OTP BANK PLC.

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

FOR THE YEAR ENDED
31 DECEMBER 2022

OTP BANK PLC.

CONTENTS

OTP BANK PLC.
SEPARATE 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 Bank of Hungary	5.	1,092,198	474,945
Placements with other banks	6.	2,899,829	2,567,212
Repo receivables	7.	246,529	33,638
Financial assets at fair value through profit or loss	8.	410,012	246,462
Financial assets at fair value through other comprehensive income	9.	797,175	641,939
Securities at amortised cost	10.	3,282,373	3,071,038
Loans at amortised cost	11.	4,825,040	4,032,465
Loans mandatorily measured at fair value through profit or loss	11.	793,242	662,012
Investments in subsidiaries	12.	1,596,717	1,573,008
Property and equipment	13.	94,564	81,817
Intangible assets	13.	69,480	62,161
Right of use assets		39,882	17,231
Investment properties	14.	4,207	4,328
Deferred tax assets	34.	35,742	-
Current tax assets	34.	1,569	-
Derivative financial assets designated as hedge accounting relationships	15.	47,220	17,727
Other assets	16.	329,752	224,488
TOTAL ASSETS		**16,565,531**	**13,710,471**
Amounts due to banks and deposits from the National Bank of Hungary and other banks	17.	1,736,128	1,051,203
Repo liabilities	18.	408,366	86,580
Deposits from customers	19.	11,119,158	9,948,532
Leasing liabilities		41,464	17,932
Liabilities from issued securities	20.	498,709	22,153
Financial liabilities designated at fair value through profit or loss	21.	16,576	20,133
Derivative financial liabilities designated as held for trading	22.	373,401	192,261
Derivative financial liabilities designated as hedge accounting relationships	23.	50,623	18,690
Deferred tax liabilities	34.	-	1,507
Current tax liabilities	34.	3,199	4,776
Provisions	24.	29,656	21,527
Other liabilities	24.	313,188	238,437
Subordinated bonds and loans	25.	294,186	271,776
TOTAL LIABILITIES		**14,884,654**	**11,895,507**
Share capital	26.	28,000	28,000
Retained earnings and reserves	27.	1,655,601	1,845,836
Treasury shares	28.	(2,724)	(58,872)
TOTAL SHAREHOLDERS' EQUITY		**1,680,877**	**1,814,964**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**16,565,531**	**13,710,471**

Budapest, 31 March 2023

Dr. Sándor Csányi
Chairman and Chief Executive Officer

László Wolf
Deputy Chief Executive Officer

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

	Note	Year ended 31 December 2022	Year ended 31 December 2021
Interest Income:			
Interest income calculated using the effective interest method	29.	721,679	302,373
Income similar to interest income	29.	377,231	105,663
Interest income and similar to interest income total		**1,098,910**	**408,036**
Interest Expense:			
Interest expenses total	29.	**(802,020)**	**(155,491)**
NET INTEREST INCOME		**296,890**	**252,545**
Loss allowance on loan, placement and repo receivables losses	6., 7., 11., 30.	(47,687)	(38,841)
Loss allowance on securities at fair value through other comprehensive income and on securities at amortised cost	9., 10., 30.	(53,238)	(1,484)
Provision for loan commitments and financial guarantees given	24., 30.	(5,541)	(130)
Change in the fair value attributable to changes in the credit risk of loans mandatorily measured at fair value through profit of loss	45.4.	11,872	(16,255)
Risk cost total		**(94,594)**	**(56,710)**
NET INTEREST INCOME AFTER RISK COST		**202,296**	**195,835**
LOSSES ARISING FROM DERECOGNITION OF FINANCIAL ASSETS MEASURED AT AMORTISED COST		**(56,195)**	**(2,700)**
MODIFICATION LOSS	4.	**(14,856)**	**(7,017)**
Income from fees and commissions	31.	362,444	300,803
Expenses from fees and commissions	31.	(66,087)	(52,276)
NET PROFIT FROM FEES AND COMMISSIONS		**296,357**	**248,527**
Foreign exchange gains and (losses)	32.	541	(5,638)
(Losses) and gains on securities, net	32.	(10,605)	2,104
Losses on financial instruments at fair value through profit or loss	32.	(18,790)	(6,494)
Net results on derivative instruments and hedge relationships	32.	9,917	3,436
Dividend income	32.	194,526	99,037
Other operating income	33.	13,775	11,265
Other operating expenses	33.	(131,942)	(41,636)
NET OPERATING INCOME		**57,422**	**62,074**
Personnel expenses	33.	(154,303)	(136,126)
Depreciation and amortization	33.	(46,738)	(40,692)
Other administrative expenses	33.	(290,989)	(178,611)
OTHER ADMINISTRATIVE EXPENSES		**(492,030)**	**(355,429)**
PROFIT BEFORE INCOME TAX		**(7,006)**	**141,290**
Income tax	34.	13,638	(15,951)
PROFIT AFTER INCOME TAX		**6,632**	**125,339**
Earnings per share (in HUF)			
Basic	43.	24	455
Diluted	43.	24	455

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

	Note	Year ended 31 December 2022	Year ended 31 December 2021
PROFIT AFTER INCOME TAX		**6,632**	**125,339**
Items that may be reclassified subsequently to profit or loss:			
Fair value adjustment of debt instruments at fair value through other comprehensive income		(55,804)	(37,163)
Deferred tax (9%) related to fair value adjustment of debt instruments at fair value through other comprehensive income	34.	5,186	3,410
Gains / (Losses) on separated currency spread of financial instruments designated as hedging instrument		(4,887)	1,681
Deferred tax (9%) related to (losses) / gains on separated currency spread of financial instruments designated as hedging instrument	34.	440	(151)
(Losses) / Gains on derivative financial instruments designated as cash flow hedge		(5,641)	(6,307)
Items that will not be reclassified to profit or loss:			
Gains on equity instruments at fair value through other comprehensive income		2,675	-
Fair value adjustment of equity instruments at fair value through other comprehensive income		61	1,407
Deferred tax (9%) related to equity instruments at fair value through other comprehensive income	34.	(41)	(281)
Total		**(58,011)**	**(37,404)**
TOTAL COMPREHENSIVE INCOME		**(51,379)**	**87,935**

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

	Note	Share Capital	Capital reserve	Retained earnings and other reserves	Treasury Shares	Total
Balance as at 1 January 2021		**28,000**	**52**	**1,697,081**	**(46,799)**	**1,678,334**
Net profit for the period		-	-	125,339	-	125,339
Other comprehensive income		-	-	(37,404)	-	(37,404)
Total comprehensive income		**-**	**-**	**87,935**	**-**	**87,935**
Share-based payment	39.	-	-	3,589	-	3,589
Payments to ICES holders		-	-	(3,734)	-	(3,734)
Increase due to termination of ICES bonds		-	-	75,422	-	75,422
Sale of treasury shares	28.	-	-	-	264,360	264,360
Acquisition of treasury shares	28.	-	-	-	(276,433)	(276,433)
Loss on treasury shares	28.	-	-	(15,543)	-	(15,543)
Other transaction with owners		**-**	**-**	**59,734**	**(12,073)**	**47,661**
Balance as at 1 January 2022		**28,000**	**52**	**1,845,784**	**(58,872)**	**1,814,964**
Net profit for the period		-	-	6,632	-	6,632
Other movement		-	-	2	-	2
Other comprehensive income		-	-	(58,011)	-	(58,011)
Total comprehensive income		**-**	**-**	**(51,377)**	**-**	**(51,377)**
Share-based payment	39.	-	-	2,948	-	2,948
Sale of treasury shares	28.	-	-	-	72,416	72,416
Acquisition of treasury shares	28.	-	-	-	(16,268)	(16,268)
Loss on sale of treasury shares		-	-	(21,558)	-	(21,558)
Dividend for the year 2021		-	-	(120,248)	-	(120,248)
Other transaction with owners		**-**	**-**	**(138,858)**	**56,148**	**(82,710)**
Balance as at 31 December 2022		**28,000**	**52**	**1,655,549**	**(2,724)**	**1,680,877**

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

	Note	2022	2021
OPERATING ACTIVITIES			
Profit before income tax		**(7,006)**	**141,290**
Net accrued interest		(11,196)	(2,205)
Depreciation and amortization	13.	46,873	40,784
Loss allowance on loans and placements	30.	63,939	38,841
Loss allowance on securities at fair value through other comprehensive income	9.	25,615	(551)
Impairment loss / (Reversal of impairment loss) on investments in subsidiaries	12.	93,513	27,420
Loss allowance on securities at amortised cost	10.	27,623	2,035
Loss allowance / (Release of loss allowance) on other assets	16.	2,939	(961)
Provision on off-balance sheet commitments and contingent liabilities	24.	7,598	1,473
Share-based payment	39.	2,948	3,589
Unrealised losses on fair value adjustment of financial instruments at fair value through profit or loss	45.	11,870	23,051
Unrealised losses / (gains) on fair value adjustment of derivative financial instruments	45.	52,840	30,962
Gains on securities	32.	62,354	6,212
Interest expense from leasing liabilities	35.	(1,186)	(214)
Foreign exchange loss	32.	9,359	35,136
Proceeds from sale of tangible and intangible assets	33.	(267)	82
Net changing in assets and liabilities in operating activities			
Net increase in placements with other banks and repo receivables before allowance for placement losses	6., 7.	(521,731)	(879,438)
Changes in held for trading securities	8.	(44,181)	(24,178)
Change in financial instruments mandatorily measured at fair value through profit or loss	8.	1,925	6,687
Changes in derivative financial instruments at fair value through profit or loss	8.	136	(1,303)
Net increase in loans	11.	(817,297)	(835,520)
Increase in other assets, excluding advances for investments and before provisions for losses	16.	(99,813)	(49,201)
Net increase in amounts due to banks and deposits from the National Bank of Hungary and other banks and repo liabilities	17., 18.	910,984	224,661
Financial liabilities designated as fair value through profit or loss	21.	(1,625)	(1,853)
Net increase in deposits from customers	19.	971,640	1,989,941
Increase in other liabilities	24.	77,424	114,259
Net increase in the compulsory reserve established by the National Bank of Hungary	5.	(641,125)	(23,270)
Dividend income	12.	(194,526)	(99,037)
Income tax paid		(19,953)	(15,259)
Net cash provided by operating activities		**9,674**	**753,433**

SEPARATE STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2022 (in HUF mn) [continued]

	Note	2022	2021
INVESTING ACTIVITIES			
Purchase securities at fair value through other comprehensive income	9.	(1,322,153)	(850,030)
Proceeds from sale of securities at fair value through other comprehensive income	9.	1,074,212	1,081,372
Change in derivative financial instruments designated as hedge accounting		13,805	1,341
Increase in investments in subsidiaries	12.	(117,222)	(51,456)
Decrease in investments in subsidiaries	12.	-	-
Dividend income		194,449	98,091
Increase in securities at amortised cost	10.	(624,476)	(1,253,830)
Redemption of securities at amortised cost	10.	415,975	214,963
Additions to property, equipment and intangible assets	13.	(60,575)	(46,081)
Disposal of property, equipment and intangible assets	13.	648	529
Net (increase) / decrease in investment properties	14.	(14)	(2,484)
Net cash used in investing activities		**(425,351)**	**(807,585)**
FINANCING ACTIVITIES			
Leasing payments		(6,189)	(5,136)
Cash received from issuance of securities	20.	575,994	5,897
Cash used for redemption of issued securities	20.	(91,635)	(9,051)
Cash received from issuance of subordinated bonds and loans	25.	6,781	1,874
Cash used for redemption of subordinated bonds and loans	25.	(7,523)	(35,518)
Payments to ICES holders	27.	-	(3,735)
Increase of Treasury shares	28.	(16,268)	(276,433)
Decrease of Treasury shares	28.	50,858	248,819
Dividends paid	27.	(120,213)	(10)
Net cash provided by financing activities		**391,805**	**(73,293)**
Net decrease in cash and cash equivalents		**(23,872)**	**(127,445)**
Cash and cash equivalents at the beginning of the year		375,642	503,087
Cash and cash equivalents at the end of the year		**351,770**	**375,642**
Interest received		*941,406*	*345,504*
Interest paid		*511,635*	*98,395*

NOTE 1: ORGANIZATION AND BASIS OF FINANCIAL STATEMENTS

1.1. General information

OTP Bank Plc. ("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, Nádor Street, Budapest 1051. Internet homepage: http://www.otpbank.hu/

Signatory of the separate financial statements is the Chief Executive Officer, dr. Sándor Csányi and Deputy Chief Executive Officer, László Wolf.

The Bank’s owners have the power to amend the separate financial statements after issue if applicable.

These financial statements are authorised for issue on 31 March 2023 by the Board of Directors.

Responsible person for the control and management of accounting services: Zoltán Tuboly (Budapest), Managing Director of Accounting and Financial Directorate, Registration Number: 177289, IFRS qualified chartered accountant.

Due to Hungarian legislation audit services are statutory 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.

Audit service fee agreed by the Annual General Meeting of the Bank for the year ended 2022 is an amount of HUF 165 million + VAT.

All other fees charged by the Auditor for non-audit services during the financial year are disclosed in the consolidated financial statements of the Bank.

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 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	-	1%
Total	**100%**	**100%**

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 provides a full range of commercial banking services through a nationwide network of 352 branches in Hungary.

	2022	**2021**
Number of employees	10,317	10,078
Average number of employees	10,516	9,934

1.2. Basis of accounting

These Separate Financial Statements were prepared based on the assumption of the Management that the Bank will remain in business for the foreseeable future. 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 Bank maintains its accounting records and prepares their statutory accounts in accordance with the commercial, banking and fiscal regulations prevailing in Hungary.

The presentation and functional currency of the Bank is the Hungarian Forint ("HUF").

The separate financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as adopted by the European Union (“EU”).

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

1.2.1. The effect of adopting new and revised IFRS 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.
  - **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 have 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 these Separate Financial Statements.

1.2.2. New and revised Standards and Interpretations issued by IASB and adopted by the EU but 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 with 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.
- **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) – *IFRS 17 is not relevant in case of these Separate Financial Statements*
- **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) – *IFRS 17 is not relevant in case of these Separate Financial Statements.*
- **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 applicaton 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.

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 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 date of publication of these 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 applicaton 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.
- **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 with 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 recognise 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 recognising, 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 Bank anticipates that the adoption of these new standards, amendments to the existing standards and new interpretations will have no material impact on the financial statements of the Bank in the period of initial application.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies applied in the preparation of the accompanying separate financial statements are summarized below:

2.1. Basis of presentation

These separate 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 Bank does not offset assets and liabilities or income and expenses unless it is required or permitted by an IFRS standard.

During the preparation of separate 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 below 2.8.)

The presentation of separate financial statements in conformity with IFRS requires the Management of the Bank to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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. 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 separate financial statements.

2.2. Foreign currency translation

Monetary assets and liabilities denominated in foreign currencies are translated into HUF that is the presentation currency, at exchange rates quoted by the National Bank of Hungary ("NBH") as at the date of the separate financial statements. Income and expenses arising in foreign currencies are converted at the rate of exchange on the transaction date. Resulting foreign exchange gains or losses are recorded to the separate statement of profit or loss.

2.3. Consolidated financial statements

These financial statements present the separate financial position and results of operations of the Bank. Consolidated financial statements are prepared by the Bank and consolidated net profit for the year and shareholders' equity differs significantly from that presented in these separate financial statements. See Note 2.4 for the description of the method of accounting for investments in subsidiaries and associated companies in these separate financial statements. The consolidated financial statements and the separate financial statements will be published on the same date.

2.4. Investments in subsidiaries, associated companies and other investments

Investments in subsidiaries comprise those investments where OTP Bank, through direct and indirect ownership interest, controls the investee. Control is achieved when the Bank has power over the investee, is exposed or has rights, to variable returns from its involvement with the investee and has the ability to use its power to affect its returns.

Investments in subsidiaries are recorded at the cost of acquisition, less impairment for permanent diminution in value, when appropriate. After initial measurement investments in subsidiaries are measured at cost, in the case of foreign currency denominated investments for the measurement the Bank uses the exchange rate at the date of transaction.

Impairment is determined based on the future economic benefits of the subsidiary and macroeconomic factors.

OTP Bank 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 Bank defines the impairment need on investment in subsidiaries based on the strategic factors and financial data of its cash-generating units.

OTP Bank in its strategic plan has taken into consideration the cautious recovery of global economic situation and outlook, the associated risks and their possible effect on the financial sector as well as the current and expected availability of wholesale funding.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

2.5. Securities at amortised cost

The Bank 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 Bank initially recognises these securities at fair value. Securities at amortised 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 recognised 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 Government bonds and corporate bonds.

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. Unrealised gains and losses on held for trading securities are recognized in profit or loss and are included in the separate statement of profit or loss for the period. The Bank holds held for trading securities within the business model to obtain short-term gains, consequently realised and unrealised gains and losses are recognized in the net operating income, while interest income is recognised in income similar to interest income. The Bank applies FIFO[1] inventory valuation method for securities held for trading. Such securities consist of discounted and interest bearing Treasury bills, Hungarian Government bonds, mortgage bonds, shares in non-financial commercial companies, shares in investment funds, shares in venture capital funds and shares in financial institutions.

2.6.2. Derivative financial instruments

In the normal course of business, the Bank 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 Bank 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. OTP Bank adopts 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 OTP Bank has almost its entire 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 separate 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 risk management positions of the Bank, 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 separate 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 forward contracts does not represent the actual market or credit risk associated with these contracts.

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

[1] First In First Out

2.6.2 Derivative financial instruments [continued]

Foreign exchange swaps and interest rate swaps

The Bank enters into foreign-exchange swap and interest rate swap ("IRS") transactions. The swap transaction is a complex agreement concerning the swap of certain financial instruments, which usually consists of a spot and one or more forward contracts.
Interest rate swaps obligate 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 interest rate swaps.
Such notional principal amounts are often used to express the volume of these transactions but are not actually exchanged between the counterparties. The Bank's interest rate swap contracts can be hedging or held for trading contracts.

Cross-currency interest rate swaps

The Bank 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. At this kind of deals the parties – in accordance with the foreign exchange prices – revalue the notional amount during lifetime of the transaction.

Equity and commodity swaps

Equity swaps obligate two parties to exchange more payments calculated with reference 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 Bank 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 counter-parties. The Bank's forward rate agreements were transacted for management of interest rate exposures.

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

In the case of a financial instrument measured at amortised cost the Bank 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 adjustmets of the carrying amount are amortised to the profit or loss using the effective interest rate method. The Bank starts the amortisation when the hedged item is no longer adjusted by the hedging gains or losses. If the hedged item is derecognised, the Bank recognises the unamortised fair value in profit or loss immediately.

Derivative financial instruments designated as fair value

Changes in the fair value of derivatives that are designated and qualify as hedging instruments fair value hedges and that prove to be highly effective in relation to the hedged risk, are recorded in the separate 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 the hedging instrument in fair value hedges are charged directly to the separate statement of profit or loss. The conditions of hedge accounting applied by the Bank are the following: formally designated as hedging relationship, proper hedge documentation is prepared, effectiveness test is performed and based on it the hedge is qualified as effective.

2.7. Hedge accounting [continued]

Derivative financial instruments designated as fair value [continued]

For the fair value hedges inefficiencies and the net revaluation of hedged and hedging item are recognised in the Net result on derivative instruments and hedge relationships.

Derivative financial instruments designated as cash flow hedge

Changes in 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 hedged risk are recognized as reserve in other comprehensive income. Amounts deferred in other comprehensive income are transferred to the separate statement of profit or loss and classified as revenue or expense in the periods during which the hedged assets and liabilities effect the separate statement of recognized and comprehensive income for the period. The ineffective element of the hedge is charged directly to the separate statement of profit or loss. The Bank terminates the hedge accounting if the hedging instrument expires or is sold, terminated, or exercised, or the hedge no longer meets the criteria for hedge accounting. In case of cash flow hedges - in line with the standard – hedge accounting is still applied as long as the underlying asset is derecognised or terminated.

When the Bank 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.

2.7. Offsetting

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

2.8. 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 or is measured at fair value but changes in fair value are recognised 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 Bank 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 Bank 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.

2.9. Securities at fair value through other comprehensive income ("FVOCI securities")

FVOCI securities are held within a business model whose objective is achieved by both collecting of contractual cash flows and selling securities. Furthermore contractual terms of FVOCI securities give rise on specified dates to cash flows that are solely payment of principal and interest on the principal amount outstanding.

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. Unrealised gains and losses on FVOCI financial instruments are recognized in other comprehensive income, except for interest and foreign exchange gains/losses on monetary items, unless such FVOCI security is part of an effective hedge. Such gains and losses will be reported when realised in profit or loss for the applicable period. The Bank applies FIFO[2] inventory valuation method for FVOCI securities.

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.

FVOCI securities are remeasured at fair value based on quoted prices or values 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 the future cash flows and the fair value of any unquoted equity instruments are calculated using the EPS ratio.

Fair value through other comprehensive income option for equity instruments

In some cases the Bank made an irrevocable election at initial recognition for certain non-trading investments in an equity instrument to present subsequent changes in fair value of these securities in 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 Bank.

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

The Bank measures Loans, placements with other banks and repo receivables at amortised cost, 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. The Bank recognises loans, which are not held for trading and do not give rise 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 ("FVTPL loans").

Loans, placements with other banks and repo receivables are accounted at amortised 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 FVTPL loans fees and charges are recognised when incurred in the separate statement of profit or loss.

Loans, placements with other banks and repo receivables loans are derecognised when the contractual rights to the cash flows expire or they are transferred. When a financial asset is derecognised the difference of the carrying amount and the consideration received is recognised in the profit or loss. In case of the above mentioned financial assets at amortised cost gains or losses from derecognition are presented in "Gains/losses arising from derecognition of financial assets at amortised cost" line. In case of FVTPL loans gains or losses from derecognition are presented in "Net operating income".

Change in the fair value of FVTPL loans is broken down into two components and presented in the separate 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 of loss".
- The remaining component of the change is presented in fair value within "Net operating income" as "Gains/(Losses) on financial instruments at fair value through profit or loss".

[2] First In First Out

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES [continued]

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

Initially, financial assets shall be recognised at fair value which is usually equal to the 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 Bank recognises the initial fair value difference in the Separate 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 recognised in profit or loss when the instrument is derecognised 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.

Allowance for losses on loans, placements with other banks and repo receivables represent management assessment for potential losses in relation to these activities.

The Bank recognises 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 Bank 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 Bank under the contract and the cash flows that the Bank 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 Bank recalculate 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 recognised as a “Modification gain or loss” in the statement of profit or loss. Interest income and amortised cost are accounted for using the 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 “Loss allowance on loan, placement and repo receivables losses” in the Statement of Profit or loss.

OTP Bank applies partial or full write-off for loans based on the definitions and prescriptions of financial instruments in accordance with IFRS 9. If OTP Bank 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.

If there are reasonable expectations of recovery for a financial asset that is written-off fully or partially, OTP Bank shall re-estimate cash flows of a financial asset and write-off reversal is applied in the financial statements.

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

Modification of contractual cash flows

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 separate statement of profit or loss. Modification gain or loss is accounted in cases like restructuring – as defined in internal policies of the Bank – 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 Bank 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 Bank 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 unamortised fees of the derecognised asset should be presented as Income similar to interest income. The newly recognised financial asset is initially measured at fair value and is placed in stage 1 if the derecognised financial asset was in stage 1 or stage 2 portfolio. The newly recognised financial asset will be purchased or originated credit impaired financial asset ("POCI") if the derecognised 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 Bank 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.

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 Bank's books.

2.11. Loss allowance

Loss Allowance for loans and placements with other banks and repo receivables are recognised by the Bank based on the expected credit loss model in accordance with IFRS 9. Based on the three stage model loss allowance is recognised in amount of 12 month expected credit loss from the initial recognition. Financial assets with significantly increased credit risk or credit impaired financial assets (based on objective evidences) loss allowance is recognised in amount of lifetime expected credit loss.

In case of purchased or originated credit impaired financial assets loss allowance is recognised in amount of lifetime expected credit loss since initial recognition. Impairment gain is recognised if lifetime expected credit loss for purchased or originated credit impaired financial assets at measurement date are less than the estimated credit loss at initial recognition.

Loss allowance for loan and placements are determined at a level that provides coverage for individually identified credit losses. Collective impairment loss is recognised for loans with similar credit risk characteristics when it is not possible to determine the amount of the individually identified credit loss in the absence of objective evidence. The expected cash flows for loan portfolios are estimated based on historical loss experience.

At subsequent measurement the Bank recognises through “Loss allowance on loan, placement and repo receivables losses” in the Statement of Profit or Loss impairment gain or loss as an amount of expected credit losses or reversal that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognised in accordance with IFRS 9.

If a financial asset, which previously classified in the first stage, classified subsequently in the second or third stage than loss allowance is adjusted to lifetime expected credit loss. If a financial asset, which previously classified in the second or third stages, classified subsequently in the first stage than loss allowance is adjusted to level of 12 month expected credit loss.

Classification into risk classes

According to the requirements of the IFRS9 standard, the Bank classifies financial assets measured at amortised cost and fair value through other comprehensive income, and loan commitments and financial guarantees into the following categories in accordance with IFRS9:

Stage 1	Performing
Stage 2	Performing, but compared to the initial recognition it shows significant increase in credit risk
Stage 3	Non-performing
POCI	Purchased or originated credit impaired

In the case of trade receivables, contract assets and lease receivables the Group applies the simplified approach and calculates only lifetime expected credit loss. 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,
- the loss allowance ratio will be the sum of the written-off amounts divided by the sum of the average balances,
- historical losses are adjusted to reflect information about current conditions and reasonable forecasts of future economic conditions,
- the loss allowance is multiplied by the end-of-year balance and it will be the actual loss allowance on these receivables,
- loss allowance should be recalculated annually.

2.12. Loss allowance [continued]

Classification into risk classes [continued]

The Bank 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 Bank considers souvereign exposures having low credit risk.

Credit risk of financial assets increases significantly at the following conditions:

- 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 household mortgage loans, the loan-to-value ratio ("LTV") exceeds a predefined rate,
- default on another loan of the retail client, if no cross-default exists,
- in case of corporate and municipal clients:
    - financial difficulty (capital requirements, liquidity, impairment of asset quality),
    - significant decrease of activity and liquidity in the market of the asset,
    - client's rating reflects higher risk, but better than default,
    - collateral value drops significantly, from which the client pays the loan,
    - more than 50% decrease in owner's equity due to net losses,
    - client under dissolution,
    - negative information from Central Credit Information System: the payment delay exceeds 30 days

Financial assets classifies as non-performing, if the following conditions are met:

- default,
- non-performing forborne exposures,
- in case of corporate and municipal clients:
    - breach of contract terms and conditions
    - critical financial difficulty of the client (capital requirements, liquidity, impairment of asset quality),
    - liquidation, dissolution or debt clearing procedures against client,
    - forced deregistration procedures from company registry,
    - terminated loans by the Bank,
    - in case of fraud,
    - negative information from Central Credit Information System: the payment delay exceeds 90 days,
    - cessation of active markets of the financial asset,
    - default of ISDA based contracts.

For lifetime expected credit losses, the Bank 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 cash flow shortfalls that will result if a default occurs in the 12 months after the reporting date (or a shorter period fi the expected life of the financial instrument is less than 12 months), weighted by the probability of that default occurring.

Expected credit losses are measured 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 of effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

2.12. Option to designate a financial asset/liability measured at fair value through profit or loss (FVTPL option)

The Bank may, at initial recognition, irrevocably designate a financial asset or liability as measured at fair value through profit or loss. The Bank may use FVTPL option in the following cases:

- if doing so eliminates or significantly reduces a measurement or recognition inconsistency (accounting mismatch) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases
- if the group of financial liabilities or assets is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the Bank's key management personnel.

The use of the fair value option is limited only to special situations, and it can be based only on direct decision of management of the Bank.

2.13. 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 statement of financial position and the consideration received is recorded in Other liabilities or Amounts due to banks and deposits from the National Bank of Hungary and other banks, or Deposits from customers. Conversely, debt or equity securities purchased under a commitment to resell are not recognized in the statement of financial position and the consideration paid is recorded either in Placements with other banks or Deposits from customers. Interest is accrued evenly over the life of the repurchase agreement. In the case of security lending transactions the Bank does not recognize or derecognize the securities because it is believed 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.

2.14. Property, equipment and intangible assets

Property, equipment and intangible assets are stated at cost, less accumulated depreciation and amortization and impairment, if any. The depreciable amount (book value less residual value) of the non-current assets must be allocated over their useful lives. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the assets based on the following annual percentages:

Intangible assets	
Software	20-33.3%
Property rights	16.7-33.3%
Property	1-2%
Office equipment and vehicles	9-33.3%

Depreciation and amortization on properties, equipment and intangible assets starts on the day when such assets are placed into service. At each balance sheet date, the Bank reviews the carrying value of its tangible and intangible assets to determine if there is any indication that those assets have suffered an impairment loss.

If 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 Bank estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Where the carrying value of property, equipment, other tangible fixed assets and intangible assets is greater than the estimated recoverable amount, it is impaired immediately to the estimated recoverable amount.

2.15. Inventories

The inventories shall be measured at the lower of cost and net realisable value. The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. The Bank uses generally FIFO formulas to the measurement of inventories. Inventories shall be removed from books when they are sold, unusable or destroyed. When inventories are sold, the carrying amount of those inventories shall be recognized as an expense in the period in which the related revenue is recognized. Repossessed assets are classified as inventories.

2.16. Investment properties

Investment properties of the Bank are land, buildings, part of buildings which are 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 Bank 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. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the assets based on the 1-2% annual percentages.

The fair value of the investment properties is established mainly by external experts. According to the opinion of the Management there is no significant difference between the fair value and the carrying value of these properties.

2.17. Financial liabilities

The financial liabilities are presented within financial liabilities at fair value through profit or loss or financial liabilities measured at amortised cost. In connection to the financial liabilities at fair value through profit or loss, the Bank presents the amount of change in their fair value originated from the changes of market conditions and business environment. 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 the case of financial liabilities measured at amortised cost, fees and commissions related to the origination of the financial liability are recognised through profit or loss during the maturity of the instrument. In certain cases the Bank 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 recognised in the statement of profit or loss and included in other operating income.

2.18. Leases

An agreement is a lease or contains a lease if it transfers the rights to control the use of an identified asset for a given period in exchange for compensation.

Expenses related to the use of lease assets, the majority of which were previously recognised in external services costs, will be currently classified as depreciation/amortisation and interest costs. Usufruct rights are depreciated using a straight line method, while lease liabilities are settled using an effective discount rate.

Recognition of lease liabilities

The Bank will recognise lease liabilities related to leases which were previously classified as "operating leases" in accordance with IAS 17 Leases. These liabilities will be measured at the present value of lease payments receivable as at the date of commencement of the application of IFRS 16. Lease payments shall be discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the incremental borrowing rate. Interest rate applied by the Bank: weighted average lessee’s incremental borrowing rate: ~1,62%

At their date of initial recognition, lease payments contained in the measurement of lease liabilities comprise the following types of payments for the right to use the underlying asset for the life of the lease:

- fixed lease payments less any lease incentives,
- variable lease payments which are dependent on market indices,
- amounts expected to be payable by the lessee under residual value guarantees,
- the strike price of a purchase option, if it is reasonably certain that the option will be exercised, and
- payment of contractual penalties for terminating the lease, if the lease period reflects that the lessee used the option of terminating the lease.

The Bank makes use of expedients with respect to short-term leases (less than 12 months) as well as in the case of leases in respect of which the underlying asset has a low value (less than HUF 1.4 million) and for which agreements it will not recognise financial liabilities nor any respective right-of-use assets. These types of lease payments will be recognised as costs using the straight-line method during the life of the lease.

2.20. Leases [continued]

Recognition of right-of-use assets

Right-of-use assets are initially measured at cost.

The cost of a right-of-use asset comprises:

- the amount of the initial measurement of lease liabilities,
- any lease payments made at or before the commencement date, less any lease incentives received,
- any initial direct costs incurred by the lessee,
- estimates of costs to be incurred by the lessee as a result of an obligation to disassemble and remove an underlying asset or to carry out renovation/restoration.

Right-of-use assets are presented separately in the financial statements.

2.20. 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.

2.21. Treasury shares

Treasury shares are shares which are purchased on the stock exchange and the over-the-counter market by the Bank and are presented in the separate statement of financial position at acquisition cost as a deduction from shareholders' equity. Gains and losses on the sale of treasury shares are recognised directly to shareholder's equity. Derecognition of treasury shares is based on the FIFO method.

2.22. Interest income, income similar to interest income and interest expense

Interest income and expenses are recognised 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 calculated without using the effective interest method and the positive fair value adjustment of interest rate swaps are also included in income similar to interest income. Interest income of FVTPL loans 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 cost and the amortisation of any discount and 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 recognised are arising from loans, placements with other banks, repo receivables, securities at fair value through other comprehensive income, securities at amortised 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 financial statements

2.23. Fees and Commissions

Fees and commissions that are not involved in the amortised cost model are recognised in the Separate Statement of Profit or Loss on an accrual basis according to IFRS 15. These fees are related to deposits, cash withdrawal, security trading, bank card, etc.

The Bank recognise income if performance obligations related to the certain goods or service 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 service, where the Bank transfer control over the asset continuously, income is recognised on accrual basis. (For more details see note 31)

The Bank 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 Separate Statement of Profit or Loss.

2.24. Dividend income

Dividend income refers to any distribution of entity's earnings to shareholders from stocks or mutual funds that is owned by the Bank. The Bank recognizes dividend income in the separate financial statements when its right to receive the payment is established.

2.25. Income tax

The Bank considers corporate income tax and local business tax and the innovation contribution as income tax in Hungary. The annual taxation charge is based on the tax payable under Hungarian fiscal law, 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 are expected to apply when the asset is realised or the liability is settled.

Deferred tax assets and liabilities are presented in a net way in the statement of financial position. Current tax asset or current tax liability is presented related to income tax and innovation contribution separately in the statement of financial position.

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

The Bank 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 Bank 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.
The Bank 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 Bank 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.

2.26. Banking tax

The Bank is obliged to pay banking tax based on Act LIX of 2006. As the calculation is not based on the taxable profit (but the adjusted Assets total calculated based on the Separate Financial Statements for the second period preceding the current tax year), banking tax is not considered as income tax. Therefore, the banking tax is considered as an other 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%.

2.27. Off-balance sheet commitments and contingent liabilities, provisions

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

Those commitments and contingent liabilities Management determines the adequacy of the provision 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 Bank recognizes a 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.

Expected credit loss model is applied for given financial guarantees and loan commitments which are under IFRS 9 the, when the provision is calculated (see more details in Note 2.12.). 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.

2.28. Share-based payment and employee benefits

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

The Bank issues equity-settled share-based payments to certain employees. Equity-settled share-based payments are measured at fair value at the grant date. The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the year, based on the Bank’s estimate of shares that will eventually vest.

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.

The Bank has applied the requirement of IAS 19 Employee Benefits. The Bank’s short-term employee benefits are wages, salaries and bonuses, premium, paid annual leave and paid sick leave and other free services (health care, reward holiday). Short-term employee benefits are expected to pay by the Bank within 12 month. These benefits are recognised as an expense and liability undiscounted in the separate financial statements.

Long-term employee benefits are mostly the jubilee reward. Long-term employee benefits are recognised as an expense and liability in the separate financial statements. Liabilities are regularly remeasured. Gains or losses due to the remeasurement are recognised in the separate statement of profit or loss.

2.29. Separate statement of cash flows

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

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

For the purposes of reporting cash flows "Cash, due from banks and balances with the NBH" line item excluding compulsory reserve are considered as cash and cash equivalents by the Bank. This line item shows balances of HUF and foreign currency cash amounts, and sight depos from NBH and from other banks, furthermore balances of current accounts.

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

2.30. Segment reporting

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

At separate level, the Management does not separate and makes decisions based on different segments; the segments are identified by the Bank only at consolidated level in line with IFRS 8 paragraph 4. At Group level the segments identified by the Bank 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 Centre.

2.31. Comparative figures

These separate financial statements are prepared in accordance with the same accounting policies in all respects as the Financial Statements prepared in accordance with IFRS as adopted by the EU for the year ended 31 December 2021

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

The presentation of separate financial statements in conformity with IFRS requires the Management of the Bank to make judgements 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 expected loss and other factors that are considered to be relevant. The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognized in the period. Actual results could differ from those estimates. Significant areas of subjective judgements include:

3.1. Loss allowance on financial instruments

The Bank regularly assesses its financial instruments for impairment. Management determines the adequacy of the 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 a new, three stage model was implemented for IFRS 9 purposes. The new impairment methodology is used to classify financial instruments in order to determine whether credit risk has significantly increased since initial recognition and able to identify credit-impaired assets. For instruments with credit-impairment or significant increase of credit risk lifetime expected losses will be recognized. (For details see note 36.1.1.)

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. for 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 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 Bank 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 recognised 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 recognised based on the credit conversion factor, which shows the proportion of the undrawn credit line that will be probably drawn.

Other provision is recognised and measured based on IAS 37 Provisions, Contingent Liabilities and Contingent Assets. The Bank is involved in a number of ongoing legal disputes. Based upon historical experience and expert reports, the Bank 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 for off-balance sheet items includes provision for litigation, provision for retirement and expected liabilities and provision for Confirmed letter of credit.

A provision is recognised by the Bank 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. Business models

A business model refers how the Bank 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 Bank 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 Bank assesses the nature, frequency and significance of any sales occurring. The Bank 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 Bank 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 Bank only manages securities.
- Business model whose objective is to achieve gains in a short term period. Within this business model the Bank 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 assessed the business model, that does not give rise to a prior error in the Bank's financial statements nor does it change the classification of the remaining financial assets held in that business model.

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

3.5. 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 Bank 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.

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 Bank 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.

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 Bank 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 BANK

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 2 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.

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 heath 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 Separate 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 February 24, 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 BANK [continued]

The principles used in the preparation of the Separate 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 Separate Financial Statements

During the preparation of these Separate Financial Statements, the Bank 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 at OTP Bank (as parent company)
2) Evaluation of Ukrainian sovereign exposures (government securities) and related reserves for expected credit losses at OTP Bank (as parent company)
3) Evaluation of derivative transactions denominated in Russian rubles
4) Evaluation of derivative transactions denominated in the Ukrainian hryvnia
5) Provisions for expected credit losses related to Russian and Ukrainian interbank claims and customer loans (following direct exposure to the Russian and Ukrainian markets, non-Russian and Ukrainian bank exposures)
6) Evaluation of investments

	Reference	**Gross value**	**Impairment**
Securities at amortized cost	1	37,103	(12,676)
Securities at fair value through other comprehensive income	1	27,415	(24,399)
Investments	6	459,960	(302,502)
TOTAL ASSETS		**524,478**	**(339,577)**

During the evaluation of these assets, the Bank 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.

NOTE 4: **MACRO-ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE BANK [continued]**

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

References

1. 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.

2. 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.

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. Provisions for expected credit losses related to Russian and Ukrainian interbank claims and customer loans (following direct exposure to the Russian and Ukrainian markets, non-Russian and Ukrainian bank exposures)

As part of the quarterly monitoring activity, the Bank has identified and analysed the secondary and tertiary negative effects of the war in the corporate segment. Changes related to the meanwhile imposed sanctions – which should have been taken into consideration at analysis - have been followed up. As part of the individual monitoring activity separate monitoring methodology and assessment were prepared for exposures above HUF 250 million as follows:

i) sectors vulnerable to the risk arising from changes of energy / interest / foreign exchange
ii) customers from sectors with high risks according to the loan policy, especially the hotel industry and real estate utilisation industry
iii) municipalities, customers owned by municipalities

Customers identified during monitoring activity were classified into Stage 2, expected credit losses were recognised at the corresponding level and amount. As at 31 December 2022 the concerning exposures (HUF 92.7 billion) had HUF 4 billion of expected credit loss, from which impairment loss was recognised in amount of HUF 3 billion.

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

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

References [continued]

5. Provisions for expected credit losses related to Russian and Ukrainian interbank claims and customer loans (following direct exposure to the Russian and Ukrainian markets, non-Russian and Ukrainian bank exposures) [continued]

When technical or objective default occured due to sanctions the affected exposures were classified into Stage 3. In these cases at least two scenarios were taken into consideration as the estimation of expected cash flows for impairment calculation. At least one scenario represents that case when significant differences occur between the expected and the contractual cash flows. Probabilities shall be allocated to represent the occurence of credit loss, even in that case when most likely there is no need to recognise impairment loss. As at 31 December 2022 gross value of the above mentioned exposures are HUF 11.3 billion and the allocated credit loss is HUF 6.9 billion.

6. Evaluation of investments

The Bank has evaluated its investments in 3 countries concerning the Russian-Ukrainian conflict based on discounted cash flows, and as a result impairment loss was recognised for the year ended 31 December 2022 as follows:

by Country	Impairment loss for the year
Ukraine	73,366
Russia	18,576
Moldova	3,163
Total	**95,105**

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

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.

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.

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

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

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 on 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).

NOTE 4: **MACRO-ENVIRONMENT, IMPACT OF ECONOMIC SITUATION ON THE BANK [continued]**

Financial assets modified during the year ended 31 December 2022

Modification due to prolongation of deadline of covid moratoria till 31 July 2022 (opt in)

Gross carrying amount before modification	79,253
Modification loss	(301)
Gross carrying amount after modification	**78,952**
Loss allowance before modification	(23,965)
Net amortised cost after modification	**54,987**

Modification due to prolongation of interest rate cap (30 June 2022)

Gross carrying amount before modification	66,133
Modification loss	(2,405)
Gross carrying amount after modification	**63,728**
Loss allowance before modification	(1,580)
Net amortised cost after modification	**62,148**

Modification due to moratoria related to agriculture and prolongation of the existing moratoria (30 September 2022)

Gross carrying amount before modification	95,560
Modification loss	(1,562)
Gross carrying amount after modification	**93,998**
Loss allowance before modification	(19,404)
Net amortised cost after modification	**74,594**

Modification due to prolongation of interest rate cap (30 November 2022)

Gross carrying amount before modification	151,318
Modification loss	(531)
Gross carrying amount after modification	**150,787**
Loss allowance before modification	(6,094)
Net amortised cost after modification	**144,693**

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

Gross carrying amount before modification	205,891
Modification loss	(10,058)
Gross carrying amount after modification	**195,833**
Loss allowance before modification	(6,915)
Net amortised cost after modification	**188,918**

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

Financial assets modified during the year ended 31 December 2021 related to covid moratorium

Modification due to prolongation of deadline of covid moratoria till 30 September 2021

Gross carrying amount before modification	668,312
Modification loss due to covid moratoria	(5,284)
Gross carrying amount after modification	**663,028**
Loss allowance before modification	(55,180)
Net amortised cost after modification	**607,848**

Modification due to prolongation of deadline of covid moratoria till 31 October 2021

Gross carrying amount before modification	665,620
Modification loss due to covid moratoria	(1,292)
Gross carrying amount after modification	**664,328**
Loss allowance before modification	(58,412)
Net amortised cost after modification	**605,916**

In 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 premoratoria personal loan interest at 11,99%. The Bank has managed this government measure as loan agreement modification in the financial statements.

Gross carrying amount before modification	57,892
Modification loss due to covid moratoria	(1,983)
Gross carrying amount after modification	**55,909**
Loss allowance before modification	(9,234)
Net amortised cost after modification	**46,675**

Modification due to prolongation of deadline of covid moratoria till 30 June 2022

Gross carrying amount before modification	82,438
Modification loss due to covid moratoria	(1,614)
Gross carrying amount after modification	**80,824**
Loss allowance before modification	(23,516)
Net amortised cost after modification	**57,308**

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.

Gross carrying amount before modification	67,108
Modification loss due to covid moratoria	(703)
Gross carrying amount after modification	**66,405**
Loss allowance before modification	(1,625)
Net amortised cost after modification	**64,780**

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

	2022	2021
Cash on hand:		
In HUF	80,809	82,839
In foreign currency	20,506	21,182
	101,315	**104,021**
Amounts due from banks and balances with National Bank of Hungary:		
Within one year:		
In HUF	739,382	81,513
In foreign currency	252,854	289,596
	992,236	**371,109**
Subtotal	**1,093,551**	**475,130**
Loss allowance	(1,353)	(185)
Subtotal	**1,092,198**	**474,945**
Average amount of compulsory reserve	740,428	99,303
Total	**351,770**	**375,642**
Rate of the compulsory reserve	6%	1%

The Bank shall deposit compulsory reserve in a determined percent of its liabilities at NBH. Liabilities considered in compulsory reserve calculation are as follows:

a) deposits and loans,
b) debt instruments,
c) repo transactions.

The amount of the compulsory reserve is the multiplication of the daily average of the liabilities considered in the compulsory reserve calculation and compulsory reserve rate, which are determined by the NBH in a specific decree. The Bank is required to complete compulsory reserve requirements in average in the second month after the reserve calculation period, requirements shall be completed once a month on the last calendar day. The Bank complies with the compulsory reserve requirements by the deposit of the adequate amount of cash as the calculated compulsory reserve on the bank account at NBH in monthly average.

Based on NBH decision compulsory reserve shall be 5%, which is effective from 1 October 2022.

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

	2022	2021
Balance as at 1 January	**185**	**-**
Loss allowance	5,023	185
Release of loss allowance	(3,813)	-
FX movement	(42)	-
Closing balance	**1,353**	**185**

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

	2022	2021
Within one year:		
In HUF	825,820	1,388,709
In foreign currency	366,574	372,361
	1,192,394	**1,761,070**
Over one year		
In HUF	1,215,114	747,871
In foreign currency	511,103	65,761
	1,726,217	**813,632**
Total placements	**2,918,611**	**2,574,702**
Loss allowance on placement losses	(18,782)	(7,490)
Total	**2,899,829**	**2,567,212**

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

	2022	2021
Balance as at 1 January	**7,490**	**5,819**
Loss allowance	27,571	20,524
Release of loss allowance	(17,026)	(18,911)
Use of loss allowance	-	(2)
FX movement	747	60
Closing balance	**18,782**	**7,490**

Interest conditions of placements with other banks (%):

	2022	2021
Placements with other banks in HUF	0%-25.7%	0% - 5.9%
Placements with other banks in foreign currency	0%-13.29%	(0.59%) - 29%
Average interest of placements with other banks	7.51%	1.63%

NOTE 7: REPO RECEIVABLES (in HUF mn)

	2022	2021
Within one year:		
In HUF	248,696	33,710
	248,696	**33,710**
Total gross amount	**248,696**	**33,710**
Loss allowance on repo receivables	(2,167)	(72)
Total repo receivables	**246,529**	**33,638**

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

	2022	2021
Balance as at 1 January	**72**	**292**
Loss allowance	4,480	449
Release of loss allowance	(2,385)	(669)
Closing balance	**2,167**	**72**

Interest conditions of repo receivables (%):

	2022	2021
Repo receivables in HUF	10.7%-18%	2%-3.2%
Average interest of repo receivables	7.31%	0.29%

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

	2022	2021
Held for trading securities:		
Government bonds	67,521	30,827
Other non-interest bearing securities	274	1,134
Hungarian government discounted Treasury Bills	4,785	869
Corporate shares and investments	385	599
Mortgage bonds	82	116
Other securities	1,748	2,088
Subtotal	**74,795**	**35,633**
Securities mandatorily measured at fair value through profit or loss		
Shares in investment funds	29,029	25,126
Shares	1,469	2,935
Subtotal	**30,498**	**28,061**
Held for trading derivative financial instruments:		
Foreign currency swaps	121,854	38,811
Interest rate swaps	121,506	59,097
CCIRS and mark-to-market CCIRS swaps	14,847	11,649
Other derivative transactions	46,512	73,211
Subtotal	**304,719**	**182,768**
Total	**410,012**	**246,462**

Interest conditions and the remaining maturities of securities held for trading are as follows:

	2022	2021
Within one year:		
variable interest	3,041	111
fixed interest	10,467	4,163
	13,508	**4,274**
Over one year:		
variable interest	9,535	1,544
fixed interest	51,093	28,083
	60,628	**29,627**
Non-interest bearing securities	659	1,732
Total	**74,795**	**35,633**

	2022	2021
Securities held for trading denominated in HUF	89%	81%
Securities held for trading denominated in foreign currency	11%	19%
Securities held for trading total	**100%**	**100%**
Government bonds denominated in HUF	90%	83%
Government bonds denominated in foreign currency	10%	17%
Government securities total	**100%**	**100%**
Interest rates on securities held for trading in HUF	0%-16.69%	0%-6.75%
Interest rates on securities held for trading in foreign currency	0%-7.63%	0%-5.75%
Average interest on securities held for trading	6.44%	1.17%

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

Interest conditions and the remaining maturities of securities mandatorily measured at fair value through profit or loss are as follows:

	2022	2021
Non-interest bearing securities	30,498	28,061
Total	**30,498**	**28,061**

Securities mandatorily measured at fair value through profit or loss denominated in HUF	69%	67%
Securities mandatorily measured at fair value through profit or loss denominated in foreign currency	31%	33%
Securities mandatorily measured at fair value through profit or loss total	**100%**	**100%**

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	177,393	278,875
Mortgage bonds	356,540	217,941
Interest bearing treasury bills	182,726	63,115
Other securities	62,594	64,870
Listed securities	*7,290*	*43,759*
in HUF	-	2,896
in foreign currency	7,290	40,863
Non-listed securities	*55,304*	*21,111*
in HUF	14,304	15,487
in foreign currency	41,000	5,624
Subtotal	**779,253**	**624,801**
Non-trading equity instruments		
-non-listed securities	17,922	17,138
in HUF	528	529
in foreign currency	17,394	16,609
	17,922	**17,138**
Securities at fair value through other comprehensive income total	**797,175**	**641,939**

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:

Name	**Currency**	**2022**	**2021**
Garantiqa	HUF	392	392
Hage / Közvil / Pénzügykut	HUF	136	136
OBS	EUR	11,915	13,222
VISA A Preferred	USD	5,479	3,388
		17,922	**17,138**

Interest conditions and the remaining maturities of FVOCI securities can be analysed as follows:

	2022	**2021**
Within one year:		
variable interest	-	1,089
fixed interest	261,529	66,970
	261,529	**68,059**
Over one year:		
variable interest	235,661	71,344
fixed interest	282,063	485,398
	517,724	**556,742**
Non-interest bearing securities	17,922	17,138
Total	**797,175**	**641,939**
FVOCI securities denominated in HUF	83%	73%
FVOCI securities denominated in foreign currency	17%	27%
FVOCI securities total	**100%**	**100%**
Interest rates on FVOCI securities denominated in HUF	1.25%-17.36%	1.25%-11%
Interest rates on FVOCI securities denominated in foreign currency	0.74%-16%	0%-16%
Average interest on FVOCI securities	5.27%	2.85%

Certain fixed-rate mortgage bonds and other securities are hedged against interest rate risk. (See Note 45.4.)

	2022	**2021**
Net gain / (loss) reclassified from other comprehensive income to statement of profit or loss	(22,816)	(26,440)
Fair value of the hedged securities:		
Government bonds	118,979	143,184
Other bonds	43,870	42,326
	162,849	**185,510**

During the year ended 31 December 2022 and the year ended 31 December 2021 the Bank didn’t sell any of equity instruments designated to measure at fair value through other comprehensive income.

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

	2022	2021
Government bonds	2,979,400	2,863,259
Other bonds	314,237	190,155
Mortgage bonds	24,586	24,309
Subtotal	**3,318,223**	**3,077,723**
Loss allowance	(35,850)	(6,685)
Total	**3,282,373**	**3,071,038**

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

	2022	2021
Within one year:		
variable interest	-	8,101
fixed interest	321,879	305,694
	321,879	**313,795**
Over one year:		
variable interest	24,601	5,122
fixed interest	2,971,743	2,758,806
	2,996,344	**2,763,928**
Total	**3,318,223**	**3,077,723**

The distribution of the securities at amortised cost by currency (%):

	2022	2021
Securities at amortised cost denominated in HUF	72%	83%
Securities at amortised cost denominated in foreign currency	28%	17%
Securities at amortised cost total	**100%**	**100%**
Interest rates on securities at amortised cost	0.1%-17.74%	0.1%-12.75%
Average interest on securities at amortised cost denominated in HUF	2.93%	2.84%

An analysis of change in the loss allowance on securities at amortised cost:

	2022	2021
Balance as at 1 January	**6,685**	**3,288**
Reclassification	-	1,281
Balance as at 1 January	**6,685**	**4,569**
Loss allowance	31,696	4,404
Release of loss allowance	(4,073)	(2,370)
FX movement	1,542	82
Closing balance	**35,850**	**6,685**

NOTE 11: LOANS (in HUF mn)

Loans measured at fair value through profit or loss

	2022	2021
Within one year	39,694	32,091
Over one year	753,548	629,921
Loans measured at fair value through profit or loss total	**793,242**	**662,012**

Loans measured at fair value through profit or loss are mandatorily measured at fair value through profit or loss.

Loans measured at amortised cost, net of allowance for loan losses

	2022	2021
Within one year	2,481,249	2,125,908
Over one year	2,518,671	2,062,114
Loans at amortised cost gross total	**4,999,920**	**4,188,022**
Loss allowance on loan losses	(174,880)	(155,557)
Loans at amortised cost total	**4,825,040**	**4,032,465**

An analysis of the loan portfolio by currency (%):

	2022	2021
In HUF	58%	62%
In foreign currency	42%	38%
Total	**100%**	**100%**

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

	2022	2021
Loans denominated in HUF	2,89%-18,26%	1.5% - 9.85%
Average interest on loans denominated in HUF	4.94%	4.56%

Interest rates of the loan portfolio measured at amortised cost are as follows (%):

	2022	2021
Loans denominated in HUF	0%-43.7%	0%-37.5%
Loans denominated in foreign currency	(0.1%)-20.1%	(0.59%)-13%
Average interest on loans denominated in HUF	9.77%	6.64%
Average interest on loans denominated in foreign currency	2.74%	1.48%

NOTE 11: LOANS (in HUF mn) [continued]

For an analysis of the loan portfolio by stages, countries and rating categories please see Note 36.1.

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

	2022	2021
Balance as at 1 January	**155,557**	**123,670**
Reclassification	-	(1,281)
Balance as at 1 January	**155,557**	**122,389**
Loss allowance	252,002	221,084
Release of loss allowance	(210,342)	(180,291)
Use of loss allowance	(21,274)	(6,951)
Partial write-off	(7,348)	(1,733)
FX movement	6,285	1,059
Closing balance	**174,880**	**155,557**

The Bank sells non-performing loans without recourse at estimated fair value to a wholly owned subsidiary, OTP Factoring Ltd.

NOTE 12: INVESTMENTS IN SUBSIDIARIES, ASSOCIATES, JOINT VENTURES AND OTHER INVESTMENTS (in HUF mn)

	2022	2021
Investments in subsidiaries:		
Controlling interest	2,116,059	2,006,178
Other	23,427	16,086
Subtotal	**2,139,486**	**2,022,264**
Impairment loss	(542,769)	(449,256)
Total	**1,596,717**	**1,573,008**

Other investments contain certain securities accounted at cost.

Significant subsidiaries

Investments in companies in which the Bank has a controlling interest (direct) are detailed below. All companies are incorporated in Hungary unless indicated otherwise:

	2022		2021	
	% Held (direct/indirect)	**Gross book value**	**% Held (direct/indirect)**	**Gross book value**
OTP Bank JSC (Ukraine)	100%	311,390	100%	311,390
DSK Bank EAD (Bulgaria)	100%	280,722	100%	280,692
OTP banka Srbija akcionarsko drustvo Novi Sad (Serbia)	100%	262,759	100%	262,759
OTP banka Hrvatska d.d. (Croatia)	100%	205,349	100%	205,349
OTP Bank Romania S.A. (Romania)	100%	167,764	100%	167,764
OTP Mortgage Bank Ltd.	100%	199,294	100%	154,294
SKB Banka d.d. Ljubljana (Slovenia)	100%	107,689	100%	107,689
JSC "OTP Bank" (Russia)	98%	74,337	98%	74,337
Crnogorska komercijalna banka a.d. (Montenegro)	100%	72,784	100%	72,784
OOO AlyansReserv (Russia)	100%	50,074	100%	50,074
Air-Invest Llc.	100%	39,248	100%	39,248
OTP Holding Malta Ltd.	100%	32,359	100%	32,359
Balansz Private Open-end Investment Fund	100%	60,630	100%	29,150
Bank Center No. 1. Ltd.	100%	26,063	100%	26,063
OTP Factoring Ltd.	100%	25,411	100%	25,411
Other		200,186		166,815
Total		**2,116,059**		**2,006,178**

An analysis of the change in the impairment loss is as follows:

	2022	2021
Balance as at 1 January	**449,256**	**425,163**
Impairment loss for the period	147,712	59,132
Reversal of impairment loss	(54,199)	(31,712)
Use of impairment loss	-	(3,327)
Closing balance	**542,769**	**449,256**

NOTE 12: INVESTMENTS IN SUBSIDIARIES, ASSOCIATES, JOINT VENTURES AND OTHER INVESTMENTS (in HUF mn) [continued]

The Bank decided that the recoverable amount is determined based on fair value less cost of disposal. The Bank prepared impairment tests of the subsidiaries based on two different net present value calculation methods that show the same result; however they represent different economical logics. On one hand is the discount cash flow method ("DCF") that calculates the value of the subsidiaries by discounting their expected cash flow; on the other hand the economic value added ("EVA") method estimates the value of the subsidiaries from the initial invested capital and the present value of the economic profit that the companies are expected to generate in the future. Applying the EVA method was more practically than DCF method because it gives a more realistic picture about how the explicit period and the residual value can contribute to the value of the company.

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

An analysis of the impairment loss by significant subsidiaries is as follows:

	2022	2021
OTP Bank JSC (Ukraine)	280,763	207,397
OTP Bank Romania S.A. (Romania)	77,962	77,962
OTP Mortgage Bank Ltd.	84,707	65,096
OTP banka Srbija akcionarsko drustvo Novi Sad (Serbia)	23,452	43,477
JSC "OTP Bank" (Russia)	2,775	-
LLC Alliance Reserve (Russia)	15,801	-
OTP Life Annuity Ltd.	10,969	10,969
Air-Invest Ltd.	10,965	10,491
Monicomp Ltd.	8,632	8,632
Crnogorska komercijalna banka a.d. (Montenegro)	4,495	6,697
Balansz Private Open-end Investment Fund	5,110	5,566
OTP Real Estate Ltd.	5,557	5,557
R.E. Four d.o.o. (Serbia)	3,763	3,763
Total	**534,951**	**445,607**

Dividend income from significant subsidiaries and shares held-for-trading and shares measured at fair value through other comprehensive income is as follows:

	2022	2021
DSK Bank EAD (Bulgaria)	74,314	-
OTP Factoring Ltd.	45,000	44,000
OTP Mortgage Bank Ltd.	18,000	-
OTP banka dioničko društvo (Croatia)	14,637	12,244
Merkantil Bank Ltd.	8,000	-
OTP Holding Ltd. (Cyprus)	7,800	-
OTP Holding Malta Ltd. (Malta)	4,803	5,531
OTP Real Estate Investment Fund Management Ltd.	3,500	3,500
OTP Bank JSC (Ukraine)	-	12,853
Inga Kettő Llc.	-	11,000
Monicomp Ltd.	-	1,173
Other	6,099	4,741
Subtotal	**182,153**	**95,042**
Dividend from shares held-for-trading	12,166	3,844
Dividend from shares fair value through other comprehensive income	207	151
Total	**194,526**	**99,037**

NOTE 12: INVESTMENTS IN SUBSIDIARIES, ASSOCIATES, JOINT VENTURES AND OTHER INVESTMENTS (in HUF mn) [continued]

Significant associates and joint ventures

The main figures of the Bank's indirectly owned associates and joint ventures at cost[1]:

As at 31 December 2022

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
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

[1] Based on unaudited financial statements.

NOTE 12: INVESTMENTS IN SUBSIDIARIES, ASSOCIATES, JOINT VENTURES AND OTHER INVESTMENTS (in HUF mn) [continued]

Significant associates and joint ventures [continued]

As at 31 December 2021

List of associated entities	Carrying amount	Ownership of OTP Bank	Profit after tax	Country / Headquarter	Activity
OTP Kockázati 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
Company for Cash Services AD	392	25.00%	(183)	Bulgaria / Sofia	Other financial service activities, exc. 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 n.e.c.
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.	-	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.	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

NOTE 12: INVESTMENTS IN SUBSIDIARIES, ASSOCIATES, JOINT VENTURES AND OTHER INVESTMENTS (in HUF mn) [continued]

Significant events related to investments

The registered capital of the Romanian subsidiary of OTP Bank was increased to RON 2.279.253.360 from RON 2.079.253.200

The financial closure of the transaction to purchase 100% shareholding of Alpha Bank Albania SH.A., the Albanian subsidiary of the Alpha Bank Group has been completed on 18 July 2022, based on the share sale and purchase agreement concluded between OTP Bank and Alpha Bank Group's member, Alpha International Holdings Single Member S.A., on 6 December 2021. The integration of OTP Bank Albania and Alpha Bank Albania is expected to be completed in 2023.

25 October 2022 the Metropolitan Court of Registration has registered a capital increase at OTP Mortgage Bank Ltd. The registered capital of OTP Mortgage Bank Ltd. was increased to HUF 57,000,000,000 from HUF 37,000,000,000.

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.

31 December 2022 the registered capital of OTP Mortgage Bank Ltd. was increased to HUF 82,000,000,000 from HUF 57,000,000,000.

The financial completion of the transaction to purchase 100% shareholding of Nova KBM d.d. and its subsidiary – after obtaining all necessary regulatory approvals – has been completed on 6 February 2023, based on the share sale and purchase agreement concluded between OTP Bank, funds managed by affiliates of Apollo Global Management, Inc. and EBRD, on 31 May 2021. The acquisition of the bank is the most significant acquisition in the history of OTP Group. With a market share of 20.7% in terms of total assets as of September 2022 and more than 1,500 employees as of the end of 2022, Nova KBM d.d. is the 2nd largest bank in the Slovenian banking market. As a universal bank, it has been active in the retail and corporate segments as well. With the transaction closing of Nova KBM, OTP Group has around 30% share in the Slovenian banking market on a pro-forma basis. The integration process of the two Slovenian subsidiaries, SKB banka purchased in 2019 and Nova KBM is expected to be completed in 2024. The new bank will be the largest foreign subsidiary of OTP Group.

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

For the year ended 31 December 2022

	Intangible assets	Property	Office equipment and vehicles	Vehicles	Construction in progress	Right of use assets	Total
Cost							
Balance as at 1 January	**188,853**	**74,506**	**103,469**	**199**	**9,425**	**31,118**	**407,570**
Additions	59,839	5,979	15,804	12	28,117	29,156	138,907
Disposals	(35,607)	(1,890)	(6,349)	(14)	(21,892)	(925)	(66,677)
Balance as at 31 Decembere	**213,085**	**78,595**	**112,924**	**197**	**15,650**	**59,349**	**479,800**
Depreciation and Amortization							
Balance as at 1 January	**126,692**	**28,316**	**77,404**	**62**	**-**	**13,887**	**246,361**
Charge for the year	24,768	4,347	10,211	29	-	7,383	46,738
Disposals	(7,855)	(2,515)	(5,038)	(14)	-	(1,803)	(17,225)
Balance as at 31 Decembere	**143,605**	**30,148**	**82,577**	**77**	**-**	**19,467**	**275,874**
Net book value							
Balance as at 1 January	**62,161**	**46,190**	**26,065**	**137**	**9,425**	**17,231**	**161,209**
Balance as at 31 December	**69,480**	**48,447**	**30,347**	**120**	**15,650**	**39,882**	**203,926**

For the year ended 31 December 2021

	Intangible assets	Property	Office equipment and vehicles	Vehicles	Construction in progress	Right of use assets	Total
Cost							
Balance as at 1 January	**164,875**	**72,277**	**93,878**	**160**	**9,421**	**22,443**	**363,054**
Additions	52,130	4,074	13,434	87	20,394	8,675	98,794
Disposals	(28,152)	(1,845)	(3,843)	(48)	(20,390)	-	(54,278)
Balance as at 31 December	188,853	**74,506**	**103,469**	**199**	**9,425**	**31,118**	**407,570**
Depreciation and Amortization							
Balance as at 1 January	**107,236**	**25,789**	**71,899**	**74**	**-**	**8,964**	**213,962**
Charge for the year	23,032	3,284	9,190	25	-	5,161	40,692
Disposals	(3,576)	(757)	(3,685)	(37)	-	(238)	(8,293)
Balance as at 31 December	**126,692**	**28,316**	**77,404**	**62**	**-**	**13,887**	**246,361**
Net book value							
Balance as at 1 January	**57,639**	**46,488**	**21,979**	**86**	**9,421**	**13,479**	**149,092**
Balance as at 31 December	**62,161**	**46,190**	**26,065**	**137**	**9,425**	**17,231**	**161,209**

The Bank has no intangible assets with indefinite useful life.

NOTE 14: INVESTMENT PROPERTIES (in HUF mn)

For the year ended 31 December 2022 and 2021, respectively

	2022	2021
Property		
Cost		
Balance as at 1 January	**5,013**	**2,577**
Additions result from subsequent expenditure	14	2,640
Disposals	-	(204)
Closing balance	**5,027**	**5,013**
Depreciation and Amortization		
Balance as at 1 January	**685**	**641**
Charge for the period	135	92
Disposals	-	(48)
Closing balance	**820**	**685**
Net book value		
Balance as at 1 January	**4,328**	**1,936**
Closing balance	**4,207**	**4,328**

According to the opinion of the Management there is no significant difference between the fair value and the carrying value of these properties.

Income and Expenses	**2022**	**2021**
Rental income	8	6
Depreciation	135	92

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

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

	2022	2021
Interest rate swaps designated as fair value hedge	29,139	13,276
CCIRS designated as fair value hedge	20,732	5,471
Interest rate swaps designated as cash flow hedge	(2,651)	(1,020)
Total	**47,220**	**17,727**

NOTE 16: OTHER ASSETS[1] (in HUF mn)

	2022	2021
Other financial assets		
Receivables from OTP Employee Stock Ownership Program (OTP ESOP)	119,123	84,304
Prepayments and accrued income	15,674	16,391
Receivables from investment services	34,828	16,074
Stock exchange deposit	30,939	11,643
Trade receivables	11,053	10,519
Receivables from card operations	34,783	10,423
Receivables from suppliers	6,621	5,812
Other	9,130	3,729
	262,151	**158,895**
Loss allowance	(7,026)	(5,148)
Other financial assets total	**255,125**	**153,747**
Other non-financial assets		
Prepayments and accrued income	44,106	44,411
Receivable related to Hungarian Government subsidies	19,076	14,281
Other	12,144	12,563
	75,326	**71,255**
Provision for impairment on other assets	(699)	(514)
Other non-financial assets total	**74,627**	**70,741**
Total	**329,752**	**224,488**

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

	2022	2021
Balance as at 1 January	**5,148**	**7,928**
Charge for the period	10,572	3,888
Release of loss allowance	(7,715)	(5,972)
Use of loss allowance	(982)	(707)
FX movement	3	11
Balance as at 31 December	**7,026**	**5,148**

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

	2022	2021
Balance as at 1 January	**514**	**482**
Charge for the period	255	86
Release of provision	(106)	(74)
FX movement	36	20
Balance as at 31 December	**699**	**514**

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

NOTE 17: AMOUNTS DUE TO BANKS AND DEPOSITS FROM THE NATIONAL BANK OF HUNGARY AND OTHER BANKS (in HUF mn)

	2022	2021
Within one year:		
In HUF	554,794	354,647
In foreign currency	448,935	81,550
	1,003,729	**436,197**
Over one year:		
In HUF	392,947	588,161
In foreign currency	339,452	26,845
	732,399	**615,006**
Subtotal	**1,736,128**	**1,051,203**
Total	**1,736,128**	**1,051,203**

Interest rates on amounts due to banks and deposits from the NBH and other banks are as follows (%):

	2022	2021
Within one year:		
In HUF	(2.4%) - 18%	(2.4%)-4.5%
In foreign currency	(2.31%) - 5.9%	(2.4%)-8.5%
Over one year:		
In HUF	(2.4%) - 9.23%	(2.4%)-1.3%
In foreign currency	(2.4%) - 6.84%	(2.4%)-1.5%
Average interest on amounts due to banks in HUF	3.24%	1.26%
Average interest on amounts due to banks in foreign currency	1.50%	1.14%

NOTE 18: REPO LIABILITIES (in HUF mn)

	2022	2021
Within one year:		
In HUF	122,676	49,726
In foreign currency	15,561	-
	138,237	**49,726**
Over one year:		
In HUF	82,200	-
In foreign currency	187,929	36,854
	270,129	**36,854**
Subtotal	**408,366**	**86,580**
Total	**408,366**	**86,580**

Interest rates on repo liabilities are as follows (%):

	2022	2021
Within one year:		
In HUF	11.5% - 15.47%	1.5%-2.8%
In foreign currency	2.47%-5.2%	-
Over one year:		
In HUF	15%	-
In foreign currency	3.58%-3.69%	(0.35)%
Average interest on repo liabilities in HUF	9.31%	11.67%
Average interest on repo liabilities in foreign currency	0.30%	0.67%

NOTE 19: **DEPOSITS FROM CUSTOMERS (in HUF mn)**

	2022	2021
Within one year:		
In HUF	7,982,882	7,823,118
In foreign currency	3,112,937	2,079,643
	11,095,819	**9,902,761**
Over one year:		
In HUF	23,339	45,771
	23,339	**45,771**
Total	**11,119,158**	**9,948,532**

Interest rates on deposits from customers are as follows (%):

	2022	2021
Within one year in HUF	0%-17.95%	(2.48%)-7.96%
Over one year in HUF	0%-13%	0.01%-2.4%
In foreign currency	(0.4%)-45.1%	(0.6%)-17.2%
Average interest on deposits from customers in HUF	2.32%	0.16%
Average interest on deposits from customers in foreign currency	0.12%	0.01%

An analysis of deposits from customers by type, not including accrued interest, is as follows:

	2022		2021	
Retail deposits	**4,756,881**	**43%**	**4,475,933**	**45%**
Household deposits	4,756,881	43%	4,475,933	45%
Corporate deposits	**6,362,277**	**57%**	**5,472,599**	**55%**
Deposits to medium and large corporates	5,570,866	50%	4,639,198	47%
Municipality deposits	791,411	7%	833,401	8%
Total	**11,119,158**	**100%**	**9,948,532**	**100%**

NOTE 20: LIABILITIES FROM ISSUED SECURITIES (in HUF mn)

	2022	2021
Within one year:		
In HUF	4,311	12,048
In foreign currency	6,351	-
	10,662	**12,048**
Over one year:		
In HUF	46,192	10,105
In foreign currency	441,855	-
	488,047	**10,105**
Total	**498,709**	**22,153**

Interest rates on liabilities from issued securities are as follows (%):

	2022	2021
Issued securities denominated in HUF	0,6%-15%	0%-1.7%
Issued securities denominated in foreign currency	5,5%-7,35%	-
Average interest on issued securities denominated in HUF	2.63%	4.9%
Average interest on issued securities denominated in foreign currency	2.95%	-

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. The NBH approved on 10 August 2022 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. The NBH approved on 8 July 2021 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.

Green Senior Preferred Notes issued in amount of EUR 400 million

„Green" notes have been issued by the Bank 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 years 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.

Green Senior Preferred Notes issued in amount of USD 60 million

The Bank has issued "green" notes on 29 September 2022 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.

Green Senior Preferred Notes issued in amount of EUR 650 million

Notes were issued 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. 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.

NOTE 20: LIABILITIES FROM ISSUED SECURITIES (in HUF mn) [continued]

Notes issued in amount of USD 650 million

See details about the event in Note 47.

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.

Issued securities denominated in foreign currency as at 31 December 2022.

	Name	Date of issuance	Maturity	Currency	Nominal value in FX million	Nominal value in HUF million	Amortised cost in FX million	Amortised cost in HUF million	Interest conditions (in % actual)	
1	XS2560693181	01/12/2022	04/03/2026	EUR	650	260,136	653	261,341	variable	7.35
2	XS2499691330	13/07/2022	13/07/2025	EUR	399	159,859	409	163,893	variable	5.50
3	XS2536446649	29/09/2022	29/09/2026	USD	60	22,541	61	22,972	variable	7.25
	Subtotal issued securities in foreign currency				**1,109**	**442,536**	**1,124**	**448,206**		

NOTE 20: LIABILITIES FROM ISSUED SECURITIES (in HUF mn) [continued]

Issued securities denominated in HUF as at 31 December 2022

	Name	Date of issuance	Maturity	Nominal value in HUF million	Amortised cost in HUF million	Interest conditions		Hedged
1	OTP_HUF_25/1	11/18/2022	11/18/2025	25,562	26,046	indexed	15.00	
2	OTP_HUF_26/1	12/22/2022	1/5/2026	10,229	10,270	indexed	12.00	
3	OTPRF2023A	3/22/2013	3/24/2023	1,010	1,215	indexed	1.70	hedged
4	OTP_DK_25/3	5/31/2021	5/31/2025	1,215	1,160	discount		
5	OTP_DK_23/II	5/29/2020	5/31/2023	997	992	discount		
6	OTP_DK_24/3	5/31/2021	5/31/2024	883	862	discount		
7	OTP_DK_27/3	3/31/2022	5/31/2027	1,092	826	discount		
8	OTP_DK_27/II	5/31/2021	5/31/2027	795	719	discount		
9	OTP_DK_23/I	12/15/2018	5/31/2023	717	710	discount		
10	OTP_DK_26/II	5/31/2021	5/31/2026	707	658	discount		
11	OTP_DK_26/3	3/31/2022	5/31/2026	783	631	discount		
12	OTP_DK_28/I	5/31/2021	5/31/2028	669	586	discount		
13	OTP_DK_24/II	5/29/2020	5/31/2024	592	581	discount		
14	OTP_DK_25/II	5/29/2020	5/31/2025	592	572	discount		
15	OTP_DK_24/I	5/30/2019	5/31/2024	426	411	discount		
16	OTPX2023A	3/22/2013	3/24/2023	312	410	indexed		hedged
17	OTP_DK_28/II	3/31/2022	5/31/2028	554	394	discount		
18	OTP_DK_26/I	5/29/2020	5/31/2026	392	372	discount		
19	OTP_DK_29/II	3/31/2022	5/31/2029	554	372	discount		
20	OTP_DK_30/II	3/31/2022	5/31/2030	554	350	discount		
21	OTP_DK_29/I	5/31/2021	5/31/2029	403	341	discount		
22	OTPX2024B	10/10/2014	10/16/2024	295	378	indexed	0.70	hedged
23	OTPX2024A	6/18/2014	6/21/2024	241	310	indexed	1.30	hedged
24	OTPX2024C	12/15/2014	12/20/2024	242	309	indexed	0.60	hedged
25	OTPX2023B	6/28/2013	6/26/2023	198	260	indexed	0.60	hedged
26	OTP_DK_31/I	3/31/2022	5/31/2031	384	228	discount		
27	OTP_DK_25/I	5/30/2019	5/31/2025	104	97	discount		
28	OTP_DK_27/I	5/29/2020	5/31/2027	95	88	discount		
29	OTP_DK_30/I	5/31/2021	5/31/2030	104	85	discount		
30	OTP_DK_32/I	3/31/2022	5/31/2032	105	59	discount		
	Other			211	211	indexed		
	Subtotal issued securities in HUF			**51,017**	**50,503**			
	Total			**493,553**	**498,709**			

NOTE 20: LIABILITIES FROM ISSUED SECURITIES (in HUF mn) [continued]

Issued securities denominated in HUF as at 31 December 2021

	Name	Date of issuance	Maturity	Nominal value in HUF million	Amortised cost in HUF million	Interest conditions		Hedged
1	OTP_DK_22/II	5/29/2020	5/31/2022	3,173	3,164	discount		
2	OTPRF2022A	3/22/2012	3/23/2022	2,321	2,513	indexed	1.70	hedged
3	OTP_DK_25/3	5/31/2021	5/31/2025	1,216	1,138	discount		
4	OTPRF2022B	3/22/2012	3/23/2022	934	1,011	indexed	1.70	hedged
5	OTP_DK_22/I	12/15/2018	5/31/2022	993	985	discount		
6	OTP_DK_23/II	5/29/2020	5/31/2023	997	981	discount		
7	OTPRF2023A	3/22/2013	3/24/2023	899	977	indexed	1.70	hedged
8	OTPRF2022E	10/29/2012	10/31/2022	862	933	indexed	1.70	hedged
9	OTP_DK_24/3	5/31/2021	5/31/2024	883	848	discount		
10	OTPRF2022F	12/28/2012	12/28/2022	708	773	indexed	1.70	hedged
11	OTP_DK_27/II	5/31/2021	5/31/2027	795	703	discount		
12	OTP_DK_23/I	12/15/2018	5/31/2023	717	694	discount		
13	OTP_DK_26/II	5/31/2021	5/31/2026	707	644	discount		
14	OTP_DK_24/II	5/29/2020	5/31/2024	592	573	discount		
15	OTP_DK_28/I	5/31/2021	5/31/2028	669	572	discount		
16	OTP_DK_25/II	5/29/2020	5/31/2025	592	564	discount		
17	OTPX2022B	7/18/2012	7/18/2022	164	549	indexed	1.70	hedged
18	OTP_DK_24/I	5/30/2019	5/31/2024	426	400	discount		
19	OTP_DK_26/I	5/29/2020	5/31/2026	392	366	discount		
20	OTPX2023A	3/22/2013	3/24/2023	312	366	indexed	1.70	hedged
21	OTPX2024B	10/10/2014	10/16/2024	295	336	indexed	0.70	hedged
22	OTP_DK_29/I	5/31/2021	5/31/2029	403	332	discount		
23	OTPRF2022D	6/28/2012	6/28/2022	286	324	indexed	1.70	hedged
24	OTPX2022C	10/29/2012	10/28/2022	177	317	indexed	1.70	hedged
25	OTPX2022D	12/28/2012	12/27/2022	238	290	indexed	1.70	hedged
26	OTPX2024A	6/18/2014	6/21/2024	241	277	indexed	1.30	hedged
27	OTPX2024C	12/15/2014	12/20/2024	242	275	indexed	0.60	hedged
28	OTPX2023B	6/28/2013	6/26/2023	198	272	indexed	0.60	hedged
29	OTPRF2022C	6/28/2012	6/28/2022	209	266	indexed	1.70	hedged
30	OTPX2022A	3/22/2012	3/23/2022	175	236	indexed	-	hedged
31	OTP_DK_25/I	5/30/2019	5/31/2025	104	94	discount		
32	OTP_DK_27/I	5/29/2020	5/31/2027	95	87	discount		
33	OTP_DK_30/I	5/31/2021	5/31/2030	104	82	discount		
	Other			211	211			
	Subtotal issued securities in HUF			**21,330**	**22,153**			
	Total			**21,330**	**22,153**			

NOTE 21: FINANCIAL LIABILITIES DESIGNATED AS FAIR VALUE THROUGH PROFIT OR LOSS (in HUF mn)

	2022	2021
Within one year:		
In HUF	1,716	1,784
	1,716	**1,784**
Over one year:		
In HUF	14,860	18,349
	14,860	**18,349**
Total	**16,576**	**20,133**
Contractual amount outstanding	**19,853**	**21,479**

Interest rates on financial liabilities designated as fair value through profit or loss are as follows (%):

	2022	2021
Within one year:		
In HUF	2,19-3.96%	0.46% - 2.46%
Over one year:		
In HUF	0,01%-4.63%	0.01% - 2.9%
Average interest on amounts due to banks in HUF	3.06%	2.15%

Certain MFB 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.

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

Negative fair value of held for trading derivative financial liabilities by deal types:

	2022	2021
Interest rate swaps	221,647	78,066
Foreign currency swaps	87,988	45,884
CCIRS and mark-to-market CCIRS	15,711	7,786
Other derivative contracts	48,055	60,525
Total	**373,401**	**192,261**

NOTE 23: FAIR VALUE OF DERIVATIVE FINANCIAL LIABLITIES DESIGNATED AS HEDGE ACCOUNTING (in HUF mn)

Fair value of derivative financial liabilities designated as hedge accounting is detailed as follows:

	2022	2021
IRS designated as fair value hedge	22,551	5,747
CCIRS designated as fair value hedge	5,398	5,325
IRS designated as cash flow hedge	22,674	7,618
Total	**50,623**	**18,690**

NOTE 24: OTHER LIABILITIES[1] AND PROVISIONS (in HUF mn)

	2022	2021
Other financial liabilities		
Liabilities from investment services	108,284	87,582
Accrued expenses	21,183	27,546
Accounts payable	27,127	18,754
Liabilities due to short positions	24,596	16,904
Liabilities from customer's credit card payments	52,274	14,574
Other	25,007	11,383
Other financial liabilities total	**258,471**	**176,743**
Other non-financial liabilities		
Technical accounts	32,338	41,186
Current income tax payable	12,371	10,080
Social contribution	5,275	4,516
Accrued expenses	2,829	3,062
Other	1,904	2,850
Other non-financial liabilities total	**54,717**	**61,694**
Other liabilities total	**313,188**	**238,437**

The provision on other liabilities, off-balance sheet commitments and contingent liabilities are detailed as follows:

	2022	2021
Provision for losses on other off-balance sheet commitments and contingent liabilities	23,632	17,768
Provisions in accordance with IFRS 9	**23,632**	**17,768**
Provision for litigation	1,917	259
Provision for retirement pension and severance pay	1,527	975
Provision on other liabilities	2,580	2,525
Provisions in accordance with IAS 37	**6,024**	**3,759**
Total	**29,656**	**21,527**

Movements in the provision for losses on commitments and contingent liabilities in accordance with IFRS 9 can be summarized as follows:

	2022	2021
Opening balance	**17,768**	**17,490**
Provision for the period	49,698	47,626
Release of provision for the period	(44,157)	(47,496)
FX revaluation	323	148
Closing balance	**23,632**	**17,768**

Movements in the provision for losses on commitments and contingent liabilities in accordance with IAS 37 can be summarized as follows:

	2022	2021
Opening balance	**3,759**	**2,416**
Provision for the period	8,128	14,286
Release of provision	(933)	(11,608)
Use of provision	(5,138)	(1,335)
FX revaluation	208	-
Closing balance	**6,024**	**3,759**

[1] Other liabilities are expected to be recovered or settled no more than twelve months after the reporting period.

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

	2022	2021
Within one year		
In foreign currency	3,395	2,841
	3,395	**2,841**
Over one year:		
In foreign currency	290,791	268,935
	290,791	**268,935**
Total	**294,186**	**271,776**

Interest rates on subordinated bonds and loans are as follows (%):

	2022	2021
Subordinated bonds and loans denominated in foreign currency	2.9%-4.7%	2.5%-2.9%
Average interest on subordinated bonds and loans denominated in foreign currency	3.06%	2.74%

Subordinated loans and bonds are detailed as follows as at 31 December 2022:

Type	Nominal value	Date of issuance	Date of maturity	Issue price	Interest conditions	Current interest rate
Subordinated bond	EUR 231 million	7 November 2006	Perpetual	99.375%	Three-month EURIBOR + 3%, variable (payable quarterly)	4.742%
Subordinated bond	EUR 499 million	15 July 2019	15 July 2029	99.738%	Fixed 2.875% annual in the first 5 years and callable after 5 years, variable after year 5 (payable annually) calculated as a sum of the initial margin (320 basis point) and the 5 year mid-swap rate prevailing at the and of the 5 year.	2.875%

NOTE 26: SHARE CAPITAL (in HUF mn)

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

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)

Based on the instructions of Act C of 2000 on accounting ("Act on Accounting") financial statements of the Bank are prepared in accordance with IFRS as issued by the IASB as adopted by the EU.

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 the years 2019 and 2020 and HUF 1 billion from the profit of the year 2021 (totally HUF 120 billion) was paid, which means 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.

Based on paragraph 114/B of Act on Accounting Equity Correlation Table is prepared and disclosed as a part of the explanatory notes for the reporting date by the Bank.

Equity correlation table shall contain the opening and closing balances of the shareholder's equity in accordance with IFRS, furthermore deducted from this the opening and closing balances of the specified equity elements. Equity correlation table shall contain also untied retained earnings available for the payment of dividends, covering retained earnings from the last financial year for which accounts have been adopted comprising net profit for the period of that financial year minus cumulative unrealized gains claimed in connection with any increase in the fair value of investment properties, as provided in IAS 40 - Investment Property, reduced by the cumulative income tax accounted for under IAS 12 - Income Taxes.

Share capital

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.

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.

Retained earnings

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

Put 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. Put 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.

Other comprehensive income

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

General reserve

The Bank shall place ten per cent of the after-tax profit of the year into general reserve prescribed by the Act CCXXXVII of 2013 on Credit Institutions and Financial Enterprises. The Bank is allowed to use general reserves only to cover operating losses arising from their activities.

Tied-up reserve

The tied-up reserve shall consist of sums tied up from the capital reserve and from the retained earnings.

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

The equity correlation table of the Bank based on paragraph 114/B of Act on Accounting as at 31 December 2022:

31 December 2022 Closing balance	Share Capital	Capital reserve	Share-based payment reserve	Retained earnings and reserves	Option reserve	Treasury Shares	Revaluation reserve	Tied-up reserve	Net profit for the year	Total
Components of Shareholder's equity in accordance with IFRS	**28,000**	**52**	**49,110**	**1,661,907**	**(55,468)**	**(2,724)**	**-**	**-**	**-**	**1,680,877**
Unused portion of reserve for developments	-	-	-	-	-	-	-	-	-	-
Other comprehensive income	-	-	-	52,933	-	-	(52,933)	-	-	-
Portion of supplementary payment recognised as an asset	-	-	-	-	-	-	-	-	-	-
Option reserve	-	(55,468)	-	-	55,468	-	-	-	-	-
Treasury shares	-	(2,724)	-	-	-	2,724	-	-	-	-
Share based payments	-	49,110	(49,110)	-	-	-	-	-	-	-
Net profit for the year	-	-	-	(6,632)	-	-	-	-	6,632	-
General reserve	-	-	-	(118,568)	-	-	-	118,568	-	-
Components of Shareholder's equity in accordance with paragraph 114/B of Act on Accounting	**28,000**	**(9,030)**	**-**	**1,589,640**	**-**	**-**	**(52,933)**	**118,568**	**6,632**	**1,680,877**

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

The equity correlation table of the Bank based on paragraph 114/B of Act on Accounting as at 1 January 2022:

1 January 2022 Opening balance	**Share Capital**	**Capital reserve**	**Share-based payment reserve**	**Retained earnings and reserves**	**Option reserve**	**Treasury Shares**	**Revaluation reserve**	**Tied-up reserve**	**Net profit for the year**	**Total**
Components of Shareholder's equity in accordance with IFRS	**28,000**	**52**	**46,162**	**1,855,090**	**(55,468)**	**(58,872)**	**-**	**-**	**-**	**1,814,964**
Unused portion of reserve for developments	-	-	-	(497)	-	-	-	497	-	-
Other comprehensive income	-	-	-	(5,078)	-	-	5,078	-	-	-
Portion of supplementary payment recognised as an asset	-	-	-	-	-	-	-	-	-	-
Option reserve	-	(55,468)	-	-	55,468	-	-	-	-	-
Treasury shares	-	(58,872)	-	-	-	58,872	-	-	-	-
Share based payments	-	46,162	(46,162)	-	-	-	-	-	-	-
Net profit for the year	-	-	-	(125,339)	-	-	-	-	125,339	-
General reserve	-	-	-	(117,905)	-	-	-	117,905	-	-
Components of Shareholder's equity in accordance with paragraph 114/B of Act on Accounting	**28,000**	**(68,126)**	**-**	**1,606,271**	**-**	**-**	**5,078**	**118,402**	**125,339**	**1,814,964**

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

Calculated untied retained earnings in accordance with paragraph 114/B of Act on Accounting

	2022	**2021**
Retained earnings	1,589,640	1,606,271
Net profit for the year	6,632	125,339
Untied retained earnings	**1,596,272**	**1,731,610**

Items of retained earnings and other reserves

	2022	**2021**
Retained earnings	1,580,770	1,606,770
Capital reserve	52	52
Option reserve	(55,468)	(55,468)
Other reserves	127,438	117,903
Fair value of financial instruments measured at fair value through other comprehensive income	(43,723)	8,646
Share-based payment reserve	49,110	46,162
Fair value of derivative financial instruments designated as cash-flow hedge	(9,210)	(3,568)
Net profit for the period	6,632	125,339
Retained earnings and other reserves	**1,655,601**	**1,845,836**

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

	2022	**2021**
Balance as at 1 January	**145**	**36,441**
Change of fair value correction	(88,350)	(34,484)
Deferred tax related to change of fair value correction	5,299	2,801
Other transfer to retained earnings	-	(5,070)
Deferred tax related to other transfer to retained earnings	-	457
Closing balance	**(82,906)**	**145**

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

	2022	**2021**
Balance as at 1 January	**1,174**	**1,714**
Increase of loss allowance	33,946	1,103
Release of loss allowance	(8,331)	(1,654)
Fx movement	2,372	11
Closing balance	**29,161**	**1,174**

Fair value changes of equity instruments as at fair value through other comprehensive income

	2022	**2021**
Balance as at 1 January	**7,327**	**6,201**
Change of fair value correction	3,631	1,407
Deferred tax related to change of fair value correction	(936)	(281)
Closing balance	**10,022**	**7,327**

NOTE 28: TREASURY SHARES (in HUF mn)

	2022	2021
Nominal value (ordinary shares)	35	325
Carrying value at acquisition cost	2,724	58,872

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	**3,249,984**	**4,331,169**
Additions	1,801,256	16,251,451
Disposals	(4,698,896)	(17,332,636)
Number of shares at the end of the period	**352,344**	**3,249,984**

Change in carrying value:	**2022**	**2021**
Balance as at 1 January	**58,872**	**46,799**
Additions	16,268	276,433
Disposals	(72,416)	(264,360)
Closing Balance	**2,724**	**58,872**

	2022	2021
Face value of treasury shares held by OTP Group members	1,097	766

NOTE 29: INTEREST INCOME AND EXPENSES (in HUF mn)

	2022	2021
Interest income accounted for using the effective interest rate method from / on		
Loans at amortised cost	297,727	168,388
FVOCI securities	39,988	21,456
Securities at amortised cost	92,948	61,085
Placements with other banks	204,479	33,544
Financial liabilities	20,098	3,337
Amounts due from banks and balances with National Bank of Hungary	56,204	14,245
Repo receivables	10,235	318
Subtotal	**721,679**	**302,373**
Income similar to interest income		
Loans mandatorily measured at fair value through profit or loss	35,927	26,045
Swap and forward deals related to Placements with other banks	273,322	68,975
Swap and forward deals related to Loans at amortised cost	60,744	11,487
Swap and forward deals related to FVOCI securities	7,230	(850)
Investment properties	8	6
Subtotal	**377,231**	**105,663**
Interest income total	**1,098,910**	**408,036**
Interest expense due to / from / on		
Amounts due to banks and deposits from the National Bank of Hungary and other banks	408,865	107,928
Deposits from customers	301,657	33,403
Leasing liabilities	1,186	214
Liabilities from issued securities	7,742	377
Subordinated bonds and loans	8,646	7,890
Investment properties (deprecation)	135	92
Financial assets	6,369	2,193
Repo liabilities	66,049	3,394
Swap transaction related to acquisitions	1,371	-
Interest expense total	**802,020**	**155,491**

NOTE 30: **RISK COST (in HUF mn)**

	2022	2021
Loss allowance of loans at amortised cost		
Loss allowance	245,183	218,534
Release of loss allowance	(211,345)	(181,270)
	33,838	**37,264**
Loss allowance of sight deposits and placements with other banks		
Loss allowance	32,592	20,709
Release of loss allowance	(20,838)	(18,912)
	11,754	**1,797**
Loss allowance of placements with other banks		
Loss allowance	4,480	449
Release of loss allowance	(2,385)	(669)
	2,095	**(220)**
Loss allowance of FVOCI securities		
Loss allowance	33,946	1,103
Release of loss allowance	(8,331)	(1,654)
	25,615	**(551)**
Loss allowance of securities at amortised cost		
Loss allowance	31,695	4,404
Release of loss allowance	(4,072)	(2,369)
	27,623	**2,035**
Provision on loan commitments and financial guarantees		
Provision for the period	49,698	47,626
Release of provision	(44,157)	(47,496)
	5,541	**130**
Change in the fair value attributable to changes in the credit risk of loans mandatorily measured at fair value through profit of loss	**(11,872)**	**16,255**
Risk cost total	**94,594**	**56,710**

NOTE 31: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn)

Income from fees and commissions:

	2022	2021
Fees and commissions related to lending	**12,711**	**12,164**
Deposit and account maintenance fees and commissions	146,817	123,800
Fees and commission related to the issued bank cards	122,138	89,243
Fees and commissions related to security trading	27,867	28,227
Fx margin	26,032	16,155
Fees and commissions paid by OTP Mortgage Bank Ltd.	8,819	11,187
Net insurance fee income	10,981	8,481
Other	7,079	11,546
Fees and commissions from contracts with customers	**349,733**	**288,639**
Total Income from fees and commissions:	**362,444**	**300,803**

Contract balances

	2022	2021
Receivables, which are included in ‘other assets’	15,674	16,391
Loss allowance	(512)	(196)

Fee and commission expense

	2022	2021
Other fees and commissions related to issued bank cards	53,179	39,835
Insurance fees	783	771
Fees and commissions related to lending	5,267	5,011
Fees and commissions related to security trading	789	618
Fees and commissions relating to deposits	2,417	2,610
Trust activities related to securities	2,096	1,652
Postal fees	223	224
Money market transaction fees and commissions	166	265
Other	1,167	1,290
Total	**66,087**	**52,276**
Net profit from fees and commissions	**296,357**	**248,527**

NOTE 31: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn) [continued]

Performance obligations and revenue recognition policies:

Fee type	Nature and timing of satisfaction of performance obligations, and the significant payment terms	Revenue recognition under IFRS 15
Deposit and account maintenance fees and commissions	The Bank 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.). Fees for ongoing account management services are charged to the customer's account on a monthly basis. The fees are commonly fix 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 case of other transaction-based fees (e.g. SMS fee), the fee is settled monthly. In case of occasional services the Bank basically charges the fees when the services are used by the customer. The fees can be fixed fees or they can be set in %. The rates are reviewed by the Bank regularly.	Fees for ongoing account management services are charged on a monthly basis during the period when they are provided. Transaction-based fees are charged when the transaction takes places or charged monthly at the end of the month.
Fees and commission related to the issued bank cards	The Bank 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. 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. 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. For all other cases where the Bank 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. The rates are reviewed by the Bank regularly.	Fees for ongoing services are charged on a monthly basis during the period when they are provided. Transaction-based fees are charged when the transaction takes places or charged monthly at the end of the month.

NOTE 31: NET PROFIT FROM FEES AND COMMISSIONS (in HUF mn) [continued]

Performance obligations and revenue recognition policies: [continued]

Fee type	Nature and timing of satisfaction of performance obligations, and the significant payment terms	Revenue recognition under IFRS 15
Fees and commissions related to security account management services	The Bank provides its clients with security account management services. Fees will be charged for account management and transactions on accounts. 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. Fees for transactions on the securities account are charged immediately after the transaction. They are determined in%, based on the transaction amount. 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.	Fees for ongoing services are charged quarterly or annually during the period when they are provided. The fees are accrued monthly. Transaction-based fees are charged when the transaction takes places.
Fees and commissions paid by OTP Mortgage Bank Ltd.	The Bank provides a number of services to its subsidiaries, in connection with fees are charged. These fees typically include services related to various warranties and guarantees, credit account management, agency activities, and marketing activities. The credit account management fee granted to OTP Mortgage Bank is settled on a monthly basis. It has a fixed part that is based on the number of the managed credit accounts, and a variable one determined by the profit split method. The fees for the guarantee services provided by the Bank are charged monthly. The fee is determined by% and based on the stock being guaranteed. Fees for agent services are charged monthly. The rate is %, based on the products sold during the period.	Fees for ongoing services are charged on a monthly basis during the period when they are provided. Transaction-based fees are charged when the transaction takes places.
Net insurance fee income	Due to the fact that the Bank does not provide 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. 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 %.	Fees for ongoing services are charged on a monthly basis during the period when they are provided.
Other	Fees that are not significant in the Banks total income are included in Other fees category. Such fees are safe lease, special procedure fee, account rent fee, adlak service fee, fee of a copy of document, etc. 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 had been met, typically also in a fixed amount.	Fees for ongoing services are charged on a monthly basis during the period when they are provided. Fees for ad hoc services are charged when the transaction takes places.

NOTE 32: GAINS AND LOSSES (in HUF mn)

	2022	2021
Losses arising from derecognition of financial assets measured at amortised cost		
Gain from loans	485	93
Loss from loans	(1,881)	(818)
Gain from securities	-	968
Loss from securities	(54,402)	(2,520)
Other	(397)	(423)
Total	**(56,195)**	**(2,700)**

Additional information to Gains or losses from operating income:

	2022	2021
Foreign exchange gains and (losses)		
Gains from foreign exchange	6,857	-
Loss from foreign exchange	-	(5,875)
Margin gains	8,400	3,597
Margin losses	(14,716)	(3,360)
Total	**541**	**(5,638)**

	2022	2021
Net results on derivative instruments and hedge relationships		
Gains on FX spot, swap and option deals	76,709	41,224
Losses from FX spot, swap and option deals	(67,882)	(34,716)
Fees received related to option deals	4,111	2,203
Fees paid related to option deals	(5,073)	(2,830)
Gains on commodity deals	134,949	91,487
Losses from commodity deals	(132,288)	(91,474)
Gains on futures transactions	687	580
Losses from futures transactions	(402)	(208)
Losses from credit valuation adjustment related to FX spot, swap and option deals held for trading	(1,059)	(2,643)
Losses from credit valuation adjustment related to commodity deals held for trading	165	(187)
Total	**9,917**	**3,436**

	2022	2021
Losses on financial instruments at fair value through profit or loss		
Gains on securities mandatorily measured at fair value through profit or loss	2,688	2,285
Gains on loans mandatorily measured at fair value through profit or loss	21,205	12,069
Losses on loans mandatorily measured at fair value through profit or loss	(44,614)	(24,764)
Gains on financial liabilities designated at fair value through profit or loss	4,509	4,354
Losses on financial liabilities designated at fair value through profit or loss	(2,578)	(438)
Total	**(18,790)**	**(6,494)**

NOTE 32: GAINS AND LOSSES (in HUF mn) [continued]

Additional information to Gains or losses from operating income: [continued]

	2022	2021
(Losses) and gains on securities, net		
Interest income from held for trading securities	3,556	277
Gains on held for trading securities	11,599	8,018
Losses on held for trading securities	(7,806)	(3,646)
Gains on FVOCI securities	8	2,138
Losses on FVOCI securities	(7,960)	(6,797)
Gains on derecognition of investments in subsidiaries	-	1,311
Losses on derecognition of investments in subsidiaries	-	(1,963)
Gains/losses from other securities	(10,002)	2,766
Total	**(10,605)**	**2,104**

	2022	2021
Dividend income		
Distribution from investments in subsidiaries	182,153	95,042
Distribution from held for trading securities	12,166	3,844
Distribution from FVOCI equity instruments	207	151
Total	**194,526**	**99,037**
Total gains and losses from operating income (without other operating income)	**175,589**	**92,445**

For the year ended 31 December 2022 gains and losses attributable to the hedged risk on the hedged item and on the hedging instruments and also ineffectiveness in case of fair value hedge on amortised cost line items as follows

	Hedged items	Hedging instrument	Hedge ineffectiveness
Fair value hedge	6,750	(9,352)	(2,602)

For the year ended 31 December 2021 gains and losses attributable to the hedged risk on the hedged item and on the hedging instruments and also ineffectiveness in case of fair value hedge on amortised cost line items as follows

	Hedged items	Hedging instrument	Hedge ineffectiveness
Fair value hedge	17,406	(15,147)	2,259

NOTE 33: OTHER OPERATING INCOME AND EXPENSES AND OTHER ADMINISTRATIVE EXPENSES (in HUF mn)

Other operating income	2022	2021
Other operating income from OTP Employee Stock Ownership Program (OTP ESOP)	4,429	2,234
Intermediary and other services	2,716	2,272
Income from lease of tangible assets	1,186	1,009
Gains on IT services provided to subsidiaries	1,021	940
Derecognition of financial liabilities at amortised cost	985	2,290
Non-repayable assets received	443	1,174
Gains on sale of tangible assets	267	(81)
Income from written off receivables	249	281
Gains on transactions related to property activities	237	239
Gains on sale of receivables	-	-
Other	2,242	907
Total	**13,775**	**11,265**

NOTE 33: OTHER OPERATING INCOME AND EXPENSES AND OTHER ADMINISTRATIVE EXPENSES (in HUF mn) [continued]

Other operating expenses	2022	2021
Income from receivable related to NDIF extraordinary payment	16,037	-
Non-repayable assets contributed	(1,397)	(862)
Release of provision for off-balance sheet commitments and contingent liabilities	(2,057)	(1,343)
Release of loss allowance on other assets	(2,939)	961
Financial support for sport association and organization of public utility	(16,344)	(10,960)
Release of loss allowance/(Loss allowance) on investments in subsidiaries	(93,513)	(27,420)
Other	(15,692)	(2,012)
Total	**(131,942)**	**(41,636)**

Other administrative expenses:	2022	2021
Personnel expenses:		
Wages	110,646	105,176
Taxes related to personnel expenses	16,460	16,709
Other personnel expenses	27,197	14,241
Subtotal	**154,303**	**136,126**
Depreciation and amortization	**46,738**	**40,692**
Other administrative expenses:		
Taxes, other than income tax	167,834	81,171
Services	74,383	57,290
Fees payable to authorities and other fees	21,674	17,362
Administration expenses, including rental fees	7,477	7,439
Professional fees	9,320	6,714
Advertising	10,301	8,635
Subtotal	**290,989**	**178,611**
Total	**492,030**	**355,429**

NOTE 34: INCOME TAX (in HUF mn)

The Bank is presently liable for income tax at a rate of 9% of taxable income, local taxes at a rate of 2.3% of taxable revenue.

A breakdown of the income tax expense is:

	2022	2021
Current tax expense	18,026	14,528
Deferred tax (benefit)/expense	(31,664)	1,423
Total	**(13,638)**	**15,951**

NOTE 34: INCOME TAX (in HUF mn) [continued]

A reconciliation of the deferred tax liability is as follows:

	2022	2021
Balance as at 1 January	**(1,507)**	**(3,062)**
Deferred tax (expense)/ benefit	31,664	(1,423)
Tax effect of fair value adjustment of FVOCI securities and ICES recognised in comprehensive income	5,585	2,978
Closing balance	**35,742**	**(1,507)**

A breakdown of the deferred tax liability is as follows:

	2022	2021
Provision for untaken leave	323	282
Provision for termination benefits and jubilee	900	644
Amounts relate to negative tax base	19,424	-
Unused tax allowance	12,103	-
Fair value adjustment of held for trading and securities at fair value through other comprehensive income	4,230	-
Deferred tax asset	**36,980**	**926**
Fair value adjustment of held for trading and securities at fair value through other comprehensive income	-	(1,312)
Difference in depreciation and amortization	(1,193)	(1,076)
Provision for developments	(45)	(45)
Deferred tax liabilities	**(1,238)**	**(2,433)**
Net deferred tax assets/(liabilities)	**35,742**	**(1,507)**

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

	2022	2021
Profit before income tax	-7,006	141,290
Income tax at statutory tax rate (9%)	-	12,717
Income tax adjustments due to permanent differences are as follows:		
Share-based payment	265	323
Deferred use of tax allowance	43	90
Dividend income	(17,298)	(8,787)
Use of tax allowance in the current year	-	(3,461)
Amounts unenforceable by tax law	(182)	(847)
Carryforward of unused tax losses	(1,234)	-
Other	77	1,618
Income tax	**(30,431)**	**1,653**
Effective tax rate	434.4%	1.2%

	2022	2021
Current tax assets	1,569	-
Current tax liabilities	(3,199)	(4,776)
Net tax liabilities	**(1,630)**	**(4,776)**

NOTE 35: LEASE (in HUF mn)

The Bank as a lessee:

Amounts recognised in profit and loss	**2022**	**2021**
Interest expense on lease liabilities	1,186	214
Expense relating to short-term leases	1,945	2,143
Expense relating to variable lease payments not included in the measurement of lease liabilities	1,386	1,271

Leasing liabilities by maturities:

	2022	**2021**
Within one year	5,944	4,868
Over one year	35,520	13,064
Total	**41,464**	**17,932**

An analysis of movement in the carrying amount of right-of-use assets by category is as follows:

Gross carrying amount	**Right-of-use of real estate**	**Right-of-use of machinery and equipment**	**Total**
Balance as at 1 January 2021	**22,406**	**37**	**22,443**
Additions due to new contracts	5,788	-	5,788
Derecognition due to matured contracts	(263)	-	(263)
Change due to revaluation and modification	3,150	-	3,150
Balance as at 31 December 2021	**31,081**	**37**	**31,118**
Additions due to new contracts	27,206	1,950	29,156
Derecognition due to matured contracts	(3,731)	-	(3,731)
Change due to revaluation and modification	2,806	-	2,806
Balance as at 31 December 2022	**57,362**	**1,987**	**59,349**
Depreciation			
Balance as at 1 January 2021	**8,952**	**12**	**8,964**
Depreciation charge	5,155	6	5,161
Derecognition due to matured contracts	(238)	-	(238)
Balance as at 31 December 2021	**13,869**	**18**	**13,887**
Depreciation charge	7,315	69	7,384
Derecognition due to matured contracts	(1,804)	-	(1,804)
Balance as at 31 December 2022	**19,380**	**87**	**19,467**
Net carrying amount			
Balance as at 31 December 2021	**17,212**	**19**	**17,231**
Balance as at 31 December 2022	**37,982**	**1,900**	**39,882**

NOTE 36: 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 Bank. The most significant risks the Bank faces include:

36.1. Credit risk

The Bank 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 Bank 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 subject to an annual or more frequent review. The exposure to any borrower including banks and brokers is further restricted by sublimit 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 capital repayment obligations and by changing these lending limits when appropriate. Exposure to credit risk is partly managed obtaining collateral, corporate and personal guarantees.

36.1.1. Financial instruments by stages

Defining the expected credit loss on individual and collective basis

On individual basis:

Individually assessed are the non-retail or 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 (amortised 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 receivable's 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. At least one scenarios should anticipate that realised 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.

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.

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.1. Financial instruments by stages [continued]

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 Headquarters 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 is responsible for parameter estimations and updates, macroeconomic scenarios are calculated by OTP Bank Headquarters for each subsidiary and each parameter. Based on the consensus proposal of Local Risk Management and OTP Bank Headquarters, the Group Reserve Committee decides on the modification of parameters (all parameters for impairment calculation).

The impairment parameters should be backtested at least annually.

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.

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.1. Financial instruments by stages [continued]

Gross carrying amount and accumulated loss allowance of financial assets at amortized cost and fair value through other comprehensive income by IFRS 9 stages as at 31 December 2022:

	Carrying amount/ Exposure	Gross carrying amount / Notional amount					Loss allowance					Write-off
		Stage 1	Stage 2	Stage 3	Purchased or originated credit impaired	Total	Stage 1	Stage 2	Stage 3	Purchased or originated credit impaired	Total	
Cash, amounts due from banks and balances with the National Bank of Hungary	1,092,198	1,062,246	31,305	-	-	1,093,551	481	872	-	-	1,353	-
Placements with other banks	2,899,829	2,906,852	10,247	1,512	-	2,918,611	16,037	1,233	1,512	-	18,782	-
Repo receivables	246,529	248,696	-	-	-	248,696	2,167	-	-	-	2,167	-
Retail consumer loans	*556,062*	*507,517*	*65,853*	*52,913*	*2*	*626,285*	*15,229*	*17,670*	*37,323*	*1*	*70,223*	-
Mortgage loans	*62,587*	*45,912*	*8,895*	*7,039*	*2,279*	*64,125*	*57*	*179*	*1,116*	*186*	*1,538*	-
Municipal loans	*81,083*	*81,856*	*286*	-	-	*82,142*	*1,010*	*49*	-	-	*1,059*	-
Corporate loans	*4,125,308*	*3,541,098*	*589,153*	*86,401*	*10,716*	*4,227,368*	*22,068*	*39,153*	*39,334*	*1,505*	*102,060*	*25,879*
Loans at amortised cost	4,825,040	4,176,383	664,187	146,353	12,997	4,999,920	38,364	57,051	77,773	1,692	174,880	25,879
FVOCI securities	797,175	769,760	-	27,415	-	797,175	4,762	-	24,399	-	29,161	-
Securities at amortised cost	3,282,373	3,273,240	6,713	38,270	-	3,318,223	21,746	300	13,804	-	35,850	-
Other financial assets	255,125	252,201	5,330	4,600	20	262,151	1,947	2,944	2,121	14	7,026	-
Total as at 31 December 2022	**13,398,269**	**12,689,378**	**717,782**	**218,150**	**13,017**	**13,638,327**	**85,504**	**62,400**	**119,609**	**1,706**	**269,219**	**25,879**
Loan commitments	1,840,521	1,745,003	101,644	5,517	-	1,852,164	6,694	3,581	1,368	-	11,643	-
Financial guarantees	1,863,476	1,848,783	24,868	173	-	1,873,824	9,502	800	46	-	10,348	-
Factoring loan commitments	371,866	327,903	14,705	30,809	-	373,417	361	87	1,103	-	1,551	-
Bill of credit	12,285	12,128	247	-	-	12,375	85	5	-	-	90	-
Loan commitments and financial guarantees total	**4,088,148**	**3,933,817**	**141,464**	**36,499**	**-**	**4,111,780**	**16,642**	**4,473**	**2,517**	**-**	**23,632**	**-**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1.1. Financial instruments by stages [continued]

Gross carrying amount and accumulated loss allowance of financial assets at amortized cost and fair value through other comprehensive income by IFRS 9 stages as at 31 December 2021:

		Gross carrying amount / Notional amount					Loss allowance					
	Carrying amount/ Exposure	**Stage 1**	**Stage 2**	**Stage 3**	**Purchased or originated credit impaired**	**Total**	**Stage 1**	**Stage 2**	**Stage 3**	**Purchased or originated credit impaired**	**Total**	**Write-off**
Cash, amounts due from banks and balances with the National Bank of Hungary	474,945	475,130	-	-	-	475,130	185	-	-	-	185	-
Placements with other banks	2,567,212	2,573,226	-	1,476	-	2,574,702	6,014	-	1,476	-	7,490	-
Repo receivables	33,638	33,710	-	-	-	33,710	72	-	-	-	72	-
Retail consumer loans	*598,699*	*488,639*	*139,193*	*33,687*	*3*	*661,522*	*11,168*	*27,597*	*24,056*	*2*	*62,823*	-
Mortgage loans	*81,471*	*33,254*	*39,220*	*8,377*	*2,724*	*83,575*	*25*	*309*	*1,503*	*267*	*2,104*	-
Municipal loans	*71,328*	*70,311*	*1,346*	-	-	*71,657*	*223*	*106*	-	-	*329*	-
Corporate loans	*3,280,967*	*2,909,439*	*384,223*	*66,915*	*10,691*	*3,371,268*	*17,945*	*39,260*	*31,528*	*1,568*	*90,301*	*21,838*
Loans at amortised cost	4,032,465	3,501,643	563,982	108,979	13,418	4,188,022	29,361	67,272	57,087	1,837	155,557	21,838
FVOCI securities	641,939	641,939	-	-	-	641,939	1,174	-	-	-	1,174	-
Securities at amortised cost	3,071,038	3,064,500	13,223	-	-	3,077,723	5,882	803	-	-	6,685	-
Other financial assets	153,748	119,174	38,964	735	23	158,896	1,696	2,840	598	14	5,148	-
Total as at 31 December 2021	**10,974,985**	**10,409,322**	**616,169**	**111,190**	**13,441**	**11,150,122**	**44,384**	**70,915**	**59,161**	**1,851**	**176,311**	**21,838**
Loan commitments	1,665,288	1,615,196	56,838	4,996	-	1,677,030	5,620	3,968	2,154	-	11,742	-
Financial guarantees	1,500,977	1,491,470	14,883	244	-	1,506,597	4,820	749	51	-	5,620	-
Factoring loan commitments	423,267	412,692	5,847	5,133	-	423,672	228	32	145	-	405	-
Bill of credit	30,380	30,381	-	-	-	30,381	1	-	-	-	1	-
Loan commitments and financial guarantees total	**3,619,912**	**3,549,739**	**77,568**	**10,373**	**-**	**3,637,680**	**10,669**	**4,749**	**2,350**	**-**	**17,768**	**-**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.1. Financial instruments by stages [continued]

Changes in the Loss allowance of financial assets at amortised cost and fair value through other comprehensive income by IFRS 9 stages

Loans at amortised cost

	Stage 1	Stage 2	Stage 3	POCI	Total
Loss allowance as at 1 January 2021	**22,506**	**65,016**	**33,226**	**1,641**	**122,389**
Transfer to Stage 1	12,289	(11,919)	(370)	-	-
Transfer to Stage 2	(1,867)	3,241	(1,374)	-	-
Transfer to Stage 3	(369)	(5,636)	6,005	-	-
Net remeasurement of loss allowance	(10,705)	18,125	20,779	221	28,420
New financial assets originated or purchased	15,197	6,326	4,292	1	25,816
Financial assets derecognised (other than write-offs)	(7,638)	(7,540)	(5,323)	(16)	(20,517)
Unwind of discount	-	-	947	9	956
Write-offs	(52)	(341)	(1,095)	(19)	(1,507)
Loss allowance as at 31 December 2021	**29,361**	**67,272**	**57,087**	**1,837**	**155,557**
Transfer to Stage 1	13,705	(12,361)	(1,344)	-	-
Transfer to Stage 2	(2,058)	6,779	(4,721)	-	-
Transfer to Stage 3	(738)	(6,414)	7,152	-	-
Net remeasurement of loss allowance	(14,906)	5,886	23,898	(69)	14,809
New financial assets originated or purchased	22,665	7,284	6,955	14	36,918
Financial assets derecognised (other than write-offs)	(9,595)	(11,041)	(8,942)	(90)	(29,668)
Unwind of discount	-	-	4,899	40	4,939
Write-offs	(70)	(354)	(7,211)	(40)	(7,675)
Loss allowance as at 31 December 2022	**38,364**	**57,051**	**77,773**	**1,692**	**174,880**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.1. Financial instruments by stages [continued]

Changes in the Loss allowance of financial assets at amortised cost and fair value through other comprehensive income by IFRS 9 stages [continued]

Loan commitments and financial guarantees

	Stage 1	Stage 2	Stage 3	Total
Loss allowance as at 1 January 2021	**10,717**	**5,820**	**953**	**17,490**
Transfer to Stage 1	2,910	(2,840)	(70)	-
Transfer to Stage 2	(200)	322	(122)	-
Transfer to Stage 3	(21)	(109)	130	-
Net remeasurement of loss allowance	(4,628)	1,371	1,500	(1,757)
New financial assets originated or purchased	3,215	904	98	4,217
Decrease	(1,324)	(719)	(139)	(2,182)
Loss allowance as at 31 December 2021	**10,669**	**4,749**	**2,350**	**17,768**
Transfer to Stage 1	2,095	(1,929)	(166)	-
Transfer to Stage 2	(442)	542	(100)	-
Transfer to Stage 3	(21)	(124)	145	-
Net remeasurement of loss allowance	2,148	1,020	1,052	4,220
New financial assets originated or purchased	3,933	602	78	4,613
Decrease	(1,740)	(387)	(842)	(2,969)
Loss allowance as at 31 December 2022	**16,642**	**4,473**	**2,517**	**23,632**

Cash, amounts due from banks and balances with the National Bank of Hungary

	Stage 1	Stage 2	Total
Loss allowance as at 1 January 2021	**-**	**-**	**-**
New financial assets originated or purchased	185	-	185
Loss allowance as at 31 December 2021	**185**	**-**	**185**
Net remeasurement of loss allowance	104	621	725
New financial assets originated or purchased	291	251	542
Financial assets derecognised (other than write-offs)	(99)	-	(99)
Loss allowance as at 31 December 2022	**481**	**872**	**1,353**

Placements with other banks

	Stage 1	Stage 2	Stage 3	Total
Loss allowance as at 1 January 2021	**4,356**	**2**	**1,461**	**5,819**
Net remeasurement of loss allowance	(303)	-	15	(288)
New financial assets originated or purchased	4,566	-	-	4,566
Financial assets derecognised (other than write-offs)	(2,605)	(2)	-	(2,607)
Loss allowance as at 31 December 2021	**6,014**	**-**	**1,476**	**7,490**
Transfer to Stage 2	(71)	71	-	-
Net remeasurement of loss allowance	1,261	1,149	36	2,446
New financial assets originated or purchased	14,166	13	-	14,179
Financial assets derecognised (other than write-offs)	(5,333)	-	-	(5,333)
Loss allowance as at 31 December 2022	**16,037**	**1,233**	**1,512**	**18,782**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.1. Financial instruments by stages [continued]

Changes in the Loss allowance of financial assets at amortised cost and fair value through other comprehensive income by IFRS 9 stages [continued]

Repo Receivables

	Stage 1	Total
Loss allowance as at 1 January 2021	**292**	**292**
New financial assets originated or purchased	449	449
Financial assets derecognised (other than write-offs)	(669)	(669)
Loss allowance as at 31 December 2021	**72**	**72**
New financial assets originated or purchased	4,480	4,480
Financial assets derecognised (other than write-offs)	(2,385)	(2,385)
Loss allowance as at 31 December 2022	**2,167**	**2,167**

Securities at amortised cost

	Stage 1	Stage 2	Stage 3	Total
Loss allowance as at 1 January 2021	**3,288**	**1,281**	**-**	**4,569**
Net remeasurement of loss allowance	898	(478)	-	420
New financial assets originated or purchased	1,761	-	-	1,761
Financial assets derecognised (other than write-offs)	(65)	-	-	(65)
Loss allowance as at 31 December 2021	**5,882**	**803**	**-**	**6,685**
Transfer to Stage 3	(48)	-	48	-
Net remeasurement of loss allowance	13,564	(18)	13,756	27,302
New financial assets originated or purchased	2,972	7	-	2,979
Financial assets derecognised (other than write-offs)	(624)	(492)	-	(1,116)
Loss allowance as at 31 December 2022	**21,746**	**300**	**13,804**	**35,850**

FVOCI Securities

	Stage 1	Stage 3	Total
Loss allowance as at 1 January 2021	**1,714**	**-**	**1,714**
Net remeasurement of loss allowance	(483)	-	(483)
New financial assets originated or purchased	348	-	348
Financial assets derecognised (other than write-offs)	(405)	-	(405)
Loss allowance as at 31 December 2021	**1,174**	**-**	**1,174**
Transfer to Stage 2	-	-	-
Transfer to Stage 3	(49)	49	-
Net remeasurement of loss allowance	1,741	24,350	26,091
New financial assets originated or purchased	2,144	-	2,144
Financial assets derecognised (other than write-offs)	(248)	-	(248)
Loss allowance as at 31 December 2022	**4,762**	**24,399**	**29,161**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.2. Loan portfolio by internal ratings

2022	Gross carrying amount				
Internal rating grade	**Stage1**	**Stage2**	**Stage3**	**POCI**	**Total**
High grade (1-4)	1,891,381	180,426	-	214	**2,072,021**
Medium grade (5-7)	2,229,142	384,237	-	10,664	**2,624,043**
Low grade (8-9)	55,863	99,521	-	308	**155,692**
Non performing	-	-	146,353	1,811	**148,164**
Total	**4,176,386**	**664,184**	**146,353**	**12,997**	**4,999,920**

	Accumulated loss allowance				
Internal rating grade	**Stage1**	**Stage2**	**Stage3**	**POCI**	**Total**
High grade (1-4)	6,965	17,509	-	3	**24,477**
Medium grade (5-7)	28,937	25,419	-	1,115	**55,471**
Low grade (8-9)	2,462	14,123		18	**16,603**
Non performing	-	-	77,773	556	**78,329**
Total	**38,364**	**57,051**	**77,773**	**1,692**	**174,880**

2021	Gross carrying amount				
Internal rating grade	**Stage1**	**Stage2**	**Stage3**	**POCI**	**Total**
High grade (1-4)	1,930,488	215,519	-	224	**2,146,231**
Medium grade (5-7)	1,459,861	238,767	-	10,522	**1,709,150**
Low grade (8-9)	111,294	109,696	-	253	**221,243**
Non performing	-	-	108,979	2,419	**111,398**
Total	**3,501,643**	**563,982**	**108,979**	**13,418**	**4,188,022**

	Accumulated loss allowance				
Internal rating grade	**Stage1**	**Stage2**	**Stage3**	**POCI**	**Total**
High grade (1-4)	11,870	21,906	-	4	**33,780**
Medium grade (5-7)	15,929	24,853	-	1,234	**42,016**
Low grade (8-9)	1,562	20,513	-	12	**22,087**
Non performing	-	-	57,087	587	**57,674**
Total	**29,361**	**67,272**	**57,087**	**1,837**	**155,557**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.3. Loan portfolio by countries

An analysis of carrying amount of the non-qualified and qualified gross loan portfolio by country is as follows:

Country	31 December 2022 Gross loan and placements with other banks portfolio	31 December 2022 Loss allowance	31 December 2021 Gross loan and placements with other banks portfolio	31 December 2021 Loss allowance
Hungary	5,651,445	(147,446)	5,039,601	(130,588)
Malta	772,898	(3,857)	792,943	(2,556)
Bulgaria	272,449	(10,736)	105,899	(11,786)
France	255,918	(969)	112,810	(321)
Serbia	251,812	(6,204)	148,599	(2,048)
Romania	197,255	(3,741)	113,517	(3,695)
Croatia	149,993	(1,424)	52,395	(530)
Slovakia	120,897	(532)	76,373	(263)
Slovenia	101,842	(261)	1,514	(6)
Ukraine	86,329	(2,393)	3,577	(2,847)
Switzerland	59,873	(3,104)	54,332	(1,589)
Other	246,516	(15,162)	294,874	(6,890)
Loans, placements with other banks and repo receivables at amortised cost total	**8,167,227**	**(195,829)**	**6,796,434**	**(163,119)**
Hungary	793,228	-	662,008	-
Other	14	-	4	-
Loans at fair value total	**793,242**	**-**	**662,012**	**-**
Loans, placements with other banks and repo receivables total	**8,960,469**	**(195,829)**	**7,458,446**	**(163,119)**

36.1.4. Loan portfolio classification by economic activities

Loans at amortised cost by economic activities	31 December 2022 Gross amount	31 December 2022 Loss allowance	31 December 2021 Gross amount	31 December 2021 Loss allowance
Retail	645,496	71,024	708,355	63,843
Agriculture, forestry and fishing	211,875	6,025	177,202	4,976
Manufacturing, mining and quarrying and other industry	587,190	18,211	320,990	7,249
Construction	231,015	5,580	172,441	4,919
Wholesale and retail trade, transportation and storage accommodation and food service activities	833,618	18,674	657,273	18,490
Information and communication	25,404	1,027	23,072	1,136
Financial and insurance activities	1,183,848	14,903	1,042,939	9,444
Real estate activities	471,772	10,995	305,100	13,143
Professional, scientific, technical, administration	231,335	3,864	136,876	3,109
Public administration, defence, education, human health and social work activities	99,593	1,592	72,027	472
Other services	478,774	22,985	571,747	28,776
Total	**4,999,920**	**174,880**	**4,188,022**	**155,557**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.5. Collaterals

The collateral value held by the Bank by collateral types is as follows (**total collateral value**). The collaterals cover loans as well as off-balance sheet exposures.

Types of collateral	2022	2021
Mortgages	1,859,713	1,602,913
Guarantees and warranties	2,082,418	1,554,921
Deposit	174,247	229,041
from this: Cash	*95,836*	*80,598*
Securities	*78,411*	*148,443*
Other	254	387
Total	**4,116,632**	**3,387,262**

The collateral value held by the Bank by collateral types is as follows (**to the extent of the exposures**). The collaterals cover loans as well as off-balance sheet exposures.

Types of collateral	2022	2021
Mortgage	921,064	753,222
Guarantees and warranties	1,597,363	1,196,385
Deposit	44,644	106,620
from this: Cash	*14,661*	*12,756*
Securities	*29,983*	*93,864*
Other	216	305
Total	**2,563,287**	**2,056,532**

The coverage level of loan portfolio to the extent of the exposures increased from 30.41% to 32.37% as at 31 December 2022, while the coverage to the total collateral value decreased from 50.09% to 51.99%.

The collateral value (**total collateral value**) held by the Bank related to impaired loan portfolio (Stage 3 and POCI loans) is as follows:

For the year ended 31 December 2022	Gross carrying amount	Loss allowance	Carrying amount	Collateral value
Retail consumer loans	52,915	(37,324)	15,591	30
Mortgage loans	9,318	(1,302)	8,016	40,796
Corporate loans	97,117	(40,839)	56,278	93,399
Total	**159,350**	**(79,465)**	**79,885**	**134,225**

For the year ended 31 December 2021	Gross carrying amount	Loss allowance	Carrying amount	Collateral value
Retail consumer loans	33,690	(24,058)	9,632	387
Mortgage loans	11,101	(1,770)	9,331	39,263
Corporate loans	77,606	(33,096)	44,510	56,960
Total	**122,397**	**(58,924)**	**63,473**	**96,610**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

36.1.6. Restructured loans

	31 December 2022		31 December 2021	
	Gross portfolio	**Loss allowance**	**Gross portfolio**	**Loss allowance**
Consumer loans	22,947	(6,279)	118,094	(21,816)
Mortgage loans	6,342	(114)	36,413	(266)
Corporate loans	181,496	(21,820)	193,571	(25,865)
SME loans	40,422	(2,951)	33,388	(4,487)
Total	**251,208**	**(31,165)**	**381,466**	**(52,434)**

Restructured portfolio definition

The forborne definition used by the Bank 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 forborne. An exposure is considered performing forborne 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 forborne.

The loan volume of Hungarian entities classified as performing forborne exclusively due to moratoria participation decreased significantly due the expiration of the probation period for retail exposures.

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

Financial instruments by rating categories[1]

Held-for-trading securities as at 31 December 2022

	A1	A2	A3	Aa2	Aa3	Aaa	Ba1	Ba2	Ba3	Baa1	Baa2	Baa3	N/A	Total
Government bonds	-	197	-	-	-	346	-	3,669	-	-	62,947	362	-	67,521
Other bonds	-	-	-	1	-	-	-	-	-	-	1,627	117	3	1,748
Investment fund units	-	-	-	-	-	-	-	-	-	-	-	-	274	274
Hungarian government discounted Treasury Bills	-	-	-	-	-	-	-	-	-	-	4,785	-	-	4,785
Shares	42	47	29	-	20	-	39	2	4	15	24	-	163	385
Mortgage bonds	-	-	-	-	-	-	-	-	-	-	11	-	71	82
Total	**42**	**244**	**29**	**1**	**20**	**346**	**39**	**3,671**	**4**	**15**	**69,394**	**479**	**511**	**74,795**

Held-for-trading securities as at 31 December 2021

	A1	A2	A3	B1	Aa3	Ba2	Baa1	Baa2	Baa3	N/A	Total
Government bonds	-	16	-	-	-	3,634	-	26,024	1,153	-	30,827
Other bonds	-	-	485	-	-	-	-	1,348	97	158	2,088
Other non-interest bearing securities	-	-	-	-	-	-	-	-	-	1,134	1,134
Hungarian government discounted Treasury Bills	-	-	-	-	-	-	-	869	-	-	869
Shares	49	59	35	6	19	2	12	24	83	310	599
Mortgage bonds	-	-	-	-	-	-	-	16	-	100	116
Total	**49**	**75**	**520**	**6**	**19**	**3,636**	**12**	**28,281**	**1,333**	**1,702**	**35,633**

Securities mandatorily measured at fair value through profit or loss as at 31 December 2022

	N/A	Total
Government bonds	29,029	29,029
Mortgage bonds	1,469	1,469
Total	**30,498**	**30,498**

[1] Moody's ratings

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

Financial instruments by rating categories[1]

Securities mandatorily measured at fair value through profit or loss as at 31 December 2021

	N/A	Total
Government bonds	25,126	25,126
Mortgage bonds	2,935	2,935
Total	**28,061**	**28,061**

FVOCI securities as at 31 December 2022

	A1	A3	Ba1	Ba2	Baa1	Baa2	Baa3	N/A	WR	Total
Government bonds	734	-	-	5,971	3,941	136,671	2,661	-	27,415	177,393
Mortgage bonds	42,407	-	-	-	-	301,987	-	12,146	-	356,540
Other bonds	-	1,691	3,820	-	-	-	39,309	17,774	-	62,594
Hungarian Treasury Bills	-	-	-	-	-	182,726	-	-	-	182,726
Non-treading equity instruments	-	-	-	-	-	-	-	17,922	-	17,922
Total	**43,141**	**1,691**	**3,820**	**5,971**	**3,941**	**621,384**	**41,970**	**47,842**	**27,415**	**797,175**

FVOCI securities as at 31 December 2021

	A1	A2	A3	Ba1	Ba2	Baa1	Baa2	Baa3	N/A	Total
Government bonds	740	2,471	-	15,209	6,784	5,032	182,439	66,201	-	278,876
Mortgage bonds	47,568	-	-	-	-	-	156,027	-	14,346	217,941
Other bonds	-	-	2,896	4,001	-	-	1,622	37,606	18,745	64,870
Hungarian Treasury Bills	-	-	-	-	-	-	63,115	-	-	63,115
Non-treading equity instruments	-	-	-	-	-	-	-	-	17,137	17,137
Total	**48,308**	**2,471**	**2,896**	**19,210**	**6,784**	**5,032**	**403,203**	**103,807**	**50,228**	**641,939**

[1] Moody's ratings

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

Financial instruments by rating categories[1]

Securities at amortised cost as at 31 December 2022

	A1	A2	A3	Aaa	Ba1	Ba2	Baa1	Baa2	Baa3	N/A	WR	Total
Government bonds	1,301	26,341	-	281,824	-	160,048	44,691	2,374,565	33,248	-	24,427	2,946,445
Corporate bonds	1,911	9,357	403	-	-	1,968	11,874	3,971	29,022	252,938	-	311,444
Mortgage bonds	12,966	-	-	-	-	-	-	-	-	11,518	-	24,484
Total	**16,178**	**35,698**	**403**	**281,824**	**-**	**162,016**	**56,565**	**2,378,536**	**62,270**	**264,456**	**24,427**	**3,282,373**

Securities at amortised cost as at 31 December 2021

	A1	A2	Aaa	Ba1	Ba2	Baa1	Baa2	Baa3	N/A	Total
Government bonds	9,002	-	185,261	18,871	12,663	25,986	2,550,824	55,256	-	2,857,863
Corporate bonds	-	8,210	-	-	-	7,343	3,682	14,780	154,886	188,901
Mortgage bonds	12,992	-	-	-	-	-	-	-	11,282	24,274
Total	**21,994**	**8,210**	**185,261**	**18,871**	**12,663**	**33,329**	**2,554,506**	**70,036**	**166,168**	**3,071,038**

[1] Moody's ratings

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.1. Credit risk [continued]

An analysis of securities (held for trading, mandatorily FVTPL, FVOCI and amortised cost) in a country breakdown is as follows:

Country	31 December 2022		31 December 2021	
	Gross carrying amount	Loss allowance	Gross carrying amount	Loss allowance
Hungary	2,412,543	(19,158)	2,709,786	(5,823)
United States of America	418,900	(1,234)	194,518	(149)
Luxembourg	223,256	(4,804)	-	-
Serbia	140,116	(867)	12,724	(61)
Spain	56,375	(365)	33,659	(178)
Russia	27,064	(9,246)	32,901	(46)
Portugal	16,979	(101)	36,268	(177)
Other	22,990	(75)	57,867	(251)
Securities at amortised cost total	**3,318,223**	**(35,850)**	**3,077,723**	**(6,685)**
Hungary	664,813	-	517,461	-
Luxembourg	62,549	-	-	-
Russia	26,829	-	65,275	-
Other	25,062	-	42,065	-
FVOCI securities total	**779,253**	**-**	**624,801**	**-**
United States of America	5,479	-	3,389	-
Austria	11,914	-	13,223	-
Other	529	-	526	-
Non-trading equity instruments designated to measure at fair value through other comprehensive income	**17,922**	**-**	**17,138**	**-**
Hungary	67,448	-	29,814	-
Serbia	3,668	-	3,634	-
Other	3,679	-	2,185	-
Held for trading securities total	**74,795**	**-**	**35,633**	**-**
Hungary	21,124	-	18,807	-
Luxembourg	6,885	-	5,542	-
United States of America	1,469	-	2,935	-
Portugal	1,020	-	777	-
Securities mandatorily measured at fair value through profit or loss	**30,498**	**-**	**28,061**	**-**
Securities total	**4,220,691**	**(35,850)**	**3,783,356**	**(6,685)**

36.2. Maturity analysis of assets and liabilities and liquidity risk

Liquidity risk is a measure of the extent to which the Bank may be required to raise funds to meet its commitments associated with financial instruments. The Bank maintains its liquidity profiles in accordance with regulations laid down 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 Bank 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 Bank'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 Bank must keep high quality liquidity reserves by means it can fulfil all liabilities when they fall due without material additional costs.

The liquidity reserves can be divided into two parts. There are separate decentralized liquid asset portfolios at subsidiary level and a centralized flexible liquidity pool at 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 OTP 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 Bank increased significantly while the liquidity risk exposure has decreased considerably. Currently the (over)coverage of risk liquidity risk exposure by high quality liquid assets is at all-time record highs. There were no material changes in the liquidity risk management process for the year ended 31 December 2022.

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.

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 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.

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.2. Maturity analysis of assets and liabilities and liquidity risk [continued]

31 December 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 Bank of Hungary	1,093,551	-	-	-	-	1,093,551
Placements with other banks	993,586	198,808	1,090,007	636,267	-	2,918,668
Repo receivables	248,696	-	-	-	-	248,696
Financial assets at fair value through profit or loss	4,380	11,013	58,638	9,357	20,787	104,175
Securities at fair value through other comprehensive income	118,490	157,390	398,959	223,210	122,241	1,020,290
Securities at amortised cost	32,817	318,757	1,874,608	1,139,867	-	3,366,049
Loans at amortised cost	1,413,038	1,040,150	1,436,743	975,208	-	4,865,139
Loans mandatorily measured at fair value through profit or loss	18,927	20,768	140,776	667,279	-	847,750
Investments in subsidiaries, associates and other investments	-	-	-	-	1,596,717	1,596,717
Other financial assets	260,924	1,228	-	-	-	262,152
TOTAL ASSETS	**4,184,409**	**1,748,114**	**4,999,731**	**3,651,188**	**1,743,952**	**16,327,394**
Amounts due to banks and deposits from the National Bank of Hungary and other banks	839,590	164,140	654,843	111,406	-	1,769,979
Deposits from customers	10,903,401	192,419	12,091	11,272	-	11,119,183
Repo liabilities	134,894	3,343	270,129	-	-	408,366
Liabilities from issued securities	8,762	1,912	486,782	3,326	-	500,782
Subordinated bonds and loans	3,395	-	-	291,801	-	295,196
Financial liabilities at fair value through profit or loss	583	1,133	5,535	12,602	-	19,853
Leasing liabilities	1,049	4,895	25,857	9,663	-	41,464
Other financial liabilities	258,771	17,377	1,706	-	-	277,854
TOTAL LIABILITIES	**12,150,445**	**385,219**	**1,456,943**	**440,070**	**-**	**14,432,677**
NET POSITION	**(7,966,036)**	**1,362,895**	**3,542,788**	**3,211,118**	**1,743,952**	**1,894,717**
Receivables from derivative financial instruments classified as held for trading	8,478,109	1,788,941	511,637	179,092	-	10,957,779
Liabilities from derivative financial instruments classified as held for trading	(8,693,889)	(1,814,992)	(524,167)	(176,944)	-	(11,209,992)
Net position of derivative financial instruments classified as held for trading	**(215,780)**	**(26,051)**	**(12,530)**	**2,148**	**-**	**(252,213)**
Receivables from derivative financial instruments designated as hedge accounting	316,440	186,838	784,159	15,859	-	1,303,296
Liabilities from derivative financial instruments designated as hedge accounting	(297,714)	(217,102)	(2,031,727)	(13,425)	-	(2,559,968)
Net position of derivative financial instruments designated as hedging accounting	**18,726**	**(30,264)**	**(1,247,568)**	**2,434**	**-**	**(1,256,672)**
Net position of derivative financial instruments total	**(197,054)**	**(56,315)**	**(1,260,098)**	**4,582**	**-**	**(1,508,885)**
Commitments to extend credit	1,852,164	-	-	-	-	1,852,164
Confirmed letters of credit	12,376	-	-	-	-	12,376
Factoring loan commitment	373,417	-	-	-	-	373,417
Bank guarantees	84,327	216,572	405,546	1,167,378	-	1,873,823
Off-balance sheet commitments	**2,322,284**	**216,572**	**405,546**	**1,167,378**	**-**	**4,111,780**

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 Bank could be required to pay. On-demand deposits are presented in the earliest (within 3 month) period category, however based on Management’s discretion the Bank has appropriate liquidity reserves as maintenance and management of liquidity risk.

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.2. Maturity analysis of assets and liabilities and liquidity risk [continued]

As at 31 December 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 Bank of Hungary	475,130	-	-	-	-	475,130
Placements with other banks	1,176,184	585,499	609,182	204,493	-	2,575,358
Repo receivables	33,710	-	-	-	-	33,710
Financial assets at fair value through profit or loss	908	3,709	19,804	10,259	29,794	64,474
Securities at fair value through other comprehensive income	16,329	58,446	358,805	199,854	17,138	650,572
Securities at amortised cost	28,514	308,921	1,792,058	938,902	-	3,068,395
Loans at amortised cost	1,327,629	873,169	1,377,885	726,016	-	4,304,699
Loans mandatorily measured at fair value through profit or loss	16,516	15,575	121,104	553,569	-	706,764
Investments in subsidiaries, associates and other investments	-	-	-	-	1,573,008	1,573,008
Other financial assets	157,669	1,227	-	-	-	158,896
TOTAL ASSETS	**3,232,589**	**1,846,546**	**4,278,838**	**2,633,093**	**1,619,940**	**13,611,006**
Amounts due to banks and deposits from the National Bank of Hungary and other banks	297,779	138,418	506,233	108,773	-	1,051,203
Deposits from customers	9,844,911	57,851	33,112	12,658	-	9,948,532
Repo liabilities	49,726	-	36,854	-	-	86,580
Liabilities from issued securities	5,258	6,812	8,812	2,065	-	22,947
Subordinated bonds and loans	2,841	-	-	269,698	-	272,539
Financial liabilities at fair value through profit or loss	531	1,253	4,422	13,927	-	20,133
Leasing liabilities	1,078	3,791	9,356	3,707	-	17,932
Other financial liabilities	193,315	5,337	876	-	-	199,528
TOTAL LIABILITIES	**10,395,439**	**213,462**	**599,665**	**410,828**	**-**	**11,619,394**
NET POSITION	**(7,162,850)**	**1,633,084**	**3,679,173**	**2,222,265**	**1,619,940**	**1,991,612**
Receivables from derivative financial instruments classified as held for trading	4,573,312	1,957,498	339,869	135,728	-	7,006,407
Liabilities from derivative financial instruments classified as held for trading	(4,581,312)	(1,951,622)	(328,607)	(132,345)	-	(6,993,886)
Net position of derivative financial instruments classified as held for trading	**(8,000)**	**5,876**	**11,262**	**3,383**	**-**	**12,521**
Receivables from derivative financial instruments designated as hedge accounting	5,693	37,436	580,280	16,195	-	639,604
Liabilities from derivative financial instruments designated as hedge accounting	(7,658)	(46,925)	(595,692)	(16,417)	-	(666,692)
Net position of derivative financial instruments designated as hedging accounting	**(1,965)**	**(9,489)**	**(15,412)**	**(222)**	**-**	**(27,088)**
Net position of derivative financial instruments total	**(9,965)**	**(3,613)**	**(4,150)**	**3,161**	**-**	**(14,567)**
Commitments to extend credit	1,677,030	-	-	-	-	1,677,030
Confirmed letters of credit	30,381	-	-	-	-	30,381
Factoring loan commitment	423,673	-	-	-	-	423,673
Bank guarantees	133,460	189,747	247,886	936,824	-	1,507,917
Off-balance sheet commitments	**2,264,544**	**189,747**	**247,886**	**936,824**	**-**	**3,639,001**

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 Bank could be required to pay. On-demand deposits are presented in the earliest (within 3 month) period category, however based on Management's discretion the Bank has appropriate liquidity reserves as maintenance and management of liquidity risk.

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.3. Net foreign currency position and foreign currency risk

As at 31 December 2022

	USD	EUR	CHF	Others	Total
Assets	583,984	3,681,519	8,956	369,969	4,644,428
Liabilities	(741,173)	(3,992,404)	(65,565)	(82,488)	(4,881,630)
Derivative financial instruments	154,902	615,822	56,690	(285,615)	541,799
Net position	**(2,287)**	**304,937**	**81**	**1,866**	**304,597**

As at 31 December 2021

	USD	EUR	CHF	Others	Total
Assets	486,225	2,448,729	14,989	290,504	3,240,447
Liabilities	(296,903)	(2,121,543)	(42,590)	(59,350)	(2,520,386)
Derivative financial instruments	(197,080)	(321,377)	27,953	(229,089)	(719,593)
Net position	**(7,758)**	**5,809**	**352**	**2,065**	**468**

The table above provides an analysis of the Bank’s main foreign currency exposures. The remaining foreign currencies are shown within ‘Others’. The Bank monitors its foreign exchange position for compliance with the regulatory requirements of the NBH and its own limit system established in respect of limits on open positions. The measurement of the Bank’s open its currency position involves monitoring the VaR limit on the foreign exchange exposure of the Bank.

In the table Derivative financial instruments are stated at fair value.

36.4. 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 Bank's interest bearing assets and liabilities 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 Bank 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 dates of the Bank. 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 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.4. Interest rate risk management [continued]

As at 31 December 2022	within 1 month		within 3 months over 1 month		within 1 year over 3 months		within 2 years over 1 year		over 2 years		Non-interest -bearing		Total		Total
ASSETS	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	
Cash, amounts due from banks and balances with the National Bank of Hungary	**637,040**	**251,192**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**183,139**	**20,827**	**820,179**	**272,019**	**1,092,198**
fixed interest	637,040	251,192	-	-	-	-	-	-	-	-	-	-	637,040	251,192	888,232
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	183,139	20,827	183,139	20,827	203,966
Placements with other banks	**665,056**	**153,142**	**130,299**	**461,042**	**74,287**	**208,087**	**98,606**	**-**	**1,012,903**	**36,780**	**48,754**	**10,873**	**2,029,905**	**869,924**	**2,899,829**
fixed interest	5,118	50,475	19,408	105,266	57,053	86,207	98,606	-	1,012,903	36,780	-	-	1,193,088	278,728	1,471,816
variable interest	659,938	102,667	110,891	355,776	17,234	121,880	-	-	-	-	-	-	788,063	580,323	1,368,386
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	48,754	10,873	48,754	10,873	59,627
Repo receivables	**246,529**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**246,529**	**-**	**246,529**
fixed interest	155,711	-	-	-	-	-	-	-	-	-	-	-	155,711	-	155,711
variable interest	90,818	-	-	-	-	-	-	-	-	-	-	-	90,818	-	90,818
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities held for trading	**16**	**1,203**	**5,199**	**229**	**12,146**	**4,250**	**21,882**	**1,049**	**26,857**	**1,305**	**123**	**536**	**66,223**	**8,572**	**74,795**
fixed interest	1	1,203	1,009	229	3,775	4,250	21,882	1,049	26,857	1,305	-	-	53,524	8,036	61,560
variable interest	15	-	4,190	-	8,371	-	-	-	-	-	-	-	12,576	-	12,576
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	123	536	123	536	659
Securities mandatorily measured at fair value through profit or loss	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**21,124**	**9,374**	**21,124**	**9,374**	**30,498**
fixed interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	21,124	9,374	21,124	9,374	30,498
Securities at fair value through other comprehensive income	**281,342**	**-**	**62,611**	**-**	**112,239**	**41,000**	**13,691**	**3,850**	**194,931**	**69,589**	**528**	**17,394**	**665,342**	**131,833**	**797,175**
fixed interest	45,688	-	62,610	-	112,232	41,000	13,691	3,850	194,931	69,589	-	-	429,152	114,439	543,591
variable interest	235,654	-	1	-	7	-	-	-	-	-	-	-	235,662	-	235,662
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	528	17,394	528	17,394	17,922

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.4. Interest rate risk management [continued]

As at 31 December 2022	within 1 month		within 3 months over 1 month		within 1 year over 3 months		within 2 years over 1 year		over 2 years		Non-interest -bearing		Total		Total
ASSETS [continued]	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	
Loans measured at amortised cost	**766,348**	**661,415**	**298,189**	**1,468,489**	**126,438**	**89,257**	**142,052**	**7,052**	**958,858**	**129,401**	**133,290**	**44,249**	**2,425,175**	**2,399,863**	**4,825,038**
fixed interest	12,400	2,313	10,673	2,338	114,941	8,718	141,272	7,052	951,725	129,401	-	-	1,231,011	149,822	1,380,833
variable interest	753,948	659,102	287,516	1,466,151	11,497	80,539	780	-	7,133	-	-	-	1,060,874	2,205,792	3,266,666
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	133,290	44,249	133,290	44,249	177,539
Loans mandatorily measured at fair value through profit or loss	**18,432**	**-**	**110**	**-**	**515**	**-**	**181,763**	**-**	**592,422**	**-**	**-**	**-**	**793,242**	**-**	**793,242**
fixed interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable interest	18,432	-	110	-	515	-	181,763	-	592,422	-	-	-	793,242	-	793,242
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities at amortised cost	**19,142**	**-**	**-**	**5,072**	**179,968**	**139,632**	**271,024**	**2,422**	**1,914,570**	**750,543**	**-**	**-**	**2,384,704**	**897,669**	**3,282,373**
fixed interest	-	-	-	-	179,968	139,632	271,024	2,422	1,914,570	750,543	-	-	2,365,562	892,597	3,258,159
variable interest	19,142	-	-	5,072	-	-	-	-	-	-	-	-	19,142	5,072	24,214
non-interest-bearing	**19,142**	**-**	**-**	**5,072**	**179,968**	**139,632**	**271,024**	**2,422**	**1,914,570**	**750,543**	-	**-**	**2,384,704**	**897,669**	3,282,373
Other financial assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**200,781**	**54,344**	**200,781**	**54,344**	**255,125**
fixed interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	200,781	54,344	200,781	54,344	255,125
Derivative financial instruments	**2,112,146**	**2,789,859**	**906,446**	**1,424,063**	**469,337**	**545,207**	**36,682**	**35,935**	**183,664**	**98,147**	**194,741**	**604,648**	**3,903,016**	**5,497,859**	**9,400,875**
fixed interest	1,991,112	2,722,206	428,080	878,305	262,461	518,338	36,682	35,935	183,664	98,147	-	-	2,901,999	4,252,931	7,154,930
variable interest	121,034	67,653	478,366	545,758	206,876	26,869	-	-	-	-	-	-	806,276	640,280	1,446,556
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	194,741	604,648	194,741	604,648	799,389

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.4. Interest rate risk management [continued]

As at 31 December 2022	within 1 month		within 3 months over 1 month		within 1 year over 3 months		within 2 years over 1 year		over 2 years		Non-interest -bearing		Total		Total
LIABILITIES	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	
Amounts due to banks and deposits with the National Bank of Hungary and other banks	**229,856**	**385,369**	**37,293**	**40,697**	**129,475**	**8,214**	**71,538**	**315,766**	**397,820**	**32,570**	**81,759**	**5,771**	**947,741**	**788,387**	**1,736,128**
fixed interest	200,719	106,264	37,293	40,697	129,475	8,214	71,538	315,766	397,820	32,570	-	-	836,845	503,511	1,340,356
variable interest	29,137	279,105	-	-	-	-	-	-	-	-	-	-	29,137	279,105	308,242
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	81,759	5,771	81,759	5,771	87,530
Financial liabilities designated to measure at fair value through profit or loss	**16,576**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**16,576**	**-**	**16,576**
fixed interest	26	-	-	-	-	-	-	-	-	-	-	-	26	-	26
variable interest	16,550	-	-	-	-	-	-	-	-	-	-	-	16,550	-	16,550
Repo liabilities	**119,520**	**188,121**	**85,356**	**15,369**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**204,876**	**203,490**	**408,366**
fixed interest	29,144	4	85,356	15,369	-	-	-	-	-	-	-	-	114,500	15,373	129,873
variable interest	90,376	188,117	-	-	-	-	-	-	-	-	-	-	90,376	188,117	278,493
Deposits from customers	**7,563,627**	**2,887,850**	**302,491**	**190,393**	**127,940**	**23,147**	**-**	**-**	**16**	**-**	**12,147**	**11,547**	**8,006,221**	**3,112,937**	**11,119,158**
fixed interest	1,008,247	552,561	302,491	190,393	127,940	23,147	-	-	16	-	-	-	1,438,694	766,101	2,204,795
variable interest	6,555,380	2,335,289	-	-	-	-	-	-	-	-	-	-	6,555,380	2,335,289	8,890,669
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	12,147	11,547	12,147	11,547	23,694
Liabilities from issued securities	**1,878**	**-**	**1,215**	**-**	**1,702**	**-**	**1,854**	**-**	**43,854**	**448,206**	**-**	**-**	**50,503**	**448,206**	**498,709**
fixed interest	211	-	-	-	1,702	-	1,854	-	43,854	448,206	-	-	47,621	448,206	495,827
variable interest	1,667	-	1,215	-	-	-	-	-	-	-	-	-	2,882	-	2,882
Subordinated bonds and loans	**-**	**-**	**-**	**93,110**	**-**	**201,076**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**294,186**	**294,186**
variable interest	-	-	-	93,110	-	201,076	-	-	-	-	-	-	-	294,186	294,186
Leasing liabilities	**282**	**431**	**430**	**815**	**1,990**	**2,781**	**5,436**	**4,966**	**15,365**	**8,968**	**-**	**-**	**23,503**	**17,961**	**41,464**
fixed interest	229	41	326	83	1,567	379	4,688	1,004	14,798	267	-	-	21,608	1,774	23,382
variable interest	53	390	104	732	423	2,402	748	3,962	567	8,701	-	-	1,895	16,187	18,082
Other financial liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**220,129**	**38,344**	**220,129**	**38,344**	**258,473**
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	220,129	38,344	220,129	38,344	258,473
Derivative financial instruments	**3,097,710**	**1,854,159**	**478,930**	**1,819,835**	**574,661**	**554,788**	**22,780**	**36,706**	**118,071**	**114,115**	**245,955**	**555,251**	**4,538,107**	**4,934,854**	**9,472,961**
fixed interest	3,012,679	1,709,457	331,253	972,597	216,895	532,485	22,758	36,706	118,071	114,115	-	-	3,701,656	3,365,360	**7,067,016**
variable interest	85,031	144,702	147,677	847,238	357,766	22,303	22	-	-	-	-	-	590,496	1,014,243	**1,604,739**
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	245,955	555,251	245,955	555,251	**801,206**
NET POSITION	**(6,283,398)**	**(1,459,119)**	**497,139**	**1,198,676**	**139,162**	**237,427**	**664,092**	**(307,130)**	**4,309,079**	**481,906**	**222,490**	**151,332**	**(451,436)**	**303,092**	**(148,343)**

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.4. Interest rate risk management [continued]

As at 31 December 2021	within 1 month		within 3 months over 1 month		within 1 year over 3 months		within 2 years over 1 year		over 2 years		Non-interest -bearing		Total		Total
ASSETS	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	
Cash, amounts due from banks and balances with the National Bank of Hungary	**31,228**	**289,008**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**133,053**	**21,655**	**164,281**	**310,663**	**474,944**
fixed interest	31,228	289,008	-	-	-	-	-	-	-	-	-	-	31,228	289,008	320,236
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	133,053	21,655	133,053	21,655	154,708
Placements with other banks	**1,353,059**	**127,852**	**148,091**	**165,940**	**31,821**	**79,243**	**76,105**	**29,677**	**499,636**	**27,178**	**24,416**	**4,194**	**2,133,128**	**434,084**	**2,567,212**
fixed interest	774,315	34,420	449	156,755	2,446	79,243	76,105	29,677	499,636	27,178	-	-	1,352,951	327,273	1,680,224
variable interest	578,744	93,432	147,642	9,185	29,375	-	-	-	-	-	-	-	755,761	102,617	858,378
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	24,416	4,194	24,416	4,194	28,610
Repo receivables	**33,638**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**33,638**	**-**	**33,638**
fixed interest	33,638	-	-	-	-	-	-	-	-	-	-	-	33,638	-	33,638
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities held for trading	**1,237**	**-**	**664**	**-**	**2,481**	**1,242**	**360**	**3,508**	**22,931**	**1,478**	**1,200**	**532**	**28,873**	**6,760**	**35,633**
fixed interest	32	-	487	-	2,208	1,242	360	3,508	22,931	1,478	-	-	26,018	6,228	32,246
variable interest	1,205	-	177	-	273	-	-	-	-	-	-	-	1,655	-	1,655
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	1,200	532	1,200	532	1,732
Securities mandatorily measured at fair value through profit or loss	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**18,807**	**9,254**	**18,807**	**9,254**	**28,061**
fixed interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	18,807	9,254	18,807	9,254	28,061
Securities at fair value through other comprehensive income	**50,774**	**-**	**22,420**	**-**	**65,666**	**432**	**40,185**	**39,228**	**289,634**	**116,463**	**528**	**16,609**	**469,207**	**172,732**	**641,939**
fixed interest	2,437	-	6,897	-	57,092	432	40,185	39,228	289,634	116,463	-	-	396,245	156,123	552,368
variable interest	48,337	-	15,523	-	8,574	-	-	-	-	-	-	-	72,434	-	72,434
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	528	16,609	528	16,609	17,137

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.4. Interest rate risk management [continued]

As at 31 December 2021	within 1 month		within 3 months over 1 month		within 1 year over 3 months		within 2 years over 1 year		over 2 years		Non-interest -bearing		Total		Total
ASSETS [continued]	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	**HUF**	**foreign currency**	
Loans measured at amortised cost	**639,477**	**339,611**	**424,299**	**1,161,425**	**53,018**	**126,963**	**185,264**	**10,912**	**829,049**	**89,993**	**121,277**	**51,177**	**2,252,384**	**1,780,081**	**4,032,465**
fixed interest	295	286	894	9,746	13,723	57,602	183,818	10,912	819,629	89,993	-	-	1,018,359	168,539	1,186,898
variable interest	639,182	339,325	423,405	1,151,679	39,295	69,361	1,446	-	9,420	-	-	-	1,112,748	1,560,365	2,673,113
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	121,277	51,177	121,277	51,177	172,454
Loans mandatorily measured at fair value through profit or loss	**19,371**	**-**	**136**	**-**	**829**	**-**	**755**	**-**	**640,921**	**-**	**-**	**-**	**662,012**	**-**	**662,012**
fixed interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable interest	19,371	-	136	-	829	-	755	-	640,921	-	-	-	662,012	-	662,012
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities at amortised cost	**-**	**7,609**	**-**	**4,811**	**304,051**	**1,069**	**215,615**	**343**	**2,044,502**	**493,038**	**-**	**-**	**2,564,168**	**506,870**	**3,071,038**
fixed interest	-	-	-	-	304,051	1,069	215,615	343	2,044,502	493,038	-	-	2,564,168	494,450	3,058,618
variable interest	-	7,609	-	4,811	-	-	-	-	-	-	-	-	-	12,420	12,420
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other financial assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**133,896**	**19,852**	**133,896**	**19,852**	**153,748**
fixed interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variable interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	133,896	19,852	133,896	19,852	153,748
Derivative financial instruments	**1,507,306**	**1,256,601**	**395,623**	**936,093**	**675,976**	**863,692**	**10,760**	**57,437**	**183,617**	**54,913**	**181,095**	**675,035**	**2,954,377**	**3,843,771**	**6,798,148**
fixed interest	1,400,852	1,133,429	188,144	551,308	570,718	861,983	10,760	57,378	183,617	54,913	-	-	2,354,091	2,659,011	5,013,102
variable interest	106,454	123,172	207,479	384,785	105,258	1,709	-	59	-	-	-	-	419,191	509,725	928,916
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	181,095	675,035	181,095	675,035	856,130

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.4. Interest rate risk management [continued]

As at 31 December 2021	within 1 month		within 3 months over 1 month		within 1 year over 3 months		within 2 years over 1 year		over 2 years		Non-interest -bearing		Total		Total
LIABILITIES	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	HUF	foreign currency	
Amounts due to banks and deposits with the National Bank of Hungary and other banks	**151,809**	**95,432**	**12,344**	**10,405**	**52,872**	**577**	**224,479**	**1,140**	**471,620**	**-**	**29,684**	**841**	**942,808**	**108,395**	**1,051,203**
fixed interest	106,028	22,624	12,344	10,405	52,872	577	224,479	1,140	471,620	-	-	-	867,343	34,746	902,089
variable interest	45,781	72,808	-	-	-	-	-	-	-	-	-	-	45,781	72,808	118,589
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	29,684	841	29,684	841	30,525
Financial liabilities designated to measure at fair value through profit or loss	**20,133**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**20,133**	**-**	**20,133**
variable interest	20,133	-	-	-	-	-	-	-	-	-	-	-	20,133	-	20,133
Repo liabilities	**49,726**	**36,854**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**49,726**	**36,854**	**86,580**
fixed interest	49,726	36,854	-	-	-	-	-	-	-	-	-	-	49,726	36,854	86,580
Deposits from customers	**7,628,098**	**2,039,650**	**197,780**	**18,468**	**30,063**	**11,066**	**-**	**-**	**-**	**-**	**12,948**	**10,459**	**7,868,889**	**2,079,643**	**9,948,532**
fixed interest	496,069	131,836	197,780	18,468	30,063	11,066	-	-	-	-	-	-	723,912	161,370	885,282
variable interest	7,132,029	1,907,814	-	-	-	-	-	-	-	-	-	-	7,132,029	1,907,814	9,039,843
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	12,948	10,459	12,948	10,459	23,407
Liabilities from issued securities	**865**	**-**	**8,514**	**-**	**4,696**	**-**	**1,676**	**-**	**6,402**	**-**	**-**	**-**	**22,153**	**-**	**22,153**
fixed interest	212	-	-	-	4,147	-	1,676	-	6,402	-	-	-	12,437	-	12,437
variable interest	653	-	8,514	-	549	-	-	-	-	-	-	-	9,716	-	9,716
Subordinated bonds and loans	**-**	**-**	**-**	**85,551**	**-**	**186,225**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**271,776**	**271,776**
variable interest	-	-	-	85,551	-	186,225	-	-	-	-	-	-	-	271,776	271,776
Leasing liabilities	**192**	**380**	**236**	**522**	**1,004**	**2,535**	**1,362**	**1,321**	**4,838**	**5,542**	**-**	**-**	**7,632**	**10,300**	**17,932**
fixed interest	108	25	72	34	538	123	717	144	2,118	485	-	-	3,553	811	4,364
variable interest	84	355	164	488	466	2,412	645	1,177	2,720	5,057	-	-	4,079	9,489	13,568
Other financial liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**156,012**	**38,499**	**156,012**	**38,499**	**194,511**
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	156,012	38,499	156,012	38,499	194,511
Derivative financial instruments	**840,797**	**2,004,808**	**220,053**	**1,083,211**	**709,776**	**870,457**	**12,937**	**54,862**	**96,350**	**73,700**	**411,167**	**430,486**	**2,291,080**	**4,517,524**	**6,808,604**
fixed interest	728,548	1,814,645	151,791	579,843	525,835	868,689	12,360	54,789	96,350	73,700	-	-	1,514,884	3,391,666	4,906,550
variable interest	112,249	190,163	68,262	503,368	183,941	1,768	577	73	-	-	-	-	365,029	695,372	1,060,401
non-interest-bearing	-	-	-	-	-	-	-	-	-	-	411,167	430,486	411,167	430,486	841,653
NET POSITION	**(5,055,530)**	**(2,156,443)**	**552,306**	**1,070,112**	**335,431**	**1,781**	**288,590**	**83,782**	**3,931,080**	**703,821**	**4,461**	**318,023**	**56,338**	**21,076**	**77,414**

36.5. Market risk

The Bank 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 Bank 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 36.2, 36.3 and 36.4 respectively.)

36.5.1. 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**	
	2022	**2021**
Foreign exchange	6,820	1,560
Interest rate	327	135
Equity instruments	42	20
Total VaR exposure	**7,189**	**1,715**

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 OTP'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 OTP to assess its market risk exposures. Details of sensitivity analysis for foreign currency risk are set out in Note 36.5.2., for interest rate risk in Note 36.5.3., and for equity price sensitivity analysis in Note 36.5.4.

36.5.2. 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 months 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 of 31 March 2021.

Since the closing of the strategic open position, the Group has been using a historical VaR calculation with 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.

Since the closing of the strategic open position, the Group has been using a historical VaR calculation with 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 (OCI), which includes securities valuated on FVOCI and the foreign currency translation reserves.

	Effects to the P&L in 3 months period	
Probability	**2022**	**2021**
	In HUF billion	**In HUF billion**
1%	(4,582)	(178)
5%	(2,470)	(119)
25%	(786)	(39)
50%	14	2
25%	999	49
5%	2,700	126
1%	4,233	187

Notes:
(1) Historical VaR simulation is based on the empirical distribution of the historical exchange rate movements between 31 December 2022 and 31 December 2021.

36.5. Market risk [continued]

36.5.3. 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) (1) HUF base rate and BUBOR increases gradually by 100 bps over the next year (probable scenario)
(2) (2) HUF base rate and 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 6,304 million (scenario 1) and increased by HUF 3,058 million (scenario 2) as a result of these simulation.The same simulation indicated HUF 1,238 million increase (scenario 1) and HUF 919 million decrease (scenario 2) in the Net interest income in a one year period after 1 January 2022. This effect is further increased by capital gains HUF -350 million (or scenario 1), HUF 181 million (for scenario 2) as at 31 December 2022 and (HUF -619 million for scenario 1, HUF +322 million for scenario 2 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 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 (one-year period)	**Effects to shareholder's equity (Price change of FVOCI government bonds)**	**Effects to the net interest income (one-year period)**	**Effects to shareholder's equity (Price change of FVOCI government bonds)**
HUF (0.1%) parallel shift	1,105	36	(25)	64
HUF 0.1% parallel shift	(1,105)	(36)	(40)	(64)
EUR (0.1%) parallel shift	(383)	-	(483)	-
USD (0.1%) parallel shift	935	-	(23)	-
USD 0.1% parallel shift	(1,106)	-	-	-
Total	**(554)**	**-**	**(571)**	**-**

36.5.4. Equity price sensitivity analysis

The following table shows the effect of the equity price sensitivity. The Bank 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, million HUF)	15	12
Stress test (million HUF)	(26)	(21)

NOTE 36: FINANCIAL RISK MANAGEMENT (in HUF mn) [continued]

36.6 Capital management

Capital management

The primary objective of the capital management of the Bank 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 Bank includes the management and evaluation of the shareholders` equity available for hedging risks, other types of funds to be recorded in the equity and all material risks to be covered by the capital.

The basis of the capital management of the Bank in the short run is the continuous monitoring of its capital position, in the long run the strategic and the business planning, which includes the monitoring and forecast of the capital position of the Bank.

The Bank maintains the capital adequacy required by the regulatory bodies and the planned risk taking mainly by means of ensuring and developing its profitability. In case the planned risk level of the Bank exceeded its Core and Supplementary capital, the Bank 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[9]

The Capital Requirements Directive package (CRDIV/CRR) transposes the global standards on banking regulation (commonly known as the Basel III agreement) into the EU legal framework. The rules are applied from 1 January 2014. They set stronger prudential requirements for institutions, requiring them to keep sufficient capital reserves and liquidity. This 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 Bank has entirely complied with the regulatory capital requirements in 2022 as well as in 2021.

The Bank's capital adequacy calculation is in line with IFRS and based on Basel III as at 31 December 2022 and 31 December 2021. The Bank uses the standard method for determining the regulatory capital requirements of the credit risk and market risk while in case of the operational risk the Advanced Measurement Approach (AMA).

	2022 Basel III	**2021 Basel III**
Core capital (Tier 1)	1,632,037	1,747,480
Primary core capital (CET1)	*1,632,037*	*1,747,480*
Supplementary capital (Tier 2)	286,181	264,396
Regulatory capital	**1,918,218**	**2,011,876**
Credit risk capital requirement	742,536	603,253
Market risk capital requirement	26,530	7,519
Operational risk capital requirement	31,440	31,629
Total eligible regulatory capital	**800,506**	**642,401**
Surplus capital	**1,117,712**	**1,369,475**
CET 1 ratio	16.31%	21.76%
Capital adequacy ratio	**19.17%**	**25.05%**

Basel III:

Common equity Tier 1 capital (CET1):

Issued capital, Capital reserve, useable part of Tied-up reserve, General reserve, Profit reserve, Profit for the year, Treasury shares, Intangible assets, deductions due to investments, adjustments due to temporary disposals

Tier 2 capital:

Subsidiary loan capital, Subordinated loan capital, deductions due to repurchased loan capital and Subordinated loan capital issued by the OTP Bank, adjustments due to temporary disposals.

[9] The dividend amount planned to pay out / paid out is deducted from reserves.

NOTE 37: TRANSFER OF FINANCIAL INSTRUMENTS (in HUF mn)

Financial assets transferred but not derecognised

	31 December 2022		31 December 2021	
	Transferred assets Carrying amount	**Associated liabilities**	**Transferred assets**	**Associated liabilities**
Financial assets at fair value through other comprehensive income				
Debt securities	95,493	95,900	-	-
Total	**95,493**	**95,900**	**-**	**-**
Financial assets at amortised cost				
Debt securities	381,356	312,466	88,181	86,580
Total	**381,356**	**312,466**	**88,181**	**86,580**
Total	**476,849**	**408,366**	**88,181**	**86,580**

As at 31 December 2022 and 2021, the Bank had obligation from repurchase agreements about HUF 408 billion and HUF 87 billion respectively. Securities sold temporarily under repurchase agreements will continue to be recognized in the Statement of Financial Position of the Bank in the appropriate securities category. The related liability is measured at amortized cost in the Statement of Financial Position as 'Amounts due to banks and deposits from the National Bank of Hungary and other banks'. Under these repurchase agreements only Hungarian and foreign government bonds were transferred.

NOTE 38: OFF-BALANCE SHEET ITEMS (in HUF mn)

In the normal course of business, the Bank becomes a party to various financial transactions that are not reflected on the statement of financial position and are referred to as off-balance sheet financial instruments. The following represents notional amounts of these off-balance sheet financial instruments, unless stated otherwise.

Contingent liabilities and commitments

	2022	**2021**
Loan commitments	1,852,164	1,677,030
Guarantees arising from banking activities	1,873,824	1,507,917
from this: Payment undertaking liabilities (related to issue of mortgage bonds) of OTP Mortgage Bank	955,480	746,476
Factoring loan commitments	373,417	423,673
Confirmed letters of credit	12,376	30,381
Contingent liabilities and commitments total in accordance with IFRS 9	**4,111,781**	**3,639,001**
Legal disputes (disputed value)	3,678	3,204
Contingent liabilities related to payments from shares in venture capital fund	28,614	47,550
Other	7	408
Contingent liabilities and commitments total in accordance with IAS 37	**32,299**	**51,162**
Total	**4,144,080**	**3,690,163**

NOTE 38: OFF-BALANCE SHEET ITEMS (in HUF mn) [continued]

Legal disputes

At the balance sheet date the Bank was involved in various claims and legal proceedings of a nature considered normal to its business. The level of these claims and legal proceedings corresponds to the level of claims and legal proceedings in previous years.

The Bank 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.

Provision due to legal disputes was HUF 1917 million and HUF 259 million as at 2022 and 2021, respectively. (See Note 24.)

Commitments to extend credit, guarantees and letter 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 Bank 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 Bank on behalf of a customer authorising a third party to draw drafts on the Bank 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 Bank 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 Bank believes the market risk associated with guarantees, irrevocable letters of credit and undrawn loan commitments are minimal.

Guarantees, payment undertakings arising from banking activities

Payment undertaking is a promise by the Bank to assume responsibility for the debt obligation of a borrower if that borrower defaults until a determined amount and 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 Bank assumes the obligation derived from guarantee independently by the conditions established by the Bank. A guarantee is most typically required when the ability of the primary obligor or principal 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.

Contingent liabilities related to OTP Mortgage Bank Ltd.

Under a syndication agreement with its wholly owned subsidiary, OTP Mortgage Bank Ltd., the Bank had guaranteed, in return for an annual fee, to purchase all mortgage loans held by OTP Mortgage Bank Ltd. that become non-performing. The repurchase guarantee contract of non-performing loans between OTP Mortgage Bank Ltd. and OTP Bank Plc. was modified in 2010. According to the arrangement the repurchase guarantee was cancelled and OTP Bank Plc. gives bail to the loans originated or purchased by the Bank.

NOTE 39: SHARE-BASED PAYMENT AND EMPLOYEE BENEFIT (in HUF mn)

Previously approved option program required a modification thanks 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.

OTP Bank ensures the share-based payment part for the management personnel of OTP Group members.

During implementation of the Remuneration Policy of the Group it became apparent 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 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.

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.

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. 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.

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.

NOTE 39: SHARE-BASED PAYMENT AND EMPLOYEE BENEFIT (in HUF mn) [continued]

The parameters for the share-based payment relating to ongoing years 2017-2021 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 per share		Exercise price	Maximum earnings per share		Exercise price	Maximum earnings per share	
	HUF per share								
	for the year 2017			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

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 per share		Exercise price	Maximum earnings per share	
	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	-	-	-	6,912	10,000	8,912

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)**						
			1Y	**2Y**	**3Y**	**4Y**	**5Y**	**6Y**	**7Y**
2017	9,200	21.3%	0.1%	0.5%	0.7%	1.0%	1.3%	1.3%	1.3%
2018	10,064	26.0%	0.2%	0.6%	1.0%	1.3%	1.6%	1.9%	2.1%
2019	12,413	19.2%	0.2%	0.7%	0.9%	1.1%	1.3%	1.4%	1.6%
2020	11,553	33.6%	0.6%	0.4%	0.5%	0.6%	0.8%	0.9%	1.0%
2021	16,644	28.6%	1.0%	1.6%	1.8%	1.9%	2.0%	2.1%	2.1%
2022	8,912	42.6%	7.1%	7.9%	7.6%	7.3%	7.1%	7.0%	6.9%

NOTE 39: SHARE-BASED PAYMENT AND EMPLOYEE BENEFIT (in HUF mn) [continued]

Relevant factors considered during measurement of fair value related to share-based payment as follows: [continued]

Év	Expected dividends (HUF/Share)							Pricing model
	1Y	2Y	3Y	4Y	5Y	6Y	7Y	
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

Based on parameters accepted by Supervisory Board, relating to the year 2017 effective pieces are 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 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 starting in 2020	101,571	101,565	12,084	6	-
Remuneration exchanged to share applying in 2020	11,584	11,584	11,897	-	-
Share-purchasing period starting in 2021	109,460	109,460	16,441	-	-
Remuneration exchanged to share applying in 2021	11,531	11,531	16,477	-	-
Share-purchasing period starting in 2022	42,820	-	-	-	42,820
Remuneration exchanged to share applying in 2022	2,950	2,950	8,529	-	-

Based on parameters accepted by Supervisory Board, relating to the year 2018 effective pieces are 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 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 starting in 2020	150,230	150,230	14,294	-	-
Remuneration exchanged to share applying in 2020	33,024	33,024	11,897	-	-
Share-purchasing period starting in 2021	73,799	73,799	16,314	-	-
Remuneration exchanged to share applying in 2021	14,618	14,618	16,468	-	-
Share-purchasing period starting in 2022	86,456	-	-	-	86,456
Remuneration exchanged to share applying 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 39: SHARE-BASED PAYMENT AND EMPLOYEE BENEFIT (in HUF mn) [continued]

Based on parameters accepted by Supervisory Board, relating to the year 2019 effective pieces are 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 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 starting in 2021	201,273	201,273	16,298	-	-
Remuneration exchanged to share applying in 2021	30,834	30,834	17,618	-	-
Share-purchasing period starting in 2022	107,760	-	-	1,335	106,425
Remuneration exchanged to share applying 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 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 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 starting in 2022	83,688	-	-	1,288	82,400
Remuneration exchanged to share applying 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 39: SHARE-BASED PAYMENT AND EMPLOYEE BENEFIT (in HUF mn) [continued]

Based on parameters accepted by Supervisory Board, relating to the year 2021 effective pieces are 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 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 was recognized as expense for the year ended 31 December 2022.

NOTE 40: RELATED PARTY TRANSACTIONS (in HUF mn)

Outstanding balances and transactions with related parties are summarized below in aggregate:

Statement of financial position

	2022		2021	
	Associated companies and other companies	**Other related parties**	**Associated companies and other companies**	**Other related parties**
Cash, amounts due from banks and balances with the National Bank of Hungary	83,713	-	1,675	-
Placements with other banks	2,019,597	-	1,557,437	-
Repo receivables	205,520	-	-	-
Held for trading securities	11	-	16	-
Held for trading derivative financial instruments:	55,989	-	19,397	-
Financial assets at fair value through other comprehensive income	302,121	-	156,162	-
Securities at amortised cost	-	601	-	596
Loans at amortised cost	997,027	65,767	960,288	105,503
Loans mandatorily measured at fair value through profit or loss	-	44	-	9
Right of use assets	21,615	-	5,713	-
Derivative financial assets designated as hedge accounting relationships	1,625	-	(9)	-
Other assets	136,361	375	101,569	5
Total Assets	**3,823,579**	**66,787**	**2,802,248**	**106,113**
Amounts due to banks and deposits from the National Bank of Hungary and other banks	(863,748)	-	(115,042)	-
Repo liabilities	(191,102)	-	(36,854)	-
Deposits from customers	(271,214)	(58,217)	(263,139)	(27,174)
Leasing liabilities	(22,129)	-	(5,926)	-
Liabilities from issued securities	(11,093)	-	(12,232)	-
Derivative financial liabilities designated as held for trading	(40,225)	-	(5,344)	-
Derivative financial liabilities designated as hedge accounting relationships	-	-	(61)	-
Other liabilities	(14,836)	(491)	(4,599)	(551)
Total Liabilities	**(1,414,347)**	**(58,708)**	**(443,197)**	**(27,725)**

Off balance sheet items

Guarantees	(1,208,669)	(7,824)	(921,818)	-
Loan commitments	(72,161)	(43,324)	(85,810)	(44,812)
Factoring loan commitments	(1,085)	(8,763)	(1,475)	-
Total	**(1,281,915)**	**(59,911)**	**(1,009,103)**	**(44,812)**

NOTE 40: RELATED PARTY TRANSACTIONS (in HUF mn) [continued]

Outstanding balances and transactions with related parties are summarized below in aggregate: [continued]

Statement of Profit or Loss

	Year ended 31 December 2022	Year ended 31 December 2021
Interest Income	181,369	42,706
Interest Expense	(93,185)	(11,449)
Risk cost	70,147	904
(Losses)/Gains arising from derecognition of financial assets measured at amortised cost	(49,745)	(2,198)
Income from fees and commissions	18,742	33,128
Expenses from fees and commissions	(3,038)	(2,859)
Other administrative expenses	(9,761)	(7,570)

Related party transactions with key management

The compensation of key management, such as the members of the Board of Directors, the members of the Supervisory Board and the employees involved in the decision-making process in accordance with the compensation categories defined in IAS 24 Related Party Disclosures, is summarised below:

	2022	2021
Short-term employee benefits	2,986	2,957
Share-based payment	2,225	2,740
Long-term employee benefits (on the basis of IAS 19)	239	246
Total	**5,450**	**5,943**

	2022	2021
Loans provided to companies owned by the Management (in the normal course of business)	65,767	105,503
Commitments to extend credit and bank guarantees	59,911	44,812

An analysis of payment to Executives related to their activity in Board of Directors and Supervisory Board is as follows (in HUF mn):

	2022	2021
Members of Board of Directors	1,180	1,489
Members of Supervisory Board	198	173
Total	**1,378**	**1,662**

In the normal course of business, OTP Bank enters into other transactions with its subsidiaries, the amounts and volumes of which are not significant to these financial statements taken as a whole.

NOTE 41: 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 Bank, they have been excluded from the accompanying separate statement of financial position.

	2022	2021
Loans managed by the Bank as a trustee	27,914	27,532

NOTE 42: 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	23.58%	22.79%
Securities issued by the OTP Mortgage Bank Ltd.	2.30%	1.77%
Loans at amortised cost	5.26%	6.51%

There were no other significant concentrations of the assets or liabilities of the Bank as at 31 December 2022 or 2021.

OTP Bank continuously provides the Authority with reports on the extent of dependency on large depositors as well as the exposure of the largest 50 depositors towards OTP Bank. Further to this obligatory reporting to the Authority. OTP Bank 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 OTP Bank in charge of partner-risk management analyses the largest partners on a constant basis and sets limits on OTP 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 which related to exposures of clients. 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 provisions system used by Bank to control risk exposures. This regulation has to be used by the Bank for its business (lending) risk-taking activity in both the retail and corporate sector.

To specify credit risk limits, the Bank strives their clients get an acceptable margin of risk based on their financial situation. In the Bank limit system a lower level decision-making delegation has to be provided.

If an OTP 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.

The maximum credit exposure to any client or counterparty among Loans at amortised cost was HUF 871 billion and HUF 893 billion as at 31 December 2022 and 2021 respectively, before taking into account collateral or other credit enhancements.

NOTE 43: EARNINGS PER SHARE

Earnings per share attributable to the Bank's ordinary shares are determined by dividing 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.

	2022	2021
Net profit for the year attributable to ordinary shareholders (in HUF mn)	6,632	125,339
Weighted average number of ordinary shares outstanding during the year for calculating basic EPS (number of share)	278,795,018	275,523,535
Basic Earnings per share (in HUF)	**24**	**455**
Separate net profit for the year attributable to ordinary shareholders (in HUF mn)	6,632	125,339
Modified weighted average number of ordinary shares outstanding during the year for calculating diluted EPS (number of share)	278,797,915	275,538,262
Diluted Earnings per share (in HUF)	**24**	**455**

	2022	2021
Weighted average number of ordinary shares	280,000,010	280,000,010
Average number of Treasury shares	(1,204,992)	(4,476,475)
Weighted average number of ordinary shares outstanding during the year for calculating basic EPS	**278,795,018**	**275,523,535**
Dilutive effect of options issued in accordance with the Remuneration Policy / Management Option Program and convertible into ordinary shares	2,896	14,727
The modified weighted average number of ordinary shares outstanding during the year for calculating diluted EPS	**278,797,914**	**275,538,262**

NOTE 44: NET GAIN OR LOSS REALISED ON FINANCIAL INSTRUMENTS (in HUF mn)

Year ended 31 December 2022	Net interest income and expense	Net non-interest gain and loss	Loss allowance	Other comprehensive income
Financial assets measured at amortised cost				
Cash, amounts due from banks and balances with the National Bank of Hungary	50,964	-	-	-
Placements with other banks	203,618	-	11,754	-
Repo receivables	10,234	-	2,095	-
Loans	297,460	11,643	33,838	-
Securities at amortised cost	92,948	(54,402)	27,623	-
Financial assets measured at amortised cost total	**655,224**	**(42,759)**	**75,310**	**-**
Financial assets measured at fair value				
Securities held for trading	3,556	6,480	-	-
Securities at fair value through other comprehensive income	39,988	(7,952)[1]	25,615	(53,068)
Loans mandatorily measured at fair value through profit or loss	35,927	(20,188)	(11,872)	-
Financial assets measured at fair value total	**79,471**	**(21,660)**	**13,743**	**(53,068)**
Financial liabilities measured at amortised cost				
Amounts due to banks and deposits from the National Bank of Hungary and other banks	(19,806)	-	-	-
Repo liabilities	(65,575)	-	-	-
Deposits from customers	(184,713)	213,359	-	-
Leasing liabilities	(1,186)	-	-	-
Liabilities from issued securities	(7,442)	-	-	-
Subordinated bonds and loans	(8,646)	-	-	-
Financial liabilities measured at amortised cost total	**(287,368)**	**213,359**	**-**	**-**
Financial liabilities designated to measure at fair value through profit or loss	**(562)**	**1,932**	**-**	**-**
Derivative financial instruments[2]	**(146,192)**	**9,917**	**-**	**-**
Total	**300,573**	**160,789**	**89,053**	**(53,068)**

[1] For the year ended 31 December 2022 HUF (7,952) 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/losses from derivative financial instruments recognised in net interest income as Income similar to interest income.

NOTE 44: NET GAIN OR LOSS REALISED ON FINANCIAL INSTRUMENTS (in HUF mn) [continued]

Year ended 31 December 2021	Net interest income and expense	Net non-interest gain and loss	Loss allowance	Other comprehensive income
Financial assets measured at amortised cost				
Cash, amounts due from banks and balances with the National Bank of Hungary	14,124	-	-	-
Placements with other banks	31,981	-	1,797	-
Repo receivables	315	-	(220)	-
Loans	167,882	13,591	37,264	-
Securities at amortised cost	61,085	(1,552)	2,035	-
Financial assets measured at amortised cost total	**275,387**	**12,039**	**40,876**	**-**
Financial assets measured at fair value				
Securities held for trading	277	6,657	-	-
Securities at fair value through other comprehensive income	21,456	(4,659)[1]	(551)	(35,756)
Loans mandatorily measured at fair value through profit or loss	26,045	(8,671)	16,255	-
Financial assets measured at fair value total	**47,778**	**(6,673)**	**15,704**	**(35,756)**
Financial liabilities measured at amortised cost				
Amounts due to banks and deposits from the National Bank of Hungary and other banks	(11,177)	-	-	-
Repo liabilities	(2,860)	-	-	-
Deposits from customers	(10,162)	170,598	-	-
Leasing liabilities	(214)	-	-	-
Liabilities from issued securities	(1,166)	-	-	-
Subordinated bonds and loans	(7,890)	-	-	-
Financial liabilities measured at amortised cost total	**(33,469)**	**170,598**	**-**	**-**
Financial liabilities designated to measure at fair value through profit or loss	**(493)**	**3,916**	**-**	**-**
Derivative financial instruments[2]	**(36,295)**	**3,436**	**-**	**-**
Total	**252,908**	**183,316**	**56,580**	**(35,756)**

[1] For the year ended 31 December 2021 HUF (4,659) 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/losses from derivative financial instruments recognised in net interest income as Income similar to interest income.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn)

In determining the fair value of a financial asset or liability the Bank in the case of instruments that are quoted on an active market uses the market price. In most cases market price is not publicly available so the Bank has to make assumptions or use valuation techniques to determine the fair value of a financial instrument. See Note 45. d) 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 instrument that are originally measured at amortised cost, the Bank used the discounted cash flow analysis (loans, placements with other banks, amounts due to banks, 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 Bank of Hungary 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 amortised 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.

For classes of assets and liabilities not measured at fair value in the 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, fair value of other classes not measured at fair value of the statement of financial position are measured using the discounted cash flow method. Fair value of loans, net of allowance for loan losses measured using 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 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 subsidised personal loans represented in "Loans mandatorily measured at fair value through profit or loss" line.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

a) *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 Bank of Hungary	1,092,198	1,092,198	474,945	474,945
Placements with other banks	2,899,829	2,871,307	2,567,212	2,548,809
Repo receivables	246,529	248,513	33,638	33,707
Securities at amortised cost	3,282,373	2,654,685	3,071,038	2,877,380
Loans at amortised cost	4,825,040	4,480,127	4,032,465	3,576,519
Other financial assets	255,125	255,125	153,747	153,747
Total assets measured not at fair value	**12,601,094**	**11,601,955**	**10,333,045**	**9,665,107**
Financial assets at fair value through profit or loss	410,012	410,012	246,462	246,462
Held for trading securities	*74,795*	*74,795*	*35,633*	*35,633*
Derivative financial instruments classified as held for trading	*304,719*	*304,719*	*182,768*	*182,768*
Securities mandatorily measured at fair value through profit or loss	*30,498*	*30,498*	*28,061*	*28,061*
Equity instruments at fair value through other comprehensive income	17,922	17,922	17,138	17,138
Securities at fair value through other comprehensive income	779,253	779,253	624,801	624,801
Loans mandatorily measured at fair value through profit or loss	793,242	793,242	662,012	662,012
Derivative financial assets designated as hedge accounting relationships	47,220	47,220	17,727	17,727
Total assets measured at fair value	**2,047,649**	**2,047,649**	**1,568,140**	**1,568,140**
FINANCIAL ASSETS TOTAL	**14,648,743**	**13,649,604**	**11,901,185**	**11,233,247**
Amounts due to banks, deposits from the National Bank of Hungary and other banks	1,736,128	1,559,492	1,051,203	958,463
Repo liabilities	408,366	415,703	86,580	86,543
Deposits from customers	11,119,158	11,122,775	9,948,532	9,946,444
Leasing liabilities	41,464	41,477	17,932	17,928
Liabilities from issued securities	498,709	493,440	22,153	21,006
Subordinated bonds and loans	294,186	261,113	271,776	278,151
Other financial liabilities	282,103	282,103	194,511	194,511
Total liabilities measured not at fair value	**14,380,114**	**14,176,104**	**11,592,687**	**11,503,046**
Financial liabilities at fair value through profit or loss	16,576	16,576	20,133	20,133
Derivative financial liabilities designated as held for trading	373,401	373,401	192,261	192,261
Derivative financial liabilities designated as hedge accounting relationships	50,623	50,623	18,690	18,690
Total liabilities measured at fair value	**440,600**	**440,600**	**231,084**	**231,084**
FINANCIAL LIABILITIES TOTAL	**14,820,714**	**14,616,704**	**11,823,771**	**11,734,130**

b) *Derivative financial instruments*

OTP Bank regularly enters into hedging transactions in order to decrease its financial risks. However some economically hedging transaction do not meet the criteria to account for hedge accounting, therefore these transactions were accounted as derivatives held for trading. Net investment hedge in foreign operations is not applicable in separate financial statements.

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).

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

b) *Derivative financial instruments [continued]*

Fair value of derivative financial instruments[1]

The Bank has the following held for trading derivatives and derivatives designated as hedge accounting:

	2022					2021				
	Before netting		Netting	After netting		Before netting		Netting	After netting	
	Assets	Liabilities		Assets	Liabilities	Assets	Liabilities		Assets	Liabilities
Held for trading derivative financial instruments										
Interest rate derivatives										
Interest rate swaps	162,519	(170,144)	155,468	7,051	(14,676)	54,251	(53,720)	40,783	13,468	(12,937)
Cross currency interest rate swaps	11,332	(12,139)	-	11,332	(12,139)	7,207	(7,618)	-	7,207	(7,618)
OTC options	1,000	(1,000)	-	1,000	(1,000)	479	(479)	-	479	(479)
Forward rate agreement	505	(3)	505	-	502	-	-	-	-	-
Total interest rate derivatives (OTC derivatives)	**175,356**	**(183,286)**	**155,973**	**19,383**	**(27,313)**	**61,937**	**(61,817)**	**40,783**	**21,154**	**(21,034)**
From this: Interest rate derivatives cleared by NBH	2,702	-	-	2,702	-	1,276	-	-	1,276	-
Foreign exchange derivatives										
Foreign exchange swaps	109,167	(76,037)	-	109,167	(76,037)	36,896	(40,639)	-	36,896	(40,639)
Foreign exchange forward	9,909	(11,936)	-	9,909	(11,936)	8,854	(6,819)	-	8,854	(6,819)
OTC options	1,048	(822)	-	1,048	(822)	804	(180)	-	804	(180)
Foreign exchange spot conversion	162	(162)	-	162	(162)	175	(246)	-	175	(246)
Total foreign exchange derivatives (OTC derivatives)	**120,286**	**(88,957)**	**-**	**120,286**	**(88,957)**	**46,729**	**(47,884)**	**-**	**46,729**	**(47,884)**
From this: Foreign exchange derivatives cleared by NBH	22,214	-	-	22,214	-	3,447	(1,480)	-	3,447	(1,480)

[1] Certain derivative financial assets and liabilities are offset and the net amount is presented in accordance with IAS 32 in the Statement of Financial Position. The Bank has the ability and the intention to settle those instruments on a net basis, which are settled through the same clearing house.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

b) *Derivative financial instruments [continued]*[1]

Fair value of derivative financial instruments [continued]

	2022					2021				
	Before netting		Netting	After netting		Before netting		Netting	After netting	
	Assets	Liabilities		Assets	Liabilities	Assets	Liabilities		Assets	Liabilities
Equity stock and index derivatives										
Commodity Swaps	34,058	(32,048)	-	34,058	(32,048)	52,197	(52,166)	-	52,197	(52,166)
Equity swaps	54	(702)	-	54	(702)	10,538	(357)	-	10,538	(357)
OTC derivatives	**34,112**	**(32,750)**	**-**	**34,112**	**(32,750)**	**62,735**	**(52,523)**	**-**	**62,735**	**(52,523)**
Exchange traded futures and options	214	(1,887)	-	214	(1,887)	164	(278)	-	164	(278)
Total equity stock and index derivatives	**34,326**	**(34,637)**	**-**	**34,326**	**(34,637)**	**62,899**	**(52,801)**	**-**	**62,899**	**(52,801)**
Derivatives held for risk management not designated in hedges										
Interest rate swaps	133,399	(225,915)	18,944	114,455	(206,971)	51,311	(70,811)	5,682	45,629	(65,129)
Foreign exchange swaps	12,687	(11,908)	-	12,687	(11,908)	1,915	(5,245)	-	1,915	(5,245)
Forward	67	-	-	67	-	-	-	-	-	-
Cross currency interest rate swaps	3,515	(3,572)	-	3,515	(3,572)	4,442	(168)	-	4,442	(168)
Total derivatives held for risk management not designated in hedges	**149,668**	**(241,438)**	**18,944**	**130,724**	**(222,494)**	**57,668**	**(76,224)**	**5,682**	**51,986**	**(70,542)**
From this: Total derivatives cleared by NBH held for risk management	78,916	(1,879)	-	78,916	(1,879)	35,226	(497)	-	35,226	(497)
Total Held for trading derivative financial instruments	**479,636**	**(548,318)**	**174,917**	**304,719**	**(373,401)**	**229,233**	**(238,726)**	**46,465**	**182,768**	**(192,261)**
Derivative financial instruments designated as hedge accounting relationships										
Derivatives designated in cash flow hedges										
Interest rate swaps	-	(25,325)	2,651	(2,651)	(22,674)	-	(8,638)	1,020	(1,020)	(7,618)
Total derivatives designated in cash flow hedges	**-**	**(25,325)**	**2,651**	**(2,651)**	**(22,674)**	**-**	**(8,638)**	**1,020**	**(1,020)**	**(7,618)**
Derivatives designated in fair value hedges										
Interest rate swaps	58,381	(37,290)	30,938	27,443	(6,352)	25,407	(17,878)	12,131	13,276	(5,747)
Cross currency interest rate swaps	20,732	(5,398)	-	20,732	(5,398)	5,471	(5,325)	-	5,471	(5,325)
Foreign exchange swaps	1,696	(16,199)	-	1,696	(16,199)	-	-	-	-	-
Total derivatives designated in fair value hedges	**80,809**	**(58,887)**	**30,938**	**49,871**	**(27,949)**	**30,878**	**(23,203)**	**12,131**	**18,747**	**(11,072)**
From this: Total derivatives cleared by NBH held for hedging	-	(5,485)	-	-	(5,485)	-	(2,249)	-	-	(2,249)
Total derivatives held for risk management (OTC derivatives)	**80,809**	**(84,212)**	**33,589**	**47,220**	**(50,623)**	**30,878**	**(31,841)**	**13,151**	**17,727**	**(18,690)**

[1] Certain derivative financial assets and liabilities are offset and the net amount is presented in accordance with IAS 32 in the Statement of Financial Position. The Bank has the ability and the intention to settle those instruments on a net basis, which are settled through the same clearing house.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

c) Hedge accounting

Interest rate risk management is centralized at OTP Bank. Interest rate risk exposures in major currencies are managed at HQ on consolidated level. Although risk exposures in local currencies are managed at subsidiary level, the respective decisions are subject to HQ 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 indexes (BUBOR, EURIBOR, LIBOR, etc.) of the respective currency.

Amount, timing and uncertainty of future cash flows - hedging instruments as at 31 December 2022 (amounts in million currency)

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%	
		JPY						
		Notional	-	-	-	4,500	-	**4,500**
		Average Interest Rate (%)	-	-	-	0.22%	-	
Fair Value Hedge	**FX & IR 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 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

c) *Hedge accounting [continued]*

Amount, timing and uncertainty of future cash flows - hedging instruments as at 31 December 2022 (amounts in million currency) [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	**FX 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	-	
Fair Value Hedge	**Other**	**Interest rate swap**						
		HUF						
		Notional	-	1,323	198	778	-	**5,585**
Cash flow Hedge	**Interest rate risk**	**Interest rate swap**						
		HUF						
		Notional	-	794	3,203	-	28,027	**32,024**
		Average Interest Rate	-	1.13	1.93	-	2.46	

c) Hedge accounting [continued]

Amount, timing and uncertainty of future cash flows - hedging instruments as at 31 December 2021 (amounts in million currency)

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	
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%	
		JPY						
		Notional	-	-	-	4,500	-	**4,500**
		Average Interest Rate (%)	-	-	-	0.22%	-	
	FX & IR 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	
	FX 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	-	
	Other	**Interest rate swap**						
		HUF						
		Notional	-	3,345	1,823	3,093	-	**8,261**
	Interest rate risk	**Interest rate swap**						
		HUF						
		Notional	-	-	-	7,819	28,027	**35,846**
		Average Interest Rate	-	-	-	1.80	2.46	

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

c) Hedge accounting [continued]

Derivative financial instruments designated as hedge accounting as follows:

Type of instrument	Type of risk	Nominal amount of the hedging instrument	Carrying amount of the hedging instrument for the year ended 31 December 2022					Line item in the statement of financial position where the hedging instrument is located	Changes in fair value used for calculating hedge ineffectiveness for the year ended 31 December 2022
			Before netting		Netting	After netting			
			Assets	Liabilities		Assets	Liabilities		
Fair value hedge									
Interest rate swap	Interest rate risk	444,627	58,260	(37,258)	30,938	27,322	(6,320)	Derivative assets (liabilities) held for risk management	12,873
Cross-currency swap	FX & IR risk	7,292	-	(2,679)	-	-	(2,679)	Derivative assets (liabilities) held for risk management	3
Cross-currency swap	FX risk	813,430	21,685	(2,719)	-	21,685	(2,719)	Derivative assets (liabilities) held for risk management	(6,087)
FX swap	FX risk	290,982	743	(16,199)	-	743	(16,199)	Derivative assets (liabilities) held for risk management	-
Interest rate swap	Other	2,299	121	(32)	-	121	(32)	Derivative assets (liabilities) held for risk management	1
Cash flow hedge									
Interest rate swap	Interest rate risk	92,203	-	(25,325)	2,651	(2,651)	(22,674)	Derivative assets (liabilities) held for risk management	(101)

31 December 2022	Type of risk	Carrying amount of the hedged item		Accumulated amount of fair value hedge adjustments on the hedged item included in the carrying amount of the hedged item		Line item in the statement of financial position in which the hedged item is included
		Assets	Liabilities	Assets	Liabilities	
Fair value hedges						
- Loans	***Interest rate risk***	64,596	-	(5,033)	-	Loans
- Loans	***Interest rate risk***	-	143,208	-	(34,149)	Amounts due to banks and deposits from the National Bank of Hungary and other banks
- Government bonds	***Interest rate risk***	14,814	-	(4,601)	-	Securities at amortised 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 securities	***Interest rate risk***	44,508	-	(638)	-	Securities at fair value through other comprehensive income
- Other securities		-	25,563	-	448	Liabilities from issued securities
- Loans	***FX & IR risk***	9,099	-	503	-	Loans
- Loans	***FX risk***	716,841	-	-	-	Loans
- Government bonds	***FX risk***	12,797	-	-	-	Securities at amortised cost
- Government bonds	***FX risk***	113,806	-	-	-	Securities at fair value through other comprehensive income
- Other securities	***Other risk***	-	2,299	-	(218)	Liabilities from issued securities
Fair value hedges total		**1,127,962**	**171,070**	**(55,089)**	**(33,919)**	

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

c) Hedge accounting [continued]

Derivative financial instruments designated as hedge accounting as follows:

Type of instrument	Type of risk	Nominal amount of the hedging instrument	Carrying amount of the hedging instrument for the year ended 31 December 2021					Line item in the statement of financial position where the hedging instrument is located	Changes in fair value used for calculating hedge ineffectiveness for the year ended 31 December 2021
			Before netting		Netting	After netting			
			Assets	Liabilities		Assets	Liabilities		
Fair value hedge									
Interest rate swap	Interest rate risk	409,595	23,976	(17,878)	12,131	11,845	(5,747)	Derivative assets (liabilities) held for risk management	6,494
Cross-currency swap	FX & IR risk	8,175	-	(2,249)	-	-	(2,249)	Derivative assets (liabilities) held for risk management	4
Cross-currency swap	FX risk	566,936	5,471	(3,076)	-	5,471	(3,076)	Derivative assets (liabilities) held for risk management	(1,687)
Interest rate swap	Other	8,261	1,431	-	-	1,431	-	Derivative assets (liabilities) held for risk management	3
Cash flow hedge									-
Interest rate swap	Interest rate risk	35,846	-	(8,638)	1,020	(1,020)	(7,618)	Derivative assets (liabilities) held for risk management	(101)

31 December 2021	Type of risk	Carrying amount of the hedged item		Accumulated amount of fair value hedge adjustments on the hedged item included in the carrying amount of the hedged item		Line item in the statement of financial position in which the hedged item is included
		Assets	Liabilities	Assets	Liabilities	
Fair value hedges						
- Loans	***Interest rate risk***	57,176	-	637	-	Loans
- Loans	***Interest rate risk***	-	142,649	-	(16,858)	Loans
- Government bonds	***Interest rate risk***	13,921	-	(1,230)	-	Securities at amortised cost
- Government bonds	***Interest rate risk***	152,830	-	(22,457)	-	Securities at fair value through other comprehensive income
- Government bonds	***Interest rate risk***	-	-	-	-	Financial assets at fair value through profit or loss
- Other securities	***Interest rate risk***	42,008	-	318	-	Securities at fair value through other comprehensive income
- Loans	***FX & IR risk***	10,595	-	611	-	Loans
- Loans	***FX risk***	458,312	-	-	-	Loans
- Loans	***FX risk***	12,811	-	-	-	Securities at fair value through other comprehensive income
- Loans	***FX risk***	98,668	-	-	-	Securities at amortised cost
- Other securities	***Other risk***	-	8,261	-	(161)	Liabilities from issued securities
Fair value hedges total		**846,321**	**150,910**	**(22,121)**	**(17,019)**	

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

c) Hedge accounting [continued]

For the year ended 31 December 2022 OCI related to cash flow hedges as follows:

Type of risk	Carrying amount of the hedged item Assets	Liabilities	Cash flow hedge reserve	Line item in the statement of financial position in which the hedged item is included
Interest rate risk	32,024	-	9,210	Loans at amortised cost

For the year ended 31 December 2021 OCI related to cash flow hedges as follows:

Type of risk	Carrying amount of the hedged item Assets	Liabilities	Cash flow hedge reserve	Line item in the statement of financial position in which the hedged item is included
Interest rate risk	35,965	-	3,568	Loans at amortised cost

For the year ended 31 December 2022 change in basis swap spread recognised in OCI related to fair value hedges as follows:

Type of risk	Carrying amount of the hedged item Assets	Liabilities	Items recognised in other comprehensive income	Change in the items recognized in other comprehensive income	Line item in the statement of financial position in which the hedged item is included
FX risk	716,841	-	(363)	605	Loans at amortised cost
FX risk	12,797	-	(52)	-	FVOCI securities
	729,638	**-**	**(415)**	**605**	

For the year ended 31 December 2021 change in basis swap spread recognised in OCI related to fair value hedges as follows:

Type of risk	Carrying amount of the hedged item Assets	Liabilities	Items recognised in other comprehensive income	Change in the items recognized in other comprehensive income	Line item in the statement of financial position in which the hedged item is included
FX risk	458,312	-	(1,032)	(1,681)	Loans at amortised cost
FX risk	12,811	-	64	-	FVOCI securities
	471,123	**-**	**(968)**	**(1,681)**	

Change in the fair value of the hedging instrument related to cash flow hedge

31 December 2022

Type of instrument	Type of risk	Change in the value of the hedging instrument recognised in cash flow hedge reserve	Hedge ineffectiveness recognised in profit or loss	Line item in profit or loss that includes hedge ineffectiveness
Interest rate swap	Interest rate risk	5,642	(101)	Interest Income from Placements with other banks, net of allowance for placement losses

For the year ended 31 Deember 2022 an amount HUF 227 million reclassified from cash flow hedge reserve to profit or loss due to termination of hedging relationship.

31 December 2021

Type of instrument	Type of risk	Change in the value of the hedging instrument recognised in cash flow hedge reserve	Hedge ineffectiveness recognised in profit or loss	Line item in profit or loss that includes hedge ineffectiveness
Interest rate swap	Interest rate risk	6,307	(101)	Interest Income from Placements with other banks, net of allowance for placement losses

For the year ended 31 December 2021 an amount HUF 171 million reclassified from cash flow hedge reserve to profit or loss due to termination of hedging relationship.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

d) *Fair value classes*

Methods and significant assumptions used to determine fair value of the different classes 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:

31 December 2022	Total	Level 1	Level 2	Level 3
Loans mandatorily at fair value through profit or loss	793,242	-	-	793,242
Financial assets at fair value through profit or loss	410,012	41,534	359,104	9,374
from this: securities held for trading	*74,795*	*20,197*	*54,598*	-
from this: positive FVA of derivative financial instruments designated as held for trading	*304,719*	*213*	*304,506*	-
from this: securities mandatorily measured at fair value through profit or loss	*30,498*	*21,124*	-	*9,374*
Equity instruments at fair value through other comprehensive income	17,922	17,922	-	-
Securities at fair value through other comprehensive income	779,253	194,756	557,082	27,415
Positive fair value of derivative financial instruments designated as hedge accounting	47,220	-	47,220	-
Financial assets measured at fair value total	**2,029,727**	**236,290**	**963,406**	**830,031**
Financial liabilities at fair value through profit or loss	16,576	-	-	16,576
Negative fair value of derivative financial instruments classified as held for trading	373,401	1,886	370,865	650
Short position	24,596	24,596	-	-
Negative fair value of derivative financial instruments designated as hedge accounting	50,623	-	50,623	-
Financial liabilities measured at fair value total	**465,196**	**26,482**	**421,488**	**17,226**

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

d) Fair value classes [continued]

As at 31 December 2021	Total	Level 1	Level 2	Level 3
Loans mandatorily at fair value through profit or loss	662,012	-	-	662,012
Financial assets at fair value through profit or loss	246,462	37,537	189,501	19,424
from this: securities held for trading	*35,633*	*18,566*	*17,067*	-
from this: positive FVA of derivative financial instruments designated as held for trading	*182,768*	*164*	*172,434*	*10,170*
from this: securities mandatorily measured at fair value through profit or loss	*28,061*	*18,807*	-	*9,254*
Equity instruments at fair value through other comprehensive income	17,138	17,138	-	-
Securities at fair value through other comprehensive income	624,801	298,009	326,792	-
Positive fair value of derivative financial instruments designated as hedge accounting	17,727	-	17,727	-
Financial assets measured at fair value total	**1,551,002**	**335,546**	**534,020**	**681,436**
Financial liabilities at fair value through profit or loss	20,133	-	-	20,133
Negative fair value of derivative financial instruments classified as held for trading	192,261	278	191,983	-
Short position	16,904	16,904	-	-
Negative fair value of derivative financial instruments designated as hedge accounting	18,690	-	18,690	-
Financial liabilities measured at fair value total	**247,988**	**17,182**	**210,673**	**20,133**

The fair value of investment properties is presented in Note 14 and they are categorized in level 3.
The fair value of investment in subsidiaries is presented in Note 12 and they are categorized in level 3.

Valuation techniques and sensitivity analysis 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 date and the impact of using alternative models.
The calculation is based on 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.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

d) Fair value classes [continued]

Unobservable inputs used in measuring fair value

Class of financial instrument	Type of financial instrument	Valuation technique	Significant unobservable input	Range of estimates for unobservable input
Financial assets at fair value through profit or loss	VISA C shares	Market approach combined with expert judgement	Discount applied due to illiquidity and litigation	+/-12%
Loans mandatorily at fair value through profit or loss	MFB refinancing loans	Discounted cash flow model	Probability of default	+/- 20%
Loans mandatorily at fair value through profit or loss	Subsidised personal loans	Discounted cash flow model	Probability of default	+/- 20%
Loans mandatorily at fair value through profit or loss	Subsidised personal loans	Discounted cash flow model	Operational costs	+/- 20%
Loans mandatorily at fair value through profit or loss	Subsidised personal loans	Discounted cash flow model	Demography	Change in the cash flow estimation +/- 5%
Securities at fair value through other comprehensive income	FVOCI debt securities	Market approach combined with expert judgement	Credit risk	+/-15%

The effect of unobservable inputs on fair value measurement

Although the Bank 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.

31 December 2022	Unobservable inputs	Carrying amount	Fair values		Effect on profit and loss	
			Favourable	Unfavourable	Favourable	Unfavourable
VISA C shares	Illiquidity	1,469	1,707	1,231	238	(238)
MFB refinancing loans	Probability of default	15,483	15,602	15,364	119	(119)
Subsidised personal loans	Probability of default	772,094	773,281	770,911	1,187	(1,183)
Subsidised personal loans	Operational costs	772,094	777,898	769,012	5,804	(3,082)
Subsidised personal loans	Demography	772,094	774,528	769,544	2,434	(2,550)
FVOCI debt securities	Credit risk	27,415	34,586	20,244	7,171	(7,171)

31 December 2021	Unobservable inputs	Carrying amount	Fair values		Effect on profit and loss	
			Favourable	Unfavourable	Favourable	Unfavourable
VISA C shares	Illiquidity	2,934	3,339	2,529	405	(405)
MFB refinancing loans	Probability of default	19,095	19,218	18,972	123	(123)
Subsidised personal loans	Probability of default	635,416	639,006	631,855	3,590	(3,561)
Subsidised personal loans	Operational costs	635,416	647,291	623,933	11,875	(11,483)
Subsidised personal loans	Demography	635,416	635,484	635,387	68	(29)

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 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 input.

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.

d) Fair value classes [continued]

The effect of unobservable inputs on fair value measurement [continued]

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 input.

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 advanced 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 one of the most significant unobservable input in the cash flow estimation.

For the year ended 31 December 2022 the Bank used a new and more complex 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 (first second and third child births after signatory and breach of conditions) and also the event of divorce. The model uses public statistical information to estimate the outcome of these possible future events. The Bank calculated the favourable and unfavourable effects of using reasonably possible alternative assumptions by modiying the demographical assumption of future child births by +/-5% as one of the most significant unobservable input in the cash flow estimation.

The favourable and unfavourable effects of using reasonably possible alternative assumptions for the valuation of FVOCI debt securities have been calculated by modifying the credit risk rate used for the valuation by +/-15% as being the best estimates of the management as at 31 December 2022 and 31 December 2021 respectively.

NOTE 45: FAIR VALUE OF FINANCIAL INSTRUMENTS (in HUF mn) [continued]

d) Fair value classes [continued]

The effect of unobservable inputs on fair value measurement [continued]

Reconciliation of the opening and closing balances of Level 3 instruments for the year ended 31 December 2022

	Opening balance	Transfer to Level 3	Change in FVA due to credit risk	Change in FVA due to market factors	Purchases/ Disbursement	Settlement/Sales	Closing balance
Loans mandatorily measured at fair value through profit or loss	662,012	-	11,872	(23,330)	182,259	(39,571)	793,242
Securities mandatorily measured at fair value through profit or loss	9,254	-	-	(1,052)	1,172	-	9,374
Derivative financial instruments designated as held for trading	10,170	-	-	(10,820)	-	-	(650)
Securities at fair value through other comprehensive income	-	12,105	-	15,310	-	-	27,415
Financial liabilities at fair value through profit or loss	(20,133)		-	1,934	-	1,623	(16,576)
Total	**661,303**	**12,105**	**11,872**	**(17,958)**	**183,431**	**(37,948)**	**812,805**

Reconciliation of the opening and closing balances of Level 3 instruments for the year ended 31 December 2021

	Opening balance	Issuance/ Disbursement	Change in FVA due to credit risk	Change in FVA due to market factors	Settlement	Closing balance
Loans mandatorily measured at fair value through profit or loss	480,937	227,324	(16,255)	(12,692)	(17,302)	662,012
Securities mandatorily measured at fair value through profit or loss	8,124	390	-	740	-	9,254
Derivative financial instruments designated as held for trading	6,586	-	-	3,584	-	10,170
Financial liabilities at fair value through profit or loss	(25,902)	-	-	(3,916)	9,685	(20,133)
Total	**469,745**	**227,714**	**(16,255)**	**(12,284)**	**(7,617)**	**661,303**

NOTE 46: SIGNIFICANT EVENTS DURING THE YEAR ENDED 31 DECEMBER 2022

1) Capital increase in OTP Bank Romania

See details about the event in Note 12.

2) 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.

3) 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.

4) 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.

5) Prolongation of deadline of loan moratorium and interest rate cap

See Note 4.

6) Interest benchmark reform

During the IBOR reform the Bank 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 abolution 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 Bank,
- After termination of LIBOR, the Bank 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 Bank.
- 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 Bank,
    - business loss due to negative customer experience,
    - operational risk, when several unique contracts must be handled in a short time

NOTE 46: SIGNIFICANT EVENTS DURING THE YEAR ENDED 31 DECEMBER 2022 [continued]

6) Interest benchmark reform [continued]

Terminating interest rates ()	**Alternative Reference Rates**
LIBOR USD* (1 week and 2 months settings), FedFund Rate	**SOFR**
LIBOR GBP	**SONIA**
LIBOR JPY	**TONA**
LIBOR EUR	**EURIBOR**
LIBOR CHF**	**SARON**
EONIA	**€STR**

* 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.

**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).

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	19,823	8
USD LIBOR	Deposit	18,811	19
USD LIBOR	Derivatives	451,042	113
Other LIBOR	Derivatives	25,593	4
Other LIBOR	Bonds (assets)	5,319	1
Total		**520,588**	**145**

The above LIBOR-based amounts outstanding as at 31 December 2022 will be managed at the first interest period therefore they do not cause a risk to the Bank or to the customers.

7) Green Senior Preferred Notes issued in amount of EUR 400 million

See details about the event in Note 20.

8) Financial closing of the bank acquisition transaction in Albania

See details about the events in Note 12.

9) Green Senior Preferred Notes issued in amount of USD 60 million

See details about the event in Note 20.

10) Capital increases at OTP Mortgage Bank Ltd.

See details about the events in Note 12.

11) Green Senior Preferred Notes issued in amount of EUR 650 million

See details about the event in Note 20.

12) Acquisition of Uzbek Ipoteka Banka

See details about the event in Note 12.

13) 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 47: SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

1) 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 Bank.

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.