,976</u>
Dividend income from instruments held at the reporting date	<u>1,179</u>	<u>467</u>
Fair value of derecognized equity instrument, fund units	=	<u>65</u>
Cumulative gain / loss on disposal transferred to retained earnings	=	<u>225</u>

During the year ended 31 December 2022 there wasn't any sale transaction regarding equity instruments designated to measure at fair value through other comprehensive income in the Group while during the year ended 31 December 2021 the Group sold HUF 65 million equity instruments designated to measure at fair value through other comprehensive income

An analysis of government bonds by currency (%):

	2022	2021
Denominated in HUF	23.64%	24.29%
Denominated in foreign currency	<u>76.36%</u>	<u>75.71%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

Interest conditions of the security portfolio at fair value through other comprehensive income are as follows (%):

	2022	2021
Interest rates on securities at fair value through other comprehensive income denominated in HUF	1.50% - 15.11%	1.25% - 7.00%
Interest rates on securities at fair value through other comprehensive income denominated in foreign currency	0.00% - 18.24%	0.00% - 17.25%
	2022	2021
Average interest rates securities at fair value through other comprehensive income denominated in HUF (%)	3.31%	2.00%
Average interest rates on securities at fair value through other comprehensive income denominated in foreign currency (%)	2.55%	2.51%

NOTE 9: SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME
(in HUF mn) [continued]

Interest conditions and the remaining maturities of securities at fair value through other comprehensive income can be analysed as follows:

	2022	2021
Within one year		
With variable interest	15,124	1,091
With fixed interest	<u>507,888</u>	<u>522,939</u>
	<u>523,012</u>	<u>524,030</u>
Over one year		
With variable interest	28,523	51,211
With fixed interest	<u>1,147,911</u>	<u>1,614,293</u>
	<u>1,176,434</u>	<u>1,665,504</u>
Non-interest-bearing securities	40,157	34,976
Total	<u>1,739,603</u>	<u>2,224,510</u>

Certain securities are hedged against interest rate risk. See Note 37.4.

NOTE 10: SECURITIES AT AMORTIZED COST (in HUF mn)

	2022	2021
Government bonds	4,375,085	3,651,508
Corporate bonds	250,538	172,526
Bonds of Hungarian National Bank	177,679	-
Discounted Treasury bills	19,539	15,705
Mortgage bonds	24,586	24,356
Interest bearing Treasury bills	4,977	-
Other securities	<u>82,583</u>	<u>36,353</u>
	<u>4,934,987</u>	<u>3,900,448</u>
Loss allowance on securities at amortized cost	<u>(43,049)</u>	<u>(9,113)</u>
Total	<u>4,891,938</u>	<u>3,891,335</u>

Interest conditions and the remaining maturities of securities at amortized cost can be analysed as follows:

	2022	2021
Within one year		
With variable interest	159	8,101
With fixed interest	<u>951,773</u>	<u>480,296</u>
	<u>951,932</u>	<u>488,397</u>
Over one year		
With variable interest	25,753	5,122
With fixed interest	<u>3,957,302</u>	<u>3,406,929</u>
	<u>3,983,055</u>	<u>3,412,051</u>
Total	<u>4,934,987</u>	<u>3,900,448</u>

An analysis of securities at amortized cost by currency (%):

	2022	2021
Denominated in HUF	63.50%	75.42%
Denominated in foreign currency	<u>36.50%</u>	<u>24.58%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

Interest conditions of securities at amortized cost (%):

	2022	2021
Interest rates of securities at amortized cost with variable interest	0.75% - 17.74%	1.20% - 2.08%
Interest rates of securities at amortized cost with fixed interest	0.00% - 23.00%	0.00% - 9.00%
	2022	2021
Average interest rates on securities at amortized cost denominated in HUF (%)	3.31%	2.46%

NOTE 10: SECURITIES AT AMORTIZED COST (in HUF mn) [continued]

An analysis of the change in the loss allowance on securities at amortized cost is as follows:

	2022	2021
Balance as at 1 January	9,113	5,657
Opening change due to modification	-	<u>1,281</u>
Balance as at 1 January after modification	<u>9,113</u>	<u>6,938</u>
Loss allowance for the period	37,104	6,634
Release of loss allowance	(5,603)	(3,621)
Use of loss allowance	-	(992)
Foreign currency translation difference	<u>2,435</u>	<u>154</u>
Closing balance	<u>43,049</u>	<u>9,113</u>

NOTE 11: LOANS AT AMORTIZED COST AND AT FAIR VALUE (in HUF mn)**Loans at amortized cost**

	2022	2021
Within one year		
In HUF	1,422,663	1,243,635
In foreign currency	<u>3,672,023</u>	<u>2,901,682</u>
	<u>5,094,686</u>	<u>4,145,317</u>
Over one year		
In HUF	2,425,793	2,359,485
In foreign currency	<u>9,540,339</u>	<u>7,840,375</u>
	<u>11,966,132</u>	<u>10,199,860</u>
	<u>17,060,818</u>	<u>14,345,177</u>
Loss allowance on loans	<u>(966,360)</u>	<u>(851,994)</u>
Total	<u>16,094,458</u>	<u>13,493,183</u>

An analysis of the gross loan portfolio at amortized cost by currency (%):

	2022	2021
In HUF	22.56%	25.12%
In foreign currency	<u>77.44%</u>	<u>74.88%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

Interest rates of the loan portfolio at amortized cost are as follows:

	2022	2021
Loans at amortized cost denominated in HUF ¹	0.00% - 43.70%	0.00% - 52.00%
Loans at amortized cost denominated in foreign currency ²	(0.10)% - 90.00%	(0.59)% - 90.00%

¹ The highest interest rate relates to HUF loan is overdraft loan, both in the current and in the previous years.

² The highest interest rate relates to loan in foreign currency regarding POS services in Russia both in the current and in the previous years.

	2022	2021
Average interest rates on loans at amortized cost denominated in HUF (%)	8.65%	6.23%
Average interest rates on loans at amortized cost denominated in foreign currency (%)	5.47%	4.79%

The amount of those loans which were written-off in the current year but they are still subject to enforcement activity to be collected is still going on were HUF 117,357 million and HUF 104,940 million as at 31 December 2022 and 2021, respectively.

NOTE 11: LOANS AT AMORTIZED COST AND AT FAIR VALUE (in HUF mn) [continued]

An analysis of the change in the loss allowance on loans is as follows:

	2022	2021
Balance as at 1 January	851,994	829,543
Opening change due to modification	=	<u>(1,281)</u>
Balance as at 1 January after modification	<u>851,994</u>	<u>828,262</u>
<i>Loss allowance for the period</i>	676,389	546,284
<i>Release of loss allowance</i>	<u>(469,929)</u>	<u>(464,888)</u>
Loss allowance in the current period	206,460	81,396
from this: effect of change in parameters used for loss allowance calculation	10,276	(60,531)
Use of loss allowance	(92,004)	(66,784)
Partial write-off ¹	(67,651)	(17,936)
Unwinding	-	345
Foreign currency translation difference	<u>67,561</u>	<u>26,711</u>
Closing balance	<u>966,360</u>	<u>851,994</u>

¹ See details in Note 2.11.

Movement in loss allowance on loans and placements is summarized as below:

	2022	2021
Loss allowance on placements and gains from write-off and sale of placements	(39)	1,664
Loss allowance on loans and gains from write-off and sale of loans	<u>114,163</u>	<u>34,776</u>
Total²	<u>114,124</u>	<u>36,440</u>

² See details in Note 31.

Loans mandatorily at fair value through profit or loss

	2022	2021
Within one year		
In HUF	70,883	61,537
In foreign currency	=	=
	<u>70,883</u>	<u>61,537</u>
Over one year		
In HUF	1,176,531	1,006,293
In foreign currency	=	<u>281</u>
	<u>1,176,531</u>	<u>1,006,574</u>
Total	<u>1,247,414</u>	<u>1,068,111</u>

NOTE 11: LOANS AT AMORTIZED COST AND AT FAIR VALUE (in HUF mn) [continued]

An analysis of the loan portfolio mandatorily at fair value through profit or loss by currency (%):

	2022	2021
In HUF	100.00%	99.17%
In foreign currency	<u>0.00%</u>	<u>0.83%</u>
Total	<u>100.00%</u>	<u>100.00%</u>

Interest rates of the loan portfolio mandatorily at fair value through profit or loss are as follows (%):

	2022	2021
Interest rates on loans denominated in HUF	1.12% - 18.26%	1.21% - 10.83%
Interest rates on loans denominated in foreign currency	-	4.00% - 4.00%

	2022	2021
Average interest rates on loan portfolio at fair value through profit or loss denominated in HUF (%)	4.55%	4.17%
Average interest rates on loan portfolio at fair value through profit or loss denominated in foreign currency (%)	0.04%	1.82%

NOTE 12: ASSOCIATES AND OTHER INVESTMENTS (in HUF mn)

	2022	2021
Investments		
Investments in associates (non-listed)	29,010	42,409
Other investments (non-listed)	<u>56,919</u>	<u>37,327</u>
	<u>85,929</u>	<u>79,736</u>
Impairment on investments	<u>(12,080)</u>	<u>(12,514)</u>
Total	<u>73,849</u>	<u>67,222</u>

An analysis of the change in the impairment on investments is as follows:

	2022	2021
Balance as at 1 January	12,514	5,864
Impairment for the period	1,312	7,266
Release of impairment for the period	(411)	(626)
Modification due to merge	(1,238)	28
Use of impairment	-	-
Foreign currency translation difference	<u>(97)</u>	<u>(18)</u>
Closing balance	<u>12,080</u>	<u>12,514</u>

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn)

There are different kinds of tangible and intangible assets held by the Group. In the followings there are presented reasons of the changes from opening values to closing ones in the gross values, the accumulated depreciation and amortization and in the impairment of the tangible and intangible assets in the Group. Here can be found information about the fair values of the tangible assets and gross amounts of those assets which were fully depreciated but which are still in use.

Carrying amount of the temporarily idle properties was HUF 3,466 million and HUF 3,057 million as at 31 December 2022 and 31 December 2021, respectively.

There were no restrictions on title and properties, plants or equipment pledged as security for liabilities as at 31 December 2022 and 2021.

As at 31 December 2022 and 2021 the amount of contractual commitments for the acquisition of tangible and intangible assets was HUF 21,116 million and HUF 1,595 million, respectively.

Impairment for the properties in the current period was needed as a result of the valuation performed by using the comparative value method (market analogy method) with direct comparison to the market price of other similar properties. Actual market transactions were used based on the 6-month period prior to the valuation date where the market price of the analogous property is adjusted by an expert coefficient for market adaptation ("ECMA"). Usually this range is from -25% to +25% and reflects the availability of sufficient market information for similar items but at these properties ECMA exceeded this range where the circumstances were exceptional although by decision of the appraiser it was used only for unique properties with characteristics similar to the appraised ones, for which no sufficient market analogues are available. The price was adjusted by coefficients reflecting the area, location, size and structure of the property, as well as a weighing factor reflecting the weight of the selected market analogies in the determined fair value.

The Bank decided that the recoverable amount of goodwill is determined based on fair value less cost of disposal. When the Bank prepares goodwill impairment tests of the subsidiaries, the two methods which are used based on discounted cash-flow calculation that shows the same result; however, they represent different economical logics. Based on the internal regulation of the Bank as at 31 December 2021 impairment test was prepared where a three-year cash-flow model was applied with an explicit period between 2022-2024. The basis for the estimation was the actual data of May 2022 and based on the prepared medium-term (2022-2024) forecasts. When the Bank prepared the calculations for the period 2022-2024, it considered the actual worldwide economic situations, the expected economic growth for the following years, their possible effects on the financial sector, the plans for growing which result from these, and the expected changes of the mentioned factors.

Present value calculation with the Free Cash-Flow method

The Bank calculated the expected cash-flow for the given period based on the expected after-tax profit of the companies. The calculation is highly sensitive to the level of discount rate and growth rate used. As discount factor the Bank uses a zero coupon yield curve derived by the Headquarter Asse-Liability Management department. This zero coupon curve is estimated for each related countries, based on the countries' issued bonds and segmented by the issuances' currencies. By subsidiaries where the yield curves were not available (Ukraine) the daily Overnight deposit yield was used as a benchmark, provided by National Bank of Ukraine as currently the only available proxy for the hryvnia rate.

The Bank calculated risk premiums on the basis of information from the country risk premiums that are published by Aswath Damodaran – New York STERN University, according to the Bank's assumption the risk-free interest rate includes the country-dependent risks in an implicit way.

When the subsidiary owns subordinated debt, the discount rate is calculated as a weighted average of the expected return on equity presented previously and the subordinated debt's interest rate. At the end of the calculation, the value of subordinated debt is being subtracted from the valuations' result.

The growth rate in the explicit period is the growth rate of the profit after tax adjusted by the interest rate of the cash and subordinated loans. The supposed growth rates for the periods of residual values reflect the long-term economic expectations in case of every country.

The values of the subsidiaries in the FCF method were then calculated as the sum of the discounted cash-flows of the explicit period, the present value of the terminal values and the initial free capital assuming an effective capital structure.

Summary of the impairment test for the year ended 31 December 2022 and 2021

Based on the valuations of the subsidiaries for the year ended 31 December 2022 67,715 million HUF goodwill impairment was needed to be recorded by the Group for JSC "OTP Bank" (Russia) while for the year ended 31 December 2021 no goodwill impairment was needed to be recorded by the Group.

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn) [continued]

For the year ended 31 December 2022

Cost	Intangible assets	Goodwill	Property	Machinery and office equipment	Vehicle	Construction in progress	Tangible assets subject to operating lease	Total
Balance as at 1 January	408,003	105,640	304,922	243,731	41,252	67,657	30,833	1,202,038
Increase due to acquisition	706	478	933	522	-	-	-	2,639
Additions	111,397	-	66,034	29,709	2,728	79,638	12,892	302,398
Foreign currency translation differences	16,350	3,067	15,936	10,951	408	316	1,952	48,980
Disposals	<u>(65,036)</u>		<u>(12,060)</u>	<u>(13,034)</u>	<u>(1,100)</u>	<u>(94,067)</u>	<u>(14,471)</u>	<u>(199,768)</u>
Closing balance	<u>471,420</u>	<u>109,185</u>	<u>375,765</u>	<u>271,879</u>	<u>43,288</u>	<u>53,544</u>	<u>31,206</u>	<u>1,356,287</u>

Depreciation and amortization	Intangible assets	Property	Machinery and office equipment	Vehicle	Tangible assets subject to operating lease	Total
Balance as at 1 January	262,307	83,707	173,138	7,188	9,493	535,833
Charge for the period	49,750	10,627	26,770	2,433	4,249	93,829
Foreign currency translation differences	9,482	4,145	8,081	257	718	22,683
Disposals	<u>(21,627)</u>	<u>(5,191)</u>	<u>(12,375)</u>	<u>(738)</u>	<u>(5,605)</u>	<u>(45,536)</u>
Closing balance	<u>299,912</u>	<u>93,288</u>	<u>195,614</u>	<u>9,140</u>	<u>8,855</u>	<u>606,809</u>

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn) [continued]

For the year ended 31 December 2022 [continued]

Impairment	Intangible assets	Goodwill	Property	Machinery and office equipment	Tangible assets subject to operating lease	Total
Balance as at 1 January	2,705	-	3,553	43	137	6,438
Impairment for the period	37	67,715	590	-	-	68,342
Release of impairment for the period	-	-	-	-	(122)	(122)
Foreign currency translation differences	54	(26,849)	258	3	7	(26,527)
Use of impairment	=	=	(150)	=	(3)	(153)
Closing balance	<u>2,796</u>	<u>40,866</u>	<u>4,251</u>	<u>46</u>	<u>19</u>	<u>47,978</u>

	Intangible assets	Goodwill	Property	Machinery and office equipment	Vehicle	Construction in progress	Tangible assets subject to operating lease	Total
Carrying value								
Balance as at 1 January	<u>142,991</u>	<u>105,640</u>	<u>217,662</u>	<u>70,550</u>	<u>34,064</u>	<u>67,657</u>	<u>21,203</u>	<u>659,767</u>
Closing balance	<u>168,712</u>	<u>68,319</u>	<u>278,226</u>	<u>76,219</u>	<u>34,148</u>	<u>53,544</u>	<u>22,332</u>	<u>701,500</u>
Fair values	=	=	<u>308,375</u>	<u>76,230</u>	<u>34,122</u>	=	<u>22,351</u>	<u>441,078</u>
Gross amount of the fully depreciated assets that are still in use	<u>152,718</u>	=	<u>26,007</u>	<u>144,310</u>	<u>1,504</u>	=	=	<u>324,539</u>

An analysis of the intangible assets for the year ended 31 December 2022 is as follows:

Intangible assets	Self-developed	Purchased	Total
Gross values	14,704	456,716	471,420
Accumulated amortization	(5,508)	(294,404)	(299,912)
Impairment	=	(2,796)	(2,796)
Carrying value	<u>9,196</u>	<u>159,516</u>	<u>168,712</u>

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn) [continued]**For the year ended 31 December 2022 [continued]**

Carrying value of the investment and goodwill allocated to the appropriate cash generating units

Subsidiaries	Carrying amounts of the subsidiary in HUF million	Goodwill values in HUF million	Goodwill values in million functional currency	Type of functional currency	Consolidated ownership interest	With ownership adjusted company value in HUF million	Applied long term grow rate	Applied long term discount rate
DSK Bank EAD (Bulgaria)	280,722	44,375	28,541 77	HUF BGN	99.92%	840,031	3.00%	12.54%
OTP banka d.d. (Croatia)	205,349	23,235	58	EUR	100.00%	410,711	2.69%	10.69%
POK-DSK Rodina a.d. (Bulgaria)	1,680	11	11	HUF	99.85%	16,564	3.00%	12.54%
George Consult (Croatia)	225	220	4	HRK	76.00%	171	2.69%	10.69%
OTP Home Solutions Llc. (Hungary)	<u>2,570</u>	<u>478</u>	478	HUF	100.00%	2,570	3.00%	16.26%
	<u>490,546</u>	<u>68,319</u>						

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn) [continued]

For the year ended 31 December 2021

Cost	Intangible assets	Goodwill	Property	Machinery and office equipment	Vehicle	Construction in progress	Tangible assets subject to operating lease	Total
Balance as at 1 January	364,495	101,393	285,506	212,105	23,893	23,403	28,926	1,039,721
Increase due to acquisition								-
Additions	90,887	-	28,684	37,266	19,135	111,316	13,427	300,715
Foreign currency translation differences	4,656	4,247	3,609	3,237	163	136	422	16,470
Disposals	<u>(52,035)</u>	-	<u>(12,877)</u>	<u>(8,877)</u>	<u>(1,939)</u>	<u>(67,198)</u>	<u>(11,942)</u>	<u>(154,868)</u>
Closing balance	<u>408,003</u>	<u>105,640</u>	<u>304,922</u>	<u>243,731</u>	<u>41,252</u>	<u>67,657</u>	<u>30,833</u>	<u>1,202,038</u>

Depreciation and amortization	Intangible assets	Property	Machinery and office equipment	Vehicle	Tangible assets subject to operating lease	Total
Balance as at 1 January	224,180	77,753	155,292	6,241	10,279	473,745
Charge for the period	44,973	9,219	22,753	1,986	4,212	83,143
Foreign currency translation differences	3,263	1,266	2,394	102	262	7,287
Disposals	<u>(10,109)</u>	<u>(4,531)</u>	<u>(7,301)</u>	<u>(1,141)</u>	<u>(5,260)</u>	<u>(28,342)</u>
Closing balance	<u>262,307</u>	<u>83,707</u>	<u>173,138</u>	<u>7,188</u>	<u>9,493</u>	<u>535,833</u>

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn) [continued]

For the year ended 31 December 2021 [continued]

Impairment	Intangible assets	Property	Machinery and office equipment	Tangible assets subject to operating lease	Total
Balance as at 1 January	2,704	1,122	42	338	4,206
Impairment for the period	-	2,967	-	9	2,976
Release of impairment for the period	-	-	-	(204)	(204)
Foreign currency translation differences	5	55	6	(1)	65
Use of impairment	(4)	(591)	(5)	(5)	(605)
Closing balance	<u>2,705</u>	<u>3,553</u>	<u>43</u>	<u>137</u>	<u>6,438</u>

	Intangible assets	Goodwill	Property	Machinery and office equipment	Vehicle	Construction in progress	Tangible assets subject to operating lease	Total
Carrying value								
Balance as at 1 January	<u>137,611</u>	<u>101,393</u>	<u>206,631</u>	<u>56,771</u>	<u>17,652</u>	<u>23,403</u>	<u>18,309</u>	<u>561,770</u>
Closing balance	<u>142,991</u>	<u>105,640</u>	<u>217,662</u>	<u>70,550</u>	<u>34,064</u>	<u>67,657</u>	<u>21,203</u>	<u>659,767</u>
Fair values	=	=	<u>247,754</u>	<u>70,258</u>	<u>34,063</u>	=	<u>21,339</u>	<u>373,414</u>
Gross amount of the fully depreciated assets that are still in use	<u>129,805</u>	=	<u>25,396</u>	<u>132,611</u>	<u>924</u>	=	=	<u>288,736</u>

An analysis of the intangible assets for the year ended 31 December 2021 is as follows:

Intangible assets	Self-developed	Purchased	Total
Gross values	12,700	395,303	408,003
Accumulated amortization	(5,017)	(257,290)	(262,307)
Impairment	=	(2,705)	(2,705)
Carrying value	<u>7,683</u>	<u>135,308</u>	<u>142,991</u>

NOTE 13: PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS (in HUF mn) [continued]**For the year ended 31 December 2021 [continued]**

Carrying value of the investment and goodwill allocated to the appropriate cash generating units

Subsidiaries	Carrying amounts of the subsidiary in HUF million	Goodwill values in HUF million	Goodwill values in million functional currency	Type of functional currency	Consolidated ownership interest	With ownership adjusted company value in HUF million	Applied long term grow rate	Applied long term discount rate
DSK Bank EAD (Bulgaria)	280,692	43,138	28,541 77	HUF BGN	99.91%	832,445	3.00%	7.90%
OTP banka d.d. (Croatia)	205,349	21,421	58	EUR	100.00%	361,995	2.69%	8.83%
JSC "OTP Bank" (Russia)	124,411	40,866	9,395	RUB	97.92%	187,552	1.89%	15.44%
POK-DSK Rodina a.d. (Bulgaria)	1,680	11	11	HUF	99.85%	15,299	3.00%	7.90%
George Consult (Croatia)	<u>225</u>	<u>204</u>	4	HRK	76.00%	171	2.69%	8.83%
	<u>612,357</u>	<u>105,640</u>						

NOTE 14: INVESTMENT PROPERTIES (in HUF mn)

An analysis of the change in gross values of investment properties is as follows:

Gross values	2022	2021
Balance as at 1 January	40,241	54,154
Increase due to transfer from inventories or owner-occupied properties	1,830	3,425
Increase from purchase	20,935	134
Transfer to held-for-sale properties	(321)	(66)
Transfer to inventories or owner-occupied properties	(1,442)	(2,858)
Disposal due to sale	(1,798)	(14,993)
Foreign currency translation difference	<u>1,901</u>	<u>445</u>
Closing balance	<u>61,346</u>	<u>40,241</u>

The applied depreciation and amortization rates were as follows:

	2022	2021
Depreciation and amortization rates	2.00% - 20.00%	1.00% - 20.00%

An analysis of the movement in the depreciation and amortization on investment properties is as follows:

Depreciation and amortization	2022	2021
Balance as at 1 January	9,111	11,383
Additions due to transfer from inventories or owner-occupied properties	1,513	1,296
Charge for the period	912	1,113
Transfer to inventories or owner-occupied properties	(126)	(236)
Disposal due to sale	(780)	(4,577)
Transfer to held-for-sale properties	(17)	-
Foreign currency translation difference	<u>660</u>	<u>132</u>
Closing balance	<u>11,273</u>	<u>9,111</u>

An analysis of the movement in the impairment on investment properties is as follows:

Impairment	2022	2021
Balance as at 1 January	1,248	4,170
Impairment for the period	1,389	54
Release of impairment for the period	(63)	(297)
Use of impairment	(40)	(2,726)
Decrease due to transfer to inventories or owner-occupied properties	(8)	-
Foreign currency translation difference	<u>95</u>	<u>47</u>
Closing balance	<u>2,621</u>	<u>1,248</u>

NOTE 14: INVESTMENT PROPERTIES (in HUF mn) [continued]

Carrying values	2022	2021
Balance as at 1 January	<u>29,882</u>	<u>38,601</u>
Closing balance	<u>47,452</u>	<u>29,882</u>
Fair values	<u>61,198</u>	<u>34,257</u>

The Group chose the cost model for measuring investment properties but estimates and reviews the fair value of the investment properties by external experts, these investment properties would have been presented on level 3 in the fair value hierarchy if the Group didn't apply cost method for this recognition.

Income and expenses	2022	2021
Rental income	2,511	2,621
Direct operating expenses of investment properties		
– income generating	426	318
Direct operating expenses of investment properties		
– non income generating	82	14

NOTE 15: DERIVATIVE FINANCIAL ASSETS DESIGNATED AS HEDGE ACCOUNTING (in HUF mn)

Positive fair value of derivative financial assets designated as fair value hedge

	2022	2021
CCIRS and mark-to-market CCIRS designated as fair value hedge	20,732	5,471
Foreign exchange swap designated as fair value hedge	1,696	-
Interest rate swaps designated as fair value hedge	<u>25,819</u>	<u>13,286</u>
Total	<u>48,247</u>	<u>18,757</u>

NOTE 16: OTHER ASSETS (in HUF mn)

Other assets are expected to be recovered or settled no more than twelve months after the reporting period.

	2022	2021
Other financial assets		
Receivables from card operations	67,981	27,820
Prepayments and accrued income on other financial assets	29,284	27,778
Trade receivables	37,777	24,951
Receivables from investment services	57,189	15,077
Other advances	19,652	21,043
Stock exchange deals	31,234	12,255
Giro clearing accounts	12,593	2,635
Receivables due from pension funds and investment funds	6,478	3,250
Receivables from leasing activities	1,778	363
Advances for securities and investments	358	525
Other financial assets	30,490	17,019
Loss allowance on other financial assets	<u>(31,833)</u>	<u>(16,800)</u>
Total	<u>262,981</u>	<u>135,916</u>
Other non-financial assets	2022	2021
Prepayments and accrued income on other non-financial assets	62,878	46,418
Receivables, subsidies from the State, Government	23,383	15,800
Settlement and suspense accounts	40,066	14,974
Biological assets and agricultural produce	8,366	5,193
Other non-financial assets	27,963	15,495
Impairment on other non-financial assets	<u>(7,041)</u>	<u>(4,413)</u>
Total	<u>155,615</u>	<u>93,467</u>
Other assets (under IAS 2)	2022	2021
Inventories	48,210	43,843
Repossessed real estate	6,985	6,354
Repossessed other non-financial assets	1,192	1,069
Write-down of the assets measured under IAS 2	<u>(3,864)</u>	<u>(3,864)</u>
Total	<u>52,523</u>	<u>47,402</u>
Total other assets	<u>471,119</u>	<u>276,785</u>

NOTE 16: OTHER ASSETS (in HUF mn) [continued]

An analysis of the movement in the loss allowance on **other financial assets** is as follows:

	2022	2021
Balance as at 1 January	16,800	18,459
Loss allowance for the period	22,472	8,569
Release of allowance for the period	(8,917)	(6,903)
Use of loss allowance	(2,083)	(3,767)
Reclassification	253	-
Foreign currency translation difference	<u>3,308</u>	<u>442</u>
Closing balance	<u>31,833</u>	<u>16,800</u>

An analysis of the movement in the impairment on **other non-financial assets** is as follows:

	2022	2021
Balance as at 1 January	4,413	4,699
Impairment for the period	3,304	949
Release of impairment for the period	(647)	(653)
Use of impairment	(324)	(751)
Reclassification	(253)	-
Foreign currency translation difference	<u>548</u>	<u>169</u>
Closing balance	<u>7,041</u>	<u>4,413</u>

NOTE 17: AMOUNTS DUE TO BANKS, THE NATIONAL GOVERNMENTS, DEPOSITS FROM THE NATIONAL BANKS AND OTHER BANKS (in HUF mn)

	2022	2021
Within one year		
In HUF	369,015	277,397
In foreign currency	<u>218,611</u>	<u>225,398</u>
	<u>587,626</u>	<u>502,795</u>
Over one year		
In HUF	689,579	900,948
In foreign currency	<u>185,953</u>	<u>163,605</u>
	<u>875,532</u>	<u>1,064,553</u>
Total	<u>1,463,158</u>	<u>1,567,348</u>

Interest rates on amounts due to banks, the National Governments, deposits from the National Banks and other banks are as follows:

	2022	2021
Within one year		
In HUF	(2.40)% - 18.00%	(2.04)% - 4.66%
In foreign currency ¹	(2.32)% - 12.00%	(2.40)% - 17.60%
Over one year		
In HUF	(2.40)% - 9.23%	(2.40)% - 4.66%
In foreign currency ¹	(2.40)% - 13.76%	(2.40)% - 12.00%

¹ The highest interest rates for due to banks denominated in foreign exchange relate to loans taken from EBRD and Green for Growth Fund in Ukraine.

	2022	2021
Average interest rates on amounts due to banks, the National Governments, deposits from the National Banks and other banks denominated in HUF	2.28%	1.20%
Average interest rates on amounts due to banks, the National Governments, deposits from the National Banks and other banks denominated in foreign currency	2.40%	1.49%

NOTE 18: REPO LIABILITIES (in HUF mn)

	2022	2021
Within one year		
In HUF	29,147	49,726
In foreign currency	<u>197</u>	<u>29,321</u>
	<u>29,344</u>	<u>79,047</u>
Over one year		
In HUF	96	-
In foreign currency	<u>187,929</u>	=
	<u>188,025</u>	=
Total	<u>217,369</u>	<u>79,047</u>

Interest rates on repo liabilities are as follows:

	2022	2021
Interest rates on repo liabilities denominated in HUF	4.75% - 15.47%	0.00% - 2.80%
Interest rates on repo liabilities denominated in foreign currency	2.47% - 5.20%	(0.95)% - 0.00%

NOTE 19: FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (in HUF mn)

	2022	2021
Within one year		
In HUF	1,716	1,784
In foreign currency	=	=
	<u>1,716</u>	<u>1,784</u>
Over one year		
In HUF	52,475	39,400
In foreign currency	=	=
	<u>52,475</u>	<u>39,400</u>
Total	<u>54,191</u>	<u>41,184</u>
Contractual amount outstanding	<u>19,853</u>	<u>21,479</u>
Result from associated entity's measured at fair value attributable to the Group	<u>37,616</u>	<u>21,051</u>

Interest conditions of financial liabilities designated at fair value through profit or loss can be analysed as follows:

	2022	2021
Interest rates on financial liabilities designated at fair value denominated in HUF within one year	2.19% - 3.96%	0.46% - 2.46%
Interest rates on financial liabilities designated at fair value denominated in HUF over one year	0.01% - 4.63%	0.01% - 2.90%

Certain MFB (“Hungarian Development Bank”) refinanced loan receivables are categorised as fair value through profit or loss based on SPPI test. Related refinancing loans at the liability side are categorised as fair value through profit or loss based on fair value option due to accounting mismatch as provided by the IFRS 9 standard.

The Group controls capital funds where it does not hold the 100% of the owner rights. The related non-controlling interest is treated as financial liability designated at fair value through profit or loss as it is not considered equity under IAS 32.

NOTE 20: DEPOSITS FROM CUSTOMERS (in HUF mn)

	2022	2021
Within one year		
In HUF	7,910,448	7,829,595
In foreign currency	<u>16,757,984</u>	<u>12,758,360</u>
	<u>24,668,432</u>	<u>20,587,955</u>
Over one year		
In HUF	274,217	293,606
In foreign currency	<u>246,156</u>	<u>187,083</u>
	<u>520,373</u>	<u>480,689</u>
Total	<u>25,188,805</u>	<u>21,068,644</u>

Interest rates on deposits from customers are as follows:

	2022	2021
Within one year		
In HUF	0.00% - 17.95%	(2.48)% - 7.96%
In foreign currency ¹	(0.40)% - 45.10%	(1.01)% - 17.20%
Over one year		
In HUF	0.00%- 13.00%	0.01% - 3.00%
In foreign currency	0.00% - 18.00%	0.00% - 8.90%

¹ The highest interest rate regarding within-one-year deposits in foreign currency for the current and previous year relate to treasury deposit in Turkish lira in Hungary.

	2022	2021
Average interest rates on deposits from customers denominated in HUF	2.21%	0.18%
Average interest rates on deposits from customers denominated in foreign currency	0.68%	0.34%

An analysis of deposits from customers by type is as follows:

	2022		2021	
Retail deposits	13,739,669	54.55%	11,982,784	56.88%
Corporate deposits	10,408,982	41.32%	8,093,206	38.41%
Municipality deposits	<u>1,040,154</u>	<u>4.13%</u>	<u>992,654</u>	<u>4.71%</u>
Total	<u>25,188,805</u>	<u>100.00%</u>	<u>21,068,644</u>	<u>100.00%</u>

NOTE 21: LIABILITIES FROM ISSUED SECURITIES (in HUF mn)

	2022	2021
With original maturity		
Within one year		
In HUF	48,755	9,332
In foreign currency	<u>6,427</u>	<u>13</u>
	<u>55,182</u>	<u>9,345</u>
Over one year		
In HUF	373,645	426,929
In foreign currency	<u>441,855</u>	<u>51</u>
	<u>815,500</u>	<u>426,980</u>
Total	<u>870,682</u>	<u>436,325</u>

Interest rates on liabilities from issued securities are as follows:

	2022	2021
Issued securities denominated in HUF	0.60% - 15.00%	0.60% - 4.26%
Issued securities denominated in foreign currency	0.74% - 7.35%	0.74% - 5.00%
	2022	2021
Average interest rates on issued securities denominated in HUF	5.00%	2.20%
Average interest rates on issued securities denominated in foreign currency	2.95%	0.25%

Issued securities denominated in HUF as at 31 December 2022 (in HUF mn)

	Name	Date of issue	Maturity	Nominal value (in HUF mn)	Amortized cost (in HUF mn)	Interest conditions (actual interest rate in % p.a.)	Hedged
1	OTPX2023A	22/03/2013	24/03/2023	312	410	indexed 1.70	hedged
2	OTPX2023B	28/06/2013	26/06/2023	198	260	indexed 0.60	hedged
3	OTPX2024A	18/06/2014	21/06/2024	241	310	indexed 1.30	hedged
4	OTPX2024B	10/10/2014	16/10/2024	295	378	indexed 0.70	hedged
5	OTPX2024C	15/12/2014	20/12/2024	242	309	indexed 0.60	hedged
6	OTP_HUF_25/1	18/11/2022	18/11/2025	25,562	26,046	fix 15.00	
7	OTP_HUF_26/1	22/12/2022	05/01/2026	10,229	10,270	fix 12.00	
8	OTPRF2023A	22/03/2013	24/03/2023	<u>1,010</u>	<u>1,215</u>	indexed 1.70	hedged
	Subtotal			<u>38,089</u>	<u>39,198</u>		

NOTE 21: LIABILITIES FROM ISSUED SECURITIES (in HUF mn) [continued]**Issued securities denominated in HUF as at 31 December 2022 (in HUF mn) [continued]**

	Name	Date of issue	Maturity	Nominal value (in HUF mn)	Amortized cost (in HUF mn)	Interest conditions (actual interest rate in % p.a.)		Hedged
9	OJB2023_I	05/04/2018	24/11/2023	44,120	39,968	fix	1.75	hedged
10	OJB2024_A	17/09/2018	20/05/2024	53,732	53,933	floating	17.36	
11	OJB2024_II	10/10/2018	24/10/2024	96,800	79,228	fix	2.50	hedged
12	OJB2025_II	03/02/2020	26/11/2025	22,550	16,193	fix	1.50	hedged
13	OJB2027_I	23/07/2020	27/10/2027	76,850	52,608	fix	1.25	hedged
14	OJB2029_A	25/07/2022	24/05/2029	91,510	91,488	floating	17.13	
15	OJB2031_I	18/08/2021	22/10/2031	82,000	49,515	fix	2.50	hedged
16	Other			<u>269</u>	<u>269</u>			
	Total issued securities in HUF			<u>505,920</u>	<u>422,400</u>			

Issued securities denominated in foreign currency as at 31 December 2022

	Name	Date of issue	Maturity	Type of FX	Nominal value (FX mn)		Amortized cost (FX mn)		Interest conditions (actual interest rate in % p.a.)	
1	XS2560693181	01/12/2022	04/03/2026	EUR	650	260,136	653	261,341	fix	7.35
2	XS2499691330	13/07/2022	13/07/2025	EUR	399	159,859	409	163,893	fix	5.50
3	XS2536446649	29/09/2022	29/09/2026	USD	60	22,541	61	22,972	fix	7.25
4	Other ¹				12	<u>60</u>	15	<u>76</u>		
	Total issued securities in FX					<u>442,596</u>		<u>448,282</u>		
	Total issued securities							<u>870,682</u>		

¹Issued other securities denominated in foreign currency are promissory notes issued by JSC "OTP Bank" (Russia) in the amount of HUF 60 million as at 31 December 2022.

Issued securities denominated in HUF as at 31 December 2021 (in HUF mn)

	Name	Date of issue	Maturity	Nominal value (in HUF mn)	Amortized cost (in HUF mn)	Interest conditions (actual interest rate in % p.a.)		Hedged
1	OTPX2022A	22/03/2012	23/03/2022	175	236	indexed	NaN	hedged
2	OTPX2022B	18/07/2012	18/07/2022	164	549	indexed	1.70	hedged
3	OTPX2022C	29/10/2012	28/10/2022	177	317	indexed	1.70	hedged
4	OTPX2022D	28/12/2012	27/12/2022	238	290	indexed	1.70	hedged
5	OTPX2023A	22/03/2013	24/03/2023	312	366	indexed	1.70	hedged
6	OTPX2023B	28/06/2013	26/06/2023	198	272	indexed	0.60	hedged
7	OTPX2024A	18/06/2014	21/06/2024	241	277	indexed	1.30	hedged
8	OTPX2024B	10/10/2014	16/10/2024	295	336	indexed	0.70	hedged
9	OTPX2024C	15/12/2014	20/12/2024	242	275	indexed	0.60	hedged
10	OTPRF2022A	22/03/2012	23/03/2022	2,321	2,513	indexed	1.70	hedged
11	OTPRF2022B	22/03/2012	23/03/2022	934	1,011	indexed	1.70	hedged
12	OTPRF2022C	28/06/2012	28/06/2022	<u>209</u>	<u>266</u>	indexed	1.70	hedged
	Subtotal			<u>5,506</u>	<u>6,708</u>			

NOTE 21: LIABILITIES FROM ISSUED SECURITIES (in HUF mn) [continued]**Issued securities denominated in HUF as at 31 December 2021 (in HUF mn) [continued]**

	Name	Date of issue	Maturity	Nominal value (in HUF mn)	Amortized cost (in HUF mn)	Interest conditions (actual interest rate in % p.a.)		Hedged
13	OTPRF2022D	28/06/2012	28/06/2022	286	324	indexed	1.70	hedged
14	OTPRF2022E	29/10/2012	31/10/2022	862	933	indexed	1.70	hedged
15	OTPRF2022F	28/12/2012	28/12/2022	708	773	indexed	1.70	hedged
16	OTPRF2023A	22/03/2013	24/03/2023	899	977	indexed	1.70	hedged
17	OJB2023_I	05/04/2018	24/11/2023	44,120	42,300	1.75	fix	
18	OJB2024_A	17/09/2018	20/05/2024	57,067	57,010	4.26	floating	
19	OJB2024_C	24/02/2020	24/10/2024	80,125	79,972	3.95	floating	
20	OJB2024_II	10/10/2018	24/10/2024	96,800	89,138	2.5	fix	
21	OJB2025_II	03/02/2020	26/11/2025	22,550	20,003	1.5	fix	hedged
22	OJB2027_I	23/07/2020	27/10/2027	76,850	67,257	1.25	fix	
23	OJB2031_I	18/08/2021	22/10/2031	82,000	70,655	2.5	fix	
33	Other			<u>211</u>	<u>211</u>			
	Total issued securities in HUF			<u>467,984</u>	<u>436,261</u>			

Issued securities denominated in foreign currency are promissory notes issued by JSC “OTP Bank” (Russia) in the amount of HUF 64 million as at 31 December 2021.

Hedge accounting

Certain issued structured securities are hedged by the Bank with interest rate swaps (“IRS”) which exchange the fixed and floating interest rate with the interest rate of the securities between the parties at a notional amount that equals the nominal amount of the hedged securities. These are considered as fair value hedge relationships as they cover the interest rate risk arising from the coupons of the hedged securities. OTP Bank does not intend to be exposed to the risk embedded in the structured bonds, consequently as part of interest rate swap transaction the structured interest payments are swapped to floating interest rate.

This hedging relationship meets all of the following hedge effectiveness requirements:

- there is an economic relationship between the hedged item and the hedging instrument
- the effect of credit risk does not dominate the value changes that result from that economic relationship
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Bank actually hedges and the quantity of the hedging instrument that the Bank actually uses to hedge that quantity of hedged item

The cash-flows of the fixed rate securities issued by the Bank are exposed to the changes in the HUF/EUR foreign exchange rate and the volatility of the quoted interest rates of EUR and HUF. The interest rate risk and foreign exchange risk related to these securities are hedged with EUR and HUF IRS transactions, where the fixed interests were swapped to payments linked to 3-month HUF BUBOR and EURIBOR, resulting in a decrease in the interest rate and foreign exchange exposure of issued securities.

NOTE 21: LIABILITIES FROM ISSUED SECURITIES (in HUF mn) [continued]

Term Note Program in the value of HUF 200 billion for the year of 2022/2023

On 10 May 2022 the Bank initiated term note program in the value of HUF 200 billion with the intention of issuing registered dematerialized bonds in public. On 10 August the National Bank of Hungary approved the prospectus of Term Note Program. The prospectus is valid for 12 months following the disclosure.

The Issuer can initiate to introduce the bonds issued under the program to the Hungarian and to other stock exchanges without any obligations.

Term Note Program in the value of HUF 200 billion for the year of 2021/2022

On 28 May 2021 the Bank initiated term note program in the value of HUF 200 billion with the intention of issuing registered dematerialized bonds in public. On 8 July 2021, the National Bank of Hungary approved the prospectus of Term Note Program. The prospectus is valid for 12 months following the disclosure.

The Issuer can initiate to introduce the bonds issued under the program to the Hungarian and to other stock exchanges without any obligations.

Issuance of Green Senior Preferred Notes in the aggregate nominal amount of EUR 400 million

OTP Bank Plc have been issued “green” notes (ISIN: XS2499691330) on 13 July 2022 as value date in the aggregate nominal amount of EUR 400 million. The non-call 2 years senior preferred notes have a three-year term and carry an annually paid fixed coupon of 5.500% in the first two years. With respect to the third year, the quarterly coupon is calculated as the sum of the initial margin (of 426.5 basis points) and the 3-month EURIBOR rate. The notes are rated ‘BBB’ by S&P Ratings Europe Limited and ‘BBB+’ by Scope Ratings GmbH. The notes are listed on the Luxembourg Stock Exchange.

Issuance of Green Senior Preferred Notes in the aggregate nominal amount of USD 60 million

OTP Bank Plc issued “green” notes (ISIN: XS2536446649) on 29 September 2022 as value date in the aggregate nominal amount of USD 60 million. The notes are rated ‘BBB’ by S&P Ratings Europe Limited and ‘BBB+’ by Scope Ratings GmbH. The notes are listed on the Luxembourg Stock Exchange.

Issuance of Senior Preferred Notes in the aggregate nominal amount of EUR 650 million

OTP Bank Plc have been issued the notes (ISIN: XS2560693181) on 1 December 2022 as value date in the aggregate nominal amount of EUR 650 million. The 3.25 Non-Call 2.25 years Senior Preferred Notes were priced on 23 November 2022. The notes are rated ‘BBB’ by S&P Ratings Europe Limited and ‘BBB+’ by Scope Ratings GmbH. The notes are listed on the Luxembourg Stock Exchange.

There was other issuance of notes denominated in USD after the balance sheet date. See details in Note 52.

NOTE 22: DERIVATIVE FINANCIAL LIABILITIES HELD FOR TRADING (in HUF mn)

Negative fair value of derivative financial liabilities held for trading by type of contracts

	2022	2021
Foreign exchange swaps held for trading	83,149	46,380
Commodity swaps	31,632	51,508
Interest rate swaps held for trading	237,269	87,945
Foreign exchange forward contracts held-for-trading	13,740	7,738
CCIRS and mark-to-market CCIRS held for trading	15,759	7,789
Held for trading option contracts	1,891	479
Held-for-trading forward security agreement	-	13
Other derivative transactions held for trading ¹	<u>2,307</u>	<u>864</u>
Total	<u>385,747</u>	<u>202,716</u>

¹ Other category includes: fx spot, equity swaps, forward rate agreement, options and index futures.

NOTE 23: DERIVATIVE FINANCIAL LIABILITIES DESIGNATED AS HEDGE ACCOUNTING (in HUF mn)

Negative fair value of derivative financial liabilities designated as hedge accounting by type of contracts

	2022	2021
CCIRS and mark-to-market CCIRS designated as fair value hedge	5,398	5,451
Foreign exchange swap designated as fair value hedge	16,199	-
Interest rate swaps designated as fair value hedge	<u>6,352</u>	<u>5,777</u>
Total	<u>27,949</u>	<u>11,228</u>

NOTE 24: PROVISIONS AND OTHER LIABILITIES (in HUF mn)

Other liabilities are expected to be recovered or settled no more than twelve months after the reporting period. Besides the total other liabilities mentioned above, which are expected to be recovered or settled more than twelve months after the reporting period are the following: accrued contractual liabilities, compulsory pension reserve, loans from government and liabilities from preferential dividend shares.

	2022	2021
Other financial liabilities		
Liabilities connected to Cafeteria benefits	91,001	114,867
Liabilities from investment services	108,513	92,612
Accrued expenses on other financial liabilities	55,898	58,247
Liabilities from card transactions	75,544	31,484
Accounts payable	56,828	46,243
Liabilities due to short positions	24,596	16,904
Giro clearing accounts	32,133	14,830
Advances received from customers	12,540	11,903
Liabilities from wages and other salary related payments	34,672	13,092
Loans from government	7,961	5,851
Dividend payable	207	135
Other financial liabilities	<u>82,387</u>	<u>79,603</u>
Subtotal	<u>582,280</u>	<u>485,771</u>
Other non-financial liabilities	2022	2021
Clearing and giro settlement accounts	46,800	48,715
Liabilities from social security contributions	11,749	11,853
Accrued expenses on other non-financial liabilities	13,647	13,029
Liabilities related to housing loans	12,868	11,428
Insurance technical reserve	2,354	3,416
Other non-financial liabilities	<u>37,956</u>	<u>23,869</u>
Subtotal	<u>125,374</u>	<u>112,310</u>
Total	<u>707,654</u>	<u>598,081</u>

NOTE 24: PROVISIONS AND OTHER LIABILITIES (in HUF mn) [continued]

The provisions are detailed as follows:

	2022	2021
Commitments and guarantees given	<u>63,372</u>	<u>51,990</u>
Total provision according to IFRS 9	<u>63,372</u>	<u>51,990</u>
Pending legal issues and tax litigation	37,043	35,354
Pensions and other retirement benefit obligations	8,225	9,308
Other long-term employee benefits	1,331	910
Restructuring	1,256	1,801
Provision due to CHF loans conversion at foreign subsidiaries	900	1,285
Other provision	<u>19,494</u>	<u>19,151</u>
Total provision according to IAS 37	<u>68,249</u>	<u>67,809</u>
Total	<u>131,621</u>	<u>119,799</u>

The movements of provisions according to IFRS 9 can be summarized as follows:

	2022	2021
Balance as at 1 January	51,990	54,810
Provision for the period	102,928	28,869
Release of provision for the period	(96,783)	(28,770)
Use of provision	(293)	(7)
Change due to acquisition	21	-
Transfer	-	(4,426)
Foreign currency translation differences	<u>5,509</u>	<u>1,514</u>
Closing balance	<u>63,372</u>	<u>51,990</u>

The movements of provisions according to IAS 37 can be summarized as follows:

	2022	2021
Balance as at 1 January	67,809	61,657
Provision for the period	27,290	37,924
Release of provision for the period	(24,846)	(27,167)
Use of provision	(6,878)	(10,953)
Change due to actuarial gains or losses related to employee benefits	(1,098)	(42)
Change due to acquisition	57	-
Unwinding of the discounted amount	16	7
Transfer	-	4,426
Foreign currency translation differences	<u>5,899</u>	<u>1,957</u>
Closing balance	<u>68,249</u>	<u>67,809</u>

NOTE 25: SUBORDINATED BONDS AND LOANS (in HUF mn)

	2022	2021
Within one year		
In HUF	-	-
In foreign currency	<u>3,395</u>	<u>2,841</u>
	<u>3,395</u>	<u>2,841</u>
Over one year		
In HUF	-	-
In foreign currency	<u>298,589</u>	<u>275,493</u>
	<u>298,589</u>	<u>275,493</u>
Total	<u>301,984</u>	<u>278,334</u>

Types of subordinated bonds and loans are as follows:

	2022	2021
Debt securities issued	7,798	6,558
Loan received	<u>294,186</u>	<u>271,776</u>
Total	<u>301,984</u>	<u>278,334</u>

Interest rates on subordinated bonds and loans are as follows:

	2022	2021
Denominated in HUF	-	-
Denominated in foreign currency	2.90% - 5.00%	2.50% - 5.00%
	2022	2021
Average interest rates on subordinated bonds and loans denominated in foreign currency	3.10%	2.75%

Subordinated bonds and loans can be detailed as follows:

Type	Nominal value	Date of issuance	Date of maturity	Issue price	Interest conditions	Interest rate as at 31 December 2022
Subordinated bond	EUR 231 million	07/11/2006	Perpetual	99.375%	Three-month EURIBOR + 3%, variable after year 10 (payable quarterly) Fixed 2.875% annual in the first 5 years and callable after 5 years, starting from year 6 fix coupon (payable annually) is calculated as a sum of the initial margin (320 basis point) and the 5 year mid-swap rate prevailing at the end of the 5 year.	4.742%
Subordinated bond	EUR 499 million	15/07/2019	15/07/2029	99.738%		2.875%
Subordinated loan	USD 17.0 million	05/06/2018	30/06/2025	100.00%	Bullet repayment, once at the end of the loan agreement	5.00%

NOTE 26: SHARE CAPITAL (in HUF mn)

	2022	2021
Authorized, issued and fully paid:		
Ordinary shares	28,000	28,000

Share capital is the portion of the Bank's equity that has been obtained by the issue of shares in the corporation to a shareholder, usually for cash.

The nominal value of the shares is HUF 100 per shares. All of the shares are ordinary shares representing the same rights to the shareholders. Furthermore, there are no restrictions on the distribution of dividends and the repayment of capital.

NOTE 27: RETAINED EARNINGS AND RESERVES (in HUF mn)

In 2021, the Bank did not pay dividend based on the earlier NBH warnings issued due to covid moratoria. In 2022 dividend of HUF 119 billion from the profit of years 2019 and 2020 and HUF 1 billion from the profit of year 2021 (totally HUF 120 billion) was paid out, which meant HUF 425.89 (for the year 2019 and 2020) and HUF 3.57 (for the year 2021) dividend per share payable to shareholders.

In 2023 dividend of HUF 84,000 million are expected to be proposed by the Management from the profit of the year 2022, which means HUF 300 dividend per share payable to the shareholders.

The retained earnings and reserves according to IFRS contains the retained earnings (HUF 774,151 million and HUF 844,343 million) and reserves (HUF 2,621,064 million and HUF 2,265,166 million) as at 31 December 2022 and 2021, respectively. The reserves include mainly the option reserve, other reserves, the fair value adjustment of financial instruments at fair value through other comprehensive income, share-based payment reserve, fair value of hedge transactions, additional reserves of Income Certificates Exchangeable for Shares (“ICES”), changes in equity accumulated in the previous years at the subsidiaries and due to consolidation as well as translation of foreign exchange differences.

In the Consolidated Financial Statements, the Group recognizes the non-monetary items at historical cost. The difference between the historical cost of the non-monetary items in forint amount and the translated foreign currencies into the presentation currency using the exchange rate at the balance sheet date, is presented in the shareholders’ equity as a translation difference. The accumulated amounts of exchange differences were HUF 237,853 million and HUF 58,164 million as at 31 December 2022 and 2021, respectively.

On 19 October 2006, the Bank sold 14.5 million Treasury shares owned by the Group through an issue of ICES. Within the transaction 10 million shares owned by OTP Bank, and a further 4.5 million shares owned by the Group were sold during the underwriting period of ICES on the weighted average market price (HUF 7,080) of the Budapest Stock Exchange. The shares have been purchased by Opus Securities S.A. (“OPUS”), which issued an exchangeable bond with a total face value of EUR 514,274,000 backed by those shares. The exchangeable bonds have been sold at a 32% premium over the selling price of the shares. The EUR denominated exchangeable bonds were perpetual and the investors could have exercised the conversion right between years 6 and 10. The bonds carried a fixed coupon of 3.95% during the first 10 years, and thereafter the Issuer had the right to redeem the bonds at face value. Following year 10, the bonds carried a coupon of 3-month EURIBOR +3%. OTP Bank had a discretionary right to cancel the interest payments. The interest payable was non-cumulative.

Due to the conditions described above, ICES was accounted as an equity instrument and therefore any payment was accounted as equity distribution paid to ICES holders.

On 14 September 2021 the Bank decided to terminate the subordinated swap agreement related to ICES transaction as at 29 October 2021, and to exercise its option for repurchasing approximately 14.5 million OTP ordinary shares held by Opus at market price based on the swap agreement. On the same day, the Bank recognised liability due to Opus as a reduction of EUR 514 million in the shareholder’s equity.

Treasury shares were repurchased on 29 October 2021 on a price HUF 18,118 and on the same day the swap transaction was financially settled. As a result of the closure of the subordinated swap agreement the Bank’s shareholder’s equity increased by HUF 75,421 million, the Group’s shareholders’ equity increased by HUF 35,063 million.

Approximately 12 million pieces of treasury shares were sold to OTP SECOP I. (“OTP Special Employee Stock Ownership Program”) and OTP SECOP II.

NOTE 27: RETAINED EARNINGS AND RESERVES (in HUF mn) [continued]

Retained earnings

Profit of previous years generated by the Group that are not distributed to shareholders as dividends.

Other reserves

The other reserves contain separated reserves due to statutory provisions.

Option reserve

OTP Bank Plc and MOL Plc entered into a share swap agreement in 16 April 2009, whereby OTP has changed 24,000,000 OTP ordinary shares for 5,010,501 „A series” MOL shares. The amended final maturity of the share swap agreement is 11 July 2027, until which any party can initiate cash or physical settlement of the transaction. Option reserve represents the written put option over OTP ordinary shares were accounted as a deduction from equity at the date of OTP-MOL share swap transaction.

Share-based payment reserve

Share-based payment reserve represents the increase in the equity due to the goods or services were received by the Bank in an equity-settled share-based payment transaction, valued at the fair value of the goods or services received (see details in Note 40).

Other comprehensive income

Other comprehensive income comprises items of income and expense (including reclassification adjustments) that are not recognized in profit or loss as required or permitted by other IFRSs.

Net investment hedge in foreign operations

Reserve presented as net investment hedge in foreign operations in the shareholders' equity is related to DSK Bank EAD, OTP banka d.d. and Crnogorska komercijalna banka a.d.

NOTE 27: RETAINED EARNINGS AND RESERVES (in HUF mn) [continued]**Changes in equity accumulated in the previous year at the subsidiaries and due to consolidation**

The accumulated changes at the subsidiaries contain the accumulated gains and losses of the subsidiaries from the first day when they were included in the consolidation process. The changes due to consolidation contain the effect on the result of the eliminations in the consolidation process of the previous years.

	2022	2021
Retained earnings	774,151	844,343
Capital reserve	52	52
Option reserve	(55,468)	(55,468)
Other reserves	129,902	129,208
Actuarial loss related to employee defined benefits	544	(471)
Fair value of financial instruments measured		
at fair value through other comprehensive income	(107,676)	11,690
Share-based payment reserve	49,110	46,162
Net investment hedge in foreign operations	(27,405)	(27,405)
Profit after income tax	346,354	455,592
Changes in equity accumulated in the previous year at the subsidiaries and due to consolidation	2,047,798	1,647,642
Foreign currency translation differences	<u>237,853</u>	<u>58,164</u>
Retained earnings and other reserves ¹	<u>3,395,215</u>	<u>3,109,509</u>

¹See more details in the Consolidated Statement of Comprehensive Income and in the Consolidated statement of Changes in equity on page 6 and 7.

Fair value adjustment of securities at fair value through other comprehensive income

	2022	2021
Balance as at 1 January	(7,653)	43,958
Change of fair value	(180,981)	(49,621)
Deferred tax related to change of fair value	22,401	3,035
Other transfer to retained earnings	-	(5,070)
Deferred tax related to other transfer to retained earnings	-	457
Transfer to profit or loss due to derecognition	1,040	(2,547)
Deferred tax related to transfer to profit or loss	(194)	491
Foreign currency translation difference	<u>955</u>	<u>1,644</u>
Closing balance	<u>(164,432)</u>	<u>(7,653)</u>

Expected credit loss on securities at fair value through other comprehensive income

	2022	2021
Balance as at 1 January	6,710	6,984
Increase of loss allowance	40,664	4,414
Release of loss allowance	(11,391)	(3,453)
Decrease due to sale, derecognition	(43)	(1,749)
Foreign currency translation difference	<u>3,685</u>	<u>514</u>
Closing balance	<u>39,625</u>	<u>6,710</u>

NOTE 27: RETAINED EARNINGS AND RESERVES (in HUF mn) [continued]**Fair value changes of equity instruments as
at fair value through other comprehensive income**

	2022	2021
Balance as at 1 January	12,633	10,454
Change of fair value	5,394	2,465
Deferred tax related to change of fair value	(1,282)	(361)
Transfer to retained earnings due to derecognition	-	(207)
Foreign currency translation difference	<u>386</u>	<u>282</u>
Closing balance	<u>17,131</u>	<u>12,633</u>

Actuarial loss related to defined employee benefits

	2022	2021
Balance as at 1 January	(471)	(513)
Change of actuarial loss related to employee benefits	1,097	98
Deferred tax related to change of actuarial loss related to employee benefits	(43)	(11)
Foreign currency translation difference	<u>(39)</u>	<u>(45)</u>
Closing balance	<u>544</u>	<u>(471)</u>

Foreign currency translation difference

	2022	2021
Balance as at 1 January	58,164	(3,369)
Change of foreign currency translation	<u>179,689</u>	<u>61,533</u>
Closing balance	<u>237,853</u>	<u>58,164</u>

NOTE 28: TREASURY SHARES (in HUF mn)

	2022	2021
Nominal value (Ordinary shares)	1,132	1,091
Carrying value at acquisition cost	106,862	106,941

The changes in the carrying value of treasury shares are due to repurchase and sale transactions on market authorised by the General Assembly.

Change in number of shares:

	2022	2021
Number of shares as at 1 January	10,906,881	23,924,900
Additions	1,801,256	16,251,451
Disposals	<u>(1,390,041)</u>	<u>(29,269,470)</u>
Closing number of shares	<u>11,318,096</u>	<u>10,906,881</u>

Change in carrying value:

	2022	2021
Balance as at 1 January	106,941	124,080
Additions	16,268	276,433
Disposals	<u>(16,347)</u>	<u>(293,572)</u>
Closing balance	<u>106,862</u>	<u>106,941</u>

NOTE 29: NON-CONTROLLING INTEREST (in HUF mn)

	2022	2021
Balance as at 1 January	6,198	4,116
Increase due to business combination	-	1,041
Non-controlling interest included in net profit for the period	727	836
Purchase of non-controlling interest	(886)	-
Foreign currency translation difference	<u>(80)</u>	<u>205</u>
Closing balance	<u>5,959</u>	<u>6,198</u>

The non-controlling interest is not significant in respect of the whole OTP Group.

NOTE 30: INTEREST INCOME, INCOME SIMILAR TO INTEREST INCOME AND EXPENSE (in HUF mn)

	2022	2021
Interest income calculated using the effective interest method from / on		
loans	981,566	692,432
securities at amortized cost	144,757	79,602
finance lease receivables	78,262	59,084
securities at fair value through other comprehensive income	54,046	49,473
banks and balances with the National Banks	62,121	16,527
placements with other banks	162,532	20,922
liabilities (negative interest expense)	20,505	3,672
repo receivables	<u>4,261</u>	<u>827</u>
Subtotal	<u>1,508,050</u>	<u>922,539</u>
Income similar to interest income from		
swap deals related to placements with other banks	364,496	128,519
loans mandatorily at fair value through profit or loss	54,036	40,131
swap deals related to credit institutions	68,123	15,557
rental income	9,264	8,964
non-trading securities mandatorily at fair value through profit or loss	<u>54</u>	<u>1,749</u>
Subtotal	<u>495,973</u>	<u>194,920</u>
Total interest income and incomes similar to interest income	<u>2,004,023</u>	<u>1,117,459</u>
	2022	2021
Interest expense due to / from / on		
swaps related to banks, National Governments and to deposits from the National Banks	390,375	116,895
deposits from customers	270,407	50,645
swaps related to deposits from customers	128,153	23,860
banks, National Governments and on deposits from the National Banks	35,134	17,467
issued securities	27,838	9,822
subordinated and supplementary bonds and loans	8,986	7,598
financial assets (negative interest income)	11,830	7,275
depreciation of assets subject to operating lease and investment properties	5,161	5,325
leases	2,386	1,556
repo liabilities	31,006	2,299
other	<u>1,433</u>	<u>407</u>
Total interest expense	<u>912,709</u>	<u>243,149</u>

NOTE 31: LOSS ALLOWANCES / IMPAIRMENT / PROVISIONS (in HUF mn)

	2022	2021
Loss allowance on loans		
Loss allowance for the period	676,389	546,284
Release of loss allowance	(477,513)	(475,067)
from this: impairment gain	9,517	10,179
Income from loan recoveries	(67,869)	(51,876)
Income from recoveries exceeding the gross loans	(8,658)	(8,752)
Impairment gain	(50,715)	(35,194)
Income from provisions on loans before OTP acquisition	(1,664)	(1,622)
Income from recoveries of written-off, but legally existing loans	(6,832)	(6,308)
Change in the fair value attributable to changes in the credit risk of loans mandatorily measured at fair value through profit of loss	(13,346)	16,289
Loss allowance on finance lease	49,433	20,694
Release of loss allowance on finance lease	<u>(25,020)</u>	<u>(14,918)</u>
	<u>142,074</u>	<u>41,406</u>
Loss allowance on due from banks, balances with National Banks, on placements and on repo receivables		
Allowance for the period	51,130	27,341
Release of allowance	<u>(50,869)</u>	<u>(24,737)</u>
	<u>261</u>	<u>2,604</u>
Loss allowance on securities at fair value through other comprehensive income and on securities at amortized cost		
Allowance for the period	77,768	11,048
Release of allowance	<u>(16,994)</u>	<u>(7,074)</u>
	<u>60,774</u>	<u>3,974</u>
Impairment / (Release of impairment) of intangible, tangible assets subject to operating lease and of investment properties		
Impairment for the period	1,389	63
Release of impairment	<u>(185)</u>	<u>(501)</u>
	<u>1,204</u>	<u>(438)</u>
Provision for commitments and guarantees given		
Provision for the period	102,928	28,869
Release of provision	<u>(96,783)</u>	<u>(28,770)</u>
	<u>6,145</u>	<u>99</u>
Loss allowances / Impairment and provisions	<u>210,458</u>	<u>47,645</u>

NOTE 32: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn)

Income from fees and commissions	2022	2021
Fees and commissions related to lending¹	<u>43,179</u>	<u>36,999</u>
Deposit and account maintenance fees and commissions	251,684	203,553
Fees and commissions related to the issued bank cards	136,341	99,766
Currency exchange gains and losses	113,494	47,843
Fees related to cash withdrawal	61,738	46,143
Fees and commissions related to security trading	32,172	30,224
Fees and commissions related to fund management	29,906	23,553
Insurance fee income	19,588	16,974
Other	<u>51,474</u>	<u>49,058</u>
Fees and commissions from contracts with customers	<u>696,397</u>	<u>517,114</u>
Total	<u>739,576</u>	<u>554,113</u>

¹ Such kinds of fees and commissions related to lending which aren't included in the effective interest rate calculation due to their nature.

Fee type	Nature and timing of obligation settlement, and the significant payment terms	Revenue recognition under IFRS 15
Deposit and account maintenance fees and commissions and fees related to cash withdrawal	<p>The Group provides a number of account management services for both retail and corporate customers in which they charge a fee. Fees related to these services can be typically account transaction fees (money transfer fees, direct debit fees, money standing order fees, etc.), internet banking fees (e.g. OTP Direct fee), account control fees (e.g. sms fee), or other fees for occasional services (account statement fees, other administration fees, etc.).</p> <p>Fees for ongoing account management services are charged to the customer's account on a monthly basis. The fees are commonly fixed amounts that can be vary per account package and customer category. In the case of the transaction-based fees where the services include money transfer the fee is charged when the transaction takes place. The rate of the fee is typically determined in a certain % of the transaction amount. In the case of other transaction-based fees (e.g. SMS fee), the fee is settled monthly.</p> <p>In the case of occasional services, the Group basically charges the fees when the services are used by the customer. The fees can be fixed fees or they can be set in %.</p> <p>The rates are reviewed by the Group regularly.</p>	<p>Fees for ongoing account management services are charged on a monthly basis during the period when they are provided.</p> <p>Transaction-based fees are charged when the transaction takes place or charged monthly at the end of the month.</p>

NOTE 32: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn) [continued]

Fee type	Nature and timing of obligation settlement, and the significant payment terms	Revenue recognition under IFRS 15
Fees and commission related to the issued bank cards	<p>The Group provides a variety of bank cards to its customers, for which different fees are charged. The fees are basically charged in connection with the issuance of cards and the related card transactions.</p> <p>The annual fees of the cards are charged in advance in a fixed amount. The amount of the annual card fee depends on the type of card.</p> <p>In case of transaction-based fees (e.g. cash withdrawal/payment fee, merchant fee, interchange fee, etc.), the settlement of the fees will take place immediately after the transaction or on a monthly basis. The fee is typically determined in % of the transaction with a fixed minimum amount.</p> <p>For all other cases where the Group provides a continuous service to the customers (e.g. card closing fee), the fees are charged monthly. The fee is calculated in a fix amount.</p> <p>The rates are reviewed by the Group regularly.</p>	<p>Fees for ongoing services are charged on a monthly basis during the period when they are provided.</p> <p>Transaction-based fees are charged when the transaction takes place or charged monthly at the end of the month.</p>
Fees and commissions related to security account management services	<p>The Group provides its clients security account management services. Fees will be charged for account management and transactions on accounts.</p> <p>Account management fees are typically charged quarterly or annually. The amount is determined in %, based on the stocks of securities managed by the clients on the account in a given period.</p> <p>Fees for transactions on the securities account are charged immediately after the transaction. They are determined in %, based on the transaction amount.</p> <p>Fees for complex services provided to clients (e.g. portfolio management or custody) are typically charged monthly or annually. The fees are fixed monthly amounts and in some cases a bonus fee are charged.</p>	<p>Fees for ongoing services are charged quarterly or annually during the period when they are provided. The fees are accrued monthly.</p> <p>Transaction-based fees are charged when the transaction takes place.</p>
Fees and commissions related to fund management	<p>Fees from fund management services provided to investment funds and from portfolio management provided to insurance companies, funds. The fee income are calculated on the basis of net asset value of the portfolio and by the fee rates determined in the contracts about portfolio management.</p>	<p>Fees for ongoing services are charged usually on monthly (mutual funds) or semi-annually (venture capital funds) during the period when they are provided but accrued monthly.</p>
Net insurance fee income	<p>Due to the fact that the Group rarely provides insurance services to its clients, only acts as an agent, the fee income charged to the customers and fees payable to the insurance company are presented net in the fee income.</p> <p>In addition, agency fee charged for the sale of insurance contracts is also recorded in this line. The fee is charged on a monthly basis and determined in %.</p>	<p>Fees for ongoing services are charged on a monthly basis during the period when they are provided.</p>
Other	<p>Fees that are not significant in the Group total income are included in Other fees category. Such fees are safe lease, special procedure fee, account rent fee, fee of a copy of document, etc.</p> <p>Other fees may include charges for continuous services or for ad hoc administration services. Continuous fees are charged monthly (e.g., safe lease fees) at the beginning of the period, typically at a fixed rate. Fees for ad hoc services are charged immediately after the service obligation were met, usually in a fixed amount.</p>	<p>Fees for ongoing services are charged on a monthly basis during the period when they are provided.</p> <p>Fees for ad hoc services are charged when the transaction takes place.</p>

NOTE 32: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn) [continued]

Expense from fees and commissions	2022	2021
Fees and commissions related to issued bank cards	56,190	42,662
Interchange fees	30,470	22,831
Fees and commissions paid on loans	9,164	9,502
Fees and commissions related to deposits	9,834	8,438
Cash withdrawal transaction fees	5,292	4,063
Fees and commissions related to security trading	4,263	3,730
Insurance fees	1,578	1,413
Fees and commissions related to collection of loans	985	830
Postal fees	576	590
Money market transaction fees and commissions	333	281
Other agent fee	1,912	1,335
Other	<u>18,619</u>	<u>16,264</u>
Total	<u>139,216</u>	<u>111,939</u>
Net profit from fees and commissions	<u>600,360</u>	<u>442,174</u>

NOTE 33: GAIN AND LOSSES BY TRANSACTIONS (in HUF mn)

Gains and losses by transactions	2022	2021
Gain by transactions	7,173	5,662
Loss by transactions	<u>(3,700)</u>	<u>(4,808)</u>
Gain from sale of loans, placements, finance lease	<u>3,473</u>	<u>854</u>
Gain by transactions	41	3,552
Loss by transactions	<u>(5,169)</u>	<u>(2,521)</u>
(Loss) / Gain from derecognition of securities and other receivables at amortized cost	<u>(5,128)</u>	<u>1,031</u>
(Loss) / Gain from derecognition of financial assets at amortized cost	<u>(1,655)</u>	<u>1,885</u>

Foreign exchange result consists of revaluation difference from converting assets and liabilities in foreign currencies into the presentation currency of the consolidation financial statements.

Gains and losses by transactions	2022	2021
Gain by transactions	16,494	9,553
Loss by transactions	<u>(19,645)</u>	<u>(4,537)</u>
Fx (loss) / gain on securities at fair value through profit or loss	<u>(3,151)</u>	<u>5,016</u>
Gain by transactions	-	2,405
Loss by transactions	<u>(323)</u>	<u>(1,889)</u>
Fx (loss) / gain on derecognition of investment in subsidiaries, associates	<u>(323)</u>	<u>516</u>
Gain by transactions	4,502	10,505
Loss by transactions	<u>(5,516)</u>	<u>(13,092)</u>
Fx loss on securities at fair value through other comprehensive income	<u>(1,014)</u>	<u>(2,587)</u>
Gain by transactions	-	2,847
Loss by transactions	=	<u>(232)</u>
Fx gain on other securities	=	<u>2,615</u>
(Loss) / Gain on securities, net	<u>(4,488)</u>	<u>5,560</u>

Gains and losses by transactions	2022	2021
Gain by transactions	4,247	5,835
Loss by transactions	<u>(4,102)</u>	<u>(1,023)</u>
Gain on non-trading securities mandatorily at fair value through profit or loss	<u>145</u>	<u>4,812</u>
Gain by transactions	50,693	36,591
Loss by transactions	<u>(60,234)</u>	<u>(44,346)</u>
Loss on loans mandatorily at fair value through profit or loss (adjustment resulting from change in market factors)	<u>(9,541)</u>	<u>(7,755)</u>
Gain by transactions	7,809	2,868
Loss by transactions	<u>(2,577)</u>	<u>(457)</u>
Gain on financial assets and liabilities designated at fair value through profit or loss	<u>5,232</u>	<u>2,411</u>
Fair value adjustment on financial instruments measured at fair value through profit or loss	<u>(4,164)</u>	<u>(532)</u>

NOTE 33: GAINS AND LOSSES (in HUF mn) [continued]

Gains and losses by transactions	2022	2021
Gain by transactions	147,311	74,582
Loss by transactions	<u>(150,804)</u>	<u>(64,034)</u>
(Loss) / Gain from fx swap, swap and option deals	<u>(3,493)</u>	<u>10,548</u>
Gain by transactions	4,156	2,684
Loss by transactions	<u>(5,082)</u>	<u>(3,005)</u>
Loss from option deals	<u>(926)</u>	<u>(321)</u>
Gain by transactions	148,699	94,639
Loss by transactions	<u>(132,968)</u>	<u>(95,794)</u>
Gain / (Loss) from commodities deals	<u>15,731</u>	<u>(1,155)</u>
Gain by transactions	752	745
Loss by transactions	<u>(1,506)</u>	<u>(3,019)</u>
Loss from futures deals	<u>(754)</u>	<u>(2,274)</u>
Net results on derivative instruments and hedge relationships	<u>10,558</u>	<u>6,798</u>

Gains and losses attributable to the hedged risk on the hedged item and on the hedging instruments and ineffectiveness in case of fair value hedge on amortised cost line items are as follows:

Fair value hedge	2022	2021
Hedged items	6,750	17,406
Hedging instrument	(9,352)	(15,147)
Hedge effectiveness	(2,602)	2,259

NOTE 34: OTHER OPERATING INCOME AND EXPENSES AND OTHER ADMINISTRATIVE EXPENSES (in HUF mn)

Other operating income	2022	2021
Income from agricultural activity	62,809	42,526
Income from tourism activity	23,197	8,588
Gains on transactions related to property activities	5,269	6,424
Rental income	2,175	2,132
Income from computer programming	1,250	1,113
Fair value adjustment of biological assets and agricultural produce	(1,939)	(2,551)
Income from written-of receivable	3,727	3,577
Income from air passenger transport	1,863	762
Gains on transactions related to insurance activity	1,369	657
Non-repayable assets received	447	165
Negative goodwill due to acquisition	3,784	31
Other income from non-financial activities	<u>21,464</u>	<u>17,904</u>
Total	<u>125,415</u>	<u>81,328</u>

Other operating expenses	2022	2021
Expense related to agricultural activity	45,612	30,392
Provision for off-balance sheet commitments and contingent liabilities	2,878	11,395
Financial support for sport association and organization of public utility	16,370	11,111
Expenses related to tourism activity	20,868	7,928
Loss allowance and loan losses on other financial assets	13,306	2,624
Expenses from losses due to foreign currency loan conversion at foreign subsidiaries	562	949
Impairment on investments ¹	901	6,640
Non-repayable assets contributed	1,339	881
Impairment on tangible and intangible assets	627	2,967
Impairment / (Release of impairment) and loan losses on other non-financial assets and assets measured under IAS 2	2,667	(638)
Release of provision due to foreign currency loan conversion at foreign subsidiaries	(434)	(638)
Operating expenses of assets subject to operating lease and investment property	883	-
Other	23,206	12,121
<i>Other expenses from non-financial activities</i>	<i>5,927</i>	<i>5,613</i>
<i>Other costs</i>	<i><u>17,279</u></i>	<i><u>6,508</u></i>
Total	<u>128,785</u>	<u>85,732</u>

¹ See details in Note 12.

NOTE 34: OTHER OPERATING INCOME AND EXPENSES AND OTHER ADMINISTRATIVE EXPENSES (in HUF mn) [continued]

Other administrative expenses	2022	2021
Personnel expenses		
Wages	311,231	271,497
Taxes related to personnel expenses	49,015	44,049
Other personnel expenses	<u>42,317</u>	<u>25,138</u>
Subtotal	<u>402,563</u>	<u>340,684</u>
Depreciation, amortization of tangible, intangible assets, right-of-use assets ²	<u>107,588</u>	<u>94,996</u>
Other administrative expenses		
Taxes, other than income tax ³	193,587	93,678
Services	150,505	113,400
Professional fees	22,932	21,775
Fees payable to authorities and other fees	54,751	44,113
Advertising	20,827	19,457
Administration expenses	17,211	14,662
Rental fees	<u>5,184</u>	<u>4,847</u>
Subtotal	<u>464,997</u>	<u>311,932</u>
Total	<u>975,148</u>	<u>747,612</u>

² See details in Note 13 and Note 36.

³ Special tax of financial institutions was paid by the Group in the amount of HUF 99,974 million for the year ended 31 December 2022 and HUF 19,652 million for the year 2021, recognized as an expense thus decreased the corporate tax base. For the year ended 31 December 2022 financial transaction duty was paid by the Bank in the amount of HUF 88,642 million while for the year ended 31 December 2021 the same duty was HUF 68 billion.

The table below contains the detailing of the fees for audit and non-audit services:

Ernst & Young Audit Ltd.	2022	2021
	In thousand EUR	
OTP – annual audit – separate financial statements	458	458
OTP – annual audit – consolidated financial statements	738	659
Other audit services based on statutory provisions to		
OTP Group members	1,120	1,050
Other services providing assurance	1,805	1,575
Other non-audit services	<u>426</u>	<u>316</u>
Total	<u>4,547</u>	<u>4,058</u>
Ernst & Young Network	2022	2021
	In thousand EUR	
Audit based on statutory provisions	2,354	1,788
Other services providing assurance	-	-
Tax consulting services	209	29
Other non-audit services	<u>1,015</u>	<u>209</u>
Total	<u>3,578</u>	<u>2,026</u>

NOTE 35: INCOME TAXES (in HUF mn)

The Group is presently liable for income tax at rates between 9% and 35% of taxable income.

Deferred tax is calculated at the income tax rate of 9% in Hungary and Montenegro, 10% in Bulgaria, 12% in Moldova, 15% in Serbia and Albania, 16% in Romania, 18% in Ukraine and Croatia, 19% in Slovenia, 20% in Russia, 25.5% in the Netherlands and 35% in Malta.

The breakdown of the income tax expense is:

	2022	2021
Current tax expense	91,537	65,692
Deferred tax (income) / expense	<u>(32,286)</u>	<u>6,431</u>
Total	<u>59,251</u>	<u>72,123</u>

A reconciliation of the net deferred tax asset/liability is as follows:

	2022	2021
Balance as at 1 January	(8,936)	(3,673)
Deferred tax income / (expense) in profit or loss	32,286	(6,431)
Deferred tax receivable related to items recognized directly in equity and in Comprehensive Income	14,591	1,294
Due to acquisition of subsidiary	-	(737)
Foreign currency translation difference	<u>(2,614)</u>	<u>611</u>
Closing balance	<u>35,327</u>	<u>(8,936)</u>

A breakdown of the deferred tax assets are as follows:

	2022	2021
Loss allowance on granted loans	13,244	8,244
Provision for off-balance sheet commitments and contingent liabilities, derivative financial instruments	7,668	7,688
Securities at amortized cost	8	9
Difference in depreciation of tangible assets	1,304	3,636
Fair value adjustment of non-trading instruments mandatorily at fair value through profit or loss	214	256
Fair value adjustment of derivative financial instruments	7,227	992
Provision on other financial, non-financial liabilities	564	1,073
Difference in accounting for leases	430	999
Fair value adjustment of securities at fair value through other comprehensive income	7,563	202
Unused tax allowance	12,103	-
Loss allowance / impairment on other financial, non-financial assets	159	2,427
Tax accrual caused by negative taxable income	19,744	152
Difference in depreciation of right-of-use assets	564	214
Loss allowance on investment	84	77
Fair value adjustment of securities at fair value through profit or loss	4,023	95
Difference in accounting for investment properties	51	4
Amounts unenforceable by tax law	32	-
Other	<u>477</u>	<u>3,980</u>
Deferred tax asset	<u>75,459</u>	<u>30,048</u>

NOTE 35: INCOME TAXES (in HUF mn) [continued]

A breakdown of the deferred tax liabilities are as follows:

	2022	2021
Difference in depreciation of tangible assets	(10,944)	(10,245)
Fair value adjustment of securities at fair value through other comprehensive income	(4,586)	(6,569)
Fair value adjustment of securities at fair value through profit or loss	-	(2,781)
Loss allowance on investment	(1,293)	(1,142)
Fair value adjustment of non-trading instruments mandatorily at fair value though profit or loss	(25)	-
Securities at amortized cost	(959)	(210)
Provision for off-balance sheet commitments and contingent liabilities, derivative financial instruments	(639)	(559)
Loss allowance on granted loans	(4,383)	(944)
Interbank placements and receivables	(1,269)	(491)
Fair value adjustment of derivative financial instruments	-	(214)
Loss allowance / impairment on other financial, non-financial assets	(91)	(2,261)
Repurchase agreement and security lending	(265)	-
Provision on other financial, non-financial liabilities	-	(1,875)
Difference in accounting for investment properties	(204)	(186)
Difference in depreciation of right-of-use assets	(272)	-
Other	<u>(15,202)</u>	<u>(11,507)</u>
Deferred tax liabilities	<u>(40,132)</u>	<u>(38,984)</u>
	2022	2021
Net deferred tax asset / (liability)	<u>35,327</u>	<u>(8,936)</u>
(amount presented in the consolidated statement of financial position)		
Deferred tax assets	<u>75,421</u>	<u>15,109</u>
Deferred tax liabilities	<u>(40,094)</u>	<u>(24,045)</u>

Among deferred tax assets the tax accruals are included the following accruals by entities:

Tax accrual caused by negative taxable income	2022	2021	Date until it can be used
OTP Bank	19,424	-	31 December 2027
Merkantil Bank Ltd.	-	40	31 December 2030
OTP Real Estate Leasing Ltd.	142	55	31 December 2030
Nagisz Ltd.	55	-	31 December 2025
Nagisz Ltd.	56	-	31 December 2026
Nagisz Ltd.	<u>67</u>	<u>57</u>	31 December 2030
	<u>19,744</u>	<u>152</u>	

NOTE 35: INCOME TAXES (in HUF mn) [continued]

A reconciliation of the income tax income / expense is as follows:

	2022	2021
Profit before income tax	394,888	528,435
Income tax expense at statutory tax rates	53,933	68,823
Income tax adjustments due to permanent differences are as follows:		
Deferred use of tax allowance	(12,102)	(8)
Tax effect of transaction costs related to share-based payment recognized directly in shareholders' equity	-	323
Reversal of statutory general provision	(5)	-
Permanent differences from unused tax losses	(1,894)	(103)
Tax effect of transaction costs related to treasury share transaction recognized directly in shareholders' equity	267	-
Amounts unenforceable by tax law	61	(846)
Use of tax allowance in the current year	(23)	(4,036)
Other	<u>(2,804)</u>	<u>(11,250)</u>
Income tax expense	<u>37,433</u>	<u>52,903</u>
Effective tax rate	9.48%	10.01%
Business tax and innovation contribution	<u>21,818</u>	<u>19,220</u>
Total income tax expense	<u>59,251</u>	<u>72,123</u>
	2022	2021
Net current tax liability	<u>(23,216)</u>	<u>(6,603)</u>
(amount presented in the consolidated statement of financial position)		
Current income tax receivables	<u>5,650</u>	<u>29,978</u>
Current income tax payable	<u>(28,866)</u>	<u>(36,581)</u>

NOTE 36: LEASES (in HUF mn)**The Group as a lessee:**

Right-of-use assets by class of underlying assets as at 31 December 2022:

2022	Property	Office equipment and vehicles	Total
Depreciation expense of right-of-use assets	17,680	328	18,008
Additions to right-of-use assets	19,416	1,931	21,347
Carrying amount of right-of-use assets at the end of the reporting period	56,842	2,095	58,937

Right-of-use assets by class of underlying assets as at 31 December 2021:

2021	Property	Office equipment and vehicles	Total
Depreciation expense of right-of-use assets	15,710	355	16,065
Additions to right-of-use assets	13,915	245	14,160
Carrying amount of right-of-use assets at the end of the reporting period	50,265	461	50,726

The total cash outflow for leases was HUF 31,872 million as at 31 December 2022 and HUF 19,663 million as at 31 December 2021.

The Group mainly leases real estate, a significant part of its right-of-use assets are related to branch offices, a smaller part to office buildings and office space.

Leasing liabilities by maturities:

	2022	2021
Within one year	13,757	11,761
Over one year	<u>50,021</u>	<u>41,525</u>
Total	<u>63,778</u>	<u>53,286</u>

Lease liabilities by payments:

	2022	2021
Arising from fixed lease payments	38,636	36,047
Arising from variable lease payments	<u>25,142</u>	<u>17,239</u>
Total	<u>63,778</u>	<u>53,286</u>

On 31 December 2022 and 31 December 2021 HUF 44 million and HUF 123 million is the lease payment respectively to be paid in the future due to leases not yet commenced to which the Group is committed. The future lease payment not taken into account would be HUF 4,220 million as at 31 December 2022 and would have been HUF 4,041 million as at 31 December 2021 arising from extension options if they had been taken into account. The most typical indexes/rates on which the variable lease payments depend are: Consumer Price Index, Inflation Rate, BUBOR, EURIBOR.

NOTE 36: LEASES (in HUF mn) [continued]**The Group as a lessee [continued]:**

Amounts recognized in profit and loss	2022	2021
Interest expense on lease liabilities	2,386	1,556
Expense relating to short-term leases	3,935	3,885
Expense relating to leases of low value assets	919	694
Expense relating to variable lease payments not included in the measurement of lease liabilities	-	-
Income from subleasing right-of-use assets	6	11
Gains or losses arising from sale and leaseback transactions	-	-

The Group as a lessor:

The Group's leasing activities are most significant in Hungary, Bulgaria, Slovenia, Ukraine and Croatia. The main activity of the leasing companies is finance leasing. About half of the underlying assets are passenger cars, besides this the Group leases mainly agricultural machinery, commercial vehicles, vessels and construction machinery.

The Group manages the risk associated with the rights held in the underlying assets by, inter alia, buy-back agreements, determining the residual values on level lower than future market values and registering pledge on the underlying asset.

The Group as a lessor, finance lease:

Amounts receivable under finance leases	2022	2021
In less than 1 year	438,205	469,646
Between 1 and 2 years	391,229	332,360
Between 2 and 3 years	265,744	241,217
Between 3 and 4 years	175,723	159,306
Between 4 and 5 years	175,420	90,548
More than 5 years	<u>69,877</u>	<u>60,000</u>
Total receivables from undiscounted lease payments	<u>1,516,198</u>	<u>1,353,077</u>
Unguaranteed residual values	395	692
Gross investment in the lease	<u>1,516,593</u>	<u>1,353,769</u>
Less: unearned finance income	<u>(164,710)</u>	<u>(141,138)</u>
Present value of minimum lease payments receivable	<u>1,351,883</u>	<u>1,212,631</u>
Loss allowance	(53,131)	(30,003)
Net investment in the lease	<u>1,298,752</u>	<u>1,182,628</u>

An analysis of the change in the gross values on finance receivables is as follows:

	2022	2021
Balance as at 1 January	1,212,631	1,075,742
Additions due to new contracts	662,694	656,055
Additions due to interest income and amortized fees	82,181	64,168
Decrease due to write-off	(484)	(543)
Decrease due to repossession of the asset	(3,616)	(3,174)
Decrease due to sale	(1,697)	(3,864)
Decrease due to early repayment	(77,500)	(59,246)
Decrease due to regular lease payment	(572,293)	(530,157)
Foreign currency translation difference	49,967	13,650
Closing balance	<u>1,351,883</u>	<u>1,212,631</u>

NOTE 36: LEASES (in HUF mn) [continued]**The Group as a lessor [continued]:****The Group as a lessor, finance lease [continued]:**

An analysis of the change in the loss allowance on finance receivables is as follows:

	2022	2021
Balance as at 1 January	30,003	24,602
Loss allowance for the period	49,433	20,694
Release of loss allowance	(25,020)	(14,918)
Use of loss allowance	(319)	(257)
Partial write-off	(516)	-
Decrease due to sale	(61)	(513)
Foreign currency translation difference	<u>(389)</u>	<u>395</u>
Closing balance	<u>53,131</u>	<u>30,003</u>

	2022	2021
Result from finance leases		
Selling profit or loss	-	325
Finance income on the net investment in the lease	78,262	59,084
Income relating to variable lease payments not included in the measurement of the net investment in the lease	-	-

The Group as a lessor, operating lease:

	2022	2021
Amounts receivable under operating leases		
In less than 1 year	6,636	10,383
Between 1 and 2 years	6,177	5,172
Between 2 and 3 years	4,782	3,527
Between 3 and 4 years	3,481	2,704
Between 4 and 5 years	2,644	2,019
More than 5 years	<u>2,173</u>	<u>904</u>
Total receivables from undiscounted lease payments	<u>25,893</u>	<u>24,709</u>

	2022	2021
Result from operating leases		
Lease income	11,439	10,791
Therein lease income relating to variable lease payments that do not depend on an index or a rate	-	-

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn)

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

Financial instruments may result in certain risks to the Group. The most significant risks the Group faces include:

37.1. Credit risk

The Group takes on exposure to credit risk which is the risk that a counter-party will be unable to pay amounts in full when due. The Group structures the levels of credit risk it undertakes by placing limits on the amount of risk accepted in relation to one borrower, or banks of borrowers, and to geographical areas and loan types. Such risks are monitored on a periodical basis and are subject to an annual or more frequent review. The exposure to any borrower including banks and brokers is further restricted by sub-limits covering on and off-balance sheet exposures and daily delivery risk limits in relation to trading items such as forward foreign exchange contracts. Actual exposures against limits are monitored daily.

Exposure to credit risk is managed through regular analysis of the ability of borrowers and potential borrowers to meet interest and principal repayment obligations and by changing these lending limits when appropriate. Exposure to credit risk is managed by obtaining collateral, corporate and personal guarantees.

Defining the expected credit loss on individual and collective basis

On individual basis:

Individually assessed are the non-retail or non- micro- and small enterprise exposure of significant amount on a stand-alone basis:

- exposure in stage 3,
- exposure in workout management,
- purchased or originated credit-impaired instruments which are in accordance with the conditions mentioned above.

The calculation of impairment must be prepared and approved by the risk management functional areas. The calculation, all relevant factors (amortized cost, original and current EIR, contracted and expected cash flows (from business and/or collateral) for the individual periods of the entire lifecycle, other essential information enforced during the valuation) and the criteria thereof (including the factors underlying the classification as stage 3) must be documented individually.

The expected credit loss of the exposure equals the difference of the items' AC (gross book value) on the valuation date and the present value of the receivable's expected cash flows discounted to the valuation date by the exposure's original effective interest rate (EIR) (calculated at the initial recognition, or in the case of variable rate, recalculated due to the last interest rate change). The estimation of the expected future cash flows should be forward looking, it must also contain the effects of the possible change of macroeconomic outlook.

At least two scenarios must be used for the estimation of the expected cash flow. It should be at least one scenario in which the entity anticipates that realized cash flows will be significantly different from the contractual cash flows. Probability weights must be allocated to the individual scenarios. The estimation must reflect the probability of the occurrence and non-occurrence of the credit loss, even if the most probable result is the non-occurrence of the loss.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

Defining the expected credit loss on individual and collective basis [continued]

On collective basis:

The following exposures are subject to collective assessment:

- retail exposure irrespective of the amount,
- micro and small enterprise exposures irrespective of the amount,
- all other exposure which are insignificant on a stand-alone basis and not part of the workout management,
- exposure which are not in stage 3, significant on a stand-alone basis,
- purchased or originated credit-impaired instruments which are in accordance with the conditions mentioned above.

In the collective impairment methodology credit risk and the change of credit risk can be correctly captured by understanding the risk characteristics of the portfolio. In order to achieve this, the main risk drivers shall be identified and used to form homogeneous segments having similar risk characteristics. The segmentation is expected to stay stable from month to month, however a regular (at least yearly) revision of the segmentation process should be set up to capture the change of risk characteristics. The segmentation must be performed separately for each parameter, since in each case different factors may have relevance.

The Bank's Headquarter Group Reserve Committee stipulates the guidelines related to the collective impairment methodology at group level. In addition, it has right of agreement in respect of the risk parameters (PD -probability of default, LGD - loss given default, EAD – exposure at default) and segmentation criteria proposed by the group members.

The review of the parameters must be performed at least annually, and the results should be approved by the Group Reserve Committee. Local Risk Managements are responsible for parameter estimations / updates, macroeconomic scenarios are calculated by OTP Bank Headquarter for each subsidiary and each parameter. Based on the consensus proposal of Local Risk Management and OTP Bank Headquarter, the Group Reserve Committee decides on the modification of parameters (all parameters for impairment calculation).

At least on a yearly basis the impairment parameters should be back tested as well.

The expected loss calculation should be forward looking, including forecasts of future economic conditions. This may be achieved by applying 3-5 different macroeconomic scenarios, which may be integrated in the PD, LGD and EAD parameters.

In 2022 in Slovenia and Romania the PD parameter estimation was extended to estimate parameters based on rating categories only. The more granular estimation resulted EUR 11 million less impairment in Slovenia, while in Romania the RON 95 million impairment release outcome of the review was netted with a post model adjustment resulting neutral overall effect.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.1. Financial instruments by stages

Gross carrying amount and accumulated loss allowance of financial assets at amortized cost and of interest-bearing securities at fair value through other comprehensive income and financial commitments and provision on them by stages as at 31 December 2022:

2022	Carrying amount / Exposure	Gross carrying amount / Notional value					Accumulated loss allowance / Provision				
		Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Placements with other banks	1,351,082	1,354,832	63	24	-	1,354,919	3,801	12	24	-	3,837
Repo receivables	41,009	41,250	-	-	-	41,250	241	-	-	-	241
Mortgage loans	4,433,192	3,975,636	373,433	161,684	53,844	4,564,597	12,638	23,738	78,932	16,097	131,405
Loans to medium and large corporates	6,824,520	5,912,383	996,292	202,188	25,350	7,136,213	64,479	100,793	138,877	7,544	311,693
Consumer loans	3,199,520	2,879,094	363,047	388,258	13,495	3,643,894	61,424	81,256	294,251	7,443	444,374
Loans to micro and small enterprises	594,427	460,940	114,173	64,383	3,079	642,575	4,710	9,136	32,558	1,744	48,148
Car-finance loans	512,580	433,316	82,146	20,705	1,098	537,265	5,751	6,830	11,199	905	24,685
Municipal loans	530,219	515,299	20,229	746	-	536,274	3,187	2,212	656	-	6,055
Loans at amortized cost	<u>16,094,458</u>	<u>14,176,668</u>	<u>1,949,320</u>	<u>837,964</u>	<u>96,866</u>	<u>17,060,818</u>	<u>152,189</u>	<u>223,965</u>	<u>556,473</u>	<u>33,733</u>	<u>966,360</u>
Finance lease receivable	1,298,752	1,045,688	235,817	70,050	328	1,351,883	4,797	15,241	32,875	218	53,131
Interest bearing securities at fair value through other comprehensive income ¹	1,699,446	1,642,481	28,285	28,680	-	1,699,446	13,754	1,040	24,831	-	39,625
Securities at amortized cost	4,891,938	4,867,061	15,141	52,785	-	4,934,987	23,675	611	18,763	-	43,049
Financial assets total	<u>25,376,685</u>	<u>23,127,980</u>	<u>2,228,626</u>	<u>989,503</u>	<u>97,194</u>	<u>26,443,303</u>	<u>198,457</u>	<u>240,869</u>	<u>632,966</u>	<u>33,951</u>	<u>1,106,243</u>
Loan commitments given	4,191,766	3,954,773	258,655	16,660	201	4,230,289	24,124	11,285	3,085	29	38,523
Financial guarantees given	1,447,014	1,378,871	80,187	7,515	1	1,466,574	14,678	2,932	1,950	-	19,560
Other commitments given	559,224	509,314	20,394	34,805	-	564,513	2,755	904	1,630	-	5,289
Financial liabilities total	<u>6,198,004</u>	<u>5,842,958</u>	<u>359,236</u>	<u>58,980</u>	<u>202</u>	<u>6,261,376</u>	<u>41,557</u>	<u>15,121</u>	<u>6,665</u>	<u>29</u>	<u>63,372</u>

¹ Interest bearing securities at fair value through other comprehensive income are recognized in the Consolidated statement of financial position as at fair value (see in Note 9). Loss allowances for securities at fair value through other comprehensive income that are in Stage 1 and / or in Stage 2 is recognized in the Other comprehensive income. It is included in the accumulated loss allowance of this table showed above.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.1. Financial instruments by stages [continued]

Gross carrying amount and accumulated loss allowance of financial assets at amortized cost and of interest-bearing securities at fair value through other comprehensive income and financial commitments and provision on them by stages as at 31 December 2021:

2021	Carrying amount / Exposure	Gross carrying amount / Notional value					Accumulated loss allowance / Provision				
		Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Placements with other banks	1,584,861	1,587,827	-	28	-	1,587,855	2,966	-	28	-	2,994
Repo receivables	61,052	61,342	-	-	-	61,342	290	-	-	-	290
Mortgage loans	3,822,426	3,173,491	559,939	178,066	57,988	3,969,484	10,450	25,590	84,937	26,081	147,058
Loans to medium and large corporates	5,294,170	4,680,180	657,586	158,773	24,117	5,520,656	51,724	69,724	98,017	7,021	226,486
Consumer loans	2,963,112	2,585,014	422,975	356,485	12,856	3,377,330	49,104	84,158	274,098	6,858	414,218
Loans to micro and small enterprises	500,991	412,247	76,131	54,458	2,339	545,175	4,751	9,707	28,351	1,375	44,184
Car-finance loans	446,341	370,790	79,965	9,675	2,452	462,882	2,988	4,978	6,508	2,067	16,541
Municipal loans	466,143	444,944	23,890	816	-	469,650	1,372	1,475	660	-	3,507
Loans at amortized cost	<u>13,493,183</u>	<u>11,666,666</u>	<u>1,820,486</u>	<u>758,273</u>	<u>99,752</u>	<u>14,345,177</u>	<u>120,389</u>	<u>195,632</u>	<u>492,571</u>	<u>43,402</u>	<u>851,994</u>
Finance lease receivable	1,182,628	959,361	210,955	41,944	371	1,212,631	4,432	11,140	14,243	188	30,003
Interest bearing securities at fair value through other comprehensive income ¹	2,189,534	2,187,835	1,699	-	-	2,189,534	6,566	144	-	-	6,710
Securities at amortized cost	3,891,335	3,879,749	20,699	-	-	3,900,448	7,789	1,324	-	-	9,113
Financial assets total	<u>22,402,593</u>	<u>20,342,780</u>	<u>2,053,839</u>	<u>800,245</u>	<u>100,123</u>	<u>23,296,987</u>	<u>142,432</u>	<u>208,240</u>	<u>506,842</u>	<u>43,590</u>	<u>901,104</u>
Loan commitments given	3,776,768	3,665,153	128,603	14,805	211	3,808,772	20,539	7,482	3,961	22	32,004
Financial guarantees given	913,038	887,585	35,648	4,568	7	927,808	11,814	1,408	1,542	6	14,770
Other commitments given	1,174,462	1,127,354	44,064	8,260	-	1,179,678	3,170	1,140	906	-	5,216
Financial liabilities total	<u>5,864,268</u>	<u>5,680,092</u>	<u>208,315</u>	<u>27,633</u>	<u>218</u>	<u>5,916,258</u>	<u>35,523</u>	<u>10,030</u>	<u>6,409</u>	<u>28</u>	<u>51,990</u>

¹ Interest bearing securities at fair value through other comprehensive income are recognized in the Consolidated statement of financial position as at fair value (see in Note 9). Loss allowances for securities at fair value through other comprehensive income that are in Stage 1 and / or in Stage 2 is recognized in the Other comprehensive income. It is included in the accumulated loss allowance of this table showed above.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.2. Movement table of loss allowance / provision on financial instruments

Movement of loss allowance on financial assets at amortized cost and on interest bearing securities at fair value through other comprehensive income and of provision of financial commitments as at 31 December 2022:

2022	Opening balance	Increases due to origination and acquisition	Decreases due to derecognition	Transfers between stages (net)	Changes due to change in credit risk (net)	Changes due to modifications without derecognition (net)	Decrease in loss allowance account due to write-offs	Other adjustments ¹	Closing balance
Stage 1	142,432	138,017	(43,066)	(120,475)	71,441	(4,547)	(88)	14,743	198,457
Placements with other banks	2,966	34,558	(11,574)	(1,345)	(20,902)	-	-	98	3,801
Repo receivables	290	4,457	(389)	-	(1,044)	-	-	(3,073)	241
Loans at amortized cost	120,389	93,238	(28,281)	(101,521)	56,228	(4,576)	(88)	16,800	152,189
Finance lease receivables	4,432	2,647	(1,105)	1,668	(3,384)	29	-	510	4,797
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	14,355	3,117	(1,717)	(19,277)	40,543	-	-	408	37,429
Stage 2	208,240	52,749	(24,038)	9,927	(26,352)	6,158	(959)	15,144	240,869
Placements with other banks	-	-	-	1,345	(1,518)	-	-	185	12
Repo receivables	-	-	-	-	-	-	-	-	-
Loans at amortized cost	195,632	42,790	(22,408)	12,796	(23,558)	6,174	(959)	13,498	223,965
Finance lease receivables	11,140	6,646	(1,630)	(4,296)	2,102	(16)	-	1,295	15,241
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	1,468	3,313	-	82	(3,378)	-	-	166	1,651
Stage 3	506,842	72,119	(52,134)	110,548	69,855	743	(124,057)	49,050	632,966
Placements with other banks	28	11	(14)	-	(121)	-	(4)	124	24
Repo receivables	-	-	-	-	-	-	-	-	-
Loans at amortized cost	492,571	34,977	(49,466)	88,725	67,932	743	(122,687)	43,678	556,473
Finance lease receivables	14,243	12,732	(2,654)	2,628	3,374	-	(1,366)	3,918	32,875
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	-	24,399	-	19,195	(1,330)	-	-	1,330	43,594
Loss allowance on financial assets subtotal	<u>857,514</u>	<u>262,885</u>	<u>(119,238)</u>	<u>≡</u>	<u>114,944</u>	<u>2,354</u>	<u>(125,104)</u>	<u>78,937</u>	<u>1,072,292</u>

¹Other adjustment mainly includes changes due to foreign exchange conversion.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.1. Credit risk [continued]****37.1.2. Movement table of loss allowance / provision on financial instruments [continued]**

Movement of loss allowance on financial assets at amortized cost and on interest bearing securities at fair value through other comprehensive income and of provision of financial commitments as at 31 December 2022 [continued]:

2022	Opening balance	Increases due to origination and acquisition	Decreases due to derecognition	Transfers between stages (net)	Changes due to change in credit risk (net)	Changes due to modifications without derecognition (net)	Decrease in loss allowance account due to write-offs	Other adjustments ¹	Closing balance
POCI	43,590	-	(3,534)	-	6,116	(138)	(6,610)	(5,473)	33,951
Placements with other banks	-	-	-	-	-	-	-	-	-
Repo receivables	-	-	-	-	-	-	-	-	-
Loans at amortized cost	43,402	-	(3,434)	-	6,098	(138)	(6,572)	(5,623)	33,733
Finance lease receivables	188	-	(100)	-	18	-	(38)	150	218
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	-	-	-	-	-	-	-	-	-
Loss allowance on financial assets total	<u>901,104</u>	<u>262,885</u>	<u>(122,772)</u>	<u>=</u>	<u>121,060</u>	<u>2,216</u>	<u>(131,714)</u>	<u>73,464</u>	<u>1,106,243</u>
Loan commitments and financial guarantees given - stage 1	35,523	22,118	(6,033)	(10,309)	708	(1,368)	-	918	41,557
Loan commitments and financial guarantees given - stage 2	10,030	4,024	(2,236)	6,939	(6,070)	302	(11)	2,143	15,121
Loan commitments and financial guarantees given - stage 3	6,409	1,975	(619)	3,370	(4,728)	(156)	(1)	415	6,665
Loan commitments and financial guarantees given - poci	<u>28</u>	<u>5</u>	<u>(9)</u>	<u>=</u>	<u>5</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>29</u>
Provision on financial liabilities total	<u>51,990</u>	<u>28,122</u>	<u>(8,897)</u>	<u>=</u>	<u>(10,085)</u>	<u>(1,222)</u>	<u>(12)</u>	<u>3,476</u>	<u>63,372</u>

¹Other adjustment mainly includes changes due to foreign exchange conversion.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.2. Movement table of loss allowance / provision on financial instruments [continued]

Movement of loss allowance on financial assets at amortized cost and on interest bearing securities at fair value through other comprehensive income and of provision of financial commitments as at 31 December 2021:

31/12/2021	Opening balance	Modification	Increases due to origination and acquisition	Decreases due to derecognition	Transfers between stages (net)	Changes due to change in credit risk (net)	Changes due to modifications without derecognition (net)	Decrease in loss allowance account due to write-offs	Other adjustments ¹	Closing balance
Stage 1	123,675	-	141,894	(37,619)	(103,930)	25,663	(4,885)	(102)	(2,264)	142,432
Placements with other banks	1,377	-	24,635	(4,383)	-	(18,854)	-	-	191	2,966
Repo receivables	292	-	667	-	-	(669)	-	-	-	290
Loans at amortized cost	106,151	-	109,970	(29,761)	(91,303)	33,215	(4,442)	(102)	(3,339)	120,389
Finance lease receivables	4,141	-	2,643	(255)	(12,106)	10,426	(443)	-	26	4,432
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	11,714	-	3,979	(3,220)	(521)	1,545	-	-	858	14,355
Stage 2	203,173	-	29,705	(21,813)	9,826	(27,800)	8,202	(498)	7,445	208,240
Placements with other banks	1	-	-	-	-	-	-	(1)	-	-
Repo receivables	-	-	-	-	-	-	-	-	-	-
Loans at amortized cost	194,941	(1,281)	26,947	(21,200)	3,766	(23,004)	8,550	(497)	7,410	195,632
Finance lease receivables	8,103	-	2,696	(613)	5,539	(4,229)	(348)	-	(8)	11,140
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	128	1,281	62	-	521	(567)	-	-	43	1,468
Stage 3	476,668	-	19,133	(44,871)	94,104	21,425	8,856	(69,523)	1,050	506,842
Placements with other banks	111	-	-	-	-	46	-	(240)	111	28
Repo receivables	-	-	-	-	-	-	-	-	-	-
Loans at amortized cost	463,570	-	17,649	(43,539)	87,537	25,360	9,852	(67,453)	(405)	492,571
Finance lease receivables	12,188	-	1,484	(1,332)	6,567	(3,981)	(996)	(1,022)	1,335	14,243
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	799	=	=	=	=	=	=	(808)	9	=
Loss allowance on financial assets subtotal	<u>803,516</u>	=	<u>190,732</u>	<u>(104,303)</u>	=	<u>19,288</u>	<u>12,173</u>	<u>(70,123)</u>	<u>6,231</u>	<u>857,514</u>

¹Other adjustment mainly includes changes due to foreign exchange conversion.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.2. Movement table of loss allowance / provision on financial instruments [continued]

Movement of loss allowance on financial assets at amortized cost and on interest bearing securities at fair value through other comprehensive income and of provision of financial commitments as at 31 December 2021 [continued]:

31/12/2021	Opening balance	Modification	Increases due to origination and acquisition	Decreases due to derecognition	Transfers between stages (net)	Changes due to change in credit risk (net)	Changes due to modifications without derecognition (net)	Decrease in loss allowance account due to write-offs	Other adjustments ¹	Closing balance
POCI	65,051	-	-	(2,929)	-	(17,138)	(129)	(4,370)	3,105	43,590
Placements with other banks	-	-	-	(2,929)	-	6,004	(129)	(4,370)	1,424	-
Repo receivables	-	-	-	-	-	-	-	-	-	-
Loans at amortized cost	64,881	-	-	-	-	(23,142)	-	-	1,663	43,402
Finance lease receivables	170	-	-	-	-	-	-	-	18	188
Interest bearing securities at fair value through other comprehensive income and securities at amortized cost	=	=	=	=	=	=	=	=	=	=
Loss allowance on financial assets total	<u>868,567</u>	=	<u>190,732</u>	<u>(107,232)</u>	=	<u>2,150</u>	<u>12,044</u>	<u>(74,493)</u>	<u>9,336</u>	<u>901,104</u>
Loan commitments and financial guarantees given - stage 1	37,297	-	23,514	(5,522)	1,446	(20,069)	(1,031)	-	(112)	35,523
Loan commitments and financial guarantees given - stage 2	11,055	-	3,804	(791)	(2,173)	(2,216)	436	-	(85)	10,030
Loan commitments and financial guarantees given - stage 3	6,458	-	932	(1,337)	727	196	(65)	-	(502)	6,409
Loan commitments and financial guarantees given - poci	=	=	31	(4)	=	3	(1)	=	(1)	28
Provision on financial liabilities total	<u>54,810</u>	=	<u>28,281</u>	<u>(7,654)</u>	=	<u>(22,086)</u>	<u>(661)</u>	=	<u>(700)</u>	<u>51,990</u>

¹Other adjustment mainly includes changes due to foreign exchange conversion.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.1. Credit risk [continued]****37.1.3. Loan portfolio by internal ratings**

2022 Internal rating grade	Gross carrying amount				Total
	Stage 1	Stage 2	Stage 3	POCI	
Low risk grade (1-4)	9,947,741	569,504	-	3,703	10,520,948
Medium risk grade (5-7)	5,073,919	1,033,413	-	36,259	6,143,591
High risk grade (8-9)	200,696	582,220	-	2,913	785,829
Non-performing	=	=	<u>908,014</u>	<u>54,319</u>	<u>962,333</u>
Total loans at amortized cost and finance lease receivable	<u>15,222,356</u>	<u>2,185,137</u>	<u>908,014</u>	<u>97,194</u>	<u>18,412,701</u>

2022 Internal rating grade	Accumulated loss allowance				Total
	Stage 1	Stage 2	Stage 3	POCI	
Low risk grade (1-4)	(66,621)	(51,998)	-	(172)	(118,791)
Medium risk grade (5-7)	(82,554)	(121,985)	-	(6,235)	(210,774)
High risk grade (8-9)	(7,811)	(65,223)	-	(250)	(73,284)
Non-performing	=	=	<u>(589,348)</u>	<u>(27,294)</u>	<u>(616,642)</u>
Total loans at amortized cost and finance lease receivable	<u>(156,986)</u>	<u>(239,206)</u>	<u>(589,348)</u>	<u>(33,951)</u>	<u>(1,019,491)</u>

2021 Internal rating grade	Gross carrying amount				Total
	Stage 1	Stage 2	Stage 3	POCI	
Low risk grade (1-4)	7,644,341	631,138	-	2,921	8,278,400
Medium risk grade (5-7)	4,692,656	869,200	-	46,708	5,608,564
High risk grade (8-9)	289,030	526,928	-	2,563	818,521
Non-performing	=	<u>4,175</u>	<u>800,217</u>	<u>47,931</u>	<u>852,323</u>
Total loans at amortized cost and finance lease receivable	<u>12,626,027</u>	<u>2,031,441</u>	<u>800,217</u>	<u>100,123</u>	<u>15,557,808</u>

2021 Internal rating grade	Accumulated loss allowance				Total
	Stage 1	Stage 2	Stage 3	POCI	
Low risk grade (1-4)	52,654	42,988	-	129	95,771
Medium risk grade (5-7)	57,421	81,894	-	13,009	152,324
High risk grade (8-9)	14,746	78,111	-	375	93,232
Non-performing	=	<u>3,779</u>	<u>506,814</u>	<u>30,077</u>	<u>540,670</u>
Total loans at amortized cost and finance lease receivable	<u>124,821</u>	<u>206,772</u>	<u>506,814</u>	<u>43,590</u>	<u>881,997</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.1. Credit risk [continued]****37.1.4. Loan portfolio by countries**

An analysis of the non-qualified and qualified gross loan portfolio at amortized cost, finance lease receivables, placements with other banks and repo receivables and their loss allowances by country is as follows:

Country	2022		2021	
	Gross amount of exposure	Loss allowance	Gross amount of exposure	Loss allowance
Hungary	5,955,212	235,946	5,528,516	215,911
Bulgaria	3,537,330	159,412	2,972,390	206,233
Croatia	2,279,085	102,039	1,826,233	101,067
Serbia	2,127,646	70,779	1,729,147	47,085
Romania	1,326,510	65,646	1,076,696	57,665
Slovenia	1,200,735	14,627	981,307	16,244
Russia	1,053,208	187,610	812,070	137,920
Ukraine	543,159	124,859	684,030	52,678
Montenegro	454,567	22,421	385,342	24,930
France	272,848	1,171	182,850	725
Albania	390,856	16,660	233,391	10,551
Moldova	171,616	11,181	166,720	5,025
Germany	39,631	525	84,164	675
Belgium	38,855	134	80,434	328
Austria	3,182	31	40,426	201
Slovakia	121,591	545	80,117	319
The Netherlands	101,078	1,864	36,858	622
Switzerland	63,843	3,138	80,611	1,701
United Kingdom	13,833	1,336	21,209	1,763
United States of America	45,232	205	106,347	419
Luxembourg	3,477	1,085	33,251	1,271
Poland	34,012	987	19,203	239
Italy	9,330	235	10,558	239
Ireland	5,966	116	5,375	106
Cyprus	5,311	217	8,646	562
Denmark	46	7	339	16
Czech Republic	739	10	899	12
Canada	74	4	4,823	16
Australia	58	13	3,164	10
Greece	999	122	1,808	192
Turkey	1,418	63	1,810	95
Spain	1,164	35	1,095	25
Israel	937	13	1,174	15
Bosnia and Herzegovina	673	97	467	76
Sweden	542	30	810	63
Norway	107	9	334	23
Saudi Arabia	87	70	239	9
United Arab Emirates	36	26	532	30
Egypt	726	14	582	15
Kazakhstan	224	9	209	15
Latvia	50	30	46	26
Other ¹	<u>2,877</u>	<u>248</u>	<u>2,783</u>	<u>164</u>
Total	<u>19,808,870</u>	<u>1,023,569</u>	<u>17,207,005</u>	<u>885,281</u>

¹ Other category as at 31 December 2022 mainly includes e.g.: Japan, Macedonia, Portugal, China, Brazil, Lithuania, Republic of South-Africa, Armenia, Belorussia, Tunisia, Iran, Syria, Kosovo and other countries.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.1. Credit risk [continued]****37.1.4. Loan portfolio by countries [continued]**

Country	2022	2021
Hungary	1,247,401	1,067,830
Croatia	-	281
Others	<u>13</u>	<u>-</u>
Total loans at fair value	<u>1,247,414</u>	<u>1,068,111</u>

37.1.5. Loan portfolio classification by economic activities

	2022	2021
Gross loan at amortized cost and finance lease receivable portfolio by economic activities		
Retail	8,575,020	7,826,752
Agriculture, forestry and fishing	752,497	610,270
Manufacturing, mining and quarrying and other industry	2,338,129	1,830,591
Construction	734,908	600,945
Wholesale and retail trade, transportation and storage accommodation and food service activities	2,948,392	2,525,942
Information and communication	241,809	196,045
Financial and insurance activities	354,235	273,817
Real estate activities	841,069	568,810
Professional, scientific, technical, administration and support service activities	657,055	437,813
Public administration, defence, education, human health and social work activities	494,955	429,290
Other services	<u>474,632</u>	<u>257,533</u>
Total gross loans and finance lease receivable	<u>18,412,701</u>	<u>15,557,808</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.1. Credit risk [continued]****37.1.5. Loan portfolio classification by economic activities [continued]**

Loss allowance on loans at amortized cost and finance lease receivable by economic activities	2022	2021
Retail	633,253	599,650
Agriculture, forestry and fishing	39,200	20,118
Manufacturing, mining and quarrying and other industry	94,324	62,951
Construction	26,040	22,165
Wholesale and retail trade, transportation and storage accommodation and food service activities	141,799	105,934
Information and communication	6,293	5,117
Financial and insurance activities	12,373	12,945
Real estate activities	29,500	21,363
Professional, scientific, technical, administration and support service activities	18,079	13,464
Public administration, defence, education, human health and social work activities	7,783	4,828
Other services	<u>10,847</u>	<u>13,462</u>
Total loss allowance on loans and finance lease receivable	<u>1,019,491</u>	<u>881,997</u>

37.1.6. Collateral

The values of collateral received and held by the Group by type are as follows (**total collateral**). The collateral covers loans as well as off-balance sheet exposures.

Types of collateral	2022	2021
Mortgages	16,332,892	13,367,891
Guarantees and warranties	1,630,318	1,296,415
Guarantees of state or organizations owned by state	1,635,382	1,070,479
Assignments (revenue or other receivables)	423,098	422,030
Securities	168,941	237,076
Cash deposits	208,487	187,934
Other	<u>1,758,802</u>	<u>2,211,671</u>
Total	<u>22,157,920</u>	<u>18,793,496</u>

The values of collateral received and held by the Group by type are as follows (**to the extent of the exposures**). The collaterals cover loans as well as off-balance sheet exposures.

Types of collateral	2022	2021
Mortgages	8,044,836	6,479,871
Guarantees of state or organizations owned by state	1,241,702	832,432
Guarantees and warranties	1,016,672	799,775
Assignments (revenue or other receivables)	220,062	290,066
Securities	99,345	156,715
Cash deposits	80,313	76,338
Other	<u>752,241</u>	<u>1,295,740</u>
Total	<u>11,455,171</u>	<u>9,930,937</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.1. Credit risk [continued]****37.1.6. Collateral [continued]**

The coverage level of the loan portfolio (total collateral) increased by 2.22 pps and the coverage level to the extent of the exposures also increased by 0.06 pps as at 31 December 2022.

The values of collateral given and held by the Group according to which financial asset is recognized as collateral are as follows:

Financial assets as collaterals recognized in the consolidated statement of financial position	2022	2021
Cash, amounts due from banks and balances with the National Banks	87,916	15,791
Placements with other banks	11,313	9,590
Repo receivables	13,253	35,826
Securities at fair value through other comprehensive income	-	16,546
Securities at amortized cost	91,991	42,233
Loans at amortized cost	1,099,311	1,089,614
Finance lease receivables	<u>32,553</u>	<u>32,553</u>
Total	<u>1,336,337</u>	<u>1,242,153</u>

37.1.7. Restructured loans

	2022		2021	
	Gross portfolio	Loss allowance	Gross portfolio	Loss allowance
Retail mortgage loans	89,167	(5,803)	269,700	(8,779)
Loans to medium and large corporations	403,643	(59,453)	276,796	(44,197)
Retail consumer loans	64,268	(21,346)	149,469	(32,850)
Loans to micro and small enterprises	59,096	(4,750)	57,403	(7,668)
Municipal	-	-	75	(8)
Other loans	<u>3,417</u>	<u>(1,361)</u>	<u>27,092</u>	<u>(2,555)</u>
Total	<u>619,591</u>	<u>(92,713)</u>	<u>780,535</u>	<u>(96,057)</u>

The forbore definition used by the Group is based on EU 2015/227 regulation.

Restructuring (forbearance) is a modification of the contract – initiated by either the client or the bank – that provides a concession or allowance towards the client in respect to the client's current or future financial difficulties. The table of restructured loans contains exposures classified as performing forbore. An exposure is considered performing forbore if the conditions of the non-performing status are not met at the time of the restructuring, or the exposure fulfilled the requirements of the minimum one-year cure period as non-performing forbore.

The loan volume of Hungarian entities classified as performing forbore exclusively due to moratoria participation decreased significantly due the expiration of the probation period for retail exposures (a total decrease of HUF 320 billion). This was partially offset by the increased volume of forbore exposures in Ukraine and Russia (a total increase of HUF 132 billion).

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.8. Financial instruments by Moody's rating categories

Securities held for trading as at fair value through profit or loss

2022	Aaa	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	N/A	Total
Government bonds	346	-	-	-	197	-	9,850	63,992	843	-	3,669	-	-	78,897
Equity instruments and fund units	-	-	20	42	47	29	15	24	-	39	2	4	163	385
Corporate bonds	-	-	-	-	-	-	-	-	116	-	-	-	3	119
Discounted Treasury bills	-	-	-	-	-	-	-	22,865	-	-	-	-	31	22,896
Mortgage bonds	-	-	-	-	-	-	-	-	-	-	-	-	72	72
Other interest bearing securities	-	1	-	-	-	-	-	1,627	-	-	-	-	-	1,628
Other non-interest bearing securities	479	-	-	-	-	-	-	-	-	-	-	-	274	753
Total	825	1	20	42	244	29	9,865	88,508	959	39	3,671	4	543	104,750

2021	Aaa	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	B1	B3	N/A	Total
Government bonds	-	-	-	16	-	18,747	26,024	11,282	10,156	31,306	-	-	-	97,531
Equity instruments and fund units	569	19	49	59	35	12	24	83	-	2	6	-	315	1,173
Corporate bonds	-	-	-	-	485	-	-	97	-	-	-	-	158	740
Discounted Treasury bills	-	-	-	-	-	-	869	-	-	-	-	54	-	923
Mortgage bonds	-	-	-	-	-	-	-	-	-	-	-	-	101	101
Other interest bearing securities	-	-	-	-	-	-	1,347	-	-	-	-	-	-	1,347
Other non-interest bearing securities	561	-	-	-	-	-	-	-	-	-	-	-	1,134	1,695
Total	1,130	19	49	75	520	18,759	28,264	11,462	10,156	31,308	6	54	1,708	103,510

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.8. Financial instruments by Moody's rating categories [continued]

Non-trading securities mandatorily at fair value through profit or loss

2022	Aaa	Aa3	A3	Baa2	Baa3	N/A	Total
Non-trading equity instruments mandatorily at fair value through profit or loss	-	-	-	8,152	-	41,594	49,746
Non-trading debt instruments mandatorily at fair value through profit or loss	<u>949</u>	<u>797</u>	<u>6</u>	<u>1,182</u>	<u>1,006</u>	<u>1,469</u>	<u>5,409</u>
Total	<u>949</u>	<u>797</u>	<u>6</u>	<u>9,334</u>	<u>1,006</u>	<u>43,063</u>	<u>55,155</u>

2021	Aa3	Baa3	Ba1	N/A	Total
Non-trading equity instruments mandatorily at fair value through profit or loss	-	-	7,811	37,083	44,894
Non-trading debt instruments mandatorily at fair value through profit or loss	<u>3,498</u>	<u>1,043</u>	<u>56</u>	<u>3,912</u>	<u>8,509</u>
Total	<u>3,498</u>	<u>1,043</u>	<u>7,867</u>	<u>40,995</u>	<u>53,403</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.8. Financial instruments by Moody's rating categories [continued]

Securities at fair value through other comprehensive income

2022	Aaa	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	B1	Caa1	Caa3	Not rated	N/A	Total
Government bonds	19,775	6,773	-	17,544	24,234	80,968	138,811	534,476	120,053	10,198	157,469	105,049	145	26,597	31,672	27,415	1,301,179
Corporate bonds	-	-	-	-	-	1,691	-	-	39,309	3,820	13,721	9,262	-	-	14,848	-	82,651
Mortgage bonds	-	-	-	42,407	-	-	-	-	-	-	-	-	-	-	12,146	-	54,553
National Bank of Hungary bonds	-	-	-	-	-	-	-	74,867	-	-	-	-	-	-	-	-	74,867
Interest bearing treasury bills	-	-	-	-	-	-	-	182,726	-	-	-	-	-	-	-	-	182,726
Other securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,470	-	3,470
Non-trading equity instruments	5,767	-	3,036	388	-	-	-	323	30	-	-	-	-	-	30,613	-	40,157
Total	25,542	6,773	3,036	60,339	24,234	82,659	138,811	792,392	159,392	14,018	171,190	114,311	145	26,597	92,749	27,415	1,739,603

2021	Aaa	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B3	Caa1	N/A	Total
Government bonds	21,728	7,849	-	17,808	28,492	99,425	203,172	495,231	372,198	188,395	162,477	-	76,732	91,487	178	-	1,765,172
Corporate bonds	-	-	-	-	-	2,896	-	6,152	44,606	4,144	12,630	-	-	-	-	18,091	88,519
Mortgage bonds	-	-	-	47,568	-	-	-	-	-	-	-	-	-	-	-	15,504	63,072
Discounted treasury bills	-	-	-	-	-	-	-	44,924	-	51,701	-	-	-	-	-	-	96,625
National Bank of Hungary bonds	-	-	-	-	-	-	-	-	-	-	-	-	109,774	-	-	-	109,774
Interest bearing treasury bills	-	-	-	-	-	-	-	63,115	-	-	-	-	-	-	-	-	63,115
Other securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,257	3,257
Non-trading equity instruments	-	-	6,112	349	-	-	-	-	305	-	-	-	-	-	-	-	28,210
Total	21,728	7,849	6,112	65,725	28,492	102,321	203,172	609,422	417,109	244,240	175,107	109,774	76,732	91,487	178	65,062	2,224,510

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.1. Credit risk [continued]

37.1.8. Financial instruments by Moody's rating categories [continued]

Securities at amortized cost

2022	Aaa	Aa2	A1	A2	A3	Baa1	Baa2	Baa3	Ba2	B1	B3	Caa3	Not rated	N/A	Total
Government bonds	285,285	27,551	12,382	26,341	33,154	218,408	3,019,422	154,043	163,104	39,470	23,623	308,798	-	24,427	4,336,008
Corporate bonds	-	-	-	-	-	-	-	15,800	-	2,839	-	-	229,322	-	247,961
Bonds of Hungarian National Bank	-	-	-	-	-	-	-	177,679	-	-	-	-	-	-	177,679
Discounted Treasury bills	-	-	-	-	-	-	-	-	-	-	18,871	-	-	-	18,871
Mortgage bonds	-	-	12,966	-	-	-	-	-	-	-	-	-	11,518	-	24,484
Interest bearing Treasury bills	-	-	-	-	-	-	-	-	-	4,954	-	-	-	-	4,954
Other securities	-	-	<u>1,911</u>	<u>9,357</u>	<u>403</u>	<u>11,874</u>	<u>3,971</u>	<u>13,223</u>	<u>1,968</u>	-	-	-	<u>39,274</u>	-	81,981
Total	<u>285,285</u>	<u>27,551</u>	<u>27,259</u>	<u>35,698</u>	<u>33,557</u>	<u>230,282</u>	<u>3,023,393</u>	<u>360,745</u>	<u>165,072</u>	<u>47,263</u>	<u>42,494</u>	<u>308,798</u>	<u>280,114</u>	<u>24,427</u>	<u>4,891,938</u>

2021	Aaa	Aa2	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	B1	B3	N/A	Total
Government bonds	185,261	45,392	20,043	-	31,892	172,502	2,858,111	174,929	26,544	12,617	25,587	91,423	-	3,644,301
Corporate bonds	-	-	-	-	-	-	-	32,013	-	-	-	-	138,862	170,875
Discounted Treasury bills	-	-	-	-	-	-	-	6	-	-	-	15,696	-	15,702
Mortgage bonds	-	-	12,992	-	-	-	-	47	-	-	-	-	11,282	24,321
Other securities	<u>298</u>	-	-	<u>8,210</u>	-	<u>7,343</u>	<u>3,682</u>	-	-	-	-	-	<u>16,603</u>	36,136
Total	<u>185,559</u>	<u>45,392</u>	<u>33,035</u>	<u>8,210</u>	<u>31,892</u>	<u>179,845</u>	<u>2,861,799</u>	<u>206,989</u>	<u>26,544</u>	<u>12,617</u>	<u>25,587</u>	<u>107,119</u>	<u>166,747</u>	<u>3,891,335</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.2. Maturity analysis of assets, liabilities and liquidity risk

Liquidity risk is a measure of the extent to which the Group may be required to raise funds to meet its commitments associated with financial instruments. The Group maintains its liquidity position in accordance with regulations prescribed by the NBH.

The essential aspect of the liquidity risk management strategy is to identify all relevant systemic and idiosyncratic sources of liquidity risk and to measure the probability and severity of such events. During liquidity risk management the Group considers the effect of liquidity risk events caused by reasons arising in the bank business line (deposit withdrawal), the national economy (exchange rate shock yield curve shock) and the global financial system (capital market shock).

In line with the Group's risk management policy liquidity risks are measured and managed on multiply hierarchy levels and applying integrated unified VaR based methodology. The basic requirement is that the Group must keep high quality liquidity reserves which means it can fulfill all liabilities when they fall due without material additional costs.

The liquidity reserves can be divided in two parts. There are separate decentralized liquid asset portfolios at subsidiary level and a centralized flexible liquidity pool at a Group level. The reserves at subsidiary levels are held to cover the relevant shocks of the subsidiaries which may arise in local currencies (deposit withdrawal, local capital market shock, unexpected business expansion), while the centralized liquidity pool is held to cover the Bank's separate shocks (deposit-, yield curve- and exchange rate shocks) and all group member's potential shocks that may arise in foreign currencies (deposit withdrawal, capital market shock).

The recalculation of shocks is made at least quarterly while the recalibration of shock measurement models and review of the risk management methodology is an annual process. The monitoring of liquidity reserves for both centralized and decentralized liquid asset portfolio has been built into the daily reporting process.

Due to the balance sheet adjustment process (deleveraging) experienced in the last few years, the liquidity reserves of the Group increased significantly while the liquidity risk exposure has decreased considerably. Currently the (over)coverage of potential liquidity risk exposure by high quality liquid assets is high. There were no material changes in the liquidity risk management process for the year ended 31 December 2022.

The contractual amounts disclosed in the maturity analyses are the contractual undiscounted cash-flows like gross finance lease obligations (before deducting finance charges); prices specified in forward agreements to purchase financial assets for cash; net amounts for pay-floating/receive-fixed interest rate swaps for which net cash-flows are exchanged; contractual amounts to be exchanged in a derivative financial instrument for which gross cash-flows are exchanged; gross loan commitments.

Such undiscounted cash-flows differ from the amount included in the Consolidated Statement of Financial Position because the amount in that statement is based on discounted cash-flows. When the amount payable is not fixed, the amount disclosed is determined by reference to the conditions existing at the end of the reporting period. For example, when the amount payable varies with changes in an index, the amount disclosed may be based on the level of the index at the end of the period.

The following tables provide an analysis of assets and liabilities about the non-discounted cash-flow into relevant maturity groupings based on the remaining period from the balance sheet date to the contractual maturity date. It is presented under the most prudent consideration of maturity dates where options or repayment schedules allow for early repayment possibilities.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.2. Maturity analysis of assets, liabilities and liquidity risk [continued]**

2022	Within 3 months	Within one year and over 3 months	Within 5 years and over one year	Over 5 years	Without maturity	Total
Cash, amounts due from banks and balances with the National Banks	4,223,091	4	-	-	-	4,223,095
Placements with other banks	1,062,238	67,317	221,803	2,969	806	1,355,133
Repo receivables	41,250	-	-	-	-	41,250
Trading securities at fair value through profit or loss	5,350	29,118	67,117	11,794	50	113,429
Non-trading instruments mandatorily at fair value through profit or loss	594	1,127	9,163	20	34,490	45,394
Securities at fair value through other comprehensive income	254,204	301,798	996,103	286,950	131,680	1,970,735
Securities at amortized cost	534,388	439,296	2,423,815	1,585,672	-	4,983,171
Loans at amortized cost	2,013,234	3,287,432	6,141,665	6,441,001	30,584	17,913,916
Finance lease receivable	87,867	215,640	1,007,512	83,753	-	1,394,772
Loans measured at fair value through profit or loss	40,151	38,038	239,627	973,060	-	1,290,876
Associates and other investments	-	-	-	-	85,929	85,929
Other financial assets ¹	<u>271,648</u>	<u>4,039</u>	<u>3,917</u>	<u>8,485</u>	<u>6,726</u>	<u>294,815</u>
TOTAL ASSETS	<u>8,534,015</u>	<u>4,383,809</u>	<u>11,110,722</u>	<u>9,393,704</u>	<u>290,265</u>	<u>33,712,515</u>
Amounts due to banks, the National Governments, deposits from the National Banks and other banks	387,564	213,599	665,930	296,766	-	1,563,859
Repo liabilities	29,153	191	188,025	-	-	217,369
Financial liabilities designated at fair value through profit or loss	583	1,133	5,535	50,218	-	57,469
Deposits from customers	23,399,285	1,275,142	398,900	123,290	-	25,196,617
Liabilities from issued securities	10,644	44,375	730,703	173,510	-	959,232
Leasing liabilities	4,720	9,616	33,534	18,397	72	66,339
Other financial liabilities ¹	550,802	34,748	11,065	817	4,231	601,663
Subordinated bonds and loans	<u>3,395</u>	-	<u>8,603</u>	<u>291,801</u>	-	<u>303,799</u>
TOTAL LIABILITIES	<u>24,386,146</u>	<u>1,578,804</u>	<u>2,042,295</u>	<u>954,799</u>	<u>4,303</u>	<u>28,966,347</u>
NET POSITION ²	<u>(15,852,131)</u>	<u>2,805,005</u>	<u>9,068,427</u>	<u>8,438,905</u>	<u>285,962</u>	<u>4,746,168</u>

¹ Without derivative financial instruments.

² Analysis for net position of assets and liabilities are calculated in accordance with IFRS 7, therefore certain financial instruments are presented in the earliest period in which the Group could be required to pay. On-demand deposits are presented in the earliest (within 3 month) period category, however based on the Management's discretion the Group has appropriate liquidity reserves as maintenance and management of liquidity risk.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.2. Maturity analysis of assets, liabilities and liquidity risk [continued]

2022	Within 3 months	Within one year and over 3 months	Within 5 years and over one year	Over 5 years	Without maturity	Total
Receivables from derivative financial instruments held for trading	7,242,836	1,270,841	476,343	186,089	-	9,176,109
Liabilities from derivative financial instruments held for trading	<u>(7,885,403)</u>	<u>(1,623,033)</u>	<u>(499,998)</u>	<u>(192,979)</u>	=	<u>(10,201,413)</u>
Net position of financial instruments						
held for trading	<u>(642,567)</u>	<u>(352,192)</u>	<u>(23,655)</u>	<u>(6,890)</u>	=	<u>(1,025,304)</u>
Receivables from derivative financial instruments designated as hedge accounting	316,440	186,839	784,159	15,859	-	1,303,297
Liabilities from derivative financial instruments designated as hedge accounting	<u>(297,714)</u>	<u>(217,102)</u>	<u>(2,031,727)</u>	<u>(13,425)</u>	=	<u>(2,559,968)</u>
Net position of financial instruments designated as hedge accounting	<u>18,726</u>	<u>(30,263)</u>	<u>(1,247,568)</u>	<u>2,434</u>	=	<u>(1,256,671)</u>
Net position of derivative financial instruments total	<u>(623,841)</u>	<u>(382,455)</u>	<u>(1,271,223)</u>	<u>(4,456)</u>	=	<u>(2,281,975)</u>
Commitments to extend credit	3,937,023	236,103	54,355	2,808	-	4,230,289
Bank guarantees	602,335	308,787	337,105	164,790	-	1,413,017
Confirmed letters of credit	47,631	5,733	193	-	-	53,557
Factoring loan commitment	<u>414,585</u>	<u>5,035</u>	=	=	=	<u>419,620</u>
Off-balance sheet commitments	<u>5,001,574</u>	<u>555,658</u>	<u>391,653</u>	<u>167,598</u>	=	<u>6,116,483</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.2. Maturity analysis of assets, liabilities and liquidity risk [continued]**

2021	Within 3 months	Within one year and over 3 months	Within 5 years and over one year	Over 5 years	Without maturity	Total
Cash, amounts due from banks and balances with the National Banks	2,557,092	51	-	-	-	2,557,143
Placements with other banks	1,314,523	61,455	145,180	67,764	-	1,588,922
Repo receivables	61,373	-	-	-	-	61,373
Trading securities at fair value through profit or loss	29,714	21,975	37,345	13,530	1,738	104,302
Non-trading instruments mandatorily at fair value through profit or loss	-	-	9,769	19	43,615	53,403
Securities at fair value through other comprehensive income	295,977	249,131	1,114,027	544,167	40,798	2,244,100
Securities at amortized cost	34,190	482,530	2,146,652	1,202,747	-	3,866,119
Loans at amortized cost	1,827,131	2,599,854	5,897,202	4,742,146	136,975	15,203,308
Finance lease receivable	124,074	307,745	770,154	48,636	-	1,250,609
Loans measured at fair value through profit or loss	30,164	31,662	221,069	835,014	-	1,117,909
Associates and other investments	-	-	-	-	79,736	79,736
Other financial assets ¹	<u>130,133</u>	<u>3,244</u>	<u>6,265</u>	<u>3,270</u>	<u>9,804</u>	<u>152,716</u>
TOTAL ASSETS	<u>6,404,371</u>	<u>3,757,647</u>	<u>10,347,663</u>	<u>7,457,293</u>	<u>312,666</u>	<u>28,279,640</u>
Amounts due to banks, the National Governments, deposits from the National Banks and other banks	332,330	173,171	704,505	366,025	-	1,576,031
Repo liabilities	79,045	-	2	-	-	79,047
Financial liabilities designated at fair value through profit or loss	530	1,253	4,421	34,980	-	41,184
Deposits from customers	19,593,347	997,565	336,246	148,580	-	21,075,738
Liabilities from issued securities	6,702	2,664	303,223	159,139	-	471,728
Leasing liabilities	3,060	9,058	27,307	15,530	-	54,955
Other financial liabilities ¹	465,022	26,311	10,312	674	6,235	508,554
Subordinated bonds and loans	<u>2,886</u>	-	<u>7,495</u>	<u>269,698</u>	-	<u>280,079</u>
TOTAL LIABILITIES	<u>20,482,922</u>	<u>1,210,022</u>	<u>1,393,511</u>	<u>994,626</u>	<u>6,235</u>	<u>24,087,316</u>
NET POSITION ²	<u>(14,078,551)</u>	<u>2,547,625</u>	<u>8,954,152</u>	<u>6,462,667</u>	<u>306,431</u>	<u>4,192,324</u>

¹ Without derivative financial instruments

² Analysis for net position of assets and liabilities are calculated in accordance with IFRS 7, therefore certain financial instruments are presented in the earliest period in which the Group could be required to pay. On-demand deposits are presented in the earliest (within 3 month) period category, however based on the Management's discretion the Group has appropriate liquidity reserves as maintenance and management of liquidity risk.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.2. Maturity analysis of assets, liabilities and liquidity risk [continued]

2021	Within 3 months	Within one year and over 3 months	Within 5 years and over one year	Over 5 years	Without maturity	Total
Receivables from derivative financial instruments held for trading	4,396,050	1,993,311	302,924	151,959	-	6,844,244
Liabilities from derivative financial instruments held for trading	<u>(4,349,598)</u>	<u>(1,991,763)</u>	<u>(296,648)</u>	<u>(146,398)</u>	=	<u>(6,784,407)</u>
Net position of financial instruments						
held for trading	<u>46,452</u>	<u>1,548</u>	<u>6,276</u>	<u>5,561</u>	=	<u>59,837</u>
Receivables from derivative financial instruments designated as hedge accounting	5,693	37,815	580,489	16,195	-	640,192
Liabilities from derivative financial instruments designated as hedge accounting	<u>(7,765)</u>	<u>(47,374)</u>	<u>(595,938)</u>	<u>(16,417)</u>	=	<u>(667,494)</u>
Net position of financial instruments designated as hedge accounting	<u>(2,072)</u>	<u>(9,559)</u>	<u>(15,449)</u>	<u>(222)</u>	=	<u>(27,302)</u>
Net position of derivative financial instruments total	<u>44,380</u>	<u>(8,011)</u>	<u>(9,173)</u>	<u>5,339</u>	=	<u>32,535</u>
Commitments to extend credit	3,749,199	234,503	74,915	6,385	-	4,065,002
Bank guarantees	532,445	347,448	307,030	106,918	-	1,293,841
Confirmed letters of credit	61,124	2,937	853	163	-	65,077
Factoring loan commitment	<u>464,341</u>	=	=	=	=	<u>464,341</u>
Off-balance sheet commitments	<u>4,807,109</u>	<u>584,888</u>	<u>382,798</u>	<u>113,466</u>	=	<u>5,888,261</u>

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.3. Net foreign currency position and foreign currency risk**

2022	USD	EUR	CHF	Other	Total
Assets	1,092,435	9,990,818	50,641	9,646,119	20,780,013
Liabilities	(1,523,947)	(9,320,156)	(148,570)	(7,646,515)	(18,639,188)
Derivative financial instruments	<u>499,444</u>	<u>1,014,423</u>	<u>161,697</u>	<u>(355,391)</u>	<u>1,320,173</u>
Net position	<u>67,932</u>	<u>1,685,085</u>	<u>63,768</u>	<u>1,644,213</u>	<u>3,460,998</u>
2021	USD	EUR	CHF	Other	Total
Assets	1,163,960	7,661,460	88,639	7,677,060	16,591,119
Liabilities	(1,013,972)	(6,769,472)	(107,902)	(5,971,941)	(13,863,287)
Derivative financial instruments	<u>(186,774)</u>	<u>(371,225)</u>	<u>32,021</u>	<u>(101,951)</u>	<u>(627,929)</u>
Net position	<u>(36,786)</u>	<u>520,763</u>	<u>12,758</u>	<u>1,603,168</u>	<u>2,099,903</u>

The table above provides an analysis of the main foreign currency exposures of the Group that arise in the non-functional currency of the entities constituting the Group. The remaining foreign currencies are shown within 'Others'. 'Others' category contains mainly foreign currencies in RON, RSD, HRK, UAH, RUB, BGN, ALL and MDL. The Group monitors its foreign exchange position for compliance with the regulatory requirements of the National Banks and its own limit system established in respect of limits on open positions. The measurement of the open foreign currency position of the Group involves monitoring the "VaR" limit on the foreign exchange exposure of the Group. The derivative financial instruments detailed in the table above are presented at fair value.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. The length of time for which the rate of interest is fixed on a financial instrument, therefore, indicates to what extent it is exposed to interest rate risk.

The majority of the interest-bearing assets and liabilities of the Group are structured to match either short-term assets and short-term liabilities, or long-term assets and liabilities with repricing opportunities within one year, or long-term assets and corresponding liabilities where repricing is performed simultaneously.

In addition, the significant spread existing between the different types of interest-bearing assets and liabilities enables the Group to benefit from a high level of flexibility in adjusting for its interest rate matching and interest rate risk exposure.

The following table presents the interest repricing periods of the assets and liabilities. Variable yield assets and liabilities have been reported in accordance with their next repricing date. Fixed income assets and liabilities have been reported in accordance with their maturity.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2022

ASSETS	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest- bearing		Total		Total	
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency		
Cash, amounts due from banks and balances with the																
National Banks	641,960	1,166,289	309	14,649	-	28,967	-	20,323	-	14,550	183,201	2,151,144	825,470	3,395,922	4,221,392	
fixed rate	641,503	1,085,631	-	-	-	4,941	-	-	-	-	-	-	641,503	1,090,572	1,732,075	
variable rate	457	80,658	309	14,649	-	24,026	-	20,323	-	14,550	-	-	766	154,206	154,972	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	183,201	2,151,144	183,201	2,151,144	2,334,345	
Placements with other banks	682,568	345,915	46,805	37,222	100,744	2,007	-	28	-	22,016	48,754	65,023	878,871	472,211	1,351,082	
fixed rate	2,151	239,634	6,542	37,222	352	-	-	28	-	22,016	-	-	9,045	298,900	307,945	
variable rate	680,417	106,281	40,263	-	100,392	2,007	-	-	-	-	-	-	821,072	108,288	929,360	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	48,754	65,023	48,754	65,023	113,777	
Repo receivables	41,009	-	-	-	-	-	-	-	-	-	-	-	-	41,009	41,009	
fixed rate	41,009	-	-	-	-	-	-	-	-	-	-	-	-	41,009	-	
variable rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Trading instruments at fair value through profit or loss	7,171	1,234	16,157	661	12,146	4,265	21,882	2,436	27,900	9,760	124	1,014	85,380	19,370	104,750	
fixed rate	7,156	1,234	11,967	661	3,775	4,265	21,882	2,436	27,900	9,760	-	-	72,680	18,356	91,036	
variable rate	15	-	4,190	-	8,371	-	-	-	-	-	-	-	12,576	-	12,576	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	124	1,014	124	1,014	1,138	
Non-trading instruments mandatorily at fair value through profit or loss	-	-	-	-	-	-	-	-	-	-	30,057	25,098	30,057	25,098	55,155	
fixed rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
variable rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	30,057	25,098	30,057	25,098	55,155	

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2022 [continued]

ASSETS [continued]	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest- bearing		Total		Total
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	
Securities at fair value through other comprehensive income	150,015	194,093	62,611	57,998	127,352	134,675	15,327	101,052	278,680	577,643	265	39,892	634,250	1,105,353	1,739,603
fixed rate	120,553	194,092	62,610	44,277	127,345	134,675	15,327	100,597	278,680	577,643	-	-	604,515	1,051,284	1,655,799
variable rate	29,462	1	1	13,721	7	-	-	455	-	-	-	-	29,470	14,177	43,647
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	265	39,892	265	39,892	40,157
Securities at amortized cost	197,317	364,928	-	61,623	375,979	216,496	288,026	48,565	2,247,457	1,091,547	-	-	3,108,779	1,783,159	4,891,938
fixed rate	177,967	364,928	-	56,550	375,979	216,496	288,026	48,565	2,247,457	1,090,235	-	-	3,089,429	1,776,774	4,866,203
variable rate	19,350	-	-	5,073	-	-	-	-	-	1,312	-	-	19,350	6,385	25,735
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loans at amortized cost, net of allowance for loan losses	186,499	6,653,388	2,251,999	2,762,858	77,681	1,428,579	38,430	403,633	961,205	1,116,179	129,999	84,008	3,645,813	12,448,645	16,094,458
fixed rate	20,139	1,643,455	1,160,027	324,583	14,300	565,806	11,987	344,884	290,461	1,016,774	-	-	1,496,914	3,895,502	5,392,416
variable rate	166,360	5,009,933	1,091,972	2,438,275	63,381	862,773	26,443	58,749	670,744	99,405	-	-	2,018,900	8,469,135	10,488,035
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	129,999	84,008	129,999	84,008	214,007
Finance lease receivables	70,923	326,963	10,843	147,623	21,539	183,361	30,106	94,727	217,805	182,904	194	11,764	351,410	947,342	1,298,752
fixed rate	5,969	144,070	818	8,234	8,971	36,041	29,796	34,165	207,861	75,332	-	-	253,415	297,842	551,257
variable rate	64,954	182,893	10,025	139,389	12,568	147,320	310	60,562	9,944	107,572	-	-	97,801	637,736	735,537
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	194	11,764	194	11,764	11,958
Loans mandatorily at fair value through profit or loss	26,449	-	10,992	-	70,371	-	231,141	-	908,461	-	-	-	1,247,414	-	1,247,414
fixed rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable rate	26,449	-	10,992	-	70,371	-	231,141	-	908,461	-	-	-	1,247,414	-	1,247,414
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fair value adjustment of derivative financial instruments	1,808,603	3,091,633	906,446	1,424,864	485,449	545,738	36,682	35,986	183,664	98,654	28,204	730,436	3,449,048	5,927,311	9,376,359
fixed rate	1,687,569	3,023,972	428,080	879,090	271,921	518,869	36,682	35,986	183,664	98,654	-	-	2,607,916	4,556,571	7,164,487
variable rate	121,034	67,661	478,366	545,774	213,528	26,869	-	-	-	-	-	-	812,928	640,304	1,453,232
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	28,204	730,436	28,204	730,436	758,640
Other financial assets	2,217	25,400	2,703	1,316	-	712	-	-	-	143	93,577	136,913	98,497	164,484	262,981
fixed rate	2,217	14,552	2,504	1,018	-	712	-	-	-	123	-	-	4,721	16,405	21,126
variable rate	-	10,848	199	298	-	-	-	-	-	20	-	-	199	11,166	11,365
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	93,577	136,913	93,577	136,913	230,490

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2022 [continued]

LIABILITIES	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest- bearing		Total		Total
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	
Amounts due to banks, the Hungarian Government, deposits from the National Bank of Hungary and other banks	17,358	187,834	27,239	55,363	109,518	80,566	71,613	5,187	751,109	42,918	81,757	32,696	1,058,594	404,564	1,463,158
fixed rate	12,847	62,086	27,239	5,079	109,518	70,661	71,613	5,182	751,109	42,913	-	-	972,326	185,921	1,158,247
variable rate	4,511	125,748	-	50,284	-	9,905	-	5	-	5	-	-	4,511	185,947	190,458
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	81,757	32,696	81,757	32,696	114,453
Repo liabilities	29,145	188,121	98	5	-	-	-	-	-	-	-	-	29,243	188,126	217,369
fixed rate	29,143	5	98	5	-	-	-	-	-	-	-	-	29,241	10	29,251
variable rate	2	188,116	-	-	-	-	-	-	-	-	-	-	2	188,116	188,118
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial liabilities designated at fair value through profit or loss	16,575	-	-	-	-	-	-	-	-	-	37,616	-	54,191	-	54,191
fixed rate	26	-	-	-	-	-	-	-	-	-	-	-	26	-	26
variable rate	16,549	-	-	-	-	-	-	-	-	-	-	-	16,549	-	16,549
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	37,616	-	37,616	-	37,616
Deposits from customers	7,466,580	13,217,695	292,239	1,746,958	153,147	869,141	37,952	154,101	220,222	189,032	14,525	827,213	8,184,665	17,004,140	25,188,805
fixed rate	1,097,639	6,265,835	292,239	1,746,958	153,147	869,141	37,952	151,009	220,222	189,032	-	-	1,801,199	9,221,975	11,023,174
variable rate	6,368,941	6,951,860	-	-	-	-	-	3,092	-	-	-	-	6,368,941	6,954,952	13,323,893
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	14,525	827,213	14,525	827,213	841,738
Liabilities from issued securities	1,878	-	1,215	18	194,515	41	79,497	-	145,295	448,205	-	18	422,400	448,282	870,682
fixed rate	211	-	-	18	44,390	41	79,497	-	145,295	448,205	-	-	269,393	448,264	717,657
variable rate	1,667	-	1,215	-	150,125	-	-	-	-	-	-	-	153,007	-	153,007
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	18	-	18	18

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2022 [continued]

LIABILITIES [continued]	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest-bearing		Total		Total
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	
Fair value adjustment of derivative financial instruments	2,868,787	2,091,600	478,930	1,824,450	577,862	556,209	22,780	36,714	118,071	113,968	246,135	529,820	4,312,565	5,152,761	9,465,326
fixed rate	2,783,756	1,945,423	331,253	972,676	218,514	531,863	22,758	36,714	118,071	113,968	-	-	3,474,352	3,600,644	7,074,996
variable rate	85,031	146,177	147,677	851,774	359,348	24,346	22	-	-	-	-	-	592,078	1,022,297	1,614,375
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	246,135	529,820	246,135	529,820	775,955
Leasing liabilities	2,005	9,146	2	1,329	-	5,384	4	7,647	1,277	31,084	-	5,900	3,288	60,490	63,778
fixed rate	1,905	8,686	1	408	-	2,197	4	2,541	1,277	17,244	-	-	3,187	31,076	34,263
variable rate	100	460	1	921	-	3,187	-	5,106	-	13,840	-	-	101	23,514	23,615
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	5,900	-	5,900	5,900
Other financial liabilities	93,677	36,041	2,247	1,735	11	6,706	-	2,494	-	2,408	288,478	211,855	384,413	261,239	645,652
fixed rate	93,668	35,843	1,748	1,735	7	3,283	-	2,401	-	2,319	-	-	95,423	45,581	141,004
variable rate	9	198	499	-	4	3,423	-	93	-	89	-	-	512	3,803	4,315
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	288,478	211,855	288,478	211,855	500,333
Subordinated bonds and loans	-	-	-	93,110	-	201,076	-	-	-	7,798	-	-	-	301,984	301,984
fixed rate	-	-	-	-	-	-	-	-	-	7,798	-	-	-	7,798	7,798
variable rate	-	-	-	93,110	-	201,076	-	-	-	-	-	-	-	294,186	294,186
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net position	(6,681,274)	(3,560,594)	2,506,895	785,846	236,208	825,677	449,748	500,607	3,589,198	2,277,983	(154,136)	1,637,790	(53,361)	2,467,309	2,413,948

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2021

ASSETS	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest- bearing		Total		Total	
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency		
Cash, amounts due from banks and balances with the																
National Banks	37,712	821,501	-	28,183	-	12,391	-	6,697	-	12,423	133,248	1,503,880	170,960	2,385,075	2,556,035	
fixed rate	36,376	661,318	-	28,183	-	12,391	-	6,697	-	12,423	-	-	36,376	721,012	757,388	
variable rate	1,336	160,183	-	-	-	-	-	-	-	-	-	-	1,336	160,183	161,519	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	133,248	1,503,880	133,248	1,503,880	1,637,128	
Placements with other banks	435,888	360,795	67,304	109,822	30,509	50,770	49,632	27,234	405,437	17,202	24,415	5,853	1,013,185	571,676	1,584,861	
fixed rate	271,734	134,382	449	96,918	1,007	50,238	49,632	27,234	254,065	17,202	-	-	576,887	325,974	902,861	
variable rate	164,154	226,413	66,855	12,904	29,502	532	-	-	151,372	-	-	-	411,883	239,849	651,732	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	24,415	5,853	24,415	5,853	30,268	
Repo receivables	33,638	21,535	-	5,828	-	-	-	-	-	-	-	51	33,638	27,414	61,052	
fixed rate	33,638	21,535	-	5,828	-	-	-	-	-	-	-	-	33,638	27,363	61,001	
variable rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	51	-	51	51	
Trading instruments at fair value through profit or loss	1,237	7,034	664	26,796	2,506	16,960	360	6,634	25,036	13,415	1,770	1,098	31,573	71,937	103,510	
fixed rate	32	7,034	487	26,796	2,233	16,960	360	6,634	25,036	13,415	-	-	28,148	70,839	98,987	
variable rate	1,205	-	177	-	273	-	-	-	-	-	-	-	1,655	-	1,655	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	1,770	1,098	1,770	1,098	2,868	
Non-trading instruments mandatorily at fair value through profit or loss	-	-	-	-	-	-	-	-	-	-	28,074	25,329	28,074	25,329	53,403	
fixed rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
variable rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	28,074	25,329	28,074	25,329	53,403	

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2021 [continued]

ASSETS [continued]	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest- bearing		Total		Total
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	
Securities at fair value through other comprehensive income	205,473	291,988	22,420	92,258	97,202	202,157	40,289	177,681	362,610	697,456	(353)	35,329	727,641	1,496,869	2,224,510
fixed rate	157,136	291,987	6,897	92,258	88,628	202,157	40,289	177,681	395,460	684,739	-	-	688,410	1,448,822	2,137,232
variable rate	48,337	1	15,523	-	8,574	-	-	-	(32,850)	12,717	-	-	39,584	12,718	52,302
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	(353)	35,329	(353)	35,329	34,976
Securities at amortized cost	117	124,634	-	24,325	365,576	28,559	264,200	56,712	2,305,098	722,114	-	-	2,934,991	956,344	3,891,335
fixed rate	-	117,026	-	19,513	365,576	28,559	264,200	56,712	2,305,098	722,114	-	-	2,934,874	943,924	3,878,798
variable rate	117	7,608	-	4,812	-	-	-	-	-	-	-	-	117	12,420	12,537
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loans at amortized cost, net of allowance for loan losses	800,665	5,419,263	534,858	1,525,057	60,259	1,431,981	264,434	410,199	1,636,001	1,180,170	121,187	109,109	3,417,404	10,075,779	13,493,183
fixed rate	51,410	1,029,075	2,075	260,668	16,048	683,927	187,209	374,260	942,294	835,327	-	-	1,199,036	3,183,257	4,382,293
variable rate	749,255	4,390,188	532,783	1,264,389	44,211	748,054	77,225	35,939	693,707	344,843	-	-	2,097,181	6,783,413	8,880,594
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	121,187	109,109	121,187	109,109	230,296
Finance lease receivables	117,384	304,444	16,580	131,417	5,736	161,672	20,288	88,194	197,583	137,387	-	1,943	357,571	825,057	1,182,628
fixed rate	6,555	118,251	440	8,408	5,736	37,140	20,288	40,715	188,967	64,125	-	-	221,986	268,639	490,625
variable rate	110,829	186,193	16,140	123,009	-	124,532	-	47,479	8,616	73,262	-	-	135,585	554,475	690,060
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	1,943	-	1,943	1,943
Loans mandatorily at fair value through profit or loss	27,185	281	11,172	-	73,893	-	29,473	-	926,107	-	-	-	1,067,830	281	1,068,111
fixed rate	2	-	-	-	-	-	-	-	-	-	-	-	2	-	2
variable rate	27,183	281	11,172	-	73,893	-	29,473	-	926,107	-	-	-	1,067,828	281	1,068,109
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fair value adjustment of derivative financial instruments	1,516,897	1,249,024	395,951	937,234	680,161	863,886	10,760	57,580	221,053	17,693	181,110	672,531	3,005,932	3,797,948	6,803,880
fixed rate	1,409,585	1,125,415	188,029	551,410	574,143	862,177	10,760	57,521	221,053	17,681	-	-	2,403,570	2,614,204	5,017,774
variable rate	107,312	123,609	207,922	385,824	106,018	1,709	-	59	-	12	-	-	421,252	511,213	932,465
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	181,110	672,531	181,110	672,531	853,641
Other financial assets	3,395	13,864	1,261	19	-	212	-	-	-	128	49,086	67,951	53,742	82,174	135,916
fixed rate	3,393	4,860	1,155	13	-	12	-	-	-	103	-	-	4,548	4,988	9,536
variable rate	2	9,004	106	6	-	200	-	-	-	25	-	-	108	9,235	9,343
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	49,086	67,951	49,086	67,951	117,037

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2021 [continued]

LIABILITIES	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest- bearing		Total		Total
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	
Amounts due to banks, the Hungarian Government, deposits from the National Bank of Hungary and other banks	103,123	200,292	41,404	56,912	26,730	79,200	355,132	26,401	616,005	12,724	35,951	13,474	1,178,345	389,003	1,567,348
fixed rate	58,913	103,240	12,367	23,208	26,730	52,310	355,132	26,356	615,961	12,724	-	-	1,069,103	217,838	1,286,941
variable rate	44,210	97,052	29,037	33,704	-	26,890	-	45	44	-	-	-	73,291	157,691	230,982
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	35,951	13,474	35,951	13,474	49,425
Repo liabilities	49,726	29,321	-	-	-	-	-	-	-	-	-	-	49,726	29,321	79,047
fixed rate	49,726	29,321	-	-	-	-	-	-	-	-	-	-	49,726	29,321	79,047
variable rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial liabilities designated at fair value through profit or loss	20,133	-	-	-	-	-	-	-	-	-	21,051	-	41,184	-	41,184
fixed rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable rate	20,133	-	-	-	-	-	-	-	-	-	-	-	20,133	-	20,133
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	21,051	-	21,051	-	21,051
Deposits from customers	7,533,566	10,675,265	198,955	456,849	94,140	735,911	31,975	75,104	248,209	120,403	16,356	881,911	8,123,201	12,945,443	21,068,644
fixed rate	463,512	4,039,568	198,955	456,849	92,653	735,911	31,975	74,680	248,209	120,403	-	-	1,035,304	5,427,411	6,462,715
variable rate	7,070,054	6,635,697	-	-	1,487	-	-	424	-	-	-	-	7,071,541	6,636,121	13,707,662
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	16,356	881,911	16,356	881,911	898,267
Liabilities from issued securities	864	-	8,514	-	170,732	-	-	51	256,151	-	-	13	436,261	64	436,325
fixed rate	211	-	-	-	-	-	-	51	256,151	-	-	-	256,362	51	256,413
variable rate	653	-	8,514	-	170,732	-	-	-	-	-	-	-	179,899	-	179,899
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	13	-	13	13

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.4. Interest rate risk management [continued]

As at 31 December 2021 [continued]

LIABILITIES [continued]	Within 1 month		Over 1 month and Within 3 months		Over 3 months and Within 12 months		Over 1 year and Within 2 years		Over 2 years		Non-interest-bearing		Total		Total
	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	HUF	Currency	
Fair value adjustment of derivative financial instruments	941,607	1,905,033	220,057	1,084,185	709,948	870,647	12,943	54,920	96,381	77,044	453,672	388,146	2,434,608	4,379,975	6,814,583
fixed rate	721,374	1,714,718	151,795	579,964	526,007	868,848	12,398	54,847	96,558	77,044	-	-	1,508,132	3,295,421	4,803,553
variable rate	220,233	190,315	68,262	504,221	183,941	1,799	545	73	(177)	-	-	-	472,804	696,408	1,169,212
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	453,672	388,146	453,672	388,146	841,818
Leasing liabilities	916	7,401	353	1,076	483	5,359	892	4,534	1,011	24,823	-	6,438	3,655	49,631	53,286
fixed rate	830	6,948	72	435	7	1,757	319	2,582	1,011	17,403	-	-	2,239	29,125	31,364
variable rate	86	453	281	641	476	3,602	573	1,952	-	7,420	-	-	1,416	14,068	15,484
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	6,438	-	6,438	6,438
Other financial liabilities	117,189	50,063	2,518	672	-	479	-	133	-	103	173,503	141,111	293,210	192,561	485,771
fixed rate	117,185	50,046	907	564	-	211	-	133	-	67	-	-	118,092	51,021	169,113
variable rate	4	17	1,611	108	-	268	-	-	-	36	-	-	1,615	429	2,044
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	173,503	141,111	173,503	141,111	314,614
Subordinated bonds and loans	-	-	-	85,551	-	186,225	-	-	-	6,514	-	44	-	278,334	278,334
fixed rate	-	-	-	-	-	-	-	-	-	6,514	-	-	-	6,514	6,514
variable rate	-	-	-	85,551	-	186,225	-	-	-	-	-	-	-	271,776	271,776
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	44	-	44	44
Net position	(5,587,533)	(4,253,012)	578,409	1,195,694	313,809	890,767	278,494	669,788	4,861,168	2,556,377	(161,996)	991,937	282,351	2,051,551	2,333,902

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.5. Market risk

The Group takes on exposure to market risks. Market risks arise from open positions in interest rate, currency and equity products, all of which are exposed to general and specific market movements. The Group applies a 'Value-at-Risk' (VaR) methodology to estimate the market risk of positions held and the maximum losses expected, based upon a number of assumptions for various changes in market conditions. The Management Board sets limits on the value of risk that may be accepted, which is monitored on a daily basis. (Analysis of liquidity risk, foreign currency risk and interest rate risk is detailed in Notes 37.2., 37.3. and 37.4., respectively.)

37.5.1. Market Risk sensitivity analysis

The VaR risk measure estimates the potential loss in pre-tax profit over a given holding period for a specified confidence level.

The VaR methodology is a statistically defined, probability-based approach that takes into account market volatilities as well as risk diversification by recognizing offsetting positions and correlations between products and markets. Risks can be measured consistently across all markets and products, and risk measures can be aggregated to arrive at a single risk number. The one-day 99% VaR number used by the Group reflects the 99% probability that the daily loss will not exceed the reported VaR.

VaR methodologies are employed to calculate daily risk numbers include the historical and variance-covariance approach. The diversification effect has not been validated among the various market risk types when capital calculation happens.

In addition to these two methodologies, Monte Carlo simulations are applied to the various portfolios on a monthly basis to determine potential future exposure.

The VaR of the trading portfolio can be summarized as follows (in HUF mn):

Historical VaR (99%, one-day) by risk type	Average VaR	
	2022	2021
Foreign exchange	5,896	1,691
Interest rate	890	212
Equity instruments	42	20
Diversification	=	=
Total VaR exposure	<u>6,829</u>	<u>1,923</u>

The table above shows the VaR figures by asset classes. Since processes driving the value of the major asset classes are not independent (for example the depreciation of HUF against the EUR mostly coincide with the increase of the yields of Hungarian Government Bonds), a diversification impact emerges, so the overall VaR is less than the sum of the VaR of each individual asset class.

While VaR captures the Group's daily exposure to currency and interest rate risk, sensitivity analysis evaluates the impact of a reasonably possible change in interest or foreign currency rates over a year. The longer time frame of sensitivity analysis complements VaR and helps the Group to assess its market risk exposures. Details of sensitivity analysis for foreign currency risk are set out in Note 37.5.2., for interest rate risk in Note 37.5.3., and for equity price sensitivity analysis in Note 37.5.4.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.5. Market risk [continued]****37.5.2. Foreign currency sensitivity analysis**

The Bank changed its methodology of foreign currency sensitivity analysis and has been using a historical VaR calculation since 31 March 2021. The former Monte Carlo simulation represented the Group's sensitivity to the rise and fall in the HUF exchange rate against EUR, over a 3-month period. The sensitivity analysis included only outstanding foreign currency denominated monetary items as strategic open positions related to foreign activities. In line with the Management's intention, the former EUR (310) million strategic open position was fully closed as at 31 March 2021.

Since the closing of the strategic open position, the Group has been using a historical VaR calculation with a 1 day holding period. The analysis includes the same net open foreign exchange position as used under the internal capital adequacy assessment process (ICAAP). The VaR methodology is a statistically defined, probability-based approach that takes into account market volatilities as well as risk diversification by recognizing offsetting positions and correlations between products and markets.

Additionally, the Bank determines the foreign currency risk of assets evaluated through the Other Comprehensive Income, which includes securities valued on fair value through other comprehensive income and the foreign currency translation reserves.

The following table shows the result of the foreign currency sensitivity analysis.

The numbers below indicate the expected daily profit or loss of the portfolio beside the given confidence level.

Probability	Effects to the Consolidated Statement of Profit or Loss		Effects to the Consolidated Statement of Other Comprehensive Income	
	In HUF million		In HUF million	
	2022	2021	2022	2021
1%	(4,746)	(194)	(5,604)	(1,707)
5%	(2,542)	(132)	(2,992)	(1,038)
25%	(843)	(50)	(1,190)	(398)
50%	(15)	(1)	(235)	98
25%	990	53	834	531
5%	2,837	142	2,415	1,215
1%	4,245	221	4,767	1,509

Note:

(1) Historical VaR simulation is based on the empirical distribution of the historical exchange rate movements between 31 December 2021 and 2022.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.5. Market risk [continued]****37.5.3. Interest rate sensitivity analysis**

The sensitivity analyses below have been determined based on the exposure to interest rates for both derivatives and non-derivative instruments at the balance sheet date. The analysis is prepared assuming the amount of assets and liabilities outstanding at the balance sheet date was outstanding for the whole year. The analysis was prepared by assuming only adverse interest rate changes. The main assumptions were as follows:

- Floating rate assets and liabilities were repriced to the modelled benchmark yields at the repricing dates assuming the unchanged margin compared to the last repricing.
- Fixed rate assets and liabilities were repriced at the contractual maturity date.
- As for liabilities with discretionary repricing feature by the Bank were assumed to be repriced with two-weeks delay, assuming no change in the margin compared to the last repricing date.
- Deposits with an interest rate lower than 0.3% even at high market rates were assumed to be unchanged for the whole period.

The sensitivity of interest income to changes in BUBOR was analysed by assuming two interest rate path scenarios:

- (1) BUBOR increases gradually by 100 bps over the next year (probable scenario)
- (2) BUBOR decreases gradually by 50 bps over the next year (alternative scenario)

The net interest income in a one-year period after 1 January 2023 would be decreased by HUF (9,002) million (probable scenario) and increased by HUF 4,306 million (alternative scenario) as a result of these simulation. A similar simulation indicated HUF 1,487 million increase (probable scenario) and HUF (1,025) million (alternative scenario) decrease in the Net interest income in a one-year period after 1 January 2022.

This effect is further enhanced by capital results HUF (350) million (for probable scenario) and HUF 181 million (for alternative scenario) as at 31 December 2022, the comparative results were (HUF (619) million for probable scenario, HUF 322 million for alternative scenario as at 31 December 2021) on the government bond portfolio held for hedging (economic).

Furthermore, the effects of an instant 10bps parallel shift of the HUF, EUR and USD yield-curves on net interest income over a one-year period and on the market value of the hedge government bond at fair value through other comprehensive income portfolio booked against capital was analysed. The results can be summarized as follows (in HUF million):

Description	2022		2021	
	Effects to the net interest income	Effects to capital	Effects to the net interest income	Effects to capital
HUF (0.1%) parallel shift	1,669	36	(105)	64
HUF 0.1% parallel shift	(1,667)	(36)	44	(64)
EUR (0.1%) parallel shift	(3,661)	-	(1,989)	-
USD (0.1%) parallel shift	119	-	(257)	-
USD 0.1% parallel shift	(290)	-	85	-

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.5. Market risk [continued]

37.5.4. Equity price sensitivity analysis

The following table shows the effect of the equity price sensitivity. The Group uses VaR calculation with 1 day holding period and a 99% confidence level. The VaR methodology is a statistically defined, probability-based approach that takes into account market volatilities as well as risk diversification by recognizing offsetting positions and correlations between products and markets. The daily loss will not exceed the reported VaR number with 99% of probability.

The stress test assumes the largest price movement of the last year and calculates with it as the adverse direction. These scenarios show the loss of the portfolio when all prices change with the maximum amount of the last year.

Description	2022	2021
VaR (99%, one day, HUF million)	15	12
Stress test (HUF million)	(26)	(21)

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

37.6. Capital management

Capital management

The primary objective of the capital management of the Group is to ensure the prudent operation, the entire compliance with the prescriptions of the regulator for a persistent business operation and maximising the shareholder value, accompanied by an optimal financing structure.

The capital management of the Group members includes the management and evaluation of the shareholders' equity and other types of funds available for hedging risks, to be recorded in the equity and all material risks to be covered by the capital.

The basis of the capital management of the Group members in the short run is the continuous monitoring of their capital position, in the long run the strategic and the business planning, which includes the monitoring and forecast of the capital position.

The Group members maintain the capital adequacy required by the regulatory bodies and the planned risk taking mainly by means of ensuring and developing their profitability. In the event that the planned risk level of a Group member exceeded its Core and the previously raised Supplementary capital, it ensures the prudent operation by occasional measures. A further tool in the capital management of the Bank is the dividend policy, and the transactions performed with the treasury shares.

Capital adequacy

The Capital Requirements Directive package (CRDIV/CRR) transposes the new global standards on banking regulation (known as the Basel III agreement) into the EU legal framework. The new rules are applied from 1 January 2014. They set stronger prudential requirements for institutions, requiring them to keep sufficient capital reserves and liquidity. This new framework makes institutions in the EU more solid and strengthens their capacity to adequately manage the risks linked to their activities and absorb any losses they may incur in doing business.

The capital adequacy of the Group is supervised based on the financial statements data prepared in accordance with IFRS applying the current directives, rulings and indicators from 1 January 2014.

The Group uses the standard method for determining the regulatory capital requirements of the credit risk and market risk, and parallel to that, the base indicator method, and the advanced method ("AMA") in case of the operational risk.

For international comparison purposes, the Group calculated the Regulatory capital based on IFRS data as adopted by the EU, and the consolidated Capital adequacy ratio based on this in accordance with the regulations of Basel III. The Capital adequacy ratio of the Group (IFRS) was 17.5%, the Regulatory capital was HUF 3,565,933 million and the Total regulatory capital requirement was HUF 1,632,426 million as at 31 December 2022. The same ratios calculated as at 31 December 2021 were the following: 19.1%, HUF 3,191,765 million and HUF 1,335,305 million.

NOTE 37: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]**37.6. Capital management [continued]****Capital adequacy [continued]**

Calculation on IFRS basis (in HUF million)	2022	2021
Core capital (Tier 1) = Common Equity Tier 1 (CET 1)	3,277,984	2,926,882
Issued capital	28,000	28,000
Reserves ¹	3,154,801	2,896,118
Fair value adjustments	(135,081)	(15,715)
Other capital components	286,963	104,326
Non-controlling interests	2,485	1,996
Treasury shares	(119,138)	(121,941)
Goodwill and other intangible assets	(170,344)	(183,440)
Other adjustments	230,298	217,538
Additional Tier 1 (AT1)	-	-
Supplementary capital (Tier 2)	287,949	264,883
Subordinated bonds and loans	287,362	264,397
Other issued capital components	-	-
Components recognized in T2 capital issued by subsidiaries	587	486
Regulatory capital	<u>3,565,933</u>	<u>3,191,765</u>
Credit risk capital requirement	1,478,168	1,199,423
Market risk capital requirement	29,322	13,440
Operational risk capital requirement	124,936	122,442
Total requirement regulatory capital	<u>1,632,426</u>	<u>1,335,305</u>
Surplus capital	<u>1,933,507</u>	<u>1,856,460</u>
CET 1 ratio	16.10%	17.50%
Tier 1 ratio	16.10%	17.50%
Capital adequacy ratio	<u>17.50%</u>	<u>19.10%</u>

¹ The dividend amount planned to pay out / paid out is deducted from reserves.

Basel III

The components of the Common Equity Tier 1 capital (CET 1) are the following: Issued capital, Reserves (Retained earnings, Other reserves, Changes in the equity of subsidiaries, Net Profit for the year, Changes due to consolidation) Fair value adjustments, Other capital components, (Revaluation reserves, Share based payments, Cash-flow hedges, Net investment hedge in foreign operations), Non-controlling interest, Treasury shares, Goodwill and other Intangible assets, other adjustments (due to prudential filters, due to deferred tax receivables, due to temporary regulations).

Supplementary capital (Tier 2): Subordinated loan capital, Supplementary loan capital, Other issued capital components, Components recognized in T2 capital issued by subsidiaries.

For regulatory compliance the capital adequacy ratios according to regulatory scope of consolidation are relevant. The Pillar3 Disclosure of OTP Group contains the capital adequacy ratios calculated under regulatory scope of consolidation.

The Group has entirely complied with the regulatory capital requirements in the year ended as at 31 December 2022 as well as 2021.

NOTE 38: TRANSFER OF FINANCIAL INSTRUMENTS (in HUF mn)**Financial assets transferred but not derecognized**

	Transferred assets Carrying amount 2022	Associated liabilities Carrying amount 2022	Transferred assets Carrying amount 2021	Associated liabilities Carrying amount 2021
Financial assets at fair value through other comprehensive income				
Debt securities	=	=	<u>52,371</u>	<u>45,484</u>
Total	=	=	<u>52,371</u>	<u>45,484</u>
Financial assets at amortized cost				
Debt securities	332,082	282,227	92,765	90,986
Loans and advances	<u>3,534</u>	<u>1,647</u>	<u>833</u>	<u>1,056</u>
Total	<u>335,616</u>	<u>283,874</u>	<u>93,598</u>	<u>92,042</u>
Total	<u>335,616</u>	<u>283,874</u>	<u>145,969</u>	<u>137,526</u>

As at 31 December 2022 and 2021, the Group had an obligation from repurchase agreements (repo liability) of HUF 217,264 million and HUF 79,045 million respectively. Securities sold temporarily under repurchase agreements will continue to be recognized in the Consolidated Statement of Financial Position of the Group in the appropriate securities category. The related liability is measured at amortized cost in the Consolidated Statement of Financial Position as “Amounts due to the National Governments, to the National Banks and other banks and repo liabilities”.

Financial assets transferred, derecognized with continuing involvement

Financial assets which would have been derecognized but would be represented the continuing involvement are not recognized in the Consolidated Statement of Financial Position as at 31 December 2022 or as at 31 December 2021.

NOTE 39: OFF-BALANCE SHEET ITEMS AND DERIVATIVE FINANCIAL INSTRUMENTS (in HUF mn)

In the normal course of business, the Group becomes a party to various financial transactions that are not reflected on the Consolidated statement of financial position and are referred to as off-balance sheet financial instruments. The following represent notional amounts of these off-balance sheet financial instruments, unless stated otherwise.

Contingent liabilities	2022	2021
Commitments to extend credit	4,230,289	4,065,002
Guarantees arising from banking activities	1,413,017	1,293,841
Factoring loan commitment	419,620	464,341
Confirmed letters of credit	53,557	65,077
Other	<u>144,893</u>	<u>27,997</u>
Contingent liabilities and commitments total in accordance with IFRS 9	<u>6,261,376</u>	<u>5,916,258</u>
Legal disputes (disputed value)	86,137	75,453
Underwriting guarantees	1,397	-
Other	<u>5,393</u>	<u>5,410</u>
Contingent liabilities and commitments total in accordance with IAS 37	<u>92,927</u>	<u>80,863</u>
Total	<u>6,354,303</u>	<u>5,997,121</u>

Legal disputes

At the balance sheet date, the Group was involved in various claims and legal proceedings of a nature considered normal to its business. The amount of these claims and legal proceedings corresponds to the amount of claims and legal proceedings in previous years.

The Group believes that the various asserted claims and litigations in which it is involved will not materially affect its financial position, future operating results or cash-flows, although no assurance can be given with respect to the ultimate outcome of any such claim or litigation. Provisions due to legal disputes were HUF 37,043 million as at 31 December 2022 and HUF 35,354 million as at 31 December 2021, respectively. (See Note 24.)

Commitments to extend credit, guarantees and letters of credit

The primary purpose of these instruments is to ensure that funds are available to a customer as required. Guarantees and standby letters of credit, which represent irrevocable assurances that the Group will make payments in the event that a customer cannot meet its obligations to third parties, carry the same credit risk as loans.

Documentary and commercial letters of credit, which are written undertakings by the Group on behalf of a customer authorising a third party to draw drafts on the Group up to a stipulated amount under specific terms and conditions, are collateralised by the underlying shipments of goods to which they relate and therefore carry less risk than a direct borrowing.

Commitments to extend credit represent unused portions of authorisations to extend credit in the form of loans, guarantees or letters of credit. With respect to credit risk on commitments to extend credit, the Group is potentially exposed to loss in an amount equal to the total unused commitments. However, the likely amount of loss is less than the total unused commitments since most commitments to extend credit are contingent upon customers maintaining specific credit standards.

Guarantees, irrevocable letters of credit and undrawn loan commitments are subject to similar credit risk monitoring and credit policies as utilised in the extension of loans. The Management of the Group believes the market risk associated with guarantees, irrevocable letters of credit and undrawn loan commitments are minimal.

NOTE 39: OFF-BALANCE SHEET ITEMS AND DERIVATIVE FINANCIAL INSTRUMENTS (in HUF mn) [continued]

Guarantees, payment undertakings arising from banking activities

Payment undertaking is a promise by the Group to assume responsibility for the debt obligation of a borrower if that borrower defaults until a determined amount, until a determined date, in case of fulfilling conditions, without checking the underlying transactions. The guarantee's liability is joint and primary with the principal, in case of payment undertaking, while the Group assumes the obligation derived from guarantee independently by the conditions established by the Group. A guarantee is most typically required when the ability of the primary obligor to perform its obligations under a contract is in question, or when there is some public or private interest which requires protection from the consequences of the principal's default or delinquency.

A contract of guarantee is subject to the statute of frauds (or its equivalent local laws) which has maturity and is only enforceable if recorded in writing and signed by the surety and the principal. This means that if the beneficiary has not exercised his rights against the surety or guarantor by the deadline indicated, he automatically forfeits all his claims against the guarantor or surety.

In the case of a simple surety, the beneficiary is obliged to seek recovery of the debt from the debtor, because as long as the debt is recoverable from the debtor, the guarantor can refuse to pay, whereas in the case of a cash surety, the beneficiary can also go to the guarantor immediately, there being no objection to enforcement.

Derivatives

The Group maintains strict control limits on net open derivative positions, that is the difference between purchase and sale contracts, regarding both the amount and the term. At any time the amount subject to credit risk is limited to the current fair value of instruments that are favourable to the Group (i.e. assets), which in relation to derivatives is only a small fraction of the contract or notional values used to express the volume of instruments outstanding. This credit risk exposure is managed as part of the overall lending limits with customers, together with potential exposures from market movements. Collateral or other security is not usually obtained for credit risk exposures on these instruments, except for trading with clients, where the Group in most of the cases requires margin deposits.

NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn)

The previously approved option program required a modification due to the introduction of the Bank Group Policy on Payments accepted in resolution of Annual General Meeting regarding to the amendment of CRD III. Directives and Act on Credit Institutions and Financial Enterprises.

Key management personnel affected by the Bank Group Policy receive compensation based on performance assessment generally in the form of cash bonus and equity shares in a ratio of 50-50%. Assignment is based on OTP shares, furthermore performance-based payments are deferred in accordance with the rules of Credit Institutions Act.

The Bank ensures the share-based payment part for the management personnel of the Group members.

During implementation of the Remuneration Policy of the Group appeared that in case of certain foreign subsidiaries it is not possible to ensure the originally determined share-based payment because of legal reasons – incompatible with relevant EU-directives –, therefore a decision was made to cancel the share-based payment in affected countries, and virtual share-based payment – cash payment fixed to share price - was made from 2017. In case of foreign subsidiaries virtual share-based payment was made uniformly from 2021 (in the case of payments related to 2021).

The quantity of usable shares for individuals calculated for settlement of share-based payment shall be determined as the ratio of the amount of share-based payment and share price determined by Supervisory Board (until the end of 2014 by Board of Directors).

The value of the share-based payment at the performance assessment is determined within 10 days by Supervisory Board based on the average of the three previous trade day's middle rate of OTP Bank's equity shares fixed on the Budapest Stock Exchange.

At the same time the conditions of discounted share-based payment are determined, and share-based payment shall contain maximum HUF 6,000 discount at the assessment date, and earnings for the shares at the payment date is maximum HUF 12,000. Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees or for the termination of employment. IAS 19 Employee Benefits shall be applied in accounting for all employee benefits, except those to which IFRS 2 Share-based Payment applies.

The parameters for the share-based payment relating to ongoing years 2017-2019 by the Supervisory Board for periods of each year as follows:

Year	Share purchasing at a discounted price		Price of remuneration exchanged to share	Share purchasing at a discounted price		Price of remuneration exchanged to share	Share purchasing at a discounted price		Price of remuneration exchanged to share
	Exercise price	Maximum earnings		Exercise price	Maximum earnings		Exercise price	Maximum earnings	
	for the year 2017			HUF per share for the year 2018			for the year 2019		
2018	8,064	3,000	10,064	-	-	-	-	-	-
2019	8,064	3,500	10,064	10,413	4,000	12,413	-	-	-
2020	8,064	4,000	10,064	10,413	4,000	12,413	9,553	4,000	11,553
2021	8,064	4,000	10,064	10,413	4,000	12,413	9,553	4,000	11,553
2022	8,064	4,000	10,064	10,913	4,000	12,413	9,553	4,000	11,553
2023	-	-	-	10,913	4,000	12,413	9,553	4,000	11,553
2024	-	-	-	10,913	4,000	12,413	9,553	4,000	11,553
2025	-	-	-	10,913	4,000	12,413	9,553	4,000	11,553
2026	-	-	-	-	-	-	9,553	4,000	11,553

NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn) [continued]

The parameters for the share-based payment relating to ongoing years 2020-2021 by the Supervisory Board for periods of each year as follows:

Year	Share purchasing at a discounted price		Price of remuneration exchanged to share	Share purchasing at a discounted price		Price of remuneration exchanged to share
	Exercise price	Maximum earnings		Exercise price	Maximum earnings	
HUF per share						
	for the year 2020			for the year 2021		
2021	12,644	9,000	16,644	-	-	-
2022	12,644	8,000	16,644	5,912	6,000	8,912
2023	13,644	8,000	16,644	6,912	7,000	8,912
2024	13,644	8,000	16,644	6,912	8,000	8,912
2025	13,644	8,000	16,644	6,912	9,000	8,912
2026	13,644	8,000	16,644	6,912	10,000	8,912
2027	13,644	8,000	16,644	6,912	10,000	8,912
2028 ¹	-	-	-	6,912	10,000	8,912

¹Parameters of benefits for year after 2021 due in 2028 only is applicable to foreign companies and for virtual benefits.

Relevant factors considered during measurement of fair value related to share-based payment as follows:

Year	Reference price	Assumed volatility	Risk-free interest rate (HUF)						
			1-year	2-year	3-year	4-year	5-year	6-year	7-year
2017	9,200	21.30%	0.10%	0.50%	0.70%	1.00%	1.30%	1.30%	1.30%
2018	10,064	26.00%	0.20%	0.60%	1.00%	1.30%	1.60%	1.90%	2.10%
2019	12,413	19.20%	0.20%	0.70%	0.90%	1.10%	1.30%	1.40%	1.60%
2020	11,553	33.60%	0.60%	0.40%	0.50%	0.60%	0.80%	0.90%	1.00%
2021	16,644	28.60%	1.00%	1.60%	1.80%	1.90%	2.00%	2.10%	2.10%
2022	8,912	42.60%	7.10%	7.90%	7.60%	7.30%	7.10%	7.00%	6.90%

Year	Expected dividends (HUF/Share)							Pricing model
	1-year	2-year	3-year	4-year	5-year	6-year	7-year	
2017	219	219	252	290	334	384	442	Binomial
2018	219	219	219	219	219	219	219	Binomial
2019	252	290	333	383	440	507	583	Binomial
2020	219	252	290	333	383	440	507	Binomial
2021	371	321	357	393	432	475	523	Binomial
2022	452	497	547	601	661	728	800	Binomial

NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn) [continued]

Based on parameters accepted by Supervisory Board relating to the year **2017** effective pieces are as follows as at 31 December 2022:

	Approved pieces of shares	Exercised until 31 December 2022	Weighted average share price at the date of exercise (in HUF)	Expired pieces	Exercisable as at 31 December 2022
Share purchasing period started in 2018	108,243	108,243	11,005	-	-
Remuneration exchanged to share provided in 2018	11,926	11,926	10,098	-	-
Share purchasing period started in 2019	212,282	212,282	12,096	-	-
Remuneration exchanged to share provided in 2019	26,538	26,538	11,813	-	-
Share purchasing period started in 2020	101,571	101,565	12,084	6	-
Remuneration exchanged to share provided in 2020	11,584	11,584	11,897	-	-
Share purchasing period started in 2021	109,460	109,460	16,288	-	-
Remuneration exchanged to share provided in 2021	11,531	11,531	16,477	-	-
Share purchasing period started in 2022	42,820	-	-	-	42,820
Remuneration exchanged to share provided in 2022	2,950	2,950	8,529	-	-

Based on parameters accepted by Supervisory Board relating to the year **2018** effective pieces are as follows as at 31 December 2022:

	Approved pieces of shares	Exercised until 31 December 2022	Weighted average share price at the date of exercise (in HUF)	Expired pieces	Exercisable as at 31 December 2022
Share purchasing period started in 2019	82,854	82,854	13,843	-	-
Remuneration exchanged to share provided in 2019	17,017	17,017	11,829	-	-
Share purchasing period started in 2020	150,230	150,230	14,294	-	-
Remuneration exchanged to share provided in 2020	33,024	33,024	11,897	-	-
Share purchasing period started in 2021	73,799	73,799	16,314	-	-
Remuneration exchanged to share provided in 2021	14,618	14,618	16,468	-	-
Share purchasing period started in 2022	86,456	-	-	-	86,456
Remuneration exchanged to share provided in 2022	13,858	13,858	8,529	-	-
Share purchasing period starting in 2023	-	-	-	-	45,155
Remuneration exchanged to share applying in 2023	-	-	-	-	4,114
Remuneration exchanged to share applying in 2024	-	-	-	-	864
Remuneration exchanged to share applying in 2025	-	-	-	-	432

NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn) [continued]

Based on parameters accepted by Supervisory Board relating to the year **2019** effective pieces are as follows as at 31 December 2022:

	Approved pieces of shares	Exercised until 31 December 2022	Weighted average share price at the date of exercise (in HUF)	Expired pieces	Exercisable as at 31 December 2022
Share purchasing period started in 2020	91,403	91,403	12,218	-	-
Remuneration exchanged to share provided in 2020	22,806	22,806	11,897	-	-
Share purchasing period started in 2021	201,273	201,273	16,298	-	-
Remuneration exchanged to share provided in 2021	30,834	30,834	17,618	-	-
Share purchasing period started in 2022	107,760	-	-	1,335	106,425
Remuneration exchanged to share provided in 2022	10,564	10,564	8,529	-	-
Share purchasing period starting in 2023	-	-	-	-	125,771
Remuneration exchanged to share applying in 2023	-	-	-	-	18,025
Share purchasing period starting in 2024	-	-	-	-	44,421
Remuneration exchanged to share applying in 2024	-	-	-	-	6,279
Remuneration exchanged to share applying in 2025	-	-	-	-	1,000
Remuneration exchanged to share applying in 2026	-	-	-	-	500

Based on parameters accepted by Supervisory Board relating to the year **2020** effective pieces are as follows as at 31 December 2022:

	Approved pieces of shares	Exercised until 31 December 2022	Weighted average share price at the date of exercise (in HUF)	Expired pieces	Exercisable as at 31 December 2022
Share purchasing period started in 2021	41,098	14,142	17,997	26,956	-
Remuneration exchanged to share provided in 2021	17,881	17,881	17,498	-	-
Share purchasing period started in 2022	83,688	-	-	1,288	82,400
Remuneration exchanged to share provided in 2022	15,232	14,743	8,529	-	489
Share purchasing period starting in 2023	-	-	-	-	47,826
Remuneration exchanged to share applying in 2023	-	-	-	-	9,292
Share purchasing period starting in 2024	-	-	-	-	51,002
Remuneration exchanged to share applying in 2024	-	-	-	-	9,518
Share purchasing period starting in 2025	-	-	-	-	13,080
Remuneration exchanged to share applying in 2025	-	-	-	-	3,443
Remuneration exchanged to share applying in 2026	-	-	-	-	680
Remuneration exchanged to share applying in 2027	-	-	-	-	680

NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn) [continued]

Based on parameters accepted by Supervisory Board relating to the year 2021 effective pieces are as follows as at 31 December 2022:

	Approved pieces of shares	Exercised until 31 December 2022	Weighted average share price at the date of exercise (in HUF)	Expired pieces	Exercisable as at 31 December 2022
Share purchasing period started in 2022	60,018	59,776	10,122	242	-
Remuneration exchanged to share provided in 2022	11,028	10,708	8,537	-	320
Share purchasing period starting in 2023	-	-	-	-	117,276
Remuneration exchanged to share applying in 2023	-	-	-	-	10,824
Share purchasing period starting in 2024	-	-	-	-	50,829
Remuneration exchanged to share applying in 2024	-	-	-	-	4,942
Share purchasing period starting in 2025	-	-	-	-	54,324
Remuneration exchanged to share applying in 2025	-	-	-	-	4,942
Share purchasing period starting in 2026	-	-	-	-	58,222
Remuneration exchanged to share applying in 2026	-	-	-	-	4,942
Share purchasing period starting in 2027	-	-	-	-	25,305
Remuneration exchanged to share applying in 2027	-	-	-	-	631

Effective pieces relating to the periods starting in 2023-2027 settled during valuation of performance of year 2018-2021, can be modified based on risk assessment and personal changes.

In connection with the share-based compensation for Board of Directors and connecting compensation, shares given as a part of payments detailed above and for the year 2022 based on performance assessment accounted as equity-settled share-based transactions, HUF 2,948 million and HUF 3,589 million was recognized as expense for the year ended 31 December 2022 and 2021 respectively.

Defined benefit plan

Defined benefit plan is post-employment benefit plans other than defined contribution plan. The Group's net obligation is calculated by estimating the amount of employee's future benefit based on their services for the current and prior periods. The future value of benefit is being discounted to present value.

The Group has small number of plans and mainly in Bulgaria, Serbia, Montenegro, Croatia and Slovenia. These plans are providing retirement benefits upon pension age as lump-sum payment based either on fixed amounts or certain months of salary.

These plans are unfunded consequently there are no significant plan assets associated with these plans.

NOTE 40: SHARE-BASED PAYMENTS AND EMPLOYEE BENEFITS (in HUF mn) [continued]**Defined benefit plan [continued]**

The movements of defined benefit obligation can be summarized as follows:

	2022	2021
Balance as at 1 January	5,264	5,022
Current service cost	432	457
Interest cost	105	61
Actuarial gains from changes in demographic assumptions	(110)	(6)
Actuarial gains from changes in financial assumptions	(1,179)	(122)
Benefits paid	(271)	(225)
Past service cost	47	(164)
Other decreases (-) / increases (+)	(19)	252
Revaluation difference	<u>459</u>	<u>(11)</u>
Closing balance	<u>4,728</u>	<u>5,264</u>
Amounts recognized in profit and loss	2022	2021
Current service cost	432	457
Net interest expense	105	61
Past service cost	47	(164)
Actuarial losses	(288)	(78)
Other cost	<u>(129)</u>	<u>44</u>
Total	<u>167</u>	<u>320</u>
Maturity analysis of the present value of defined benefit obligations	2022	2021
Within one year	575	127
Within 5 years and over one year	1,285	1,237
Within 10 years and over 5 years	1,470	2,210
Over 10 years	<u>1,398</u>	<u>1,688</u>
Total present value	<u>4,728</u>	<u>5,262</u>
Actuarial assumptions	2022	2021
Discount rate	1.80% - 6.00%	0.35% - 4.50%
Future salary increases	0.75% - 8.00%	0.75% - 8.00%

Since plan asset is not recognized in the Consolidated Financial Statements, the effect of the asset ceiling, the effect of changes in foreign exchange rates and the return on plan assets, excluding amounts included in interest accounts are also not recognized and therefore not presented.

OTP Group made an insignificant amount of contribution to the defined benefit plans during the year ended 31 December 2022 and 2021.

NOTE 41: RELATED PARTY TRANSACTIONS (in HUF mn)

The compensation of key management personnel, such as the members of the Board of Directors, members of the Supervisory Board, key employees of the Bank and its major subsidiaries involved in the decision-making process in accordance with the compensation categories defined in IAS 24 Related Party Disclosures, is summarised below:

Compensations	2022	2021
Short-term employee benefits	9,790	8,881
Share-based payment	2,638	3,110
Other long-term employee benefits	875	743
Termination benefits	293	-
Post-employment benefits	<u>1</u>	<u>112</u>
Total	<u>13,597</u>	<u>12,846</u>

Share based compensations to the members of the Board of Directors, Supervisory Board or key employees of the Bank and its major subsidiaries are detailed in Note 40 Share-based payments.

An analysis of payment to executives of the Group related to their activity in Board of Directors and Supervisory Board is as follows:

	2022	2021
Members of Board of Directors	3,049	3,023
Members of Supervisory Board	<u>386</u>	<u>283</u>
Total	<u>3,435</u>	<u>3,306</u>

NOTE 41: RELATED PARTY TRANSACTIONS (in HUF mn) [continued]

Connections with related party (key management personnel and their close family member and companies) by which line of the consolidated statement of financial position and off-balance sheet is presented:

Assets	2022				2021			
	Other related parties	Associated companies	Other companies	Total	Other related parties	Associated companies	Other companies	Total
Securities	601	-	-	601	596	-	-	596
Loans at amortized cost (gross value)	75,704	23,554	4,067	103,325	111,529	1,828	1,798	115,155
Loss allowance on loans at amortized cost	-	-	-	-	(3,197)	(669)	(6)	(3,872)
Finance lease receivable	-	22	-	22	-	-	-	-
Loans at fair value through profit or loss	<u>164</u>	=	=	<u>164</u>	<u>108</u>	=	=	<u>108</u>
Total assets	<u>76,469</u>	<u>23,576</u>	<u>4,067</u>	<u>104,112</u>	<u>109,036</u>	<u>1,159</u>	<u>1,792</u>	<u>111,987</u>
Liabilities								
Deposits from customers and loan liabilities	54,002	12,490	2,104	68,596	39,872	4,280	2,732	46,884
Fair value adjustment of derivative financial instruments	=	<u>46</u>	=	<u>46</u>	=	=	=	=
Total liabilities	<u>54,002</u>	<u>12,536</u>	<u>2,104</u>	<u>68,642</u>	<u>39,872</u>	<u>4,280</u>	<u>2,732</u>	<u>46,884</u>

NOTE 41: RELATED PARTY TRANSACTIONS (in HUF mn) [continued]

Connections with related party (key management personnel and their close family member and companies) by which line of the consolidated statement of financial position and off-balance sheet is presented [continued]:

Off-balance sheet items	2022				2021			
	Other related parties	Associated companies	Other companies	Total	Other related parties	Associated companies	Other companies	Total
Undrawn line of credit	47,522	322	2,209	50,053	30,369	1,913	1,176	33,458
Bank Guarantee	8,455	-	2,652	11,107	6,220	-	551	6,771
Commitments and guarantees given	<u>24</u>	=	=	<u>24</u>	=	=	=	=
Total off-balance sheet items	<u>56,001</u>	<u>322</u>	<u>4,861</u>	<u>61,184</u>	<u>36,589</u>	<u>1,913</u>	<u>1,727</u>	<u>40,229</u>

Statement of profit or loss (turnover during the current period)	2022	2021
Interest income	860	167
Fees and commissions	117	61
Interest expense	(243)	(13)
Fees and commission expenses	(7)	(22)
Loss allowance / Provision		
on loans, placements, for commitments and guarantees given	(29)	(652)
Operational costs	(1,852)	(224)

In the normal course of business, the Bank enters into other transactions with its unconsolidated subsidiaries of the Group, the amounts and volumes of which are not significant to these Consolidated Financial Statements taken as a whole. Related party transactions were made on terms equivalent to those that prevail in arm's length transactions and such terms can be substantiated.

NOTE 42: ACQUISITION (in HUF mn)

Purchase and consolidation of subsidiaries

On 6 December 2021 OTP Bank signed an acquisition agreement with Alpha International Holdings Single Member S.A. on purchasing 100% shareholding of Alpha Bank SH.A., the Albanian subsidiary of the Greek Alpha Bank S.A. The purchase price has been agreed at EUR 55 million. The financial closing of the transaction was completed on 18 July 2022.

The Seller shall, on an after-tax basis, indemnify and keep indemnified OTP Bank (the Purchaser) against all losses suffered or incurred by it arising directly out of two lawsuits. The aggregate liability of the Seller for all indemnity claims shall not exceed three million euros.

The Seller made a strategic decision to dispose of its Albanian subsidiary. Purchasing an entity with negative goodwill is reasoned by altogether the expected cost synergies arising from the market situation in Albania.

On 31 May 2021, OTP Bank signed a share sale and purchase agreement on purchasing 100% shareholding of Nova KBM d.d. and its subsidiaries, which are 80% owned by funds managed by affiliates of Apollo Global Management, Inc. and 20% by EBRD. The financial closing of the transaction took place on 6 February 2023, after obtaining all the necessary regulatory approvals.

The Nova KBM acquisition completed in February 2023 and the pending acquisition of Ipoteka Bank in Uzbekistan (expected to be financially closed in the second quarter) may substantially contribute to the consolidated profit after tax; in addition to this, the expected positive after-tax effect of one-off items to be booked in relation to the consolidation of Nova KBM (badwill, PPA, initial risk cost, etc.) might reach EUR 230 million.

The fair value of the assets and liabilities acquired is as follows:

	Alpha Bank SH.A.
Cash amounts and due from banks and balances with the National Banks	(58,880)
Placements with other banks, repo receivables	(26,500)
Financial assets at fair value through profit or loss	-
Securities at fair value through other comprehensive income	(46,003)
Loans at amortized cost	(101,642)
Loans mandatorily at fair value through profit or loss	-
Associates and other investments	-
Securities at amortized cost	(3,038)
Property and equipment	(1,063)
Intangible assets	(1,391)
Right-of-use assets	(3,209)
Investment properties	-
Derivative financial assets designated as hedge accounting	-
Other assets	<u>(6,852)</u>
Total assets	<u>(248,579)</u>

NOTE 42: ACQUISITION (in HUF mn) [continued]

The fair value of the assets and liabilities acquired is as follows [continued]:

	Alpha Bank SH.A.
Amounts due to the banks, the National Governments, deposits from the National Banks and other banks and repo liabilities	1,969
Financial liabilities designated at fair value through profit or loss	-
Deposits from customers	213,400
Liabilities from issued securities	-
Derivative financial liabilities held for trading	-
Derivative financial liabilities designated as hedge accounting	-
Leasing liabilities	3,346
Other liabilities	6,089
Subordinated bonds and loans	-
Total liabilities	<u>224,804</u>
Net assets	<u>(23,775)</u>
	2022
Net assets total	(23,775)
Non-controlling interest	-
Negative goodwill	<u>3,784</u>
Net cash	<u>(19,991)</u>
Cash acquired on purchase	<u>58,880</u>
Net cash paid for acquisition	<u>38,889</u>

Breakdown of the acquired entity's income, profit / loss from the date of the acquisition:

	Interest income	Net result
Alpha Bank SH.A.	2,704	(5,920)

Breakdown of the acquired entity's income, profit / loss if the Group would have acquired from the beginning of year 2022:

	Interest income	Net result
Alpha Bank SH.A.	6,889	(11,572)

With the acquisition the following shares were purchased:

	Number of shares	Type	Voting rights
ALPHAALTECH1	5,720,372	Common stock	100.00%

NOTE 43: SIGNIFICANT SUBSIDIARIES AND ASSOCIATES (in HUF mn)

The control is established when the Group has the right and exposure over the variable positive yield of the investee but the same time put up with the consequences of the negative returns and the Group by its decisions is able to influence the extent of the yields.

The Group primarily considering the following factors in the process of determining the existing of the control:

- investigation of the decision-making mechanism of the entity,
- authority of the Board of Directors, Supervisory Board and General meeting based on the deed of association,
- existence of investments with preferential voting rights.

If the control can't be obviously determined, then it should be supposed that the control does not exist.

Significant influence is presumed by the Group to exist – unless the contrary case is proven – when the Group holds 20% or more of the voting power of an investee but does not have a control.

Investments in companies in which the Bank has a controlling interest are detailed below. They are fully consolidated companies and incorporated in Hungary unless otherwise stated. The Group considers a subsidiary significant when it is a financial institution or when the subsidiary contributes to the Groups' total balance sheet with higher amount. The Bank considers the subsidiaries as cash generating units.

NOTE 43: SIGNIFICANT SUBSIDIARIES AND ASSOCIATES (in HUF mn) [continued]**Significant subsidiaries**

Name	Ownership (Direct and Indirect)		Activity
	2022	2021	
DSK Bank AD (Bulgaria)	99.92%	99.91%	commercial banking services
OTP Bank JSC (Ukraine)	100.00%	100.00%	commercial banking services
JSC "OTP Bank" (Russia)	97.92%	97.92%	commercial banking services
OTP banka d.d. (Croatia)	100.00%	100.00%	commercial banking services
OTP Bank Romania S.A. (Romania)	100.00%	100.00%	commercial banking services
OTP banka Srbija a.d. Novi Sad (Serbia)	100.00%	100.00%	commercial banking services
Crnogorska komercijalna banka a.d. (Montenegro)	100.00%	100.00%	commercial banking services
Banka OTP Albania SH.A. (Albania)	100.00%	100.00%	commercial banking services
OTP Bank S.A. (Moldova)	98.26%	98.26%	commercial banking services
SKB Banka d.d. Ljubljana (Slovenia)	100.00%	100.00%	commercial banking services
OTP Financing Malta Company Ltd. (Malta)	100.00%	100.00%	refinancing activities
OTP Financing Netherlands B.V. (the Netherlands)	100.00%	100.00%	refinancing activities
OTP Holding Ltd. (Cyprus)	100.00%	100.00%	refinancing activities
OTP Factoring Ltd.	100.00%	100.00%	work-out
OTP Mortgage Bank Ltd.	100.00%	100.00%	mortgage lending
OTP Real Estate Ltd.	100.00%	100.00%	real estate management and development
Merkantil Bank Ltd.	100.00%	100.00%	finance lease
OTP Building Society Ltd.	100.00%	100.00%	housing savings and loan
OTP Fund Management Ltd.	100.00%	100.00%	fund management
Bank Center No. 1. Ltd.	100.00%	100.00%	real estate lease
Inga Kettő Ltd.	100.00%	100.00%	property management
OTP Funds Servicing and Consulting Ltd.	100.00%	100.00%	fund services
OTP Real Estate Leasing Ltd.	100.00%	100.00%	real estate leasing

NOTE 43: SIGNIFICANT SUBSIDIARIES AND ASSOCIATES (in HUF mn) [continued]**Significant associates and joint ventures**

Summarized financial and non-financial information of associates which are accounted according to IAS 28 and in line with IFRS 9 as at 31 December 2022 is as follows:

List of associated entities	Carrying amount	Ownership of OTP Bank	Profit after tax	Country / Headquarter	Activity
OTP Risk Fund I.	520	44.12%	(52)	Hungary / Budapest	Trusts, funds and similar financial entities
OTP-DayOne Magvető Fund	683	22.00%	13	Hungary / Budapest	Trusts, funds and similar financial entities
D-ÉG Thermoset Ltd 'u.l.'	-	46.99%	-	Hungary / Dunaújváros	Wholesale of hardware, plumbing and heating equipment and supplies
Company for Cash Services AD	392	25.00%	183	Bulgaria / Sofia	Other financial service activities, except insurance and pension funding
Edrone spółka z ograniczoną odpowiedzialnością	822	23.54%	(516)	Poland / Krakow	Computer programming activities
NovaKid Inc.	1,723	4.07%	(5,409)	USA / San Francisco	Online kids English learning platform operator
Banzai Cloud Closed Co. Plc	216	17.42%	267	Hungary / Budapest	Computer programming activities
ClodeCool Ltd	1,323	20.15%	1	Hungary / Budapest	Other education
Pepita.hu Closed Co. Plc	1,323	40.00%	(157)	Hungary / Szeghalom	Retail sale via mail order houses or via Internet
Seon Holdings Ltd	8,689	19.26%	(3)	UK / London	Computer programming activities
VCC Live Group Closed Co. Plc	1,308	24.75%	(226)	Hungary / Budapest	Computer programming activities
Cursor Insight Ltd	75	6.75%	n.a.	UK / London	Computer programming activities
Fabetker Ltd	1	20.48%	135	Hungary / Nádudvar	Manufacture of concrete products for construction purposes
OneSoil Ag.	362	3.72%	(514)	Switzerland / Zurich	Computer programming activities
Packhelp Spółka Akcyjna	1,168	3.15%	(3,385)	Poland / Warsaw	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
Phoenix Play Invest closed Co. Plc	2,350	21.69%	(1)	Hungary / Budapest	Activities of holding companies
Algorithmiq Invest Closed Co. Plc	8,195	21.69%	792	Hungary / Budapest	Activities of holding companies
NGY Propertiers Investment SRL	11,735	14.54%	(22,567)	Romania / Bucharest	Renting and operating of own or leased real estate
Deligo Vision Technologies Ltd	205	2.50%	(15)	Hungary / Budapest	Other information service activities
GRADUW Invest Closed Co. Plc	4,803	3.81%	131	Hungary / Budapest	Sale and purchase of own real estate
SEH-Partner Ltd	6,403	30.56%	n.a.	Hungary / Budapest	Activities of holding companies
Simonyi út 20. Ingatlanhasznosító Ltd	90	47.62%	-	Hungary / Debrecen	Renting and operating of own or leased real estate
Fintech CEE Software Invest Ltd	127	20.04%	n.a.	Hungary / Budapest	Activities of holding companies
New Frontier Technology Invest SARL	3,393	14.01%	n.a.	Luxemburg / Luxembourg	Activities of holding companies
Mindgram sp. z.o.o	200	2.38%	(328)	Poland / Warsaw	Other human health activities

NOTE 43: SIGNIFICANT SUBSIDIARIES AND ASSOCIATES (in HUF mn) [continued]**Significant associates and joint ventures [continued]**

The Group made significant investments into associates during 2021. Venture capital funds under the control of the Group obtained ownership interest in Phoenix Play Invest Co.Plc, in Algorithmiq Invest Closed Co. Plc and in NGY Propertiers Investment SRL.

List of associated entities	Carrying amount	Ownership of OTP Bank	Profit after tax	Country / Headquarter	Activity
OTP Risk Fund I.	526	44.12%	(52)	Hungary /Budapest	Trusts, funds and similar financial entities
OTP-DayOne Magvető Fund	288	22.00%	13	Hungary /Budapest	Trusts, funds and similar financial entities
D-ÉG Thermoset Ltd 'u.l.'	-	46.99%	-	Hungary / Dunaújváros	Wholesale of hardware, plumbing and heating equipment and supplies
Company for Cash Services AD	392	25.00%	(183)	Bulgaria / Sofia	Other financial service activities, except insurance and pension funding
Edrone spółka z ograniczoną odpowiedzialnością	779	17.34%	(293)	Poland / Krakow	Computer programming activities
Graboplast Closed Co. Plc	700	7.00%	n.a.	Hungary / Győr	Manufacture of builders' ware of plastic
NovaKid Inc.	2,006	4.17%	(4,621)	USA / San Francisco	Online kids English learning platform operator
Banzai Cloud Closed Co. Plc	374	17.42%	n.a.	Hungary /Budapest	Computer programming activities
ClodeCool Ltd	1,770	20.15%	1	Hungary /Budapest	Other education
Pepita.hu Closed Co. Plc	516	34.00%	(132)	Hungary / Szeghalom	Retail sale via mail order houses or via Internet
Seon Holdings Ltd	4,756	23.86%	(4)	UK / London	Computer programming activities
Starschema Ltd	3,944	36.19%	n.a.	Hungary /Budapest	Computer consultancy activities
VCC Live Group Closed Co. Plc	1,672	49.56%	(203)	Hungary /Budapest	Computer programming activities
Virtual Solutaion Ltd	n.a.	8.33%	n.a.	Hungary /Budapest	Computer programming activities
Yieldigo s.r.o.	76	1.97%	(168)	Czech Republic / Prague	Computer programming activities
Szallas.hu Closed Co. Plc ¹	8,809	51.19%	1,278	Hungary / Miskolc	Web portals
Cursor Insight Ltd	146	6.75%	(247)	UK / London	Computer programming activities
Fabetker Ltd	1	20.48%	132	Hungary / Nádudvar	Manufacture of concrete products for construction purposes
OneSoil Ag.	318	3.72%	(1,058)	Switzerland / Zurich	Computer programming activities
Packhelp Spółka Akcyjna	2,160	1.00%	(3,038)	Poland / Warsaw	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
Phoenix Play Invest closed Co. Plc	3,081	21.69%	(1)	Hungary /Budapest	Activities of holding companies
Algorithmiq Invest Closed Co. Plc	8,996	21.69%	792	Hungary /Budapest	Activities of holding companies
NGY Propertiers Investment SRL	12,331	14.54%	(22,567)	Romania / Bucharest	Renting and operating of own or leased real estate

¹ It does not control another entity even though it holds more than half of the voting rights.

NOTE 44: TRUST ACTIVITIES (in HUF mn)

The Bank acts as a trustee for certain loans granted by companies or employers to their employees, mainly for housing purposes. The ultimate risk for these loans rests with the party advancing the funds. As these loans and related funds are not considered to be assets or liabilities of the Group, they have been excluded from the accompanying Consolidated Statement of Financial Position.

	2022	2021
The amount of loans managed by the Group as a trustee	37,714	36,517

NOTE 45: CONCENTRATION OF ASSETS AND LIABILITIES

	2022	2021
In the percentage of the total assets		
Receivables from, or securities issued by the Hungarian Government or the NBH	14.75%	15.87%

There were no other significant concentrations of the assets or liabilities of the Group either as at 31 December 2022 or as at 31 December 2021.

The Group continuously provides the NBH with reports on the extent of dependency on large depositors as well as the exposure of the biggest 50 depositors towards the Group.

Further to this obligatory reporting to the NBH, the Group pays particular attention on the exposure of its largest partners and cares for maintaining a closer relationship with these partners in order to secure the stability of the level of deposits.

The organisational unit of the Bank in charge of partner-risk management analyses the biggest partners on a constant basis and sets limits on the Bank's and the Group's exposure separately partner-by-partner. If necessary, it modifies partner-limits in due course thereby reducing the room for manoeuvring of the Treasury and other business areas.

The Bank's internal regulation (Limit-management regulation) controls risk management related to exposures of clients. The Bank makes a difference between clients or clients who are economically connected with each other, partners, partners operating in the same geographical region or in the same economic sector, exposures from customers. Limit-management regulation includes a specific range provision system used by the Bank to control risk exposures. This regulation has to be used by the Bank for its business (lending) risk-taking activity both in retail and corporate sector.

To specify credit risk limits Group strives their clients get an acceptable margin of risk based on their financial situation. In the Group limit system has to be provided a lower-level decision-making delegation.

If a Group member takes risk against a client or group of clients (either inside the local economy or outside), the client will be qualified as a group level risk and these limits will be specified at group level.

The validity period of this policy is 12 months. The limit shall be reviewed prior to the expiry date but at least once a year - based on the relevant information required to limit calculations.

NOTE 46: EARNINGS PER SHARE

Consolidated Earnings per share attributable to the ordinary shares of the Group are determined by dividing consolidated Net profit for the year attributable to ordinary shareholders, after the deduction of declared preference dividends, by the weighted average number of ordinary shares outstanding during the year. Dilutive potential ordinary shares are deemed to have been converted into ordinary shares.

Earnings per share from continuing and discontinued operations	2022	2021
Consolidated profit after income tax for the period attributable to ordinary shareholders (in HUF mn)	346,354	455,592
Weighted average number of ordinary shares outstanding during the year for calculating basic EPS (number of share)	268,790,272	262,017,836
Basic Earnings per share (in HUF)	<u>1,289</u>	<u>1,738</u>
Consolidated profit after income tax for the period attributable to ordinary shareholders (in HUF mn)	346,354	455,592
Modified weighted average number of ordinary shares outstanding during the year for calculating diluted EPS (number of share)	268,873,185	262,094,958
Diluted Earnings per share (in HUF)	<u>1,288</u>	<u>1,738</u>
Earnings per share from continuing operations	2022	2021
Consolidated profit after income tax for the period attributable to ordinary shareholders (in HUF mn)	334,910	455,476
Weighted average number of ordinary shares outstanding during the year for calculating basic EPS (number of share)	268,790,272	262,017,836
Basic Earnings per share (in HUF)	<u>1,246</u>	<u>1,738</u>
Consolidated profit after income tax for the period attributable to ordinary shareholders (in HUF mn)	334,910	455,476
Modified weighted average number of ordinary shares outstanding during the year for calculating diluted EPS (number of share)	268,873,185	262,094,958
Diluted Earnings per share (in HUF)	<u>1,246</u>	<u>1,738</u>
Earnings per share from discontinued operations	2022	2021
Consolidated profit after income tax for the period attributable to ordinary shareholders (in HUF mn)	11,444	116
Weighted average number of ordinary shares outstanding during the year for calculating basic EPS (number of share)	268,790,272	262,017,836
Basic Earnings per share (in HUF)	<u>43</u>	=
Consolidated profit after income tax for the period attributable to ordinary shareholders (in HUF mn)	11,444	116
Modified weighted average number of ordinary shares outstanding during the year for calculating diluted EPS (number of share)	268,873,185	262,094,958
Diluted Earnings per share (in HUF)	<u>43</u>	=

NOTE 46: EARNINGS PER SHARE [continued]

	2022	2021
Weighted average number of ordinary shares	280,000,010	280,000,010
Average number of Treasury shares	11,209,738	17,982,174
Weighted average number of ordinary shares outstanding during the year for calculating basic EPS	<u>268,790,272</u>	<u>262,017,836</u>
Dilutive effects of options issued in accordance with the remuneration policy and convertible into ordinary shares ¹	82,913	77,122
The modified weighted average number of ordinary shares outstanding during the year for calculating diluted EPS	<u>268,873,185</u>	<u>262,094,958</u>

¹ Both in the year 2022 and 2021 the dilutive effect is in connection with the Remuneration Policy and the Management Option Program.

NOTE 47: NET GAIN OR LOSS REALIZED ON FINANCIAL INSTRUMENTS (in HUF mn)

2022	Net interest / similar to interest gain and loss	Net non- interest gain and loss	Loss allowance	Other Compre- hensive Income
Cash, amounts due from banks and balances with the National Banks	62,121	-	(375)	-
Placements with other banks	154,231	-	39	-
Repo receivables	4,261	-	50	-
Trading securities at fair value through profit or loss	-	(3,151)	-	-
Non-trading instruments mandatorily at fair value through profit or loss	54	145	-	-
Securities at fair value through other comprehensive income ¹	54,046	(1,014)	(29,273)	(119,377)
Securities at amortized cost	144,757	(4,636)	(31,501)	-
Loans at amortized cost	978,037	32,572	(167,506)	-
Finance lease receivables	78,262	-	(24,413)	-
Loans mandatorily at fair value through profit or loss	54,036	(5,951)	13,346	-
Other financial assets ²	4,103	-	(1,204)	-
Derivative financial instruments ²	<u>(85,909)</u>	<u>10,558</u>	=	=
Total result on financial assets	<u>1,447,999</u>	<u>28,523</u>	<u>(240,837)</u>	<u>(119,377)</u>
Amounts due to banks, the National Governments, deposits from the National Banks and other banks	(16,315)	-	-	-
Repo liabilities	(31,006)	-	-	-
Financial liabilities designated at fair value through profit or loss	(562)	1,932	-	-
Deposits from customers	(269,592)	342,427	-	-
Liabilities from issued securities	(27,838)	-	-	-
Leasing liabilities	(2,386)	-	-	-
Subordinated bonds and loans	<u>(8,986)</u>	=	=	=
Total result on financial liabilities	<u>(356,685)</u>	<u>344,359</u>	=	=
Total result on financial instruments	<u>1,091,314</u>	<u>372,882</u>	<u>(240,837)</u>	<u>(119,377)</u>

¹ For the year 2022 HUF (1,014) million net non-interest gain on securities at fair value through other comprehensive income was transferred from other comprehensive income to profit or loss.

² Gains from other financial assets and derivative financial instruments recognized in net interest income as Income similar to interest income.

NOTE 47: NET GAIN OR LOSS REALIZED ON FINANCIAL INSTRUMENTS (in HUF mn)
[continued]

2021	Net interest / similar to interest gain and loss	Net non- interest gain and loss	Loss allowance	Other Compre- hensive Income
Cash, amounts due from banks and balances with the National Banks	16,527	-	(952)	-
Placements with other banks	24,594	-	(1,664)	-
Repo receivables	827	-	12	-
Trading securities at fair value through profit or loss	-	5,016	-	-
Non-trading instruments mandatorily at fair value through profit or loss	1,749	4,812	-	-
Securities at fair value through other comprehensive income ¹	49,473	(2,587)	(961)	(44,877)
Securities at amortized cost	79,602	1,031	(3,013)	-
Loans at amortized cost	692,432	26,354	(32,159)	-
Finance lease receivables	59,084	-	(5,776)	-
Loans mandatorily at fair value through profit or loss	40,131	4,459	(16,289)	-
Other financial assets ²	3,639	-	438	-
Derivative financial instruments ²	<u>3,321</u>	<u>9,412</u>	=	=
Total result on financial assets	<u>971,379</u>	<u>48,497</u>	<u>(60,364)</u>	<u>(44,877)</u>
Amounts due to banks, the National Governments, deposits from the National Banks and other banks	(24,249)	-	-	-
Repo liabilities	(2,299)	-	-	-
Financial liabilities designated at fair value through profit or loss	(493)	(3,916)	-	-
Deposits from customers	(51,052)	267,033	-	-
Liabilities from issued securities	(9,822)	-	-	-
Leasing liabilities	(1,556)	-	-	-
Subordinated bonds and loans	<u>(7,598)</u>	=	=	=
Total result on financial liabilities	<u>(97,069)</u>	<u>263,117</u>	<u>=</u>	<u>=</u>
Total result on financial instruments	<u>874,310</u>	<u>311,614</u>	<u>(60,364)</u>	<u>(44,877)</u>

¹ For the year of 2021 HUF (2,587) million net non-interest gain on securities at fair value through other comprehensive income was transferred from other comprehensive income to profit or loss.

² Gains from other financial assets and derivative financial instruments recognized in net interest income as Income similar to interest income.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn)

In determining the fair value of a financial asset or liability the Group uses the market price in the case of instruments that are quoted on an active market. In most cases market price is not publicly available, so the Group has to make assumptions or use valuation techniques to determine the fair value of a financial instrument. See Note 48.4. for more information about fair value classes applied for financial assets and liabilities measured at fair value in these financial statements.

To provide a reliable estimate of the fair value of those financial instruments that are originally measured at amortized cost, the Group used the discounted cash-flow analyses (loans, placements with other banks, repo receivables, amounts due to banks, repo liabilities, deposits from customers). The fair value of issued securities and subordinated bonds is based on quoted prices (e.g. Reuters). Cash and amounts due from banks and balances with the National Banks represent amounts available immediately thus the fair value equals to the cost.

The assumptions used when calculating the fair value of financial assets and liabilities when using valuation technique are the following:

- the discount rates are the risk-free rates related to the denomination currency adjusted by the appropriate risk premium as of the end of the reporting period,
- the contractual cash-flows are considered for the performing loans and for the non-performing loans, the amortized cost less impairment is considered as fair value,
- the future cash-flows for floating interest rate instruments are estimated from the yield curves as of the end of the reporting period,
- the fair value of the deposit which can be due in demand cannot be lower than the amount payable on demand.

Classes of assets and liabilities not measured at fair value in the Consolidated Statement of Financial Position, the income approach was used to convert future cash-flows to a single current amount. Fair value of current assets is equal to carrying amount, fair value of liabilities from issued securities and other bond-type classes of assets and liabilities not measured at fair value measured based on Reuters market rates, and the fair value of other classes not measured at fair value of the Consolidated Statement of Financial Position is measured at discounted cash-flow method. Fair value of loans, net of loss allowance for loans measured at discount rate adjustment technique, the discount rate is derived from observed rates of return for comparable assets or liabilities that are traded in the market.

Fair value measurements – in relation to instruments measured not at fair value – are mainly categorized in level 3 of the fair value hierarchy.

Use of modified yield curve

During the year ended 31 December 2022 yield curves derived from Hungarian government bonds (“ÁKK curve”) have become distorted due to certain market events, which means that real liquidity has concentrated on certain part of the yield curve. Therefore, a modified yield curve - which is not observable on the market - has been used at the concerning fair value calculations. This yield curve is based on the relevant yield curve points of the original ÁKK curve. Based on Management’s discretion fair value calculated with modified yield curves can represent the perspective of market participants reliable at current market conditions.

Modified yield curve was used for calculating fair value in case of subsidized personal loans represented in “Loans mandatorily measured at fair value through profit or loss” line.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.1. Fair value of financial assets and liabilities

	2022		2021	
	Carrying amount	Fair value	Carrying amount	Fair value
Cash, amounts due from banks and balances with the National Banks	4,221,392	4,221,392	2,556,035	2,556,035
Placements with other banks	1,351,082	1,322,560	1,584,861	1,566,458
Repo receivables	41,009	42,993	61,052	61,121
Securities at amortized cost	4,891,938	4,048,877	3,891,335	3,645,046
Loans at amortized cost	16,094,458	15,557,928	13,493,183	13,106,425
Finance lease receivables	1,298,752	1,320,286	1,182,628	1,183,089
Other financial assets	<u>262,981</u>	<u>262,981</u>	<u>135,916</u>	<u>135,916</u>
Total assets not measured at fair value	<u>28,161,612</u>	<u>26,777,017</u>	<u>22,905,010</u>	<u>22,254,090</u>
Financial assets at fair value through profit or loss	436,387	436,387	341,397	341,397
<i>Trading securities at fair value through profit or loss</i>	<i>104,750</i>	<i>104,750</i>	<i>103,510</i>	<i>103,510</i>
<i>Fair value of derivative financial assets held for trading</i>	<i>276,482</i>	<i>276,482</i>	<i>184,484</i>	<i>184,484</i>
<i>Non-trading instruments mandatorily at fair value through profit or loss</i>	<i>55,155</i>	<i>55,155</i>	<i>53,403</i>	<i>53,403</i>
<i>Financial assets designated at fair value through profit or loss</i>	-	-	-	-
Equity instruments at fair value through other comprehensive income	40,157	40,157	34,976	34,976
Securities at fair value through other comprehensive income	1,699,446	1,699,446	2,189,534	2,189,534
Loans mandatorily at fair value through profit or loss	1,247,414	1,247,414	1,068,111	1,068,111
Derivative financial assets designated as hedge accounting	<u>48,247</u>	<u>48,247</u>	<u>18,757</u>	<u>18,757</u>
Total assets measured at fair value	<u>3,471,651</u>	<u>3,471,651</u>	<u>3,652,775</u>	<u>3,652,775</u>
Financial assets total	<u>31,633,263</u>	<u>30,248,668</u>	<u>26,557,785</u>	<u>25,906,865</u>
Amounts due to the National Governments, to the National Banks and other banks	1,463,158	1,109,924	1,567,348	1,446,036
Repo liabilities	217,369	227,669	79,047	79,010
Deposits from customers	25,188,805	25,056,412	21,068,644	21,002,125
Liabilities from issued securities	870,682	743,907	436,325	400,071
Leasing liabilities	63,778	63,791	53,286	53,447
Other financial liabilities	645,652	645,652	485,771	485,771
Subordinated bonds and loans	<u>301,984</u>	<u>268,911</u>	<u>278,334</u>	<u>284,709</u>
Total liabilities not measured at fair value	<u>28,751,428</u>	<u>28,116,265</u>	<u>23,968,755</u>	<u>23,751,169</u>
Financial liabilities designated at fair value through profit or loss	54,191	54,191	41,184	41,184
Held for trading derivative financial liabilities	385,747	385,747	202,716	202,716
Derivative financial liabilities designated as hedge accounting	<u>27,949</u>	<u>27,949</u>	<u>11,228</u>	<u>11,228</u>
Total liabilities measured at fair value	<u>467,887</u>	<u>467,887</u>	<u>255,128</u>	<u>255,128</u>
Financial liabilities total	<u>29,219,315</u>	<u>28,584,152</u>	<u>24,223,883</u>	<u>24,006,297</u>

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.2. Fair value of derivative instruments

The Group regularly enters into hedging transactions in order to decrease its financial risks. However some economically hedging transaction do not meet the criteria to qualify as hedge accounting, therefore these transactions were accounted for as derivatives held for trading.

The assessment of the hedge effectiveness (both for fair value hedges and cash flow hedges) to determine the economic relationship between the hedged item and the hedging instrument is accomplished with prospective scenario analysis via different rate shift scenarios of the relevant risk factor(s) of the hedged risk component(s). The fair value change of the hedged item and the hedging instrument is compared in the different scenarios. Economic relationship is justified if the change of the fair value of the hedged item and the hedging instrument are in the opposite direction and the absolute changes are similar amounts. The hedge ratio is determined as the ratio of the notional of the hedged item and the notional of the hedging instrument. The sources of hedge ineffectiveness are the not hedged risk components (e.g. change of cross currency basis spreads in case of interest rate risk hedges), slight differences in maturity dates and interest payment dates in case of fair value hedges, and differences between the carrying amount of the hedged item and the carrying amount of the hedging instrument in case of FX hedges (e.g. caused by interest rate risk components in the fair value of the hedging instrument).

The summary of the derivatives held for trading and derivatives designated as hedge accounting of the Group are as follows:

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.2. Fair value of derivative instruments [continued]

	Before netting		2022	After netting		Before netting		2021	After netting	
	Assets	Liabilities	Netting	Assets	Liabilities	Assets	Liabilities	Netting	Assets	Liabilities
Held for trading derivative financial instruments										
Interest rate derivatives										
Interest rate swaps	165,478	(171,706)	155,468	10,010	(16,238)	58,512	(56,070)	40,783	17,729	(15,287)
Cross currency interest rate swaps	11,332	(12,139)	-	11,332	(12,139)	7,316	(7,621)	-	7,316	(7,621)
OTC options	1,074	(1,069)	-	1,074	(1,069)	484	(299)	-	484	(299)
Forward rate agreement	505	(3)	505	=	502	=	=	=	=	=
Total interest rate derivatives (OTC derivatives)	178,389	(184,917)	155,973	22,416	(28,944)	66,312	(63,990)	40,783	25,529	(23,207)
Foreign exchange derivatives										
Foreign exchange swaps	76,881	(72,959)	-	76,881	(72,959)	37,638	(42,272)	-	37,638	(42,272)
Foreign exchange forward contracts	13,085	(13,740)	-	13,085	(13,740)	10,790	(7,738)	-	10,790	(7,738)
OTC options	1,048	(822)	-	1,048	(822)	801	(180)	-	801	(180)
Foreign exchange spot conversion	177	(177)	=	177	(177)	187	(242)	=	187	(242)
Total foreign exchange derivatives (OTC derivatives)	91,191	(87,698)	=	91,191	(87,698)	49,416	(50,432)	=	49,416	(50,432)
Equity stock and index derivatives										
Commodity Swaps	33,693	(31,632)	-	33,693	(31,632)	51,523	(51,508)	-	51,523	(51,508)
Equity swaps	54	(702)	=	54	(702)	10,538	(357)	=	10,538	(357)
OTC derivatives total	33,747	(32,334)	=	33,747	(32,334)	62,061	(51,865)	=	62,061	(51,865)
Exchange traded futures and options	214	(1,887)	=	214	(1,887)	171	(278)	=	171	(278)
Total equity stock and index derivatives	33,961	(34,221)	=	33,961	(34,221)	62,232	(52,143)	=	62,232	(52,143)
Derivatives held for risk management not designated in hedge										
Interest rate swaps	136,164	(239,975)	18,944	117,220	(221,031)	47,457	(78,340)	5,682	41,775	(72,658)
Foreign exchange swaps	2,514	(10,190)	-	2,514	(10,190)	1,090	(4,108)	-	1,090	(4,108)
Foreign exchange spot	-	(43)	-	-	(43)	-	-	-	-	-
Cross currency interest rate swaps	9,180	(3,620)	=	9,180	(3,620)	4,442	(168)	=	4,442	(168)
Total derivatives held for risk management not designated in hedge	147,858	(253,828)	18,944	128,914	(234,884)	52,989	(82,616)	5,682	47,307	(76,934)
Total held for trading derivative financial instruments	451,399	(560,664)	174,917	276,482	(385,747)	230,949	(249,181)	46,465	184,484	(202,716)

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.2. Fair value of derivative instruments [continued]

	Before netting		2022	After netting		Before netting		2021	After netting	
	Assets	Liabilities	Netting	Assets	Liabilities	Assets	Liabilities	Netting	Assets	Liabilities
Derivative financial instruments designated as hedge accounting										
Derivatives designated in cash flow hedges										
Interest rate swaps	<u>2,651</u>	<u>(2,651)</u>	<u>2,651</u>	=	=	<u>1,020</u>	<u>(1,020)</u>	<u>1,020</u>	=	=
Total derivatives designated in cash flow hedges	<u>2,651</u>	<u>(2,651)</u>	<u>2,651</u>	=	=	<u>1,020</u>	<u>(1,020)</u>	<u>1,020</u>	=	=
Derivatives designated in fair value hedges										
Interest rate swaps	56,757	(37,290)	30,938	25,819	(6,352)	25,417	(17,908)	12,131	13,286	(5,777)
Cross currency interest rate swaps	20,732	(5,398)	-	20,732	(5,398)	5,471	(5,451)	-	5,471	(5,451)
Foreign exchange swaps	<u>1,696</u>	<u>(16,199)</u>	=	<u>1,696</u>	<u>(16,199)</u>	=	=	=	=	=
Total derivatives designated in fair value hedges	<u>79,185</u>	<u>(58,887)</u>	<u>30,938</u>	<u>48,247</u>	<u>(27,949)</u>	<u>30,888</u>	<u>(23,359)</u>	<u>12,131</u>	<u>18,757</u>	<u>(11,228)</u>
Total derivatives held for risk management (OTC derivatives)	<u>81,836</u>	<u>(61,538)</u>	<u>33,589</u>	<u>48,247</u>	<u>(27,949)</u>	<u>31,908</u>	<u>(24,379)</u>	<u>13,151</u>	<u>18,757</u>	<u>(11,228)</u>

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting

Interest rate risk management is centralized at the Group. Interest rate risk exposures in major currencies are managed at OTP Headquarter on a consolidated level. Although risk exposures in local currencies are managed at subsidiary level, the respective decisions are subject to Headquarter ALCO approval. Interest rate risk is measured by simulating NII and EVE under different stress and plan scenarios, the established risk limits are described in „OTP Bank’s Group-Level Regulations on the Management of Liquidity Risk and Interest Rate Risk of Banking Book”. The interest rate risk management activity aims to stabilize NII within the approved risk limits

The risk management objective of these hedge relationships is to mitigate the risk of clean fair value (i.e. excluding accrued interest) change of MIRS loans due to the change of interest rate reference indices (BUBOR, EURIBOR, LIBOR, etc.) of the respective currency.

The ineffective part of fair value hedge accounting is presented on Interest income / Interest expense in the Consolidated Statement of Profit or Loss.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

Amount, timing and uncertainty of future cash flows – hedging instruments as at 31 December 2022 (in fx million)

Type of hedge	Type of risk	Type of instrument	Within one month	Within three months and over one month	Within one year and over three months	Within five years and over one year	More than five years	Total
Fair Value Hedge	Interest rate risk	Interest rate swap						
		HUF						
		Notional	-	-	-	(64,875)	30,300	(34,575)
		Average Interest Rate (%)	-	-	-	7.15%	1.40%	
		EUR						
		Notional	-	-	101	10	50	161
		Average Interest Rate (%)	-	-	0.24%	0.22%	0.05%	
		USD						
		Notional	-	90	-	29	47	166
		Average Interest Rate (%)	-	2.60%	-	2.35%	4.18%	
Fair Value Hedge	Foreign exchange & Interest rate risk	Cross currency interest rate swap						
		EUR/HUF						
		Notional	-	1	2	10	11	24
		Average Interest Rate (%)	(1.64%)	(1.68%)	(1.68%)	(1.71%)	(1.82%)	
		Average FX Rate	310.41	310.17	310.20	309.74	307.71	

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

Amount, timing and uncertainty of future cash flows – hedging instruments as at 31 December 2022 (in fx million) [continued]

Type of hedge	Type of risk	Type of instrument	Within one month	Within three months and over one month	Within one year and over three months	Within five years and over one year	More than five years	Total
Fair Value Hedge	Foreign exchange risk	Cross currency interest rate swap						
		EUR/HUF						
		Notional	-	(10)	125	878	-	993
		Average FX Rate	363.88	407.57	362.11	373.88	-	
		RON/HUF						
		Notional	-	-	400	3,121	-	3,521
		Average FX Rate	-	-	72.92	75.08	-	
		JPY/HUF						
		Notional	-	-	-	4,500	-	4,500
		Average FX Rate	-	-	-	2.79	-	
		USD/HUF						
		Notional	-	(7)	144	146	-	283
Average FX Rate	-	323.77	323.77	323.77	-			

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

Amount, timing and uncertainty of future cash flows – hedging instruments as at 31 December 2021 (in fx million)

Type of hedge	Type of risk	Type of instrument	Within one month	Within three months and over one month	Within one year and over three months	Within five years and over one year	More than five years	Total
Fair Value Hedge	Interest rate risk	Interest rate swap						
		HUF						
		Notional	-	2,000	900	(52,474)	42,950	(6,624)
		Average Interest Rate (%)	-	1.09%	0.49%	1.65%	1.31%	
		EUR						
		Notional	-	-	1	111	50	162
		Average Interest Rate (%)	-	-	0.23%	0.24%	0.05%	
		USD						
		Notional	-	-	-	119	47	166
		Average Interest Rate (%)	-	-	-	2.54%	4.18%	
Fair Value Hedge	Foreign exchange & Interest rate risk	Cross currency interest rate swap						
		EUR/HUF						
		Notional	-	1	2	12	12	27
		Average Interest Rate (%)	(1.64)%	(1.68)%	(1.67)%	(1.69)%	(1.82)%	
		Average FX Rate	310.41	310.29	310.26	310.01	307.81	

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

Amount, timing and uncertainty of future cash flows – hedging instruments as at 31 December 2021 (in fx million) [continued]

Type of hedge	Type of risk	Type of instrument	Within one month	Within three months and over one month	Within one year and over three months	Within five years and over one year	More than five years	Total
Fair Value Hedge	Foreign exchange risk	Cross currency interest rate swap						
		EUR/HUF						
		Notional	-	(6)	35	572	-	601
		Average FX Rate	363.88	354.22	356.94	355.93	-	
		RON/HUF						
		Notional	-	-	200	2,225	-	2,425
		Average FX Rate	-	-	66.21	73.08	-	
		RUB/HUF						
		Notional	-	-	-	11,200	-	11,200
		Average FX Rate	-	-	-	4.15	-	
		JPY/HUF						
		Notional	-	-	-	4,500	-	4,500
		Average FX Rate	-	-	-	2.79	-	
		USD/HUF						
		Notional	-	-	(3)	306	-	303
Average FX Rate	-	323.77	323.77	323.77	-			
Other	Interest rate swap							
	HUF							
	Notional	-	3,345	1,823	3,093	-	8,261	

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

As at 31 December 2022 is as follows:

Type of hedge	Type of instrument	Type of risk	Nominal amount of the hedging instrument	Carrying amount of the hedging instrument as at 31 December 2022					Line item in the consolidated statement of financial position where the hedging instrument is located	Changes in fair value used for calculating hedge ineffectiveness for the six-month period ended as at 31 December 2022
				Before netting Assets	Liabilities	Netting	After netting Assets	Liabilities		
Fair value hedge	IRS	Interest rate risk	444,627	56,636	(37,258)	30,938	25,698	(6,320)	Derivative financial instruments designated as hedge accounting	12,873
	CCIRS	FX & IR risk	7,292	-	(2,679)	-	-	(2,679)	Derivative financial instruments designated as hedge accounting	3
	CCIRS	FX risk	813,430	20,732	(2,719)	-	20,732	(2,719)	Derivative financial instruments designated as hedge accounting	(6,087)
	FX swap	FX risk	290,982	1,696	(16,199)	-	1,696	(16,199)	Derivative financial instruments designated as hedge accounting	-
	IRS	Other	<u>5,584</u>	<u>121</u>	<u>(32)</u>	<u>-</u>	<u>121</u>	<u>(32)</u>	Derivative financial instruments designated as hedge accounting	<u>1</u>
Fair value hedges total			<u>1,561,915</u>	<u>79,185</u>	<u>(58,887)</u>	<u>30,938</u>	<u>48,247</u>	<u>(27,949)</u>		<u>6,790</u>

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

As at 31 December 2021 is as follows:

Type of hedge	Type of instrument	Type of risk	Nominal amount of the hedging instrument	Carrying amount of the hedging instrument as at 31 December 2021					Line item in the consolidated statement of financial position where the hedging instrument is located	Changes in fair value used for calculating hedge ineffectiveness for the year ended as at 31 December 2021
				Before netting Assets	Liabilities	Netting	After netting Assets	Liabilities		
Fair value hedge	IRS	Interest rate risk	409,595	23,986	(17,908)	12,131	11,855	(5,777)	Derivative financial instruments designated as hedge accounting	6,494
	CCIRS	FX & IR risk	8,175	-	(2,375)	-	-	(2,375)	Derivative financial instruments designated as hedge accounting	4
	CCIRS	FX risk	566,936	5,471	(3,076)	-	5,471	(3,076)	Derivative financial instruments designated as hedge accounting	(1,687)
	IRS	Other	<u>8,261</u>	<u>1,431</u>	=	=	<u>1,431</u>	=	Derivative financial instruments designated as hedge accounting	<u>3</u>
Fair value hedges total			<u>992,967</u>	<u>30,888</u>	<u>(23,359)</u>	<u>12,131</u>	<u>18,757</u>	<u>(11,228)</u>		<u>4,814</u>

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

As at 31 December 2022 is as follows:

Type of hedge	Type of risk	Carrying amount of the hedged item as at 31 December 2022		Amount of fair value hedge adjustments on the hedged item included in the carrying amount of the hedged item for the year ended 31 December 2022		Line item in the consolidated statement of financial position in which the hedged item is included
		Assets	Liabilities	Assets	Liabilities	
- Loans	Interest rate risk	64,596	-	(5,033)	-	Loans
- Loans	Interest rate risk	-	143,208	-	(34,149)	Amounts due to banks, the National Governments, deposits from the National Banks and other banks
- Government bonds	Interest rate risk	14,814	-	(4,601)	-	Securities at amortized cost
- Government bonds	Interest rate risk	151,501	-	(45,319)	-	Securities at fair value through other comprehensive income
- Government bonds	Interest rate risk	-	-	-	-	Financial assets at fair value through profit or loss
- Other bonds	Interest rate risk	44,508	-	(638)	-	Securities at fair value through other comprehensive income
- Other bonds	Interest rate risk	-	25,563	-	448	Liabilities from issued securities
- Loans	Foreign exchange & Interest rate risk	9,099	-	503	-	Loans
- Loans	Foreign exchange risk	716,841	-	-	-	Loans
- Government bonds	Foreign exchange risk	12,797	-	-	-	Securities at fair value through other comprehensive income
- Government bonds	Foreign exchange risk	113,806	-	-	-	Securities at amortized cost
- Other securities	Other risk	-	2,299	-	(218)	Liabilities from issued securities
Fair value hedges total		<u>1,127,962</u>	<u>171,070</u>	<u>(55,088)</u>	<u>(33,919)</u>	

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

As at 31 December 2021 is as follows:

Type of hedge	Type of risk	Carrying amount of the hedged item as at 31 December 2021		Amount of fair value hedge adjustments on the hedged item included in the carrying amount of the hedged item for the year ended 31 December 2021		Line item in the consolidated statement of financial position in which the hedged item is included
		Assets	Liabilities	Assets	Liabilities	
- Loans	Interest rate risk	57,176	-	637	-	Loans
- Loans	Interest rate risk	-	142,649	-	(16,858)	Amounts due to banks, the National Governments, deposits from the National Banks and other banks
- Government bonds	Interest rate risk	13,921	-	1,230	-	Securities at amortized cost
- Government bonds	Interest rate risk	152,830	-	22,457	-	Securities at fair value through other comprehensive income
- Other bonds	Interest rate risk	42,008	-	318	-	Securities at fair value through other comprehensive income
- Loans	Foreign exchange & Interest rate risk	101,934	-	611	(1,114)	Loans
- Loans	Foreign exchange risk	458,312	-	-	-	Loans
- Government bonds	Foreign exchange risk	12,811	-	-	-	Securities at fair value through other comprehensive income
- Government bonds	Foreign exchange risk	98,668	-	-	-	Securities at amortized cost
- Other securities	Other risk	=	8,261	=	(161)	Liabilities from issued securities
Fair value hedges total		<u>937,660</u>	<u>150,910</u>	<u>25,253</u>	<u>(18,133)</u>	

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.3. Types of hedge accounting [continued]

Change in basis swap spread recognised in the consolidated other comprehensive income related fair value hedges as follows:

Type of risk	Carrying amount of the hedged item		Items recognized in the consolidated other comprehensive income for the year ended 31 December 2022	Change in the items recognized in other comprehensive income for the year ended 31 December 2022	Line item in the consolidated statement of financial position in which the hedged item is included
	Assets	Liabilities			
FX risk	716,841	-	(363)	605	Loans at amortised cost
FX risk	<u>12,797</u>	=	<u>(52)</u>	=	Securities at fair value through other comprehensive income
Total	<u>729,638</u>	=	<u>(415)</u>	<u>605</u>	

Type of risk	Carrying amount of the hedged item		Items recognised in the consolidated other comprehensive income for the year 2021	Change in the items recognized in other comprehensive income for the year 2021	Line item in the consolidated statement of financial position in which the hedged item is included
	Assets	Liabilities			
FX risk	458,312	-	(1,032)	(1,681)	Loans at amortised cost
FX risk	<u>12,811</u>	=	<u>64</u>	=	Securities at fair value through other comprehensive income
Total	<u>471,123</u>	=	<u>(968)</u>	<u>(1,681)</u>	

On Group level there weren't any cash-flow hedges for the year ended as at 31 December 2022 and 2021.

Neither at the end of 31 December 2022 nor at the end of 31 December 2021 regarding net investment hedges for foreign subsidiaries there aren't any disclosure requirements to be presented.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]**48.4. Fair value levels**

Methods and significant assumptions used to determine fair value of the different levels of financial instruments:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included within Level 1, that are observable for the asset or liability either directly or indirectly. Fair value measurements – in relation with instruments measured not at fair value – are categorized in level 2;
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The following table shows an analysis of financial instruments recorded at fair value by level of the fair value hierarchy:

2022	Total	Level 1	Level 2	Level 3
Financial assets at fair value through profit or loss	436,387	85,339	339,060	11,988
<i>Trading securities at fair value through profit or loss</i>	104,750	50,131	54,619	-
<i>Positive fair value of derivative financial assets held for trading</i>	276,482	214	276,268	-
<i>Non-trading instruments mandatorily at fair value through profit or loss¹</i>	55,155	34,994	8,173	11,988
Securities at fair value through other comprehensive income ²	1,739,603	562,081	1,103,082	74,440
Loans mandatorily measured at fair value through profit or loss	1,247,414	-	-	1,247,414
Positive fair value of derivative financial assets designated as fair value hedge	48,247	=	48,247	=
Financial assets measured at fair value total	<u>3,471,651</u>	<u>647,420</u>	<u>1,490,389</u>	<u>1,333,842</u>
Financial liabilities designated at fair value through profit or loss	54,191	-	-	54,191
Negative fair value of held-for-trading derivative financial liabilities	385,747	1,886	383,211	650
Negative fair value of derivative financial liabilities designated as fair value hedge	27,949	=	27,949	=
Financial liabilities measured at fair value total	<u>467,887</u>	<u>1,886</u>	<u>411,160</u>	<u>54,841</u>

¹ The portfolio in level 3 includes Visa C shares.

² The portfolio in level 3 includes HUF 26,571 million Ukrainian and HUF 27,415 million Russian government bonds.

The fair value of investment properties is presented in Note 14 and they are categorized in level 3.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]**48.4. Fair value levels [continued]**

2021	Total	Level 1	Level 2	Level 3
Financial assets at fair value through profit or loss	341,397	90,877	227,153	23,367
<i>Trading securities at fair value through profit or loss</i>	103,510	58,727	44,777	6
<i>Positive fair value of derivative financial assets held for trading</i>	184,484	171	174,143	10,170
<i>Non-trading instruments mandatorily at fair value through profit or loss ¹</i>	53,403	31,979	8,233	13,191
Securities at fair value through other comprehensive income ²	2,224,510	910,324	1,250,833	63,353
Loans mandatorily measured at fair value through profit or loss	1,068,111	281	-	1,067,830
Positive fair value of derivative financial assets designated as fair value hedge	<u>18,757</u>	-	<u>18,757</u>	-
Financial assets measured at fair value total	<u>3,652,775</u>	<u>1,001,482</u>	<u>1,496,743</u>	<u>1,154,550</u>
Financial liabilities designated at fair value through profit or loss	41,184	-	-	41,184
Negative fair value of held-for-trading derivative financial liabilities	202,716	278	202,438	-
Negative fair value of derivative financial liabilities designated as fair value hedge	<u>11,228</u>	-	<u>11,228</u>	-
Financial liabilities measured at fair value total	<u>255,128</u>	<u>278</u>	<u>213,666</u>	<u>41,184</u>

¹ The portfolio in level 3 includes mainly Visa C shares.

² The portfolio in level 3 includes HUF 55,476 million Ukrainian government bonds.

The fair value of investment properties is presented in Note 14 and they are categorized in level 3.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]**48.4. Fair value levels [continued]****Movements in Level 3 financial instruments measured at fair value**

The following table shows a reconciliation of the opening and closing amount of Level 3 financial assets and liabilities which are recorded at fair value:

2022	Opening balance	Purchase (+)	Issuance /Disbursement (+)	Settlement / Close (-)	Sale (-)	FVA (+/-)	Transfer (+/-)	Fx effect / Revaluation	Other	Closing balance
Trading securities at fair value through profit or loss	6	-	-	-	-	-	-	-	(6)	-
Positive fair value of derivative financial assets held for trading	10,170	-	-	-	-	(10,170)	-	-	-	-
Non-trading securities mandatorily at fair value through profit or loss	13,191	-	1,171	-	-	(1,745)	-	482	(1,111)	11,988
Securities at fair value through other comprehensive income	63,353	981	-	-	(33,288)	15,310	19,678	(1,051)	9,457	74,440
Loans mandatorily measured at fair value through profit or loss ¹	<u>1,067,830</u>	=	<u>258,658</u>	<u>(81,764)</u>	<u>(1,490)</u>	<u>3,885</u>	=	<u>(11)</u>	<u>306</u>	<u>1,247,414</u>
Financial assets measured at fair value total	<u>1,154,550</u>	<u>981</u>	<u>259,829</u>	<u>(81,764)</u>	<u>(34,778)</u>	<u>7,280</u>	<u>19,678</u>	<u>(580)</u>	<u>8,646</u>	<u>1,333,842</u>
Financial liabilities designated at fair value through profit or loss	41,184	-	-	(1,624)	-	(1,934)	-	-	16,565	54,191
Negative fair value of held-for-trading derivative financial liabilities	=	=	=	=	=	650	=	=	=	650
Financial liabilities designated at fair value total	<u>41,184</u>	=	=	<u>(1,624)</u>	=	<u>(1,284)</u>	=	=	<u>16,565</u>	<u>54,841</u>

¹ HUF 13,346 million fair value adjustment resulting from risk factors and HUF (9,991) million adjustment resulting from market factors are included into FVA change for the current year at loans mandatorily measured at fair value through profit or loss.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.4. Fair value levels [continued]

Movements in Level 3 financial instruments measured at fair value [continued]

The following table shows a reconciliation of the opening and closing amount of Level 3 financial assets and liabilities which are recorded at fair value:

2021	Opening balance	Purchase (+)	Issuance /Disbursement (+)	Settlement / Close (-)	Sale (-)	FVA (+/-)	Transfer (+/-)	Fx effect / Revaluation	Other	Closing balance
Trading securities at fair value through profit or loss	12	-	-	-	-	-	-	-	(6)	6
Positive fair value of derivative financial assets held for trading	6,586	-	-	-	-	3,584	-	-	-	10,170
Non-trading securities mandatorily at fair value through profit or loss	15,433	-	390	-	(4,501)	640	(57)	256	1,030	13,191
Securities at fair value through other comprehensive income	56,906	81,795	-	(5,544)	(2,018)	(91)	(69,636)	1,813	128	63,353
Loans mandatorily measured at fair value through profit or loss ¹	<u>798,981</u>	=	<u>333,931</u>	<u>(41,038)</u>	=	<u>(24,044)</u>	=	=	=	<u>1,067,830</u>
Financial assets measured at fair value total	<u>877,918</u>	<u>81,795</u>	<u>334,321</u>	<u>(46,582)</u>	<u>(6,519)</u>	<u>(19,911)</u>	<u>(69,693)</u>	<u>2,069</u>	<u>1,152</u>	<u>1,154,550</u>
Financial liabilities designated at fair value through profit or loss	<u>31,896</u>	=	=	<u>(9,685)</u>	=	<u>3,916</u>	=	=	<u>15,057</u>	<u>41,184</u>
Financial liabilities designated fair value total	<u>31,896</u>	=	=	<u>(9,685)</u>	=	<u>3,916</u>	=	=	<u>15,057</u>	<u>41,184</u>

¹ FVA change for the previous period at loans mandatorily measured at fair value through profit or loss consists of HUF 16,289 million adjustment resulting from risk factors and HUF 7,755 million adjustment resulting from market factors.

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]**48.4. Fair value levels [continued]****Valuation techniques on Level 2 instruments**

The fair value of Level 2 instruments is calculated by discounting their expected interest and capital cash flows. Discounting is done with the respective swap curve of each currency.

Valuation techniques and sensitivity analysis on Level 3 instruments

Sensitivity analysis is performed on products with significant unobservable inputs (Level 3) to generate a range of reasonably possible alternative valuations. The sensitivity methodologies applied take account of the nature of the valuation techniques used, as well as the availability and reliability of observable proxy and historical data and the impact of using alternative models.

The calculation is based on a range or spread data of reliable reference source or a scenario based on relevant market analysis alongside the impact of using alternative models. Sensitivities are calculated without reflecting the impact of any diversification in the portfolio.

Unobservable inputs used in measuring fair value

Type of financial instrument	Valuation technique	Significant unobservable input	Range of estimates for unobservable input
VISA C shares	Market approach combined with expert judgement.	Illiquidity	+12% / (12%)
MFB refinancing loans	Discounted cash flow model	Probability of default	+ / (20)%
Subsidized personal loans	Discounted cash flow model	Probability of default	+ / (20)%
Subsidized personal loans	Discounted cash flow model	Operational costs	+ / (20)%
Subsidized personal loans	Discounted cash flow model	Demography	Change in the cash flow estimation + / (5)%
Ministry of Finance of Russia	Discounted cash flow model	Credit risk	+ / (15)%
Ministry of Finance of Ukraine	Discounted cash flow model	Credit risk	+ / (1)%

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.4. Fair value levels [continued]

The effect of unobservable inputs on fair value measurement

Although the Group believes that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value. For fair value measurements in Level 3 changing the assumptions used to reasonably possible alternative assumptions would have the following effects.

2022	Presentation in the Statement of Financial Position	Unobservable inputs	Book value	Fair values		Effect on profit and loss	
				Favourable	Unfavourable	Favourable	Unfavourable
VISA C shares	Non-trading instruments mandatorily at fair value through profit or loss	Illiquidity	2,951	3,430	2,472	479	(479)
MFB refinancing loans	Financial liabilities designated at fair value through profit or loss	Probability of default	15,483	15,602	15,364	119	(119)
Subsidised personal loans	Loans mandatorily at fair value through profit or loss	Probability of default	772,094	773,281	770,911	1,187	(1,183)
Subsidised personal loans	Loans mandatorily at fair value through profit or loss	Operational costs	772,094	777,898	769,012	5,804	(3,082)
Subsidised personal loans	Loans mandatorily at fair value through profit or loss	Demography	772,094	774,528	769,544	2,434	(2,550)
Russian government bonds	Trading securities at fair value through other comprehensive income	Credit risk	37,580	50,468	24,692	12,888	(12,888)
Ukrainian government bonds	Trading securities at fair value through other comprehensive income	Credit risk	26,571	26,571	26,571	-	-
Loans mandatorily at fair value through profit or loss	Loans mandatorily at fair value through profit or loss	Probability of default	454,164	454,383	453,945	219	(219)
Loans mandatorily at fair value through profit or loss	Loans mandatorily at fair value through profit or loss	Operational costs	<u>454,164</u>	<u>459,950</u>	<u>448,558</u>	<u>5,786</u>	<u>(5,606)</u>
Total			<u>3,307,195</u>	<u>3,336,111</u>	<u>3,281,069</u>	<u>28,916</u>	<u>(26,126)</u>
2021	Presentation in the Statement of Financial Position	Unobservable	Book value	Fair values		Effect on profit and loss	
				Favourable	Unfavourable	Favourable	Unfavourable
VISA C shares	Non-trading instruments mandatorily at fair value through profit or loss	Illiquidity	5,891	6,704	5,078	813	(813)
MFB refinancing loans	Financial liabilities designated at fair value through profit or loss	Probability of default	19,095	19,218	18,972	123	(123)
Subsidised personal loans	Loans mandatorily at fair value through profit or loss	Probability of default	635,416	639,006	631,855	3,590	(3,561)
Subsidised personal loans	Loans mandatorily at fair value through profit or loss	Operational costs	635,416	647,291	623,933	11,875	(11,483)
Subsidised personal loans	Loans mandatorily at fair value through profit or loss	Demography	635,416	635,484	635,387	68	(29)
Ukrainian government bonds	Trading securities at fair value through other comprehensive income	Credit risk	55,475	55,475	55,475	-	-
Loans mandatorily at fair value through profit or loss	Loans mandatorily at fair value through profit or loss	Probability of default	405,819	406,368	405,272	549	(547)
Loans mandatorily at fair value through profit or loss	Loans mandatorily at fair value through profit or loss	Operational costs	<u>405,819</u>	<u>412,873</u>	<u>399,025</u>	<u>7,054</u>	<u>(6,794)</u>
Total			<u>2,798,347</u>	<u>2,822,419</u>	<u>2,774,997</u>	<u>24,072</u>	<u>(23,350)</u>

NOTE 48: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

48.4. Fair value levels [continued]

The effect of unobservable inputs on fair value measurement [continued]

The favourable and unfavourable effects of using reasonably possible alternative assumptions for the valuation of Visa C shares have been calculated by modifying the discount rate used for the valuation by +/-12% as being the best estimates of the management as at 31 December 2022 and 31 December 2021 respectively.

In the case of Hungarian Development Bank (“MFB”) refinancing loans and subsidised personal loans the Bank calculated the favourable and unfavourable effects of using reasonably possible alternative assumptions by modifying the rates of probability of default by +/- 20% as one of the most significant unobservable inputs.

In case of subsidised personal loans operational cost and factors related to demography are considered as unobservable inputs to the applied fair value calculation model in addition to credit risk.

The Bank calculated the favourable and unfavourable effects of using reasonably possible alternative assumptions by modifying the rates of operational costs by +/- 20% as one of the most significant unobservable inputs.

In case of subsidised personal loans cash flow estimation are based on assumption related to the future number of childbirths performed by the debtors both in the current and the comparative period. According to the assumptions used in comparative period 15% of the debtors will not fulfill the conditions of the subsidy determined by the government after 5 years (“breach of conditions”), thereby debtors will be obliged to pay back the interest subsidy given in advance. Furthermore, in this case subsidised loans are converted to loans provided based on market conditions. Loans are prepaid by the government as part of the subsidy after the second and the third childbirth following the signatory of the loan contract. The Bank calculated the favourable and unfavourable effects of using reasonably possible alternative assumptions by modifying the demographical assumption of breach of conditions by +/- 5% as the most significant unobservable input in the cash flow estimation.

For the year ended 31 December 2022 the Bank used a new and more detailed model for cash flow calculations of the subsidised personal loans. The new model uses more scenarios compared to the previous one. These scenarios based on the above-mentioned events (child births after signatory and breach of conditions) and also the event of divorce. The model uses public statistical information for these events to estimate. The Bank calculated the favourable and unfavourable effects of using reasonably possible alternative assumptions by modifying the demographical assumption of future child births by +/-5% as one of the most significant unobservable inputs in the cash flow estimation.

The favourable and unfavourable effects of using reasonably possible alternative assumptions for the valuation of FVOCI securities have been calculated by modifying the discount rate used for the valuation by +/-15% and +/- 1% as being the best estimates of the management as at 31 December 2022 and 2021 respectively.

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn)

The Group distinguishes business and geographical segments. The report on the base of the business and geographical segments is reported below.

The reportable segments of the Group on the base of IFRS 8 are as the follows:

OTP Core Hungary, Russia, Ukraine, Bulgaria, Romania, Serbia, Croatia, Montenegro, Albania, Moldova, Slovenia, Merkantil Group, Asset Management subsidiaries, Other subsidiaries and Corporate Center.

OTP Core is an economic unit for measuring the result of core business activity of the Group in Hungary. Financials for OTP Core are calculated from the partially Consolidated Financial Statements of the companies engaged in the Group's underlying banking operation in Hungary. These companies include OTP Bank Hungary Plc, OTP Mortgage Bank Ltd., OTP Building Society Ltd., OTP Factoring Ltd., OTP Financial Point Ltd., and companies providing intragroup financing. The Bank Employee Stock Ownership Plan Organization was included from the fourth quarter of 2016; OTP Card Factory Ltd., OTP Facility Management Llc., Monicomp Ltd. and OTP Real Estate Lease Ltd. were included from the first quarter of 2017 (from the first quarter of 2019 OTP Real Estate Lease Ltd. was eliminated from OTP Core); OTP Mobile Service Llc., OTP Inगतlanpont Llc. were included from the first quarter of 2019, OTP Ecosystem Ltd. (previous name: OTP eBIZ Ltd.) from the first quarter of 2020 and OTP Home Solutions Ltd. was included from the second quarter of 2021. The consolidated accounting results of these companies are segmented into OTP Core and Corporate Centre. The latter is a virtual entity.

Within the Group, the Corporate Centre acts as a virtual entity established by the equity investment of OTP Core for managing the wholesale financing activity for all the subsidiaries within the Group but outside OTP Core. Therefore, the balance sheet of the Corporate Centre is funded by the equity and intragroup lending received from OTP Core, the intragroup lending received from other subsidiaries, and the subordinated debt and senior notes arranged by OTP under its running EMTN program.

From this funding pool, the Corporate Centre is to provide intragroup lending to, and hold equity stakes in OTP subsidiaries outside OTP Core. Main subsidiaries financed by Corporate Centre are as follows: Hungarians: Merkantil Bank Ltd, OTP Real Estate Lease Ltd, OTP Fund Management Ltd, OTP Real Estate Investment Fund Management Ltd, OTP Life Annuity Ltd; foreigners: banks, leasing companies, factoring companies.

The results of foreign factoring companies (OTP Factoring Ukraine LLC, OTP Factoring SRL, OTP Factoring Bulgaria LLC, OTP Factoring Serbia d.o.o., and OTP Debt Collection d.o.o. (formerly known as: OTP Factoring Montenegro d.o.o.), as well as the foreign leasing companies are included into the relevant foreign bank's segment.

The Other subsidiaries include, among others: OTP Real Estate Ltd., OTP Life Annuity Ltd, OTP Funds Servicing and Consulting Ltd.

The reportable business and geographical segments of the Group are those components where:

- separated income and expenses, assets and liabilities can be identified and assignable to the segments,
- transactions between the different segments were eliminated,
- the main decisive board of the Group regularly controls the operating results,
- separated financial information is available.

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Adjustments

Goodwill / investment impairment and their tax shield effect:

According to the accounting standards the effect of the goodwill impairment of JSC “OTP Bank” (Russia) was HUF 67,714 million in the first quarter of 2022, which equals to the original RUB 9,395 million amount and the historic FX rate at the time of entry. However, due to the change in RUB exchange rate against HUF until the booking of the goodwill impairment, there was a revaluation gain of HUF 26,848 million booked directly against equity. Thus, the goodwill impairment’s net impact on the shareholders’ equity was HUF (40,866) million (before tax).

Furthermore, in the first quarter of 2022 investment impairment was booked in relation to the Russian, Ukrainian and Moldovan subsidiary banks. The impairments themselves are eliminated on consolidated level, therefore they do not have an effect for the consolidated profit or loss, but their positive tax shield is still recognized in the consolidated profit or loss (+HUF 11,400 million effect).

In the third quarter of 2022 HUF 1.8 billion corporate tax effect emerged in the wake of the impairment booked in relation to the revaluation of the subsidiary investment in OTP Mortgage Bank.

In the fourth quarter of 2022 HUF (4.8) billion corporate tax effect emerged due to the reversal of impairment booked mainly in relation to the revaluation of the investment in the Russian and Serbian subsidiaries.

As at 31 December 2021 HUF 39,546 million impairment was booked on the investment in OTP Bank Romania S.A. on which HUF 3,559 million positive tax effect was recognized, HUF 9,906 million impairment release was booked on OTP Banka Srbija a.d. on which HUF 892 million negative tax effect was recognized, 16,628 million impairment release was booked on Crnogorska komercijalna banka a.d. on which HUF 1,496 million negative tax effect was recognized, 8,463 million impairment was booked on Monicomp Ltd. on which HUF 763 million positive tax effect was recognized.

Special taxes on financial institutions (after income tax):

The after-tax effect of the special tax on financial institutions payable in Hungary since 2010 reached HUF 20.2 billion for full-year 2022, the whole amount was booked in the first quarter. Furthermore, for 2022 the after-tax burden of the windfall tax (announced by the Hungarian Government on 4 June and payable temporarily in 2022 and 2023) was HUF 67.9 billion, accounted for in a lump sum in the second quarter. Thirdly, the newly introduced special tax on certain companies in Croatia was booked in the fourth quarter of 2022 with an after-tax effect of HUF (3.2) billion.

Effect of acquisitions (after income tax):

The following main items appeared on this line in the period under review: the integration costs of the acquired banks and other direct effects related to the acquisitions (such as customer base value amortisation).

Moratorium one-off effect:

During the term of the moratorium OTP Bank accrues the unpaid interest in its statement of recognized income, amongst the revenues. At the same time, due to the fact that interest cannot be charged on the unpaid interest, and the unpaid interest will be repaid later, in the course of 2020, 2021 and 2022 altogether HUF 44.1 billion one-off after tax loss emerged in Hungary.

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Adjustments [continued]

Impairments on Russian government bonds at OTP Core and DSK Bank:

As at 31 December 2022 the face value of Russian government bonds held by OTP Bank and DSK Bank comprised HUF 135.7 billion.

During the first quarter those exposures were shifted into the Stage 3 category, and altogether HUF 38.3 billion impairments were recognized in the course of 2022 (mainly in the first quarter) in relation to those exposures, resulting in an after-tax negative effect of HUF 34.8 billion.

Also, the fair value of those exposures that are measured at fair value was reduced through a negative fair value adjustment recognized within the comprehensive income statement. As a combined effect of the above two factors, the net book value of these Russian bonds held by OTP Bank in Hungary and DSK Bank in Bulgaria stood at HUF 62 billion.

Effect of the liquidation of Sberbank Hungary:

The liquidation of Sberbank Hungary resulted in an after-tax effect of HUF (10.4) billion. In the second quarter the Hungarian Group members were obliged to pay HUF 28.5 billion extraordinary contribution to the National Deposit Insurance Fund. At the same time this amount was offset by the expected recovery from the already completed sale of Sberbank's assets.

Interest rate cap Hungary:

For the period between 1 January and 30 June 2022 the Hungarian Government introduced an interest rate cap for variable-rate retail mortgage loans, and for housing purposes financial leasing contracts, too. Pursuant to Government Decree, the Government extended the interest rate cap by an additional 6 months, that is until 31 December 2022. The expected one-off effect of the extension of the interest rate cap amounted to HUF (10.1) billion (after tax) and was booked in the second quarter of 2022. On 22 October 2022 the Government announced that starting from 15 November until 30 June 2023, the reference rate of certain MSE loans will also be capped and the provisions shall be applied to HUF denominated, non-subsidized, floating rate loans to micro and small enterprises and financial lease contracts, excluding overdraft loan agreements. The expected negative after tax effect of the measures taken in October 2022 amounted to HUF 26.4 billion and was accounted for in the fourth quarter of 2022 in one sum.

Explanation to the segments in the following table below:

3; 4; 6: The segments distinguished by geographical basis contain banks in that country and sometimes other financial institutions (like leasing or factoring companies) or other companies. The incomes mainly arises from providing financial services like: collecting deposits, granting loans, leasing and treasury activities, payment and investment services and other financial services.

7: Merkantil Group conducts leasing activities in Hungary, originates its income from providing leasing services (financing cars and production equipment).

8: Incomes arising in this segment is mainly fee income of fund management companies in Hungary, Bulgaria, Romania, Ukraine based on capital in investment funds or assets in funds.

9: The activities of other Hungarian and foreign subsidiaries are very divergent, so their income also originates from different sources. The main part of the income in the Other subsidiaries segment comes from the activities of OTP Funds Servicing and Consulting, OTP Real Estate, OTP Real Estate Fund Management and PortfoLion Funds.

10: Net interest income of Corporate Centre includes interest expense on liabilities and interest income on assets allocated into this segment.

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below:

As at 31 December 2022

Main components of the consolidated statement of profit or loss in HUF million	OTP Group - in the consolidated statement of profit or loss - structure of accounting reports a	Adjustments on the accounting in Recognized Income b	OTP Group - in the consolidated statement of profit or loss - structure of management reports 1=a+b
Profit after income tax for the year from continued and discontinued operations	347,081		347,081
Profit after income tax for the year from discontinued operations	11,444		11,444
Profit after income tax for the year from continued operations	335,637		335,637
Adjustments (total)		(245,468)	(245,468)
Dividends and net cash transfers (after income tax)		1,927	1,927
Goodwill /investment impairment (after income tax)		(59,254)	(59,254)
Special tax on financial institutions (after income tax)		(91,353)	(91,353)
Effect of acquisition (after income tax)		(15,594)	(15,594)
Expected one-off negative effect of the debt repayment moratorium in Hungary (after income tax)		(2,473)	(2,473)
Result of the treasury share swap agreement at OTP Core (after income tax)		3,028	3,028
Loss allowance on Russian government bonds at OTP Core and DSK Bank (after income tax)		(34,775)	(34,775)
Effect of the winding up of Sberbank Hungary (after income tax)		(10,389)	(10,389)
Expected one-off effect of the extension of the interest rate cap for certain retail loans in Hungary (after income tax)		(36,585)	(36,585)

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2022 [continued]

Main components of the consolidated statement of profit or loss in HUF million	OTP Group - in the consolidated statement of profit or loss - structure of accounting reports	Adjustments on the accounting in Recognized Income	OTP Group - in the consolidated statement of profit or loss - structure of management reports	Hungarian segment and other foreign subsidiaries not reported in "Foreign bank segment" subtotal (without adjustments)	Foreign banks in EU subtotal (without adjustments)	Foreign banks not in EU subtotal (without adjustments)	Eliminations and adjustments
	a	b	1=a+b; 1=2+3+4+5	2	3	4	5
Consolidated adjusted profit after income tax for the year	335,637	256,911	592,548	304,293	189,617	92,869	5,769
Profit before income tax	394,888	295,134	690,022	353,561	217,950	110,918	7,593
Adjusted operating profit	734,658	138,957	873,615	361,426	232,797	278,563	829
Adjusted total income	1,709,806	(48,107)	1,661,699	759,142	446,844	470,700	(14,987)
Adjusted net interest income	1,091,314	2,265	1,093,579	448,001	303,256	341,577	745
Adjusted net profit	-	-	-	-	-	-	-
from fees and commissions	600,360	(203,242)	397,118	207,941	113,606	78,675	(3,104)
Adjusted other net non-interest income	18,132	152,870	171,002	103,200	29,982	50,448	(12,628)
Adjusted other administrative expenses	(975,148)	187,064	(788,084)	(397,716)	(214,047)	(192,137)	15,816
Personnel expenses	(402,563)	6,259	(396,304)	(179,651)	(108,850)	(108,716)	913
Depreciation and amortization	(107,588)	22,925	(84,663)	(46,891)	(18,928)	(18,482)	(362)
Other general expenses	(464,997)	157,880	(307,117)	(171,174)	(86,269)	(64,939)	15,265
Gains from derecognition of financial assets at amortized cost	(1,655)	-	(1,655)	(7,342)	1,746	3,933	8
Modification loss	(39,997)	40,822	825	-	20	805	-
Total risk costs	(298,118)	115,355	(182,763)	(523)	(16,613)	(172,383)	6,756
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	(210,458)	70,929	(139,529)	34,015	(9,672)	(163,792)	(80)
Goodwill impairment	(67,715)	67,715	-	-	-	-	-
Other impairment (adjustment)	(19,945)	(23,289)	(43,234)	(34,538)	(6,941)	(8,591)	6,836
from this: Adjusted impairment under IAS 36	(4,185)	888	(3,297)	(1,356)	(774)	(1,166)	(1)
Income tax	(59,251)	(38,223)	(97,474)	(49,268)	(28,333)	(18,049)	(1,824)
Total Assets	32,804,210	-	32,804,210	21,275,751	12,650,295	6,452,844	(7,574,680)
Total Liabilities	29,481,898	-	29,481,898	17,337,096	11,104,567	5,452,540	(4,412,305)

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2022 [continued]

Main components of the consolidated statement of profit or loss in HUF million [continued]	Hungarian segment and other foreign subsidiaries not reported in "Foreign bank segment" subtotal (without adjustments) 2=6+...+10	OTP CORE (Hungary) 6	Merkantil Group (Hungary) 7	Asset Management subsidiaries 8	Other subsidiaries 9	Corporate Centre 10
Consolidated adjusted profit after income tax for the year	304,293	253,230	10,971	9,619	27,505	2,968
Profit before income tax	353,561	296,670	12,616	10,870	29,982	3,423
Adjusted operating profit	361,426	299,378	13,945	10,955	33,725	3,423
Adjusted total income	759,142	642,591	24,780	15,799	70,921	5,051
Adjusted net interest income	448,001	412,611	22,537	32	7,770	5,051
Adjusted net profit						
from fees and commissions	207,941	176,830	921	15,242	14,948	-
Adjusted other net non-interest income	103,200	53,150	1,322	525	48,203	-
Adjusted other administrative expenses	(397,716)	(343,213)	(10,835)	(4,844)	(37,196)	(1,628)
Personnel expenses	(179,651)	(157,512)	(5,371)	(2,905)	(13,752)	(111)
Depreciation and amortization	(46,891)	(40,536)	(1,462)	(251)	(4,640)	(2)
Other general expenses	(171,174)	(145,165)	(4,002)	(1,688)	(18,804)	(1,515)
Gains from derecognition of financial assets at amortized cost	(7,342)	(7,198)	(144)	-	-	-
Modification loss	-	-	-	-	-	-
Total risk costs	(523)	4,490	(1,185)	(85)	(3,743)	-
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	34,015	34,925	(939)	-	29	-
Goodwill impairment	-	-	-	-	-	-
Other impairment (adjustment)	(34,538)	(30,435)	(246)	(85)	(3,772)	-
from this: Adjusted impairment under IAS 36	(1,356)	(58)	(18)	14	(1,294)	-
Income tax	(49,268)	(43,440)	(1,645)	(1,251)	(2,477)	(455)
Total Assets	21,275,751	15,758,292	948,735	29,916	690,628	3,848,180
Total Liabilities	17,337,096	13,742,272	891,144	11,180	293,169	2,399,331

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2022 [continued]

Main components of the consolidated statement of profit or loss in HUF million [continued]	Foreign banks in EU subtotal (without adjustments) 3=11+...+14	DSK Bank AD (Bulgaria) 11	OTP banka d.d. (Croatia) 12	SKB Banka d.d. (Slovenia) 13	OTP Bank Romania S.A. (Romania) 14
Consolidated adjusted profit after income tax for the year	189,617	119,884	42,801	23,859	3,073
Profit before income tax	217,950	132,564	52,095	29,569	3,722
Adjusted operating profit	232,797	142,393	48,973	24,046	17,385
Adjusted total income	446,844	230,844	102,001	51,403	62,596
Adjusted net interest income	303,256	145,461	70,547	33,688	53,560
Adjusted net profit					
from fees and commissions	113,606	68,755	24,692	15,416	4,743
Adjusted other net non-interest income	29,982	16,628	6,762	2,299	4,293
Adjusted other administrative expenses	(214,047)	(88,451)	(53,028)	(27,357)	(45,211)
Personnel expenses	(108,850)	(41,946)	(27,020)	(15,278)	(24,606)
Depreciation and amortization	(18,928)	(7,831)	(4,845)	(1,671)	(4,581)
Other general expenses	(86,269)	(38,674)	(21,163)	(10,408)	(16,024)
Gains from derecognition of financial assets at amortized cost	1,746	1,249	578	-	(81)
Modification loss	20	-	-	20	-
Total risk costs	(16,613)	(11,078)	2,544	5,503	(13,582)
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	(9,672)	(12,251)	6,564	7,028	(11,013)
Goodwill impairment	-	-	-	-	-
Other impairment (adjustment)	(6,941)	1,173	(4,020)	(1,525)	(2,569)
from this: Adjusted impairment under IAS 36	(774)	(367)	122	(53)	(476)
Income tax	(28,333)	(12,680)	(9,294)	(5,710)	(649)
Total Assets	12,650,295	5,946,815	3,224,955	1,790,944	1,687,581
Total Liabilities	11,104,567	5,167,720	2,834,372	1,596,100	1,506,375

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2022 [continued]

Main components of the consolidated statement of profit or loss in HUF million [continued]	Foreign banks not in EU subtotal (without adjustments) 4=15+...+20	OTP banka Srbija a.d. (Serbia) 15	OTP Bank JSC (Ukraine) 16	JSC "OTP Bank" (Russia) and Touch Bank 17	Crnogorska komercijalna banka a.d. (Montenegro) 18	Banka OTP Albania SHA (Albania) 19	OTP Bank S.A. (Moldova) 20
Consolidated adjusted profit after income tax for the year	92,869	36,873	(15,923)	42,548	9,792	10,174	9,405
Profit before income tax	110,918	42,991	(13,205)	46,180	11,976	12,187	10,789
Adjusted operating profit	278,563	58,543	79,862	98,137	15,134	9,335	17,552
Adjusted total income	470,700	104,523	110,805	178,494	28,816	20,232	27,830
Adjusted net interest income	341,577	76,635	90,007	118,004	20,832	16,927	19,172
Adjusted net profit							
from fees and commissions	78,675	17,954	12,673	35,251	7,106	3,067	2,624
Adjusted other net non-interest income	50,448	9,934	8,125	25,239	878	238	6,034
Adjusted other administrative expenses	(192,137)	(45,980)	(30,943)	(80,357)	(13,682)	(10,897)	(10,278)
Personnel expenses	(108,716)	(23,342)	(18,170)	(50,404)	(6,529)	(4,318)	(5,953)
Depreciation and amortization	(18,482)	(3,342)	(2,570)	(8,712)	(1,711)	(1,023)	(1,124)
Other general expenses	(64,939)	(19,296)	(10,203)	(21,241)	(5,442)	(5,556)	(3,201)
Gains from derecognition of financial assets at amortized cost	3,933	1,300	286	3,284	(80)	(671)	(186)
Modification loss	805	2,062	(1,245)	-	(12)	-	-
Total risk costs	(172,383)	(18,914)	(92,108)	(55,241)	(3,066)	3,523	(6,577)
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	(163,792)	(17,783)	(89,877)	(54,330)	731	3,176	(5,709)
Goodwill impairment		-	-	-	-	-	-
Other impairment (adjustment)	(8,591)	(1,131)	(2,231)	(911)	(3,797)	347	(868)
from this: Adjusted impairment under IAS 36	(1,166)	(151)	(33)	(263)	(677)	-	(42)
Income tax	(18,049)	(6,118)	(2,718)	(3,632)	(2,184)	(2,013)	(1,384)
Total Assets	6,452,844	2,708,993	1,048,713	1,029,721	664,395	635,364	365,658
Total Liabilities	5,452,540	2,350,873	926,221	723,417	565,264	574,537	312,228

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2021

Main components of the consolidated statement of profit or loss in HUF million	OTP Group - in the consolidated statement of profit or loss - structure of accounting reports a	Adjustments on the accounting in Recognized Income b	OTP Group - in the consolidated statement of profit or loss - structure of management reports 1=a+b
Profit after income tax for the year from continued and discontinued operations	456,428		456,428
Profit after income tax for the year from discontinued operations	116		116
Profit after income tax for the year from continued operations	456,312		456,312
Adjustments (total)		(40,475)	(40,475)
Dividends and net cash transfers (after income tax)		729	729
Goodwill /investment impairment (after income tax)		1,909	1,909
Bank tax on financial institutions (after income tax)		(18,893)	(18,893)
Effect of acquisition (after income tax)		(15,506)	(15,506)
Expected one-off negative effect of the debt re-payment moratorium in Hungary (after income tax)		(15,040)	(15,040)
Result of the treasury share swap agreement at OTP Core (after income tax)		6,326	6,326

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2021 [continued]

Main components of the consolidated statement of profit or loss in HUF million	OTP Group - in the consolidated statement of profit or loss - structure of accounting reports	Adjustments on the accounting in Recognized Income	OTP Group - in the consolidated statement of profit or loss - structure of management reports	Hungarian segment and other foreign subsidiaries not reported in "Foreign bank segment" subtotal (without adjustments)	Foreign banks in EU subtotal (without adjustments)	Foreign banks not in EU subtotal (without adjustments)	Eliminations and adjustments
	a	b	1=a+b; 1=2+3+4+5	2	3	4	5
Consolidated adjusted profit after income tax for the year	456,312	44,071	500,383	240,838	131,309	124,272	3,964
Profit before income tax	528,435	62,899	591,334	284,803	152,663	148,419	5,449
Adjusted operating profit	597,770	61,589	659,359	299,431	178,192	183,171	(1,435)
Adjusted total income	1,345,382	(33,290)	1,312,092	632,013	356,257	335,934	(12,112)
Adjusted net interest income	874,310	9,702	884,012	392,588	237,745	252,782	897
Adjusted net profit							
from fees and commissions	442,174	(116,626)	325,548	177,034	90,092	63,699	(5,277)
Adjusted other net non-interest income	28,898	73,634	102,532	62,391	28,420	19,453	(7,732)
Adjusted other administrative expenses	(747,612)	94,879	(652,733)	(332,582)	(178,065)	(152,763)	10,677
Personnel expenses	(340,684)	483	(340,201)	(163,957)	(91,350)	(85,606)	712
Depreciation and amortization	(94,996)	22,180	(72,816)	(42,088)	(16,383)	(13,966)	(379)
Other general expenses	(311,932)	72,216	(239,716)	(126,537)	(70,332)	(53,191)	10,344
Gains from derecognition of financial assets at amortized cost	1,885	(1)	1,884	(1,791)	1,814	1,862	(1)
Modification loss	(13,672)	10,131	(3,541)	(3,397)	(14)	(130)	-
Total risk costs	(57,548)	(8,820)	(66,368)	(9,440)	(27,329)	(36,484)	6,885
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	(47,645)	7,809	(39,836)	2,010	(23,973)	(21,918)	4,045
Other impairment (adjustment)	(9,903)	(16,629)	(26,532)	(11,450)	(3,356)	(14,566)	2,840
from this: adjusted impairment under IAS 36	(9,903)	437	(9,466)	(6,190)	(3,001)	(274)	(1)
Income tax	(72,123)	(18,828)	(90,951)	(43,965)	(21,354)	(24,147)	(1,485)
Total Assets ¹	27,551,338	-	27,551,338	18,637,440	10,075,267	5,183,118	(6,344,487)
Total Liabilities	24,516,618	-	24,516,618	14,861,117	8,680,440	4,316,145	(3,341,084)

¹ Relating to the discontinued operations the assets were HUF 2,046 million.

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2021 [continued]

Main components of the consolidated statement of profit or loss in HUF million [continued]	Hungarian segment and other foreign subsidiaries not reported in "Foreign bank segment" subtotal (without adjustments) 2=6+...+10	OTP CORE (Hungary) 6	Merkantil Group (Hungary) 7	Asset Management subsidiaries 8	Other subsidiaries 9	Corporate Centre 10
Consolidated adjusted profit after income tax for the year	240,838	213,378	7,998	6,321	10,254	2,887
Profit before income tax	284,803	253,972	8,916	7,138	11,777	3,000
Adjusted operating profit	299,431	256,151	11,961	7,141	23,938	240
Adjusted total income	632,013	545,185	23,291	11,064	51,213	1,260
Adjusted net interest income	392,588	369,309	20,680	4	1,335	1,260
Adjusted net profit						
from fees and commissions	177,034	150,578	116	10,786	15,554	-
Adjusted other net non-interest income	62,391	25,298	2,495	274	34,324	-
Adjusted other administrative expenses	(332,582)	(289,034)	(11,330)	(3,923)	(27,275)	(1,020)
Personnel expenses	(163,957)	(143,234)	(4,654)	(2,443)	(13,531)	(95)
Depreciation and amortization	(42,088)	(36,926)	(1,428)	(231)	(3,501)	(2)
Other general expenses	(126,537)	(108,874)	(5,248)	(1,249)	(10,243)	(923)
Gains from derecognition of financial assets at amortized cost	(1,791)	(1,598)	(193)	-	-	-
Modification loss	(3,397)	(3,397)	-	-	-	-
Total risk costs	(9,440)	2,816	(2,852)	(3)	(12,161)	2,760
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	2,010	4,910	(2,900)	-	-	-
Other impairment (adjustment)	(11,450)	(2,094)	48	(3)	(12,161)	2,760
from this: adjusted impairment under IAS 36	(6,190)	70	179	(14)	(6,425)	-
Income tax	(43,965)	(40,594)	(918)	(817)	(1,523)	(113)
Total Assets	18,637,440	14,205,354	782,222	27,753	512,742	3,109,369
Total Liabilities	14,861,117	12,195,467	722,976	12,610	236,701	1,693,363

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2021 [continued]

Main components of the consolidated statement of profit or loss in HUF million [continued]	Foreign banks in EU subtotal (without adjustments) 3=11+...+14	DSK Bank AD (Bulgaria) 11	OTP banka d.d. (Croatia) 12	SKB Banka d.d. (Slovenia) 13	OTP Bank Romania S.A. (Romania) 14
Consolidated adjusted profit after income tax for the year	131,309	76,789	33,446	16,822	4,252
Profit before income tax	152,663	85,243	41,064	20,660	5,696
Adjusted operating profit	178,192	106,240	43,421	19,595	8,936
Adjusted total income	356,257	178,470	88,735	42,354	46,698
Adjusted net interest income	237,745	112,869	60,933	27,673	36,270
Adjusted net profit					
from fees and commissions	90,092	54,508	18,183	13,258	4,143
Adjusted other net non-interest income	28,420	11,093	9,619	1,423	6,285
Adjusted other administrative expenses	(178,065)	(72,230)	(45,314)	(22,759)	(37,762)
Personnel expenses	(91,350)	(34,284)	(23,111)	(13,015)	(20,940)
Depreciation and amortization	(16,383)	(7,160)	(4,392)	(1,350)	(3,481)
Other general expenses	(70,332)	(30,786)	(17,811)	(8,394)	(13,341)
Gains from derecognition of financial assets at amortized cost	1,814	1,893	1,449	-	(1,528)
Modification loss	(14)	-	-	(14)	-
Total risk costs	(27,329)	(22,890)	(3,806)	1,079	(1,712)
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	(23,973)	(20,831)	318	1,833	(5,293)
Other impairment (adjustment)	(3,356)	(2,059)	(4,124)	(754)	3,581
from this: adjusted impairment under IAS 36	(3,001)	(2,401)	(135)	-	(465)
Income tax	(21,354)	(8,454)	(7,618)	(3,838)	(1,444)
Total Assets	10,075,267	4,627,132	2,576,445	1,433,206	1,438,484
Total Liabilities	8,680,440	3,927,757	2,225,422	1,253,691	1,273,570

() used at: provisions, impairment and expenses

NOTE 49: SEGMENT REPORTING BY BUSINESS AND GEOGRAPHICAL SEGMENTS (in HUF mn) [continued]

Information regarding the Group's reportable segments is presented below [continued]:

As at 31 December 2021 [continued]

Main components of the consolidated statement of profit or loss in HUF million [continued]	Foreign banks not in EU subtotal (without adjustments) 4=15+...+20	OTP banka Srbija a.d. (Serbia) 15	OTP Bank JSC (Ukraine) 16	JSC "OTP Bank" (Russia) and Touch Bank 17	Crnogorska komercijalna banka a.d. (Montenegro) 18	Banka OTP Albania SHA (Albania) 19	OTP Bank S.A. (Moldova) 20
Consolidated adjusted profit after income tax for the year	124,272	32,104	39,025	37,624	4,139	5,521	5,859
Profit before income tax	148,419	35,714	47,267	47,314	4,956	6,507	6,661
Adjusted operating profit	183,171	40,754	54,761	62,368	10,240	7,212	7,836
Adjusted total income	335,934	83,493	83,567	118,158	22,046	13,398	15,272
Adjusted net interest income	252,782	62,497	62,051	91,364	16,553	10,619	9,698
Adjusted net profit							
from fees and commissions	63,699	14,410	14,494	25,728	4,880	1,843	2,344
Adjusted other net non-interest income	19,453	6,586	7,022	1,066	613	936	3,230
Adjusted other administrative expenses	(152,763)	(42,739)	(28,806)	(55,790)	(11,806)	(6,186)	(7,436)
Personnel expenses	(85,606)	(22,569)	(16,580)	(33,773)	(5,805)	(2,794)	(4,085)
Depreciation and amortization	(13,966)	(2,820)	(2,131)	(6,263)	(1,461)	(559)	(732)
Other general expenses	(53,191)	(17,350)	(10,095)	(15,754)	(4,540)	(2,833)	(2,619)
Gains from derecognition of financial assets at amortized cost	1,862	554	916	467	(31)	(33)	(11)
Modification loss	(130)	-	(130)	-	-	-	-
Total risk costs	(36,484)	(5,594)	(8,280)	(15,521)	(5,253)	(672)	(1,164)
Adjusted loss allowance on financial assets and liabilities (without the effect of revaluation of FX)	(21,918)	(941)	(6,613)	(13,542)	677	(847)	(652)
Other impairment (adjustment)	(14,566)	(4,653)	(1,667)	(1,979)	(5,930)	175	(512)
from this: adjusted impairment under IAS 36	(274)	(245)	(3)	24	(51)	1	-
Income tax	(24,147)	(3,610)	(8,242)	(9,690)	(817)	(986)	(802)
Total Assets	5,183,118	2,224,715	983,557	799,965	513,522	350,848	310,511
Total Liabilities	4,316,145	1,918,085	823,801	559,241	431,495	315,713	267,810

() used at: provisions, impairment and expenses

NOTE 50: ASSET CLASSIFIED AS HELD-FOR-SALE AND DISCONTINUED OPERATIONS (in HUF mn)

Discontinued operation

The Serbian Pevec d.o.o. Beograd company as the investment of OTP Factoring Ltd. was classified as asset held-for-sale by the Group as at 31 December, 2021. This investment was not revalued in the Consolidated Financial Statements. Classification as asset held-for-sale was needed due to the purchase agreement had been concluded already in 2021 for the real estates in the ownership of Pevec. In the first half year of 2022, the purchase price was paid out and the transfer of ownership happened. The purchase price of the sold real estate was EUR 9,918,995. the estimated value of those real estates which weren't sold was defined in the amount of EUR 300,000 by a value assessment in January 2021. These assets which were classified as held-for-sale in the amount of HUF 2,046 million at the end of 31 December 2021 were eliminated during the first half year of 2022 from these Consolidated Financial Statements.

Asset classified as held-for-sale

On 2 November 2022, the Group sold its share in the associated company Szállás.hu Zrt. to the Polish Wirtualna Polska Media S.A. The whole company was sold for EUR 83 million. The Group's gain recognized in the year under review related to the transaction was HUF 10,458 million, which is presented in the Other income.

NOTE 51: SIGNIFICANT EVENTS DURING THE YEAR ENDED 31 DECEMBER 2022

1) Term Note Program

See details in Note 21.

2) Purchase of the majority stake in the Uzbek Ipoteka Bank

On 12 December 2022 OTP Bank signed a purchase and sale contract for the purchase of the majority stake of Ipoteka Bank and its subsidiaries with the Ministry of Finance of the Republic of Uzbekistan. OTP Bank will purchase 100% of the shares held by the Ministry of Finance of the Republic of Uzbekistan (nearly 97% total shareholding) in two steps: 75% of the shares now and the remaining 25% three years after the financial closing of the first transaction. Ipoteka Bank is the fifth largest bank in Uzbekistan, with a market share of 8.5% based on total assets on 1 October 2022, with more than 1.6 million retail customers and a significant corporate clientele. The financial closure of the first transaction is expected in the second quarter of 2023 subject to obtaining all the necessary regulatory approvals.

3) Joint venture company in China

On 2 June 2022 OTP Bank Plc executed transaction agreements with its partners to establish a consumer finance joint venture company as a greenfield investment in China, with a 15% shareholding.

4) Special taxes on financial institutions

Pursuant to Government Decree No. 197/2022 published on 4 June 2022, the Hungarian Government decided to impose a windfall tax on credit institutions and financial enterprises temporarily, that is for 2022 and 2023.

As for 2022, the base of the windfall tax is the net revenues based on the 2021 financial statements, calculated according to local tax law, whereas the tax rate is 10%.

The after-tax effect of the special tax on financial institutions payable in Hungary since 2010 reached HUF 20.2 billion for full-year 2022, the whole amount was booked in the first quarter. Furthermore, for 2022 the after-tax burden of the windfall tax was HUF 67.9 billion, accounted for in a lump sum in the second quarter. Thirdly, the newly introduced special tax on certain companies in Croatia was booked in the fourth quarter of 2022 with an after-tax effect of HUF (3.2) billion.

5) Maturity of OTP MOL Swap

The amended final maturity of the share swap agreement concluded with MOL Plc (“MOL”) on 16 April 2009 – whereby OTP has exchanged 24.000.000 OTP ordinary shares for 5.010.501 (from 28 September 2017 for 40.084.008) „A” series MOL ordinary shares – is 11 July 2027, until which each party can initiate cash or physical settlement of the transaction.

6) Prolongation of deadline of loan moratorium and interest rate cap

See details in Note 4.

7) Interest benchmark reform

The Group was actively involved in industry efforts supporting transition to IBOR alternatives. The Group has taken extensive steps to prepare for the discontinuation of IBORs and worked closely with clients to ensure awareness and support transition activities. As the transition is complex, time-consuming process and relevant for the whole Group, the management of Group has evaluated the impacts of the interest rate benchmarks reform, preparing itself for the transition through a dedicated internal group-wide project. As LIBOR’s five currencies (USD, GBP, EUR, JPY and CHF) and EONIA will be replaced by Risk Free Rates – which are different in nature compared to IBOR rates – OTP Group has implemented the relevant rates into the IT systems and reached out the clients. The Group’s priority was to ensure that the Group can continue to offer clients the products and services they need, while also supporting them in the transition to the new alternative Risk-Free Rates.

NOTE 51: SIGNIFICANT EVENTS DURING THE YEAR ENDED 31 DECEMBER 2022 [continued]**7) Interest benchmark reform [continued]**

During the IBOR reform the Group identified several risks at the beginning of 2021, which the project had to manage and monitor closely. These risks include but are not limited to the following:

- The abolition of LIBOR affected several transactions that may require automated IT solutions,
- The new reference rates are different in nature from LIBOR that cause difficulties to settle the value differences with the customers,
- It was necessary to implement new processes not to develop LIBOR based products, and to develop a strategy for removing or modifying the affected products handled by the Group,
- After the termination of LIBOR, the Group has to act under the "Fallback clauses", the clauses that regulate the replacement of the reference interest rates in the contract and the use of an alternative interest as a reference. The content of these clauses needs to be clearly defined and checked from a business point of view, ie which reference interest rate will be applied instead of LIBOR for the given contract and whether it is commercially appropriate. In defining the fallback clauses, efforts had to be made to provide a viable alternative to the termination of LIBOR that would not result in a business loss for the Group.
- Legal risks related to the termination of LIBOR. Such risks can arise when Fallback clauses are not included in the contracts, or the law governing the contract doesn't contain a statutory reference rate. In these cases, the contracts can be cancelled due to impossibility or the termination by either party.
- Missing of contractual interest rates can result in settlement disputes, compensation cases or litigation.
- Business risks of the termination of LIBOR. The most significant of these are:
 - the law governing the contract can set the applicable interest rate that can be result in a business loss for the Group,
 - business loss due to negative customer experience,
 - operational risk, when several unique contracts must be handled in a short time.

Terminating interest rates

LIBOR USD¹ (1 week and 2 months settings), FedFund Rate
 LIBOR GBP
 LIBOR JPY
 LIBOR EUR
 LIBOR CHF²
 EONIA

Alternative Reference Rates

SOFR
 SONIA
 TONA
 EURIBOR
 SARON
 €STR

¹ The following USD LIBOR settings will be terminated after June 30, 2023: overnight and 1, 3, 6 and 12 Months. The affected USD LIBOR contracts will be handled on an ongoing basis until the remaining USD LIBOR settings' cessation date.

² In the case of CHF LIBOR, OTP Bank acts in accordance with the implementing regulation of the European Commission ([https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C\(2021\)7488&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C(2021)7488&from=EN)).

Amounts effected by IBOR reform as at 31 December 2022

Reference rate	Type of the contract	Nominal value of the contract	Pieces of contracts
USD LIBOR	Loan	139,883	2,299
USD LIBOR	Deposit	27,697	43
USD LIBOR	Derivatives	451,042	113
Other LIBOR	Loan	16,065	1,293
Other LIBOR	Derivatives	25,593	4
Other LIBOR	Bonds (assets)	5,319	1
Total		<u>665,599</u>	<u>3,753</u>

The above LIBOR-based amounts outstanding as at 31 December 2022 will be managed at the next first interest period therefore they do not cause a risk to the Group or to the customers.

NOTE 51: SIGNIFICANT EVENTS DURING THE YEAR ENDED 31 DECEMBER 2022 [continued]

8) Risk relating to the Russian-Ukrainian armed conflict

On 24 February 2022 Russia launched a military operation against Ukraine which is still ongoing at the date of this Report. Until now many countries, as well as the European Union imposed sanctions due to the armed conflict on Russia and Russian businesses and citizens. Russia responded to these sanctions with similar measures.

The armed conflict and the international sanctions influence the business and economic activities significantly all around the world. There are a number of factors associated with the Russian-Ukrainian armed conflict and the international sanctions as well as their impact on global economies that could have a material adverse effect on (among other things) the profitability, capital and liquidity of financial institutions such as the OTP Group.

The armed conflict and the international sanctions cause significant economic damage to the affected parties and in addition they cause disruptions in the global economic processes, of which the precise consequences (inter alia the effects on energy and grain markets, the global transport routes and international trade as well as tourism) are difficult to be estimated at the moment.

It remains unclear how this will evolve through 2022 and the OTP Group continues to monitor the situation closely. However, the OTP Group's ability to conduct business may be adversely affected by disruptions to its infrastructure, business processes and technology services. This may cause significant customer detriment, costs to reimburse losses incurred by the OTP Group's customers, and reputational damage.

Furthermore, the OTP Group relies on models to support a broad range of business and risk management activities, including informing business decisions and strategies, measuring and limiting risk, valuing exposures, conducting stress testing and assessing capital adequacy. Models are, by their nature, imperfect and incomplete representations of reality because they rely on assumptions and inputs, and as such assumptions may later potentially prove to be incorrect, this can affect the accuracy of their outputs. This may be exacerbated when dealing with unprecedented scenarios, such as the Russian-Ukrainian armed conflict and the international sanctions, due to the lack of reliable historical reference points and data.

Any and all such events mentioned above could have a material adverse effect on the OTP Group's business, financial condition, results of operations, prospects, liquidity, capital position and credit ratings, as well as on the OTP Group's customers, employees and suppliers.

NOTE 52: POST BALANCE SHEET EVENTS

Summary of economic policy measures made and other relevant regulatory changes as post-balance sheet events

In the section below, the measures and developments which have been made since the balance sheet date, and – in OTP Bank's view – are relevant and have materially influenced / can materially influence the operation of the Group members.

OTP Bank excludes any liability for the completeness and accuracy of the measures presented herein.

Hungary

- On 4 January 2023 OTP Bank announced that the National Bank of Hungary imposed the below additional capital requirements for OTP Group, on consolidated level, effective from 1 January 2023 until the next review:
 - 1.13%-points in case of the Common Equity Tier1 (CET1) capital, accordingly the minimum requirement for the consolidated CET1 ratio is 5.63% (without regulatory capital buffers);
 - 1.50%-points in case of the Tier1 capital, accordingly the minimum requirement for the consolidated Tier1 ratio is 7.50% (without regulatory capital buffers);
 - 2.00%-points in case of the Total SREP Capital Requirement (TSCR), accordingly the minimum requirement for the consolidated capital adequacy ratio is 10.00% (without regulatory capital buffers).
- On 23 January 2023 the Ministry of Economic Development announced that the Gábor Baross Reindustrialization Loan Programme will be launched from February by Eximbank, with a total available amount of HUF 700 billion. Under the scheme, the HUF and EUR denominated loans will be available for all purposes, depending on the loan amount either through commercial banks or directly through Eximbank, but all the funding need will be provided or refinanced by Eximbank. The interest rate of the loans will be fixed throughout the whole tenor and will be typically maximum 6% in the case of HUF loans and maximum 3.5% in the case of EUR loans.
- On 24 January 2023 the National Bank of Hungary kept the reference rates unchanged. The NBH held a long-term deposit tender on 25 January, and from 1 February discount bill auctions are held on a weekly basis. The NBH said that it will continue to meet foreign currency liquidity needs in the coming months to reach market balance related to the energy account. Furthermore, the Deputy Governor announced that effective from April the mandatory reserve requirement for banks will be increased from 5% to 10%.
- On 27 January 2023 S&P Global Ratings lowered the long- and short-term foreign and local currency sovereign credit ratings on Hungary to 'BBB-/A-3' from 'BBB/A-2'. The outlook on the long-term ratings is stable.
- According to the press release published on 30 January 2023 by S&P Global Ratings, the rating agency downgraded its long- and short-term issuer credit ratings, as well as the long- and short-term resolution counterparty ratings on OTP Bank Plc and OTP Mortgage Bank Ltd. to 'BBB-/A-3' from 'BBB/A-2', and the senior preferred debt rating of OTP Bank Plc was also downgraded by one notch to 'BBB-'. The outlook on the long-term issuer ratings is stable.
- The financial completion of the transaction to purchase 100% shareholding of Nova KBM d.d. and its subsidiary in Slovenia – after obtaining all necessary regulatory approvals – has been completed on 6 February 2023.
- According to the press release published on 6 February 2023 by Moody's Investors Service, the rating agency concluded the ratings review initiated in July 2021. The rating agency downgraded OTP Bank's subordinated bond rating by one notch to 'Ba2' from 'Ba1'. All other ratings and assessments of OTP Bank have been affirmed. Outlook is stable.
- At the same time, Moody's Investors Service downgraded the backed long-term domestic currency issuer rating of OTP Mortgage Bank to 'Baa3' from 'Baa2'. All other ratings and assessments of OTP Mortgage Bank have been affirmed. Outlook is stable.
- On 15 February 2023 as value date OTP Bank issued Tier 2 Notes in the aggregate nominal amount of USD 650 million. The Tier 2 Notes with 10.25 years maturity, redeemable at par any time during the 3-month period prior to the Reset Date at 5.25 years, were priced on 8 February 2023.

NOTE 52: POST BALANCE SHEET EVENTS [continued]

Summary of economic policy measures made and other relevant regulatory changes as post-balance sheet events [continued]

Bulgaria

- On 17 February 2023 the Minister of Finance announced that the originally planned accession date to the Eurozone of 1 January 2024 will be postponed. The new target date will be declared by the new Parliament formed after the elections scheduled to 2 April.

Serbia

- On 12 January 2023 the central bank hiked the base rate by 25 bps to 5.25%.
- On 9 February 2023 the central bank hiked the base rate by 25 bps to 5.5%.

Slovenia

- On 2 February 2023 the ECB hiked its key interest rate by 50 bps to 3.0%.
- On 7 February 2023 Moody's upgraded the deposit rating of NKBM to 'A3', the outlook is stable. At the same time, the Bank's unsecured non-preferred debt rating was upgraded to 'Baa3'.

Romania

- On 20 January 2023 the central bank hiked the base rate by 25 bps to 7%.

Russia

- Effective from 1 January 2023 the capital conservation buffer in Russia decreased temporarily to 0% from 2.5%, which does not affect the minimum requirement for OTP Group.

Ukraine

- Effective from 1 January 2023 the Ukrainian central bank raised the mandatory reserve requirement for local and foreign currency denominated deposits by 5-5 pps each, to 5% and 15%, respectively.
- On 10 February 2023 Moody's downgraded the Ukrainian sovereign credit rating from 'Caa' to 'Ca', the outlook is stable.

Moldova

- On 7 February 2023 Moldova's central bank cut its key rate to 17% from 20%.