OP Mortgage Bank's Report by the Board of Directors and Financial Statements 2021

Contents

Report by the Board of Directors

OP Mortgage Bank (OP MB) is part of OP Financial Group. Together with OP Corporate Bank plc, its role is to raise funding for OP from money and capital markets. OP MB is responsible for the Group's funding with regard to covered bond issuance. OP MB has no independent customer business or service network, but OP cooperative banks manage customer relationships and loan management at local level.

OP MB either underwrites intermediary loans on OP Financial Group member cooperative banks' balance sheets or buys the home loans in security for bonds.

In 2021, the intermediary loans and loan portfolio of OP MB increased to EUR 18,275 million (15,326)*. Bonds issued by OP MB totalled EUR 16,415 million (13,665) at the end of December 2021.

In March, OP MB issued Finland's first green covered bond in the international capital market. The fixed-rate EUR 750-million covered bond had a maturity of 10 years. Out of the proceeds of the bond, EUR 520 million was intermediated to 42 OP cooperative banks in the form of intermediary loans.

In May, OP MB issued three floating-rate covered bonds in the amount of one billion euros each and with a maturity of two years. The entire proceeds of the bond were intermediated as intermediary loans to 113 OP cooperative banks. The bond issues in May were performed as internal issues within OP Financial Group.

In September, a new extension of an intermediary loan model was performed on a bond issued in March 2021 that will mature in 2031. As part of this extension, OP MB provided 15 OP cooperative banks with intermediary loans at a total amount of EUR 230 million.

In October, a new extension of an intermediary loan model was performed on a bond issued in January 2020 that will mature in 2028. As part of this extension, OP MB provided six OP cooperative banks with intermediary loans at a total amount of EUR 16 million.

In November, OP MB carried out two new extensions of an intermediary loan model. The first one was performed on a bond issued in February 2019 that will mature in 2029. As part of this extension, OP MB provided eight OP cooperative banks with intermediary loans at a total amount of EUR 65 million. The second extension was performed on a bond issued in November 2019 that will mature in 2026. As part of this extension, OP MB provided 11 OP cooperative banks with intermediary loans at a total amount of EUR 70 million.

On 31 December 2021, 118 OP cooperative banks had a total of EUR 14,691 million (10,790) in intermediary loans from OP MB.

After the balance sheet date, OP Financial Group decided to apply an RWA floor based on the standardised approach. Application of the floor is expected to decrease OP Mortgage Bank's CET1 ratio by around 30 per cent in the second quarter of 2022.

Collateralisation of bonds issued to the public

On 31 December 2021, loans as collateral in security of the covered bonds issued under the Euro Medium Term Covered Note programme worth EUR 20 billion established on 12 November 2010 under the Act on Mortgage Credit Banks (Laki kiinnitysluottopankkitoiminnasta 688/2010) totalled EUR 15,841 million. On the same date, loans as collateral in security of the covered bonds issued under the Euro Medium Term Retained Covered Note programme worth EUR 10 billion established on 15 June 2020 totalled EUR 3,587 million.

Joint and several liability

Under the Act on the Amalgamation of Deposit Banks, the amalgamation of cooperative banks comprises the organisation's central cooperative (OP Cooperative), the central cooperative's member credit institutions and the companies belonging to their consolidation groups as well as credit and financial institutions and service companies in which the above together hold more than half of the total votes. This amalgamation is supervised on a consolidated basis. On 31 December 2021, OP Cooperative’s members comprised 121 cooperative banks as well as OP Corporate Bank plc, OP Mortgage Bank and OP Retail Customers plc. The central cooperative is responsible for issuing instructions to its member credit institutions concerning their internal control and risk management, their procedures for securing liquidity and capital adequacy as well as for compliance with harmonised accounting policies in the preparation of the amalgamation’s consolidated financial statements.

By law, companies belonging to the amalgamation are liable for each other's debts. OP Financial Group’s insurance companies do not fall within the scope of joint and several liability. The amalgamation's central cooperative, OP Cooperative, is obliged, if necessary, to assist member banks as a support action with a sum that prevents them from going into liquidation. The central cooperative is also liable for the debts of a member bank which cannot be paid using the member bank’s assets.

Each member bank is liable to pay a proportion of the amount which the central cooperative has paid to either another member bank as part of support action or to a creditor of such member bank in payment of an amount overdue which the creditor has not received from the member bank. Furthermore, in the case of the central cooperative’s default, a member bank has unlimited refinancing liability for the central cooperative’s debts as referred to in the Co-operatives Act.

Each member bank’s liability for the amount the central cooperative has paid to the creditor on behalf of a member bank is divided between the member banks in proportion to their last adopted balance sheets.

According to section 25 of the Act on Mortgage Credit Banks, the holder of a covered bond has the right to receive a payment for the entire term of the bond from the assets entered as collateral before other receivables without this being prevented by OP MB's liquidation or bankruptcy.

*) The comparatives for 2020 are given in brackets. For income statement and other aggregated figures, the figures for January-December 2020 serve as comparatives. For balance-sheet and other cross-sectional figures, figures at the end of the previous financial year (31 December 2020) serve as comparatives.

Profit performance

OP MB's key financial indicators in 2021 are shown below:

Thousand euros	Q1-4/2021	Q1-4/2020
Income		
Net interest income	42,075	48,470
Net commissions and fees	-25,804	-32,411
Net investment income	1	1
Other operating income	1	1
Total	16,274	16,061
Expenses		
Personnel costs	487	467
Other operating expenses	8,591	5,972
Total	9,079	6,439
Impairment loss on receivables	-491	-1,646
Earnings before tax	6,704	7,975

Impairment loss on receivables related to loans in OP MB’s balance sheet decreased to EUR 0.5 million (1.6). A year ago, customers actively applied for repayment holidays on their loans as a result of the Covid-19 crisis. Combined with the changes in macroeconomic parameters applied in the calculation of expected credit losses, this increased the amount of expected credit losses. A year ago, the adoption of the new definition of default also increased the amount of expected credit losses.

The company's financial standing remained stable throughout the reporting period. Full-year earnings before tax came to EUR 6,704 thousand (7,975).

On-balance-sheet and off-balance-sheet commitments

OP MB's balance sheet total was EUR 18,601 million (16,006) on 31 December 2021. The table below shows the development of key assets and liabilities.

Key assets and liabilities

€ million	31 Dec 2021	31 Dec 2020
Balance sheet	18,601	16,006
Receivables from customers	3,584	4,536
Receivables from credit institutions	14,814	11,009
Debt securities issued to the public	16,579	14,095
Liabilities to credit institutions	1,570	1,500
Equity capital	370	371

The bank's intermediary loans and loan portfolio increased to EUR 18,275 million (15,326) in January–December. On 31 December 2021, households accounted for 99.5% (99.9) of the loan portfolio and institutional customers for 0.5% (0.1). On 31 December 2021, OP MB's non-performing receivables totalled EUR 279 million (301).

The carrying amount of bonds issued to the public was EUR 16,579 million (14,095) at the end of the year. In addition to bonds, OP MB financed its operations through debt financing from OP Corporate Bank plc. At the end of the financial year, the amount of debt financing came to EUR 1,570 million (1,500).

OP MB has hedged its loan portfolio against interest rate risk by means of interest rate swaps. Interest rate swaps are used to swap base rate cash flows of hedged loans to Euribor cash flows. OP MB has also changed the fixed rates of the bonds it has issued to short-term market rates. OP MB's interest rate derivative portfolio totalled EUR 17,019 million (17,953). OP MB has concluded all derivative contracts for hedging purposes, with OP Corporate Bank plc being their counterparty.

Capital base and capital adequacy

OP MB uses the Internal Ratings Based Approach (IRBA) to measure its capital adequacy requirement for credit risk. OP MB uses the Standardised Approach to measure its capital adequacy for operational risks.

OP MB's Common Equity Tier 1 (CET1) ratio stood at 92.9% (61.8) on 31 December 2021. The statutory minimum for CET1 ratio is 4.5% and for the capital adequacy ratio 8%. The requirement for the capital conservation buffer of 2.5% under the Act on Credit Institutions increases in practice the CET1 ratio to 7% and the minimum capital adequacy ratio to 10.5%.

Capital base and capital adequacy, TEUR	31 Dec 2021	31 Dec 2020
Equity capital	370,077	371,093
Common Equity Tier 1 (CET1) before deductions	**370,077**	**371,093**
Excess funding of pension liability	-57	-56
Share of unaudited profits	-5,364	-6,381
Impairment loss – shortfall of expected losses	-2,856	-3,448
CET1 capital	**361,800**	**361,208**
Tier 1 capital (T1)	**361,800**	**361,208**
Total capital	**361,800**	**361,208**
Total risk exposure amount		
Credit and counterparty risk	359,126	550,145
Operational risk	30,130	34,748
Total	**389,256**	**584,893**
Ratios, %		
CET1 ratio	92.9	61.8
Tier 1 capital ratio	92.9	61.8
Capital adequacy ratio	92.9	61.8
Capital requirement		
Capital base	361,800	361,208
Capital requirement	40,872	61,414
Buffer for capital requirements	320,928	299,794

The decrease in exposures improved the CET1 ratio. Earnings for the financial year were not included in CET1 capital.

Formulas for key figures and ratios

Common Equity Tier 1 (CET1) capital ratio, %

$$\frac{\text{CET1}}{\text{Total risk exposure amount}}$$

Tier 1 capital (T1) capital adequacy ratio, %

$$\frac{\text{Tier1}}{\text{Total risk exposure amount}}$$

Capital adequacy ratio, %

$$\frac{\text{Total capital}}{\text{Total risk exposure amount}}$$

Financial indicators

Ratio	2021	2020	2019
Return on equity (ROE), %	1.4	1.7	3.2
Return on assets (ROA), %	0.03	0.04	0.08
Equity ratio, %	1.99	2.32	2.46
Cost/income ratio, %	56	40	30

Formulas for Alternative Performance Measures

The Alternative Performance Measures Guidelines issued by the European Securities and Markets Authority (ESMA) came into force on 3 July 2016. The Alternative Performance Measures are presented to illustrate the financial performance of business operations and to improve comparability between reporting periods. They should not be considered to be replacements for the performance measures defined in IFRS governing financial reporting.

The formulas for the used Alternative Performance Measures are presented below and they correspond to the previously presented performance indicators in terms of content.

Return on equity (ROE), %

Operating profit (loss) - Income tax* x 100
Equity capital (average of the beginning and end of year)

Return on assets (ROA), %

Operating profit (loss) - Income tax* x 100
Average balance sheet total
(average of the beginning and end of year)

Equity ratio, %

Equity capital x 100
Balance sheet total

Cost/income ratio, %

Personnel costs + Depreciation/amortisation and impairment loss
+ Other operating expenses x 100
Net interest income + Net commissions and fees + Net investment
income + Other operating income

* Includes tax effect from appropriations.

Risk management and capital adequacy management

OP Financial Group's core values, strategic goals and financial targets form the basis for OP MB's risk management and capital adequacy management. In OP Financial Group's risk policy, the central cooperative's Board of Directors confirms annually risk-management principles, actions, objectives and limits to be applied by the Group and its entities that are used to guide business to implement the policies confirmed in the Group's strategy and the principles of the risk tolerance system.

The central cooperative is in charge of the OP Financial Group level risk and capital adequacy management. OP MB is responsible for its own risk and capital adequacy management in accordance with the nature and extent of its operations.

OP MB's Board of Directors makes decisions on its risk and capital adequacy management in line with the principles adopted by the central cooperative's Board of Directors. In addition, OP MB's Board of Directors deals with, in terms of quality and extent, far-reaching and important matters in principle from the perspective of the company's operations, and any unusual matters. The Board of Directors decides on principles and procedures to ensure that the company operates in compliance with external regulation and OP Cooperative's guidelines.

The Managing Director is responsible for the implementation of risk and capital adequacy management according to the principles and guidelines that have been agreed on, and reports regularly on the company's business and financial standing.

OP MB's risk and capital adequacy management tasks are centralised within OP Financial Group's Risk Management. Risk and capital adequacy management falls under internal control. Its purpose is to ensure OP MB's risk capacity and liquidity and, thereby, ensure business continuity. Risk capacity is made up of effective risk management that is proportionate to the extent and complexity of operations and of adequate capital resources and liquidity based on profitable business operations.

Risk and capital adequacy management has been made an integral part of the company's business and management. OP MB focuses on carrying out its role according to its service capabilities and risk-bearing capacities in accordance with shared business models. OP MB has a moderate attitude towards risk-taking.

Risk-bearing capacity

OP MB's risk-bearing capacity remained good. Its capital adequacy ratio stood at 92.9% (61.8). The return on equity was 1.4% (1.7).

OP MB does not seek to secure its capital base by retaining earnings. Rather, OP Cooperative guarantees OP MB's capital base.

Credit risk exposure

OP MB's loan portfolio totalled EUR 3,584 million (4,536) at the end of the reporting period. The quality of the loan portfolio is good. Doubtful receivables totalled EUR 279 million (301). Doubtful receivables refer to receivables that are more than 90 days past due, other receivables classified as risky and forborne receivables due to the customer's financial difficulties. Forbearance measures consist of concessions agreed at the customers' initiative to the original repayment plan to make it easier for them to manage through temporary payment difficulties. OP cooperative banks make every effort to identify ways of solving customers' temporary financial difficulties. Loan modifications due to reasons other than the customer's financial difficulties are not classified as doubtful receivables.

	Performing forborne exposures (gross)		Non-performing receivables (gross)		Doubtful receivables (gross)	
	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
More than 90 days past due			13,122	13,444	13,122	13,444
Unlikely to be paid			12,783	11,030	12,783	11,030
Forborne exposures	213,922	241,864	38,762	34,203	252,684	276,067
Total	**213,922**	**241,864**	**64,667**	**58,677**	**278,589**	**300,541**

As receivables more than 90 days past due, OP MB reports the remaining principal of receivables whose interest or principal amount has been overdue and outstanding for over three months. Other receivables categorised as risky are reported as contracts unlikely to be paid. Forborne loans include receivables that have been modified due to the customer's financial difficulties by, for example, granting a repayment holiday of 6 to 12 months.

Key ratios	31 Dec 2021	31 Dec 2020
Doubtful receivables, TEUR	278,589	300,541
Ratio of doubtful receivables to exposures, %	7.77	6.64
Ratio of non-performing receivables to exposures, %	1.80	1.30
Ratio of performing forborne exposures to exposures, %	5.97	5.34
Ratio of performing forborne exposures to doubtful receivables, %	76.79	80.48
Ratio of loss allowance to doubtful receivables, %	1.04	1.25

Key ratios were changed from net to gross as of the beginning of 2021, i.e. non-performing receivables no longer include loss allowance. In the key ratios, the new denominator includes the loan and guarantee portfolio, and deferred interest income. Comparatives have been adjusted accordingly.

The company does not have any group of connected clients with the total amount of customer risk exceeding the limit set in the Act on Credit Institutions of 25% of the bank's capital base. Thanks to the loan portfolio's diversity and hard collateral, OP MB's credit risk exposure is highly stable.

Market risks and liquidity risk

Market risks include the following risks both on and off the balance sheet: interest rate risk, price risks and market liquidity risk. The company's products and market instruments, funding and investment principles and applied risk monitoring methods have been defined in the market risk management guidelines confirmed by the Risk Management Committee.

Interest rate risk means the effect of changing market interest rates on the company's earnings, profitability and capital adequacy. OP MB has used interest rate swaps to hedge against interest rate risk. Interest rate swaps are used to swap base rate cash flows of hedged home loans to Euribor cash flows. OP MB has also changed the fixed rates of the bonds it has issued to floating market rates. OP Corporate Bank plc is the counterparty to all derivative contracts.

The purpose of liquidity risk management is to secure the company's ability to fulfil its payment obligations without endangering business continuity, profitability or capital adequacy. OP MB monitors its cash flows on a daily basis to secure funding liquidity and its structural funding risk on a regular basis as part of the company's internal capital adequacy assessment process (ICAAP).

OP MB's Board of Directors monitors regularly that the company's interest rate and funding risk exposure remain within the limits it has set.

The provisions of the Act on Mortgage Credit Banks also set limits on the bank's interest rate and funding risk-taking. According to the Act, the total amount of interest received during any 12 months for loans forming the collateral for covered bonds must exceed the total amount of interest paid on covered bonds for the same period. Additionally, the average residual term to maturity of covered bonds must be shorter than the average residual term to maturity of the assets as their collateral. During the entire financial year, OP MB's operations have been in compliance with law, both in respect of the interest flow assessment and maturity assessment.

Operational risks

Operational risk means a risk of an adverse consequence caused by all business operations that may result from insufficient or incorrect practices, processes, systems or external factors. Operational risk includes ICT and security risks. Operational risk may materialise in the form of financial losses or other harmful consequences, such as deterioration or loss of reputation or trust. Operational risks are managed by identifying and analysing them and by ensuring that controls and management tools are appropriate and adequate. The bank assesses operational risks regularly and reports its risk status to the Board of Directors once a year. Operational risk management is aimed at ensuring that no unforeseeable operational risks materialise in operations.

Compliance risk forms part of operational risk. Compliance activities are aimed at ensuring that OP MB complies with laws, regulatory instructions and regulations, self-regulation of markets, and internal guidelines, policies and instructions of OP Financial Group and OP MB. Compliance also ensures that customer relationship management complies with appropriate and ethically sound principles and practices.

Corporate responsibility

OP Financial Group’s core values and principles governing corporate responsibility also guide the operations of OP MB.

Corporate responsibility is an integral part of OP Financial Group’s business and strategy. The Group’s aim is to be a forerunner of corporate responsibility within its sector in Finland. OP Financial Group is committed to complying with the ten principles of the UN Global Compact initiative in the areas of human rights, labour rights, the environment and anti-corruption. OP has agreed to follow the UN Principles for Responsible Investment. OP Financial Group is a Founding Signatory of the Principles for Responsible Banking under the United Nations Environment Programme Finance Initiative (UNEP FI).

In March, OP MB issued the first green covered bond in Finland. The EUR 750 million bond has a maturity of 10 years. The bond is targeted at responsible international institutional investors, and proceeds raised with the bond will be allocated to OP Financial Group’s home loans recognised as green ones according to the Green Covered Bond Framework of OP MB. The sector to be financed is energy-efficient residential buildings (green buildings).

In December, OP Financial Group’s climate actions scored, for the third time in a row, an A- in CDP’s international climate impact assessment.

Personnel and remuneration schemes

On 31 December 2021, OP MB had seven employees. The company purchases all the most important support services from OP Cooperative and its Group companies, reducing the need for its own personnel.

Variable remuneration applied by OP Financial Group in 2021 consists of the performance-based bonus scheme covering all personnel, and the personnel fund. Company-specific targets based on the annual plan and the Group-level strategic targets are taken into account in the metrics used in the performance-based bonus scheme and the personnel fund. In drawing up the remuneration schemes, OP has taken account of the regulation regarding the financial sector's remuneration schemes. More detailed information on variable remuneration is available on OP Financial Group’s website.

OP MB belongs to OP Financial Group’s OP Personnel Fund which forms a long-term remuneration scheme for employees. The company pays the Personnel Fund profit-based bonuses in accordance with pre-agreed principles. Members of the Fund may withdraw fund units on the grounds specified in Fund Rules.

Governance

Board of Directors

The Board of Directors manages OP MB's business. According to the Articles of Association, the Board of Directors is responsible for the company's administration and appropriate organisation of operations. The Board of Directors has general authority to decide on all issues related to the governance and other matters that, by law, are not the responsibility of the Annual General Meeting or the Managing Director. The Board of Directors decides on the strategy and key business goals. The Board of Directors' duty is to ensure that accounting and financial management have been organised appropriately.

Board of Directors:

Chair	Vesa Aho	Chief Financial Officer, OP Cooperative until 28 February 2022
Chair	Mikko Timonen	Chief Financial Officer, OP Cooperative from 1 March 2022
Members	Kaisu Christie	Head of Retail Customer Financing and Housin-related Services, OP Cooperative
	Lauri Iloniemi	Head of Group Reasury and Asset and Liability Management, OP Corporate Bank plc

According to the Articles of Association, OP MB's Board of Directors comprises a minimum of three and a maximum of eight members. Currently, the Board has three members. Board members are elected for a period of one year. Their term begins upon closing of the Annual General Meeting that elected them and ends upon closing of the Annual General Meeting that elects the new Board. A Board member must resign after they reach the age of 65 at the latest. The Board of Directors has a quorum when more than half of its members are present. The Board of Directors held nine meetings in the year under review.

Managing Director

OP MB's Managing Director must advance the company's interests carefully and manage the bank's daily operations according to laws and the guidelines and regulations issued by the Board of Directors. The Managing Director may take measures which, considering the extent and nature of the company's operations, are unusual or far-reaching in nature only if duly authorised by the Board of Directors, or if the Board of Director's decision cannot be awaited without causing material harm to the company's operations. It is the statutory duty of the Managing Director to ensure that the company's accounting is in compliance with the applicable law and that the bank's treasury is managed in a reliable manner.

OP MB's Managing Director is Sanna Eriksson. The deputy Managing Director is Tuomas Ruotsalainen, Senior Covered Bonds Manager at OP MB.

OP MB's Corporate Governance Statement is available at www.op.fi.

Audit

OP MB's Annual General Meeting of 22 March 2021 elected KPMG Oy Ab, a firm of authorised public accountants, as the company's auditor with Tiia Kataja, Authorised Public Accountant, acting as the chief auditor.

OP Cooperative's Internal Audit is in charge of the company's internal audit.

Events after the balance sheet date

OP Financial Group has decided to apply an RWA floor – based on the standardised approach – in the second quarter of 2022. This is due to enhanced regulatory requirements and discussions with the European Central Bank (ECB) on the application of the Internal Ratings Based Approach (IRBA).

The floor will be applied within OP Financial Group in the second quarter of 2022. After application of the floor, OP Mortgage Bank's CET1 ratio will be an estimated 30%. Application of the floor is a temporary capital measure which will not affect OP Mortgage Bank's good risk position. The impact of the floor will be eliminated in stages over the coming years, as the ECB approves the Group's development measures regarding the Internal Ratings Based Approach. Application of the floor will have no material impact on OP Financial Group's bond issuance plan for 2022.

Outlook

It is expected that OP MB's capital adequacy will remain strong, risk exposure favourable and the overall quality of the loan portfolio good. This will make it possible to issue new covered bonds in 2022 as well.

Proposal by the Board of Directors for profit distribution

OP Mortgage Bank's equity capital on 31 December 2021

+ Share capital	60,000,000.00
+ Reserve for invested non-restricted equity	245,000,000.00
+ Profit for the financial year	5,363,655.10
+ Retained earnings	59,713,331.85
Total	**370,076,986.95**

Distributable funds totalled EUR 310,076,986.95.

As shown in the financial statements of 31 December 2021, the company's distributable funds, which include EUR 5,363,655.10 in profit for the financial year, totalled EUR 65,076,986.95. The company's distributable funds totalled EUR 310,076,986.95.

The Board of Directors proposes that a dividend of EUR 70.02 per share be distributed, totalling EUR 5,362,971.84, and that following dividend distribution, the remaining amount of EUR 683.26 be recognised in retained earnings. Following dividend distribution, the company's distributable earnings total EUR 59,714,015.11 and its distributable funds total EUR 304,714,015.11.

The company's financial position has not undergone any material changes since the end of the financial year 2021. The company's liquidity is good and will not be jeopardised by the proposed profit distribution, in the Board of Directors' view.

INCOME STATEMENT

EUR	Note	2021	2020
Net interest income	3	42,075,223.01	48,469,674.58
Net commissions and fees	4	-25,803,527.38	-32,410,957.49
Net investment income		1,138.44	1,400.00
Other operating income		848.17	829.74
Total income		**16,273,682.24**	**16,060,946.83**
Personnel costs	5	487,232.30	467,485.53
Other operating expenses	6	8,591,380.11	5,971,860.26
Total expenses		**9,078,612.41**	**6,439,345.79**
Impairment losses on receivables	7	-490,832.71	-1,646,311.26
Earnings before tax		**6,704,237.12**	**7,975,289.78**
Income tax	8	1,340,582.02	1,594,123.67
Profit for the financial year		**5,363,655.10**	**6,381,166.11**

STATEMENT OF COMPREHENSIVE INCOME

EUR		2021	2020
Profit for the financial year		**5,363,655.10**	**6,381,166.11**
Items that will not be reclassified to profit or loss			
Gains/(losses) arising from remeasurement of defined benefit plans	17	1,760.00	-16,821.00
Income tax on gains/(losses) arising from remeasurement of defined benefit plans	14	-352.00	3,364.20
Total comprehensive income for the financial year		**5,365,063.10**	**6,367,709.31**

BALANCE SHEET

EUR	Note	31 Dec 20201	31 Dec 2020
Receivables from credit institutions	9	14,814,634,687.68	11,008,826,679.52
Derivative contracts	10	170,199,655.59	431,801,099.80
Receivables from customers	11	3,584,444,587.19	4,536,258,872.98
Investments assets	12	40,000.00	40,000.00
Other assets	13	31,241,430.01	28,621,909.98
Tax assets	14	0.00	802,794.72
Total assets		**18,600,560,360.47**	**16,006,351,357.00**
Liabilities to financial institutions	15	1,570,000,000.00	1,500,000,000.00
Derivative contracts	10	52,965,536.44	14,907,515.27
Debt securities issued to the public	16	16,579,276,014.86	14,095,016,636.02
Other liabilities	17	27,893,172.13	25,266,686.27
Tax liabilities	14	348,650.09	67,716.07
Total liabilities		**18,230,483,373.52**	**15,635,258,553.63**
Shareholders' equity			
Shareholders' interest			
Share capital		60,000,000.00	60,000,000.00
Reserve for invested unrestricted equity		245,000,000.00	245,000,000.00
Retained earnings		65,076,986.95	66,092,803.37
Total equity	18	**370,076,986.95**	**371,092,803.37**
Total liabilities and shareholders' equity		**18,600,560,360.47**	**16,006,351,357.00**

CASH FLOW STATEMENT

TEUR	2021	2020
Cash flow from operating activities		
Profit for the financial year	5,364	6,381
Adjustments to profit for the financial year	-14,640	9,302
Increase (-) or decrease (+) in operating assets	**-2,976,898**	**-993,478**
Receivables from credit institutions	-3,918,101	-2,088,262
Receivables from customers	943,822	1,091,801
Other assets	-2,620	2,983
Increase (+) or decrease (-) in operating liabilities	**72,628**	**-1,044,611**
Liabilities to credit institutions	70,000	-1,016,000
Derivative contracts	12,913	-29,541
Provisions and other liabilities	-10,285	930
Income tax paid	-257	-1,483
Dividends received	1	1
A. Net cash from operating activities	**-2,913,803**	**-2,023,888**
Cash flow from investing activities		
B. Net cash used in investing activities		
Cash flow from financing activities		
Increases in debt securities issued to the public	3,807,890	3,081,772
Decreases in debt securities issued to the public	-1,000,000	-1,270,000
Dividends paid and interest on cooperative capital	-6,381	-11,891
C. Net cash used in financing activities	**2,801,509**	**1,799,881**
Net change in cash and cash equivalents (A+B+C+D)	**-112,293**	**-224,007**
Cash and cash equivalents at year-start	**214,695**	**438,702**
Cash and cash equivalents at year-end	**102,402**	**214,695**

Notes to cash flows are presented in Note. 21

STATEMENT OF CHANGES IN EQUITY

TEUR	Note	Share capital	Reserve for invested unrestricted equity	Retained earnings	Total
Shareholders' equity on 1 January 2021	18	60,000	245,000	66,093	371,093
Profit for the financial year				5,364	5,364
Other comprehensive income for the period				1	1
Other changes				-6,381	-6,381
Shareholders' equity on 31 December 2021		60,000	245,000	65,077	370,077
Shareholders' equity on 1 January 2020	18	60,000	245,000	71,616	376,616
Profit for the financial year				6,381	6,381
Other comprehensive income for the period				-13	-13
Other changes				-11,891	-11,891
Shareholders' equity on 31 December 2020		60,000	245,000	66,093	371,093

NOTES TO THE FINANCIAL STATEMENTS

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APPENDIX 1. Accounting policies

OP Mortgage Bank (OP MB) is a credit institution engaged in mortgage banking in Finland.

The company is part of an amalgamation of cooperative banks (OP Financial Group). Ultimately, OP Cooperative and its member credit institutions are liable for each other's debts and commitments. OP Cooperative acts as the entire OP Financial Group's strategic owner institution and as a central cooperative in charge of Group control and supervision.

OP MB is domiciled in Helsinki and the address of its registered office is Gebhardinaukio 1, FI-00510 Helsinki.

A copy of OP MB's financial statements is available at www.op.fi or the company's office at Gebhardinaukio 1, FI-00510 Helsinki.

OP MB belongs to OP Financial Group, and OP MB's accounts are included in its consolidated financial statements. A copy of OP Financial Group's consolidated financial statements is available at www.op.fi or the Group's office at Gebhardinaukio 1, FI-00510 Helsinki.

The Board of Directors of OP MB approved the financial statements bulletin for issue on 9 February 2022, and the Board of Directors approved the financial statements on 1 March 2022.

BASIS OF PREPARATION

OP MB's financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), applying IASs, IFRSs and SIC and IFRIC interpretations effective on 31 December 2021. The International Financial Reporting Standards refer to standards and their interpretations adopted in accordance with Regulation (EU) No. 1606/2002 of the European Parliament and of the Council. OP MB's notes also conform to the requirements of Finnish accounting and company legislation that complement IFRS regulations.

In 2021, OP MB adopted the following standards and interpretations:

- On 1 January 2021, OP MB adopted a document entitled Interest Rate Benchmark Reform (Phase 2) that will amend IFRS 9, IAS 39 and IFRS 7, IFRS 4 and IFRS 16. These amendments are a continuation of the Interest Rate Benchmark Reform document (Phase 1) adopted in 2020. The amendments to Phase 2 brought two practical reliefs and they are applied from the date when the benchmark rate has changed. The first one applies to financial instruments carried at amortised cost so that changing contractual cash flows due to the Interest Rate Benchmark Reform is treated by updating the effective interest rate, in which case the change does not cause a direct profit or loss. This amendment will have no significant effect on OP MB because the majority of receivables and liabilities are linked to the Euribor, which is still used as a reference interest rate. Libor-linked liabilities and receivables are only small in number. The other amendment applies to hedge accounting which is not discontinued although the reference interest rate changes during the hedging relationship but the risk to be hedged and related cash flows are redetermined when the reference rate changes. Similarly, hedging documentation will be changed in respect of the hedged risk and the hedging instrument. The resulting change in valuation is presented as part of hedge effectiveness. This change will have no significant effect on OP MB, because hedges are mostly linked to the Euribor.

OP MB's financial statements were prepared at historical cost with the exception of derivative contracts and hedged items in fair value hedging.

The figures in the income statement and the balance sheet are presented in euros and cents; other figures in the financial statements are presented in thousands of euros.

In order to ensure uniformity in the accounting policies of entities within OP Financial Group, OP Cooperative is obliged to issue guidelines on the preparation of financial statements to its member credit institutions. According to the Act on Cooperative Banks and Other Cooperative Institutions and the Act on the Amalgamation of Deposit Banks, the Board of Directors of OP Cooperative must confirm any applicable accounting policies for which no IFRS directions are available.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of financial statements requires making estimates and assumptions about the future and the actual results may differ from these estimates and assumptions. It also requires the management to exercise its judgement in the process of applying the accounting policies.

The determination of the measurement models for expected credit losses (ECL) involves several factors requiring management judgement, such as:

- Selection of appropriate ECL models so that they describe the expected credit losses on the contract portfolio as well as possible
- Different assumptions and expert assessments made in the models
- Selection of the estimation methods of the parameters for the ECL models
- Determination of model risk associated with the quality of the available modelling data and other data
- Proper grouping of contracts into different segments so that their ECL can be calculated using an appropriate model
- Selection of macroeconomic factors in such a way that their changes correlate with the contracts' probability of default
- Forecasting future macroeconomic scenarios and their probabilities.
- Extra provisions based on management judgement related to a certain industry due to Covid-19, for example
- Reductions in collateral value made on the basis of the geographical location of collateral based on management judgement

Management judgement has also been used in the assessment of a significant increase in credit risk, such as in:

- The expert assessment used in the assessment of change in relative credit risk associated with private customers to ensure a true number of contracts that move to stage 2 before moving to stage 3 (so-called default capture rate)
- The selection of the absolute threshold that is based on historical default behaviour and OP MB's credit risk process
- The determination of the length of a period during which the customer must prove proper payment behaviour so that the impairment stage 3 can improve to stage 2 or 1.

The actual measurement of ECL figures is performed using the ECL models without management judgement, except if a large corporate exposure in stage 3 is involved, in which case the ECL is calculated using the cash flow based ECL method based on expert assessment.

Management overlays directly to the ECL figures (post-model adjustments) are intended only for temporary use until an unpredictable event caused by the overlay provision or circumstance could have been taken into account in the ECL models.

The existing ECL models do not take account of the Environmental, Social and Governance (ESG) risks as a separate component. (Note 11. Receivables from customers)

COVID-19 PANDEMIC

EU member states implemented a range of financial support measures in 2020 to counter the significant economic effects of the coronavirus pandemic (COVID-19). Finland's financial support measures related to lending involve raising Finnvera's financing authorisation to EUR 12 billion. Consequently, businesses can apply for working capital backed up by a guarantee from Finnvera to get through the coronavirus crisis. Finnvera's guarantees affect the LDG component in ECL measurement, thus reducing the ECL amount.

OP MB has independently provided its private customers with the opportunity to get a 12-month repayment holiday on their home loans. With respect to corporate customers, changes in repayment schedules are always evaluated on a case-by-case basis. In addition, extensive use has been made of guarantees provided by Finnvera. In loan modifications, forborne loans and customers in default are identified according to the normal set of instructions. During the Covid-19 crisis, most of the repayment holidays have been granted to private customers and to SME customers. The high number of 12-month repayment holidays granted in spring 2020 came to an end in 2021.

In ECL measurement, macroeconomic factors are updated on a quarterly basis. The ECL is measured as the weighted average under three scenarios. Scenario weights have been at normal level, or downside 20%, baseline 60% and upside 20%. The update of the macroeconomic forecasts had no significant effect on the ECL. Uncertainty still exists related to the economic development caused by the Covid-19 crisis.

SUMMARY OF PRESENTATION OF INCOME STATEMENT ITEMS

Net interest income	Received and paid interest on fixed-income instruments, the recognised difference between the nominal value and acquisition value, interest on interest-rate derivatives and fair value change in fair value hedging, interest expense on issued debt securities. Note 3.
Net commissions and fees	Commission income from lending, commission expenses from lending and loan management fees to OP cooperative banks, and commission expenses from issued debt certificates. Note 4.
Personnel costs	Wages and salaries, pension costs, social expenses. Note 5.
Other operating expenses	Office expenses, ICT costs, other administrative expenses, charges of financial authorities and auditors, rents and other expenses. Note 6.
Impairment loss on receivables	Expected credit losses from customers and final credit losses and their reversals. Note 7.

REVENUE RECOGNITION

Interest income and expenses

Interest income and expenses for interest-bearing assets and liabilities are recognised using the effective interest method. More detailed information on the effective interest method can be found in these accounting policies under Amortised cost. Interest on receivables with non-settled, due payments is also recognised as revenue. The difference between the receivable's acquisition cost and its nominal value is recognised as interest income and that between the amount received and nominal value of the liability in interest expenses. The difference between the nominal value and the acquisition cost of fixed-rate bonds is recognised as interest income or expenses over the residual term to maturity.

Net commissions and fees

Fees that are not an integral part of the effective interest rate of a financial instrument are accounted for in accordance with IFRS 15 Revenue from Contracts with Customers. Fees and commissions under IFRS 15 are recognised as revenue when a service's agreed performance obligations are transferred to the customer and the key criterion is transfer of control. Commissions and fees are recognised to the amount to which an entity expects to be entitled in exchange of transferring promised services to a customer. Commission expenses are recognised in net commissions and fees on an accrual basis.

Commissions and fees consist of commissions from lending to private customers. Their performance obligations are fulfilled over time. The amount of consideration for the services is the list price or a contractually stated price. OP MB charges its customers the fees on a monthly basis according to the contract terms.

OP MB refunds a share of the return (as agreed in the fee model) on any loan it manages to the OP cooperative bank that granted the loan to the customer. Commission expenses consist mainly of the payment to OP cooperative banks of commissions charged from lending and fees for loan management, and of commission expenses relating to the issuance of bonds.

FINANCIAL INSTRUMENTS

Fair value determination

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date.

The fair value of financial instruments is determined using either prices quoted in an active market or the company's own valuation techniques where no active market exists. Markets are deemed to be active if price quotes are easily and regularly available and reflect real and regularly occurring market transactions on an arm's length basis. The current bid price is used as the quoted market price of financial assets.

If the market has a commonly used valuation technique applied to a financial instrument to which the fair value is not directly available, the fair value is based on a commonly used valuation technique and market quotations of the inputs used by the technique.

If the valuation technique is not a commonly used technique in the market, a valuation model created for the instrument in question will be used to determine the fair value. Valuation models are based on widely used measurement techniques, incorporating all factors that market participants would consider in setting a price, and are consistent with accepted economic methodologies for pricing financial instruments.

The valuation techniques used include prices of market transactions, the discounted cash flow method and reference to the current fair value of another instrument that is substantially the same. The valuation techniques take account of estimated credit risk, applicable discount rates, the possibility of early repayment and other factors affecting the reliable measurement of the fair value of financial instruments.

The fair values of financial instruments are categorised into three hierarchy levels, depending on the inputs used in valuation techniques:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1)
- Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices) (Level 2)
- Inputs for the asset or liability that are not based on observable market data (Level 3)

If the inputs used to measure fair value are categorised into different levels of the fair value hierarchy, the fair value measurement is categorised in its entirety at the same level as the lowest level input that is significant to the entire measurement. The significance of inputs has been assessed on the basis of the fair value measurement in its entirety. (Note 20. Financial instruments classification, grouped by valuation technique)

Financial assets and liabilities

Amortised cost

Amortised cost is the amount at which the financial asset or financial liability is measured at initial recognition minus the principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any loss allowance.

The effective interest method uses the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability to the gross carrying amount of a financial asset or to the amortised cost of a financial liability. When calculating the effective interest rate, OP MB estimates the expected cash flows by considering all the contractual terms of the financial instrument excluding the expected credit losses (ECL). The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts. Fees that are an integral part of the rate of a financial instrument include office and origination fees related to loan drawdown and they are amortised over the expected life of the financial instrument or a shorter period if that is appropriate. Fees that are not an integral part of the effective interest rate of a financial instrument are accounted for in accordance with IFRS 15. These include fees charged for servicing a loan, for example.

Loans are entered in OP MB's balance sheet if they have been granted directly from its balance sheet or if an OP cooperative bank has sold the loans to OP MB at market price, with the credit risk, interest rate risk and funding risk having transferred to OP MB with the sale. These loans are presented in the balance sheet under 'Receivables from customers'. (Note 11. Receivables from customers)

The loan is not transferred to OP MB's balance sheet in the intermediary loan model referred to in the Act on Mortgage Credit Banks (688/2010), whereby OP MB issues mortgage-backed bonds and uses the funds obtained to make an intermediary loan to OP cooperative banks, presented under 'Receivables from credit institutions' in the balance sheet. In the intermediary loan model, an OP cooperative bank's mortgage-backed loan's credit risk, interest rate risk or funding risk are not transferred to OP MB but are entered as collateral of the bond issued by OP MB.

Interest revenue

Interest revenue has been calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for:

a) purchased or originated credit-impaired financial assets. For those financial assets, OP Corporate Bank applies the credit-adjusted effective interest rate to the amortised cost of the financial asset from initial recognition
b) financial assets that are not purchased or originated credit-impaired financial assets but subsequently have become credit-impaired financial assets (or that are in stage 3). For those financial assets, OP MB applies the effective interest rate to the amortised cost of the financial asset (i.e. to the net carrying amount after the deduction of the expected credit loss).

Initial recognition and measurement

At initial recognition, OP MB measures a financial asset or financial liability at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are incremental and directly attributable to the acquisition or issue of the financial asset or financial liability. Immediately after initial recognition, an expected credit loss allowance of a financial asset will be recognised if the financial asset is measured at amortised cost or at fair value through other comprehensive income. This results in accounting loss recognition for newly originated or newly purchased financial assets in the income statement.

Classification and subsequent measurement of financial assets

OP MB classifies financial assets into the following categories:

- Fair value through profit or loss (FVTPL)
- Fair value through other comprehensive income (FVOCI)
- Amortised cost.

Loans

The classification of loans and notes and bonds depend on the following factors:

a) OP MB's business model for managing the financial assets
b) The contractual cash flow characteristics of the financial asset.

On the basis of these factors, OP MB classifies loans into the following three measurement categories:

1) Financial assets measured at amortised cost are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows that are solely payments of principal and interest on the principal amount outstanding. The financial asset's carrying amount is adjusted by any allowance for expected credit losses and interest revenue is recognised in interest revenue using the effective interest method.

2) Financial assets recognised at fair value through other comprehensive income are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. In addition, the contractual terms of the financial asset specify cash flows occurring on specific dates which are solely payments of principal and interest on the principal amount outstanding. Changes in the fair value are recognised in the fair value reserve. Impairment gains or losses and foreign exchange gains or losses are recognised in profit or loss. When a financial asset is derecognised, the cumulative profit or loss in the fair value reserve is reclassified from equity to profit or loss in net investment income as a reclassification adjustment. Interest calculated using the effective interest method is recognised in interest income.

3) Financial assets measured at fair value through profit or loss are held for trading or if the financial asset does not meet the criteria for amortised cost or FVOCI. Gains and losses are recognised in net investment income.

Business model

A business model refers to how OP MB manages its financial assets in order to generate cash flows. OP MB's business model determines whether cash flows will result solely from collecting contractual cash flows or from collecting contractual cash flows and cash flows and by selling a financial asset, or whether the purpose is held for trading. Financial assets within the trading business model are measured through profit or loss. When assessing the business model, OP MB takes account of future measures to achieve the objective of the business model. The assessment includes previous experience in collecting cash flows, how the performance of the business model and the financial assets held within that business model are evaluated and reported to the entity's key management personnel, how risks are managed and how managers of the business are compensated. For example, OP MB holds home loans and intermediary loans it has granted to collect contractual cash flows.

Cash flow characteristics

When OP MB's business model is other than trading, OP MB assesses whether contractual cash flows are consistent with a basic lending arrangement. In the basic lending arrangement, contractual cash flows are solely payments or principal and interest on the principal amount outstanding (SPPI) where consideration for the time value of money, credit risk, lending risks and profit margin are typically the most significant elements of interest. The majority of OP MB's financial assets correspond to basic lending arrangements.

All loans to private customers granted by OP MB contain the option for early repayment. The terms and conditions are, however, consistent with the basic lending arrangement because the prepayment amount substantially represents the contractual par amount and accrued (but unpaid) contractual interest, which may include reasonable additional compensation for the early termination of the contract.

When contractual cash flows are exposed, for example, to change in stock prices or a borrower's financial result, this is no basic lending arrangement and such financial assets are measured at fair value through profit or loss. These are typically various mutual fund investments which do not fulfil the definition of equity in the issuer's financial statements under IAS 32.

Embedded derivatives included in financial assets are not separated from the host contract but they are considered in the overall assessment of contractual cash flows.

If OP Financial Group has to change its business model for managing financial assets, it may have to reclassify financial assets. The reclassification must be applied prospectively from the reclassification date. Such changes are expected to be very infrequent.

Equity instruments

Equity instruments are instruments that evidence a residual interest in the assets of a company after deducting all of its liabilities. These are typically stock investments.

Equity instruments are subsequently measured at fair value through profit or loss, except when OP MB has made an irrevocable election at initial recognition for particular investments in equity instruments that would otherwise be measured at fair value through profit or loss to present subsequent changes in fair value in other comprehensive income. These investments comprise OP MB's strategic investments in OP Cooperative's cooperative capital, the nominal value of which corresponds to their fair value. No capital gains or losses are realised from these investments. The interest on cooperative capital is recognised in net investment income. OP Cooperative's Cooperative Meeting confirms the amount of interest payable on an annual basis.

Modification of contractual cash flows

Modifications in the contractual payment terms are made as a normal measure related to the management of customer relationship but also in situations where the customer's repayment capacity has deteriorated. The modification to the loan due to the customer's deteriorated repayment capacity is recognised as forbearance which typically means a moratorium for a limited time. Generally, in these cases, the contractual cash flows of a loan are renegotiated or otherwise modified and the renegotiation or modification does not result in the derecognition of that loan. In such a case, OP Financial Group recalculates the gross carrying amount of the loan and recognises a profit or loss on the modification in net interest income in the income statement. Payment modifications are subject to regular monitoring and reporting to the management as an indicator anticipating customers' solvency.

If modifications to the loan terms are significant or the loan is renegotiated, OP MB derecognises the original loan and recognises the modified new loan in the balance sheet. The date of renegotiation is consequently considered to be the date of initial recognition for the impairment calculation purposes. This typically means measuring the loss allowance at an amount equal to 12-month expected credit losses. OP MB uses internal rating to classify reasons for modifications and severity classes to monitor whether there has been evidence that the new loan recognised has deemed to be credit-impaired at initial recognition. Accordingly, it is recognised as an originated credit-impaired financial asset. This might occur, for example, in a situation in which there was a substantial modification of a distressed asset.

Otherwise, OP MB derecognises financial assets when the contractual rights to the cash flows from the financial asset expire or it transfers the financial asset to another party and the transfer qualifies for derecognition.

Impairment

Expected credit losses are calculated on all balance sheet items amortised at cost and those recognised at fair value through other comprehensive income (FVOCI) (instruments other than equity instruments) and on off-balance-sheet loan commitments and financial guarantee contracts. Expected credit losses are recognised at each reporting date, reflecting:

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

Classification of contracts into three impairment stages

Contracts are classified into three stages. The different stages reflect credit deterioration since initial recognition.

- Stage 1: contracts whose credit risk has not increased significantly since initial recognition and for which a 12-month ECL is calculated.
- Stage 2: contracts whose credit risk has increased significantly since initial recognition and for which a lifetime ECL is calculated.
- Stage 3: non-performing contracts in 2021 (defaulted contracts in 2020) for which a lifetime ECL is also calculated.

Definition of default
In the IFRS 9 based calculation, OP MB applies the same definition of default as in internal credit risk models (IRB). The central cooperative consolidated assesses default using OP Financial Group's internal rating system based on payment behaviour. For personal customers, the definition of default is applied on a contract-by-contract basis whereas corporate customers are reviewed in terms of a group of connected clients. The customer is classified as a customer in default when the customer's repayment is considered unlikely, for example when the customer has registered payment default or it has been granted a forbearance in which the present value of the loan decreases by more than 1 per cent. Default extends to all credit obligations of an obligor in default among personal customers when a significant proportion (20%) of personal customer exposures are defaulted. In addition, the contract is defaulted when a payment related to a financial asset is over 90 days past due, at the latest.

The customer's default ends when it no longer meets the criteria for the definition of default and the subsequent probation period of 6–12 months has ended.

The definition of default is based on Article 178 of Regulation (EU) No 575/2013 (CRR) of the European Parliament and of the Council and on the European Banking Authority's (EBA) guidelines on the application of the definition of default (EBA/GL/2016/07 and EBA/RTS/2016/06).

Definition of non-performing exposure

The definition of non-performing exposure includes the probation periods of non-performing forborne exposures, in addition to the exposures based on the definition of default used previously before they can be reclassified as performing. On 31 December 2021, OP MB adopted non-performing exposure as the criterion for stage 3 impairment classification, in place of defaulted exposure. Comparatives have not been restated.

In addition, originated credit-impaired contracts are always within the scope of the lifetime expected credit loss (POCI).

Significant increase in credit risk

The expected credit losses will be calculated for each contract for 12 months or lifetime, depending on whether the instrument's credit risk on the reporting date has increased significantly since initial recognition. Both qualitative and quantitative criteria will be used to assess for each contract whether the credit risk has increased significantly. Forbearance is regarded as a qualitative criterion. Other qualitative factors will consist of various credit risk indicators (e.g. breach of covenants) that will be taken into account in credit rating models or in the assessment of the payment behaviour class.

OP MB has included relative and absolute thresholds for the determination of significant quantitative increases in credit risk considering all relevant and supportable information.

A quantitative change is assessed based on the relative change in lifetime PD figures (PD curve). The original lifetime PD curve is calculated on the origination date of the loan taking account of macroeconomic factors. Next, the acceptable natural range of variation is determined for the limits within which the credit risk is not considered to increase significantly during the remaining maturity of the loan. This yields a so-called threshold value curve. On each reporting date, the current lifetime PD curve is compared to the threshold value curve. If the threshold value is exceeded, the credit risk has increased significantly and a credit loss (calculated for the entire remaining maturity of the loan) is recognised. In addition to this limit of the relative change, a further requirement is that a borrower grade has deteriorated since initial recognition so that shifting to the lifetime ECL calculation does not occur only on the basis of the passage of time. In addition, an absolute threshold is used for the weakest rating grades (E+, E, E-, 9.0, 9.5 and 10.0).

In addition to the aforementioned criteria, credit risk of a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due or forbearance has been on the loan.

OP MB monitors regularly how effectively the abovementioned criteria perceive a significant increase in credit risk before contractual payments have been over 30 days past due and that the contracts do not generally move from impairment stage 1 directly to impairment stage 3, and performs the required calibrations to the calculation method of the relative change.

Measurement methods

Expected credit losses are mainly measured on a system basis, using the PD/LGD method on a contract-specific basis for all private customer exposures.

PD/LGD method

Expected credit losses are measured using modelled risk parameters with the formula probability of default (PD) x loss given default (LGD) x exposure at default (EAD) for majority of portfolios per contract and they reflect expectations of future credit losses at the reporting date. PD describes probability of default according to the definition of default. The probability of default applied to OP Financial Group's internal loans is zero due to the joint and several liability. LGD describes the share of an asset if a borrower defaults. It is affected, for example, by the quantity and type of collateral securities and various financial guarantees. EAD describes the exposure amount at default, including exposure in the balance sheet (capital and accrued interest) and expected use of off-balance-sheet items at default.

The ECL calculation is based on three different scenarios. Risk parameters PD, LGD and EAD are calculated for yearly time buckets in each scenario. Yearly ECL figures are discounted to the reporting date and a probability-weighted ECL is calculated from the figures of different scenarios. The contract's effective interest or its estimate is used as the discount factor. The contract's maximum residual term to maturity is limited to 30 years in the calculation.

The lifetime probability of default (lifetime PD) models for a contract have been prepared separately for personal customers and corporate customers. The PD models are substantially affected by the contract's credit rating, loan age (personal customers) as well as the model's sub-segment, which is determined for corporate customers on the basis the rating model and for personal customers on the basis of the product type. In addition, PD estimates are dependent on macroeconomic factors and their forecasts in each scenario. In the lifetime PD model for personal customers, the macroeconomic factors have been divided by segment and a GDP change and the 12-month Euribor rate are used, for example, in home loans, where the effects of GDP and inflation have been deducted. The variables in revolving credit facilities include change in GDP and the real 3-month Euribor rate (change, for example, in GDP and the 12-month Euribor in home loans and change in the unemployment rate and the 12-month Euribor in revolving credit facilities in 2021). Comparatives have not been changed.

The lifetime LGD consists of the following three components: 1) cure rate, 2) collateral return and 3) non-collateral return. The values of the components depend fundamentally on a product type, industry (companies), collateral type and the time how long the contract has been in default. The estimates for the non-collateral return and the cure rate for impairment stage 3 time-dependent so that they will decrease if the period of default or debt collection increases.

The macroeconomic factors and their forecasts affect the first two components.

The lifetime exposure at default (lifetime EAD) for a contract is based on contractual cash flows, utilisation rate, prepayment rate and maturity model, depending on the product type.

Determining the period of a contract

The period of a contract for promissory notes is a contractual maturity that takes account of repayments under the payment terms. The prepayment model applies to secured promissory notes (excl. default). It does not reduce the contractual maturity but is taken into account as part of the contract's EAD.

Revolving credit facilities (such as credit cards) are contracts valid until further notice and an expected maturity has been modelled for them. The modelled maturity depends on the product type and rating grade, averaging some 15 years.

Forward-looking information

The calculation model includes forward-looking information and macroeconomic scenarios. OP Financial Group's economists update macroeconomic scenarios on a quarterly basis and the scenarios are the same as those otherwise used by OP MB in its financial planning. Macroeconomic scenarios spam 2–3 years of the baseline economic scenarios. After that, the scenario converges towards an economic balance in the long term. In the long-term balance, GDP and some of other variables are calculated using production function methodology. Alternative scenarios around the baseline are defined using the autoregressive model where the paths of each variable with desired probabilities are solved from the joint probability distribution of variables. The probability distribution of the variables is based on economic shocks observed in history and on correlations between the variables. The forecast errors in OP's economic forecast are also taken into account in defining alternative scenarios. Three scenarios are used: baseline, upside and downside. The macroeconomic factors used are GDP growth rate, unemployment rate, investment growth rate, inflation rate, change in income level, 12-month Euribor rate and real 3–month Euribor. In addition, the house price index is used in LGD models.

Preparing macroeconomic forecasts and projecting them into the future up to 30 years involves a large amount of uncertainty, which is why actual results may differ significantly from the forecasts. OP MB has analysed that the relationship of the change in the components of risk parameters and macroeconomic factors used in the ECL calculation is not linear. Accordingly, the macroeconomic forecasts represent OP MB's best view of potential scenarios and outcomes.

Recognition of expected credit losses

OP MB mainly recognises a loss allowance for expected credit losses on a loan at carrying amount in a separate account. For loan commitments and financial guarantee contracts, the loss allowance is recognised as a provision. For products that include both a loan (i.e. financial asset) and an undrawn commitment (i.e. loan commitment) component and OP MB cannot separately identify the expected credit losses on the loan commitment component from those on the financial asset component, the expected credit losses on the loan commitment are recognised together with the loss allowance for the financial asset.

Write-off

A write-off constitutes a derecognition event. When OP MB has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof, it directly reduces the gross carrying amount of the financial asset.

A loan is derecognised when collateral securities have been realised or debt rescheduling has come to an end or when collection measures have ended. Payments received after the derecognition are recognised as an adjustment to impairment losses on receivables.

Cash and cash equivalents

Cash and cash equivalents consist of cash and receivables from credit institutions repayable on demand.

Classification and subsequent measurement of financial liabilities

Financial liabilities include liabilities to credit institutions, debt securities issued to the public and other financial liabilities.

Financial liabilities are classified at amortised cost using the effective interest method, except for derivative liabilities measured at fair value through profit or loss.

Upon initial recognition, OP MB has not designated financial liabilities as measured at fair value through profit or loss.

OP MB derecognises a financial liability (or a part of a financial liability) when it is extinguished – i.e. when the obligation specified in the contract is discharged or cancelled or expires.

Netting

Financial assets and liabilities are offset in the balance sheet if OP MB currently has a legally enforceable right of set-off in the normal course of business and in the event of default, insolvency or bankruptcy, and intends to settle the asset and liability on a net basis.

Derivative contracts

Derivative contracts are classified as hedging contracts and derivative contracts held for trading. OP MB uses derivatives only for hedging purposes. Derivatives are measured at fair value at all times. OP MB
has prepared methods and internal principles used for hedge accounting, whereby a financial instrument can be defined as a hedging instrument. (Note 10. Derivative contracts)

In accordance with the hedging principles, OP MB can hedge against interest rate risk by applying fair value hedge or cash flow hedge. Fair value hedging refers to hedging against changes in the fair value of the hedged asset, and cash flow hedging to hedging against changes in future cash flows.

Hedge accounting

Hedge accounting is used to verify that changes in the fair value of a hedging instrument or cash flows fully or partially offset the corresponding changes of a hedged item.

The relationship between hedging and hedged instruments is formally documented. The documentation contains information on risk management principles, hedging strategy and the methods used to demonstrate hedge effectiveness. Hedge effectiveness is tested at the inception of the hedge and in subsequent periods by comparing respective changes in the fair value or cash flows of the hedging and hedged instrument. The hedge is considered effective if the change in the fair value of the hedging instrument or in cash flows offsets the change in the fair value of the hedged contract or portfolio or in cash flows within a range of 80–125%.

Fair value hedges

Fair value hedging against interest rate risk involves long-term fixed-rate debt instruments (OP MB's own issues), individual loan portfolios, as well as individual loans. Interest rate swaps are used as a hedging instrument.

For derivative contracts which are documented as fair value hedges and which provide effective hedges, the changes in the fair value are recognised in the income statement. Hedged assets and liabilities are also measured at fair value during the period for which the hedge is designated, and any fair value changes are recognised through profit or loss.

In fair value hedge accounting, changes in the fair value of the hedged item and hedging instrument are recorded in the income statement under net interest income.

The calculation principles of the Euribor changed during 2019. In July 2019, the Financial Services and Markets Authority (FSMA) of Belgium granted authorisation related to the Euribor by virtue of the European Union Benchmark Regulation. This made it possible for the market participants to continue using the Euribor after 1 January 2020, covering both the existing and new contracts. OP MB expects that the Euribor will remain a reference interest rate in the future too and does not expect to change the risk to be hedged to a second reference rate. For these reasons, OP MB does not consider that the reference rate change would directly affect fair value hedges where the Euribor is the reference rate.

EMPLOYEE BENEFITS

Pension benefits

Statutory pension cover for OP MB employees is arranged by Ilmarinen Mutual Pension Insurance Company. The supplementary pension plan has been arranged through OP-Bank Group Pension Foundation.

Pension plans managed by Ilmarinen Mutual Pension Insurance Company are defined contribution plans in respect of funded disability and old-age pension benefits. All of the plans managed by OP Bank Group Pension Foundation are defined benefit plans.

Expenses arising from pension plans are recognised under “Personnel costs” in the income statement. Contributions under defined contribution plans are charged to expenses for the financial year to which they relate. No other payment obligations are included in defined contribution plans. Curtailing the defined benefit pension plan or fulfilling or changing the related obligation is recognised through profit or loss at the time of occurrence.

Defined benefit plans in OP Bank Group Pension Foundation are funded through payments based on actuarial calculations.

The liability recognised in the balance sheet in respect of the defined benefit plan is the present value of the defined benefit obligation on the balance sheet date less the fair value of the plan assets of OP Bank Group Pension Foundation and acceptable insurance.

Defined benefit obligations are calculated separately for each plan using the projected unit credit method. Pension costs are charged to expenses over the employees’ expected working lives on the basis of calculations performed by authorised actuaries. The discount rate for the present value of the defined benefit obligation is determined on the basis of the market return on high-grade corporate bonds on the closing date of the reporting period.

Items resulting from remeasurements of the net defined benefit liability are recognised in other comprehensive income in the period they occur. Remeasurements of the net defined benefit liability recognised in other comprehensive income will not be reclassified to income statement in later financial periods. (Note 17. Other liabilities)

Short-term employee benefits

OP MB has a short-term and long-term remuneration scheme in place. Those included in the scheme may receive bonuses either in cash only or as a combination of cash and a reference instrument decided by OP Cooperative’s Board of Directors. Bonuses will be paid for work performed during the performance year. The maximum estimated amount under the remuneration scheme is calculated on the grant date and the amount charged to expenses is recognised in personnel costs and deferred expenses over the vesting period.

The amount of compensation corresponding to the objectives reached is reviewed quarterly. Any effects resulting from reviewing the original estimates are recognised in personnel costs in the income statement, and the corresponding adjustment is made in accrued expenses and deferred income.

OP MB belongs to OP Financial Group's OP Personnel Fund into which bonuses are paid on the basis of pre-agreed principles, depending on the achievement of OP Financial Group's targets. Bonuses transferred to the Fund are recognised under "Wages and salaries" in the income statement. The counterpart is recognised under "Deferred expenses" in the balance sheet until disbursed to beneficiaries. (Note 5. Personnel costs)

INCOME TAX

Income tax expense shown in the income statement includes current tax, based on the taxable income of the financial year and income tax for prior financial years and deferred tax expense or income. Taxes are recognised in the profit and loss except when they are directly linked to items entered in equity or other items in other comprehensive income. In such a case, the tax is recognised in the items in question. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date.

Deferred tax liabilities are recognised for temporary taxable differences between the carrying amount of assets and liabilities and their tax base. Deferred tax assets are calculated on tax-deductible temporary differences between the carrying amount and taxable value included in the financial statements, and on losses confirmed for tax purposes. Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised.

OP MB offsets deferred tax assets and liabilities. Deferred tax assets and liabilities are measured at the tax rate that is expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted by the balance sheet date. (Note 14. Tax assets and tax liabilities)

SEGMENT REPORTING

OP MB is responsible for OP Financial Group's funding for the part of covered bond issuance. OP MB either underwrites intermediary loans on OP Financial Group member cooperative banks' balance sheets or buys the home loans in security for bonds. Since all of OP MB's operations are covered by a single segment, the company does not prepare segment reporting.

NEW STANDARDS AND INTERPRETATIONS

The IASB (International Accounting Standards Board) has issued future IFRS amendments. Amendments to IAS 37, IFRS 16 and IFRS 3 took effect on 1 January 2022. The amendments will not have any major effect on OP MB's financial statements.

OP Mortgage Bank's risk management principles

1 Overview of OP Mortgage Bank's (OP MB's) significant risks

OP MB's independent Risk Management function forms part of OP Financial Group's centralised Risk Management in organisational terms.

Because of the characteristics of OP Financial Group's business and industry, risks have two fundamental principles differing from each other: OP Financial Group may earn revenue through risks (earnings risks) or risks may be a consequence of something (consequential risks).

OP Financial Group's risk management and compliance are based on the principle of three lines of defence. The first line of defence comprises business lines, the second line of defence comprises risk management and compliance functions independent of the business lines/divisions and the third line of defence comprises Internal Audit. Each line of defence has its own role in performing the risk management process efficiently.

At OP Financial Group, the first line and the second line of defence in risk management cooperate on an ongoing basis. This is to ensure that all expertise needed to develop and manage operations is in use. The lines of defence build the risk management process together where the special features of OP Financial Group's business are taken into consideration. Responsibilities of the first and second lines of defence have been clearly divided.

- The business units fulfil OP Financial Group's strategy, are responsible for planning their own operations and their efficient and effective implementation and for their internal control. Only the unit concerned makes business decisions and is responsible for the quality of its customer service, its business continuity as well as its earnings and risks.
- The second line of defence prepares a risk management framework within the limits of which the first line of defence implements risk-taking and risk management related to daily business. The second line of defence supports the first line of defence by consulting them especially in matters that are part of their own expertise. The second line of defence also oversees compliance with the risk management framework and carries out an independent analysis related to the balance between earnings, risks and capital and liquidity acting as buffers as well as ensuring business continuity during incidents too.
- Internal Audit that is independent of other lines of defence acts as the third line of defence.

2 OP MB's significant risks – sources and management

2.1 Definitions and sources of significant risks

Below is a summarised description of the definitions and sources of OP MB's significant risks.

Credit risks	Credit risk refers to the risk that a contracting party to a financial instrument is unable to fulfil their contractual repayment obligations and thereby causes a financial loss to the other party.
Liquidity risks	Liquidity risk arises from the imbalance between the timing and amounts cash flows related to granting and obtaining financing, insufficient collateral needed to obtain financing and the temporal and counterparty- and instrument-specific concentration. This may lead to weaker liquidity for OP MB if it has not engaged in sufficient liquidity planning. Liquidity risk also involves market liquidity risk, which means a risk of failing to execute market transactions within a desired time and/or at an estimated price.

Market risks	Market risk refers to an unfavourable change related to the value of a contract or contract revenue due to price changes observed in the financial market.
Counterparty risks	Counterparty risk refers to the risk of the contracting party not fulfilling its financial obligations.
Operational risks	Operational risk is caused by all business operations and may result from insufficient or incorrect practices, processes, systems or external factors. OP Financial Group's operational risks also include ICT and security risks. The data capital risk included in operational risks means potential losses, loss of reputation or deterioration of operations caused by uncertainty in decision-making, management and reporting related to data and the information derived from it.
Compliance risks	Risks caused by non-compliance with external regulation, internal policies, appropriate procedures or ethical principles governing customer relationships.
Model risks	Model risk refers to potential losses or loss of reputation caused by decisions made on the basis of the results of models due to errors made in the development, implementation or use of models. The model means a method used to translate the source data based on mathematics, statistics and expert assessments into data guiding business decisions or quantitative data related to financial position or risk exposure.
Reputational risks	Risk of the loss of reputation or trust caused by negative publicity or materialisation of a risk.
Concentration risks	Risks that may arise due to a business having an excess concentration of risk in individual customers, products, lines of business, maturity periods or geographical areas. Concentration risk can also arise due to a concentration of service providers or processes.
Risks associated with future business	Risk associated with the conditions and volumes on which similar or entirely new agreements are based. The underlying factor behind this may lie in inadequate reaction and inflexibility for change when changes occur in the business and competitive environment or in the values of customers or in technology. The key means of managing the risks of future business lie in management decisions.

Counterparty risks and risks associated with future business are not dealt with as a specific whole because risks associated with future business may emerge in the form of various significant risks and counterparty risks emerge as part of various risk types.

Customer behaviour risk may materialise in several risk types (the impact of a change in customer behaviour affecting matters such as the value of insurance contracts, volume of deposits or early repayments of contracts).

Residual risk is the risk which cannot be eliminated or which the entity is unwilling to eliminate. Residual risk can be considered synonymous with risk. As such, residual risk is not an equivalent concept to the significant risks described above. Instead, residual risk can be considered to apply to any of the significant risks described above.

Drivers of change in the business environment

General changes in the business environment, such as climate change (ESG = environmental, social and governance) affect the needs and preferences of customers and society. Together with factors such as scientific and technological innovations may affect demand and supply in the financial sector, which, for its part, will govern the terms and conditions of the new agreements made by OP Financial Group. OP Financial Group reviews external drivers of change to understand the preconditions for the customer's future success. Ensuring such future success is crucial for the Group's future success.

The drivers of change in the business environment as such are not risks but they are channelled into financial risks in the banking and insurance business through various impact chains. In addition to the external drivers of change providing opportunities, they can jeopardise the conditions to operate in some industries. For example, where climate change may contribute to agriculture in Finland and its competitiveness, it may weaken profitability in some industries as a result of change in customer behaviour, lower collateral values in some areas, and a higher-than-predicted increase in regulation-related costs. The abovementioned effects on a credit institution are directly or indirectly reflected in matters such as credit, liquidity, and reputational and operational risks.

What is essential is to assess the long-term effect of change in the external business environment. The trend may lead to a change in customer behaviour, which affects demand and the product range. The long-term drivers of change in the business environment may be a threat to business continuity (e.g. the price and availability of funding). The effects of the one and the same driver of change may at the same time be very local and global trends. The effects may provide opportunities on the one hand but can limit the conditions to operate on the other hand.

At customer level, risks are managed by providing customers with advice and monitoring how customer relationship develops. Pricing is based on risks. The ESG projects and/or investments to be financed must be financially sustainable. Attending to the customers' future success ensures that the Group's business remains profitable in the long term too and that the risk buffers for operations are sufficient for capital and liquidity. The aim of providing advice is to generate added value that shows in the better financial standing and wellbeing of the customer.

2.2 Banking risks

2.2.1 Credit risks

OP MB has no independent customer business or a service network of its own. Its loan portfolio consists of mortgage loans placed as collateral for bonds, which OP MB has bought from OP Financial Group member cooperative banks, and of loans they granted to their customers on behalf of OP MB before 1 March 2016. OP MB ceased to buy loans from OP cooperative banks after IFRS 9 entered into force, and new purchases of this kind are only possible sporadically or during crises. Framework agreements between OP MB and the OP cooperative banks specify obligations and rights related to the utilisation of OP MB's financing, and credit risk management. OP cooperative banks take care of credit decisions, customer relationships and loan management at local level in accordance with instructions issued by OP Financial Group and OP MB.

OP Financial Group manages its credit risk through the Group-level guidelines and principles and quantitative risk limits. These are specified in Banking risk-taking policy lines, limits and control limits, qualitative and quantitative targets as well principles governing customer selection, collateral and covenants. Quantitative and qualitative target levels balance out the business targets and moderate risk appetite. Limits and control limits set a maximum for risk-taking. These help to ensure the sufficient diversification of the loan portfolio while avoiding the emergence of too large risk concentrations.

Credit risk management is based on careful customer selection, active customer relationship management, good knowledge of customers, strong professional skills and comprehensive documentation. The day-to-day credit process and its effectiveness play a key role in the management of credit risks. The Group also manages credit risk through the selection of the range of products and product terms and conditions. Risk associated with new lending is managed through well thought-out customer selections and the avoidance of risk concentrations. In addition, OP MB makes use of techniques for reducing credit risks (collateral and guarantees). It also makes active use of covenants. Managing risk associated with the loan portfolio is based on good customer relationship management and the proactive and consistent management of problem situations.

The customer's sufficient repayment capacity is a prerequisite for all lending. Creating a group of connected clients properly provide a foundation for credit risk management. Without a clear picture of which parties constitute the group, what the structure of the group is like and what its repayment capacity comprises, it is not possible to get a true picture of the group and understand the risk what lending to the group involves. Each business unit identifies the group of connected clients and their interdependencies, and describes them in OP Financial Group's systems according to the related instructions.

Sufficient up-to-date information must be gathered on any customers that cause a credit risk, to enable the assessment of their creditworthiness. Creditworthiness comes from the customer's willingness to pay and repayment capacity. They both affect the customer's rating grade. Sufficient and correct basic information is used to ensure that the customer can be rated with a correct credit rating model and that the borrower grade gives a true picture of the customer's creditworthiness risk. Each business unit ensures that its customers' borrower grades are constantly valid and up to date and, if necessary, updates the grade if the customer's situation changes. This is how the loan portfolio of the bank concerned and the entire OP Financial Group can be monitored on a real-time basis.

Collateral management is based on an independent collateral assessment, the validity of pledges and the fact that the collateral can be realised so that we can continuously maintain a realistic view of the hard collateral securities that secure receivables. The values of assets pledged in security of receivables must give a true and real-time picture of the collateral position related to the entire loan portfolio as well as individual customers. When valuing illiquid collateral securities, it is necessary to consider the financial standing of the collateral asset owner. The weaker is the asset owner's financial standing, the bigger should be the weight of the realisation value in estimating the collateral asset.

Financing decision-making is based on the principle of segregation under which the person preparing financing may not make the financing decision alone. Considering that financing decisions are about risk-taking decisions, those making the decisions must be aware of all information relevant to decision-making. All credit risk decisions are made on a business-specific basis. Decision-making is guided by OP Financial Group's Risk Appetite Statement (RAS) and the target risk exposure specified in the risk policy. Decisions that deviate from the target risk status specified in the risk policy must be explained on a broader basis. The central cooperative's Risk Management assesses compliance of the most significant financing projects with the risk policy and reports to the management of OP Financial Group and the management of Group banking entities a situational picture of compliance with the risk policy.

The bank's senior management and management body monitor closely the bank's credit risk exposure. The bank's management is responsible for keeping the members of the management body informed in the event that the bank's operational risk-taking deviates from the risk policy approved by the management body, in order for the Board of Directors, as its role requires, to monitor the trend in the bank's risk exposure and, if necessary, issue instructions to the management at operational level concerning risk-taking.

From the bank's perspective, credit risk materialises in a situation where the customer becomes insolvent and cannot fulfil their credit obligations without the bank taking measures, such as realising collateral. It is therefore important that customers whose repayment capacity has weakened or a significant threat is posed to their repayment capacity are promptly identified in both the financing process and the customer relationship management process.

Customers that are most significant to the bank and whose risk of default has increased clearly or another significant threat is related to their repayment capacity must be placed under special control. For these customers, the bank must prepare an action plan on what measures should be taken to resolve the customer' situation from the bank's perspective and to minimise the risk the bank may be exposed if materialised. Monitoring and documenting potential customers in default or actual customer in default are more intensive and extensive than among less risky customers, so that the bank is actively aware of changes in the customer's situation and can immediately react to the changed situation.

Measuring credit risk

OP Financial Group measures credit risk using the ratio of economic capital requirement for credit risk to exposures at default (EAD), the ratio of non-performing receivables to exposures, and the ratio of expected credit losses (ECL) to exposures at default EAD. Limits have been set for these metrics in the risk policy. In addition, loan portfolio concentrations are monitored by customer, industry and country. The Group also measures the growth differential of the loan portfolio and credit risk economic capital to ensure balance between growth and risk-taking. Limits deriving from Group-level limits have been set for the business segments engaged in banking.

Limits set in the risk policy can be supplemented with qualitative targets set in the operating instructions of each segment that may be segment- or entity-specific. Targets may be set for the entire loan portfolio or separately to personal or corporate customer financing. Furthermore, it is possible set targets measuring the quality of the credit risk process.

In order to ensure sufficient diversification of the loan portfolio and efficient capital allocation, customer segmentation is used to manage the loan portfolio. Customer segments have been defined to ensure that receivables in each individual segment are homogenous in terms of credit risk to enable a coordinated risk policy. By utilising segmentation and the breakdown by rating grade, the loan portfolio target status is presented in the risk policy, which is not binding on the business unit concerned but the business unit should control credit risk-taking in such a way that the target state will be achieved.

OP Financial Group utilises internal credit risk models in risk assessment. In addition to the models used for assessing probability of default (PD), the Group uses models for predicting loss given default (LGD) and exposure at default (EAD) to measure credit risk. Exposure at Default (EAD) refers to the estimated amount of the bank's receivable from the customer at default. Off-balance-sheet exposures at default are determined on the basis of the conversion factor (CF). Loss Given Default (LGD) is an estimate of a financial loss incurred by the bank, as a share of EAD, if the customer defaults. Procedures based on model risk management are applied to the models used in credit risk assessment.

<u>OP Financial Group's internal credit rating system</u>

'Rating' refers to the use of models, methods, processes, supervision, data collection and IT systems that support credit risk management, credit risk assessment, the assignment of exposures to rating grades or pools, and the quantification of default and loss estimates developed for certain types of exposures. OP Financial Group's rating system applies to all Group entities. The Board of Directors of OP Cooperative considers and approves the credit rating principles as part of the Risk Appetite Framework document. From the viewpoint of OP MB, the most significant part of the credit rating system is the rating model for the private customer portfolio.

OP MB uses an internal 16-level scale of A–F to assess the probability of default for its private customer agreements, with F representing borrowers in default. OP MB assesses monthly all private customer agreements' PD using a loan portfolio rating model. The loan portfolio rating is based on a customer's basic data, payment behaviour and other transaction history data. Average PDs have been calculated for each borrower grade for a period of 12 months.

Risk Management maintains a more detailed description of the internal credit rating system and reports regularly on its effectiveness as part of OP Financial Group's risk analysis and separately to the Risk Management Committee.

2.2.2 Liquidity risks

As OP Financial Group's mortgage bank, OP MB operates in accordance with the Act on Mortgage Credit Banks. The Board of Directors of OP MB sets a quantitative target for the proportion of the mortgage bank to the entire OP Financial Group's credit institution business.

The Banking risk policy defines a funding risk limit for OP MB. OP MB's funding risk consists of loans bought from OP cooperative banks, issued bonds and intermediary loans granted to OP cooperative banks. Furthermore, OP MB finances excess collateral from Group Treasury.

In its annual planning, OP MB assesses the sufficiency of available collateral in the banks' balance sheets in order to implement planned issues. OP cooperative banks' mortgages are used as collateral for covered bonds issued by OP MB. OP MB is responsible for managing the sufficiency of collateral according to the Act on Mortgage Credit Banks and other regulations.

OP MB ensures the management of its daily liquidity and, as part of its annual planning, makes an assessment of the sufficiency of liquidity.

<u>Identifying liquidity risks</u>

OP Financial Group's Treasury and other business units plus Risk Management continuously identify and assess risks associated with funding and business and other business environment. In the risk assessment of new products, services, business models, processes and systems, every business unit must take account of liquidity risks, too. At least once a year, Risk Management and business representatives perform a comprehensive liquidity risk assessment to ensure that the capital adequacy assessment process (ILAAP) is appropriate and adequate in relation to the Group's liquidity risks.

OP MB's key source of liquidity risk is banking where inflows and outflows of financing does not take place at the same time. In such a case, the bank is exposed to refinancing risk due mainly to lending with a long maturity and the differences between the maturity of deposit funding dependent on customer behaviour and the illiquidity of receivables. At the same time, the bank is exposed to funding concentration risk as regards the counterparties of deposit and wholesale funding, availability and maturity of finance. Lack of market liquidity may reduce liquid assets held by the bank.

Assessment and measurement

OP Financial Group assesses the future cash flows of receivables, liabilities and off-balance-sheet commitments based on the contract maturity date or repayment programme, expert assessments or statistical models based on customer behaviour history.

Structural funding risk is measured on the difference between cash inflows and cash outflows in different maturities. In addition, the Group calculates the regulatory Net Stable Funding Ratio (NSFR) which determines the amount of stable funding sources expected to span over one year in proportion to assets requiring stable funding.

From the perspective of the relevant authority, funding liquidity risk is measured using the Liquidity Coverage Ratio (LCR). The sufficiency of the liquidity requirement in terms of time is assessed though maturing items on the balance sheet, wherein agreements are not renewed but ended at maturity. Based on the economic perspective, OP Central Cooperative Consolidated measures the sufficiency of the liquidity buffer through stress testing.

OP Financial Group measures funding concentration risk by calculating the amount of bond funding with a maturity of 12 months and rolling 3 months. In the time horizon of less than 12 months, the Group measures the total wholesale funding amount, comprising short- and long-term wholesale funding, for 3 months. When it comes to deposit funding, the Group monitors the concentration of the largest deposit volumes. Concentrations by counterparty and instrument are also subject to monitoring.

The Group measures its asset encumbrance by proportioning encumbered assets to the aggregate amount of balance sheet assets and collateral securities.

Risk assessment and measurement methods related to liquidity buffer investments are described as part of market risks.

Liquidity stress testing

The adequacy of OP Financial Group's liquidity buffer and buffer items is assessed through various scenarios. OP Financial Group-specific and market-specific scenarios as well as their combination are used as stress scenarios. The scenarios must cover both short- and long-term stress conditions. When measuring member bank-specific structural funding risk, the liquidity requirement based on the regulatory stress scenario is counted as a deposit in Treasury on a bank-specific basis. A reverse stress test is used in connection with the Group's Recovery Plan. Senior management confirms the scenarios to be used, use and reporting of stress test results.

Funding plan

In its funding plan, OP Financial Group must take account of its member banks' estimate of the funding need for years to come. The funding plan defines guidelines for wholesale funding for the next few years. Implementation of the plan is monitored regularly and the plan is updated, where needed, during the year. Deposit funding is primarily based on the business strategy and plan. The funding plan specifies the sources of wholesale funding and presents how the Group covers its need for the most important wholesale funding sources in view of the depth of the market and sufficient diversification, as well as defines decision-making powers. The funding plan must also take account of unfavourable scenarios lasting several years and of abrupt changes in key funding items.

Non-euro liquidity management

OP Financial Group carries out non-euro funding due to the diversification of funding sources. Since almost all the Group's receivables are in euros, the Group mainly converts its non-euro funding into euros through derivative transactions in connection with an issue.

According to liquidity regulation, a non-euro currency is significant if non-euro liabilities account for over 5% of the amalgamation's balance sheet total. The Group monitors significant currencies every month when it produces its liquidity report to the supervisor. Foreign currencies account for only a small proportion of the balance sheet and the liquidity risk due to currency availability has been minimised by the operating model.

Management of intraday liquidity

OP Financial Group's Treasury monitors intraday funding sources and anticipates and monitors the execution of intraday payments. The Group holds intraday funding sources to the amount that it can make payments due on the banking day.

Based on the liquidity contingency plan, the Group can raise its level of preparedness even if intraday liquidity is disturbed in order to ensure efficient operations in the case of an increased threat of a crisis.

Liquidity buffer

From the economic perspective, the liquidity buffer consists of deposits in the Bank of Finland and unencumbered notes and bonds eligible as collateral for central bank refinancing held by OP Corporate Bank. It also includes other notes and bonds marketable on the secondary market and unencumbered corporate loans eligible as collateral for central bank refinancing.

From the normative perspective, OP Financial Group's liquidity buffer consists of the liquidity buffer that fulfils the criteria for liquidity buffer requirement provisions (=LCR buffer).

Group Treasury must draw up an investment plan at least once a year that includes liquidity buffer covered note investments held by Group Treasury. OP Corporate Bank's Board of Directors approves the plan. The investment plan applies the restrictions and objectives set in OP Financial Group's Risk Appetite Statement (RAS) and Risk Policy for market risk, credit risk and funding liquidity risk. The investment plan establishes, to the appropriate extent, a framework for testing the liquidity of notes and bonds.

The Group diversifies investments, for example, by product, counterparty and country, in view of both internal risk appetite and external regulatory requirements.

Collateral management and asset encumbrance

Collateral securities in this context mean OP Financial Group's assets that are used as collateral to fulfil liquidity needs either in normal conditions or in stress conditions. Group Treasury monitors collateral on a centralised basis, and is responsible for its use and transfer.

Home loans serving as collateral for covered bonds issued by OP MB constitute the largest source of asset encumbrance in the balance sheet. In addition, central bank operations and derivatives business are mainly other sources of asset encumbrance. From the perspective of preparing for liquidity needs, the Group restricts asset encumbrance through quantitative limits specified in its Risk Policy.

To increase liquidity potential, it is necessary to identify the eligibility of the balance sheet receivables as collateral and create readiness to use receivables as collateral.

Securing liquidity in stress conditions

OP Financial Group's liquidity contingency plan establishes a framework that safeguards the Group's ability to meet its payment obligations during a liquidity crisis as well. The plan provides well-defined operational guidelines and operating models for identifying an increased liquidity risk while directing OP Financial Group to timely and appropriate actions to reduce liquidity risk by ensuring efficient organisation and activities in case a threat of crisis is imminent. The contingency plan specifies control and monitoring practices for each liquidity level, which become more rigorous when moving up to the next level.

Furthermore, OP Financial Group's Recovery Plan includes liquidity management recovery measures.

Liquidity risk reporting

OP Financial Group reports liquidity risks to the central cooperative's management on a regular basis and, with a heightened threshold level of the liquidity status, will adopt weekly or daily progress reporting practices whenever necessary. OP Financial Group companies report liquidity risks to their boards of directors regularly, applying at least the level which has been set for control limits and limits.

As part of OP Financial Group's risk analysis, Risk Management reports quarterly to the Risk Committee, which operates under the central cooperative's Board of Directors, on the implementation of the liquidity strategy and the Banking risk policy lines. The report involves primarily assessing funding changes at amalgamation level relative to the customer business funding need and changes in deposits and wholesale funding and related customer behaviour. Through stress tests, reporting also assesses the short-term and long-term sufficiency of internal liquidity buffers, the funding structure of banking and changes in regulatory requirements.

The functionality of the models utilised in liquidity risk management is ensured as specified in the principles of model risk management described as part of model risks.

Liquidity management and control within the amalgamation

Liquidity regulation as such is not applied to the amalgamation's companies but, with the ECB's permission, the central cooperative may give special permission to its member banks to deviate from the liquidity regulation. As the central institution of the amalgamation of cooperative banks, OP Cooperative has granted its member credit institutions special permission, under the Act on the Amalgamation of Deposit Banks, pursuant to which the liquidity requirements set for credit institutions mentioned in Part VI of the EU Capital Requirements Regulation are not applied to the member credit institutions. Liquidity based on the regulation is subject to supervision and reporting at the level of the cooperative banks' amalgamation. The prerequisite for special permission is that the central cooperative gives the amalgamation's companies instructions on risk management needed to secure liquidity and other qualitative requirements, and supervises compliance with these instructions.

The central cooperative senior management is responsible for organising OP Financial Group's centralised liquidity risk management according to the liquidity strategy policy lines. It must ensure that the management and supervision of the amalgamation's liquidity management is at all times in accordance with the extent and quality of business and fulfils regulatory requirements. In the sales control of borrowing and lending, the management pays attention not only to growth and profitability targets but also to liquidity features. Product development related to customer service must also aim to reduce risks associated with the liquidity and funding structure.

OP Financial Group's liquidity and wholesale funding plan and authorisations to raise capital on the financial markets are subject to approval by the Boards of Directors of OP Corporate Bank and OP MB. The central cooperative's senior management approves the Liquidity Contingency Plan which contains the control and supervision procedures of the liquidity status based on various threshold levels as well as funding sources.

As OP Financial Group's treasury, OP Corporate Bank plc is tasked with securing the liquidity of the entire Group and each OP cooperative bank or Group company. The Group puts its entities' liquidity into its Treasury's cheque account with the Bank of Finland. This means that the Group always manages its overall liquidity position through the account on a centralised basis. OP Financial Group's Treasury is in charge of the Group's wholesale funding, manages the Group's short-term liquidity, maintains the liquidity buffer, manages the Group's minimum reserve on a centralised basis and is responsible for managing intraday liquidity risk. On a centralised basis, OP Corporate Bank manages the Group's wholesale funding in the form of debt capital and equity capital, while OP MB manages wholesale funding based on covered bonds.

Based on the decision by the Board of Directors or a body it has authorised, Group Treasury may use the collateral securities in the entire OP Financial Group in a normal circumstance. In a severe liquidity crisis caused by money and capital market disruptions or other events, or in preparing for such a crisis, the central cooperative's Board of Directors, or a body it has authorised, obliges the amalgamation's member banks to either sell loans to OP MB or to place part of their loan portfolio as collateral for the covered bond issued by OP MB through an intermediary loan. The amounts of the loans to be needed are based on the Group-level need and are determined for each bank. The decision may be put into practice based on a decision made by the central cooperative's Board of Directors or a body it has authorised. Member banks are committed to immediately executing the measures related to the decision.

The primary funding sources of OP cooperative banks' lending include equity capital, deposit funding and funding for intermediary loans from OP MB. The use of intermediary loans reduces the need for OP Financial Group's senior funding.

If surplus liquidity emerges in an OP cooperative bank's customer business, it will be channelled to investment products provided by the Group's Treasury to support the implementation of the entire OP Financial Group's mission. Investment is not counted among the basic tasks of OP cooperative banks.

Allocation of liquidity risk costs within the amalgamation

The costs of wholesale funding and liquidity buffer maintenance are allocated among member banks based on the matching principle adopted by the central cooperative senior management. The costs of liquidity maintenance are allocated through liquidity deposits and the costs of wholesale funding are allocated through the margin added to the base rate of OP Financial Group's loans/deposits, or by using another practice.

The costs of external wholesale funding must be reflected in the pricing of customer business.

2.2.3 Market risks

OP MB's interest rate risk arises from the company's equity capital and differences in the bases of interest rates for lending and funding. OP MB hedges against interest rate risk through derivative contracts entered into with OP Corporate Bank plc. OP MB prepares an interest rate risk management plan on an annual basis. The central cooperative's independent Risk Management produces a monthly risk report for OP MB.

Interest Rate Risk in the Banking Book (IRRBB) management strategy

Around a third of OP Financial Group's income is based on net interest income. Consequently, the strategy of the management of the interest rate risk in the banking book forms a key component in ensuring the Group's earnings stability. As part of market risk, the interest rate risk in the banking book has been defined as one of OP Financial Group's significant risks.

The banking book comprises on- and off-balance sheet items of OP Financial Group's banking that have not been determined to be included in items within the trading book. Interest rate risk in the banking book is a structural interest rate risk which emerges due to the nature of a business. The interest rate risk in the banking book is hedged using products offered by Group Treasury. Each member bank must demonstrate adequate knowledge of using derivatives for hedging purposes.

Interest rate risk in the banking book is limited to a level that avoids taking too great a short-term or long-term interest rate risk in relation to each member bank's risk-bearing capacity.

The principles governing the management of the interest rate risk in the banking book establish the conditions for the fulfilment of the new regulatory requirements applying to IRRBB (Interest Rate Risk in the Banking Book). Accordingly:

- Senior management is responsible for arranging the management of interest rate risks in the banking book in OP Financial Group's banking, in accordance with the principles of the interest rate risk management strategy.
- The interest rate risk management practices are justified, solid and documented.
- Each member bank in the amalgamation bears the interest rate risk in its banking book and is responsible for managing it.
- Optionalities included in assets and liabilities are taken into account in the models used to measure interest rate risk. The functionality of the models is ensured as specified in the principles of the model risk management described as part of model risks.
- Interest rate risk is measured against changes in the level of the yield curve and in stress tests against changes in the yield curve shape.
- The interest income risk metric is used to measure interest income risk, and the present value risk metric to measure interest risk of the on- and off-balance sheet items over their entire term to maturity

- Economic capital is allocated for interest rate risk in the banking book in relation to interest rate risk.
- Stress tests on the interest rate risk are carried out on a regular basis.
- Few fixed-rate loans have been issued at the moment. Because receivables are chiefly based on floating reference interest rates, the bank's earnings do not markedly depend on the difference between long and short-term rates. However, some of the bank's earnings could be based more extensively on the difference between long and short-term interest rates, while remaining within the current interest rate limits.

Each member bank manages interest rate risk in the banking book within the scope of the risk policy and limits, other guidelines and targets issued by the central cooperative, and the terms and conditions of accounts, deposits and loans. As part of their annual planning, member banks prepare an ALM plan that includes a management plan for their interest rate risk in the banking book.

Using the risk assessment procedure applied to OP Financial Group's new products, services, operating models, processes and systems ensures that the characteristics of interest rate risk management have been understood and described appropriately.

Based on the loan terms and conditions, the minimum reference rate of zero is applied to a considerable number of loans. In technical terms, zero floors are assessed to remain with high probability because there has not been any discussion on abandoning it within the sector and in public. The removal of zero floors would require a legislative amendment defining how customers are compensated for the negative reference interest rate and how it is treated in taxation. Stress tests are used to assess the effects of the removal of zero floors.

Equity capital is considered an item that finances business. Interest on Profit Shares is taken into account in risk calculation, according to customer promise and the contract rate of subordinate loans. Share capital, cooperative capital and retained earnings are all free of interest.

The central cooperative ensures that the interest rate risk transfer reflects in the financial statements of the Group and its major companies in accordance with the nature of business through centralised hedge accounting.

As part of OP Financial Group's risk analysis, Risk Management reports quarterly to the Risk Committee, which operates under the central cooperative's Board of Directors, on the implementation of the Banking risk policy.

2.2.4 Operational risks

Management of operational risks at OP MB

Operational risk management at OP MB aims to ensure the efficiency and quality of key business processes and functions, as well as their continuity in abnormal circumstances. Operational risk management is based on continuous risk identification and analyses. Risk identification also takes account of forthcoming and emerging business risks, climate and environmental impacts, security threats and external requirements, and the required risk management methods are planned in a risk-based manner. The purpose of business continuity management is to minimise the financial impact of possible incidents, the duration of an outage and any adverse reputational impacts.

Operational risk management is aimed at ensuring that no unforeseeable financial losses or other harmful consequences occur. Due to the qualitative nature of operational risks, it's not possible to ever fully protect against them, nor to prevent their adverse effects in all cases. Operational risk management does not always aim to eliminate the risk altogether, but it does aim to bring risks down to an acceptable level.

OP Financial Group's management of security risks and security work seeks to foster a culture of security throughout OP Mortgage Bank, develop and maintain the desired security level by emphasising preventive measures, and ensure effective management of threats and incidents. In threatening situations, ensuring personal security is always the primary goal, while protecting property and data remains a secondary goal.

The management of ICT risks aims at ensuring the security, availability and quick recovery of data communications and systems that support them during an incident. It is the responsibility of every system owner to see to it that the above-mentioned goals are also achieved by external ICT service providers.

The key elements of OP Mortgage Bank's operational risk management include:

- A clear organisational structure and defined responsibilities
- Designation of process owners responsible for the efficiency and quality of processes, and for regulatorily compliance in line with their duties and responsibilities.
- Personnel who must have the required competences and qualifications, and the responsibilities and targets that are set and described clearly and communicated appropriately.
- Permissions and authorisations to access data and ICT systems that are based on work duties and that are limited to the data and ICT systems that the employee needs in performing their duties. The company's management is responsible for access rights management and control. This includes defining how to avoid inadequate segregation of duties.
- Ensuring that information and cyber security are adequate and up to date. This is implemented through monitoring, systematic technical arrangements, daily monitoring measures and targeted information security audits.
- Verifying the accuracy of all data. The company's management and process owners are responsible for the usability, integrity, confidentiality and availability of data with the aid of technical and administrative measures as well as for protecting data from unauthorised access and illegal or accidental information processing.
- Identification and categorisation of data repositories according their criticality, in view of confidentiality, integrity and availability. Responsibility for categorisation and the measures required to protect the data rests with the data repository owner. A data repository is a set of data created for a certain purpose, such as an application with databases or a data set or table created for analytical purposes.

The management and process owners within companies are responsible for identifying and evaluating the risks associated with business processes, services and products and the ICT systems they involve, and for implementing the controls required to achieve an acceptable risk level and ensure process functionality and efficiency. Efforts should be made to automate controls or support them with automation whenever possible.

OP Mortgage Bank enforces the framework and procedures for operational risk management in OP Financial Group. OP Financial Group's operational risk management framework is divided into backward-looking (e.g. operational risk events), current situation based and proactive procedures (risk and control self-assessment, business continuity management, and RCSA regarding new products). The central cooperative's Risk Management is responsible for OP Financial Group's operational risk management framework, its maintenance and development, and issues more detailed instructions on operational risk management procedures followed in OP Financial Group. Risk Management maintains a shared risk library system for identifying operational risks at OP Financial Group – which includes cause, impact, standard risk and control libraries – and which it reviews regularly to ensure that the system is comprehensive and up to date.

OP Financial Group manages the control, responsibilities, supervision and development of security by means of the Corporate Security Principles, which are approved by the Board of Directors of OP Cooperative and which enable coherent Group-wide security work. The principles and derived guidelines constitute the corporate security governance model.

OP Financial Group uses a centralised cyber security governance model to manage, supervise and report on cyber security. The Cyber Security organisation provides more detailed procedures and operating instructions on implementing and ensuring information security within the Group and managing any information security violations detected. Our cyber security operating instructions are policies which guide our activities and which we must comply with in all our work, whether we are developing or procuring new systems and solutions. OP Financial Group's Cyber Security function is in charge of managing any deviations from these instructions, and from the related guidelines.

NOTES TO THE INCOME STATEMENT

NOTE 3. Net interest income, TEUR	2021	2020
Interest income		
From receivables from credit institutions		
Interest	-47 997	-19 777
From receivables from customers	18 420	39 570
From derivative contracts		
From hedge accounting	2 801	-5 443
From liabilities to credit institutions		
Negative interest	699	
Other interest income	1	7
Total interest income (expense)	**-26 076**	**14 357**
Interest expenses		
From liabilities to credit institutions	-3 599	-2 702
From derivative contracts		
From hedge accounting	197 882	-246 300
From debt securities issued to the public	-262 435	214 888
Other interest expenses	0	0
Total interest expenses (income)	**-68 151**	**-34 113**
Net interest income	**42 075**	**48 470**

Net income from hedge accounting

Net income from hedging instruments is TEUR -299,659 (140,218) and net income from hedged items is TEUR 299,659 (-140,218).

Net income calculated using the effective interest method totalled TEUR -29,577 (19,793)
The negative figures shown in the table are negative interest income/expenses.

NOTE 4. Net commissions and fees, TEUR	2021	2020
Commission income		
From lending	3 435	3 946
Total	**3 435**	**3 946**
Commission expenses		
From lending to OP cooperative banks	3 283	3 777
Loan management fee to OP cooperative banks	25 860	32 418
Issue of bonds	87	154
Other	8	7
Total	**29 238**	**36 357**
Net commissions and fees	**-25 804**	**-32 411**

OP MB refunded OP cooperative banks the amount of the returns of loans managed by OP MB agreed in the fee model.
As a result of this, net commissions and fees were negative.

NOTE 5. Personnel costs, TEUR	2021	2020
Wages and salaries	408	398
Pension costs		
Defined contribution plans	66	61
Defined benefit plans	0	0
Total	66	60
Other indirect personnel costs	13	9
Total personnel costs	**487**	**467**

The average number of employees was seven (7) in 2021.

Remuneration schemes

OP Financial Group's variable remuneration comprises a performance-based bonus scheme and the personnel fund.

Personnel fund

OP Mortgage Bank belongs to OP Financial Group Personnel Fund. Payment of profit-based bonuses to OP Financial Group's Personnel Fund in 2021 was based on the achievement of the following targets: growth differential between OP Financial Group's income and expenses with a weight of 50% and net growth in customers using OP as their main bank and insurer with a weight of 50%. Profit-based bonuses for 2021 transferred to the Personnel Fund account for some 3.0% (2.0%) of the combined salaries and wages earned by the Fund's members.

Bonuses recognised in 2021 totalled 11 thousand euros (7).

Performance-based bonus scheme in 2021

The performance-based bonus scheme's performance period is one calendar year, and the bonus is paid in cash. Performance-based bonuses are based on targets set for each company, team and person derived from the annual plan, covering all personnel of OP Financial Group. The bonus is determined by the job grade and the maximum bonuses correspond a 1–12-month annual salary.
Performance metrics of the performance-based bonus scheme in 2021:
A factor applies to the bonus created through the achievement of the targets achieved in the central cooperative consolidated companies that is based on the central cooperative consolidated's EBT. Targets shown in the balanced scorecards and derived from annual planning are decided by the business lines/functions.
Determination and payout of performance-based bonuses in 2021:
Bonuses will be paid to their beneficiaries provided that OP Financial Group's CET1 ratio exceeds the CET1 ratio which, if exceeded, no restrictions on profit distribution occur +2% and the LCR exceeds 110% in the financial statements preceding the year of the bonus payout date. Another condition is that the person is in the employ of OP Financial Group until the payout date and an OP Financial Group company or the customer business shows profit shows a profit on the bonus payout date.

Bonuses earned based on the balanced scorecard will be reduced before bonus payout if binding internal guidelines within the Group or task or regulatory requirements have been ignored and risk management elements have been materialised. If an offence or negligence becomes apparent only after the bonus payout, bonus reduction or clawback can also be applied retrospectively.

Expenses for the scheme are recognised from the beginning of the performance period up to the date of payout (vesting period) as personnel costs, and the equivalent liability is recognised under deferred expenses.

OP Cooperative's Board of Directors decides on the terms and conditions of OP Financial Group's performance-based bonus scheme, maximum bonuses based on job grades and a structural framework within which OP Cooperative's Executive Management Team and OP cooperative banks' boards of directors can select the scheme metrics and set related targets.

A liability recognised under the scheme amounted to 43 thousand euros (18) on 31 December 2021.

Monitoring of OP Financial Group's remuneration

OP Financial Group monitors the market consistency of its total remuneration on a regular basis using various salary surveys.

The Nomination and Remuneration Committee of OP Cooperative annually monitors how paid bonuses are in proportion to OP Financial Group's success vis-à-vis benchmark companies and refunds paid to customers. OP Financial Group also makes internal, Group-level comparisons of remuneration and structures on a regular basis.

NOTE 6. Other operating expenses, TEUR	2021	2020
Rental expenses	6	4
Government charges and audit fees	596	560
Membership fees	584	414
Office expenses	813	192
ICT costs		
Production	3 605	2 327
Development	1 220	1 393
Telecommunications	2	24
Marketing	1	1
Other administrative expenses	156	118
Insurance and security costs	247	169
Experts' costs	1 301	677
Other	60	93
Total	**8 591**	**5 972**

Fees paid to auditors by assignment

Auditing	50	40
Other services	32	64
Total	**82**	**105**

Non-audit services provided by KPMG Oy Ab totalled TEUR 32 (63). The corresponding figures for 2020 are shown in brackets.

NOTE 7. Impairment losses on receivables, TEUR	2021	2020
Receivables written down as loan and guarantee losses	143	121
Recoveries of receivables written down	-18	-3
Increase in impairment losses on individually assessed receivables	366	1 528
Total	**491**	**1 646**

Impairment loss on receivables related to loans in OP MB's balance sheet totalled EUR 0.5 million (1.6). A year ago, customers actively applied for repayment holidays on their loans as a result of the Covid-19 crisis. Combined with the changes in macroeconomic parameters applied in the calculation of expected credit losses, this increased the amount of expected credit losses. A year ago, the adoption of the new definition of default also increased the amount of expected credit losses.

Loss allowance is itemised in Note 11.

NOTE 8. Income tax, TEUR	2021	2020
Current tax	1 334	1 587
Deferred tax	6	7
Income tax expense on the income statement	**1 341**	**1 594**
Corporate income tax rate	20,0 %	20,0 %

Reconciliation between tax expense in the income statement and tax expense calculated by the applicable tax rate

Earnings before tax	6 704	7 975
Share of the profit according to the tax rate	1 341	1 595
Other	0	-1
Income tax expense on the income statement	**1 341**	**1 594**

NOTES TO ASSETS

NOTE 9. Receivables from credit institutions, TEUR	31 Dec 2021	31 Dec 2020
Receivables from credit institutions		
Deposits		
Repayable on demand	102 402	214 695
Other		
Other than those repayable on demand	14 712 233	10 794 132
Total receivables from credit institutions	**14 814 635**	**11 008 827**

NOTE 10. Derivative contracts, TEUR	31 Dec 2021	31 Dec 2020
Derivative contracts		
Hedging derivative contracts		
Interest rate derivatives	170 200	431 801
Total derivative contracts, balance sheet assets	**170 200**	**431 801**
Derivative contracts		
Hedging derivative contracts		
Interest rate derivatives	52 966	14 908
Total hedge accounting derivative contracts, balance sheet liabilities	**52 966**	**14 908**

Derivative contracts held for hedging – fair value hedging on 31 Dec 2021

	Nominal values/residual term to maturity				Fair values		
	Less than 1 year	1 to 5 years	More than 5 years	Total	Assets	Liabilities	Credit equivalent
Interest rate derivatives							
Interest rate swaps	2 397 318	8 481 885	6 139 450	17 018 653	170 200	52 966	339 563
Total interest rate derivatives	**2 397 318**	**8 481 885**	**6 139 450**	**17 018 653**	**170 200**	**52 966**	**339 563**

Derivative contracts held for hedging – fair value hedging on 31 Dec 2020

	Nominal values/residual term to maturity				Fair values		
	Less than 1 year	1 to 5 years	More than 5 years	Total	Assets	Liabilities	Credit equivalent
Interest rate derivatives							
Interest rate swaps	2 463 289	9 272 218	6 217 250	17 952 757	431 801	14 908	615 219
Total interest rate derivatives	**2 463 289**	**9 272 218**	**6 217 250**	**17 952 757**	**431 801**	**14 908**	**615 219**

Effects of hedge accounting on financial position and result

	Interest rate risk hedge	
Fair value hedges	31 Dec 2021	31 Dec 2020
Carrying amount of hedged receivables *	3 584 445	4 536 259
of which the accrued amount of hedge adjustments	6 726	14 226
Carrying amount of hedged liabilities **	12 109 246	12 657 476
of which the accrued amount of hedge adjustments	123 960	431 120

* Presented under Receivables from customers in the balance sheet.
** Presented under Debt securities issued to the public in the balance sheet.

	Interest rate risk hedge	
Fair value hedges	31 Dec 2021	31 Dec 2020
Changes in fair value of hedging derivatives	-299 659	140 218
Change in value of hedged item that is used as basis for recognition of ineffective hedge during period	299 659	-140 218

NOTE 11. Receivables from customers, TEUR	31 Dec 2021	31 Dec 2020
Loans to the public and public sector entities	3 587 576	4 539 024
Loss allowance	-3 132	-2 766
Total receivables from customers	**3 584 445**	**4 536 259**

Credit risk exposures and related loss allowance

Exposures within the scope of accounting for expected credit losses by impairment stage

Exposures 31 December 2021	Stage 1	Stage 2			Stage 3	
TEUR		Not more than 30 DPD	More than 30 DPD	Total		Total exposure
Receivables from customers (gross)						
Mortgage-backed loans	3 134 901	383 754	967	384 721	63 270	3 582 892
Receivables from customers	**3 134 901**	**383 754**	**967**	**384 721**	**63 270**	**3 582 892**

Loss allowance by impairment stage 31 December 2021

TEUR	Stage 1	Stage 2 Not more than 30 DPD	More than 30 DPD	Total	Stage 3	Total exposure
Receivables from customers						
Mortgage-backed loans	-60	-259	-5	-263	-2 809	-3 132
Total receivables from customers	**-60**	**-259**	**-5**	**-263**	**-2 809**	**-3 132**

The table below shows a summary of loss allowance relative to the exposure amount by impairment stage.
The coverage ratio describes the ratio of loss allowance to exposure amount.

Summary and key indicators 31 December 2021

TEUR	Stage 1	Stage 2 Not more than 30 DPD	More than 30 DPD	Total	Stage 3	Total exposure
Receivables from customers: on-balance-sheet and off-balance-sheet items						
Mortgage-backed loans	3 134 901	383 754	967	384 721	63 270	3 582 892
Loss allowance						
Mortgage-backed loans	-60	-259	-5	-263	-2 809	-3 132
Coverage ratio, %						
Mortgage-backed loans	0,0 %	-0,1 %	-0,5 %	-0,1 %	-4,4 %	-0,1 %
Receivables from customers	**3 134 901**	**383 754**	**967**	**384 721**	**63 270**	**3 582 892**
Total loss allowance	**-60**	**-259**	**-5**	**-263**	**-2 809**	**-3 132**
Total coverage ratio, %	**0,0 %**	**-0,1 %**	**-0,5 %**	**-0,1 %**	**-4,4 %**	**-0,1 %**

Exposures within the scope of accounting for expected credit losses by impairment stage 31 December 2020

Exposures 31 December 2020 TEUR	Stage 1	Stage 2 Not more than 30	More than 30	Total	Stage 3	Total exposure
Receivables from customers (gross)						
Mortgage-backed loans	3 948 515	524 072	1 937	526 009	54 528	4 529 052
Receivables from customers	**3 948 515**	**524 072**	**1 937**	**526 009**	**54 528**	**4 529 052**

Loss allowance by impairment stage 31 December 2020

TEUR	Stage 1	Stage 2 Not more than 30 DPD	More than 30 DPD	Total	Stage 3	Total exposure
Receivables from customers						
Mortgage-backed loans	-61	-423	-6	-430	-2 275	-2 766
Total receivables from customers	**-61**	**-423**	**-6**	**-430**	**-2 275**	**-2 766**

Summary and key indicators 31 December 2020

TEUR	Stage 1	Stage 2 Not more than 30	More than 30	Total	Stage 3	Total exposure
Receivables from customers						
Mortgage-backed loans	3 948 515	524 072	1 937	526 009	54 528	4 529 052
Loss allowance						
Mortgage-backed loans	-61	-423	-6	-430	-2 275	-2 766
Coverage ratio, %						
Mortgage-backed loans	0,0 %	-0,1 %	-0,3 %	-0,1 %	-4,2 %	-0,1 %
Receivables from customers	**3 948 515**	**524 072**	**1 937**	**526 009**	**54 528**	**4 529 052**
Total loss allowance	**-61**	**-423**	**-6**	**-430**	**-2 275**	**-2 766**
Total coverage ratio, %	**0,0 %**	**-0,1 %**	**-0,3 %**	**-0,1 %**	**-4,2 %**	**-0,1 %**

Loss allowance	Receivables from customers			
TEUR	Stage 1 12 mths	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance on 1 January 2021	**61**	**430**	**2 275**	**2 766**
Transfers from Stage 1 to Stage 2	-3	66		63
Transfers from Stage 1 to Stage 3	0		178	178
Transfers from Stage 2 to Stage 1	16	-26		-10
Transfers from Stage 2 to Stage 3		-45	909	865
Transfers from Stage 3 to Stage 2		24	-201	-178
Transfers from Stage 3 to Stage 1	0		-17	-17
Decreases due to derecognition	-1	-19	-203	-224
Changes in risk parameters	-32	-200	18	-214
Changes due to update in the methodology for estimation	19	34		53
Allowances due to recognised write-off			-150	-150
Total net result effect	**-1**	**-166**	**534**	**366**
Loss allowance on 31 Dec 2021	**60**	**263**	**2 809**	**3 132**

Loss allowance	Receivables from customers			
	Stage 1	Stage 2	Stage 3	Total
TEUR	12 mths	Lifetime	Lifetime	
Loss allowance on 1 January 2020	**16**	**176**	**1 046**	**1 238**
Transfers from Stage 1 to Stage 2	-3	46	0	44
Transfers from Stage 1 to Stage 3	-1	0	169	169
Transfers from Stage 2 to Stage 1	2	-15	0	-13
Transfers from Stage 2 to Stage 3	0	-53	1 019	966
Transfers from Stage 3 to Stage 2	0	2	-23	-21
Transfers from Stage 3 to Stage 1	0	0	0	0
Decreases due to derecognition	-2	-23	-255	-280
Changes in risk parameters	48	301	361	710
Changes due to update in the methodology for estimation	0	-4	0	-4
Allowances due to recognised write-off	0	0	-35	-35
Total net result effect	**45**	**254**	**1 236**	**1 535**
Loss allowance on 31 Dec 2020	**61**	**430**	**2 282**	**2 773**

The table below presents gross exposures of on-balance-sheet and off-balance-sheet receivables by rating as well as loss allowance. Internal grades 1–12 are used in the internal rating of corporations and public-sector entities and grades A–F in the internal rating of households. Internal grades have been combined into the table in such a way that corporate customer grade 2 comprises grades 2 and 2.5 etc. Internal grade A in private customers includes A+, A and A- etc.

31 December 2021

TEUR	Balance sheet exposures			Loss allowance		
Rating grade	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
4	1 009			0		
5	2 898			0		
6	562	60		0	0	
7	3	62		0		
8	13	151				
9		58				
A	2 244 718	37 329		-6	-1	
B	566 041	85 686		-10	-9	
C	221 628	93 612		-17	-15	
D	98 029	110 478		-27	-77	
E		57 286			-161	
F			63 270			-2 809
Total	**3 134 901**	**384 721**	**63 270**	**-60**	**-263**	**-2 809**

31 December 2020

TEUR	Balance sheet exposures			Loss allowance		
Rating grade	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
4	258					
5	4 127			0		
6	556			0	0	
7	629	125		0	0	
8		126			0	
10		5				
A	3 551 343	33 063		-17	0	
B	318 546	235 496		-15	-75	
C	55 834	125 642		-14	-82	
D	17 222	104 897		-15	-121	
E		26 655			-151	
F			54 528			-2 275
Total	**3 948 515**	**526 009**	**54 528**	**-61**	**-430**	**-2 275**

NOTE 12. Investment assets, TEUR	31 Dec 2021	31 Dec 2020
Financial assets available for sale		
Shares and participations, unquoted	40	40
Total investment assets	**40**	**40**

NOTE 13. Other assets, TEUR	31 Dec 2021	31 Dec 2020
Pension plan assets	72	70
Deferred income		
Interest	30 548	28 189
Other	622	363
Total	**31 241**	**28 622**

Note 17. Other liabilities describes the calculation of plan assets in greater detail.

NOTE 14. Tax assets, TEUR	31 Dec 2021	31 Dec 2020
Income tax asset	0	803
Total tax assets	**0**	**803**
Income tax liabilities		
Deferred tax liabilities		68
Total tax liabilities		**68**
Specification of tax assets and liabilities		
Deferred tax assets		
Due to other items	0	6
Set-off against deferred tax liabilities	0	-6
Total	**0**	**0**
Deferred tax liabilities		
From defined benefit pension plans	74	74
Set-off against deferred tax assets	0	-6
Total	**74**	**68**
Changes in deferred taxes		
Deferred tax assets/liabilities on 1 January	-68	-64
Recognised in the income statement		
Defined benefit pension obligations	-6	-7
Recognised in statement of comprehensive income		
Items arising from remeasurement of defined benefit plans	0	3
Total deferred tax assets/liabilities on 31 December	**-74**	**-68**
Income tax assets	**274**	**803**
Total tax assets and liabilities	**200**	**735**

NOTES TO LIABILITIES AND EQUITY CAPITAL

NOTE 15. Liabilities to credit institutions, TEUR	31 Dec 2021	31 Dec 2020
Other than those repayable on demand		
Liabilities to OP Corporate Bank	1 570 000	1 500 000
Liabilities to credit institutions	**1 570 000**	**1 500 000**

NOTE 16. Debt securities issued to the public, TEUR	31 Dec 2021	31 Dec 2020
Bonds	16 579 276	14 095 017
Total debt securities issued to the public	**16 579 276**	**14 095 017**

Bonds issued by OP Mortgage Bank

Bond	Book value	Fair value	Interest rate base	Nominal interest %	Maturity
OP Mortage Bank rekisteröity Covered Bond (NSV)	114 905	115 000	Fixed	2,157	12.11.2024
OP Mortgage Bank Covered Bond 2014	998 680	1 036 280	Fixes	1,000	28.11.2024
OP Mortgage Bank Covered Bond 2015	999 507	1 008 290	Fixed	0,625	4.9.2022
OP Mortgage Bank Covered Bond 2016	1 248 723	1 262 663	Fixed	0,250	11.5.2023
OP Mortgage Bank Covered Bond 2017	997 549	1 013 190	Fixed	0,250	13.3.2024
OP Mortgage Bank Covered Bond 2017	996 885	1 042 240	Fixed	0,750	7.6.2027
OP Mortgage Bank Covered Bond 2017	999 139	1 006 590	Fixed	0,050	22.2.2023
OP Mortgage Bank Covered Bond 2018	997 649	1 028 570	Fixed	0,625	1.9.2025
OP Mortgage Bank Covered Bond 2019	1 238 373	1 298 763	Fixed	0,625	15.2.2029
OP Mortgage Bank Covered Bond 2019	1 000 021	1 003 390	Fixed	0,010	19.11.2026
OP Mortgage Bank Covered Bond 2020	995 080	1 001 990	Fixed	0,050	21.4.2028
OP Mortgage Bank Covered Bond 2020	500 745	501 095	Floating	0,249	18.4.2022
OP Mortgage Bank Covered Bond 2020	309 515	317 400	Floating	0,402	21.4.2028
OP Mortgage Bank Covered Bond 2020	1 268 686	1 229 863	Fixed	0,010	19.11.2030
OP Mortgage Bank Covered Bond 2021	746 788	737 490	Fixed	0,050	25.3.2031
OP Mortgage Bank Retained Covered Bond 2021	1 014 252	1 013 330	Floating	0,436	24.5.2023
OP Mortgage Bank Retained Covered Bond 2021	1 014 371	1 013 440	Floating	0,425	29.5.2023
OP Mortgage Bank Retained Covered Bond 2021	1 014 448	1 013 460	Floating	0,428	31.5.2023
Total	**16 455 316**	**16 643 043**			

Collateralisation of bonds issued to the public

On 31 December 2021, loans as collateral in security of the covered bonds issued under the Euro Medium Term Covered Note programme worth EUR 20 billion established on 12 November 2010 under the Act on Mortgage Credit Banks (Laki kiinnitysluottopankkitoiminnasta 688/2010) totalled EUR 15,841 million. On the same date, loans as collateral in security of the covered bonds issued under the Euro Medium Term Retained Covered Note programme worth EUR 10 billion established on 15 June 2020 totalled EUR 3,587 million.

Reconciliation of changes in liabilities in cash flows from financing activities against balance sheet items

Balance sheet value 1 Jan. 2021	**14 095 017**
Changes in cash flows from financing activities	
Increases in bonds	3 807 890
Increases total	**3 807 890**
Decreases in bonds	1 000 000
Decreases total	**1 000 000**
Total changes in cash flows from financing activities	**2 807 890**
Valuations and foreign exchange changes	-323 631
Balance sheet value 31 Dec 2021	**16 579 276**

Balance sheet value 1 Jan. 2020	**12 135 974**
Changes in cash flows from financing activities	
Increases in bonds	3 081 772
Increases total	**3 081 772**
Decreases in bonds	1 270 000
Decreases total	**1 270 000**
Total changes in cash flows from financing activities	**1 811 772**
Valuations and foreign exchange changes	147 271
Balance sheet value 31 Dec 2020	**13 800 475**

NOTE 17. Other liabilities, TEUR	31 Dec 2021	31 Dec 2020
Other liabilities		
Payment transfer liabilities	98	110
Accrued expenses		
Interest liabilities	25 059	22 088
Other accrued expenses	2 605	2 895
Payables based on purchase invoices	391	159
Other	14	14
Total	**28 167**	**25 267**

Defined benefit pension plans

Schemes related to OP MB's supplementary pensions in OP Bank Group Pension Foundation have been treated as defined benefit plans. Supplementary pension schemes supplement statutory pension cover under the Employees Pensions Act (TyEL).
Supplementary pension cover provided by the Pension Foundation is fully funded.

OP Bank Group Pension Foundation covers every employee who has reached the age of 20 years and who has been employed, as specified by TyEL, for two consecutive years by an employer within the Pension Foundation and whose employment has begun before 1 July 1991. The emplyment term entitling to pension begins from the day the employee turned 23 years in the emplyment of the employer. The salary/wage serving as the basis for calculation of pension refers to pernsionable pay based on one and the same employment and calculated under the Finnish Employees Pensions Act (TEL), in force until 31 December 2006. The retirement age of those covered by the Pension Foundation varies from 60 to 65 years, depending on the personnel group to which the employee belongs under the Pension Foundation rules.
The most significant associated risk relates to the possibility of the actual return on investment assets being lower than the target set for the minimum return.
If such a risk materialised in several consecutive years, this would result in the charging of contributions.
The most significant actuarial risks of OP Bank Group Pension Foundation are associated with interest rate and market risks, systematically increasing life expectancy and inflation risk.
A change in the discount rate for pension liabilities has a substantial effect on the amount of pension liabilities.
Responsible for investment, the Board of Trustees of the Pension Foundation approves the pension institution's investment plan related to its assets.
A pension institution's chief actuary prepares annually a forecast for developments in technical provisions and pension costs. On this basis, investment asset allocation takes account of the requirements set by the nature of technical provisions for investment operations with respect to the level of security, productivity an liquidity, as well as the Pension Fund's risk-bearing capacity.
The amount of defined benefit pension obligations was 88 thousand euros (123), the fair value of pension assets 160 thousand euros (192) and net pension assets 72
Defined benefit pension costs recognised in the income statement totalled 0 thousand euros (0), and gains recognised in other comprehensive income arising from remeasurement totalled 2 thousand euros (2020: gains of 17 thousand euros).

NOTE 18. Shareholders' equity, TEUR	31 Dec 2021	31 Dec 2020
Share capital	60 000	60 000
Unrestricted reserves	245 000	245 000
Retained earnings		
Profits for previous years	59 713	59 712
Profit for the financial year	5 364	6 381
Total equity	**370 077**	**371 093**
Distributable reserves	**310 077**	**311 093**
Distributable profits	**65 077**	**66 093**

The Board of Directors proposes that a dividend of 70.02 euros be distributed per share (83.31), totalling 5,363 thousand euros (6,381).

Reserve for invested non-restricted equity consists of OP Cooperative's capital investment of EUR 245,000,000.

Share capital and number of shares

	Total
Share capital, EUR thousand	60 000
Number of shares	76 592
Proportion of share capital, %	100

OP Cooperative holds 100% of OP Mortgage Bank.
The minimum share capital of the Company is EUR 8,500,000 and the maximum share capital is EUR 150,000,000, within which limits the share capital may be increased or reduced without altering the Articles of Association. The minimum number of shares is 34,000 and the maximum number is 136,000. Permission from the Company is required for the acquisition of shares through transfer. The shares have no nominal value.

OTHER NOTES TO THE BALANCE SHEET

NOTE 19. Classification of financial assets and liabilities, TEUR

Assets	Amortised cost	Recognised at fair value through profit or loss	Recognised at fair value through other comprehensive income	Carrying amount total	Fair value total
Receivables from credit institutions	14 814 635			14 814 635	14 814 635
Derivative contracts		170 200		170 200	170 200
Receivables from customers	3 584 445			3 584 445	3 584 445
Shares and participations			40	40	40
Other receivables	30 931			30 931	30 931
Financial assets	18 430 010	170 200	40	**18 600 250**	**18 600 250**
Other than Financial assets				310	310
Total on 31 Dec 2021	**18 430 010**	**170 200**	**40**	**18 600 560**	**18 600 560**

Liabilities	Recognised at fair value through profit or loss	Amortised cost	Carrying amount total	Fair value total
Liabilities to credit institutions		1 570 000	1 570 000	1 570 000
Derivative contracts	52 966		52 966	52 966
Debt securities issued to the public		16 579 276	16 579 276	16 643 043
Other liabilities		25 267	25 267	25 267
Financial liabilities	**52 966**	**18 174 543**	**18 227 509**	**18 291 275**
Other than filancial liabilities			2 694	2 694
Total on 31 Dec 2021	**52 966**	**18 174 543**	**18 230 202**	**18 293 969**

Assets	Amortised cost	Recognised at fair value through profit or loss	Recognised at fair value through other comprehensive income	Carrying amount total	Fair value total
Receivables from credit institutions	11 008 827			11 008 827	11 008 827
Derivative contracts		431 801		431 801	431 801
Receivables from customers	4 536 259			4 536 259	4 536 259
Shares and participations			40	40	40
Other receivables	28 369			28 369	28 369
Finacial Assets	**15 573 454**	**431 801**	**40**	**16 005 296**	**16 005 296**
Other than Financial assets				1 056	1 056
Total on 31 Dec 2020	**15 573 454**	**431 801**	**40**	**16 006 351**	**16 006 351**

Liabilities	Recognised at fair value through profit or loss	Amortised cost	Carrying amount total	Fair value total
Liabilities to credit institutions		1 500 000	1 500 000	1 500 000
Derivative contracts	14 908		14 908	14 908
Debt securities issued to the public		14 095 017	14 095 017	14 171 617
Other liabilities		22 359	22 359	22 359
Finacial liabilities	**14 908**	**15 617 376**	**15 632 283**	**15 708 883**
Other than filancial liabilities			2 975	2 975
Total on 31 Dec 2020	**14 908**	**15 617 376**	**15 635 259**	**15 711 858**

Debt securities issued to the public are carried at amortised cost. On 31 December, the fair value of these debt instruments was approximately EUR 63,766 thousand (76,600) higher than their carrying amount, based on information available in markets and employing commonly used valuation techniques.

NOTE 20. Financial instruments classification, grouped by valuation technique, TEUR

Recurring fair value measurements of assets	31 Dec 2021 Balance sheet value	Fair value measurement at year end Level 1*	Level 2**
Derivative contracts	170 200		170 200
Total	**170 200**		**170 200**

Recurring fair value measurements of assets	31 Dec 2020 Balance sheet value	Fair value measurement at year end Level 1*	Level 2**
Derivative contracts	431 801		431 801
Total	**431 801**		**431 801**

Recurring fair value measurements of liabilities	31 Dec 2021 Balance sheet value	Fair value measurement at year end Level 1*	Level 2**
Derivative contracts	52 966		52 966
Total	**52 966**		**52 966**

Recurring fair value measurements of liabilities	31 Dec 2020 Balance sheet value	Fair value measurement at year end Level 1*	Level 2**
Derivative contracts	14 908		14 908
Total	**14 908**		**14 908**

Financial liabilities not measured at fair value	31 Dec 2021 Balance sheet value	Level 1*	Fair value measurement at year end Level 2**	Level 3***
Debt securities issued to the public	16 579 276	11 498 066	1 272 815	4 036 388
Total	**16 579 276**	**11 498 066**	**1 272 815**	**4 036 388**

Financial liabilities not measured at fair value	31 Dec 2020 Balance sheet value	Level 1*	Fair value measurement at year end Level 2**	Level 3***
Debt securities issued to the public	14 095 017	13 639 467		962 395
Total	**14 095 017**	**13 639 467**		**962 395**

Valuation techniques whose input parameters involve uncertainty (Level 3)

Opening balance 1 January 2021	962 395
Transfers to level 3	
Transfers from level 3	
Other changes	3 073 993
Closing balance 31 December 2021	4 036 388

The line Other change includes bonds on hierarchy level 3 issued by OP MB during the reporting period.

*Level 1 includes equities listed on major stock exchanges, quoted debt instruments issued by companies, governments and financial institutions as well as exchange-traded derivatives. The fair value of these instruments is determined on the basis of market quotes.

** Valuation techniques based on observable input parameters. The fair value of the instruments included within Level 2 means value derived from the market price of a financial instrument's components or similar financial instruments; or value which can be determined using commonly used valuation models and techniques if the inputs significant to the fair value measurement are based on observable market data. The fair value hierarchy level at OP Financial Group's includes OTC derivatives, quoted debt instruments issued by companies, governments and financial institutions which have not been included in Level 1, and repo agreements as well as securities lent or borrowed.

*** Valuation techniques whose input parameters involve uncertainty. The fair value determination of the instrumets included in Level 3 contains inputs no based on observable market data. Level 3 also includes bonds for which there is little, if any, market activity on the valuation date. Level 3 fair value is based on pricing information from a third party.

Transfers between hierarchy levels of recurring fair value measurements

Transfers between the levels of the fair value hierarchy are considered to take place on the date when an event causes such transfer or when circumstances change. Transfers between the levels are mainly due to the number of available market quotes.

OTHER NOTES

NOTE 21. NOTES TO THE CASH FLOW STATEMENT

Interest received	**-28 063**	**17 884**
Interest paid	**71 122**	**6 318**
Adjustments to profit for the financial year		
Impairment losses on receivables	509	1 649
Income tax	1 341	1 594
Price difference recognised	-16 471	6 046
Other	-19	12
Total adjustments	**-14 640**	**9 302**
Cash and cash equivalents		
Receivables from credit institutions payable on demand	102 402	214 695
Total cash and cash equivalents	**102 402**	**214 695**

NOTE 22. Related party transactions

OP MB's related parties comprise companies consolidated into OP Cooperative Consolidated, associates, key management personnel and their close family members, and other related-party entities. The company's key management personnel comprises the Managing Director, Deputy Managing Director and members of the Board of Directors. Related parties also include companies over which a key management person or their close family member, either alone or together with another person, exercise control. Other entities regarded as related parties include OP Bank Group Pension Fund and OP Financial Group Personnel Fund. Related parties have been defined in accordance with IAS 24. Related party transactions consist of paid salaries and fees as well as ordinary business transactions. Standard loan terms and conditions are applied to loans granted to related parties. Loans are tied to generally used reference interest rates

Business transactions with related parties, TEUR

	2021		2020	
	OP Cooperative	Other	OP Cooperative	Other
Loans		2 863 769		2 375 757
Other receivables		188 693		462 432
Deposits		1 570 000		1 500 000
Other liabilities	75	3 890 959	14	844 975
Interest income		12 392		12 155
Interest expenses		15 205		144 201
Dividend income				
Net commission income and expenses		-5 516		-4 060
Other operating income	1			
Operating costs	1 632	3 134	798	2 005

All OP MB's derivative contracts have been entered into with OP Corporate Bank plc. Data on derivative contracts are presented in Note 3 Net interest income and in Note 10 Derivative contracts.

Shares held by related parties
The parent company holds all of the 76,592 shares.

Wages and salaries paid to Managing Director Sanna Erikson and her fringe benefits were, as follows:

wages and salaries	131
fringe benefits	0
Total	132

NOTE 23. Events after the balance sheet date

OP Financial Group has decided to apply an RWA floor – based on the standardised approach – in the second quarter of 2022. This is due to enhanced regulatory requirements and discussions with the European Central Bank (ECB) on the application of the Internal Ratings Based Approach (IRBA).
The floor will be applied within OP Financial Group in the second quarter of 2022. After application of the floor, OP Mortgage Bank's CET1 ratio will be an estimated 30%. Application of the floor is a temporary capital measure which will not affect OP Mortgage Bank's good risk position. The impact of the floor will be eliminated in stages over the coming years, as the ECB approves the Group's development measures regarding the Internal Ratings Based Approach.
Application of the floor will have no material impact on OP Financial Group's bond issuance plan for 2022

NOTE 24. Structure of funding, TEUR

	31 Dec 2021	**Share, %**	**31 Dec 2020**	**Share, %**
Liabilities to credit institutions	1 570 000	8,5	1 500 000	9,4
Debt securities issued to the public	16 579 276	89,4	14 095 017	88,1
Other liabilities	27 893	0,2	25 267	0,2
Shareholders' equity	370 077	2,0	371 093	2,3
Total	**18 547 246**	**100,0**	**15 991 376**	**100,0**

NOTE 25. Maturity distribution of financial assets and liabilities by residual term to maturity, TEUR

31 Dec 2021	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Financial assets						
Receivables from credit institutions	123 835	110 000	9 032 800	5 548 000		14 814 635
Receivables from customers	117 859	353 590	1 542 672	1 075 924	492 983	3 583 028
Total financial assets	**241 693**	**463 590**	**10 575 472**	**6 623 924**	**492 983**	**18 397 663**
Financial liabilities						
Liabilities to credit institutions		570 000	1 000 000			1 570 000
Debt securities issued to the public		1 500 252	9 399 739	5 555 326	123 960	16 579 276
Total financial liabilities		**2 070 252**	10 399 739	**5 555 326**	**123 960**	**18 149 276**

31 Dec 2020	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 year	Total
Financial assets						
Receivables from credit institutions	218 877		5 142 800	5 647 150		11 008 827
Receivables from customers	132 153	416 600	1 861 859	1 381 331	739 180	4 531 123
Total financial assets	**351 029**	**416 600**	**7 004 659**	**7 028 481**	**739 180**	**15 539 949**
Financial liabilities						
Liabilities to credit institutions	100 000	1 400 000				1 500 000
Debt securities issued to the public	999 797		7 285 944	5 809 276		14 095 017
Total financial liabilities	**1 099 797**	**1 400 000**	**7 285 944**	**5 809 276**		**15 595 017**

The presented cash flows have not been discounted.

NOTE 26. Funding risk

OP Financial Group's liquidity management has been centralised within OP Corporate Bank which is OP Mortgage Bank can also exploit OP Financial Group's liquidity buffer.

NOTE 27. Maturity of financial assets and liabilities by due date or repricing, TEUR

Contractual repricing dates or earlier due dates on 31 December 2021.

31 Dec 2021	1 month or less	> 1–3 months	> 3–12 months	> 1–2 years	> 2–5 years	More than 5 years	Total
Financial assets							
Receivables from credit institutions	977 452	10 345 983	2 830 150	199 650	334 200	127 200	14 814 635
Receivables from customers	711 558	895 070	1 970 749	923	1 990	2 737	3 583 028
Total financial assets	**1 689 010**	**11 241 053**	**4 800 899**	**200 573**	**336 190**	**129 937**	**18 397 663**
Financial liabilities							
Liabilities to credit institutions	400 000	1 000 000	170 000				1 570 000
Debt securities issued to the public	934 219	3 043 071	999 507	2 247 862	4 108 805	5 245 811	16 579 276
Total financial liabilities	**1 334 219**	**4 043 071**	**1 169 507**	**2 247 862**	**4 108 805**	**5 245 811**	**18 149 276**

31 Dec 2020	1 month or less	> 1–3 months	> 3–12 months	> 1–2 years	> 2–5 years	More than 5 years	Total
Financial assets							
Receivables from credit institutions	1 074 195	6 479 632	2 830 150		484 850	140 000	11 008 827
Receivables from customers	925 395	1 128 267	2 468 099	3 121	2 750	3 491	4 531 123
Total financial assets	**1 999 590**	**7 607 898**	**5 298 249**	**3 121**	**487 600**	**143 491**	**15 539 949**
Financial liabilities							
Liabilities to credit institutions	400 000	1 100 000					1 500 000
Debt securities issued to the public		999 797		998 790	5 352 750	5 498 253	14 095 017
Total financial liabilities	**1 645 427**	**2 099 797**		**998 790**	**5 352 750**	**5 498 253**	**15 595 017**

NOTE 29. Interest rate risk

At OP Mortgage Bank, the interest rate risk indicator applied is a key figure in which the effect of a parallel 1 percentage point change in the interest rate on the present value of the banking book excluding customer margin is proportioned to the Bank's capital base. The present value is calculated and reported every month. At the end of the year, the value of the key figure was –0.46%. Interest rate risk can be considered low. The interest rate risk comes mainly from the differences of the loan portfolio available for use as collateral for bonds and its interest rate linkages as well as the company's equity.

Sensitivity analysis for interest rate risk

			Impact on equity	
TEUR	Risk parameter	Change	31 Dec 2021	31 Dec 2020
Interest rate risk	Interest rate	1 pp	-1672,8	-3839,6

OP Mortgage Bank Plc

SIGNATURES TO THE FINANCIAL STATEMENTS AND ANNUAL REPORT

Helsinki, 1 March 2022

Mikko Timonen Chair of the Board of Directors	Kaisu Christie	Lauri Iloniemi

Sanna Eriksson
Managing Director

AUDITOR'S NOTE

We have today issued an auditors' report on the performed audit.

Helsinki, 2 March 2022

KPMG Oy Ab
Authorised Public Accountants

Tiia Kataja
Authorised Public Accountant

This document is an English translation of the Finnish auditor's report. Only the Finnish version of the report is legally binding.

Auditor's Report

To the Annual General Meeting of OP Mortgage Bank Plc

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of OP Mortgage Bank Plc (business identity code 1614329-2) for the year ended 31 December 2021. The financial statements comprise balance sheet, income statement, statement of comprehensive income, statement of changes in equity, cash flow statement and notes, including a summary of significant accounting policies.

In our opinion the financial statements give a true and fair view of the bank's financial performance and financial position and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Board of Directors.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report.

We are independent of the company in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the company are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 6 to the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Materiality

The scope of our audit was influenced by our application of materiality. The materiality is determined based on our professional judgement and is used to determine the nature, timing and extent of our audit procedures and to evaluate the effect of identified misstatements on the financial statements as a whole. The level of materiality we set is based on our assessment of the magnitude of misstatements that, individually or in aggregate, could reasonably be expected to have influence on the economic decisions of the users of the financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The significant risks of material misstatement referred to in the EU Regulation No 537/2014 point (c) of Article 10(2) are included in the description of key audit matters below.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
Receivables from credit institutions and receivables from customers – valuation (accounting policies, notes 9, 11, 16 and 19 to financial statements)	
— Receivables from credit institutions, EUR 14.8 billion, and receivables from customers, EUR 3.6 billion, are significant items on the OP Mortgage Bank's balance sheet comprising 99% of the total assets. Receivables from credit institutions are intermediary loans issued to OP Financial Group's member banks and receivables from customers are mortgage-backed loans issued by OP Mortgage Bank. — The calculation of expected credit losses (ECL) in accordance with IFRS 9 *Financial Instruments* involves assumptions, estimates and management judgement in determining, for example, the probability and amount of expected credit losses and significant increases in credit risk. — The components of the ECL calculation are updated and refined in the light of actual credit risk developments, validation and improvement of the calculation process, and regulatory changes and requirements. — Due to the significance of the carrying amount of receivables, the complexity of the valuation methods applied and management judgement involved, the valuation of receivables is addressed as a key audit matter.	— We evaluated the intermediary loan process, compliance with lending guidelines, credit risk management, and policies and controls for recording and monitoring receivables. — We gained an understanding of OP Cooperative's control environment for the centralised lending process components and the calculation of expected credit losses by performing centralised audit procedures. — The main areas of the audit were the assessment of the monitoring process of collateral valuations for covered bonds using data analyses, components in ECL calculation requiring management judgement and the impact of the Covid-19 pandemic on the credit risk position and the ECL calculation. — Furthermore, we considered the appropriateness of the notes provided by OP Mortgage Bank in respect of receivables and expected credit losses.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the company or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

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

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

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

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

— Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

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

— Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

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

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

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

Other Reporting Requirements

Information on our audit engagement

We were first appointed as auditors by the Annual General Meeting in 2002 and our appointment represents a total period of uninterrupted engagement of 20 years.

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. Our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed, we conclude that there is a material misstatement of the report of the Board of Directors, we are required to report that fact. We have nothing to report in this regard.

Helsinki, 2 March 2022

KPMG OY AB

TIIA KATAJA
Authorised Public Accountant, KHT