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

OP

Contents

Report by the Board of Directors 2021

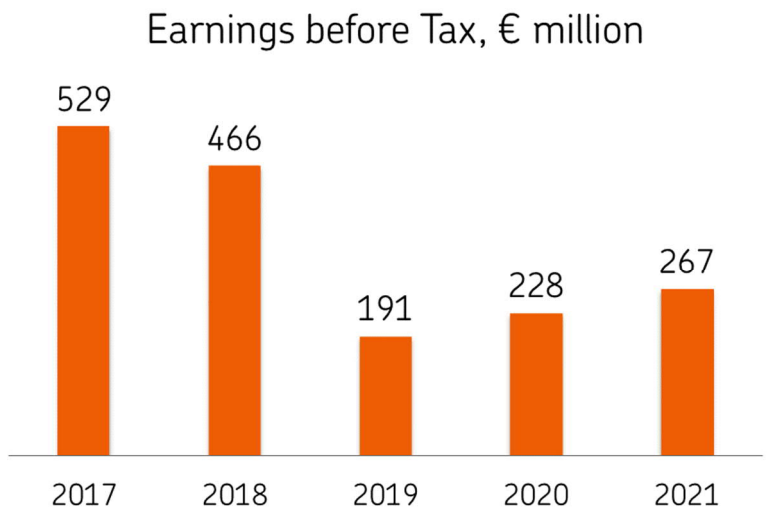
Earnings before tax Q1–4/2021	Total income Q1–4/2021	Loan portfolio Q1-4/2021	CET1 ratio 31 Dec 2021
€267 million	+26%	7%	15.4%

- As a result of the structural arrangements carried out in OP Corporate Bank plc in 2021, OP Corporate Bank plc no longer constitutes a reporting group. OP Corporate Bank plc has changed over to preparing its interim reports and financial statements under IFRS. Data for 2020 has been adjusted to correspond the IFRS regulatory framework.
- **OP Corporate Bank plc's** earnings before tax improved to EUR 267 million (228). Total income increased by 26% to EUR 661 million (523). Net interest income increased by 28% to EUR 412 million (322) and net investment income by 12% to EUR 168 million (150). Other operating income amounted to EUR 49 million (29). Net commissions and fees increased by EUR 9 million to EUR 31 million (23) Total expenses increased by 34% to EUR 320 million (240). Impairment loss on receivables increased by EUR 21 million to EUR 74 million (53). The loan portfolio grew in the year to December by 7% to EUR 26.2 billion (24.5). The deposit portfolio grew by 15% to EUR 16.1 billion (13.9).
- OP Corporate Bank plc's business segments include Corporate Banking and Capital Markets, Asset and Sales Finance Services and Payment Transfers as well as Baltics. Non-business segment operations are presented in the Other Operations segment.
- **The Corporate Banking and Capital Markets** segment's earnings before tax improved to EUR 261 million (190). Total income increased by 26% to EUR 420 million (334). Net investment income increased by 21% to EUR 167 million (138). Other operating income amounted to EUR 70 million (8). Net interest income decreased by 4% to EUR 213 million (222). Total expenses increased by 12% to EUR 121 million (108). Higher personnel costs and other operating expenses increased expenses. Impairment loss on receivables totalled EUR 38 million (36).
- **The Asset and Sales Finance Services and Payment Transfers** segment's earnings before tax improved to EUR 90 million (79). Total income increased by 22% to EUR 231 million (189). Net interest income increased by 21% to EUR 155 million (129) and net commissions and fees by 13% to EUR 58 million (51). Total expenses increased by 11% to EUR 104 million (93). Expenses were particularly increased by higher other operating expenses. Impairment loss on receivables increased by EUR 23 million to EUR 37 million (14).
- **Baltic** earnings before tax improved to EUR 20 million (15). Total income increased by 11% to EUR 42 million (38). Net interest income increased by 9% to EUR 33 million (30) and net commissions and fees by 30% to EUR 9 million (7). Total expenses increased by 10% to EUR 22 million (20).
- **Other Operations** earnings before tax were EUR –105 million (–55). Liquidity remained strong.
- **OP Corporate Bank plc's** CET1 ratio was 15.4% (14.1).
- OP Corporate Bank plc's Baltic subsidiaries OP Finance AS (Estonia), OP Finance SIA (Latvia) and AB OP Finance (Lithuania) merged into their parent company OP Corporate Bank plc on 31 October 2021 through a cross-border subsidiary merger.
- On 29 November 2021, OP Corporate Bank plc implemented a partial demerger in such a way that the shares of Pohjola Insurance Ltd, OP Corporate Bank plc's subsidiary engaged in non-life insurance business, were transferred to the direct ownership of OP Cooperative.
- On 30 November 2021, OP Corporate Bank plc sold all shares of OP Custody Ltd to OP Cooperative.
- 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 Corporate Bank's CET1 ratio to an estimated 12% in the second quarter of 2022.

OP Corporate Bank plc's key indicators

Earnings before tax, € million	Q1–4/2021	Q1–4/2020	Change, %
Corporate Banking and Capital Markets	261	190	37.6
Asset and Sales Finance Services and Payment Transfers	90	79	13.8
Baltics	20	15	37.7
Other Operations	-105	-55	-
Total	267	228	16.7
Return on equity (ROE), %	5.2	4.7	0.5*
Return on assets (ROA), %	0.25	0.25	-0.01*
	31 Dec 2021	31 Dec 2020	Change, %
CET1 ratio, %	15.4	14.1	1.3*
Loan portfolio, € million	26,236	24,461	7.3
Guarantee portfolio, € million	3,475	2,558	35.9
Other exposures, € million	5,731	5,422	5.7
Deposits, € million	16,089	13,944	15.4
Ratio of non-performing exposures to exposures, %	1.8	2.2	-0.5*
Ratio of impairment loss on receivables to loan and guarantee portfolio, %	0.25	0.20	0.05*

Comparatives deriving from the income statement are based on OP Corporate Bank plc's figures reported for the corresponding periods in 2020 presented under the IFRS regulatory framework. Unless otherwise specified, balance-sheet and other cross-sectional figures on 31 December 2020 are used as comparatives.
*Change in ratio



OP Corporate Bank plc's earnings before tax calculated under national legislation are presented as figures for 2017–2019.

Business environment

In 2021, the world economy recovered from the crisis caused by the Covid-19 pandemic. During the last quarter of the year, the economy grew briskly despite growth in the rate of infections caused by the Omicron variant. Inflation sped up strongly towards the end of the year, reaching the fastest rate in decades in many countries. The Euribor rates remained steady but long-term interest rates rose moderately during the year.

Finland's GDP exceeded its pre-pandemic level already in the spring and recovery continued at a brisk pace in the autumn. Employment has recovered from the crisis rapidly and unemployment has clearly decreased. Inflation in Finland accelerated more moderately than in the euro area on the whole although the increase was at its highest since the early 2010s. Home prices too rose at the fastest rate in many years. Towards the year end, activity on the housing market began to slow down but remained strong.

Growth in Covid-19 infections is likely to temporarily slow down economic growth at the beginning of 2022 but the economic recovery is expected to continue during the year. Inflation is expected to slow down but to remain quite high. The Covid-19 pandemic, geopolitical tensions and uncertainty related to the inflation outlook cast a shadow over the economic outlook. In December, the European Central Bank announced that it would gradually reduce its asset purchases during 2022.

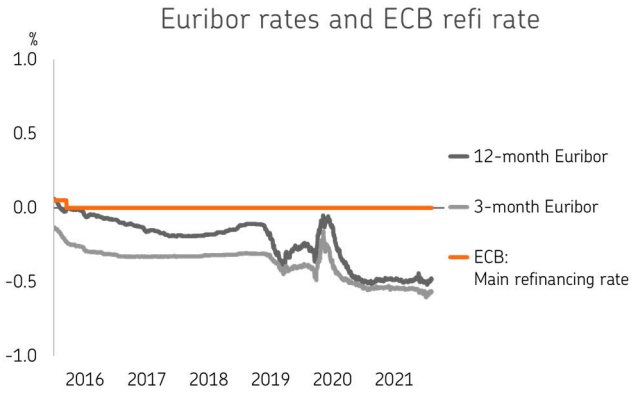
Total loans increased by 3.3% in 2021. Household and housing company loans showed the strongest growth.

In 2021, household loans increased by 4.0%, housing company loans by 5.9% and corporate loans by 1.1%. Growth in home loans as a driver of growth in household loans slowed down towards the year end, reaching 4.1%, whereas the growth rate in consumer loans strengthened to 2.5%.

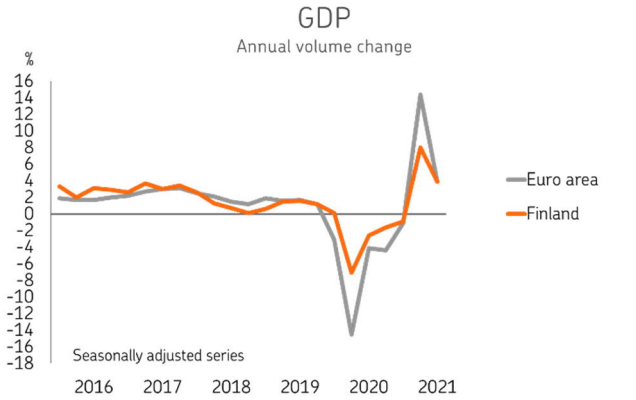
Total deposits rose by 4.7% in 2021. Corporate deposits increased by 10.9% and household deposits by 5.1%.

The value of mutual funds registered in Finland rose to a record of EUR 158.8 billion at the end of 2021. New capital invested in mutual funds during 2021 totalled EUR 9.1 billion. A rise in stock prices also increased the value of mutual fund investments.

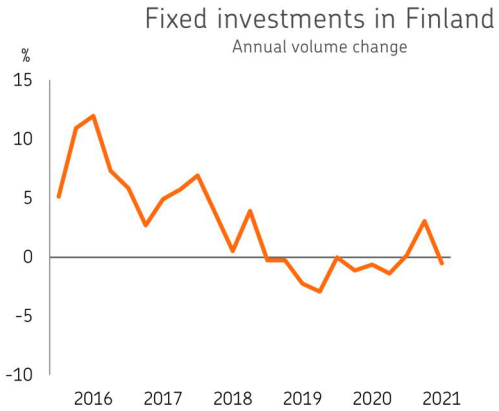
In the insurance sector, 2021 was favourable. The economic recovery supported demand for insurance products and the effects of the Covid-19 pandemic did not weaken the profitability of insurance companies. Strong performance in the capital market was also favourable to insurance companies.



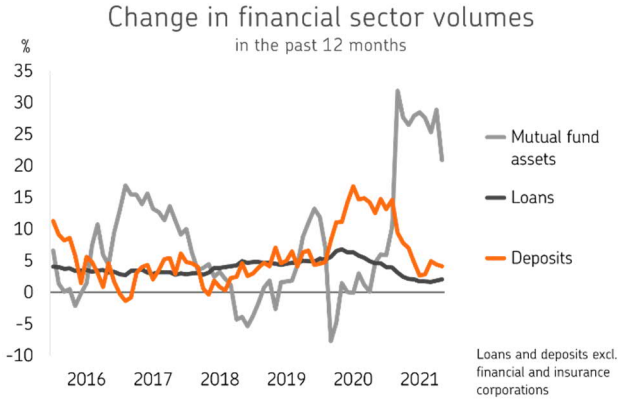
Source: Bank of Finland



Sources: Eurostat, Statistics Finland



Source: Statistics Finland



Sources: Bank of Finland, Investment Research Finland

OP Corporate Bank earnings

€ million	Q1–4/2021	Q1–4/2020	Change, %
Net interest income	412	322	28.3
Net commissions and fees	31	23	38.0
Net investment income	168	150	12.1
Other operating income	49	29	68.4
Total income	661	523	26.3
Personnel costs	72	62	16.2
Depreciation/amortisation and impairment loss	12	14	-10.2
Other operating expenses	236	163	44.2
Total expenses	320	240	33.8
Impairment loss on receivables	-74	-53	39.4
OP bonuses to owner-customers	-	-2	-
Total earnings before tax	267	228	16.7

January–December

OP Corporate Bank plc's earnings before tax improved to EUR 267 million (228). Total income increased to EUR 661 million (523). Net interest income increased by EUR 91 million to EUR 412 million. This increase was especially explained by the realisation of a conditional additional benefit from the interest rate margin of the TLTRO III funding offered by the European Central Bank to banks. Net commissions and fees increased by EUR 9 million to EUR 31 million. Net investment income of EUR 168 million rose by EUR 18 million year on year. Other operating income rose by EUR 20 million to EUR 49 million. Other operating income was increased by non-recurring items from OP Corporate Bank's restructuring. Total expenses increased by EUR 81 million to EUR 320 million. Other operating expenses were especially increased by the interest benefit from TLTRO III funding that was transferred from OP Corporate Bank's Treasury to OP Financial Group companies. Impairment loss on receivables increased by EUR 21 million to EUR 74 million.

Net interest income increased by EUR 91 million to EUR 412 million. Income from interest on central bank debt and negative deposit interest rates increased interest income. In the financial year, OP Corporate Bank recognised as income EUR 103 million in the conditional additional benefit from the interest rate margin related to the TLTRO III funding. Interest income from receivables from customers decreased to EUR 381 million (384). Interest expenses were increased by higher negative interest charges payable for central bank deposits and higher interest expenses for senior non-preferred bonds.

During the financial year, OP Corporate Bank borrowed EUR 8 billion under TLTRO funding offered by the European Central Bank to banks. The amount of TLTRO funding increased to EUR 16 billion. In the year to December, the amount of senior non-preferred bonds rose by EUR 2.3 billion to EUR 3.9 billion. Tier 2 bonds amounted to EUR 2.0 billion (2.3) at the end of the financial year. In the year to December, OP Corporate Bank's loan portfolio grew by 7.3% to EUR 26.2 billion (24.5) and guarantee portfolio by 35.9% to EUR 3.5 billion (2.6). In the year to December, the deposit portfolio increased by 15.4% to EUR 16.1 billion (13.9).

Net commissions and fees increased by EUR 9 million to EUR 31 million. Commissions and fees were especially increased by commission income from payment transfers and lending.

Net investment income increased by EUR 18 million to EUR 168 million. Income from financial assets held for trading rose by EUR 20 million to EUR 164 million. Value changes in Credit Valuation Adjustment (CVA) in derivatives owing to market changes improved earnings by EUR 15 million (–16). Capital gains on notes and bonds, EUR 4 million, were EUR 3 million lower than a year ago.

Other operating income of EUR 49 million rose by EUR 20 million year on year. Other operating income was mainly increased by capital gain on the sale of OP Custody Ltd shares.

Total expenses increased by EUR 81 million year on year to EUR 320 million. Personnel costs rose by EUR 10 million to EUR 72 million due to higher provisions for performance-based bonuses. Depreciation/amortisation and impairment

loss, EUR 12 million, decreased by EUR 1 million year on year. Other operating expenses increased by EUR 72 million to EUR 236 million. Other operating expenses were increased by the transfer of the interest rate benefit, EUR 54 million, received under TLTRO III funding to OP Financial Group companies. This benefit was transferred on the basis of the collateral securities allocated to the companies and used for TLTRO III funding. The increase in other operating expenses was also explained by higher ICT costs and higher year-on-year service charges by OP Cooperative and charges of financial authorities.

Impairment loss on receivables, EUR 74 million, was EUR 21 million higher than a year ago. This increase in impairment loss on receivables was particularly explained by the tightened management of the measurement of exposures that have been non-performing for a long time. Final net loan losses recognised totalled EUR 46 million (55). Loss allowance was EUR 339 million (310) at the end of the financial year. Non-performing exposures accounted for 1.8% (2.2) of the exposures. Impairment loss on loans and receivables accounted for 0.25% (0.20) of the loan and guarantee portfolio.

Measures taken by OP Corporate Bank amid the Covid-19 crisis

OP Corporate Bank has provided its customers with the opportunity for a loan modification if the Covid-19 pandemic has caused disruptions in their business or repayment capacity.

OP Corporate Bank has ensured that services critical to society are available during the Covid-19 crisis too. OP Corporate Bank has enabled safe working conditions for its personnel in their workplace. Extensive remote working is also encouraged in those jobs where it is possible.

In October, OP Corporate Bank approved the principles of the future way of working, or hybrid work. These shared principles will help organisations and teams to plan how to work in diverse ways from multiple locations. OP Corporate Bank will in future combine in-office and remote work systematically, smoothly and productively while taking account of occupational safety. Customer needs and business goals primarily guide the types and locations of work.

2021 highlights

Restructuring

OP Corporate Bank plc's Baltic subsidiaries OP Finance AS (Estonia), OP Finance SIA (Latvia) and AB OP Finance (Lithuania) merged into their parent company OP Corporate Bank plc on 31 October 2021 through a cross-border subsidiary merger.

On 29 November 2021, OP Corporate Bank plc implemented a partial demerger in such a way that the shares of Pohjola Insurance Ltd, OP Corporate Bank plc's subsidiary engaged in non-life insurance business, were transferred to the direct ownership of OP Cooperative. Technically, this was implemented in such a way that OP Corporate Bank plc demerged through a partial demerger into OP Insurance Holding Ltd, an ancillary company wholly owned by OP Cooperative, on 29 November 2021, which merged into OP Cooperative through a subsidiary merger on 30 November 2021.

OP Corporate Bank plc sold all shares of its subsidiary OP Custody Ltd to OP Cooperative on 30 November 2021.

Corporate responsibility

Corporate responsibility is an integral part of OP Corporate Bank's and OP Financial Group's business and strategy. OP Financial 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 since 2009. OP Financial Group is a Founding Signatory of the Principles for Responsible Banking under the United Nations Environment Programme Finance Initiative (UNEP FI).

In May, OP published the annual Green Bond Report that contains a description of the green bond of EUR 500 million issued by OP Corporate Bank in February 2019, including examples of businesses and projects financed and the environmental impacts achieved. Proceeds raised with OP's first green bond were used to finance renewable energy, green buildings and sustainable land use. During 2020, it resulted in significant positive environmental impacts: almost 200,000 tonnes of avoided CO2e emissions in power generation, over 140,000 CO2e tonnes of carbon sinks through sustainable land use, production of 390 MW of renewable energy and 20,000 m2 of green certified building area.

In its loan decisions, OP Corporate Bank considers the ESG themes and risks related to environmental, social and governance factors in accordance with the EBA (European Banking Authority) Guidelines on loan origination and monitoring. In the new ESG analysis, customers are reviewed on a sector-specific basis in respect of the ESG themes. At the initial stage, the Guidelines will be applied to corporate customer exposures granted after 30 June 2021. In prior years, OP Corporate Bank has already conducted ESG analyses on its large customers, which have taken account of environmental, social and governance aspects. In corporate financing, OP Corporate Bank assesses the companies' climate change actions from the following perspectives: the company's impact on climate change, the relevance of the company's measures to mitigate climate change and the impacts of climate change on the company.

In October, OP Corporate Bank committed itself to ensuring that its corporate loan portfolios are carbon neutral by 2050.

In addition, OP Corporate Bank tightened its stance on coal in its financing and investments. In future, OP Corporate Bank will not provide finance for new coal power plants or coal mines, including companies that plan to build the low-carbon economy transition, which present a concrete plan to withdraw from coal. Neither does it finance new corporate customers with financial dependence of over 5% on coal as an energy source, measured in net sales. The only exceptions are corporate customers committed to making, its main market for corporate financing. Right now, OP Corporate Bank is creating a road map for reducing emissions significantly before 2050, especially in Finland, its main market for corporate financing.

The aim of the EU Taxonomy for sustainable finance that entered into force in 2021 is to determine the sustainability of financing and investment instruments. For 2021, information in compliance with the EU taxonomy is presented at Group level in OP Financial Group's Financial Statements Bulletin 2021 and OP Financial Group's Report by the Board of Directors 2021.

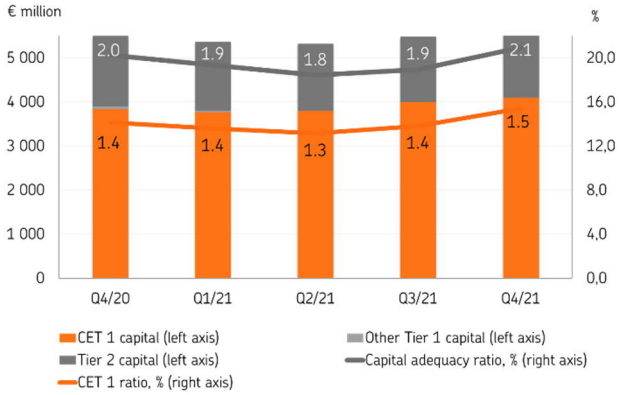
OP Corporate Bank has developed two products based on the international framework for sustainable finance: green loans and sustainability-linked loans. Green loans are designed for corporate customers that can make a commitment to using the borrowed funds to promote specific projects, while sustainability-linked loans are for corporate customers that are prepared to pursue sustainability-based performance targets agreed with the lender. These targets affect the loan margin. The combined exposures of these loans and limits increased to EUR 3.0 billion (1.5) in 2021.

To promote diversity, OP Financial Group's objective is that the proportion of both genders in defined executive positions is at least 40%. Women accounted for 30% (28) at the end of December.

More detailed information on corporate responsibility at OP Corporate Bank is reported as part of OP Financial Group's corporate responsibility reporting. Reporting on non-financial information for 2021 is published at Group level in OP Financial Group's Report by the Board of Directors. Corporate responsibility reporting based on the Core option of the GRI Standards is published at Group level in OP Financial Group's Annual Review 2021. The reporting also includes a review based on the TCFD framework (Task-force on Climate related Financial Disclosures).

Capital adequacy

Capital base and capital adequacy



Capital adequacy for credit institutions

OP Corporate Bank plc's CET1 ratio was 15.4% (14.1) on 31 December 2021.

As a credit institution, the company's capital adequacy is on a solid basis compared to the statutory requirements and those set by the authorities. The statutory minimum for the capital adequacy ratio is 8% and for the CET1 ratio 4.5%. The requirement for the capital conservation buffer of 2.5% under the Act on Credit Institutions increases in practice the minimum capital adequacy ratio to 10.5% and the minimum CET1 ratio to 7%.

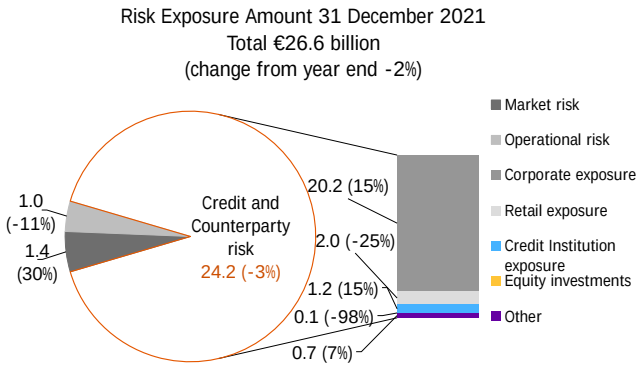
The CET1 capital totalled EUR 4.1 billion (3.8) on 31 December 2021. CET1 capital was increased by the earnings for the financial year.

On 31 December 2021, the risk exposure amount (REA) totalled EUR 26.6 billion (27.1), or 2.1% lower than a year earlier. In March, the ECB set a parameter factor for corporate exposures, based on the TRIM (Targeted Review of Internal Models), which increased the risk-weighted assets of corporate exposures. The amount of corporate exposures increased from the end of 2020. The revised Capital Requirements Directive and Regulation (CRR2) came into force in June, which increased counterparty risk associated with derivatives as anticipated. In September, OP Financial Group adopted calibrated parameters in retail and corporate exposures. This adoption slightly increased risk-weighted assets and slightly decreased expected loss. As a result of the partial demerger of OP Corporate Bank plc, EUR 3.9 billion in risk-weighted assets as insurance company holdings were removed from equity investments.

OP Corporate Bank plc is part of OP Financial Group, whose capital adequacy is supervised in accordance with the Act on the Supervision of Financial and Insurance Conglomerates. As part of OP Financial Group, OP Corporate Bank plc is supervised by the ECB. OP Financial Group presents capital adequacy information in its financial statements bulletin and interim and half-year financial reports in accordance with the

Act on the Amalgamation of Deposit Banks. OP Financial Group also publishes Pillar III disclosures.

The Finnish Financial Supervisory Authority (FIN-FSA) makes a macroprudential policy decision on a quarterly basis. In December 2021, the FIN-FSA reiterated its decision not to impose a countercyclical capital buffer requirement on banks.



OP Financial Group is in discussions with the ECB on reassessing the scope of application of internal models (IRBA, Internal Ratings-Based Approach). Based on the current estimate, the change in the scope of the IRBA may decrease OP Corporate Bank plc's CET1 ratio by around 0.5 percentage points. The final effect of the change and the implementation schedule will be specified after discussions with the supervisor and the approval process related to the scope of the IRBA.

Liabilities under the Resolution Act

Under regulation applied to crisis resolution of credit institutions and investment firms, the resolution authority is authorised to intervene in the terms and conditions of investment products issued by a bank in a way that affects an investor's position. The EU's Single Resolution Board (SRB) based in Brussels is OP Financial Group's resolution authority. The SRB has confirmed a resolution strategy for OP Financial Group whereby the resolution measures would focus on the OP amalgamation and on the new OP Corporate Bank that would be formed in the case of resolution.

On 14 May 2021, the resolution authority updated the Minimum Requirement for Own Funds and Eligible Liabilities (MREL) for OP Financial Group. The updated MREL is 25.8% of the risk-weighted assets (RWA) and 10.12% of the leverage ratio exposures (LRE). It took effect on 1 January 2022. The requirements include a combined buffer requirement of 3.5%.

As part of the MREL, the resolution authority has set a new subordination requirement for OP Financial Group in accordance with the Single Resolution Mechanisms Regulation. The subordination requirement determines how much of the MREL must be met with own funds or with subordinated liabilities. From the beginning of 2022, the subordination requirement supplementing the MREL will be 22% of the total risk exposure amount and 10.11% of the leverage ratio exposure. From the beginning of 2024, the subordination requirement will be 24% of the total risk exposure amount and 10.12% of the leverage ratio exposure.

OP Financial Group's buffer for the MREL was EUR 6.5 billion and for the subordination requirement EUR 1.1 billion. The MREL was based on the RWA and the subordination requirement on the LRE. The amount of senior non-preferred (SNP) bonds issued by OP Corporate Bank totalled EUR 3.9 billion. These bonds provide funds for OP Financial Group's subordination requirement.

Credit ratings

OP Corporate Bank plc's credit ratings on 31 December 2021

Rating agency	Short-term debt	Outlook	Long-term debt	Outlook
Standard & Poor's	A-1+	-	AA-	Stable
Moody's	P-1	Stable	Aa3	Stable

OP Corporate Bank plc has credit ratings affirmed by Standard & Poor's Global Ratings Europe Limited and Moody's Investors Service (Nordics) AB. When assessing the company's credit rating, credit rating agencies take account of the entire OP Financial Group's financial standing.

Risk exposure

OP Financial Group's risk-taking starts from the fact that the Group assumes risks that are mainly associated with executing the Group's mission. In its risk-taking, the Group emphasises moderation, responsibility and careful action. Risk-taking is directed and limited by means of principles and limits prepared by senior management and approved by Group Executive Management.

OP Financial Group has created a foundation for successful operations if it has diverse knowledge of factors affecting its customers' future, and skills in using this knowledge, in addition to capital of trust, financial capital and liquidity. Risk-taking is based on understanding matters affecting customers' future operations and success in the current business environment and in situations where the business environment is affected by an unexpected shock or change in trend.

OP Financial Group analyses the business environment as part of the continuous strategy process. Megatrends and future visions behind the strategy reflect driving forces that affect the daily activities, conditions and future of OP Financial Group and its customers. Such factors shaping the business environment include sustainable development and responsibility (ESG), demographic change in the population and fast technological progress.

For example, climate and environmental changes are considered thoroughly so that their effects on the customers' future success are understood. Through advice and business decisions, OP Financial Group encourages its customers in bolstering their sustainable and successful business in the future. At the same time, OP Financial Group ensures that its operations are profitable and in compliance with its core values in the long term.
Considering that OP Financial Group's business covers various areas of the financial sector on an extensive basis, unexpected external shocks may cause direct and indirect effects on the prosperity of OP Financial Group's customers and on the Group's premises, IT infrastructure and personnel that may come in many forms. If materialised, they may affect risk exposure, capitalisation, liquidity and the continuity of daily business in various ways. The Group makes the effects of such potential shocks visible by means of scenario work.

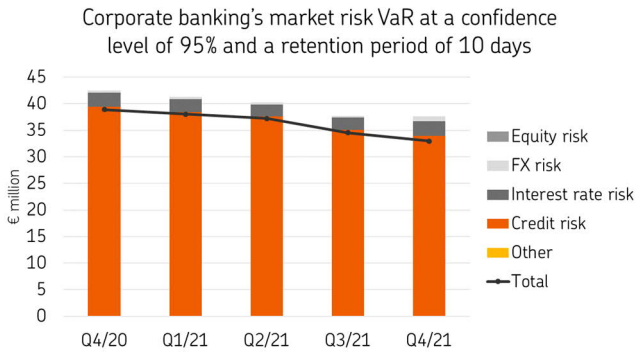
Operational risks were well managed at Group level, and the materialisation of OP Corporate Bank's operational risks resulted in EUR 5 million (2) in gross losses. For other risks, the risk exposure will next be examined in greater detail for Banking and Other Operations. Banking involves Corporate Banking and Capital Markets, Asset and Sales Finance Services and Payment Transfers as well as the Baltic operations.

Banking

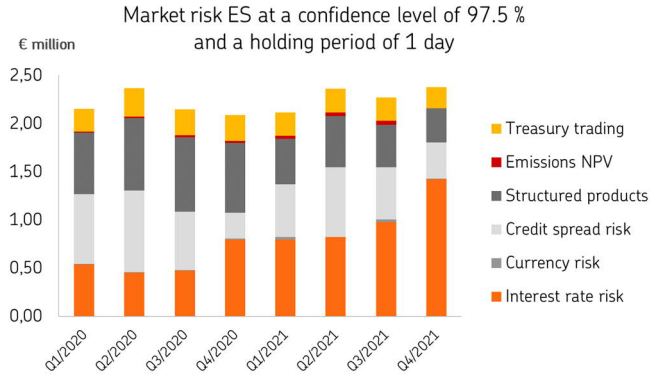
Major risks in banking are associated with credit risk arising from customer business, and market risk.

Credit risk exposure by Banking remained stable and credit risk remained moderate, despite the Covid-19 pandemic.

During the financial year, the market risk level of Banking's long-term investments decreased. No major changes were made to the asset class allocation during the financial year. The VaR, a measure of market risks, was EUR 33 million (39) on 31 December 2021. The VaR risk metric includes the liquidity buffer and banking's long-term bond investments as well as derivatives that hedge their interest rate risks.



Expected Shortfall (ES), a measure of market risk associated with the interest rate risk position of Markets and Treasury, increased slightly. Interest rate risk, in particular, and its proportion of the total risk increased clearly as a result of the market movements seen in the last quarter.



Banking's interest rate risk in the banking book measured as the effect of a one-percentage point change on a 12-month net interest income was EUR 56 million at the end of the financial year. A rise in interest rates increases interest income risk. Interest income risk is calculated for a one-year period by dividing the sum of the interest income risk for the next three years by three.

Forborne loans and non-performing receivables

	Performing forborne exposures (gross)		Non-performing receivables (gross)		Doubtful receivables (gross)		Loss allowance		Doubtful receivables (net)	
	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Over 90 days past due, € billion			0.18	0.13	0.18	0.13	0.09	0.08	0.09	0.05
Unlikely to be paid, € billion			0.31	0.49	0.31	0.49	0.09	0.13	0.22	0.35
Forborne exposures, € billion	0.19	0.25	0.14	0.10	0.32	0.34	0.09	0.05	0.24	0.30
Total, € billion	0.19	0.25	0.63	0.71	0.81	0.96	0.27	0.26	0.55	0.70

Key ratios	31 Dec 2021	31 Dec 2020
Ratio of doubtful receivables to exposures, %	2.29	2.99
Ratio of non-performing exposures to exposures, %	1.77	2.22
Ratio of performing forborne exposures to exposures, %	0.52	0.77
Ratio of performing forborne exposures to doubtful receivables, %	22.9	25.8
Ratio of loss allowance (receivables from customers) to doubtful receivables, %	41.5	32.1

On 31 December 2021, OP Corporate Bank plc had 7 (6) large customer exposures, totalling EUR 3.5 billion (2.7). Large customer exposure refers to the amount of exposures of an individual group of connected clients which, after allowances and other techniques applied to mitigate credit risks, exceeds 10% of the capital base covering customer risk. Own funds covering customer exposure means Tier 1 capital under CRR II.

Exposures by the Baltic Banking were EUR 3.7 billion (3.6), accounting for 9.3% (9.2) of total banking exposures of the Corporate Banking segment.

The distribution of loss allowance by sector is presented at Group level in OP Financial Group's Report by the Board of Directors and financial statements for 2021.

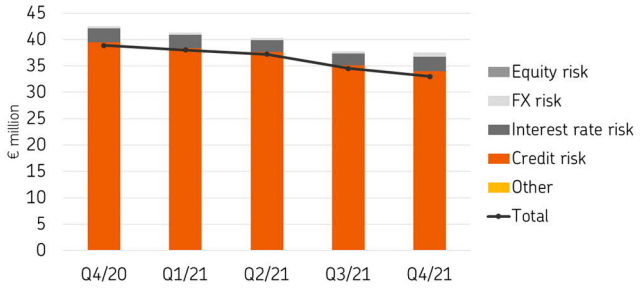
Other Operations

Major risks related to the Other Operations segment include credit and market risks associated with the liquidity buffer, and liquidity risks. The most significant market risk factor is the effect of credit spread changes on the value of notes and bonds included in the liquidity buffer.

OP Financial Group and OP Corporate Bank plc have a solid funding and liquidity position. The availability of funding has remained good.

The market risk of notes and bonds in the liquidity buffer (VaR with 95% confidence) decreased during the financial year. No major changes occurred in the asset class allocation. The VaR risk metric that measures market risk associated with the liquidity buffer was EUR 30 million (35) on 31 December 2021. The VaR risk metric includes the long-term bond investments within the liquidity buffer and the derivative contracts that hedge their interest rate risks.

Corporate banking's market risk VaR at a confidence level of 95% and a retention period of 10 days



OP Financial Group secures its liquidity through a liquidity buffer maintained by OP Corporate Bank and consisting mainly of deposits with central banks and receivables eligible as collateral for central bank refinancing. The liquidity buffer is sufficient to cover the need for short-term funding for known and predictable payment flows and in a liquidity stress scenario.

OP Financial Group monitors its liquidity and the adequacy of its liquidity buffer using, for example, the LCR (Liquidity Coverage Ratio). According to regulation, the LCR must be at least 100%. OP Financial Group's LCR was 212% (197) at the end of the financial year.

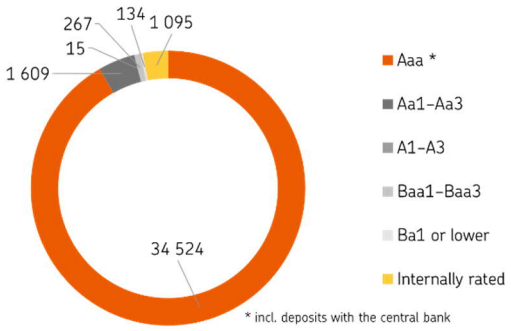
OP Financial Group monitors its long-term funding sufficiency, for example, by means of the Net Stable Funding Ratio (NSFR), which measures structural funding risk. In regulation, a minimum requirement of 100% has been set for the NSFR as of 30 June 2021. OP Financial Group's NSFR was 130% (123) at the end of the financial year.

Liquidity buffer

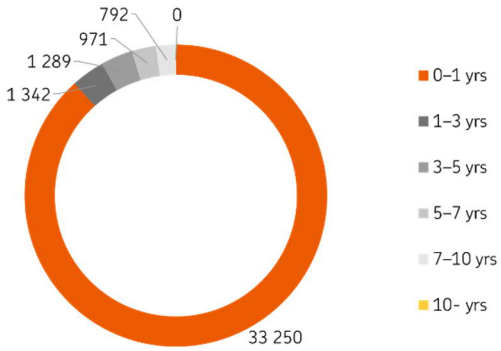
€ billion	31 Dec 2021	31 Dec 2020	Change, %
Deposits with central banks	32.6	21.6	51.3
Notes and bonds eligible as collateral	4.0	8.7	-53.5
Corporate loans eligible as collateral	0.0	0.0	-
Total	36.7	30.2	21.2
Receivables ineligible as collateral	1.0	1.0	-2.6
Liquidity buffer at market value	37.6	31.3	20.4
Collateral haircut	-0.3	-0.5	-
Liquidity buffer at collateral value	37.3	30.8	21.3

The liquidity buffer comprises notes, bonds and securitised assets issued by governments, municipalities, financial institutions and companies all showing good credit ratings.

Financial assets included in the liquidity buffer by credit rating on 31 December 2021, € million



Financial assets included in the liquidity buffer by maturity on 31 December 2021, € million



For OP Corporate Bank plc acting as OP Financial Group's central financial institution, OP cooperative banks and OP Cooperative with its subsidiaries form a significant customer group. Exposures of OP Financial Group entities represented 19.3% of OP Corporate Bank plc's exposures. These exposures increased during the year by EUR 3.7 billion. All exposures of OP cooperative banks and OP Cooperative are investment-grade exposures.

Financial performance by segment

OP Corporate Bank plc has published its interim reports and financial statements for prior financial years as consolidated financial statements under IFRS. As a result of the structural arrangements carried out in the fourth quarter of 2021, OP Corporate Bank plc no longer constitutes a reporting group under IFRS. In prior interim and financial reports, OP Corporate Bank Group's business segments were Corporate Banking and Insurance. Non-business segment operations were presented in the Other Operations segment. As a result of structural changes made in OP Corporate Bank, OP Corporate Bank is engaged in corporate banking and central banking.

OP Corporate Bank's new business segments include Corporate Banking and Capital Markets, Asset and Sales Finance Services and Payment Transfers as well as Baltics. Non-business segment operations are presented in the Other Operations segment. OP Corporate Bank plc prepares its segment reporting in compliance with its accounting policies.

Corporate Banking and Capital Markets

- Earnings before tax improved to EUR 261 million (190).
- Total income increased by 25.6% to EUR 420 million. Net interest income decreased by 3.9% to EUR 213 million. Net investment income increased to EUR 167 million (138). Value changes in Credit Valuation Adjustment (CVA) in derivatives owing to market changes improved earnings by EUR 15 million (–16).
- Total expenses increased by 11.9% to EUR 121 million (108). Personnel costs accounted for EUR 6 million of this increase and the EU stability contribution for EUR 2 million.
- In the year to December, the loan portfolio grew by 8.9% to EUR 15.2 billion.
- Impairment loss on receivables weakened earnings by EUR 38 million (36).
- The most significant development investments focused on the development of the equity savings account.

Key figures and ratios

€ million	Q1–4/2021	Q1–4/2020	Change, %
Net interest income	213	222	-3.9
Net commissions and fees	-31	-33	-7.4
Net investment income	167	138	21.3
Other operating income	70	8	815.2
Total income	420	334	25.6
Personnel costs	36	30	20.1
Depreciation/amortisation and impairment loss	7	6	14.7
Other operating expenses	78	72	8.2
Total expenses	121	108	11.9
Impairment loss on receivables	-38	-36	3.7
Earnings before tax	261	190	37.6
Cost/income ratio, %	28.9	32.4	3.5*
Return on assets (ROA), %	1.29	0.92	0.37*
Return on assets, excluding OP bonuses, %	1.29	0.92	0.37*
	31 Dec 2021	31 Dec 2020	Change, %
Loan portfolio, € billion	15.2	14.0	8.9

*Change in ratio

The Corporate Banking and Capital Markets business segment provides corporate and institutional customers with financing and liquidity management services and financing services for foreign trade. The services also range from the arrangement of debt issues, corporate finance services, equity, foreign exchange, bond, money market and derivative products, structured investment products and investment research. In addition to its own clients, the segment provides capital market products and services to corporate and retail clients through OP cooperative banks.

Investments by Corporate Banking in promoting sustainable finance increased the commitment portfolio of responsible finance to EUR 3 billion.

Demand for home loans supported the sale of interest rate protection products, but the activity level among corporate customers decreased over the previous year. A year ago, the Covid-19 pandemic increased rearrangement of finance and thereby the activity level of interest rate hedges by companies.

In October, OP launched the equity savings account for its customers on OP-mobile.

Financial performance for the financial year

The segment's earnings before tax improved to EUR 261 million (190). Total income increased by 25.6%. Total expenses increased by 11.9%. The cost/income ratio improved to 28.9% (32.4) year on year.

Net interest income decreased by 3.9% to EUR 213 million (222). The segment's loan portfolio increased by 8.9%, amounting to EUR 15.2 billion (14.0). Net commissions and fees increased to EUR –31 million (–33). Net commissions and fees include commissions paid to OP Financial Group.

Net investment income increased to EUR 167 million (138) as a result of higher income from derivatives business. Market changes, in particular the rise in long-term interest rates, reduced derivative receivables and their valuation adjustments recognised through profit or loss.

Other operating income increased to EUR 70 million (8). Other operating income was increased by a capital gain of EUR 18 million on the sale of OP Custody Ltd as well as the additional margin of EUR 45 million under TLTRO III funding.

Impairment loss on receivables weakened earnings by EUR 38 million (36).

Total expenses were EUR 121 million (108). Personnel costs rose by 20.1% to EUR 36 million due to higher provisions for performance-based bonuses. Other operating expenses increased by 8.2% to EUR 78 million (72). The EU stability contribution increased by EUR 2 million to EUR 14 million.

Asset and Sales Finance Services and Payment Transfers

- Earnings before tax improved to EUR 90 million (79).
- Total income increased by 22.3% to EUR 231 million. Net interest income increased by 20.5% to EUR 155 million.
- Total expenses increased by 11.4% to EUR 104 million (93). The EU stability contribution represented EUR 3 million of the increase.
- In the year to December, the loan portfolio grew by 3.4% to EUR 8.0 billion.
- Impairment loss on receivables weakened earnings by EUR 37 million (14).
- The most significant development investments involved the development of payment systems.

Key figures and ratios

€ million	Q1–4/2021	Q1–4/2020	Change, %
Net interest income	155	129	20.5
Net commissions and fees	58	51	13.3
Net investment income	0	0	0
Other operating income	18	9	102.3
Total income	231	189	22.3
Personnel costs	26	25	6.5
Depreciation/amortisation and impairment loss	2	4	-54.7
Other operating expenses	76	65	16.8
Total expenses	104	93	11.4
Impairment loss on receivables	-37	-14	160
OP bonuses to owner-customers	0	-2	-100
Earnings before tax	90	79	13.8
Cost/income ratio, %	44.9	49.3	4.4*
Return on assets (ROA), %	1.10	1.05	0.04*
Return on assets, excluding OP bonuses, %	1.10	1.09	0.01*
	31 Dec 2021	31 Dec 2020	Change, %
Loan portfolio, € billion	8.0	7.8	3.4
Deposits, € billion	14.9	12.4	20.5

*Change in ratio

The Asset and Sales Finance Services and Payment Transfers business segment provides consumers and companies with customer financing services, payment and liquidity management services, financing services for foreign trade and leasing and factoring services.

The most significant development investments of the business segment involved the upgrades of core payment systems. In addition, digital transaction services were updated and improved. The financial year involved upgrading, for example, online services of asset and sales finance services for end users in personal and corporate customer segments. In addition, OP enabled multi-banking for businesses as the first bank in Finland.

Financial performance for the financial year

The segment's earnings before tax improved to EUR 90 million (79). Total income increased by 22.3%. Total expenses increased by 11.4%. The cost/income ratio improved to 44.9% (49.3) year on year.

Net interest income increased by 20.5% to EUR 155 million. The increase was explained by an increase in net interest income from asset and sales finance solutions. Net commissions and fees increased to EUR 58 million (51). Favourable development in commission income from payment transfers, in particular, was behind the increase. Other operating income increased to EUR 18 million (9).

Other operating income was increased by the additional margin of EUR 7 million under TLTRO III funding. The loan portfolio grew in the year to December by 3.4% to EUR 8.0 billion (7.8). The deposit portfolio increased by 20.5% to EUR 14.9 billion (12.4).

Impairment loss on receivables weakened earnings by EUR 37 million (14).

Total expenses were EUR 104 million (93). Personnel costs rose by 6.5% to EUR 26 million due to higher provisions for performance-based bonuses. Other operating expenses increased by 11.4% to EUR 76 million (65). ICT costs increased by EUR 3 million year on year. The EU stability contribution increased by EUR 3 million to EUR 7 million.

Baltics

- Earnings before tax improved to EUR 20 million (15).
- Total income increased by 11.2% to EUR 42 million. Net interest income increased by 8.9% to EUR 33 million.
- Total expenses increased by 10.3% to EUR 22 million (20).
- In the year to December, the loan portfolio grew by 7.0% to EUR 2.4 billion.
- Impairment loss on receivables totalled EUR 0 million (3).
- The most significant development investments focused on the development of systems.

Key figures and ratios

€ million	Q1–4/2021	Q1–4/2020	Change, %
Net interest income	33	30	8.9
Net commissions and fees	9	7	30
Net investment income	0	0	-107.8
Other operating income	0	1	-93.1
Total income	42	38	11.2
Personnel costs	6	5	32.0
Depreciation/amortisation and impairment loss	2	2	-6.0
Other operating expenses	14	13	5.4
Total expenses	22	20	10.3
Impairment loss on receivables	0	-3	-115.4
Earnings before tax	20	15	37.7
Cost/income ratio, %	52.8	53.3	0.4*
Return on assets (ROA), %	0.71	0.54	0.17*
Return on assets, excluding OP bonuses, %	0.71	0.54	0.17*
	31 Dec 2021	31 Dec 2020	Change, %
Loan portfolio, € billion	2.4	2.2	7.0
Deposits, € billion	0.7	0.8	-14.0

*Change in ratio

With its local expertise, the Baltics segment provides corporate and institutional customers with financing and liquidity management services and financing services for foreign trade. OP Corporate Bank plc has branches in Estonia, Latvia and Lithuania.

In the year to December, the segment's loan portfolio grew by 7.0% to EUR 2.4 billion. The deposit portfolio decreased by 14% to EUR 0.7 billion.

The most significant development investments in 2021 focused on the system development of leasing products.

Financial performance for the financial year

The segment's earnings before tax improved to EUR 20 million (15). Total income increased by 11.2%. Total expenses increased by 10.3%. The cost/income ratio improved to 52.8% (53.3) year on year.

Net interest income increased by 8.9% to EUR 33 million (30). The loan portfolio grew by 7.0%. Net commissions and fees increased to EUR 9 million (7). Other operating income amounted to EUR 0 million (1).

Impairment loss on receivables totalled EUR 0 million (3).

Total expenses were EUR 22 million (20). Personnel costs rose by 32.0% to EUR 6 million due to higher provisions for performance-based bonuses. Other operating expenses increased by 5.4% to EUR 14 million (13). ICT costs were at the same level as a year ago.

Other Operations

- Earnings before tax totalled EUR –105 million (–55).
- The additional interest under TLTRO funding increased net interest income by EUR 103 million (18) and other expenses by EUR 106 million (0).
- Liquidity remained strong.

Key figures and ratios

€ million	Q1–4/2021	Q1–4/2020	Change, %
Net interest income	11	-59	-
Net commissions and fees	-5	-2	-
Net investment income	1	12	-90.0
Other operating income	19	12	62.1
Total income	27	-3	-
Personnel costs	4	3	30.1
Other expenses	127	15	765.8
Total expenses	132	18	628.6
Impairment loss on receivables	0	1	-20.0
Earnings before tax	-105	-55	-
Receivables and liabilities from/to the amalgamation's central cooperative and member credit institutions, net position, € billion	-13.1	-9.5	-

Functions supporting OP Financial Group, such as Group Treasury, are centralised within Other Operations. Group Treasury is responsible for the management of the funding and liquidity of member credit institutions and the central cooperative consolidated. It is also in charge of OP Financial Group's wholesale funding together with OP Mortgage Bank. Income generated by Other Operations derives mainly from net interest income and net investment income. The most significant risk categories are market risks and credit risk. In addition, income, expenses, investments and capital which have not been allocated to the business segments are reported under Other Operations.

Financial performance for the financial year

Other Operations earnings before tax amounted to EUR –105 million (–55). Earnings before tax at fair value were EUR –86 million (–18).

Net interest income was EUR 11 million (–59). The conditional additional margin of –0.5% exceeding the ECB's deposit facility rate under TLTRO III funding increased net interest income by EUR 103 million (18). The future cash flows of TLTRO III funding were changed in the cash flow measurement as a result of the fulfilment of the criteria for net lending performance that were the condition for the additional margin. In this change, the conditional additional margin for the current interest period was added to cash flows and the repayment periods of the funding were updated. The gross carrying amount of TLTRO funding was determined under IFRS 9 to correspond to the present value of the reassessed cash flows by discounting them by the original effective interest rates for tranches of finance. The resulting adjustment was recognised through profit or loss under IFRS 9.

Net interest income was weakened by the Tier 2 bonds issued in 2020 and by senior non-preferred bonds issued in 2021, according to the funding plan, whose credit spread is higher than that of senior bonds. Net interest income was also weakened by a non-recurring cost caused by the cancellation of interest rate hedge of a subordinated loan redeemed in April.

Net investment income totalled EUR 1 million (12). Net investment income included EUR 3 million (5) in capital gains on notes and bonds.

Expenses for the financial year increased by EUR 106 million (0) due to the transmission within OP Financial Group of the margin exceeding the ECB's deposit facility rate based on the TLTRO programme launched in 2021.

At the end of December, the average margin of senior and senior non-preferred wholesale funding and TLTRO funding was 18 basis points (20). The cost was lowered by TLTRO funding.

OP Corporate Bank participated in the seventh TLTRO III operation for EUR 5.0 billion in March and in the eighth operation for EUR 3.0 billion in June. OP Corporate Bank's TLTRO III funding amounted to a total of EUR 16.0 billion at the end of December.

OP Corporate Bank issued two senior non-preferred bonds in March and one in June, one in September and one in October. The bonds issued in March were worth EUR 500 million with a 5-year maturity and EUR 300 million with a 10-year maturity. The bonds issued in June and September were worth EUR 500 million with a 7-year maturity and the bond issued in October was worth GBP 400 million with a 5-year maturity.

During the financial year, OP Corporate Bank issued long-term bonds worth EUR 3.1 billion.

In 2020, the Governing Council of the European Central Bank modified the terms and conditions of TLTRO III to stimulate bank lending to those hardest hit by the Covid-19 pandemic. According to the modified conditions, the interest rate between 24 June 2020 and 23 June 2022 can be the ECB's deposit facility rate (–0.50% on the reporting date) minus 0.50%. For the subsequent loan maturity, the interest rate can be, at its best, the ECB's deposit facility rate. The reduced interest rate is conditional on fulfilling the criteria for net lending performance.

The interest rate for 24 June 2020–23 June 2021 was determined by the net lending performance period expired on 31 March 2021 and the interest rate for 24 June 2021–23 June 2022 was determined by the net lending performance period expired on 31 December 2021. In respect of the interest period for 24 June 2020–23 June 2021, the Bank of Finland has confirmed that OP Financial Group has fulfilled the criteria for net lending performance. In respect of the interest period for 24 June 2021–23 June 2022, OP Financial Group assesses that it has fulfilled the criteria. The final interest rate will be determined when the TLTRO III operation matures.

OP Financial Group has assessed that TLTRO III funding fulfils the terms of market-based financing and is treated according to IFRS 9.

On 31 December 2021, investments by the amalgamation's central cooperative and the member credit institutions in OP Corporate Bank were EUR 13.1 billion higher than funding borrowed by them from Group Treasury. This increase in the amount was affected by liquidity deposits made by member credit institutions at OP Corporate Bank and an increase in the amount of OP Mortgage Bank's covered bonds from the date of comparison, that has partly been channelled to Group Treasury as investments.

OP Financial Group's and OP Corporate Bank plc's funding position and liquidity is strong.

OP Corporate Bank redeemed on 12 April 2021 a perpetual subordinated loan of EUR 50 million that it issued in March 2005 and redeemed on 30 August 2021 a perpetual subordinated loan of EUR 40 million that it issued in November 2005.

Service development

OP Corporate Bank invests in developing its operations and improving customer experience on an ongoing basis. ICT investments make up a significant portion of the costs of developing these services.

ICT costs of OP Corporate Bank's service development and production maintenance totalled EUR 92 million (86). These include licence fees, purchased services, other external costs related to projects and inhouse work. Development costs totalled EUR 17 million (17). Development costs have not been capitalised (1).

In the spring of 2019, OP Financial Group concluded a five-year agreement with Tata Consultancy Services Ltd (TCS) on the production of ICT services. The agreement involves the ICT infrastructure services used by OP Financial Group, such as mainframe, server and capacity services. The agreement also includes data centre and cloud services. The transfer of ICT infrastructure services to TCS was completed as planned in February 2021.

In February 2021, OP Financial Group signed a new five-year agreement with CGI on producing IT application services in the fields of insurance and centres of excellence, in particular. In May, OP Financial Group signed a new five-year agreement with Accenture on producing IT application services especially in the field of banking. In June, OP Financial Group signed a new six-year agreement with Elisa on the production of workstation and support services. The agreements are part of increasing the effectiveness of and reforming practices and partnerships related to IT operations.

More detailed information on OP Corporate Bank's investments can be found under each business segment's text section in this Report by the Board of Directors.

Personnel and remuneration

On 31 December 2021, OP Corporate Bank plc had 767 employees (715).

Personnel at period end

	31 Dec 2021	31 Dec 2020
Corporate Banking and Capital Markets	290	277
Asset and Sales Finance Services and Payment Transfers	312	316
Baltics	125	83
Other Operations	40	39
Total	767	715

Variable remuneration applied by OP Financial Group and OP Corporate Bank consisted in 2021 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 in Note 9. Personnel costs.

Corporate governance and management

OP Corporate Bank plc's management system is based on business segments. Management of OP Corporate Bank is part of OP Financial Group's management system.

On 22 March 2021, the Annual General Meeting (AGM) of OP Corporate Bank plc elected OP Financial Group's President and Group Chief Executive Officer Timo Ritakallio as Chair of OP Corporate Bank's Board of Directors. As other Board members, the AGM elected OP Financial Group's Chief Financial Officer Vesa Aho, Helsinki Area Cooperative Bank's Managing Director Jarmo Viitanen, OP Keski-Suomi Managing Director Pasi Sorri and OP Turun Seutu Managing Director Olli-Pekka Saario.

Vesa Aho stepped down from the Board of Directors on 1-March 2022.

The AGM re-elected KPMG Oy Ab, an audit firm, to act as OP Corporate Bank's auditor for the financial year 2021, with Juha-Pekka Mylén, APA, acting as the chief auditor, appointed by KPMG Oy Ab.

OP Corporate Bank has published its Corporate Governance Statement in a separate report that is available at www.op.fi.

Joint and several liability

OP Corporate Bank plc is a member of the central cooperative (OP Cooperative) of an amalgamation, as referred to in the Act on the Amalgamation of Deposit Banks, and belongs to said amalgamation.

The amalgamation is formed by OP Corporate Bank, OP Cooperative as the central cooperative of the amalgamation, other companies belonging to the central cooperative's consolidation group, the central cooperative's member credit institutions and companies belonging to their consolidation groups, and credit institutions, financial institutions and service companies in which the abovementioned institutions jointly hold more than half of the voting rights.

The member credit institutions within the amalgamation (121 OP cooperative banks, OP Corporate Bank plc, OP Mortgage Bank and OP Retail Customers plc) and the central cooperative are jointly and severally liable for each other's debts. A creditor who has not received payment of an overdue amount (principal debt) may demand payment from the central cooperative when the principal debt falls due. In

such a case, the central cooperative must produce a statement referred to in said Act, showing the amount of liability apportioned to each member credit institution. This liability between the credit institutions is determined inproportion to the total assets shown in their most recently adopted balance sheets.

The member credit institutions, including OP Corporate Bank plc, are obliged to participate in any necessary support measures aimed at preventing another member credit institution from going into liquidation, and to pay a debt for another member credit institution as referred to in section 5 of the Act on the Amalgamation of Deposit Banks.

Furthermore, upon default of the central cooperative, a member credit institution shall have unlimited refinancing liability for the central cooperative's debts as laid down in the Co-operatives Act.

The central cooperative supervises its member credit institutions as specified in the Act on the Amalgamation of Deposit Banks, confirms the operating principles referred to in section 5 of said Act with which it must comply, and issues instructions to the member credit institutions on capital adequacy and risk management, good corporate governance and internal control to secure liquidity and capital adequacy, as well as instructions on compliance with uniform accounting policies in the preparation of the amalgamation's consolidated financial statements.

Protection afforded by the Deposit Guarantee Fund and the Investors' Compensation Fund

OP Corporate Bank plc belongs to the Deposit Guarantee Fund and to the Investors' Compensation Fund.

Under the law governing the Deposit Guarantee Fund, deposit banks as members of the amalgamation of cooperative banks (including OP Corporate Bank plc) are regarded as a single bank with respect to deposit guarantee. The Deposit Guarantee Fund reimburses a maximum total of EUR 100,000 to an individual account holder who has receivables from deposit banks belonging to the amalgamation of cooperative banks.

Under the law governing the Investors' Compensation Fund, the amalgamation of cooperative banks is considered to constitute a single credit institution in respect of investors' compensation. An investor's receivables are compensated up to a total maximum of EUR 20,000. The Fund does not cover losses incurred due to changes in the prices of securities or to wrong investment decisions. The Fund safeguards only retail investors' claims.

Deposit guarantee is the responsibility of the Financial Stability Authority operating under the Ministry of Finance.

Proposal by the Board of Directors for profit distribution

As shown in the financial statements of 31 December 2021, the company's distributable funds, which include EUR 214,597,413.35 in profit for the financial year and taxation-based provisions of EUR 1,300,008,870.48 recognised in transition to IFRS-based financial statements, totalled EUR 2,795,794,958.70. The company's distributable funds totalled EUR 3,127,175,795.76.

The Board of Directors proposes that a dividend of EUR 0.25 be distributed per share, totalling EUR 79,887,853.75, and that following dividend distribution, the remaining amount of EUR 134,709, 559.60 be recognised in the retained earnings account. Following dividend distribution, the company's distributable earnings total EUR 2,715,907,104.95 and its distributable funds total EUR 3,047,287,942.01.

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 distribution of funds, in the Board of Directors' view.

Events after the balance sheet date

On 27 January 2022, OP Corporate Bank plc issued a green bond worth EUR 500 million in accordance with its updated Green Bond Framework. The green bond will support the green transition, and proceeds raised with it will be allocated to sustainable corporate lending. Targeted at international responsible institutional investors, the bond is OP Corporate Bank's first senior non-preferred, unsecured green bond, which amounts to EUR 500 million and has a maturity of 5.5 years. Eligible sectors to be funded include renewable energy, green buildings and environmentally sustainable management of living natural resources and land use.

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 Corporate Bank's CET1 ratio will be an estimated 12%. Application of the floor is a temporary capital measure which will not affect OP Corporate 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 for 2022

In 2021, both the world and Finnish economy recovered from the crisis caused by the Covid-19 pandemic, and economic growth was exceptionally strong due to a weak reference level. In the last quarter of the year, the economy continued to grow strongly although the strongest recovery was over. Energy raw material prices rose clearly during the latter half of the year, which sped up inflation, reaching the fastest rate in decades in many countries. In Finland, inflation accelerated more moderately than in many other countries. Nevertheless, consumer prices rose at the fastest pace in a decade.

In the financial market, stock prices increased strongly during 2021. Towards the end of the year, inflation acceleration and the central bank's preparation for tightening monetary policy made markets nervous. Short-term interest rates remained low but longer-term rates rose gradually during the year.

The higher number of Covid-19 cases and the resulting restrictions are expected to temporarily slow down economic growth at the beginning of the year. Economic recovery is expected to continue but gradually slow down. An increase in inflation is predicted to level off but remain high throughout the early part of the year. The monetary policy will be gradually tightened but the European Central Bank is not expected to raise its benchmark interest rates during the first half of the year.

Economic uncertainty is expected to remain elevated. The Covid-19 pandemic may unexpectedly slow down economic growth or cause major bottlenecks in production. Even if the economic growth remained sluggish, the inflation period may prove to be longer than anticipated. This may tighten the financing conditions and increase uncertainty in the financial market.

A sudden worsening of the pandemic could affect OP Corporate Bank in three ways: economic uncertainty and uncertainty in the financial and capital markets would increase, a rise in financial difficulties among customers would increase credit risk and decrease the demand for services, and a worsening disease situation could make it more difficult for OP Corporate Bank to run its operations efficiently.

The most significant uncertainties affecting earnings performance due to the Covid-19 pandemic and inflation relate to changes in the interest rate and investment environment and to the developments in impairment losses. The war in Ukraine and the related sanctions and counter-sanctions will substantially increase the uncertainties associated with the economy and profit performance. In addition, future earnings performance will be affected by the market growth rate and change in the competitive situation.

Full-year earnings estimates for 2022 will only be provided at the OP Financial Group level, in its financial statements bulletin and interim and half-year financial reports.

All forward-looking statements in this Report by the Board of Directors expressing the management's expectations, beliefs, estimates, forecasts, projections and assumptions are based on the current view of the future development in the business environment and the future financial performance of OP Corporate Bank plc and its various functions, and actual results may differ materially from those expressed in the forward-looking statements.

Key income statement and balance sheet items

Key income statement items, € million	2019	2020	2021
Net interest income	291	322	412
Net commissions and fees	6	23	31
Net investment income	143	150	168
Other income	34	29	49
Personnel costs	56	62	72
Other expenses	175	177	248
Impairment loss on receivables	-50	-53	-74
OP bonuses to owner-customers	-2	-2	0
Earnings before tax	**191**	**228**	**267**

Key balance sheet items – assets, € million			
Cash and cash equivalents	11,910	21,764	32,789
Receivables from credit institutions	9,126	11,248	13,419
Derivative contracts	4,852	5,352	3,712
Receivables from customers	23,803	24,461	26,236
Investment assets	14,842	15,834	17,373
Property, plant and equipment, and intangible assets	39	28	17
Other items	680	1,121	1,274
Total assets	**65,252**	**79,809**	**94,820**

Key balance sheet items – liabilities and equity, € million			
Liabilities to credit institutions	15,334	28,888	42,660
Derivative contracts	3,852	4,274	2,669
Liabilities to customers	16,013	16,403	18,357
Debt securities issued to the public	22,860	21,931	22,630
Other liabilities	3,098	4,293	4,208
Shareholders' equity	2,623	4,020	4,296
Total liabilities and shareholders' equity	**65,252**	**79,809**	**94,820**

OP Corporate Bank plc's figures calculated under national legislation are presented as figures for 2019.

Consolidated earnings by quarter

€ million	Q1/ 2021	Q2/ 2021	Q3/ 2021	Q4/ 2021	Q1–4/ 2021	Q1–4/ 2020
Net interest income	77	73	81	181	412	322
Net commissions and fees	13	7	5	6	31	23
Net investment income	49	47	32	40	168	150
Other operating income	11	7	7	25	49	29
Total income	**150**	**134**	**125**	**252**	**661**	**523**
Personnel costs	16	19	15	21	72	62
Depreciation/amortisation and impairment loss	3	3	3	4	12	14
Other operating expenses	67	45	37	87	236	163
Total expenses	**87**	**67**	**55**	**112**	**320**	**240**
Impairment loss on receivables	2	10	-37	-49	-74	-53
OP bonuses to owner-customers	0	0	0	0	0	-2
Earnings before tax	**65**	**77**	**33**	**91**	**267**	**228**
Income tax	12	12	10	18	52	46
Profit for the financial year	**53**	**66**	**23**	**73**	**215**	**182**

Financial indicators

	2019	2020	2021
Return on equity (ROE), %	5.5	4.7	5.2
Return on equity at fair value (ROE), %	5.6	4.6	5.5
Return on assets (ROA), %	0.2	0.3	0.2
Equity ratio, %	4.0	5.0	4.5
Cost/income ratio, %	48.6	45.8	48.5
Average personnel	707	734	758
Share-related figures and ratios			
Equity per share, €	8.21	12.58	13.44
Dividend per share, €*	-	-	0.25
Dividend payout ratio, %*	-	-	37.23
Number of shares, year end	319,551,415	319,551,415	319,551,415

* Board proposal 2021

OP Cooperative holds all shares of OP Corporate Bank plc. The number of shares did not change during the financial year.

Formulas for key figures and ratios

The Alternative Performance Measures are presented to illustrate the financial performance of business operations and to improve comparability between reporting periods. The formulas for the used Alternative Performance Measures are presented below.

Alternative Performance Measures

Key figure or ratio	Formula	Description
Return on equity (ROE), %	Profit for the financial year / Shareholders' equity (average at beginning and end of financial year) x 100	The ratio describes how much return is generated on equity capital as a percentage of equity during the financial year.
Return on equity (ROE) excluding OP bonuses, %	Profit for the financial year + OP bonuses after tax / Shareholders' equity (average at beginning and end of financial year) x 100	The ratio describes how much return is generated on equity capital as a percentage of equity during the financial year, excluding OP bonuses paid to owner-customers that are charged to expenses.
Return on equity (ROE) at fair value, %	Total comprehensive income for financial year / Shareholders' equity (average at beginning and end of financial year) x 100	The ratio describes how much return (as show in comprehensive income) is generated on equity capital as a percentage of equity during the financial year.
Return on assets (ROA), %	Profit for the financial year / Average balance sheet total (average at beginning and end of financial year) x 100	The ratio describes how much return is generated on capital tied up on business during the financial year.
Return on assets (ROA) excluding OP bonuses, %	Profit for the financial year + OP bonuses / Average balance sheet total (average at beginning and end of financial year x 100	The ratio describes how much return is generated on capital tied up on business during the financial year, excluding OP bonuses paid to owner-customers that are charged to expenses.
Equity per share	Shareholders' equity / Share-issue adjusted number of shares on the balance sheet date	The ratio describes shareholders' equity per share.
Dividend per share	Dividends paid for the financial year / Share-issue adjusted number of shares on the balance sheet date x 100	Dividend per share describes the ratio of dividend to each share.
Dividend payout ratio, %	Dividend per share / Earnings per share x 100	The dividend payout ratio describes the proportion of dividend to earnings for the financial year.
Cost/income ratio, %	Total expenses / Total income x 100	The ratio describes the ratio of expenses to income. The lower that ratio, the better.
Loan portfolio	Balance sheet item Receivables from customers	The loan portfolio is presented in Receivables from customers in the balance sheet.
Ratio of impairment loss on receivables to loan and guarantee portfolio, %	Impairment loss on receivables / Loan and guarantee portfolio at end of financial year x 100	The ratio describes the ratio of impairment loss on receivables entered in the income statement to the loan and guarantee portfolio. The lower the ratio, the better.
Deposits	Deposits included in balance sheet item Liabilities to customers	Deposits are presented under Liabilities to customers in the balance sheet.

Coverage ratio, %	Loss allowance / Receivables from customers (on-balance-sheet and off-balance-sheet items) x 100	The ratio describes how much the amount of expected losses covers the amount of the liability.
Default capture rate, %	New defaulted contracts in stage 2 a year ago / New defaulted contracts during the financial year x 100	The ratio describes the effectiveness of the SICR (Significant Increase in Credit Risk) model, in other words how many contracts were in stage 2 before moving to stage 3.

Key indicators based on a separate calculation

Capital adequacy ratio, %	Total capital / Total risk exposure amount x 100	The ratio describes a credit institution's capital adequacy and shows the ratio of total capital to the total risk exposure amount.
Tier 1 ratio, %	Tier 1 capital / Total risk exposure amount x 100	The ratio describes a credit institution's capital adequacy and shows the ratio of Tier 1 capital to the total risk exposure amount.
CET1 ratio, %	CET1 capital / Total risk exposure amount x 100	The ratio describes a credit institution's capital adequacy and shows the ratio of CET1 capital to the total risk exposure amount.
Leverage ratio, %	Tier 1 capital (T1) / Exposure amount x 100	The ratio describes a credit institution's indebtedness and shows the ratio of Tier 1 capital to the total risk exposure amount.
Liquidity coverage requirement (LCR), %	Liquid assets / Liquidity outflows – liquidity inflows under stressed conditions x 100	The ratio describes short-term funding liquidity risk that requires the bank to have sufficient, high-quality liquid assets to get through an acute 30-day stress scenario.
Net stable funding ratio (NSFR), %	Available stable funding / Required stable funding x 100	The ratio describes a long-term liquidity risk that requires the bank to have a sufficient amount of stable funding sources in relation to items requiring stable funding sources. The objective is to secure the sustainable maturity structure of assets and liabilities applying a 12-month time horizon and to restrict excessive resort to short-term wholesale funding.
Capital adequacy ratio under the Act on the Supervision of Financial and Insurance Conglomerates*	Conglomerate's total capital base / Conglomerate's total minimum capital requirement x 100	The ratio describes the capital adequacy of the financial conglomerate and shows the ratio of the capital base to the minimum amount of the capital base.

Ratio of non-performing exposures to exposures, %	Non-performing exposures (gross) / Exposures at period end x 100	The ratio describes the ratio of customers with severe payment difficulties to the entire exposure portfolio. Non-performing exposures refer to receivables that are more than 90 days past due and other receivables classified as risky as well as forborne exposures related to such 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. Non-performing exposures are presented in gross terms; expected credit losses have not been deducted from them.
Ratio of doubtful receivables to exposures, %	Doubtful receivables (gross) / Exposures at period end x 100	The ratio describes the ratio of customers with payment difficulties to the entire exposure portfolio. Doubtful receivables refer to receivables that are more than 90 days past due and other receivables classified as risky as well as forbearance related to such receivables or to performing 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. In addition to non-performing forborne exposures, doubtful receivables include non-performing exposures reclassified as performing ones during their probation period or forbearance measures made into a performing agreement. Loan modifications due to reasons other than the customer's financial difficulties are not classified as doubtful receivables. Doubtful receivables are presented in gross terms; expected credit losses have not been deducted from them.
Ratio of performing forborne exposures to exposures, %	Performing forborne exposures (gross) / Exposures at period end x 100	The ratio describes the ratio of forborne exposures to the entire exposure portfolio. Performing forborne exposures include forborne exposures reclassified as performing ones during their probation period or forbearance measures made into a performing agreement. Loan modifications due to reasons other than the customer's financial difficulties are not classified as forborne exposures.
Ratio of performing forborne exposures to doubtful receivables, %	Performing forborne exposures (gross) / Doubtful receivables at period end x 100	The ratio describes the ratio of performing forborne exposures to doubtful receivables that include not only performing forborne exposures but also non-performing exposures. Performing forborne exposures include forborne exposures reclassified as performing ones during their probation period or forbearance measures made into a performing agreement. Loan modifications due to reasons other than the customer's financial difficulties are not classified as forborne exposures.
Ratio of loss allowance (receivables from customers) to doubtful receivables, %	Loss allowance for receivables from customers in the balance sheet / Doubtful receivables at period end x 100	The ratio describes the ratio of expected losses to all doubtful receivables. Doubtful receivables include non-performing exposures and performing forborne exposures.
Loan and guarantee portfolio	Loan portfolio + guarantee portfolio	The indicator describes the total amount of loans and guarantees given.
Exposures	Loan and guarantee portfolio + interest receivables + unused standby credit facilities	The sum of the loan and guarantee portfolio, interest receivables and unused standby credit facilities (undrawn loans and limits) is used as the basis for proportioning doubtful receivables and non-performing exposures.
Other exposures	Interest receivables + unused standby credit facilities	In addition to the loan and guarantee portfolio, exposures come from interest receivables and unused standby credit facilities (undrawn loans and limits).

*Transitional provisions have been taken into account in the FiCo solvency.

Capital adequacy and solvency

Capital adequacy for credit institutions

Capital base, € million	31 Dec 2021	31 Dec 2020
OP Corporate Bank plc's equity	4,296	2,709
Appropriations less deferred tax liability		1,300
Fair value reserve, cash flow hedge	1	-2
Common Equity Tier 1 (CET1) before deductions	4,297	4,007
Intangible assets	-12	-23
Excess funding of pension liability and valuation adjustments	-35	-26
Planned profit distribution	-80	
Shortfall of ECL minus expected losses	-72	-121
Insufficient coverage for non-performing exposures	-1	
CET1 capital	4,098	3,837
Hybrid capital to which transitional provision is applied		55
Additional Tier 1 capital (AT1)		55
Tier 1 capital (T1)	4,098	3,891
Debenture loans	1,308	1,602
Debentures to which transitional provision applies	141	
Excess of ECL minus expected losses	16	
Tier 2 capital (T2)	1,464	1,602
Total capital	5,562	5,494

Risk exposure amount, € million	31 Dec 2021	31 Dec 2020
Credit and counterparty risk	23,947	24,762
Standardised Approach (SA)	3,118	3,207
Central government and central banks exposure	40	44
Credit institution exposure	5	9
Corporate exposure	2,966	3,091
Retail exposure	52	0
Equity investments		3
Other	55	61
Internal Ratings-based Approach (IRB)	20,829	21,555
Credit institution exposure	1,194	1,029
Corporate exposure	17,242	14,455
Retail exposure	1,940	2,646
Equity investments	63	3,022
Other	391	402
Market and settlement risk (Standardised Approach)	1,380	1,062
Operational risk (Standardised Approach)	1,040	1,171
Valuation adjustment (CVA)	204	138
Total risk exposure amount	26,570	27,132

Ratios, %	31 Dec 2021	31 Dec 2020
CET1 capital ratio	15.4	14.1
Tier 1 ratio	15.4	14.3
Capital adequacy ratio	20.9	20.2

Ratios, fully loaded, %	31 Dec 2021	31 Dec 2020
CET1 capital ratio	15.4	14.1
Tier 1 ratio	15.4	14.3
Capital adequacy ratio	20.4	20.2

Capital requirement, € million	31 Dec 2021	31 Dec 2020
Capital base	5,562	5,494
Capital requirement	2,792	2,850
Buffer for capital requirements	2,770	2,643

The capital requirement comprises the minimum requirement of 8%, the capital conservation buffer of 2.5% and the changing capital conservation buffers by country for foreign exposures.

Financial statements

Income statement

EUR million	Notes	2021	2020
Net interest income	5	412	322
Net commissions and fees	6	31	23
Net investment income	7	168	150
Other operating income	8	49	29
Total income		**661**	**523**
Personnel costs	9	72	62
Depreciation/amortisation	10	12	14
Other expenses	11	236	163
Total expenses		**320**	**240**
Impairments loss on receivables	12	-74	-53
OP bonuses to owner-customers			-2
Earnings before tax		**267**	**228**
Income tax expense	13	52	46
Profit for the financial year		**215**	**182**

Statement of comprehensive income

EUR million	Notes	2021	2020
Profit for the financial year		**215**	**182**
Items that will not be reclassified to profit or loss			
Gains/(losses) arising from remeasurement of defined benefit plans	27	4	-2
Items that may be reclassified to profit or loss			
Change in fair value reserve			
Measurement at fair value	29	28	31
Cash flow hedge	29	-4	2
Income tax			
Items that will not be reclassified to profit or loss			
Gains/(losses) arising from remeasurement of defined benefit plans	23	-1	0
Change in revaluation reserve			
Measurement at fair value	29	-6	-6
Cash flow hedge	29	1	0
Total comprehensive income for the financial year		**238**	**207**

Balance sheet

EUR million	Notes	31 Dec 2021	31 Dec 2020
Cash and cash equivalents	14	32,789	21,764
Receivables from credit institutions	15	13,419	11,248
Derivative contracts	16	3,712	5,352
Receivables from customers	17	26,236	24,461
Investment assets	18	17,373	15,834
Intangible assets	19	12	24
Property, plant and equipment (PPE)	20	5	4
Other assets	22	1,274	1,094
Tax assets	23		26
Total assets		**94,820**	**79,809**
Liabilities to credit institutions	24	42,660	28,888
Derivative contracts	16	2,669	4,274
Liabilities to customers	25	18,357	16,403
Debt securities issued to the public	26	22,630	21,931
Provisions and other liabilities	27	1,874	1,654
Tax liabilities	23	339	330
Subordinated liabilities	28	1,994	2,309
Total liabilities		**90,524**	**75,789**
Equity capital	29		
Share capital		428	428
Fair value reserve		42	22
Other reserves		1,019	1,019
Retained earnings		2,807	2,551
Total equity capital		**4,296**	**4,020**
Total liabilities and equity capital		**94,820**	**79,809**

Statement of changes in equity

EUR million	Notes	Share capital	Fair value reserve	Other reserves	Retained earnings	Total equity capital
Balance at 31 December 2019		**428**	**-4**	**1,019**	**1,180**	**2,623**
IFRS adjustments	3				1,190	1,190
Balance at 1 January 2020		**428**	**-4**	**1,019**	**2,370**	**3,813**
Total comprehensive income for the period			26		180	**207**
Profit for the period					182	**182**
Other comprehensive income			26		-2	**24**
Balance at 31 December 2020		**428**	**22**	**1,019**	**2,551**	**4,020**

EUR million	Share capital	Fair value reserve	Other reserves	Retained earnings	Total equity capital
Balance at 1 January 2021	**428**	**22**	**1,019**	**2,551**	**4,020**
Total comprehensive income for the period		20		218	**238**
Profit for the period				215	**215**
Other comprehensive income		20		4	**23**
OP Corporate Bank plc's partial demerger 29 Nov 2021				-13	**-13**
Other*				51	**51**
Balance at 31 December 2021	**428**	**42**	**1,019**	**2,807**	**4,296**

* The Baltic subsidiaries OP Finance AS (Estonia), OP Finance SIA (Latvia) and AB OP Finance (Lithuania) merged into their parent company OP Corporate Bank plc on 31 October 2021 through a cross-border merger. The merger difference of EUR 51 million was recognised in retained earnings.

Cash flow statement

EUR million		Notes	2021	2020
Cash flow from operating activities				
Profit for the period			215	182
Adjustments to profit for the period			497	-117
Increase (-) or decrease (+) in operating assets			**-5,453**	**-5,139**
Receivables from credit institutions		15	-2,146	-3,032
Derivative contracts		16	-68	-31
Receivables from customers		17	-1,088	-694
Investment assets		18	-1,977	-942
Other assets		22	-173	-441
Increase (+) or decrease (-) in operating liabilities			**15,441**	**13,633**
Liabilities to credit institutions		24	13,275	13,456
Derivative contracts		16	225	-263
Liabilities to customers		25	1,954	390
Provisions and other liabilities		27	-13	51
Income tax paid			-23	-8
Dividends received			3	6
A. Net cash from operating activities			**10,680**	**8,556**
Cash flow from investing activities				
Disposal of subsidiaries, net of cash disposed				4
Purchase of PPP and intangible assets	19,20		1	-2
Proceeds from sale of PPE and intangible assets	19,20			0
B. Net cash used in investing activities			**1**	**2**
Cash flow from financing activities				
Subordinated liabilities, change		28	-290	978
Debt securities issued to the public, change		26	833	-950
Dividends paid			0	
Lease liabilities		21	-1	0
C. Net cash used in financing activities			**541**	**28**
Net change in cash and cash equivalents (A+B+C)			**11,222**	**8,587**
Cash and cash equivalents at period-start			**21,842**	**12,898**
Effect of foreign exchange rate changes			-173	357
Cash and cash equivalents at period-end			**32,891**	**21,842**

Presentation of cash flow statement items for 2020 has been changed to correspond to presentation under IFRS. Note 3 in the Financial statements bulletin describes transition to the financial statements under IFRS.

Notes to the financial statements

Contents

Note 1. OP Corporate Bank plc's accounting policies

General

OP Corporate Bank is one of the leading corporate banks in Finland. OP Corporate Bank has a well-established and broad customer base consisting of companies and institutions to which it provides an extensive range of banking services. In addition, OP Corporate Bank acts as the central bank for OP Financial Group's cooperative banks.

OP Corporate Bank plc belongs to OP Financial Group, which consists of 121 cooperative banks and their central cooperative, OP Cooperative, with its subsidiaries. OP Financial Group's member credit institutions comprise OP Corporate Bank plc, Helsinki Area Cooperative Bank, OP Retail Customers plc and OP Cooperative's member cooperative banks.

In accordance with the Act on the Amalgamation of Deposit Banks, the member credit institutions, OP Corporate Bank included, and OP Cooperative are ultimately jointly and severally liable for each other's debts and commitments. If a member credit institution's own capital is depleted to such a low level owing to losses that the criteria, specified in the Act, for being placed in liquidation are fulfilled, OP Cooperative has the right to collect from its member credit institutions extra contributions on the basis of the combined balance sheets previously adopted.

OP Corporate Bank is domiciled in Helsinki and the address of its registered office is Gebhardinaukio 1, FI-00510 Helsinki. The postal address of its registered office is P.O. Box 308, FI-00013 OP. A copy of OP Corporate Bank plc's financial statements is available at www.op.fi or the company's registered office.

OP Corporate Bank's parent company is OP Cooperative and OP Corporate Bank's accounts are included in its consolidated financial statements.

Copies of the financial statements of OP Cooperative are available at the following address: Gebhardinaukio 1, FI-00510 Helsinki. OP Financial Group's financial statements are available at www.op.fi or the company's registered office at Gebhardinaukio 1, FI-00510 Helsinki.

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

1 Basis of preparation

These financial statements were 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 Corporate Bank's notes also conform to the requirements of Finnish accounting and company legislation that complement IFRS regulations.

OP Corporate Bank plc's financial statements were prepared at historical cost, with the exception of financial assets and liabilities at fair value through profit or loss, financial assets at fair value through other comprehensive income, hedged items in fair value hedging (for hedged risk), derivative contracts and investment property measured at fair value. In addition, defined benefit pension plans are accounted for according to IAS 19.

The financial statements are presented in millions of euro. Number zero in the tables in Notes means that the item contains some balance but it is rounded off to zero. If nothing (blank) is presented in the item, the balance of the item is zero.

OP Financial Group presents Pillar III disclosures in compliance with EU Regulation No. 575/2013 of the European Parliament and of the Council in a separate OP Financial Group Risk and Capital Adequacy Report. A summary of OP Corporate Bank's capital adequacy is presented in OP Corporate Bank's Report by the Board of Directors.

2 Critical accounting estimates and judgements

The preparation of the financial statements in conformity with IFRS requires the management to make judgements, estimates and assumptions in the application of the accounting policies. The preparation of the 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.

2.1 Expected credit losses

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 the contract's maturity for non-maturing loans (revolving credit facilities)
- 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 personal 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 Financial Group'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 it is mainly the question of a large corporate exposure in stage 2 or 3 and on the watch list, 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. Loss allowance calculations are shown in Note 34. Loss allowance regarding receivables and notes and bonds.

2.2 Fair values of financial instruments

The management must assess when the market for financial instruments is not active. The management must also assess whether an individual financial instrument is actively traded and whether the price obtained from the market is a reliable indication of the instrument's fair value. When the fair value of financial instruments is determined using a valuation technique, management judgement is required to select the applicable valuation technique. Whenever market observable input data is not available for outputs produced by valuation techniques, the management must evaluate how much other information will be used (Note 33. Recurring fair value measurements by valuation technique.)

3 Foreign currency translation

OP Corporate Bank's financial statements are presented in euros, which is the company's functional and presentation currency. Non-euro transactions are recognised in euros at the exchange rate quoted on the transaction date or at the average exchange rate of the month of recognition. On the balance sheet date, non-euro monetary balance sheet items are translated into euros at the exchange rate quoted on the balance sheet date. Non-monetary balance sheet items measured at cost are presented at the exchange rate quoted on the transaction date.

The exchange rate differences arising from the translation of non-euro transactions and monetary balance sheet items into euros are recognised as foreign exchange gains or losses under Net investment income in the income statement (Note 7. Net investment income).

4 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 Fees that are regarded as compensation for the risk taken by the bank associated with the financial instrument and as being an integral part of the financial instrument's effective interest rate
Net commissions and fees	Commission income from lending, deposits, payment transactions, securities brokerage, securities issuance, mutual funds, asset management, legal services and guarantees. Commission expenses for lending, payment transactions, securities brokerage, securities issuance, investment management guarantees.
Net investment income	Realised capital gains and losses on financial assets recognised at fair value through other comprehensive income, interest income, currency valuations as well as impairment losses and their reversals. Fair value changes in financial instruments at fair value through profit or loss and dividends and holdings. In addition, interest income and expenses related to financial assets held for trading. Income from loans and receivables recognised at amortised cost, and impairment loss. Fair value changes in investment property, rents and other property-related expenses.
Other operating income	Central banking service fees and other operating income
Personnel costs	Wages and salaries, pension costs, social expenses
Other operating expenses	ICT production and development costs, purchased services, costs related to premises, charges of financial authorities, telecommunications, marketing, corporate responsibility and other expenses.
Impairment loss on receivables	Expected credit losses from customers, off-balance-sheet items and notes and bonds as well as final credit losses and their reversals.

5 Revenue recognition

5.1 Interest income

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 6.2.1 Amortised cost herein. 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.

The customer margin of the interest rate cap and interest rate corridor loans would accrue net interest income as the customer pays the additional margin related to the derivative clause (Note 5. Net interest income)

5.2 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.

In the Corporate Banking and Capital Markets segment, commissions and fees are charged from corporate, institutional and personal customers as well as OP Financial Group's internal actors. Commission income consists of that from lending, securities brokerage and issues, investment research and guarantees. In the Asset and Sales Finance Services and Payment Transfers segment, commissions are charged from personal customers and corporate customers. Commission income consists of that from lending, payment transactions and guarantees. Commission income consists of that from lending, payment transactions and guarantees. In the Baltics segment, commissions are charged from personal and corporate customers in Estonia, Latvia and Lithuania. The abovementioned commission items consist of several fee types whose performance obligations are fulfilled over time or at a point in time, according to the type of the fee. The performance obligations of lending, investment research and guarantee fees are mainly fulfilled over time while other fees at a

point in time. The amount of consideration for the services is the list price or a contractually stated price. Revenue from contracts with customers in the financial statements is grouped according to the segments (Note 6: Net commissions and fees).

Dividends are primarily recognised when they are approved by the General Meeting of Shareholders of the distributing company. Dividend income is shown in net investment income.

6 Financial instruments

6.1 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 (Note 33 Recurring fair value measurements by valuation technique).

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. The market is 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 on the balance sheet date. 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.

It is typical of illiquid instruments that their price calculated using a pricing model differs from the actual transaction price. However, the actual transaction price is the best evidence of the instrument's fair value. The Day 1 profit/loss, based on the difference between the actual transaction price and the price deriving from the pricing model that uses market prices, is recognised in the income statement over the term of the agreement or a shorter period taking account of the product's structure and counterparty. However, the non-recognised amount will be recognised as soon as there is a genuine market price for the instrument or a well-established pricing practice is created in the market. The amount of illiquid financial assets is insignificant in OP Corporate Bank's balance sheet.

6.2 Financial assets and liabilities

Note 14. Cash and cash equivalents, 15. Receivables from credit institutions, 16. Derivative contracts, 17. Receivables from customers, 18. Investment assets and 22. Other assets. Financial liabilities are shown in Notes 24. Liabilities to credit institutions, 25. Liabilities to customers, 26. Debt securities issued to the public, 27. Provisions and other liabilities and 28. Subordinated liabilities

6.2.1. 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 Corporate Bank 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 and are accounted for in accordance with IFRS 15 include fees charged for servicing a loan, for example.

OP Corporate Bank incorporates the impact of expected credit losses in the estimated future cash flows when calculating the credit-adjusted effective interest rate for financial assets that are considered to be purchased or originated credit-impaired at initial recognition (POCI).

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 Corporate Bank 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).

6.2.2. Initial recognition and measurement

At initial recognition, OP Corporate Bank 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.

6.3 Classification and subsequent measurement of financial assets

OP Corporate Bank classifies financial assets into the following categories:

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

6.3.1 Loans and notes and bonds

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

a) OP Corporate Bank'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 Corporate Bank classifies loans and notes and bonds 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. Interest income and expenses of held-for-trading notes and bonds and derivatives are presented in net investment income since.

Business model

A business model refers to how OP Corporate Bank manages its financial assets in order to generate cash flows. OP Corporate Bank'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 Corporate Bank 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 Corporate Bank holds corporate loans it has granted to collect contractual cash flows. For example, the objective of the business model of OP Corporate Bank's liquidity buffer is to collect contractual cash flows and to sell financial assets.

Change in the business model

Changes in the business model are expected rarely as a result of internal or external changes and they must be significant in terms of OP Corporate Bank's operations. OP Cooperative's Board of Directors decides on changes in the business model. The business model changes in case OP Corporate Bank acquires or transfers a business area or closes down it. The business model change is appropriately documented by the business unit concerned and is handled by Finance and Risk Management to determine the related accounting effects (incl. the effects on the ECL). The change of the objective of the entity's business model must be executed before the date of the reclassification.

The reclassification is applied prospectively from the reclassification date onwards. The reclassification date is the first date of the following reporting period, before which a decision on the reclassification has been made. Prior reporting periods are not adjusted retrospectively.

The table below shows the effects of various reclassifications on accounting:

Initial measurement category	New measurement category	Accounting effect
Amortised cost	FVTPL	Fair value is determined on the reclassification date. Any gain or loss on the difference that may arise between a financial asset previously measured at amortised cost and the fair value is recognised through profit or loss.
FVTPL	Amortised cost	The fair value on the reclassification date becomes a new gross carrying amount. The effective interest rate is determined based on the fair value on the reclassification date.
Amortised cost	FVOCI	Any gain or loss on the difference that may arise between a financial asset previously measured at amortised cost and the fair value is recognised in other comprehensive income. The effective interest rate and the amount of expected credit losses are not adjusted as a result of the reclassification.
FVOCI	Amortised cost	The fair value on the reclassification date becomes a new amortised cost. A gain or loss previously recognised in other comprehensive income is, however, derecognised from equity and recognised to adjust the fair value of a financial asset on the reclassification date. The effective interest rate and the amount of expected credit losses are not adjusted as a result of the reclassification.
FVTPL	FVOCI	The fair value on the reclassification date becomes a new carrying amount. The effective interest rate is determined based on the fair value on the reclassification date.
FVOCI	FVTPL	The fair value on the reclassification date becomes a new carrying amount. A gain or loss previously recognised in other comprehensive income is transferred as an adjustment due to the reclassification from equity through profit or loss on the reclassification date.

Cash flow characteristics

When OP Corporate Bank's business model is other than trading, OP Corporate Bank 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 Corporate Bank's financial assets are basic lending arrangements.

All loans to personal customers and some corporate loans granted by OP Corporate Bank 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 nominal amount and accrued (but unpaid) contractual interest, which may include reasonable additional compensation for the early termination of the contract.

OP Corporate Bank uses the SPPI Test solution to test the cash flow characteristics of notes and bonds. On the basis of its test result (pass/fail), the SPPI test is either passed or failed with no further reviews or the company reviews the cash flow characteristics using OP's internal guidelines before the decision on classification (further review required as the result). The solution identifies various elements in contract terms that affect whether the SPPI definition is satisfied.

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 Corporate Bank 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.

6.3.2 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.

6.3.3 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 Corporate Bank 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 Corporate Bank 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 Corporate Bank 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 Corporate Bank 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.

6.4 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 (Note 34. Loss allowance regarding receivables and notes and bonds). 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.

6.4.1 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 Corporate Bank applies the same definition of default as in internal credit risk models (IRB). OP Corporate Bank assesses default using its 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 Corporate Bank changed the non-performing exposure as the criterion for stage 3 impairment classification to replace the previous defaulted exposure. Comparatives have not been restated.

In addition, purchased or 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 are 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 whether the credit risk for each contract 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 Corporate Bank 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. The acceptable range has been modelled separately for personal customers and corporate customers. 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 rating 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.

In the assessment of a significant increase in credit risk, OP Corporate Bank has not applied a transitional rule on the assumption of low credit risk permitted by IFRS 9 to contracts, for which it is not possible without undue cost or effort, to calculate the original lifetime PDs.

OP Corporate Bank 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.

6.4.2 Measurement methods

Expected credit losses are mainly measured on a system basis using the PD/LGD method on a contract-specific basis for all personal and corporate customer exposures.
Additionally, the cash flow based ECL measurement method based on expert judgement is used for the largest corporate exposures in stage 3.

6.4.2.1 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 described above. 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. Change in GDP and real interest rates are used as macroeconomic explanatory factors in the lifetime PD model for corporate exposures. 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 2020). Comparatives have not been restated.

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 Corporate Bank's economists update macroeconomic scenarios on a quarterly basis and the scenarios are the same that OP Corporate Bank uses otherwise in its financial planning. Macroeconomic scenarios span 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 the 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 Corporate Bank 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 Corporate Bank's best view of potential scenarios and outcomes.

6.4.2.2 Cash flow based ECL method based on customer-specific expert assessment

The target group of customers subject to the expert ECL testing method are R-rated corporate counterparties on the watch list, whose exposures have, in general, been moved to Stage 2 or 3 of ECL calculation. Such expert assessment is performed in connection with a rating or credit decision.

The forward-looking information used in the calculation is part of the credit rating assessment and rating proposal by a credit analyst that cover developments in business, markets, competitive situation and the forecast cash flow. The calculation also takes account of the scenarios describing the effect of macroeconomic variables (upside, baseline and downside), on the basis of which the customer's weighted expected credit loss is calculated. The scenarios used in the PD/LGD model are utilised in the determination of the scenarios.

When the customer included in the ECL measurement based on the customer-specific expert assessment does no longer meet the criteria for default and has been identified and classified as a 'performing' obligor, it is excluded from this method and returns to be included in the ECL measurement based on the normal PD/LGD model.

6.4.3 Impairment of notes and bonds

The expected loss on notes and bonds recognised through other comprehensive income is recognised through profit or loss and to adjust the fair value reserve.

OP Corporate Bank uses a model in the calculation of the expected credit loss on notes and bonds that is based on credit rating information.

In the model, credit ratings are sought for purchase lots on the purchase date and the reporting date, and they are converted into PD figures. OP Corporate Bank primarily uses the averages of external credit ratings and secondarily internal credit ratings in case no external credit ratings exist.

The PDs correspond to the actual historical default rates by credit rating for each period from the date of issuing the credit rating. The historical data, for which the determined equivalence is based on, is comprehensive and on a long-term basis. The LGDs also correspond to the studied historical actuals by investment class/collateral type (seniority, covered bond status) and these are not separately assessed on an issuer- or investment-specific basis. Because external credit ratings measure total credit risk (ECL), not PD, the LDG in these cases affect only the division of the ECL between PD and LGD components.

6.4.3.1 Classification of notes and bonds into impairment stages

Investments whose 12-month PD has doubled in such a way that the change is at least 0.2 percentage points, an investment is subject to forbearance measures or its payments are over 30 days past due are transferred to stage 2. Investments related to an issuer in default are classified into stage 3 if its payments are over 90 days past due or if the customer is a customer in potential default.

6.4.4 Impairment of off-balance-sheet items

Several products provided by OP Corporate Bank include a limit, credit facility or another off-balance-sheet loan commitment as a standard feature or a feature in some stage of the product lifecycle. For example, revolving credit facilities, such as credit cards and accounts with credit facility, include both a loan and an undrawn commitment component. Moreover, OP Corporate Bank is an issuer in various guarantee contracts, such as financial guarantees and other commercial guarantees or guarantees given to authorities, to all of which IFRS 9 impairment rules apply. For loan commitments and financial guarantee contracts, the date that OP Corporate Bank becomes a party to the irrevocable commitment shall be considered to be the date of initial recognition for the purposes of applying the impairment requirements. Accordingly, only OP Corporate Bank's binding items are taken into account in the calculation of expected credit losses.

The expected credit loss is calculated for these items using the same principles as for loans. Likewise, increases in significant credit risk are assessed on the same grounds. OP Corporate Bank models EAD for such products that forecasts exposure at default. It includes both the utilisation rate and credit conversion factor. In addition, a maturity model is applied to contracts valid until further notice. The model takes account of cases where OP Corporate Bank has a contractual ability to demand repayment and cancel the undrawn commitment but it does not limit OP Corporate Bank's exposure to credit losses during the contractual notice period.

6.4.5 Recognition of expected credit losses

OP Corporate Bank 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 Corporate Bank 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.

6.4.6 Write-off

A write-off constitutes a derecognition event. When OP Corporate Bank 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 when the final meeting of the bankruptcy estate has been held, debt rescheduling or financial restructuring 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.

6.5 Cash and cash equivalents

Cash and cash equivalents consist of cash and receivables from credit institutions repayable on demand (Note 14. Cash and cash equivalents).

6.6 Classification and subsequent measurement of financial liabilities

Financial liabilities comprise deposits and other liabilities to credit institutions and customers, 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. Liabilities held for trading also include obligations to deliver securities to the counterparty which have been sold but which are not owned at the time of selling (short selling).

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

OP Corporate Bank 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.

An exchange between OP Corporate Bank and original lenders of financial liabilities with substantially different terms must be accounted for as an extinguishment of the original financial liability. In such a case, any costs or fees incurred are recognised as part of the gain or loss on the extinguishment. If the exchange or modification is not accounted for as an extinguishment, the amortised cost of the modified financial liability will be recalculated by discounting the modified contractual cash flows using the original effective interest rate. Changes in the amortised cost of the financial liability is recognised through profit or loss. Costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability. OP Corporate Bank has not made any exchanges of financial liabilities for the existing financial liabilities.

6.6.1 Effective interest rate of TLTRO III loans

The effective interest rate has been calculated on TLTRO loans based on management judgement related to the fulfilment of net lending criteria for upcoming review periods. If changes occur later in this management judgement, they will be treated as changes in the loan's carrying amount. The gross carrying amount of the loan is recalculated in such a way that it corresponds to the present value of the reassessed cash flows that is discounted at the loan's original effective interest rate. The resulting adjustment is recognised through profit or loss.

In 2021, the conditional additional margin of –0.5% exceeding the ECB's deposit facility rate under TLTRO III funding increased net interest income by EUR 103 million (18). The future cash flows of TLTRO III funding were changed in the cash flow measurement as a result of the fulfilment of the criteria for net lending performance that were the condition for the additional margin. In this change, the conditional additional margin for the current interest period was added to cash flows and the repayment periods of the funding were updated. The gross carrying amount of TLTRO funding was determined under IFRS 9 to correspond to the present value of the reassessed cash flows by discounting them by the original effective interest rates for tranches of finance. The resulting adjustment was recognised through profit or loss under IFRS 9.

Note 5. Net interest income presents the revenue recognition of the conditional additional margin exceeding the ECB's deposit facility rate under TILTRO III funding. In the segment report, the revenue recognition of the additional margin is presented in net interest income of the Other Operations segment, from where it was allocated to other operating income of the Corporate Banking and Capital Markets and Assets and Sales Finance Services and Payment Transfers segments through other operating expenses of the Other

Operations segment. OP Corporate Bank's Treasury passed on the interest benefit of EUR 54 million to other OP Financial Group companies. This interest benefit is presented in other operating income.

6.7 Netting

Financial assets and liabilities are offset in the balance sheet if OP Corporate Bank 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 (Note 36. Financial assets and liabilities offset in the balance sheet or subject to enforceable master netting arrangements or similar agreements).

6.8 Derivative contracts

Derivative contracts are classified as hedging derivative contracts and derivative contracts held for trading. They include interest rate, currency, equity, commodity and credit derivatives. Derivatives are always measured at fair value (Note 16. Derivative contracts).

Standardised OTC derivative transactions entered into with financial counterparties are cleared in London Clearing House, in accordance with the EMIR regulation (EU 648/2012). In the model used, the central counterparty (CCP) will become the derivatives counterparty at the end of the daily clearing process. Depending on the clearing broker, the settled-to-market (STM) or collateralised-to-market (CTM) practice is used as the settlement model. In both models, daily payments of derivatives are offset with the central counterparty. In addition, the fair value change of derivatives (variation margin) is either paid or received in cash. In the STM model, the daily payment is determined on a contractual basis as final payment and part of the derivative contract's cash flows. The daily payment is recognised as a fair value change through profit or loss. In such a case, the derivative contract involves no fair value change other than the valuation difference between OP and the CCP. The difference is recognised in derivative assets or derivative liabilities (Sum of net liability positions) in the balance sheet. The CTM model differs from the STM model in such way that the daily payment has not on a contractual basis defined as the final payment but as collateral. It is, however, offset with the fair value of the derivative in the balance sheet. Other derivatives are presented in the balance sheet on a gross basis, in which case positive value changes are presented as derivative contracts under assets and negative value changes as derivative contracts under liabilities.

6.8.1 Hedging derivatives

OP Corporate Bank has prepared methods and internal principles used for hedge accounting, whereby a financial instrument can be defined as a hedging instrument. In accordance with the hedging principles, OP Corporate Bank can hedge against interest rate risk, currency risk and price 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. In OP Corporate Bank, the hedgeable risk categories are fair value and cash flow interest rate risks as well as currency risk.

Contracts are not accounted for according to the rules of hedge accounting if the hedging relationship between the hedging instrument and the related hedged item, as required by IAS 39, does not meet the criteria of the standard. OP Corporate Bank also enters into derivative contracts which are in fact used to hedge against financial risks but which do not fulfil these criteria.

6.8.2 Derivatives held for trading

The difference between interest received and paid on interest rate swaps held for trading is recorded in Net investment income in the income statement and the corresponding interest carried forward is recognised in Derivative contracts in the balance sheet. Changes in the fair value of derivatives held for trading are recorded under Net investment income in the income statement. Derivatives are carried as assets under Derivative contracts when their fair value is positive and as liabilities under Derivative contracts when their fair value is negative.

6.9 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 instrument and the hedged item. The hedge is considered highly 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%. Due,

however, to the Interest Rate Benchmark Reform, if the real result of the retrospective effectiveness test is outside of the limits concerned, the central cooperative consolidated assesses whether hedge accounting can continue or be discontinued. This includes that hedging is still expected to be prospectively effective and the hedging relationship effectiveness can be calculated reliably. When assessing proactive effectiveness testing whether hedge is still highly probable, the reference rate will not be changed due to the Interest Rate Benchmark Reform. The effectiveness test also involves assessing any potential effects of market participants following the Reform on OP Corporate Bank's hedging relationship. OP Corporate Bank will stop applying the changes to hedging relationship effectiveness tests when uncertainty due to the Interest Rate Benchmark Reform ceases to affect cash flows based on reference rate of a hedged item or hedging derivative or when the hedging relationship ceases to exist. OP Corporate Bank applies hedge accounting based on IAS 39 and the related changes caused by the Interest Rate Benchmark Reform.

OP Financial Group set up a Reference Interest Rate Committee tasked with monitoring the progress of the Interest rate Benchmark Reform and its effects on OP Corporate Bank too. OP Financial Group has made a business continuity plan required by the Benchmarks Regulation that determines a substitute rate for contracts if no reference rates are not available or where the existing contract terms by product are identified. The plan is updated as the Reform progresses. OP Corporate Bank will adopt reformed reference rate in new contracts, based on market practice. When it comes to the old portfolio of contracts, the changes will be implemented by adopting practices applied in the market to replace IBORs.

6.9.1 Fair value hedges

Fair value hedging against interest rate risk involves long-term fixed-rate debt instruments (such as central bank debt, own issues and certain term deposit issues), individual bond and loan portfolios, as well as individual loans. OP Corporate Bank applies the fair value portfolio hedging model to hedging interest rate corridor loans. OP Corporate Bank uses interest rate options, forward exchange contracts and interest-rate and currency swaps (OTC swaps) as hedging instruments. Hedging against foreign currency risk applies to Non-life Insurance's equity fund investments.

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 hedging instrument and the hedged item are recorded in banking in the income statement under net interest income and net investment income. These are recorded in net investment income in Non-life Insurance. Any ineffectiveness that may arise from a hedge relationship may be caused by the timing differences between the cash flows of the hedging instrument and the hedged item, and it is correspondingly recognised in the abovementioned items.

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 makes it possible for the market participants to continue using the Euribor after 1 January 2020, covering both the existing and new contracts. OP Corporate Bank 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 as a second reference rate. For these reasons, OP Corporate Bank does not consider that the reference rate change would directly affect fair value hedges where the Euribor is the reference rate.

6.9.2 Cash flow hedges

A cash flow hedge is a hedge of the exposure to the variability attributable to a particular risk associated with variable-rate debt or other variable-rate assets and liabilities. In addition, cash flow hedges are used to hedge the future interest flows of the loan portfolio defined on the basis of reference interest rate linkage. Interest rate swaps are used as hedging instruments, for example.

Derivative contracts which are documented as cash flow hedges and provide effective hedges are measured at fair value. The effective portion of changes in the fair value of the hedging instrument is recognised in other comprehensive income. Any ineffectiveness that may arise from a hedge relationship may be caused by the timing differences between the cash flows of the hedging instrument and the hedged item, and it is recognised in net interest income in the income statement. Fair value changes recognised in equity are included in the income statement in the period when hedged items affect net income.

OP Corporate Bank has assessed to what extent cash flow hedges are dependent on the uncertainty associated with the Interest rate Benchmark Reform on the reporting date. Hedged items and hedging derivatives continue indexing in respect of the reference interest rate that is not changed and whose quotations continue on a daily basis and whose cash flows are changed between counterparties as before. The new reference rate is expected to be replaced with the LIBOR. This transition and the new reference rate still involve uncertainty that may later affect the hedging relationship effectiveness or the assessment of the highly probable term. In respect of cash

flow hedges either, OP Corporate Bank does not see that the Reform would cause any uncertainty with timing or Euribor cash flows on the reporting date of 31 December 2021.

7 Investment property

Investment property is land and/or buildings or part thereof held to earn rental income or for capital appreciation. Property, a minor part of which is used by the owner company or its personnel, is also accounted for as investment property. However, a part of property used by the owner company or its personnel is not accounted for as investment property if the part can be sold separately. Investment property is shown as investment assets in the consolidated balance sheet (Note 18. Investment assets).

Investment property is initially recognised at cost which includes transaction costs. It is subsequently carried at fair value. Investment property under construction is also measured at fair value only if the fair value can be determined reliably. Any changes in fair value are recognised under Net investment income in the income statement.

If no comparable market data is available on the actual transaction prices of the property comparable with the property under review, OP Corporate Bank uses the income approach and internal methods based on property-specific net income to determine the fair value of commercial, office and industrial premises. OP Corporate Bank uses both its internal and external information in the income approach. A property's net income comprises the difference between rental income and maintenance charges and it is based on income under current leases or, if no lease is in force, on average market rents. Expenses deducted from income are mainly based on actual expenses. Assumption of underutilisation of the property is also taken into account in the calculation. For the income approach, OP Corporate Bank obtains information on market rental and cost levels from sources outside OP Corporate Bank, in addition to its own expertise. The return requirements for investment property holdings are determined on the basis of the property's purpose of use, location and condition/modernness and are based on market data provided by an external expert.

The fair value of residential buildings and land areas is primarily determined using the market approach, based on information on the actual transaction prices of similar properties and on OP Corporate Bank's internal expertise. In the fair value of undeveloped plots, OP Corporate Bank has taken account of the planning and market situation at the time of appraisal. The fair value of major property holdings is based on valuation reports drawn up by Authorised Property Valuers. External valuers use a cash flow analysis as the basis for their appraisal (Note 33. Recurring fair value measurements by valuation technique).

8 Intangible assets

Information systems and other intangible assets are presented in the intangible assets group on the balance sheet (Note 19. Intangible assets).

8.1 Other intangible assets

Other intangible assets are measured at cost less accumulated amortisation and any impairment losses. In general, computer software and licences are amortised over 4 years and other intangible assets over 5 years.

The development costs of internally generated intangible assets (software) are capitalised from the time when they can be determined reliably, completing the asset is technically feasible and the asset can be used or sold and it has been demonstrated that the software will generate future economic benefit. The capitalised expenditure includes, for example, licence fees, purchased services, other external costs related to projects and inhouse work. The asset will be amortised from the time it is ready for use. An asset that is not yet ready for use is assessed annually for impairment. Research costs are recognised as expenses for the financial year.

8.2 Cloud computing arrangements

In cloud computing arrangements, in other words Software as a Service (SaaS) or Infrastructure as a Service (IaaS), the software vendor has partial or full control over the software or service concerned, and OP Corporate Bank does not capitalise fees for software or services controlled by the vendor as intangible assets.

The development costs of a cloud computing arrangement, before its implementation, are recognised in prepayments under other assets. The amount capitalised in prepayments constitutes costs related to the implementation project and customisation that are performed by the service provider before the service provider is able to produce the service for OP Corporate Bank. Costs capitalised in prepayments are an integral part of the service and they are not separable from the service itself. Prepayment costs are spread over the contract period from the date when the service is ready for use.

9 Property, plant and equipment

Property, plant and equipment (PPE) assets are carried at cost less depreciation and any impairment losses. These assets are depreciated on a straight-line basis over their estimated useful lives. Land is not subject to depreciation. Subsequent expenditures are capitalised at the asset's carrying amount only if it is probable that the asset will generate greater economic benefits than initially estimated (Note 20. Property, plant and equipment).

The estimated useful lives are mainly as follows:

Buildings	20–50 years
Machinery and equipment	3–10 years
ICT hardware	3–5 years
Cars	5–6 years
Other PPE assets	3–10 years

The assets' residual value and useful lives are reviewed on each balance sheet date and adjusted as appropriate if expectations differ from previous estimates with respect to economic benefits.

9.1 Impairment of PPE and intangible assets

On each balance sheet date, OP Corporate Bank assesses whether there is any indication of an asset's impairment. If such indication exists, the amount recoverable from the asset will be estimated. Regardless of the existence of such indication, the recoverable amount is annually estimated for assets not yet available for use, goodwill and intangible assets with indefinite useful lives (brands). An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its future recoverable amount.

The recoverable amount is the higher of an asset's fair value less costs to sell (net selling price) or value in use. The recoverable amount is primarily determined on the basis of the asset's net selling price, but if this is not possible, the asset's value in use must be determined. The asset's value in use equals the present value of future cash flows expected to be recoverable from the asset. The discount rate used is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset. The need for impairment of the annually tested assets stated above is always determined on the basis of value-in-use calculations.

If the asset's net selling price cannot be determined and the asset does not generate cash flows independent of other assets, the need for impairment will be determined through the cash-generating unit, or the business segment or its company, to which the asset belongs. In such a case, the carrying amounts of the unit's assets are compared with the entire unit's recoverable amounts.

An impairment loss is reversed if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset may not exceed the carrying amount of the asset that would have been determined had no impairment loss been previously recognised. Impairment loss on goodwill may not be reversed under any circumstances.

In respect of property in own use, OP Corporate Bank assesses as part of the financial statements whether there is any indication of an impaired property. Such indication includes a significant reduction in the market value and evidence of non-marketability or physical damage. If the income probably generated in the future by property in own use is expected to be lower than its acquisition cost not depreciated, the resulting difference will be impairment loss and charged to expenses.

10 Leases

At the inception of the lease, OP Corporate Bank assesses whether the contract concerned is a lease or contains a lease. It is the question of a lease treated under IFRS 16 if the following conditions are fulfilled in all respects:

- The contract is based on control over an identified asset in such a way that OP Corporate Bank companies or its employees have the right to decide on the use of the asset throughout the lease period when OP Corporate Bank is the lessee and the customer and its Group companies have decision-making powers related to the use of the asset when OP Corporate Bank is the lessor
- The contract includes rights and obligations and related payments

- The asset identified in the contract is used only by OP Corporate Bank companies or employees when OP Corporate Bank is the lessee, and by the customer or its Group companies when OP Corporate Bank is the lessor.

Recognition of assets leased out

On the date of inception, OP Corporate Bank classifies leased assets as finance leases or operating leases depending on the substance of the transaction. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incident to ownership to the lessee. All other leases are classified as operating leases. Lease classification is performed at the inception of the lease.

Assets leased out under finance lease are recorded as receivables from customers in the balance sheet, to the amount equal to the net investment in the lease. Finance income from the lease is recognised in interest income based on a pattern reflecting a constant periodic rate of return on the lessor's net investment outstanding in respect of the finance lease.

Assets leased out under operating lease are shown under property, plant and equipment and are depreciated on a straight-line basis over the lease term. Lease income is presented under other operating income and is recognised on straight-line basis over the lease term. The fixed duration specified in the contract is determined as the lease term in the leased contracts that may not be extended or terminated without a good reason or sanction.

Recognition of leased right-of-use assets

Leased right-of-use assets are presented in PPE assets and are mainly derecognised during the lease term. The corresponding lease liability is presented in other liabilities and the related interest expenses are presented in net interest income. Service charges related to leases, which are separated from the lease amount, are presented in other operating expenses. Separating the service charge is performed by right-of-use asset class.

For leased contracts, OP Corporate Bank defines the lease term as follows:

i. A fixed term that cannot be extended or terminated without any good reason or sanction or
ii. based on management judgement, for a maximum of three years when it is the question of a property lease until further notice to which a mutual notice period applies. If the lease is fixed at first and is renewed to be valid until further notice as described above, the lease term is a combination of these. When such a lease has been terminated, the notice period is defined as the lease term. When determining the lease term, OP assesses that it is reasonably certain that the lessee stays on the premises longer because the property based on the lease has a central location and no substitutive property is necessarily available.
iii. The lessor's notice period if it is the question of a lease other than a property lease until further notice to which a mutual notice period applies. The lease term will always be renewed with a new notice period after the notice period unless the lease has been terminated. When determining the lease term, OP assesses that it is reasonably certain that leases have been concluded for a longer time because terminating and renewing such leases would not be profitable. Or
iv. The useful life of the leased property if it is shorter than the lease terms defined in a matter mentioned above.

In calculating lease liability, OP Corporate Bank usually uses the incremental borrowing rate of the lessor. The interest rate quoted by the OP Corporate Bank Treasury is used as the incremental borrowing rate that Treasury uses to lend OP cooperative banks and OP Financial Group's subsidiaries.

OP Corporate Bank applies entry concessions allowed for lessors. Expenses of low-value and short-term leases for the financial year are recognised in other operating expenses. These leases include laptops, mobile phones and smaller devices and devices and machines leased on a one-time basis.

OP Corporate Bank applies IAS 36 Impairment of assets to determine whether the asset concerned has impaired. On every day at the end of the reporting period, OP Corporate Bank assesses whether there is any indication of impairment of an asset. If there is such indication, OP Corporate Bank will assess the asset's recoverable amount. An asset has impaired when its carrying amount exceeds its recoverable amount.

OP Corporate Bank's leased contracts are mainly those related to premises, company cars and safety devices (Note 21. Leases).

11 Employee benefits

11.1 Pension benefits

Statutory pension cover for OP Corporate Bank employees is arranged by Ilmarinen Mutual Pension Insurance Company. Part of the statutory pension cover was managed through OP Bank Group Pension Fund until the end of 2020. OP Corporate Bank transferred the majority of the management of the statutory pension insurance portfolio of OP Bank Group Pension Fund to Ilmarinen Mutual Pension Insurance Company on 31 December 2018 and the remaining portfolio was transferred on 31 December 2020.

Pension plans managed by Ilmarinen Mutual Pension Insurance Company are defined contribution plans. Pension plans managed by insurance companies may be either defined benefit or defined contribution plans. 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 paid to the insurance company and 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 managed by insurance companies and 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.

11.2 Short-term employee benefits

OP Corporate Bank 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 Financial Group has a personnel fund into which profit-based 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 and the counterpart as Deferred expenses in the balance sheet until they are disbursed to their beneficiaries (Note 9. Personnel costs).

12 Provisions and contingent liabilities

A provision is recognised for an obligation if the obligation is based on a past event and it is probable that an outflow of resources will be required to settle the obligation, but there is uncertainty about the timing or amount required in settlement. In addition, an entity must have a present legal or constructive obligation towards a third party as a result of past events. If it is possible to receive compensation for part of the obligation from a third party, the compensation is recognised as a separate asset, but only at the time when receipt of the compensation is actually certain.

A contingent liability is a possible obligation arising from past events, whose existence will be confirmed only by the realisation of an uncertain future event beyond OP Corporate Bank's control. A present obligation which probably does not require fulfilment of payment obligation or the amount of which cannot be defined reliably is also considered as contingent liability. A contingent liability is presented in a note (Note 27. Provisions and contingent liabilities).

13 Income tax

Income taxes shown in the income statement include current tax, based on the taxable income of OP Corporate Bank, 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 into 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 in the countries where the companies operate and generate taxable income.

Deferred tax liabilities are recognised for all temporary differences between the carrying amount and tax base of assets and liabilities. 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. Deferred tax assets are not recognised insofar as taxable profits are not likely to be generated against which taxable losses or refunds can be utilised. The most significant temporary differences arise from the measurement of investments at fair value.

OP Corporate Bank offsets deferred tax assets and liabilities by company. Deferred tax assets and liabilities resulting from consolidation are not offset. 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 13. Income tax).

14 Charges of financial authorities

OP Corporate Bank pays charges to various authorities. Responsibility for banking supervision rests with the European Central Bank. The Finnish Financial Supervisory Authority is responsible for macroprudential supervision and supervision of conduct of business. The EU's Single Resolution Board (SRB) is responsible for bank resolution. The financial authority charges and fees are in full recognised under other operating expenses at the beginning of the year (Note 11. Other operating expenses).

14.1 Stability contribution

Stability contributions will be paid to the euro-area Single Resolution Fund (SRF) until 2023 in such a way that the target of 1% of the amount of covered deposits will be reached. The SRF is managed by the Single Resolution Board which also determines the amount of stability contributions. The SRF ensures that the financial industry, as a whole, finances the stabilisation of the financial system. The stability contribution is determined based on the bank's importance and risk profile.

14.2 Deposit guarantee contribution

Amounts contributed to the former Deposit Guarantee Fund currently exceed the EU requirements governing the deposit guarantee level. By virtue of its rules, the former Deposit Guarantee Fund takes charge of the deposit guarantee contributions payable by its member banks to the new Deposit Guarantee Fund in proportion to which each member bank has made contributions to the former Deposit Guarantee Fund over the years. The Financial Stability Fund determines the contribution for each member bank but charges the amount directly from the former Deposit Guarantee Fund. The deposit guarantee contribution had no effect on OP Corporate Bank in 2020 and 2021 in terms of expenses.

14.3 Financial Stability Authority's administrative fee

The administrative fee charged by the Financial Stability Authority is based on the same calculation method as the supervision fee charged by the Financial Supervisory Authority.

14.4 Financial Supervisory Authority's supervision fee

The supervision fee charged by the Financial Supervisory Authority comprises a relative supervision fee, which is based on an entity's balance sheet total, and a fixed basic fee.

14.5 European Central Bank's supervisory fee

OP Corporate Bank is supervised by the European Central Bank (ECB).

15 Government grants

Government grants mean support by which resources are transferred to an entity that has followed or will follow certain conditions related to its business in consideration of the support. Benefit that is received at an interest rate lower than that for the market interest rate of the public authority for the loan is treated as a government grant. The benefit lower than the market interest rate for the loan must be determined based on the difference between the loan's original carrying amount and received payments. However, government grant will be recognised only when it is reasonably certain that the entity fulfils the related terms and condition and that the grant will be given. Grants related to income are reduced from respective expenses in the financial statements and are recognised through profit for the periods when the expenses are recognised as expenditure that the grant is meant to cover.

16 New standards and interpretations

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

On 1 January 2021, OP Corporate Bank 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 Corporate Bank because the majority of receivables and liabilities are linked to the Euribor and the Euribor is still a reference interest rate in use. 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 ineffectiveness. This change will have no significant effect on OP Corporate Bank because hedges are mostly linked to the Euribor.

Note 2. OP Corporate Bank plc's Risk Appetite Framework

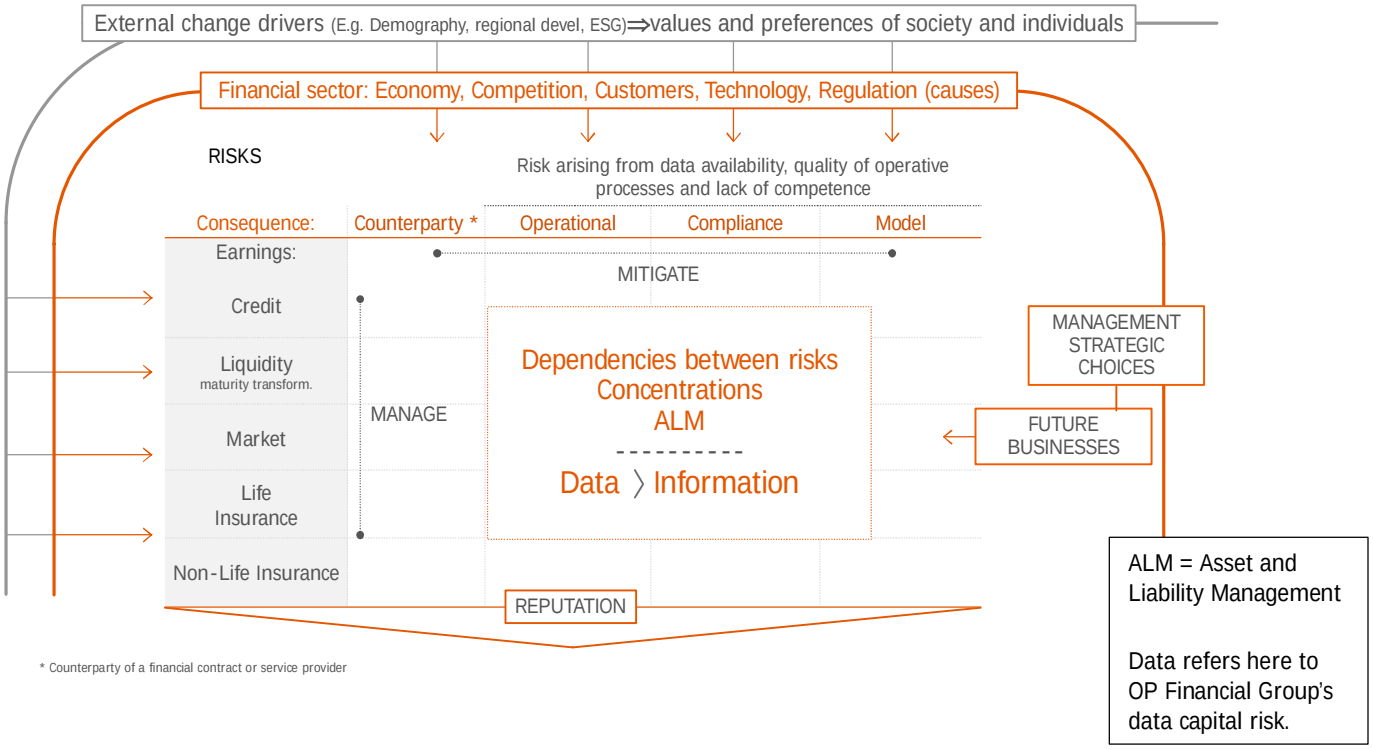
1 Overview of OP Corporate Bank's significant risks

OP Corporate Bank's independent Risk Management function forms part of OP Financial Group's centralised Risk Management in organisational terms. OP Financial Group prepares its Risk Appetite Statement and Risk Appetite Framework to cover all operations and these general risk management principles are further specified for each revenue logic (by product and service). The bases for establishing revenue generation models include services provided to customers, processes needed in the production of services, analyses reporting of operations and what risks will be caused to OP Financial Group by providing these services.

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). Because the review of earnings risks requires that OP Financial Group examine critical success factors from the perspective of business, the sources and management of earnings risk are grouped in more detailed descriptions of significant risks by revenue logic, except for Group-level risks that apply to all revenue logics. Because the majority of consequential risks are Group-level ones and because the review of consequential risks focuses on reducing the negative effects of potential risk materialisation, these risks are grouped in the more detailed descriptions of significant risks at Group level. The graph below shows a summary of OP Financial Group's significant risks and their sources. The sources and root causes of significant risks are presented in shaded grey and orange in the periphery of the figure's table. Similarly, the negative effect of the potential materialisation of risks on OP Financial Group's trust and reputation is also described outside the table.

It is highly important to note the following in the graph's table:

- Taking earnings risks may cause consequential risks in addition to the sources and causes of OP Financial Group's external risks.
- The combined effect of earnings and consequential risks may result in new Group-level risks, due, for example, to concentrations and interdependencies between risks.
- Due to the different function of earnings and consequential risks, the Group primarily aims to manage earnings risks whereas it primarily aims to reduce consequential risks.



* Counterparty of a financial contract or service provider

The Banking revenue generation models contain both the Retail Banking segment and the Corporate Banking segment. The Banking revenue generation models are grouped into three revenue logics in risk management: Banking through the balance sheet, Markets and Asset Management revenue logics. Life and Non-life Insurance revenue generation models belong to the Insurance segment.

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 in advance. 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 business concerned makes business decisions and is responsible for the quality of its customer service, its business continuity as well as its earnings and risks.
- For consideration by OP Financial Group's management, 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 its 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 Corporate Bank'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 Financial Group'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 a company's weaker liquidity if it has not sufficiently prepared for liquidity. Liquidity risks also involve 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. Market risks include interest rate, currency, volatility, credit spread, equity and property risks associated with on- and off-balance sheet items as well as other potential price risks.
Counterparty risks	Counterparty risk refers to the risk of the contracting party not fulfilling its financial obligations. Counterparty risk may be related to a derivative contract, trading or a reinsurance contract.
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

The general drivers of change in the business environment, such as climate change and other sustainability factors, that is to say ESG factors (environmental, social, governance), affect the needs and preferences of customers and society. These together with, for example, technological progress and demographic changes 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.

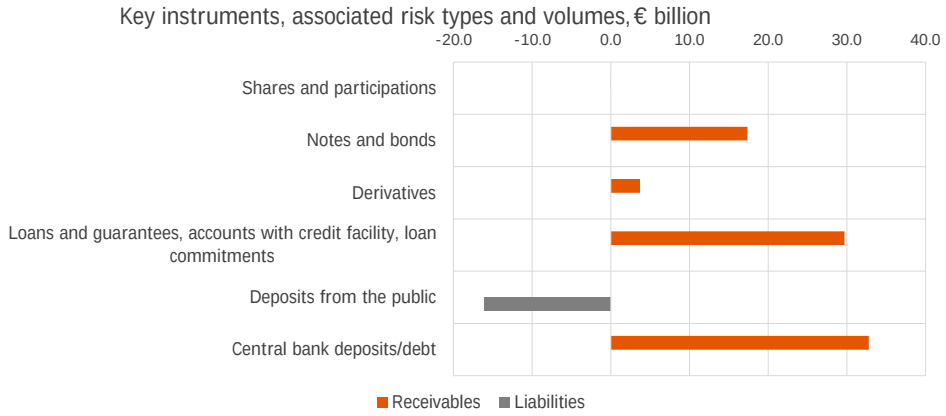
The drivers of change in the business environment as such are not risks but they are channelled into financial risks in the banking and insurance business through various impact chains. In addition to the external drivers of change providing opportunities, they can jeopardise the conditions to operate 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 an increase in regulation-related costs higher than predicted. The abovementioned effects on a credit institution are directly or indirectly reflected, for example, in credit, liquidity, 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. By providing customers with advice, the Group seeks to generate added value that shows in the customers' better financial standing and wellbeing.

Key instruments and risk types

The graph below describes risk types associated with key financial instruments and illustrates the significance of risk types by means of the balance sheet values of each financial instrument (31 December 2021).



	Credit	Market	Operational	Liquidity
Shares and participations		X	X	X
Notes and bonds	X	X	X	X
Derivatives	X	X	X	X
Loans and guarantees, accounts with credit facility, loan commitments	X	X	X	X
Deposits from the public		X	X	X
Central bank deposits/debt		X	X	X

2.2 Banking risks

2.2.1 Credit risks

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. Credit risk is also managed 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 selection and the avoidance of risk concentrations. In addition, techniques are used to reduce 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 provides 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.

It is necessary to collect sufficient up-to-date information on customers that cause credit risk to assess 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 rating grade gives a true picture of the customer's creditworthiness risk. Each business unit ensures that its customers' rating 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 hard collateral securities used to secure receivables. The values of assets pledged in security of receivables must give a true and real-time picture of the collateral position related not only to an individual customer but also the entire loan portfolio. 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 such decisions must have 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 clearly increased, or whose repayment capacity is subject to another significant threat, 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, the ratio of non-performing receivables to the loan and guarantee portfolio, and the ratio of expected credit losses to the loan and guarantee portfolio. What is also measured is the proportion of corporate exposures in different rating grade baskets, and the average rating of corporate exposure. The risk policy sets limits for these metrics. 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 a 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.

OP Financial Group's internal credit rating system

Rating means 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 that have been 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.

OP Financial Group uses an internal 16-level scale of A–F to assess the probability of default for its **personal customer** agreements, with F representing borrowers in default. The Group assesses monthly all personal 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 rating grade for a period of 12 months.

The rating based on the application stage for now supports the loan approval process, credit risk assessment and the pricing of new loans. OP cooperative banks and the Group's asset and sales finance solutions and unsecured consumer loans have their own application stage models.

The probability of default of **corporate customers** is assessed using the 20-level credit rating system on a scale of 1.0–12.0, with 11–12 rating grades representing customers in default.

The R rating for mid-size and large corporate customers is based on the company's financial indicators and qualitative background data on the basis of which a statistical model generates a proposal for rating. An expert familiar with the customer makes a rating proposal on the basis of what is suggested by the model and of any other information available. Any changes and uncertainties relating to the future outlook will be regarded as warning signs and exceptions to the rating provided by the model. The rating grade is determined by the central cooperative's independent Risk Management, based on the rating proposal, at least once a year and, in respect of weak customers, on a half yearly basis.

Suomen Asiakatieto's automated rating model, Rating Alfa, forms the basis of small corporate customers' A rating. The Rating Alfa variables include information on payment default and payment practices of the company and its persons in charge, key indicators based on financial statements and the customer's basic data. The Rating Alfa risk scores and OP Financial Group's internal payment behaviour data resulting in default are used to generate OP Financial Group's rating grades that will be changed based on expert assessments, if need be. The banks must at least once a year assess the validity of the rating grade of A rated customers and they must assess

customers with a low rating grade and those on the watch list on a half-yearly basis. Responsibility for the assessment rests with the bank in charge. The rating grade for the most significant A rated customers is approved by the central cooperative's Risk Management.

Low exposure corporate customers are rated using a rating model for low exposures (P). The rating model is an automated rating model calculated on a monthly basis that is created on the basis of the customer's basic data, transaction data and payment behaviour data.

OP Financial Group uses a 20-level credit rating system on a scale of 1.0–12.0, with 11–12 rating grades representing customers in default, to assess the probability of default of **credit institution counterparties.**

A specific L rating model is used to assess the probability of default of credit institutions as counterparties, the structure of which corresponds to the R rating model for companies. The statistical model as the basis of the credit rating is based on financial indicators in financial statements and on qualitative background data. Such rating can be revised by an expert with warning signs and, in many cases, rating is also affected by the parent company's support to the banking group and by the Sovereign Ceiling rule whereby the counterparty cannot be better than the country concerned in terms of creditworthiness. Credit institution ratings are decided on at least once a year.

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 of the Executive Management Team.

2.2.2 Liquidity risks

Identifying liquidity risks

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 together with the representatives of the business concerned make 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.

The 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 a financial perspective, OP Financial Group measures the sufficiency of the liquidity buffer based on 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 financial 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 regulatory perspective, OP Financial Group's liquidity buffer consists of the liquidity buffer that fulfils the criteria for liquidity buffer requirement provisions (LCR buffer).

The Group's Treasury is responsible for preparing the investment plan at least once a year. The bond investments in the liquidity buffer held by the Treasury are included in it. 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 Mortgage Bank 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 Mortgage Bank. 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. OP Corporate Bank manages on a centralised basis the Group's wholesale funding in the form of debt capital and equity capital, while OP Mortgage Bank 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 by other reasons or in preparing for it 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 Mortgage Bank or to place part of their loan portfolio as collateral for the covered bond issued by OP Mortgage Bank 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 Mortgage Bank. 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

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.

Management of other market risks in Banking through the balance sheet

Other market risks associated with revenue logic arising from banking through the balance sheet are chiefly due to the management of OP Financial Group's liquidity buffer and OP Corporate Bank's portfolio of bonds.

OP Corporate Bank's Group Treasury manages OP Financial Group's banking liquidity buffer. The regulatory liquidity coverage ratio (LCR) determines the constraints on the size and allocation of the liquidity buffer. Alongside Group Treasury deposits, the liquidity buffer contains the liquidity buffer portfolio, and items in the liquidity buffer portfolio must conform to the regulatory creditworthiness and liquidity requirements. For this reason, the portfolio includes securities carrying a very low likelihood of credit losses materialising. Because these securities most often have fixed interest rates, their value varies depending on movements in market rates and credit spreads. A decision has been taken to recognise the securities in the portfolio at fair value through other comprehensive income, so changes in the value of these securities are recognised in the fair value reserve included in the capital base. Such changes have therefore an impact on capital adequacy.

The liquidity buffer portfolio is monitored and managed using market risk management methods:

- The earnings of the liquidity buffer portfolio are based on covering credit spread and liquidity risk. Derivatives are used to hedge interest rate risk. Derivative transactions can be executed within OP Corporate Bank, whereupon the interest rate risk is transferred for management by the Group Treasury.
- The Banking risk policy determines the risk measurement methods and risk-taking limits, as well as other restrictions.
- An investment plan is prepared for the investment portfolio, describing the goals of investment activities and the principles of portfolio management. OP Corporate Bank's Board of Directors approves the investment plan. Short-term investments in local authority papers can be made in addition to the investments described in the investment plan.
- OP Corporate Bank ensures sufficient portfolio diversification by means of restrictions by issuer.

In addition, OP Corporate Bank invests in corporate bonds. OP Corporate Bank's bond portfolio is OP Corporate Bank's equivalent to lending. An investment plan is prepared for each portfolio, describing the goals of investment activities and the principles of portfolio management.

OP Corporate Bank manages equity and real estate risk in Banking primarily through instructions which strictly limit risk-taking. Real estate risk chiefly involves real property units used by OP cooperative banks. The current Banking business models do not call for an increase in equity or real estate risk.

In car dealer financing, OP Financial Group can offer products where the risk of the car's resale value at the end of the contract period is borne by OP Corporate Bank. If the actual selling prices is less than the estimate used in the pricing of the contract, the revenue will be lower than targeted or a loss is made. To manage risks, it is important to limit the financed assets so that their prices can be predicted and their realisation goes smoothly.

Risk management in Markets

OP Financial Group's trading in capital market products has been centralised in OP Corporate Bank's Markets function. This includes the price setting and market hedging of interest rate hedging products for loans granted by OP cooperative banks and OP Corporate Bank, separate interest rate hedges, foreign exchange trading, structured investment products, trading in bonds and commodity derivatives. Risks taken include interest rate risk in various currencies, currency risk, volatility risk of options, credit spread risk and counterparty risk. Repurchases of structured investment products also generate a degree of equity risk. Markets is responsible for managing the Group's currency exposure and does foreign exchange transactions on the market according to needs. Markets manages risk exposures by actively trading on the market. Markets monitors risks and earnings on a daily basis. In addition, Risk Management reports Markets' risks to the Board of Directors' Risk Committee and the senior management, as a part of OP Financial Group's risk analysis.

Markets' risks are measured using the expected shortfall measure, as well as various sensitivity and nominal value metrics for specific products and positions. The impacts of market movements that are significant to the business are assessed via stress tests. This is important in order to understand the risks of rare market movements and those with a major impact. The market risks borne by Markets are included in the economic capital requirement. The risk policy sets limits and frameworks for business models. The risk policy is prepared in such a way that the risks are visible for each business model and any risk-taking that goes beyond the business model is strictly limited.

Counterparty risk arises from entry into derivative contracts, which is controlled by applying customer-specific limits. OP Corporate Bank's credit decision process decides on the limits. To take account of the risk, OP Corporate Bank adjusts the valuations of derivatives using Credit Valuation Adjustment (CVA and DVA). The size of the valuation adjustment is affected by the credit-risk-free valuation of derivatives, interest rates, volatility of interest rate options, exchange rates, and credit risk market price. Fluctuations in adjustments to the value of credit risk due to the valuation adjustment are mitigated by entering into derivative contracts.

Risks arising from interest-rate hedges linked to loans are transferred to Markets, which covers them on the market. Risks associated with operations include interest rate and volatility risk. In some products, the forecast client behaviour has a significant effect on the pricing of the product and risk hedging. If, on the whole, the client's behaviour differs significantly from the predicted one, the realised client return may be lower or higher than expected and the risk exposure is over-hedged or under-hedged. Client behaviour risk differs from market risks in that the risk cannot be hedged on inter-bank markets. Risk management is based on OP cooperative banks' client relationship management, real-time monitoring of client behaviour and the use of accumulated data in the development of forecast models.

Risk management for the Asset Management business model

The most important risks associated with Asset Management are the operational and compliance risks related to the arrangement of operations. The sale of asset management products is subject to detailed regulation seeking to ensure that clients understand the risks, costs and environmental and social impacts of their investment decisions. The sale of investment products carries a reputational risk. The effect of market developments on assets under management exposes to market risks involved in the revenue earned by business.

Risks are managed by improving the quality of processes and ensuring that the product offering corresponds to client demand and needs. A diverse product offering improves customer retention in a situation where clients want to switch or diverse their investment products. A capital requirement is set for risks within the risk type, Other assessable risks.

As part of OP Financial Group's risk analysis, the Compliance organisation reports on compliance risks and Risk Management reports on other risks associated with the Asset Management revenue generation models to the Risk Committee of the Board of Directors and the senior management.

Note 3. Corporate transactions and transition to financial statements under IFRS

1. Corporate transactions and transition to IFRS financial statements

1.1 Subsidiary mergers

On 10 February 2021, OP Corporate Bank plc's Board of Directors approved a merger plan whereby the Baltic subsidiaries OP Finance AS (Estonia), OP Finance SIA (Latvia) and AB OP Finance (Lithuania) will merge into their parent company OP Corporate Bank plc on 31 October 2021 through a cross-border merger. The merger difference of EUR 51 million was recognised in retained earnings. The merger is about the amalgamation of entities under the same control with the parent company, in which case control does not change and thus the merger gain has been recognised in retained earnings under equity. In the merger, the following balance sheet items were transferred to OP Corporate Bank plc:

€ million	31 Oct 2021
Assets	
Cash and cash equivalents	6
Receivables from customers	758
Receivables from credit institutions*	-562
Investment assets*	-12
Intangible assets	0
Property, plant and equipment	1
Total assets	**192**

*Items between OP Corporate Bank plc and its Baltic subsidiaries.

€ million	31 Oct 2021
Liabilities and equity	
Equity	
Retained earnings	51
Liabilities	
Liabilities to credit institutions	133
Provisions and other liabilities	8
Total liabilities and equity	**192**

1.2 Sale of the subsidiaries' shares

On 30 November 2021, OP Corporate Bank plc sold the entire share capital of OP Custody Ltd to OP Cooperative for EUR 21 million. On 19 October 2021, the Finnish Financial Supervisory Authority gave OP Cooperative permission for the acquisition of the company's shares in a manner required by chapter 6a, section 2 and subsection 2 of the Act on Investment Services (747/2012) and stated that it had no comment or cause for complaint on account of the sale of the shares. The capital gain of EUR 18 million was recognised for the Corporate Banking and Capital Markets segment.

1.3 OP Corporate Bank plc's partial demerger

OP Corporate Bank plc demerged in such a way that some of its assets and liabilities transferred to OP Insurance Holding Ltd without the liquidation procedure. The demerger was a partial demerger as referred to in the Limited Liability Companies Act.

In the partial demerger, OP Corporate Bank plc's non-life insurance business conducted through Pohjola Insurance Ltd was transferred to OP Insurance Holding Ltd in its entirety, including the related assets and liabilities. All other OP Corporate Bank

plc's business, Treasury and Corporate Banking, remained with OP Corporate Bank plc. A total of 2,800,000 new shares of OP Insurance Holding Ltd were given as the demerger consideration to the demerging company's sole shareholder OP Cooperative.

All subsidiary shares related to the transferring non-life insurance business, EUR 1,010 million, were transferred to OP Insurance Holding Ltd. Since the transfer of liabilities in respect of those transferring to OP Insurance Holding Ltd requires creditor approval and since obtaining such approval may in practice be hard in administrative terms, the transfer of the liabilities was performed in such a way that Insurance Holding Ltd and OP Corporate Bank plc established a debt relationship between each other, under which the debt terms and conditions are essentially consistent with the terms and conditions of the original debts to be transferred in terms of their maturity and interest payable on the debt. A loan of EUR 997million was granted to OP Insurance Holding Ltd. In addition, retained earnings worth EUR 13 million were transferred to OP Insurance Holding Ltd. On 30 November 2021, OP Insurance Holding Ltd merged into OP Cooperative through a subsidiary merger.

1.4 Cessation of OP Corporate Bank Group and OP Corporate Bank plc's transition to the preparation of the financial statements under IFRS

OP Corporate Bank plc prepared its 2020 financial statements based on IFRS and the parent company's financial statements 2020 based on national legislation. As a result of the structural arrangements carried out in 2021, OP Corporate Bank plc does not constitute a reporting group under IFRS. OP Corporate Bank Group's Q1–Q3/2021 interim report was published in accordance with IAS 34 Interim Financial Reporting and the accounting policies presented in the 2020 financial statements bulletin.

OP Corporate Bank plc (formerly the parent company of OP Corporate Bank Group) will start preparing its interim reports and financial statements under the International Financial Reporting Standards (IFRS). IASs, IFRSs and SIC and IFRIC interpretations are applied effective on 31 December 2021 are applied to the preparation of the financial statements for 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 Corporate Bank's notes also conform to the requirements of Finnish accounting and company legislation that complement IFRS regulations.

In its prior financial years, OP Corporate Bank plc (formerly the parent company of OP Corporate Bank Group) applied the guidelines on the preparation of the financial statements based on national regulation and disclosed information in the financial statements according to the Act on Credit Institutions, the Ministry of Finance Decree on the Financial Statements and Consolidated Financial Statements of a Credit Institution and Investment Firm, the Accounting Act and the set of the Financial Supervisory Authority's (FIN-FSA) regulations and guidelines governing financial sector accounting, financial statements and the report by the board of directors.

Based on the FIN-FSA regulations and guidelines, OP Corporate Bank plc has reported financial assets and liabilities under IFRS 9 since the adoption of the standard on 1 January 2018. Section 6 Financial instruments in the accounting policies describes in greater detail the classification of financial instruments in accordance with IFRS 9.

1.5 IFRS reconciliation statements

OP Corporate Bank plc's IFRS reconciliation statements are presented below. The IFRS adjustments made in connection with the transition are described verbally under the tables.

IFRS Opening Balance 1 Jan 2020

€ million	Additional information: 1.7 IFRS adjustments	FAS 31 Dec 2019	IFRS adjustments	IFRS 1 Jan 2020
Cash and cash equivalents		11,910		11,910
Receivables from credit institutions		9,126		9,126
Derivative contracts		4,852		4,852
Receivables from customers		23,803		23,803
Investment assets	1.7.5 & 1.7.6 & 1.7.7	14,842	-98	14,743
Intangible assets	1.7.4	34	1	35
Property, plant and equipment	1.7.2 & 1.7.5	4	-1	3
Other assets	1.7.3 & 1.7.6	654	0	654
Tax assets	1.7.3	26	13	39
Total assets		**65,252**	**-85**	**65,166**
Liabilities to credit institutions		15,334		15,334
Derivative contracts		3,852		3,852
Liabilities to customers		16,013		16,013
Debt securities issued to the public	1.7.6	22,860	-101	22,759
Provisions and other liabilities	1.7.2 & 1.7.3 & 1.7.6	1,759	-2	1,757
Tax liabilities	1.7.1 & 1.7.3 & 1.7.4 & 1.7.6 & 1.7.7	1	299	299
Subordinated liabilities		1,339		1,339
Total liabilities		**61,158**	**196**	**61,353**
Appropriations	1.7.1	**1,471**	**-1,471**	
Equity				
Share capital		428		428
Fair value reserve		-4		-4
Other reserves		1,019		1,019
Retained earnings		1,180	1,190	2,370
Total equity		**2,623**	**1,190**	**3,813**
Total liabilities and equity		**65,252**	**-85**	**65,166**

Income Statement under IFRS 1 Jan–31 Dec 2020

€ million	Additional information: 1.7 IFRS adjustments	FAS 1 Jan–31 Dec 2020	IFRS adjustments	IFRS 1 Jan–31 Dec 2020
Net interest income	1.7.2 & 1.7.6	321	1	322
Net commissions and fees		23		23
Net investment income	1.7.6 & 1.7.7	153	-3	150
Other operating income	1.7.5	27	2	29
Total income		**523**	**0**	**523**
Personnel costs	1.7.3	62	0	62
Depreciation/amortisation and impairment loss	1.7.2 & 1.7.4 & 1.7.5	13	1	14
Other operating expenses	1.7.2	164	-1	163
Total expenses		**239**	**1**	**240**
Appropriations	1.7.1	-154	154	
Impairment loss on receivables		-53		-53
OP bonuses to owner-customers		-2		-2
Earnings before tax		**75**	**153**	**228**
Income tax		15	31	46
Profit for the financial year		**60**	**123**	**182**

Statement of comprehensive income under IFRS 1 Jan–31 Dec 2020

€ million	FAS 1 Jan–31 Dec 2020	IFRS adjustments	IFRS 1 Jan–31 Dec 2020
Profit for the financial year	**60**	**123**	**182**
Items reclassified to the income statement			
Gains/(losses) arising from remeasurement of defined benefit plans		-2	-2
Items that may later be reclassified to the income statement			
Change in fair value reserve			
On fair value measurement		31	31
On cash flow hedge		2	2
Income tax			
On items not reclassified to the income statement			
On gains/(losses) arising from remeasurement of defined benefit plans		0	0
On items that may later be reclassified to the income statement			
On fair value measurement		-6	-6
On cash flow hedge		0	0
Total comprehensive income for financial year	**60**	**147**	**207**

IFRS Opening Balance 1 Jan 2021

€ million	Additional information: 1.7 IFRS adjustments	FAS 31 Dec 2020	IFRS adjustments	IFRS 1 Jan 2021
Cash and cash equivalents		21,764		21,764
Receivables from credit institutions		11,248		11,248
Derivative contracts		5,352		5,352
Receivables from customers		24,461		24,461
Investment assets	1.7.5 & 1.7.6	15,906	-72	15,834
Intangible assets	1.7.4	23	1	24
Property, plant and equipment	1.7.2	1	3	4
Other assets	1.7.3 & 1.7.6	1,097	-2	1,094
Tax assets	1.7.3	13	14	26
Total assets		**79,865**	**-56**	**79,809**
Liabilities to credit institutions		28,888		28,888
Derivative contracts		4,274		4,274
Liabilities to customers		16,403		16,403
Debt securities issued to the public	1.7.6	22,003	-72	21,931
Provisions and other liabilities	1.7.2 & 1.7.3 & 1.7.6	1,654	0	1,654
Tax liabilities	1.7.1 & 1.7.3 & 1.7.4 & 1.7.6	1	329	330
Subordinated liabilities		2,309		2,309
Total liabilities		**75,531**	**258**	**75,789**
Appropriations	1.7.1	1,625	-1,625	
Equity				
Share capital		428		428
Fair value reserve		22		22
Other reserves		1,019		1,019
Retained earnings		1,240	1,311	2,551
Total equity		**2,709**	**1,311**	**4,020**
Total liabilities and equity		**79,865**	**-56**	**79,809**

Retained earnings

€ million	Additional information: 1.7 IFRS adjustments	1 Jan 2020	31 Dec 2020
Retained earnings under FAS		**1,180**	**1,240**
Loan loss provision (Appropriations)	1.7.1	956	1,058
Accumulated depreciation difference (Appropriations)	1.7.1	220	243
IFRS 16 Leases	1.7.2	0	0
IAS 19 Employee benefits	1.7.3	12	10
IAS 38 Intangible assets	1.7.4	1	0
IAS 40 Investment property	1.7.5	-1	0
Other	1.7.6 & 1.7.7	2	0
Retained earnings under IFRS		**2,370**	**2,551**

Earnings for 2021 by quarter

OP Corporate Bank plc's earnings for 2021 by quarter under IFRS are presented below.

€ million	Q1/2021	Q2/2021	Q3/2021	Q4/2021	Q1–4/2021	Q1–4/2020
Net interest income	77	73	81	181	412	322
Net commissions and fees	13	7	5	6	31	23
Net investment income	49	47	32	40	168	150
Other operating income	11	7	7	25	49	29
Total income	**150**	**134**	**125**	**252**	**661**	**523**
Personnel costs	16	19	15	21	72	62
Depreciation/amortisation and impairment loss	3	3	3	4	12	14
Other operating expenses	67	45	37	87	236	163
Total expenses	**87**	**67**	**55**	**112**	**320**	**240**
Impairment loss on receivables	2	10	-37	-49	-74	-53
OP bonuses to owner-customers	0	0	0	0	0	-2
Earnings before tax	**65**	**77**	**33**	**91**	**267**	**228**
Income tax	12	12	10	18	52	46
Profit for the financial year	**53**	**66**	**23**	**73**	**215**	**182**

1.6 Changes in presentation

In its prior financial years, OP Corporate Bank plc applied the guidelines on the preparation of the financial statements based on national regulation and presented income statement and balance sheet items in accordance with national legislation in force at any given time. The names and contents of income statement and balance sheet items presented according to national legislation differ from the names and contents of such items presented under IFRS. The above reconciliation statements comply with IFRS-based presentation.

Below is a description of key changes in presentation between income statement and balance sheet items presented under national legislation and the corresponding items presented in the reconciliation statement under IFRS.

In its financial statements prepared under national regulation, OP Corporate Bank plc has presented Deferred income and advances paid as a separate balance sheet item. In the reconciliation statement, these are included in Other assets on the balance sheet.

In its financial statements prepared under national regulation, OP Corporate Bank plc has presented Tax assets under the balance sheet item Other assets. In the reconciliation statement, these are included in Tax assets on the balance sheet.

In its financial statements prepared under national regulation, OP Corporate Bank plc has presented certain liabilities held for trading under the balance sheet item Derivative contracts and other liabilities held for trading. In the reconciliation statement, these items are presented in the balance sheet item Provisions and other liabilities as well as Tax liabilities.

In its financial statements prepared under national regulation, OP Corporate Bank plc has presented Tax liabilities under the balance sheet item Other liabilities. In the reconciliation statement, these are included in Tax liabilities on the balance sheet.

In its financial statements prepared under national regulation, OP Corporate Bank plc has presented OP bonuses paid to customers under the income statement item Commission expenses. In the reconciliation statement, these are included in OP bonuses to owner-customers in the income statement.

In its prior financial years, OP Corporate Bank plc presented, based on national guidelines, items concerning income from hedge accounting in the Net income from hedge accounting item. In the reconciliation statement and according to IFRS, these are presented under Net interest income.

OP Corporate Bank plc leases out moveable capital assets, real property and other premises to its customers. In its financial statements prepared under national regulation, OP Corporate Bank plc has presented assets leased out under the balance sheet item Lease assets. Lease income are presented in Net lease income under Net interest income. Capital gains or losses on lease assets are presented under Depreciation/amortisation and impairment loss in the income statement. In the IFRS-compliant financial statements, OP Corporate Bank classifies leased contracts as finance leases and presents the contract asset in the Receivables from customers item on the balance sheet. In the income statement, finance income from leases is presented under Net interest income and lease fees under Net commissions and fees. In the reconciliation statement, these items are presented in items presented under IFRS.

1.7 IFRS adjustments

1.7.1 Appropriations

In its prior financial years, OP Corporate Bank plc recognised provisions permitted by national tax laws in appropriations. In prior financial years, OP Corporate Bank plc recognised the depreciation difference and loan loss provision in tax-based provisions. The depreciation difference under appropriations on the balance sheet in prior financial years includes the accumulated difference between depreciation made and planned depreciation. According to the tax law, a deposit bank may deduct a loan loss provision made during the tax year, the amount of which accounts for a maximum of 0.6% of the total amount of receivables at the end of the tax year. In addition, the total amount of non-reversed loan loss provisions made during the tax year and earlier may account for a maximum of 5% of the total amount of receivables at the end of the tax year. In its prior financial years, OP Corporate Bank plc has recognised a loan loss provision permitted by the tax law.

As a result of the transition to IFRS reporting, such taxation-based provisions will not be recognised. Change in the taxation-based provisions presented under appropriations in the 2020 income statement have been reversed in the transition to IFRS reporting and the corresponding the reversal reversed portion has been recognised in equity and deferred tax liabilities. In the IFRS transition, OP Corporate Bank plc recognised the depreciation difference previously recognised on the balance sheet and the loan loss provision under Retained earnings in the equity. Deferred tax liability of EUR 325 million with respect to tax-based provisions was transferred to Tax liabilities on the opening balance of 1 January 2021. A total of EUR 1.3 billion recognised in retained earnings were recognised in the appropriations in the balance sheet in the IFRS transition.

1.7.2 IFRS 16 Leases

Recognition of leased right-of-use assets

OP Corporate Bank plc classifies leases under IFRS 16 and at the inception of the lease it assesses whether the contract concerned is a lease or contains a lease. Leased right-of-use assets are presented in PPE assets and are mainly derecognised during the lease term. The corresponding lease liability is presented in other liabilities and the related interest expenses are presented in net interest income. Service charges related to leases, which are separated from the lease amount, are presented in other operating expenses. Separating the service charge is performed by right-of-use asset class. OP Corporate Bank plc applies entry concessions allowed for lessors. Expenses of low-value and short-term leases for the financial year are recognised in other operating expenses. A more detailed description of accounting for lease right-of-use assets can be found in section 10 Leases in the accounting policies and in Note 21 Leases.

In its prior financial years, OP Corporate Bank plc recognised lease expenses in other operating expenses, in accordance with national legislation.

In its transition to IFRS, OP Corporate Bank plc applies C5(a) of IFRS 16 retrospectively to each prior reporting period, in accordance with the IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. In its transition to IFRS reporting, OP Corporate Bank plc presents leases under IFRS 16 retrospectively adjusted for 2020.

Recognition of leased assets

On the date of inception, OP Corporate Bank plc classifies leased assets as finance leases or operating leases, in accordance with IFRS 16, depending on the substance of the transaction. Assets leased under a finance lease are recognised as receivables from customers on the balance sheet, to the amount equal to the net investment in the lease. Finance income from the lease is recognised in interest income based on a pattern reflecting a constant periodic rate of return on the lessor's net investment outstanding in respect of the finance lease. A more detailed description of accounting for lease assets can be found in section 10 Leases in the accounting policies and in Note 21 Leases.

In its prior financial years, OP Corporate Bank plc recognised leased assets in Lease assets on the balance sheet, in accordance with national legislation. Lease income from leased assets less planned depreciation on the lease assets has been recognised under Net lease income.

1.7.3 IAS 19 Employee benefits

Expenses arising from pension plans are recognised under personnel costs in the income statement. Contributions under defined contribution plans are paid to the insurance company and charged to expenses for the financial year to which they relate. 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 other acceptable insurance. Pension costs of the defined benefit plans are charged to expenses over the employees' expected working lives on the basis of calculations performed by authorised actuaries. 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. A more detailed description of accounting for pension plans can be found in section 11 Employee benefits in the accounting policies and in Note 27 Provisions and other liabilities.

In its prior financial years, OP Corporate Bank plc recognised expenses arising from pension plans under Personnel costs in the income statement, in accordance with national legislation.

1.7.4 IAS 38 Intangible assets

The development costs of internally generated intangible assets (software) are capitalised from the time when they can be determined reliably, completing the asset is technically feasible and the asset can be used or sold, and it has been demonstrated that the software will generate future economic benefit. The capitalised expenditure includes, for example, licence fees, purchased services, other external costs related to projects and inhouse work. The asset will be amortised from the time it is ready for use. In accordance with IAS 38, OP Corporate Bank plc has capitalised the intangible right of the share of own work in acquisition cost insofar as the share of own work has fulfilled the IAS 38 criteria for an intangible asset. In its financial statements based on national legislation, OP Corporate Bank plc has not in its prior financial years capitalised all of its own work at cost of an intangible asset. In the transition to the financial statements under IFRS, the carrying amount of OP Corporate Bank plc's intangible assets increased by EUR 1 million. A more detailed description of accounting for intangible rights can be found in section 8 Intangible assets in the accounting policies and in Note 19 Intangible assets.

1.7.5 IAS 40 Investment property

OP Corporate Bank plc applies IAS 40 to measure investment property at fair value after initial recognition. Investment property is initially recognised at cost which includes transaction costs. Any changes in fair value are recognised under Net investment income in the income statement. A more detailed description of accounting for investment property can be found in section 7 Investment property in the accounting policies and in Note 18. Investment assets.

In its prior financial years, OP Corporate Bank plc measured investment property at cost according to national legislation and recognised related depreciation according to plan.

1.7.6 OP Corporate Bank's own bonds and notes

In its trading portfolio, OP Corporate Bank plc has its own bonds it has repurchased. In its prior financial years, OP Corporate Bank plc eliminated these internally acquired items within OP Corporate Bank Group. These bonds have been included in OP Corporate Bank plc's financial statements based on national legislation. In its transition to the financial statements under IFRS, OP Corporate Bank plc recognised eliminated bonds and notes on the opening balance of 1 January 2020, as follows: Investment assets decreased by EUR 100 million, Other asset by EUR 6 million, Debt securities issued to the public by EUR 101 and Provisions and other liabilities by EUR 6 million. In the income statement of the transition year 2021, Net investment income decreased by EUR 1 million and Net interest income by EUR 0.3 million as a result of eliminations. In future, OP Corporate Bank plc will eliminate the effect of the bonds and notes in its IFRS-compliant financial statements on the balance sheet and income statement items.

1.7.7 Calculated share of profit of funds

In its transition to the financial statements under IFRS, OP Corporate Bank plc has adjusted the measurement of the share of profit of individual funds to correspond to the IFRS-compliant calculation principle. In the transition to IFRS, OP Corporate Bank plc has deducted the calculated 2-million euro share of the funds' profit from Net investment income

Note 4. Segment reporting

OP Corporate Bank plc's business segments include Corporate Banking and Capital Markets, Asset and Sales Finance Services and Payment Transfers, Baltics as well as Other Operations. Non-business segment operations are presented under the Other Operations segment. Segment reporting conforms to OP Financial Corporate Bank plc's accounting policies applied to OP Corporate Bank plc's financial statements. Defining segments and presentation are based on management reporting. The segments' earnings and profitability are assessed in terms of EBT.

Corporate Banking and Capital Markets

The Corporate Banking and Capital Markets segment provides corporate and institutional customers with financing and capital market services. The services also range from the arrangement of debt issues, corporate finance services, equity, foreign exchange, bond, money market and derivative products, structured investment products and investment research. In addition to its own clients, the segment provides capital market products and services to corporate and retail clients through OP cooperative banks. The segment's net income derives mainly from net interest income, net investment income and net commissions and fees. Expenses mainly come from personnel and ICT costs. The most significant risk categories of the segment are credit risk and market risk.

Asset and Sales Finance Services and Payment Transfers

The Asset and Sales Finance Services and Payment Transfers segment provides consumers and companies with customer financing services, payment and liquidity management services, financing services for foreign trade and leasing and factoring services. Net income generated by the segment derives mainly from net interest income and commissions and fees. Expenses mainly come from personnel and ICT costs. Credit risk is the most significant risk type for the segment.

Baltics

The Baltics segment provides corporate and institutional customers with financing and liquidity management services and financing services for foreign trade. OP Corporate Bank plc has branches in Estonia, Latvia and Lithuania.

Net income generated by the segment derives mainly from net interest income and commissions and fees. Expenses mainly come from personnel and ICT costs. Credit risk is the most significant risk type for the segment.

Other Operations

Functions supporting OP Financial Group and its business, such as Group Treasury and the liquidity buffer, have been centralised within Other Operations. Other Operations is also responsible for the management of the funding and liquidity of member credit institutions and the central cooperative consolidated. It is also in charge of OP Financial Group's wholesale funding together with OP Mortgage Bank. Net income generated by Other Operations derives mainly from net interest income and net investment income. The most significant risk categories are market risks and credit risk. In addition, income, expenses, investments and capital which have not been allocated to the business segments are reported under Other Operations.

Segment accounting policies

Segment reporting conforms to the accounting policies. Income, expenses, assets and liabilities which have been considered to relate directly to and be reasonably attributable to the segments are allocated to the segments. Items between segments are reported in column 'Inter-segment items'.

Segment information

Q1–4 earnings 2021, EUR million	Corporate Banking and Capital Markets	Asset and Sales Finance Services and Payment Transfers	Baltics	Other operations	Inter-segment items	Total
Net interest income	213	155	33	11		412
of which internal net income before tax	21	-30	1	9		
Net commissions and fees	-31	58	9	-5		31
Net investment income	167	0	0	1		168
Other operating income	70	18	0	19	-58	49
Total income	**420**	**231**	**42**	**27**	**-58**	**661**
Personnel costs	36	26	6	4		72
Depreciation/amortisation	7	2	2	1		12
Other operating expenses	78	76	14	126	-58	236
Total expenses	**121**	**104**	**22**	**132**	**-58**	**320**
Impairments loss on receivables	-38	-37	0	0		-74
Earnings before tax	**261**	**90**	**20**	**-105**		**267**

Q1–4 earnings 2020, EUR million	Corporate Banking and Capital Markets	Asset and Sales Finance Services and Payment Transfers	Baltics	Other operations	Inter-segment items	Total
Net interest income	222	129	30	-59		322
of which internal net income before tax	25	-50	0	25		
Net commissions and fees	-33	51	7	-2		23
Net investment income	138		0	12		150
Other operating income	8	9	1	12		29
Total income	**334**	**189**	**38**	**-38**		**523**
Personnel costs	30	25	5	3		62
Depreciation/amortisation	6	4	2	2		14
Other operating expenses	72	65	13	13		163
Total expenses	**108**	**93**	**20**	**18**		**240**
Impairments loss on receivables	-36	-14	-3	1		-53
OP bonuses to owner-customers	0	-2	0			-2
Earnings before tax	**190**	**79**	**15**	**-55**		**228**

Balance sheet 31 December 2021, EUR million	Corporate Banking and Capital Markets	Asset and Sales Finance Services and Payment Transfers	Baltics	Other operations	Inter-segment items	Total
Cash and cash equivalents	11	124	48	32,606		32,789
Receivables from credit institutions	-2	133	-3	13,291		13,419
Derivative contracts	3,441			271		3,712
Receivables from customers	15,240	8,041	2,385	570		26,236
Investment assets	487	0	0	16,886		17,373
Intangible assets	5	3	2	1		12
Property, plant and equipment (PPE)	1	1	3	1		5
Other assets	307	321	-97	743		1,274
Tax assets	0	0	0	0		
Total assets	**19,490**	**8,622**	**2,338**	**64,370**		**94,820**
Liabilities to credit institutions	-40	151	0	42,549		42,660
Derivative contracts	2,553			117		2,669
Liabilities to customers	-1	14,894	663	2,801		18,357
Debt securities issued to the public	1,406			21,225		22,630
Provisions and other liabilities	747	0	-4	1,131		1,874
Tax liabilities	1	0	2	336		339
Subordinated liabilities				1,994		1,994
Total liabilities	**4,665**	**15,045**	**661**	**70,153**		**90,524**
Equity						**4,296**

Balance sheet 31 December 2020, EUR million	Corporate Banking and Capital Markets	Asset and Sales Finance Services and Payment Transfers	Baltics	Other operations	Inter-segment items	Total
Cash and cash equivalents	11	155	58	21,540		21,764
Receivables from credit institutions	-4	68	4	11,180		11,248
Derivative contracts	5,144			209		5,352
Receivables from customers	13,988	7,794	2,198	482		24,461
Investment assets	491	0	0	15,343		15,834
Intangible assets	13	6	3	2		24
Property, plant and equipment (PPE)	1	1	2	1		4
Other assets	614	459	-55	75		1,094
Tax assets	0	0	0	26		26
Total assets	**20,257**	**8,483**	**2,210**	**48,860**		**79,809**
Liabilities to credit institutions	-35	-98	7	29,014		28,888
Derivative contracts	4,082			192		4,274
Liabilities to customers	46	12,365	771	3,221		16,403
Debt securities issued to the public	855			21,076		21,931
Provisions and other liabilities	754	0	-17	917		1,654
Tax liabilities	0	0	1	329		330
Subordinated liabilities	-11			2,320		2,309
Total liabilities	**5,691**	**12,267**	**762**	**57,069**		**75,789**
Equity						**4,020**

Notes to the income statement

Note 5. Net interest income

EUR million	2021	2020
Interest income		
Receivables from credit institutions	36	29
Receivables from customers		
Loans	356	360
Finance lease receivables	24	24
Impaired loans and other commitments		0
Total	381	384
Notes and bonds		
Measured at fair value through profit or loss	0	0
At fair value through other comprehensive income	52	62
Amortised cost	-12	0
Total	40	62
Derivative contracts		
Fair value hedge	-109	-99
Cash flow hedge	0	
Other	5	4
Total	-105	-94
Liabilities to credit institutions		
Negative interest	203	56
Liabilities to customers		
Negative interest	41	31
Other	7	7
Total	**604**	**474**
Interest expenses		
Liabilities to credit institutions	57	77
Liabilities to customers	-11	4
Notes and bonds issued to the public	80	151
Subordinated liabilities		
Subordinated loans	0	0
Other	62	58
Total	63	58
Derivative contracts		
Held for trading		
Cash flow hedge	-152	-162
Other	-35	-87
Total	-187	-249
Receivables from credit institutions		
Negative interest	181	104
Other	5	5
Total	**187**	**151**
Net interest income before fair value adjustment under hedge accounting	**417**	**324**
Hedging derivatives	-72	15
Value changes of hedged items	68	-17
Total	**412**	**322**

Interest income calculated using the effective interest method totalled EUR 661 (499) million.

The conditional additional margin of –0.5% exceeding the ECB's deposit facility rate under TLTRO III funding increased net interest income by EUR 103 million (18). The future cash flows of TLTRO III funding were changed in the cash flow measurement as a result of the fulfilment of the criteria for net lending performance that were the condition for the additional margin. In this change, the conditional additional margin for the current interest period was added to cash flows and the repayment periods of the funding were updated. The gross carrying amount of TLTRO funding was determined under IFRS 9 to correspond to the present value of the reassessed cash flows by discounting them by the original effective interest rates for tranches of finance. The resulting adjustment was recognised through profit or loss under IFRS 9.

Note 6. Net commissions and fees

Q1–4 2021, EUR million	Corporate Banking and Capital Markets	Asset and Sales Finance Services and Payment Transfers	Baltics	Other operations	Inter-segment items	Total
Commission income						
Lending	31	17	3	0		50
Deposits	0	0	3	0		3
Payment transfers	0	35	0	0		35
Securities brokerage	28					28
Securities issuance	6					6
Fund fees	0	0		0		0
Asset management	2	0				2
Legal services	0	0				0
Guarantees	2	9	2	0		13
Other	0	1	0	0		2
Total	**69**	**62**	**9**	**0**		**140**
Commission expenses						
Lending	0	1		0		1
Payment transfers	1	3	0	0		3
Securities brokerage	4			0		4
Securities issuance	2			1		3
Asset management	0			4		4
Guarantees			0			0
Other*	93	0	0	1		94
Total	**100**	**4**	**0**	**5**		**109**
Total net commissions and fees	**-31**	**58**	**9**	**-5**		**31**

Q1–4 2020, EUR million	Corporate Banking and Capital Markets	Asset and Sales Finance Services and Payment Transfers	Baltics	Other operations	Inter-segment items	Total
Commission income						
Lending	27	18	2	0		47
Deposits	0		3	0		3
Payment transfers	0	25	0	0		25
Securities brokerage	27					27
Securities issuance	10			0		10
Fund fees	0	0		0		0
Asset management	2	0				2
Legal services	0					0
Guarantees	2	9	2	0		12
Other	1	5	1	0		6
Total	**69**	**56**	**7**	**0**		**133**
Commission expenses						
Lending	0	1		0		1
Payment transfers	1	1	0	0		2
Securities brokerage	4			0		4
Securities issuance	2			0		2
Asset management	0			1		1
Guarantees			0			0
Other*	95	3	0	1		98
Total	**102**	**5**	**0**	**2**		**110**
Total net commissions and fees	**-33**	**51**	**7**	**-2**		**23**

* In 2021, the item includes EUR 89 million (91) in commission expenses paid to member banks arising from derivative trading.

Note 7. Net investment income

EUR million	2021	2020
Net income from assets at fair value through other comprehensive income		
Notes and bonds		
Other income and expenses	0	0
Capital gains and losses	4	6
Total	**4**	**6**
Net income recognised at fair value through profit or loss		
Financial assets held for trading		
Notes and bonds		
Fair value gains and losses	-5	1
Interest income and expenses	3	4
Total	-2	5
Shares and participations		
Fair value gains and losses	-3	0
Dividend income and share of profits	3	6
Total	0	6
Derivatives		
Fair value gains and losses*	151	124
Interest income and expenses	15	9
Total	166	133
Total	**164**	**144**
Financial assets that must measured at fair value through profit or loss		
Notes and bonds		
Fair value gains and losses		0
Total		0
Total		**0**
Total net income from financial assets recognised at fair value through profit or loss	**164**	**144**

* Net income from hedging derivatives amounted to -22.0 million euros (13.4).

Net income from investment property		
Fair value gains and losses	0	0
Net income from investment property total	**0**	**0**
Total net investment income	**168**	**150**

Note 8. Other operating income

EUR million	2021	2020
Capital gains on property in own use		2
Leasing agreements	0	0
ICT income	1	2
Merger gains		1
OP Financial Group's internal income	29	24
Other*	18	0
Total	**49**	**29**

* Includes the capital gain of EUR 18 million on the sale of OP Custody Ltd shares.

Note 9. Personnel costs

EUR million	2021	2020
Wages and salaries	48	45
Variable remuneration	13	8
Pension costs	8	7
Defined contribution plans	8	7
Defined benefit plans*	0	1
Other personnel related costs	4	2
Total	**72**	**62**

* Note 27.

Personnel fund

All personnel of OP Corporate Bank, excluding directors and the Baltic personnel, belongs to OP Financial Group's 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 Fund account for some 3.0% (2.0 %) of the combined salaries and wages earned by the Fund's members. The bonuses recognised in 2021 totalled EUR 1.3 million (0.9).

Performance-based bonus scheme in

The performance period of the performance-based bonus scheme is 12 months. Short-term remuneration schemes are based on targets set for each company, team and person derived from the annual plan, covering all personnel of OP Corporate Bank.

The bonus is determined by the job grade and the maximum bonuses correspond a 1–10-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 OP Corporate Bank that is based on the central cooperative consolidated's EBT. The total bonus amount in separately defined positions is based on OP Corporate Bank's EBT. Targets shown in the balanced scorecards and derived from annual planning are decided by the business lines/functions.

Conditions for payment of variable remuneration in 2021

Bonuses will be paid to their beneficiaries provided that OP Financial Group's CET1 ratio exceeds the CET1 ratio on the payout date 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. and that the person within the scheme is employed by OP Financial Group up to the payout date and OP Corporate Bank shows a profit.

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 qualitative 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 companies belonging to the Group can select the scheme metrics and set related targets.

Deferred payment of variable remuneration

The Act on Credit Institutions (233/2021) and the Act on Investment Services (213/2012), among other things, prescribe payment of variable remuneration to persons whose action may cause significant risk to the company ('identified staff'). OP Corporate Bank's identified staff includes CEOs/Managing Directors and other key management personnel as well as those involved in internal control.

If the bonus of a member of identified staff for the performance year exceeds €50,000 or accounts for at least a third (a quarter in investment firms) of the combined annual bonuses, 60% of the bonus will be paid during the year following the performance year. The remaining part 40% of the bonus will be paid in four equal instalments over the course of four years in such a way that the time between the payments is at least one year. Half of the variable remuneration is paid in cash and half is tied to the value of the reference instrument decided by OP Cooperative's Board of Directors. The bonus tied to the reference instrument will be paid to its beneficiary after a one-year retention period.

Remuneration for persons in charge of control duties

The remuneration objectives of persons in charge of control duties independent of business lines, such as risk management, internal audit, compliance and actuarial duties, may not jeopardise the independence of the duties. Variable remuneration must be independent of the business line under control and the Chief Risk Officer's metrics may not include any direct sales-based targets. It is also recommended that the balanced scorecard also include a qualitative metric that measures the performance of control duties.

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.

OP Cooperative' Board of Directors 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.

Expenses recognised for variable remuneration*

EUR million	2021	2020
Personnel fund	1	1
Performance-based bonuses	12	7
Total	**14**	**8**

* Excl. social expenses.

More information on the remuneration schemes is available at www.op.fi.

Note 10. Depreciation/amortisation and impairment loss

EUR million	2021	2020
Depreciation and amortisation		
Buildings		0
Machinery and equipment	0	0
Information systems and other	13	13
Right-of-use assets	1	1
Leased out assets	-1	0
Other		0
Total	12	14
Total	**12**	**14**

Note 11. Other operating expenses

EUR million	2021	2020
ICT costs		
Production	75	70
Development	17	16
Buildings	0	0
Government charges and audit fees*	51	39
Purchased services	13	12
Data communications	2	2
Marketing	2	2
Corporate social responsibility	0	0
Insurance and security costs	3	2
Other	72	20
Total	**236**	**163**

* In 2021, audit fees paid by OP Corporate Bank plc to auditors totalled EUR 283,000 million (267,000), whereas fees for assignments as referred to in chapter 1, section 1, sub-section 2, paragraph 1 of the Auditing Act were EUR 0 (1,000), those for tax counselling EUR 139,000 (71,000) and for other services EUR 62,000 (108,000). Non-audit services rendered by KPMG Oy Ab totalled EUR 201,000 (179,000) (excl. VAT). The corresponding figures for 2020 are shown in brackets.

** Other operating expenses increased by EUR 54 million due to the transmission within OP Financial Group of the margin exceeding the ECB's deposit facility rate based on the TLTRO programme launched in 2021.

Development costs

€ million	2021	2020
ICT development costs	17	16
Share of own work	0	0
Total development costs in the income statement	**17**	**16**
Capitalised ICT costs		1
Total capitalised development costs		**1**
Total development costs	**17**	**17**
Depreciation/amortisation and impairment loss	11	12

The development investments ensure the competitiveness and continuity of the present-day business and regulatory compliance and create conditions for new customer-driven business models.

Note 12. Impairment losses on receivables

EUR million	2021	2020
Receivables written down as loan and guarantee losses	-46	-55
Recoveries of receivables written down	1	1
Expected credit losses* (ECL) on receivables from customers and off-balance-sheet items	-28	1
Expected credit losses* (ECL) on notes and bonds	0	1
Total	**-74**	**-53**

* Loss allowance is itemised in Note 34. Loss allowance regarding receivables and notes and bonds.

Note 13. Income tax

EUR million	2021	2020
Current tax	52	12
Tax for previous financial years	-1	0
Deferred tax	1	34
Income tax expense	**52**	**46**
Corporate income tax rate	20.0	20.0
Reconciliation between tax expense in the income statement and tax expense calculated by the		
Earnings before tax	267	228
Tax calculated at a tax rate of 20%	53	46
Tax for previous financial years	-1	0
Tax-exempt income	-4	-1
Non-deductible expenses and income portions of limited partnerships	0	1
Tax adjustments	4	0
Other items	0	0
Tax expense	**52**	**46**

Notes to assets

Note 14. Liquid assets

EUR million	31 Dec 2021	31 Dec 2020
Cash	124	155
Deposits with central banks repayable on demand		
OP Corporate Bank plc's minimum reserve deposit	863	818
Cheque account*	31,802	20,791
Total liquid assets	**32,789**	**21,764**

* The cheque account includes EUR –11 million (–31) in cash resulting from central counterparty clearing.

In accordance with the minimum reserve system under the euro system, credit institutions are obligated to have a minimum reserve deposit with their national central bank. The reserve deposit equals the required percentage of the reserve base, as specified by the European Central Bank. The reserve base includes deposits (extensive) and debt securities with a maximum maturity of two years. The reserve base does not include deposits from other parties subject to the minimum reserve obligation. The reserve deposit is currently 1% of the reserve base. Credit institutions within OP Financial Group place a reserve deposit with OP Corporate Bank plc, which acts as an intermediary authorised by OP Financial Group credit institutions and is responsible for OP Financial Group's obligation to place a deposit with the Bank of Finland.

Note 15. Receivables from credit institutions

EUR million	31 Dec 2021	31 Dec 2020
Deposits		
Repayable on demand	102	78
Other	2	-0
Total	104	78
Loans and receivables		
Repayable on demand		
From other credit institutions	0	0
Other		
From OP Financial Group institutions	13,127	11,094
From other credit institutions	189	77
Total	13,316	11,171
Loss allowance*		
From other credit institutions	-1	0
Total	-1	0
Total receivables from credit institutions	**13,419**	**11,248**

* Loss allowance is itemised in Note 34. Loss allowance regarding receivables and notes and bonds.

Note 16. Derivative contracts

Assets

EUR million	31 Dec 2021	31 Dec 2020
Held for trading		
Interest rate derivatives	3,036	4,696
Currency derivatives	400	443
Equity and index derivatives	0	0
Credit derivatives		0
Commodity derivatives	7	4
Total	3,444	5,143
Hedging derivative contracts*		
Fair value hedging		
Interest rate derivatives	29	48
Currency derivatives	239	162
Total	268	209
Total derivative contracts	**3,712**	**5,352**

* The balance sheet item includes positive changes in fair value of derivative contracts as well as premiums paid.

Liabilities

EUR million	31 Dec 2021	31 Dec 2020
Held for trading		
Interest rate derivatives	2,154	3,622
Currency derivatives	396	450
Credit derivatives	0	0
Other	29	8
Total	2,579	4,079
Hedging derivative contracts*		
Fair value hedging		
Interest rate derivatives	90	129
Currency derivatives	0	65
Cash flow hedge		
Interest rate derivatives	0	
Total	91	195
Total derivative contracts	**2,669**	**4,274**

* The balance sheet item includes negative changes in value of derivative contracts as well as premiums received.

Derivatives held for trading 31 December 2021

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	24,352	40,399	63,172	127,923	1,761	1,169
Cleared by the central counterparty	6,606	23,805	38,098	68,509	9	11
Settled-to-market (STM)	5,774	21,888	35,745	63,407	8	10
Collateralised-to-market (CTM)	832	1,916	2,353	5,101	0	1
Forward rate agreements						
OTC interest rate options						
Call and caps						
Purchased	3,591	10,651	7,769	22,012	511	173
Written	2,333	6,158	4,868	13,359	59	224
Put and floors						
Purchased	903	7,853	5,181	13,937	296	50
Written	1,235	8,500	2,057	11,793	46	156
Total OTC interest rate derivatives	32,414	73,561	83,048	189,023	2,673	1,772
Interest rate futures	517	950		1,467	0	0
Total exchange traded derivatives	517	950		1,467	0	0
Total interest rate derivatives	32,931	74,511	83,048	190,490	2,673	1,772
Currency derivatives						
Forward exchange agreements	38,930	1,354	3	40,288	397	394
Interest rate and currency swaps	568	2,937	403	3,908	151	182
Currency options						
Call						
Purchased	111			111	1	0
Written	138			138	0	2
Put						
Purchased	132			132	1	0
Written	101			101	0	1
Total OTC currency derivatives	39,982	4,291	406	44,679	551	579
Total currency derivatives	39,982	4,291	406	44,679	551	579
Equity and index derivatives						
Equity index options						
Call						
Purchased	2			2	0	
Total OTC equity and index derivatives	2			2	0	
Total equity and index derivatives	2			2	0	
Credit derivatives						
Credit default swaps	34	62		95	2	35
Total credit derivatives	34	62		95	2	35
Other						
Other forward contracts	36	44		81	3	24
Other swaps	196	500	28	724	101	19
Total other OTC derivatives	233	544	28	805	104	43
Total other derivatives	260	544	28	832	104	43
Total derivatives held for trading	**73,208**	**79,408**	**83,481**	**236,098**	**3,329**	**2,430**

Derivatives held for trading 31 December 2020

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	24,608	44,923	60,980	130,511	3,096	2,144
Cleared by the central counterparty	7,576	26,412	36,841	70,829	14	17
Settled-to-market (STM)	6,324	24,171	34,821	65,315	13	16
Collateralised-to-market (CTM)	1,252	2,241	2,020	5,513	0	1
OTC interest rate options						
Call and caps						
Purchased	4,628	7,998	7,630	20,256	620	234
Written	4,482	4,110	4,920	13,512	82	364
Put and floors						
Purchased	2,820	4,585	4,761	12,166	231	2
Written	3,820	4,440	2,206	10,466	82	197
Total OTC interest rate derivatives	40,358	66,056	80,496	186,910	4,111	2,942
Interest rate futures	2,502	563		3,065	0	0
Total exchange traded derivatives	2,502	563		3,065	0	0
Total interest rate derivatives	42,860	66,619	80,496	189,975	4,111	2,942
Currency derivatives						
Forward exchange agreements	38,158	515	5	38,679	439	446
Interest rate and currency swaps	3,072	2,211	1,472	6,755	440	442
Currency options						
Call						
Purchased	123	2		125	2	0
Written	139	2		141	0	2
Put						
Purchased	138	2		139	2	0
Written	126	2		127	0	1
Total OTC currency derivatives	41,756	2,733	1,477	45,965	883	893
Total currency derivatives	41,756	2,733	1,477	45,965	883	893
Equity and index derivatives						
Equity index options						
Call						
Purchased		2		2	0	
Total OTC equity and index derivatives		2		2	0	
Total equity and index derivatives		2		2	0	
Credit derivatives						
Credit default swaps	90	82		172	1	0
Total credit derivatives	90	82		172	1	0
Other						
Other forward contracts	12	3		15	0	4
Other swaps	121	456	11	588	52	24
Total other OTC derivatives	133	458	11	602	52	28
Total other derivatives	133	458	11	602	52	28
Total derivatives held for trading	**84,838**	**69,894**	**81,984**	**236,716**	**5,047**	**3,863**

Derivative contracts for hedging purposes - fair value hedging 31 December 2021

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	3,800	13,990	13,916	31,706	29	7
Cleared by the central counterparty	3,720	13,990	13,768	31,478	2	2
Settled-to-market (STM)	381	2,714	1,566	4,662	0	0
Collateralised-to-market (CTM)	3,339	11,276	12,202	26,817	2	2
Total OTC interest rate derivatives	3,800	15,348	14,229	33,378	33	35
Total interest rate derivatives	3,800	15,348	14,229	33,378	33	35
Currency derivatives						
Interest rate and currency swaps	730	1,217	351	2,297	63	83
Total OTC currency derivatives	730	1,217	351	2,297	81	84
Total currency derivatives	730	1,217	351	2,297	81	84
Total derivative contracts, fair value hedge	**4,530**	**16,565**	**14,580**	**35,675**	**114**	**119**

Derivative contracts for hedging purposes – cash flow hedge 31 December 2021

	Nominal values/residual term to maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps		500		500	0	0
Cleared by the central counterparty		500		500		0
Collateralised-to-market (CTM)		500		500		0
Total OTC interest rate derivatives		500		500	0	0
Total interest rate derivatives		500		500	0	0
Currency derivatives						
Forward exchange agreements	3,978			3,978	158	0
Total OTC currency derivatives	3,978			3,978	158	0
Total currency derivatives	3,978			3,978	158	0
Total derivative contracts, cash flow hedge	**3,978**	**500**		**4,478**	**158**	**0**
Total derivative contracts held for hedging	**8,508**	**17,065**	**14,580**	**40,153**	**272**	**119**

Derivative contracts for hedging purposes – fair value hedging 31 December 2020

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	2,419	16,468	12,335	31,223	48	15
Cleared by the central counterparty	2,229	16,388	12,139	30,757	5	4
Settled-to-market (STM)	255	2,923	802	3,980	0	0
Collateralised-to-market (CTM)	1,974	13,465	11,337	26,777	5	4
Total OTC interest rate derivatives	2,419	16,468	12,335	31,223	48	15
Total interest rate derivatives	2,419	16,468	12,335	31,223	48	15
Currency derivatives						
Interest rate and currency swaps	593	1,366	404	2,363	117	115
Total OTC currency derivatives	593	1,366	404	2,363	117	115
Total currency derivatives	593	1,366	404	2,363	117	115
Total derivative contracts, fair value hedge	**3,012**	**17,835**	**12,739**	**33,585**	**165**	**129**

Derivative contracts for hedging purposes – cash flow hedge 31 December 2020

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Currency derivatives						
Forward exchange agreements	6,535	22		6,557	26	65
Total OTC currency derivatives	6,535	22		6,557	26	65
Total currency derivatives	6,535	22		6,557	26	65
Total derivative contracts, cash flow he	**6,535**	**22**		**6,557**	**26**	**65**
Total derivative contracts held for hedging	**9,547**	**17,857**	**12,739**	**40,143**	**191**	**194**

Total derivatives 31 December 2021

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives	36,731	90,360	97,277	224,368	2,706	1,808
Cleared by the central counterparty	10,327	38,295	51,866	100,487	11	13
Settled-to-market (STM)	6,155	24,603	37,311	68,069	9	11
Collateralised-to-market (CTM)	4,171	13,692	14,554	32,418	2	3
Currency derivatives	44,689	5,508	757	50,954	790	662
Equity and index-linked derivatives	2			2	0	
Credit derivatives	34	62		95	2	35
Other derivatives	260	544	28	832	104	43
Total derivatives	**81,716**	**96,473**	**98,061**	**276,251**	**3,602**	**2,549**

Total derivatives 31 December 2020

	Nominal values/residual maturity				Fair values*	
EUR million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives	45,279	83,087	92,831	221,197	4,159	2,957
Cleared by the central counterparty	9,805	42,800	48,980	101,586	19	21
Settled-to-market (STM)	6,579	27,094	35,623	69,296	14	16
Collateralised-to-market (CTM)	3,226	15,706	13,357	32,290	5	5
Currency derivatives	48,884	4,121	1,880	54,885	1,026	1,072
Equity and index-linked derivatives		2		2	0	
Credit derivatives	90	82		172	1	0
Other derivatives	133	458	11	602	52	28
Total derivatives	**94,386**	**87,750**	**94,723**	**276,859**	**5,238**	**4,057**

*Fair values include accrued interest which is shown under other assets or provisions and other liabilities in the balance sheet.

Interest rate derivatives for central counterparty clearing are offset in the balance sheet. Note 36 below presents the effects of netting. Other derivative contracts are presented on a gross basis in the balance sheet.

Average interest rates of interest rate derivative contracts in hedge accounting – fair value 31 December 2021

	<1 year	1–5 years	>5 years	Total
Interest rate derivatives				
Cleared by the central counterparty	1.243	0.249	0.167	0.325
OTC interest rate derivatives	3.362		3.040	3.169
Total interest rate derivatives	1.291	0.249	0.192	0.343

Average interest rates of interest rate derivative contracts in hedge accounting – fair value 31 December 2020

	<1 year	1–5 years	>5 years	Total
Interest rate derivatives				
Cleared by the central counterparty	1.119	0.426	0.299	0.421
OTC interest rate derivatives	4.373	3.362	3.040	3.654
Total interest rate derivatives	1.330	0.441	0.326	0.457

Average interest rates of interest rate swaps and currency swaps in hedge accounting related to significant currencies 31 December 2021

	<1 year	1–5 years	>5 years	Total
AUD			2.440	2.440
CHF				
GBP	2.500	1.326	0.880	1.569
HKD		2.959		2.959
JPY			1.300	1.300
NOK			3.800	3.800
USD	1.943	1.954	3.611	2.783

Average interest rates of interest rate swaps and currency swaps in hedge accounting related to significant currencies 31 December 2020

	<1 year	1–5 years	>5 years	Total
AUD			2.440	2.440
CHF	1.604			1.604
GBP	0.355	2.405	0.634	1.131
HKD		3.001	2.880	2.941
JPY			1.300	1.300
NOK			3.800	3.800
USD		1.951	3.611	2.781

Average prices of currency derivatives in hedge accounting concerning significant currencies 31 December 2021

	<1 year	1–5 years	>5 years	Total
Currency derivatives				
Forward exchange agreements				
Average EUR:AUD				
Average EUR:CAD				
Average EUR:CHF	1.077			1.077
Average EUR:GBP	0.893			0.893
Average EUR:HKD				
Average EUR:NOK				
Average EUR:SGD	1.625			1.625
Average EUR:USD	1.200			1.200

Average prices of currency derivatives in hedge accounting concerning significant currencies 31 December 2020

	<1 year	1–5 years	>5 years	Total
Currency derivatives				
Forward exchange agreements				
Average EUR:AUD	1.648			1.648
Average EUR:CAD	1.475			1.475
Average EUR:CHF	1.084			1.084
Average EUR:GBP	0.888			0.888
Average EUR:HKD	8.896			8.896
Average EUR:NOK	10.795			10.795
Average EUR:SGD	1.568			1.568
Average EUR:USD	1.114			1.114

Effects of hedge accounting on financial position and result

EUR million	Interest rate risk hedge 31 Dec 2021	31 Dec 2020
Fair value hedges		
Carrying amount of hedged receivables*	15,967	14,879
- of which the accrued amount of hedge adjustments	93	448
Carrying amount of hedged liabilities**	14,331	18,596
- of which the accrued amount of hedge adjustments	140	599
Remaining hedge adjustment amount of discontinued hedges	53	3

* Presented under Receivables from customers and Investment assets in the balance sheet.

** Presented in the balance sheet under Liabilities to customers, Debt securities issued to the public and Subordinated liabilities.

EUR million	Interest rate risk hedge 31 Dec 2021	31 Dec 2020
Fair value hedges		
Changes in fair value of hedging derivatives	-72	15
Change in value of hedged item that is used as basis for recognition of ineffective hedge during period	68	-18
Hedge ineffectiveness presented in income statement	-4	-4

EUR million	Interest rate risk hedge 31 Dec 2021	31 Dec 2020
Cash flow hedges		
Changes in fair value of hedging derivatives	2	
Change in value of hedged item that is used as basis for recognition of ineffective hedge during period	-2	
Hedge ineffectiveness presented in income statement	0	
Change in cash flow hedge reserve concerning continuous hedges	2	

Note 17. Receivables from customers

EUR million	31 Dec 2021	31 Dec 2020
Loans to the public and public sector entities	24,426	23,148
Finance lease receivables*	2,124	1,590
Guarantee receivables	2	2
Total	26,552	24,741
Loss allowance**	-316	-280
Total receivables from customers	**26,236**	**24,461**

* Finance lease receivables are itemised in Note 21.

** Loss allowance is itemised in Note 34. Loss allowance regarding receivables and notes and bonds.

Note 18. Investment assets

EUR million	31 Dec 2021	31 Dec 2020
Financial assets held for trading		
Notes and bonds	331	332
Shares and participations	18	25
Total	349	357
Financial assets at fair value through other comprehensive income		
Notes and bonds	13,171	13,639
Shares and participations	0	0
Total	13,171	13,639
Amortised cost		
Notes and bonds	3,853	814
Shares and participations		1,024
Total	3,853	1,839
Investment property	0	0
Total investment assets	**17,373**	**15,834**

Note 34 describes expected credit losses of items measured at fair value through other comprehensive income and at amortised cost.

Note 19. Intangible assets

Changes in intangible assets, EUR million	Information systems	Information systems under development	Other	Total
Acquisition cost 1 January 2021	99	2	0	101
Increases	0		0	0
Decreases	-40		0	-41
Transfers between items	2	-2		
Acquisition cost 31 December 2021	61	0	0	61
Acc. amortisation and impairments 1 January 2021	-77		0	-77
Amortisation during the financial year	-13		0	-13
Decreases	40		0	41
Acc. amortisation and impairments 31 December 2021	-49		0	-49
Carrying amount 31 December 2021	**11**	**0**	**0**	**12**

Changes in intangible assets, EUR million	Information systems	Information systems under development	Other	Total
Acquisition cost 1 January 2020	93	7	0	100
Increases		1	0	1
Transfers between items	7	-7		
Acquisition cost 31 December 2020	99	2	0	101
Acc. amortisation and impairments 1 January 2020	-65		0	-65
Amortisation for the period	-13		0	-13
Accumulated amortisation and impairments 31 December 2020	-77		0	-77
Carrying amount 31 December 2020	**22**	**2**	**0**	**24**

Note 20. Property, plant and equipment

EUR million	31 Dec 2021	31 Dec 2020
Property in Group use		
Land and water areas	0	0
Machinery and equipment	0	0
Other tangible assets	2	1
Right-of-use assets	3	3
Total property, plant and equipment	**5**	**4**

Changes in property, plant and equipment (PPE), and investment property, EUR million	Property in Group use	Machinery and equipment	Other tangible assets	Total PPE
Acquisition cost 1 January 2021	1	0	1	3
Increases		0	0	1
Decreases		0	0	0
Acquisition cost 31 December 2021	1	1	2	4
Accumulated depreciation and impairments 1 January 2021	-1	0	0	-1
Depreciation for the financial year		0	0	0
Decreases		0		0
Accumulated depreciation and impairments 31 December 2021	-1	0	0	-1
Right-of-use assets*				3
Carrying amount 31 December 2021	**0**	**0**	**2**	**5**

Changes in property, plant and equipment (PPE), and investment property, EUR million	Property in Group use	Machinery and equipment	Other tangible assets	Total PPE
Acquisition cost 1 January 2020	3	0	2	5
Increases		0	0	0
Decreases	-2		-1	-2
Acquisition cost 31 December 2020	1	0	1	3
Accumulated depreciations and impairments				
1 January 2020	-3	0	0	-3
Depreciation for the financial year		0		0
Decreases	2			2
31 December 2020	-1	0	0	-1
Right-of-use assets*				3
Carrying amount 31 December 2020	**0**	**0**	**1**	**4**

* Note 21. Leases

Note 21. Leases

Right-of-use assets, EUR million	Buildings	Other	Total
Carrying amount 1 January 2021	3	1	4
Increases		0	0
Decreases		0	0
Depreciation for the financial year	0	0	-1
Value changes for the financial year	0	0	0
Carrying amount 31 December 2021	**2**	**1**	**3**

Right-of-use assets, EUR million	Buildings	Other	Total
Carrying amount 1 January 2020	2	0	2
Increases	1	1	2
Decreases	0	0	-1
Depreciation for the financial year	0	0	0
Value changes for the financial year	0	0	0
Carrying amount 31 December 2020	**3**	**1**	**4**

Lease liabilities, EUR million	31 Dec 2021	31 Dec 2020
* Carrying amount	3	4
Contractual maturities		
< 1 year	1	1
1–2 years	1	1
2–3 years	0	1
3–4 years	0	0
4–5 years	0	0
Over 5 years	1	1

* Note 27. Provisions and other liabilities

Items entered in the income statement, EUR million	31 Dec 2021	31 Dec 2020
Interest expenses	0	0
Depreciation on right-of-use assets	-1	-1
Gains or losses arising from sale and leaseback transactions;	0	0
Expenses of short-term and low-value leases	-1	-1
Total cash flow from leases	-1	-1

Finance lease receivables

OP Corporate Bank plc uses finance leases to finance moveable capital assets, real property units and other premises in Finland. In addition, OP Corporate Bank's branches in Estonia, Latvia and Lithuania use finance leases to finance moveable capital assets.

EUR million	31 Dec 2021	31 Dec 2020
Maturity of finance lease receivables		
< 1 year	666	439
1–2 years	569	362
2–3 years	380	294
3–4 years	220	160
4–5 years	170	118
Over 5 years	202	290
Gross investment in finance leases	2,207	1,662
Unearned finance income (–)	-83	-72
Present value of minimum lease payments	**2,124**	**1,590**
Present value of minimum lease payment receivables		
< 1 year	637	418
1–2 years	550	347
2–3 years	369	284
3–4 years	213	154
4–5 years	167	113
Over 5 years	189	274
Total	**2,124**	**1,590**

Items entered in the income statement, € million	31 Dec 2021	31 Dec 2020
Interest income from finance lease receivables	19	17
Capital gain/loss accrued from finance leases	1	0

Note 22. Other assets

EUR million	31 Dec 2021	31 Dec 2020
Payment transfer receivables	249	296
Pension assets	8	3
Accrued income and prepaid expenses		
Interest	305	136
Interest on derivatives receivables	21	23
Other	22	13
Derivatives receivables, central counterparty clearing	5	15
CSA receivables from derivative contracts	488	503
Securities receivables	4	8
Other receivables	172	98
Total	**1,274**	**1,094**

Note 23. Tax assets and liabilities

EUR million	31 Dec 2021	31 Dec 2020
Income tax assets		12
Deferred tax assets		15
Total tax assets		**26**

EUR million	31 Dec 2021	31 Dec 2020
Income tax liabilities	17	1
Deferred tax liabilities	322	329
Total tax liabilities	**339**	**330**

Deferred tax assets	31 Dec 2021	31 Dec 2020
Due to financial assets at fair value through other comprehensive income		
Due to depreciation and impairments		0
Due to provisions and impairment losses on receivables		0
Cash flow hedge	0	
Due to defined-benefit pension plans	13	13
Due to unused tax credits		0
Due to other temporary differences	6	8
Set-off against deferred tax liabilities	-19	-7
Total		**15**

Deferred tax liabilities	31 Dec 2021	31 Dec 2020
Due to appropriations	325	325
Due to financial assets at fair value through other comprehensive income	11	5
Cash flow hedge		0
Defined benefit pension plans	4	4
Due to other temporary differences	1	2
Set-off against deferred tax assets	-19	-7
Total	**322**	**329**
Net deferred tax asset (+)/liability (-)	**-322**	**-315**

Changes in deferred taxes	31 Dec 2021	31 Dec 2020
Deferred tax assets /liabilities 1 January	-315	-275
Effect of losses		
Appropriations		-31
Defined benefit pension plans	0	0
Other	-1	-3
Recognised in statement of comprehensive income		
Available-for-sale financial assets		
Fair value measurement	-6	-6
Cash flow hedges	1	0
Actuarial gains/losses on post-employment benefit obligations	-1	0
Total deferred tax assets 31 December, asset (+)/liability (-)	**-322**	**-315**
Income tax assets, asset (+)/liability (-)	**-17**	**11**
Total tax assets, asset (+)/liability (-)	**-339**	**-304**

Notes to liabilities and equity capital

Note 24. Liabilities to credit institutions

EUR million	31 Dec 2021	31 Dec 2020
Liabilities to central banks	16,000	8,000
Liabilities to credit institutions		
Repayable on demand		
Deposits		
With OP Financial Group entities	1,420	2,789
With other credit institutions	550	24
Other liabilities		
With OP Financial Group entities	0	0
Total	1,971	2,813
Other than repayable on demand		
Deposits		
With OP Financial Group entities*	24,621	18,043
With other credit institutions	68	32
Total	24,689	18,075
Total liabilities to credit institutions and central banks	**42,660**	**28,888**

* The item includes LCR deposits by member credit institutions.

In 2020, the Governing Council of the European Central Bank modified the terms and conditions of TLTRO III to stimulate bank lending to those hardest hit by the Covid-19 pandemic. According to the modified conditions, the interest rate between 24 June 2020 and 23 June 2022 can be the ECB's deposit facility rate (–0.50% on the reporting date) minus 0.50%. For the subsequent loan maturity, the interest rate can be, at its best, the ECB's deposit facility rate. The reduced interest rate is conditional on fulfilling the criteria for net lending performance. The interest rate for 24 June 2020–23 June 2021 was determined by the net lending performance period expired on 31 March 2021 and the interest rate for 24 June 2021–23 June 2022 was determined by the net lending performance period expired on 31 December 2021. In respect of the interest period for 24 June 2020–23 June 2021, the Bank of Finland has confirmed that OP Financial Group has fulfilled the criteria for net lending performance. In respect of the interest period for 24 June 2021–23 June 2022, OP Financial Group assesses that it has fulfilled the criteria. The final interest rate will be determined when the TLTRO III operation matures.

Note 25. Liabilities to customers

EUR million	31 Dec 2021	31 Dec 2020
Deposits		
Repayable on demand		
Private	18	22
Companies and public-sector entities	15,701	13,402
Total	15,719	13,424
Other		
Private	0	0
Companies and public-sector entities	370	520
Total	370	520
Total deposits	16,089	13,944
Other financial liabilities		
Repayable on demand		
Companies and public-sector entities	1	1
Total	1	1
Other		
Companies and public-sector entities	2,267	2,457
Total	2,267	2,457
Total other financial liabilities	2,268	2,458
Total liabilities to customers	**18,357**	**16,403**

Note 26. Debt securities issued to the public

EUR million	31 Dec 2021	31 Dec 2020
Bonds	10,927	12,694
Other		
Certificates of deposit	297	273
Commercial paper	7,539	7,347
Subordinated bonds (SNP)	3,926	1,689
Included in own portfolio in trading (–)*	-58	-72
Total debt securities issued to the public	**22,630**	**21,931**

*Own bonds held by OP Corporate Bank plc have been set off against liabilities.

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

EUR million	Debt securities issued to the public	Subordinated liabilities
Balance sheet value 1 Jan 2021	**21,931**	**2,309**
Changes in cash flows from financing activities		
Increases in bonds	3,144	
Increases in certificates of deposit	371	
Increases in commercial papers	8,145	
Increases in debentures		21
Increases total	**11,660**	**21**
Decreases in bonds	-2,526	
Decreases in certificates of deposit	-348	
Decreases in commercial papers	-7,953	
Decreases in debentures		-311
Decreases total	**-10,827**	**-311**
Total changes in cash flows from financing activities	**833**	**-290**
Valuations	-133	-24
Balance sheet value 31 Dec 2021	**22,630**	**1,994**

EUR million	Debt securities issued to the public	Subordinated liabilities
Balance sheet value 1 Jan 2020	**22,759**	**1,339**
Changes in cash flows from financing activities		
Increases in bonds	9,717	
Increases in certificates of deposit	350	
Increases in commercial papers	18,012	
Increases in debentures		1,326
Increases total	**28,079**	**1,326**
Decreases in bonds	-8,571	
Decreases in certificates of deposit	-77	
Decreases in commercial papers	-20,381	
Decreases in debentures		-348
Decreases total	**-29,029**	**-348**
Total changes in cash flows from financing activities	**-950**	**978**
Valuations	122	-8
Balance sheet value 31 Dec 2020	**21,931**	**2,309**

Long-term loans and interest rate bases	Nominal amount	Interest rate	Maturity
OP Corporate Bank plc Issue of EUR 60,000,000 Floating Rate Instruments due 25 January 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	60.0	EUB3 + 0.750%	25 Jan 2022
OP Corporate Bank plc Issue of EUR 60,000,000 3.75 per cent. Instruments due 1 March 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	60.0	Fixed 3.750 %	1 March 2022
OP Corporate Bank plc Issue of EUR 1,000,000,000 0.75 per cent. Instruments due March 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	1,000.0	Fixed 0.750 %	3 March 2022
OP Corporate Bank plc Issue of EUR 35,000,000 Floating Rate Instruments due 18 May 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	35.0	EUB3 + 0.550%	18 May 2022
OP Corporate Bank plc Issue of GBP 400,000,000 2.500 per cent. Instruments due 20 May 2022 under the EUR 15,000,000,000 Programme for the Issuance of Debt Instruments	476.0	Fixed 2.500 %	20 May 2022
OP Corporate Bank plc Issue of SEK 2,600,000,000 Floating Rate Instruments due May 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	253.7	SES3M + 0.750%	31 May 2022
OP Corporate Bank plc Issue of EUR 25,000,000 0.139 per cent. Fixed Rate Instruments due June 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	25.0	Fixed 0.139%	10 June 2022
OP Corporate Bank plc Issue of EUR 55,000,000 Floating Rate Instruments due June 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	55.0	EUB3 + 1.050%	11 June 2022
OP Corporate Bank plc Issue of EUR 300,000,000 Floating Rate Instruments due 13 June 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	300.0	EUB3M + 0.75 %	13 June 2022
OP Corporate Bank plc Issue of EUR 20,000,000 0.01 per cent. Instruments due 18 July 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	20.0	Fixed 0.010%	18 July 2022
OP Corporate Bank plc Issue of EUR 400,000,000 Floating Rate Instruments due August 2022 to be consolidated and form a single series with the existing Issue of EUR 250,000,000 Floating Rate Instruments due August 2022 issued on 10 August 2020 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	650.0	EUB3 + 1.050%	10 Aug 2022
OP Corporate Bank plc Issue of EUR 50,000,000 Floating Rate Instruments due August 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	50.0	EUB3M + 0.50 %	17 Aug 2022
OP Corporate Bank plc Issue of EUR 500,000,000 0.375 per cent. Instruments due 11 Oct 2022 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.375 %	11 Oct 2022
OP Corporate Bank plc Issue of EUR 500,000,000 0.375 per cent. Instruments due 29 Aug 2023 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.375 %	29 Aug 2023
OP Corporate Bank plc Issue of EUR 10,000,000 0.55 per cent. Instruments due 5 Oct 2023 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	10.0	Fixed 0.550 %	5 Oct 2023
OP Corporate Bank plc Issue of EUR 500 Million Floating Rate Senior Unsecured Notes Due January 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	EUB3 + 1.000%	18 Jan 2024
OP Corporate Bank plc Issue of EUR 20,000,000 1.097 per cent. Instruments due 16 February 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	20.0	Fixed 1.097 %	16 Feb 2024
OP Corporate Bank plc Issue of EUR 500,000,000 0.375 per cent. Instruments due 26 February 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.375 %	26 Feb 2024
OP Corporate Bank plc Issue of EUR 15,000,000 Fixed Rate Notes due 14 June 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments.	15.0	Fixed 0.780 %	14 June 2024
OP Corporate Bank plc Issue of EUR 500,000,000 0.375 per cent. Senior Non-Preffered Instruments due 19 June 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.375 %	19 June 2024
OP Corporate Bank plc Issue of EUR 10,000,000 0,725 per cent. Instruments due 20 June 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments.	10.0	Fixed 0.725 %	20 June 2024
OP Corporate Bank plc Issue of EUR 1,000,000,000 0.125 per cent. Unsubordinated Instruments due 1 July 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	1,000.0	Fixed 0.125%	1 July 2024
OP Corporate Bank plc Issue of EUR 20,000,000 0,55 per cent. Instruments due 30 Aug 2024 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments.	20.0	Fixed 0.550 %	30 Aug 2024
OP Corporate Bank plc Issue of AUD 200,000,000 Floating Rate Senio Non-Preffered Instruments due 25 November 2024 under the AUD 3 000,000,000 Programme for the Issuance of Debt Instruments	128.1	BBSW + 1.150%	25 Nov 2024
OP Corporate Bank plc Issue of EUR 57,000,000 1.07 per cent. Notes due 2025 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments.	57.0	Fixed 1.070 %	12 May 2025
OP Corporate Bank plc Issue of EUR 500,000,000 1.00 per cent. Instruments due 22 May 2025 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments.	500.0	Fixed 1.000 %	22 May 2025

OP Corporate Bank plc Issue of EUR 1,000,000,000 0.500 per cent. Unsubordinated Instruments due 12 August 2025 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	1,000.0	Fixed 0.500%	12 Aug 2025
OP Corporate Bank plc Issue of HKD 1,270,000,000 Floating Rate Note due September 2025 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	143.8	Fixed 3.001 %	4 Sept 2025
OP Corporate Bank plc Issue of EUR 20,000,000 0.91 per cent. Fixed Rate Notes due 14 January 2026 under the EUR 20,000,000 Programme for the Issuance of Debt Instruments	20.0	Fixed 0.910 %	14 Jan 2026
OP Corporate Bank plc Issue of HKD 663,000,000 2.88 per cent. Instruments due 21 January 2026 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	75.1	Fixed 2.880 %	21 Jan 2026
OP Corporate Bank plc Issue of 5yr EUR 500 000 000 Fixed Rate Senior Non-Preferred Instruments due 24 March 2026 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.250 %	24 March 2026
OP Corporate Bank plc Issue of EUR 50,000,000 0.25 per cent. Fixed Rate Notes due 1 July 2026 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	50.0	Fixed 0.250 %	21 July 2026
OP Corporate Bank plc Issue of Short 5yr GBP 400,000,000 Fixed Rate Senior Non-Preferred Instruments due 4 September 2026 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	476.0	Fixed 1.375 %	4 Sept 2026
OP Corporate Bank plc Issue of EUR 500,000,000 0.600 per cent. Senior Non-Preferred Instruments due 18 January 2027 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.600%	18 Jan 2027
OP Corporate Bank plc Issue of EUR 10,000,000 1.058 per cent. Instruments due 18 May 2027 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	10.0	Fixed 1.058 %	18 May 2027
OP Corporate Bank plc Issue of EUR 50,000,000 3.086 per cent. Instruments due 23 August 2027 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	50.0	Fixed 3.086 %	23 Aug 2027
OP Corporate Bank plc Issue of EUR 25,000,000 1.00 per cent. Notes due 2027 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	25.0	Fixed 1.000 %	8 Oct 2027
OP Corporate Bank plc Issue of EUR 1,000,000,000 0.100 per cent. Instruments due 16 November 2027 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	1000.0	Fixed 0.100 %	16 Nov 2027
OP Corporate Bank plc Issue of USD 60,000,000 3.692 per cent. Instruments due 15 Jun 2028 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	53.0	Fixed 3.692 %	15 June 2028
OP Corporate Bank plc Issue of 7yr EUR 500 000 000 Fixed Rate Senior Non-Preferred Instruments due 16 June 2028 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.375 %	16 June 2028
OP Corporate Bank plc Issue of EUR 10,000,000 1.30 per cent. Instruments due 23 Oct 2028 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	10.0	Fixed 1.300 %	23 Oct 2028
OP Corporate Bank plc Issue of USD 100,000,000 3.901 per cent. Instruments due 7 Dec 2028 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	88.3	Fixed 3.901 %	7 Dec 2028
OP Corporate Bank plc Issue of 7.25yr EUR 500 000 000 Fixed Rate Senior Non-Preferred Instruments due 8 December 2028 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.375 %	8 Dec 2028
OP Corporate Bank plc Issue of EUR 10,000,000 1.310 per cent. Fixed Rate Instruments due 24 January 2029 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	10.0	Fixed 1.310 %	24 Jan 2029
OP Corporate Bank plc Issue of EUR 19,000,000 1.005 per cent. Fixed Rate Instruments due 6 March 2029 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	19.0	Fixed 1.005 %	6 March 2029
OP Corporate Bank plc Issue of NOK 200,000,000 3.80 per cent. Instruments due 27 May 2029 under the EUR 15,000,000,000 Programme for Debt Instruments	20.0	Fixed 3.800 %	27 May 2029
OP Corporate Bank plc Issue of AUD 197,000,000 2.440% per cent.	126.2	Fixed 2.440 %	10 July 2029
OP Corporate Bank plc Issue of USD 50,000,000 Fixed Rate Senior Non-Preferred Instruments due 17 July 2029 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	44.1	Fixed 2.933 %	17 July 2029
OP Corporate Bank plc Issue of EUR 500,000,000 0.625 per cent. Senior Non-Preferred Instruments due 12 November 2029 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	500.0	Fixed 0.625 %	12 Nov 2029
OP Corporate Bank plc Issue of EUR 10,000,000 0.53 per cent. Fixed Rate Instruments due 15 November 2029 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	10.0	Fixed 0.530 %	15 Nov 2029
OP Corporate Bank plc Issue of EUR 30,000,000 1.70 per cent. Notes due 2030 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	30.0	Fixed 1.700 %	21 Aug 2030
OP Corporate Bank plc Issue of EUR 50,000,000 2.045 per cent. Instruments due 18 November 2030 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	50.0	Fixed 2.045 %	18 Nov 2030

OP Corporate Bank plc Issue of EUR 10,000,000 1.865 per cent. Instruments due 27 January 2031 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	10.0	Fixed 1.865 %	27 Jan 2031
OP Corporate Bank plc Issue of 10yr EUR 300 000 000 Fixed Rate Senior Non-Preferred Instruments due 24 March 2031 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	300.0	Fixed 1.750 %	21 March 2031
OP Corporate Bank plc Issue of EUR 50,000,000 1.706 per cent. Instruments due 12 Dec 2033 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	50.0	Fixed 1.706 %	12 Dec 2033
OP Corporate Bank plc Issue of EUR 30,000,000 3.068 per cent. Instruments due 21 March 2034 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	30.0	Fixed 3.068 %	21 March 2034
OP Corporate Bank plc Issue of EUR 30,000,000 Fixed Rate Notes due 2034 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	30.0	Fixed 3.015 %	31 March 2034
OP Corporate Bank plc Issue of EUR 40,000,000 Fixed Rate Notes due 2034 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	40.0	Fixed 3.000 %	11 April 2034
OP Corporate Bank plc Issue of EUR 40,000,000 1.40 cent. Instruments due 16 March 2035 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	40.0	Fixed 1.400 %	16 March 2035
OP Corporate Bank plc Issue of EUR 30,000,000 2.155 per cent. Instruments due 20 November 2035 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	30.0	Fixed 2.155 %	20 Nov 2035
OP Corporate Bank plc Issue of JPY 2,500,000,000 1.30 per cent. Instruments due 27 November 2035 under the EUR 20,000,000,000 Programme for the Issuance of Debt Instruments	19.2	Fixed 1.300 %	27 Nov 2035

The interest rate is the rate according to the issue currency. The euro equivalents are calculated using the average rate of the European Central Bank on the balance sheet date. The nominal amount of structured bonds issued by OP Corporate Bank plc was EUR 1,138 million (1,112). The bonds' interest rate is determined on the basis of interest, equity, equity index or similar underlying instruments. Any possible additional return on the bonds to the investor is hedged using a corresponding derivative structure.

Note 27. Provisions and other liabilities

EUR million	31 Dec 2021	31 Dec 2020
Provisions		
Loss allowance	20	27
Reorganisation provision		0
Other liabilities		
Payment transfer liabilities	779	809
Accrued expenses		
Interest payable	135	142
Interest payable on derivatives	-2	1
Other accrued expenses	84	27
CSA liabilities from derivatives	807	572
Pension liabilities	6	6
Lease liabilities	3	3
Accounts payable on securities	4	8
Payables based on purchase invoices	2	5
Other	36	54
Total provisions and other liabilities	**1,874**	**1,654**

Changes in provisions

EUR million	Loss allowance	Re-organisation	Other provisions	Total
1 Jan 2021	27	0		27
Increase in provisions	0			0
Provisions used	-8	0		-8
31 Dec 2021	20			20

EUR million	Loss allowance	Re-organisation	Other provisions	Total
1 Jan 2020	16	1		17
Increase in provisions	11			11
Provisions used	0	-1		-1
31 Dec 2020	27	0		27

Defined benefit pension plans

OP Corporate Bank plc has funded assets of its pension schemes through insurance companies and OP Bank Group Pension Foundation. Schemes related to supplementary pensions in OP Bank Group Pension Foundation are treated as defined benefit plans. Statutory pension cover managed by Ilmarinen Mutual Pension Insurance Company is treated as a defined contribution plan.

Supplementary pension at OP Bank Group Pension Foundation and insurance companies

OP Bank Group Pension Foundation manages supplementary pension cover provided by OP Corporate Bank for its employees. The purpose of the Pension Foundation is to grant old-age and disability pension benefits and sickness benefits to employees covered by the Pension Foundation activities, and survivors' pension benefits to their beneficiaries, and burial grant. In addition, the Pension Foundation may grant said employees benefits related to rehabilitation. Arranging supplementary pension is voluntary. Supplementary pension cover provided by the Pension Foundation is fully funded.

The 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 the employer within the Pension Foundation and whose employment has begun before 1 July 1991. The employment term entitling to pension begins from the day the employee turned 23 years in the employment of the employer. The salary/wage serving as the basis for the calculation of pension refers to pensionable 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 materialises in several consecutive years, this would result in charging 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 insurance liabilities and pension costs. On this basis, investment asset allocation takes account of the requirements set by the nature of insurance liabilities for investment operations with respect to the level of security, productivity and liquidity, as well as the Pension Foundation's risk-bearing capacity.

Supplementary pension has also been arranged in life insurance companies.

	Defined benefit obligations		Fair value of pension assets		Net liabilities (assets)	
Balance sheet value of defined benefit plans, EUR million	2021	2020	2021	2020	2021	2020
Opening balance 1 Jan	56	51	-53	-51	3	0
Defined benefit pension costs recognised in income statement						
Current service cost	0	0			0	0
Interest expense (income)	0	0	0	0	0	0
Effect of plan curtailment, change and fulfilment of obligation or previous service cost					0	
Administrative expenses			0	0	0	0
Total	**1**	**1**	**0**	**0**	**0**	**1**
Losses (gains) recognised in other comprehensive income arising from remeasurement						
Actuarial losses (gains) arising from changes in economic expectations	2	3			2	3
Actuarial losses (gains) arising from changes in demographic expectations	0				0	0
Experience adjustments	0	3			0	3
Return on plan assets, excluding amount (–) of net defined benefit liability (asset)			-7	-3	-7	-3
Total	**2**	**6**	**-7**	**-3**	**-4**	**2**
Other						
Employer contributions*			0	0	0	0
Benefits paid	-2	-2	2	2		0
Total	**-2**	**-2**	**2**	**2**	**0**	**0**
Closing balance 31 Dec	**56**	**56**	**-58**	**-53**	**-2**	**3**

Liabilities and assets recognised in the balance sheet, EUR million	31 Dec 2021	31 Dec 2020
Net liabilities/assets (Pension Foundation)	-8	-3
Net liabilities (Other pension plans)	6	6
Total net liabilities	**6**	**6**
Total net assets	**-8**	**-3**

Pension Foundation assets, 31 Dec 2021, EUR million	Total
Shares and participations	9
Notes and bonds	16
Real property	1
Mutual funds	24
Derivatives	0
Other assets	3
Total	**53**

Pension Foundation assets, 31 Dec 2020, EUR million	Total
Shares and participations	7
Notes and bonds	16
Real property	1
Mutual funds	22
Derivatives	0
Other assets	2
Total	**49**

Pension plan assets include, EUR million,	31 Dec 2021	31 Dec 2020
Other receivables from OP Financial Group companies	3	2
Total	**3**	**2**

Contributions payable under the defined benefit pension plan in 2022 are estimated at EUR 0.3 million.

The duration of the defined benefit pension obligation in the Pension Foundation on 31 December 2021 was 15.7 years, and in other plans 15.0 years.

Key actuarial assumptions used, 31 Dec 2021, EUR million	Pension Foundation	Insurance companies
Discount rate, %	0.9	1.0
Future pay increase assumption, %	2.9	3.0
Future pension increases, %	2.3	2.3
Turnover rate, %	0.0	0.0
Inflation rate, %	2.1	2.2
Estimated remaining service life of employees in years	6.0	6.0
Life expectancy for 65-year old people		
Men	21.4	21.4
Women	25.4	25.4
Life expectancy for 45-year old people after 20 years		
Men	23.7	23.7
Women	28.1	28.1

Key actuarial assumptions used, 31 Dec 2020, EUR million	Pension Foundation	Insurance companies
Discount rate, %	0.4	0.5
Future pay increase assumption, %	2.1	2.2
Future pension increases, %	1.4	1.5
Turnover rate, %	0.0	0.0
Inflation rate, %	1.3	1.4
Estimated remaining service life of employees in years	6.0	8.0
Life expectancy for 65-year old people		
Men	21.4	21.4
Women	25.4	25.4
Life expectancy for 45-year old people after 20 years		
Men	23.7	23.7
Women	28.1	28.1

	Pension Foundation Change in defined benefit pension obligation		Supplementary pension schemes of insurance companies change in defined benefit net pension liability	
Sensitivity analysis of key actuarial assumptions, 31 Dec 2021	EUR million	%	EUR million	%
Discount rate				
0.5 pp increase	-3	-7.0	0	-8.3
0.5 pp decrease	4	7.9	0	9.4
Pension increases				
0.5 pp increase	3	7.2	0	29.1
0.5 pp decrease	-3	-6.7	0	-27.1
Mortality				
1-year increase in life expectancy	2	3.9	0	4.1
1-year decrease in life expectancy	-2	-3.7	0	-4.0

	Pension Foundation Change in defined benefit pension obligation		Supplementary pension schemes of insurance companies change in defined benefit net pension liability	
Sensitivity analysis of key actuarial assumptions, 31 Dec 2020	EUR million	%	EUR million	%
Discount rate				
0.5 pp increase	-3	-6.9	0	-8.1
0.5 pp decrease	4	7.8	0	9.2
Pension increases				
0.5 pp increase	3	7.1	0	27.6
0.5 pp decrease	-3	-6.6	0	-25.5
Mortality				
1-year increase in life expectancy	2	3.8	0	3.8
1-year decrease in life expectancy	-2	-3.6	0	-3.6

Note 28. Subordinated liabilities

EUR million	31 Dec 2021	31 Dec 2020
Subordinated loans		86
Other		
Debentures	1,994	2,223
Total subordinated liabilities	**1,994**	**2,309**

Debentures

1. A debenture loan of EUR 500 million, which is a 10-year bullet loan, will mature on 28 February 2022. Under the terms and conditions of the loan, the issuer will have the opportunity for early redemption in case the principal cannot be counted as part of the bank's Tier 2 capital. The loan carries a fixed interest rate of 5.75% p.a.
2. Debenture loan of JPY 10 billion (euro equivalent 77 million), which is a ten-year bullet loan, will mature on 3 July 2025. Under the terms and conditions of the loan, the issuer will have the opportunity for early redemption in case the principal cannot be counted as part of the bank's Tier 2 capital. The loan carries a floating rate linked to the JPY Libor + 0.735%.
3. Debenture loan of 100 million euros, which is a 10-year bullet loan, will mature on 25 September 2025. Under the terms and conditions of the loan, the issuer will have the opportunity for early redemption in case the principal cannot be counted as part of the bank's Tier 2 capital. The loan carries a fixed interest rate of 2.405% p.a.
4. Debenture loan of SEK 3,250 million (euro equivalent 317 million), which is a ten-year bullet loan, will mature on 3 June 2030. Under the terms and conditions of the loan, the issuer will have the opportunity for early redemption in case the principal cannot be counted as part of the bank's Tier 2 capital. The loan carries a floating rate linked to a 3-month Stibor + 2.300%.
5. Debenture loan of 1,000 million euros, which is a 10-year bullet loan, will mature on 9 June 2030. Under the terms and conditions of the loan, the issuer will have the opportunity for early redemption in case the principal cannot be counted as part of the bank's Tier 2 capital. The loan carries a fixed interest rate of 1.625% p.a.

Loans 1–5 were issued in international capital markets.

OP Corporate Bank plc has no breaches of the terms and conditions of the loan contracts with respect to principal, interest and other conditions. The difference between the nominal value and carrying amount is due to the fair value hedge related to interest rate risk measurement.

Note 29. Equity capital

EUR million	31 Dec 2021	31 Dec 2020
Liabilities to central banks	428	428
Reserves		
Restricted reserves		
Share premium account	524	524
Reserve fund	164	164
Fair value reserve		
Cash flow hedge	-1	2
Measurement at fair value		
Notes and bonds	41	19
Loss allowance regarding notes and bonds	1	2
Other restricted reserves		
Non-restricted reserves		
Reserve for invested non-restricted equity	308	308
Other non-restricted reserves	23	23
Retained earnings		
Profit (loss) for previous financial years	2,593	2,368
Profit (loss) for the financial year	215	182
Total equity capital	**4,296**	**4,020**

Share capital and shares

The number of shares remained unchanged, 319,551,415. The shares have no nominal value and their stated value (not an exact figure) is 1.34 euros per share. All of the shares issued have been paid in full.

Proposed distribution of dividend

The Board of Directors proposes that a dividend of EUR 0.25 be distributed per share, totalling EUR 80 million for the financial year 2021. No dividend was distributed for the comparison period.

Reserves

Share premium account

The share premium account was formed during the validity of regulations in force before 1 September 2006. Items entered in the share premium account include amounts exceeding the stated value paid for shares in a rights issue and amounts exceeding the stated value of a share and paid for share subscription based on stock options.

The share premium account may be lowered in compliance with the regulations governing the reduction of share capital and may be used to increase the share capital. The amount of the subscription price exceeding the stated value of shares subscribed in September and November 2006, based on stock options, was entered in the share premium account, because the General Meeting had made the decision on issuing stock options before the entry into force of the new Companies Act. Otherwise, it has no longer been possible to increase the share premium account since 1 September 2006.

Reserve fund

The reserve fund consists of profits transferred to it during previous periods and the loan loss provisions transferred to it in 1990. The reserve fund may be used to cover losses for which the non-restricted equity is not sufficient. The reserve fund may also be used to increase the share capital and it may be reduced in the same way as the share capital. Since 1 September 2006, it has no longer been possible to increase the reserve fund.

Fair value reserve

The reserve includes the change in the fair value of financial assets recognised through the statement of comprehensive income. Items included in this reserve are derecognised and recorded in the income statement when the financial asset is disposed of or is subject to impairment. The expected loss on notes and bonds recognised through other comprehensive income is recognised to add the fair value reserve. The reserve also includes the net fair value change of interest rate derivatives as cash flow hedges verified as effective and adjusted for deferred tax. Fair value changes are included in the income statement in the period when hedged cash flows affect net income.

Fair value reserve after income tax

EUR million	Fair value through other comprehensive income Notes and bonds	Cash flow hedging	Total
Opening balance 1 Jan 2020	**-4**	**0**	**-4**
Fair value changes	31	2	33
Capital gains transferred to income statement	0		0
Deferred tax	-6	0	-7
Closing balance 31 Dec 2020	**20**	**2**	**22**

EUR million	Fair value through other comprehensive income Notes and bonds	Cash flow hedging	Total
Opening balance 1 Jan 2021	**20**	**2**	**22**
Fair value changes	30	-4	27
Capital gains transferred to income statement	-2		-2
Deferred tax	-6	1	-5
Closing balance 31 Dec 2021	**43**	**-1**	**42**

The fair value reserve before tax amounted to EUR 52 million positive on 31 December 2021 and the related deferred tax liability was EUR 10 million. At the end of 2020, the fair value reserve totalled EUR 28 million and the related deferred tax liability was EUR 6 million. The loss allowance on notes and bonds recognised at fair value through other comprehensive income totalled EUR 0 million in the fair value reserve (1) during the financial year.

The negative fair value reserve may recover by means of asset appreciation, capital losses and recognised impairments.

Other restricted reserves

These reserves consist of retained earnings based on the Articles of Association or other rules describing their purpose.

Reserve for Invested non-restricted equity

Capital raised through the rights offering in 2009 was entered in the reserve for invested non-restricted equity.

Other non-restricted reserves

These reserves consist of retained earnings based on decisions by the General Meeting.

Retained earnings

Retained earnings contain tax-based provisions transferred in the IFRS transition and gains/losses due to the redefinition of defined benefit pension plans less deferred tax.

Restricted and non-restricted equity and distributable funds

EUR million	31 Dec 2021	31 Dec 2020
Shareholders' equity		
Restricted equity	1,157	1,138
Non-restricted equity	3,139	2,882
Total shareholders' equity	**4,296**	**4,020**

EUR million	31 Dec 2021	31 Dec 2020
Distributable funds		
Reserve for Invested non-restricted equity	308	308
Other non-restricted reserves	23	23
Retained earnings, defined benefit plans	-73	-76
Retained earnings for previous financial years	1,366	1,145
Tax-based provisions transferred in transition to IFRS	1,300	1,300
Profit for the financial year	215	182
	3,139	2,882
Capitalised development expenditure	-11	-24
Total distributable funds	**3,127**	**2,858**

Other notes to on-balance and off-balance sheet items

Note 30. Collateral given

EUR million	31 Dec 2021	31 Dec 2020
Given on behalf of own liabilities and commitments		
Others	18,320	9,658
Total collateral given*	**18,320**	**9,658**
Secured derivative liabilities	744	1,078
Other secured liabilities	16,004	8,008
Total	**16,748**	**9,086**

* In addition, bonds with a book value of EUR 2.0 billion have been pledged in the central bank, of which EUR 1.0 billion in intraday settlement collateral. Given that the bonds are available for withdrawal without the central bank's advance permission, they are not presented in the table above.

Note 31. Financial collateral held

OP Corporate Bank has received collateral, in accordance with the Financial Collateral Act, which it may resell or repledge.

EUR million	31 Dec 2021	31 Dec 2020
Fair value of collateral received		
Other	678	420
Total	**678**	**420**

The credit risk arising from derivatives is mitigated through collateral, which means the use of ISDA Credit Support Annex (CSA) contract associated with the ISDA general agreement. In the collateral system, the counterparty provides securities or cash in security for the receivable. The amount of CSA-related collateral received in cash totalled EUR 678 million on the balance sheet date (420). The Group had no securities received as collateral on the balance sheet date.

Note 32. Classification of financial assets and liabilities

		Fair value through profit or loss				
Assets, EUR million	Amortised cost	Fair value through other comprehen-sive income	Financial assets held for trading	Must be measured at fair value through profit or loss	Hedging derivatives	Carrying amount total
Cash and cash equivalents	32,789					32,789
Receivables from credit institutions	13,419					13,419
Derivative contracts			3,444		268	3,712
Receivables from customers	26,236					26,236
Notes and bonds	3,853	13,171	331			17,355
Equity instruments		0	18			18
Other financial assets	1,274					1,274
Financial assets						**94,803**
Other than financial instruments						17
Total 31 December 2021	**77,571**	**13,171**	**3,792**		**268**	**94,820**

		Fair value through profit or loss				
Assets, EUR million	Amortised cost	Fair value through other comprehen-sive income	Financial assets held for trading	Must be measured at fair value through profit or loss	Hedging derivatives	Carrying amount total
Cash and cash equivalents	21,764					21,764
Receivables from credit institutions	11,248					11,248
Derivative contracts			5,143		209	5,352
Receivables from customers	24,461					24,461
Notes and bonds	814	13,639	332			14,784
Equity instruments	1,024	0	25			1,050
Other financial assets	1,097					1,097
Financial assets						**79,756**
Other than financial instruments						53
Total 31 December 2020	**60,408**	**13,639**	**5,500**		**209**	**79,809**

Liabilities, EUR million	Financial liabilities at fair value through profit or loss	Other liabilities	Hedging derivatives	Carrying amount total
Liabilities to credit institutions		42,660		42,660
Derivative contracts	2,579		91	2,669
Liabilities to customers		18,357		18,357
Debt securities issued to the public		22,630		22,630
Subordinated loans		1,994		1,994
Other financial liabilities		1,748		1,748
Financial liabilities				**90,059**
Other than financial liabilities				465
Total 31 December 2021	**2,579**	**87,389**	**91**	**90,524**

Liabilities, EUR million	Financial liabilities at fair value through profit or loss	Other liabilities	Hedging derivatives	Carrying amount total
Liabilities to credit institutions		28,888		28,888
Derivative contracts	4,079		195	4,274
Liabilities to customers		16,403		16,403
Debt securities issued to the public		21,931		21,931
Subordinated loans		2,309		2,309
Other financial liabilities		1,572		1,572
Financial liabilities				**75,377**
Other than financial liabilities				412
Total 31 December 2020	**4,079**	**71,103**	**195**	**75,789**

Bonds included in debt securities issued to the public are carried at amortised cost. On 31 December, the fair value of these debt instruments was approximately EUR 190 (303) million higher than their carrying amount, based on information available in markets and employing commonly used valuation techniques. Subordinated liabilities are carried at amortised cost. Their fair values are higher than their amortised costs, but determining reliable fair values involves uncertainty.

Note 33. Recurring fair value measurements by valuation technique

Fair value of assets on 31 December 2021, EUR million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Equity instruments		13	5	18
Debt instruments	77	60	193	331
Derivative financial instruments	1	3,604	106	3,712
Fair value through other comprehensive income				
Equity instruments		0		0
Debt instruments	10,269	2,376	527	13,171
Total financial instruments	**10,347**	**6,053**	**832**	**17,232**
Investment property			0	0
Total	**10,347**	**6,053**	**832**	**17,232**

Fair value of assets on 31 December 2020, EUR million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Equity instruments		22	4	25
Debt instruments	61	35	235	332
Derivative financial instruments	0	5,291	61	5,352
Fair value through other comprehensive income				
Equity instruments		0		0
Debt instruments	12,075	1,280	283	13,639
Total financial instruments	**12,137**	**6,628**	**583**	**19,348**
Investment property			0	0
Total	**12,137**	**6,628**	**583**	**19,348**

Fair value of liabilities on 31 December 2021, EUR million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Other		0		0
Derivative financial instruments	2	2,637	30	2,669
Total	**2**	**2,637**	**30**	**2,669**

Fair value of liabilities on 31 December 2020, EUR million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Other		0		0
Derivative financial instruments	0	4,232	42	4,274
Total	**0**	**4,232**	**42**	**4,274**

Fair value measurement

Derivatives

The Group obtains the price of listed derivatives directly from markets. In the fair value measurement of OTC derivatives, Pohjola uses models and techniques commonly used in markets. These are needed, for instance, to create yield curves and currency conversion charts and volatility surfaces as well as for option valuation. The input data of these models can generally be derived from markets. In the fair value measurement of some contracts, however, the Group has to use models where input data cannot be observed in the market and therefore they must be assessed. Such contracts are included in Level 3.

Middle Office is responsible for the fair value measurement of Banking derivatives, incl. level 3 hierarchy, and the quality and reliability of market data, valuation curves and volatility surfaces used in them, as part of its daily fair value measurement process. Middle Office compares regularly at contract level valuation prices with valuations supplied by CSA counterparties and central counterparties and, whenever necessary, determines any possible significant valuation differences.

Risk Management Control is responsible for approval of new fair value measurement models and techniques and supervision of the fair value measurement process. Verifying fair values is based, for example, on valuation using alternative sources for market prices and other input data. In this verification process, valuation prices can be compared with prices supplied by CSA counterparties and central counterparties. In addition, it is possible to use valuation services provided by third parties.

The fair value measurement of OTC derivatives takes account of the credit risk of the parties to a transaction. Credit risk is adjusted with a Credit Valuation Adjustment (CVA) and with a Debit Valuation Adjustment (DVA). CVA and DVA valuation adjustments are calculated for each counterparty. CVA and DVA adjustments are calculated by simulating the market values of derivatives and events of default based primarily on data obtained from markets. In assessing probabilities of default, the Group utilises market data through illiquid counterparties too by combining the counterparties with liquid market data.

Fair value hierarchy

Level 1: Quoted prices in active markets

This level includes equities listed on major stock exchanges, quoted debt instruments issued by companies, governments and financial institutions as well as and exchange-traded derivatives. The fair value of these instruments is determined on the basis of the quotes in active markets.

Level 2: Valuation techniques using observable inputs

Valuation techniques based on observable input parameters. The fair value of the instruments included within this level 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. This hierarchy level includes the majority of OP Corporate Bank plc's OTC derivatives and quoted debt instruments issued by companies, governments and financial institutions which have not been included in Level 1.

Level 3: Valuation techniques using unobservable inputs

Valuation techniques whose input parameters involve uncertainty. The fair value determination of the instruments included within this level contains inputs not based on observable market data (unobservable inputs). Level 3 also includes bonds for which there is little, if any, market activity on the valuation date. This level includes the most complex OTC derivatives and derivatives with a long maturity for which the Group had to extrapolate the market data used in their value measurement, as well as certain private equity investments, and illiquid bonds, structured bonds, including securitised bonds and structured debt securities, and hedge funds. Level 3 fair value is based on pricing information from a third party.

Transfers between levels of the fair value hierarchy

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.

Reconciliation of Level 3 items

Specification of financial assets and liabilities

Financial assets, EUR million	Financial assets at fair value through profit or loss	Derivative contracts	Fair value through other comprehen-sive income	Total assets
Opening balance 1 January 2021	**239**	**61**	**283**	**583**
Total gains/losses in profit or loss	-233	45		-188
Transfers into Level 3	193		376	569
Transfers out of Level 3			-132	-132
Closing balance 31 December 2021	**198**	**106**	**527**	**832**

Financial assets, EUR million	Financial assets at fair value through profit or loss	Derivative contracts	Fair value through other comprehen-sive income	Total assets
Opening balance 1 January 2020	**504**	**74**	**859**	**1,437**
Total gains/losses in profit or loss	-497	-13		-510
Transfers into Level 3	232		-501	-269
Transfers out of Level 3			-75	-75
Closing balance 31 December 2020	**239**	**61**	**283**	**583**

Financial liabilities, EUR million	Derivative contracts	Total liabilities
Opening balance 1 January 2021	**42**	**42**
Total gains/losses in profit or loss	-11	-11
Closing balance 31 December 2021	**30**	**30**

Financial liabilities, EUR million	Derivative contracts	Total liabilities
Opening balance 1 January 2020	**32**	**32**
Total gains/losses in profit or loss	9	9
Closing balance 31 December 2020	**42**	**42**

Total gains/losses included in profit or loss by item for the financial year on 31 December 2021

EUR million	Net interest income	Net investment income	Statement of comprehensive income/ Change in fair value reserve	Total gains/ losses for the financial year included in profit or loss for assets/ liabilities held at year-end
Realised net gains (losses)	-233			-233
Unrealised net gains (losses)	57			57
Total net gains (losses)	**-177**			**-177**

Total gains/losses included in profit or loss by item for the financial year on 31 December 2020

EUR million	Net interest income	Net investment income	Statement of comprehensive income/ Change in fair value reserve	Total gains/ losses for the financial year included in profit or loss for assets/ liabilities held at year-end
Realised net gains (losses)	-497			-497
Unrealised net gains (losses)	-22			-22
Total net gains (losses)	**-519**			**-519**

Derivatives included in Level 3 comprise structured derivatives for customer needs, whose market risk is covered by a corresponding derivatives contract. The uncovered market risk does not have any effect on earnings. Level 3 derivatives relate to structured bonds issued by OP Corporate Bank, whose return is determined by the value performance of an embedded derivative instrument. The fair value change of these embedded derivatives is not presented in the above table. In addition, long-maturity derivatives have been included in Level 3 for which the Group had to extrapolate the market data used in their value measurement.

Changes in the levels of hierarchy

No major changes occurred in valuation techniques in 2021.

Sensitivity analysis of input parameters involving uncertainty on 31 December 2021

Type of instrument, EUR million	Receivables	Liabilities	Net balance	Sensitivity analysis	Reasonably possible change in fair value
Recognised at fair value through profit or loss:					
Private equity funds*	193		193	19.3	10 %
Real estate funds***	5		5	1.0	0.2
Derivatives:					
Index-linked bond hedges and structured derivatives, and derivatives with a long-term maturity**	106	-30	76	8.4	11 %
Fair value through profit or loss					
Bond investments	527		527	52.7	10 %

Sensitivity analysis of input parameters involving uncertainty on 31 December 2020

Type of instrument, EUR million	Receivables	Liabilities	Net balance	Sensitivity analysis	Reasonably possible change in fair value
Recognised at fair value through profit or loss:					
Private equity funds*	235		235	23.5	10 %
Real estate funds***	4		4	0.8	0.2
Derivatives:					
Index-linked bond hedges and structured derivatives, and derivatives with a long-term maturity**	61	-42	19	2.1	11 %
Fair value through profit or loss					
Bond investments	283		283	28.3	10 %

* The value of private equity funds depends mainly on the profit performance of portfolio companies and the PE ratios of similar listed companies. The Total Value to Paid-in (TVPI) multiple, which has changed an average of 10%, is used to monitor the progress of the fair value of private equity funds.

** Following stress scenarios: the combined value change of volatility of shares (30%), dividends of shares (30%), credit risk premiums (30%) and significant correlation changes.

*** In the valuation of real estate funds, OP mainly uses the income approach whose main components are yield requirement and net rent. A +/– 1 percentage point change in the yield requirement leads on average to around 20% change in the fair value.

Note 34. Loss allowance regarding receivables and notes and bonds

Credit risk exposures and related loss allowance

A description of OP Corporate Bank´s credit risk formation and management can be found in section 2 of Note 2. The measurement principles of expected credit losses are described in section 6.4 Impairment of Note 1.

Expected credit losses are calculated on receivables measured at amortised cost and notes and bonds recognised at fair value through other comprehensive income (investments in bonds). OP Corporate Bank receivables include loans, standby credit facilities (e.g. credit cards and accounts with credit facility and lease and factoring receivables). In addition, expected credit losses are calculated on off-balance-sheet items, such as loan commitments, credit facilities and bank guarantees. However, notes and bonds are investments in bonds. For expected credit losses, loss allowance is recognised in the balance sheet or in the case of notes and bonds in other comprehensive income.

The following factors, for example, affect the amount of expected credit losses: exposure amount, exposure validity, customer borrower grade and collateral value as well as forward-looking information.

The following table shows the receivables which are exposed to credit risk and on which expected credit loss is calculated. Here the on-balance-sheet and off-balance sheet exposures also describe the maximum exposure amount exposed to credit risk, excluding collateral securities or other arrangements that improve credit quality. The off-balance sheet exposure represents the exposure amount binding on the bank or the guarantee amount.

Exposures within the scope of accounting for expected credit losses by impairment stage 31 December 2021

Exposures	Stage 1	Stage 2			Stage 3	
EUR million		Not more than 30 DPD	More than 30 DPD	Total		Total exposure
Receivables from customers (gross)						
Corporate Banking	24,673	1,058	247	1,304	508	26,486
Total	**24,673**	**1,058**	**247**	**1,304**	**508**	**26,486**
Off-balance-sheet limits						
Corporate Banking	4,279	190	88	278	75	4,631
Total	**4,279**	**190**	**88**	**278**	**75**	**4,631**
Other off-balance-sheetcommitments						
Corporate Banking	7,196	121		121	78	7,396
Total	**7,196**	**121**		**121**	**78**	**7,396**
Notes and bonds						
Other Operations	13,160	31		31		13,191
Total	**13,160**	**31**		**31**		**13,191**
Total exposures within the scope of accounting for expected credit losses	**49,309**	**1,399**	**335**	**1,733**	**661**	**51,704**

Loss allowance by stage 31 December 2021

On-balance-sheet exposures and related off-balance-sheet limits*	Stage 1	Stage 2			Stage 3	
EUR million		Not more than 30 DPD	More than 30 DPD	Total		Total loss allowance
Receivables from customers						
Corporate Banking	-23	-23	-2	-25	-269	-317
Total	**-23**	**-23**	**-2**	**-25**	**-269**	**-317**
Off-balance-sheet commitments**						
Corporate Banking	-3	-3		-3	-14	-20
Total	**-3**	**-3**		**-3**	**-14**	**-20**
Notes and bonds***						
Other Operations	-2	-1		-1		-2
Total	**-2**	**-1**		**-1**		**-2**
Total	**-28**	**-26**	**-2**	**-28**	**-283**	**-339**

* Loss allowance is recognised as one component to deduct the balance sheet item.

** Loss allowance is recognised in provisions and other liabilities in the balance sheet.

*** Loss allowance is recognised in the fair value reserve in other comprehensive income.

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	Stage 1	Stage 2			Stage 3	
		Not more than 30 DPD	More than 30 DPD	Total		Total
Receivables from customers; on-balance-sheet and off-balance-sheet items						
Corporate Banking	36,149	1,368	335	1,703	661	38,513
Loss allowance						
Corporate Banking	-26	-25	-2	-27	-283	-337
Coverage ratio, %						
Corporate Banking	-0.07 %	-1.85 %	-0.63 %	-1.61 %	-42.84 %	-0.88 %
Receivables from customers; total on-balance-sheet and off-balance-sheet items	**36,149**	**1,368**	**335**	**1,703**	**661**	**38,513**
Total loss allowance	**-26**	**-25**	**-2**	**-27**	**-283**	**-337**
Total coverage ratio, %	**-0.07 %**	**-1.85 %**	**-0.63 %**	**-1.61 %**	**-42.84 %**	**-0.88 %**
Carrying amount, notes and bonds						
Other Operations	13,160	31		31		13,191
Loss allowance						
Other Operations	-2	-1		-1		-2
Coverage ratio, %						
Other Operations	-0.01 %	-2.00 %		-2.00 %		-0.02 %
Total notes and bonds	**13,160**	**31**		**31**		**13,191**
Total loss allowance	**-2**	**-1**		**-1**		**-2**
Total coverage ratio, %	**-0.01 %**	**-2.00 %**		**-2.00 %**		**-0.02 %**

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

Exposures EUR million	Stage 1	Stage 2 Not more than 30 DPD	Stage 2 More than 30 DPD	Stage 2 Total	Stage 3	Total exposure
Receivables from customers (gross)						
Corporate Banking	22,903	1,159	154	1,313	497	24,714
Total	**22,903**	**1,159**	**154**	**1,313**	**497**	**24,714**
Off-balance-sheet limits						
Corporate Banking	4,048	377	69	446	65	4,558
Total	**4,048**	**377**	**69**	**446**	**65**	**4,558**
Other off-balance-sheetcommitments						
Corporate Banking	6,267	262		262	99	6,628
Total	**6,267**	**262**		**262**	**99**	**6,628**
Notes and bonds						
Other Operations	13,141	50		50		13,191
Total	**13,141**	**50**		**50**		**13,191**
Total exposures within the scope of accounting for expected credit losses	**46,359**	**1,849**	**223**	**2,071**	**660**	**49,091**

Loss allowance by stage 31 December 2020

On-balance-sheet exposures and related off-balance-sheet limits* EUR million	Stage 1	Stage 2 Not more than 30 DPD	Stage 2 More than 30 DPD	Stage 2 Total	Stage 3	Total loss allowance
Receivables from customers						
Corporate Banking	-24	-28	-1	-29	-227	-280
Total	**-24**	**-28**	**-1**	**-29**	**-227**	**-280**
Off-balance-sheet commitments**						
Corporate Banking	-12	-1		-1	-14	-27
Total	**-12**	**-1**		**-1**	**-14**	**-27**
Notes and bonds***						
Other Operations	-1	-1		-1		-2
Total	**-1**	**-1**		**-1**		**-2**
Total	**-37**	**-30**	**-1**	**-31**	**-242**	**-310**

* Loss allowance is recognised as one component to deduct the balance sheet item.

** Loss allowance is recognised in provisions and other liabilities in the balance sheet.

*** Loss allowance is recognised in the fair value reserve in other comprehensive income.

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 2020	Stage 1	Stage 2			Stage 3	
		Not more than 30 DPD	More than 30 DPD	Total		Total
Receivables from customers; on-balance-sheet and off-balance-sheet items						
Corporate Banking	33,218	1,798	223	2,021	660	35,900
Loss allowance						
Corporate Banking	-36	-29	-1	-30	-242	-308
Coverage ratio, %						
Corporate Banking	-0.11 %	-1.61 %	-0.56 %	-1.50 %	-36.57 %	-0.86 %
Receivables from customers; total on-balance-sheet and off-balance-sheet items	**33,218**	**1,798**	**223**	**2,021**	**660**	**35,900**
Total loss allowance	**-36**	**-29**	**-1**	**-30**	**-242**	**-308**
Total coverage ratio, %	**-0.11 %**	**-1.61 %**	**-0.56 %**	**-1.50 %**	**-36.57 %**	**-0.86 %**
Carrying amount, notes and bonds						
Other Operations	13,141	50		50		13,191
Loss allowance						
Other Operations	-1	-1		-1		-2
Coverage ratio, %						
Other Operations	-0.01 %	-1.34 %		-1.34 %		-0.02 %
Total notes and bonds	**13,141**	**50**		**50**		**13,191**
Total loss allowance	**-1**	**-1**		**-1**		**-2**
Total coverage ratio, %	**-0.01 %**	**-1.34 %**		**-1.34 %**		**-0.02 %**

Changes in loss allowance during financial year

The table below shows the change in loss allowance by impairment stage during 2021 in respect of the effect of the following factors:
Note 1, section 6.4.1 describes impairment stages.

Receivables from customers and off-balance-sheet items, EUR million	Stage 1 12 months	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance 1 January 2021	**36**	**29**	**243**	**308**
Transfers from Stage 1 to Stage 2	-1	6		5
Transfers from Stage 1 to Stage 3	0		13	13
Transfers from Stage 2 to Stage 1	1	-4		-4
Transfers from Stage 2 to Stage 3		-7	32	25
Transfers from Stage 3 to Stage 2		2	-3	-1
Transfers from Stage 3 to Stage 1	0		-2	-2
Increases due to origination and acquisition	10	5	8	25
Decreases due to derecognition	-17	-6	-25	-48
Changes in risk parameters (net)	-3	1	46	44
Changes due to update in the methodology for estimation (net)	1	1	0	2
Decrease in allowance account due to write-offs		0	-30	-30
Net change in expected credit losses	**-10**	**-2**	**40**	**28**
Loss allowance 31 December 2021	**26**	**27**	**283**	**337**

The table below shows a change in exposures within the scope of the calculation of expected credit losses by impairment Stage for 2021 resulting from the effect of the following factors:

Receivables from customers and off-balance-sheet items, EUR million	Stage 1	Stage 2	Stage 3	Total
Receivables from customers; on-balance-sheet and off-balance-sheet items 1 January 2021	**33,197**	**2,021**	**682**	**35,900**
Transfers from Stage 1 to Stage 2, incl. repayments	-913	857		-57
Transfers from Stage 1 to Stage 3, incl. repayments	-92		73	-19
Transfers from Stage 2 to Stage 1, incl. repayments	549	-613		-64
Transfers from Stage 2 to Stage 3, incl. repayments		-134	115	-20
Transfers from Stage 3 to Stage 1, incl. repayments	11		-14	-3
Transfers from Stage 3 to Stage 2, incl. repayments		25	-28	-2
Unchanged Stage, incl repayments	-1,097	-47	-95	-1,240
Increases due to origination and acquisition	11,579	231	50	11,861
Decreases due to derecognition	-7,085	-634	-81	-7,800
Recognised as final credit loss		-3	-40	-43
Receivables from customers; on-balance-sheet and off-balance-sheet items 31 December 2021	**36,149**	**1,703**	**661**	**38,513**

Transfers from Stage 1 to Stage 3 compare the current reporting-date Stage 3 of a financial asset at the beginning of the year. However, around 81% of these transfers to Stage 3 through Stage 2. The agreement may transfer directly to Stage 3 due to external payment default.

Transfers from Stage 3 to Stages 2 or 1 compare the year-start Stage 3 with the year-end Stage 2 or 1. As the main rule, the transfers, however, took place within 2021 with a delay of one month.

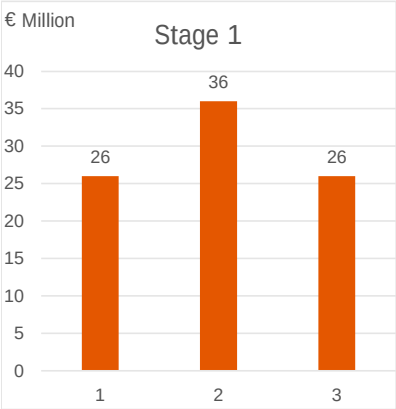
The majority of the loans have transferred to stage 2 in all ratings based on OP's relative SICR model. Payments past due over 30 days causes a transfer to stage 2 in most cases in the middle and lower level ratings. Forbearance measures cause a transfer to stage 2 in corporate customers more often in middle and lower level ratings whereas they affect transfers to stage 2 in all ratings in private customers.. The lowest ratings are classified into stage 2 based on an absolute rating limit. In the lowest ratings, in particular, there are several reasons for transfers to stage 2. Default is identified on a real-time basis, immediately causing a transfer to stage 3.

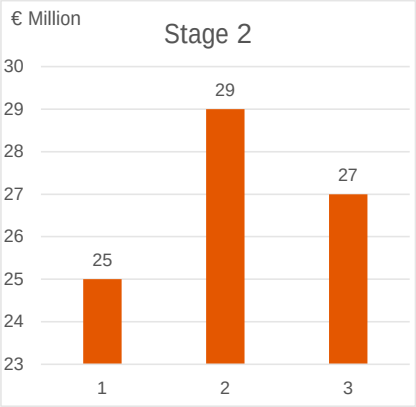
In Q1/2021, OP Corporate Bank calibrated its internal rating model for retail customers to correspond to the new 2020 definition of default. This had an effect in April on the PD model under IFRS 9 and on the quantitative SICR model that is used to decide on transferring the agreement from impairment Stage 1 to Stage 2. OP Corporate Bank calibrated the original PD curves used in the SICR model to be comparable, in which case the calibration had no significant effect on the amount of the ECL. As part of its normal model update, OP Corporate Bank updated the actual PD model for retail customers under IFRS 9 and the quantitative SICR model during Q4/2021.

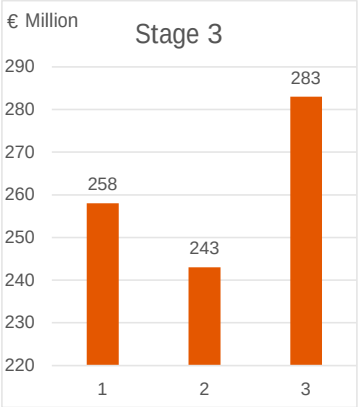
The PD model for retail customers under IFRS 9 was updated based on data complying with the new definition of default, among other things. In addition, we further specified segmentation for the model and the 12-month Euribor, with the effect of inflation and change in GDP deducted, the real 3-month Euribor, with the effect of inflation deducted and change in the unemployment rate deducted (previously GDP change, 12-month Euribor and change in the unemployment rate). ECL increased by 2 million euros; it is presented as a change in model assumptions and methodology.

OP Corporate Bank has exercised management discretion and made an additional 6-million euro ECL provision, concerning mainly CRE-backed loans in stage 3. The provision is aimed at anticipating growth in the ECL caused by the update of the collateral assessment of riskier collateral real estate holdings and probable default statutes. The provision will be reversed after the collateral assessment probably ends during 2022.

The following graphs illustrate the trend in the expected credit losses of customer receivables by impairment stage during the last few years, showing their growth during the Covid-19 pandemic and how the growth has levelled off.







OP Corporate Bank provides its customers with the opportunity to get a maximum of 12-month repayment holiday on their home loans. As regards corporate customers, changes in repayment schedules will be evaluated on a case-by-case basis, and guarantees provided by Finnvera will be used extensively. In loan modifications, forborne loans and customers in default are identified according to the normal set of instructions.

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%. Macroeconomic forecast updates in 2021 have increased expected credit losses by EUR 7 million.

Notes and bonds, EUR million	Stage 1	Stage 2	Stage 3	
	12 months	Lifetime	Lifetime	Total
Loss allowance 1 January 2021	**2**	**1**		**2**
Transfers from Stage 2 to Stage 1	0	0		0
Increases due to origination and acquisition	0			0
Decreases due to derecognition	0			0
Changes in risk parameters (net)	0	0		0
Net change in expected credit losses	**0**	**0**		**0**
Loss allowance 31 December 2021	**2**	**0**		**2**

Changes in loss allowance during 2020

The table below shows the change in loss allowance by impairment stage during 2020 in respect of the effect of the following factors:

Receivables from customers and off-balance-sheet items, EUR million	Stage 1 12 months	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance 1 January 2020	**26**	**25**	**258**	**309**
Transfers from Stage 1 to Stage 2	-1	7		6
Transfers from Stage 1 to Stage 3	-1		29	28
Transfers from Stage 2 to Stage 1	0	-3		-3
Transfers from Stage 2 to Stage 3		-4	28	24
Transfers from Stage 3 to Stage 2		0	-3	-2
Transfers from Stage 3 to Stage 1	0		0	0
Increases due to origination and acquisition	15	7	4	27
Decreases due to derecognition	-6	-6	-32	-44
Changes in risk parameters (net)	7	5	-7	5
Changes due to update in the methodology for estimation (net)	-5	-2		-7
Decrease in allowance account due to write-offs			-33	-33
Net change in expected credit losses	**10**	**4**	**-15**	**0**
Loss allowance 31 December 2020	**36**	**29**	**243**	**308**

The table below shows a change in exposures within the scope of the measurement of expected credit losses by impairment Stage for 2020 resulting from the effect of the following factors:

Receivables from customers and off-balance-sheet items, EUR million	Stage 1	Stage 2	Stage 3	Total
Receivables from customers; on-balance-sheet and off-balance-sheet items 1 January 2020	**34,687**	**3,379**	**514**	**38,580**
Transfers from Stage 1 to Stage 2, incl. repayments	-785	663		-121
Transfers from Stage 1 to Stage 3, incl. repayments	-109		85	-23
Transfers from Stage 2 to Stage 1, incl. repayments	522	-606		-84
Transfers from Stage 2 to Stage 3, incl. repayments		-186	144	-43
Transfers from Stage 3 to Stage 1, incl. repayments	5		-7	-2
Transfers from Stage 3 to Stage 2, incl. repayments		9	-14	-6
Unchanged Stage, incl repayments	-2,214	-142	8	-2,348
Increases due to origination and acquisition	7,628	406	55	8,089
Decreases due to derecognition	-6,538	-1,502	-56	-8,096
Recognised as final credit loss			-46	-46
Receivables from customers; on-balance-sheet and off-balance-sheet items 31 December 2020	**33,197**	**2,021**	**682**	**35,900**

Transfers from Stage 1 to State 3 compare the current year-end Stage 3 of a financial asset to the Stage 3 at the beginning of the year. Of these, some 66% (see the default capture rate below) have been reported in Stage 2 during 2020, so the agreements have, as a rule, transferred to Stage 3 through Stage 2. The agreement may transfer directly to Stage 3 due to external payment default.

Transfers from Stage 3 to Stages 2 or 1 compare the year-start Stage 3 with the year-end Stage 2 or 1. As the main rule, the transfers, however, took place within 2020 with a delay of one month.

The majority of the loans have transferred to stage 2 in all ratings based on OP's relative SICR model. Payments past due over 30 days causes a transfer to stage 2 in most cases in the middle and lower level ratings. Forbearance measures cause a transfer to stage 2 in corporate customers more often in middle and lower level ratings whereas they affect transfers to stage 2 in all ratings in private customers.. The lowest ratings are classified into stage 2 based on an absolute rating limit. In the lowest ratings, in particular, there are several reasons for transfers to stage 2. Default is identified on a real-time basis, immediately causing a transfer to stage 3.

Notes and bonds, EUR million	Stage 1 12 months	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance 1 January 2020	**2**	**1**		**3**
Transfers from Stage 1 to Stage 2	0	1		1
Increases due to origination and acquisition	0			0
Decreases due to derecognition	0	-1		-1
Changes in risk parameters (net)	0			0
Changes due to update in the methodology for estimation (net)	-1			-1
Net change in expected credit losses	**-1**	**0**		**-1**
Loss allowance 31 December 2020	**2**	**1**		**2**

The table below presents exposures of receivables in the balance sheet by rating and off-balance-sheet exposures, exposure amount after deducting collateral 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. The ratings have been combined into the table in such a way that the corporate customer rating 1 comprises ratings 1 and 1.5 etc. The private customer rating A comprises A+, A and A- etc. Note 2, section 2.2.1 describes OP Financial Group's ratings. Net exposure has been calculated for each contract and it excludes overcollateralisation.

31.12.2021

EUR million	Balance sheet exposures			Off-balance-sheet exposure, gross			Net exposure after collateral			Loss allowance		
Rating	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
1	98			149			126			0		
2	1,308	6		1,461	14		1,174	8		0	0	
3	5,263	113		2,401	36		4,169	113		-1	0	
4	3,864	75		2,004	44		2,101	75		-1	0	
5	4,741	21		2,347	15		2,379	16		-2	0	
6	4,330	87		1,822	16		1,659	10		-5	0	
7	2,400	246		889	49		846	62		-8	-1	
8	514	281		282	183		118	124		-6	-12	
9	5	73			23			7			-2	
10		29			4			7			-3	
11			383			147			180			-217
12			53			2			49			-50
A	98	0		25	0		22	0		0	0	
B	604	1		46	0		114	0		0	0	
C	1,019	22		31	1		184	6		-1	0	
D	431	61		18	4		137	20		-1	0	
E		289	1		9			88	0		-8	0
F			71			4			29			-16
Total	**24,673**	**1,304**	**508**	**11,475**	**399**	**153**	**13,029**	**536**	**258**	**-26**	**-27**	**-283**

31.12.2020

EUR million	Balance sheet exposures			Off-balance-sheet exposure, gross			Net exposure after collateral			Loss allowance		
Rating	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
1	367	23		375	32		632	9		0	0	
2	1,671	7		1,278	5		219	22		0	0	
3	4,529	55		2,372	21		1,597	0		-1	0	
4	3,392	7		1,448	2		3,333	54		-1	0	
5	3,989	31		1,981	62		2,017	7		-2	0	
6	3,788	210		1,448	37		2,269	27		-5	-1	
7	2,392	134		822	53		1,655	40		-9	-2	
8	701	306		476	443		1,111	59		-15	-7	
9		175			35		327	204			-7	
10		79			9			36			-7	
11			374			156		12				-180
12			49			4			204			-48
A	33			52					61	0		
B	426	2		36	1		65			0	0	
C	1,028	4		14	2		150	2		0	0	
D	589	16		12	3		236	3		-1	0	
E		264			3		225	9			-4	
F			75			4		81				-14
Total	**22,904**	**1,313**	**497**	**10,315**	**708**	**163**	**13,835**	**564**	**265**	**-36**	**-29**	**-243**

The majority of the loans have transferred to stage 2 in all ratings based on OP's relative SICR model. Payments past due over 30 days causes a transfer to stage 2 in most cases in the middle and lower level ratings. Forbearance measures cause a transfer to stage 2 in corporate customers more often in middle and lower level ratings whereas they affect transfers to stage 2 in all ratings in private customers.. The lowest ratings are classified into stage 2 based on an absolute rating limit. In the lowest ratings, in particular, there are several reasons for transfers to stage 2. Default is identified on a real-time basis, immediately causing a transfer to stage 3.

OP Corporate Bank may write off credit loss from financial assets in full or in part, but thereafter these will still be subject to collection measures. The amount of such financial assets were EUR 17 million (15) on 31 December 2021.

Significant increase in credit risk (SICR)

A significant increase in credit risk is discovered on a technical basis as presented in the accounting policies (Note 1 section 6.4.1).

The classification of contracts under SICR into similar groups in terms of credit risk is identical with lifetime PD (probability at default) models. Credit ratings are the most significant input data of the PD models. Both the current PDs and threshold PDs include forward-looking information (below).

The effectiveness of SICR is assessed on every reporting date using the following indicators:

The default capture rate measures how many contracts were in Stage 2 before it transferred to Stage 3. The rate was 81% (66) on 31 December 2020. The higher the rate is, the better the SICR model can capture a significant increase in credit risk. Contracts in Stage 2 accounted for 3% (6) of the entire non-default loan portfolio.

A specific model has been developed for the SICR criterion for a relative increase in PD, whose parameters are calculated from historical data. In addition to these parameters, the SICR model is affected, for example, by the contract rating grade, segment and macroeconomic variables which together determine the PD of the contract lifetime. In addition, the comparison of the relative increase is affected by the contract's passed and remaining lifetime. For these reasons, no general threshold has been determined for an increase in the PD. It can, however, stated that, on average, a doubling or trebling of the PD causes the quantitative SICR criterion to trigger.

Forward-looking information included in the ECL measurement models

The assessment of SICR and the measurement of expected credit loss incorporate forward-looking information; OP Financial Group has analysed what macroeconomic variables have an explanatory significance to the credit risk amount.

The table below shows a summary of the values of the five most important macroeconomic variables for 2021–2050 used in the models (average, minimum and maximum) for three scenarios that have been used in the measurement of the expected credit loss. These values were used for all product groups on 31 December 2021.

Economic variable	Scenario	Average (%)	Minimum (%)	Maksimum (%)
GDP growth	Downside	0.6	-0.6	2.8
	Baseline	1.5	1.1	3.5
	Upside	2.3	2.0	5.1
Unemployment rate	Downside	8.4	7.5	9.1
	Baseline	6.6	6.5	7.8
	Upside	4.7	4.1	7.7
House price index	Downside	1.2	-0.8	2.9
	Baseline	2.8	2.0	4.0
	Upside	3.8	3.0	4.9
12-month Euribor where the effect of GDP growth and inflation has been deducted	Downside	0.0	-2.0	0.6
	Baseline	0.4	-2.1	1.2
	Upside	0.9	-2.4	-1.8
3-month real interest rate	Downside	-0.6	-2.6	-0.1
	Baseline	-0.4	-2.8	0.4
	Upside	-0.1	-3.2	0.9

On 31 December 2021, the probability weights of the scenarios were Downside 20%, Baseline 60% and Upside 20%.

The table below shows a summary of the values of the five most important macroeconomic variables for 2020–2049 used in the models (average, minimum and maximum) for three scenarios that have been used in the measurement of expected credit losses. These values were used for all product groups on 31 December 2020.

Economic variable	Scenario	Average (%)	Minimum (%)	Maksimum (%)
GDP growth	Downside	0.4	-4.0	0.8
	Baseline	1.3	-4.0	3.0
	Upside	2.0	-4.0	5.4
Unemployment rate	Downside	8.4	7.8	8.7
	Baseline	6.7	6.5	8.0
	Upside	4.9	4.5	7.8
Investment growth %	Downside	1.0	-1.7	1.5
	Baseline	2.6	0.7	3.0
	Upside	3.7	1.0	4.0
House price index	Downside	0.8	-1.0	1.3
	Baseline	1.6	-0.4	2.3
	Upside	2.5	-0.2	3.3
12-month Euribor	Downside	-0.5	-2.1	-0.1
	Baseline	-0.1	-2.0	0.4
	Upside	0.2	-1.9	0.9

On 31 December 2020, the probability weights of the scenarios were Downside 20%, Baseline 60% and Upside 20%.

The scenarios are based on the forecasts performed by OP Financial Group economists. The forecast process also takes account of comparable forecasts by external organisations, such as the OECD, International Monetary Fund, Bank of Finland, Ministry of Finance etc., as well as academic research.

The rationality of the used macroeconomic variables is assessed when reviewing the functionality of the models for PD, LGD, EAD and prepayment.

The table below shows loss allowance regarding significant receivables under various scenarios by impairment stage on 31 December 2021.

Total private customer and corporate customer exposures	Weighted loss allowance	Loss allowance under downside scenario	Loss allowance under baseline scenario	Loss allowance under upside scenario
Stage 1	25	27	24	22
Stage 2	27	29	27	25
Stage 3	256	256	256	256
Total	**308**	**312**	**307**	**303**

The table below shows loss allowance regarding significant receivables under various scenarios by impairment stage on 31 December 2020.

Total private customer and corporate customer exposures	Weighted loss allowance	Loss allowance under downside scenario	Loss allowance under baseline scenario	Loss allowance under upside scenario
Stage 1	35	38	35	33
Stage 2	27	30	27	25
Stage 3	231	231	231	231
Total	**293**	**299**	**293**	**289**

All personal and corporate customer risk parameters affect in a parallel way in such a way that loss allowance is the largest under the downside scenario. The LGD model for Stage 3 is independent of macroeconomic factors, but a significant proportion of Stage 3 exposures is assessed by means of a cash flow based expert assessment that also takes account of forward-looking information.

Sensitivity analysis

The sensitivity analysis describes the sensitivity of loss allowance to changes in macroeconomic factors. The analysis below only describes somewhat potential economic deterioration and not an economic upswing at all. In addition, all different components of the sensitivity analysis do not necessarily develop together during a recession in the way presented in the sensitivity analysis.

The most significant macroeconomic variables in risk parameters and exposure classes include the 12-month Euribor rate, real 3-month Euribor where the effect of inflation and GDP growth have been deducted. Changes used in sensitivity analyses include a 1 percentage point increase in the 12-month Euribor rate, a 1 percentage point increase the 3-month Euribor rate, a 1 percentage point increase in the inflation rate and a 3.5 percentage point decrease in the GDP growth rate. So the figures reflect an economic situation that is poorer than now and all of them increase loss allowance and are based on the following facts. The levels used in the sensitivity analysis are based on the behaviour of variables in the historic period, and the changes roughly correspond to the change in standard deviation.

The sensitivity analysis covers only Stage 1 and 2 contracts. The sensitivity analysis does not take account of the transfers between Stage 1 and 2 as a result of SICR. Changes in the lifetime PD stressed scenarios are included only in PD estimates based on the loss allowance formula and the effects of PD changes are not taking into account through SICR in the sensitivity analysis.

The table below show the sensitivity of change in the loss allowance of the groups of household and corporate customers on 31 December 2021, when the economic situation weakens due to the combined effect of changes in interest rates, the real interest rate, inflation rate and GDP:

Group Stage	Loss allowance	Loss allowance sensitivity analysis*	Proportional change
Households			
Stage 1	2	2	4.0 %
Stage 2	9	10	11.0 %
Corporate customers			
Stage 1	22	24	9.9 %
Stage 2	18	23	27.4 %
Total	**51**	**60**	**16.0 %**

* 1 percentage point increase in the 12-month Euribor rate, 1 percentage point increase in the real 3-month Euribor rate. 1 percentage point increase in the inflation rate and a 3.5 percentage point decrease in the GDP growth rate under all scenarios.

The table below show the sensitivity of change in the loss allowance of the groups household and corporate customers on 31 December 2020, when the economic situation weakens due to changes in the combined effects of interest rates, investment growth rate and GDP:

Group Stage	Loss allowance	Loss allowance sensitivity analysis*	Proportional change
Households			
Stage 1	2	2	5.5 %
Stage 2	5	5	5.6 %
Corporate customers			
Stage 1	34	38	12.9 %
Stage 2	21	29	33.2 %
Total	**61**	**73**	**19.3 %**

* 1 percentage point increase in the 12-month Euribor rate, 1 percentage point increase in the real interest rate and a 3.5 percentage point decrease in the GDP rate under all scenarios.

Loss allowances are largely determined based on the first couple of years when the first years of the simulated scenario years are essential in terms of the results.

A 1 percentage point increase in interest rates increases the amount of loss allowance in both personal customers and corporate customers. GDP growth has a negative relation to the amount of loss allowance through all model components. Slower GDP growth increases PD values for both personal customers and corporate customers. It also affects through the LGD in such a way that a GDP decrease weakens developments in the fair value of residential property collateral, which has an effect on Stage 2 contracts.

The analysis shows that the most significant proportional and absolute changes apply to the corporate customers where the amounts of loss allowance regarding Stage 1 and 2 contracts increase significantly. Changes are considerably smaller in personal customers than in corporate customers because the estimates of their risk parameters are not so sensitive to economic conditions.

Note 35. Off-balance-sheet commitments

EUR million	31 Dec 2021	31 Dec 2020
Guarantees	406	460
Other guarantee liabilities	2,413	1,871
Loan commitments	5,678	5,364
Commitments related to short-term trade transactions	656	227
Other	495	496
Total off-balance-sheet commitments	**9,649**	**8,417**

Note 36. Financial assets and liabilities offset in the balance sheet or subject to enforceable master netting arrangements or similar agreements

Financial assets

				Financial assets not set off in the balance sheet		
31 December 2021, EUR million	Gross amount of financial assets	Gross amount of financial liabilities deducted from financial assets	Net amount presented in the balance sheet	Master agreements*	Collateral received	Net amount
Derivatives	4,073	-361	3,712	-2,190	-678	844

				Financial assets not set off in the balance sheet		
31 December 2020, EUR million	Gross amount of financial assets	Gross amount of financial liabilities deducted from financial assets	Net amount presented in the balance sheet	Master agreements*	Collateral received	Net amount
Derivatives	5,915	-562	5,352	-2,462	-377	2,513

Financial liabilities

				Financial liabilities not set off in the balance sheet		
31 December 2021, EUR million	Gross amount of financial liabilities	Gross amount of financial assets deducted from financial liabilities	Net amount presented in the balance sheet	Master agreements*	Collateral given	Net amount
Derivatives	3,015	-345	2,669	-2,190	-488	-9

				Financial liabilities not set off in the balance sheet		
31 December 2020, EUR million	Gross amount of financial liabilities	Gross amount of financial assets deducted from financial liabilities	Net amount presented in the balance sheet	Master agreements*	Collateral given	Net amount
Derivatives	4,863	-589	4,274	-2,462	-542	1,269

* It is OP Corporate Bank plc's practice to enter into master agreements for derivative transactions with all derivative counterparties.

Central counterparty clearing for OTC derivatives

Standardised OTC derivative transactions entered into with financial counterparties are cleared in London Clearing House, accordance with EMIR (EU 648/2012). Based on this model, the central counterparty will become the derivatives counterparty at the end of the daily clearing process, with whom daily payments for derivatives are netted. In addition, collateral is paid or received daily, which corresponds to the change in the fair value of open positions (variation margin), which is treated as collateral or final payment, depending on the clearing method. Interest rate derivatives cleared by the central counterparty are presented on a net basis in the balance sheet.

Other bilaterally cleared OTC derivatives

The ISDA Master Agreement or the Master Agreement of Finance Finland or the OP Corporate Bank will apply to derivative transactions between the OP Corporate Bank and other clients and to derivative transactions to which central counterparty clearing in accordance with the Regulation does not pertain. On the basis of these agreements, derivative payments may be netted per transaction on each payment date and in the event of counterparty default and bankruptcy. It is also possible to agree on collateral on a counterparty-specific basis in the terms and conditions of the agreement. Such derivatives are presented on a gross basis in the balance sheet.

Note 37. Notes to the cash flow statement

EUR million	2021	2020
Interest received	**694**	**937**
Interest paid	**-509**	**-678**
Non-cash items and other adjustments		
Impairment losses on receivables	74	54
Changes in value of financial instruments	304	-217
Changes in fair value of investment property	0	0
Defined benefit pension plans	0	0
Planned amortisation and depreciation	12	14
OP bonuses to owner-customers	0	0
Income tax paid	52	45
Other	54	-12
Total adjustments	**497**	**-117**
Cash and cash equivalents		
Liquid assets	32,789	21,764
Receivables from credit institutions payable on demand	102	78
Total	**32,891**	**21,842**

Notes to risk management

Note 2 describes the Risk Appetite Framework.

Note 38. Credit losses and impairments

Credit losses and impairments

EUR million	2015	2016	2017	2018*	2019	2020	2021
Gross credit losses and impairments	-69	-83	-48	-24	-50	-54	-74
Reversals	40	46	36	0	1	1	1
Net credit losses and impairments	-30	-37	-12	-23	-50	-53	-74

* IFRS 9 was adopted on 1 January 2018.

Note 39. Collateral received by type of collateral

EUR million	31 Dec 2021	%	31 Dec 2020	%
Object of financing as collateral	4,846	35.0	3,333	28.7
Property or lease mortgage on office or industrial property	2,996	21.6	2,759	23.7
Public-sector guarantees	2,387	17.2	2,567	22.1
Shares and participations, other	1,345	9.7	1,273	11.0
Shares in housing corporations, and housing associations and property companies in residential use	821	5.9	351	3.0
Property or lease mortgage on residential property	502	3.6	485	4.2
Business mortgage	297	2.1	290	2.5
Other collateral	290	2.1	284	2.4
Factoring	201	1.5	180	1.5
Bank guarantee	172	1.2	103	0.9
Total	**13,858**	**100.0**	**11,626**	**100.0**

Received collateral by type of collateral has been calculated on the basis of the values of collateral held by the bank allocated to liabilities. The collateral's fair value is used as the basis for calculating the collateral value which is derived from the fair value on the basis of valuation percentages, based on conservative estimates, by type of collateral.

Note 40. Funding structure

EUR million	31 Dec 2021	%	31 Dec 2020	%
Liabilities to credit institutions	42,660	49.8	28,888	41.5
Liabilities to customers				
Deposits	16,089	18.8	13,944	20.1
Other	2,268	2.6	2,458	3.5
Debt securities issued to the public				
Certificates of deposit and ECPs (Euro Commercial Paper)	7,835	9.1	7,620	11.0
Bonds	10,869	12.7	12,622	18.2
Subordinated bonds (SNP)	3,926	4.6	1,689	2.4
Subordinated liabilities	1,994	2.3	2,309	3.3
Total	**85,641**	**100.0**	**69,530**	**100.0**

Note 41. Maturity of financial assets and liabilities by residual term to maturity

31 December 2021	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Liquid assets	32,789					32,789
Receivables from credit institutions	992	3,304	7,656	981	487	13,419
Receivables from customers	4,245	3,355	15,091	2,253	1,293	26,236
Investment assets						
Financial assets held for trading	132	68	71	59	0	331
Financial assets at fair value through other comprehensive income	264	740	7,273	4,894		13,171
Financial assets at amortised cost		501	3,043	310		3,853
Total assets	**38,421**	**7,967**	**33,134**	**8,496**	**1,780**	**89,799**
Liabilities to credit institutions	10,772	2,703	22,387	6,798		42,660
Liabilities to customers	17,718	194	411	32		18,357
Debt securities issued to the public	4,901	6,723	6,918	3,849	239	22,630
Subordinated liabilities	507		1,487			1,994
Total liabilities	**33,898**	**9,620**	**31,204**	**10,679**	**239**	**85,641**
Guarantees	112	67	193	0	34	406
Other guarantee liabilities	251	614	632	886	30	2,413
Loan commitments	5,678					5,678
Commitments related to short-term trade transactions	115	389	153			656
Other	492	2	0	1		495
Total off-balance-sheet commitments	**6,647**	**1,072**	**978**	**887**	**64**	**9,649**

31 December 2020	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Liquid assets	21,764					21,764
Receivables from credit institutions	1,137	4,474	5,211	328	98	11,248
Receivables from customers	5,167	3,372	13,434	1,169	1,320	24,461
Investment assets						
Financial assets held for trading	192	49	59	27	4	331
Financial assets at fair value through other comprehensive income	213	435	7,469	5,522		13,639
Financial assets at amortised cost			503	311		814
Total assets	**28,473**	**8,329**	**26,676**	**7,357**	**1,423**	**72,257**
Liabilities to credit institutions	8,331	653	12,896	7,007		28,888
Liabilities to customers	15,375	553	421	53		16,403
Debt securities issued to the public	4,052	5,966	8,915	2,749	250	21,931
Subordinated liabilities		283	2,026			2,309
Total liabilities	**27,758**	**7,455**	**24,258**	**9,809**	**250**	**69,530**
Guarantees	54	76	276	1	52	460
Other guarantee liabilities	198	356	502	760	55	1,871
Loan commitments	5,364					5,364
Commitments related to short-term trade transactions	65	78	84	0		227
Other	493	0	2	1	0	496
Total off-balance-sheet commitments	**6,174**	**511**	**864**	**762**	**107**	**8,417**

Note 42. Liquidity buffer

The liquidity buffer is presented under the Other Operations segment.

Liquidity buffer by maturity and credit rating on 31 December 2021, EUR million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion, %
Aaa*	32,837	603	604	226	254		34,524	91.7
Aa1 Aa3	106	346	439	391	329	0	1,609	4.3
A1 A3	2	2	0	8	2		15	0.0
Baa1 Baa3	1	112	101	41	11	0	267	0.7
Ba1 or lower	0	66	30	39			134	0.4
Internally rated	305	213	115	267	196		1,095	2.9
Total	**33,250**	**1,342**	**1,289**	**971**	**792**	**0**	**37,645**	**100.0**

* incl. deposits with the central bank

The liquidity buffer's (excl. deposits with the central bank) residual term to maturity averages 4.0 years.

Liquidity buffer by maturity and credit rating on 31 December 2020, EUR million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion, %
Aaa*	21,954	1,515	1,611	852	1,414		27,346	87.5
Aa1 Aa3	1	651	984	474	706	0	2,814	9.0
A1 A3	0	2	4	3	2	3	14	0.0
Baa1 Baa3	32	59	124	51	5	1	273	0.9
Ba1 or lower	20	7	64	35	0		127	0.4
Internally rated	245	190	167	78			680	2.2
Total	**22,253**	**2,424**	**2,954**	**1,494**	**2,127**	**4**	**31,254**	**100.0**

* incl. deposits with the central bank

The liquidity buffer's (excl. deposits with the central bank) residual term to maturity averages 4.4 years.

Note 43. Maturities of financial assets and liabilities by maturity or repricing

31 December 2021	1 month or less	>1–3 months	>3–12 months	>1–2 years	>2–5 years	>5 years	Total
Cash and cash equivalents	32,789						32,789
Receivables from credit institutions	2,550	4,909	3,016	1,329	1,438	177	13,419
Receivables from customers	5,828	8,438	7,651	368	2,558	1,393	26,236
Investment assets							
Financial assets held for trading	22	78	85	9	67	70	331
Financial assets at fair value through other	593	138	714	1,596	5,235	4,894	13,171
Financial assets at amortised cost	810	3,043					3,853
Total assets	**42,593**	**16,606**	**11,465**	**3,303**	**9,298**	**6,534**	**89,799**
Liabilities to credit institutions	26,577	7,430	1,519	777	2,056	4,301	42,660
Liabilities recognised at fair value through profit or loss			0				0
Liabilities to customers	16,348	1,451	558				18,357
Debt securities issued to the public	2,807	4,272	5,494	604	5,350	4,105	22,630
Subordinated liabilities	77	816	7		1,094		1,994
Total liabilities	**45,809**	**13,969**	**7,578**	**1,380**	**8,500**	**8,405**	**85,641**

Debt repayable on demand totalled EUR 17.7 billion, consisting mainly of public deposits.

31 December 2020	1 month or less	>1–3 months	>3–12 months	>1–2 years	>2–5 years	>5 years	Total
Cash and cash equivalents	21,764						21,764
Receivables from credit institutions	1,655	3,512	3,672	740	1,580	89	11,248
Receivables from customers	6,170	7,694	6,468	459	2,288	1,382	24,461
Investment assets							
Financial assets held for trading	94	100	48	7	51	32	331
Financial assets at fair value through other	590	141	346	1,318	5,723	5,522	13,639
Financial assets at amortised cost	814						814
Total assets	**31,086**	**11,447**	**10,534**	**2,523**	**9,642**	**7,024**	**72,257**
Liabilities to credit institutions	9,016	3,964	1,473	2,226	7,740	4,468	28,888
Liabilities to customers	14,015	1,518	870				16,403
Debt securities issued to the public	2,071	4,628	5,865	1,706	4,771	2,889	21,931
Subordinated liabilities	75	363	278	500	1,093		2,309
Total liabilities	**25,178**	**10,473**	**8,487**	**4,431**	**13,604**	**7,358**	**69,530**

Debt repayable on demand totalled EUR 16.2 billion, consisting mainly of public deposits.

Note 44. Sensitivity analysis of interest rate and market risk

Interest rate risk associated with balance sheet

	2021		2020	
Currency EUR million	-200bp	+200bp	-200bp	+200bp
EUR	426	-69	313	-219

The risk is reported in euros for all currencies. The non-euro currency amounts are small and the associated currency and interest rate risks are mainly hedged. Interest rate risk is calculated monthly as the volatility of the present value of balance sheet cash flows to the parallel 2 percentage point change of the yield curve.

Sensitivity analysis of market risk

EUR million		2021	2020
Interest rate volatility*	10bp	-2	0
Currency volatility*	10 pps	0	0
Credit risk premium**	10bp	-55	-61

* Trading portfolio

** Long-term investment assets

Other notes

Note 45. Information by country

OP Corporate Bank plc operates mainly in Finland. OP Corporate Bank plc has branches engaged in banking and asset and sales finance operations in Estonia, Latvia and Lithuania. On 10 February 2021, OP Corporate Bank plc's Board of Directors approved a merger plan whereby the Baltic subsidiaries OP Finance AS (Estonia), OP Finance SIA (Latvia) and AB OP Finance (Lithuania) will merge into their parent company OP Corporate Bank plc on 31 October 2021 through a cross-border merger.

2021

Name		Domicile
OP Corporate Bank plc Estonian Branch	Branch	Estonia
OP Corporate Bank plc Latvian Branch	Branch	Latvia
OP Corporate Bank plc Lithuanian Branch	Branch	Lithuania

Financial information on 31 December 2021, EUR million	Estonia	Latvia	Lithuania	Total
Total operating income	16	19	21	**56**
Total EBIT	4	10	9	**23**
Total current tax	2	1	2	**5**
Total personnel in man-years	38	35	43	**115**

2020

Name		Domicile
OP Corporate Bank plc Estonian Branch	Branch	Estonia
OP Corporate Bank plc Latvian Branch	Branch	Latvia
OP Corporate Bank plc Lithuanian Branch	Branch	Lithuania
OP Finance AS	Subsidiary	Estonia
OP Finance SIA	Subsidiary	Latvia
UAB OP Finance	Subsidiary	Lithuania

Financial information on 31 December 2020, EUR million	Estonia	Latvia	Lithuania	Total
Total operating income	15	17	19	**51**
Total EBIT	9	10	13	**32**
Total current tax	1	1	2	**3**
Total personnel in man-years	34	33	40	**106**

Note 46. Related-party transactions

OP Corporate Bank plc's related parties comprise subsidiaries 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 President and CEO, Deputy President and CEO and other members of senior management as well as members of the Board of Directors. Related parties also include companies over which key management persons or their close family member, either alone or together with another person, exercises significant influence. Other entities regarded as related parties include OP Bank Group Pension Foundation and OP Financial Group's Personnel Fund.

Information on related party corporate transactions can be found in Note 3.

Standard terms and conditions for credit are applied to loans granted to the related parties. Loans are tied to generally used reference rates.

Related-party transactions 2021

EUR 1,000	Parent company	Key management personnel	Others*
Loans	997,004	4,505	6,834,997
Other receivables	431		3,976,402
Deposits	659,645	3,120	7,521,581
Other liabilities	141,203		320,704
Interest income	1,667	19	36,464
Interest expenses	-955	4	43,039
Commission income	199	1	6,273
Commission expenses	456	0	21,557
Net investment income			-51,267
Other operating income	198		10,028
Operating expenses	45,161		60,069
Contingent liabilities and derivatives			
Off-balance-sheet commitments			
Guarantees			12,500
Other guarantee liabilities			1,393
Derivative contracts			
Nominal values			6,213,935
Credit equivalents			53,634
Salaries, other short-term benefits and performance-based pay			
Salaries, other short-term benefits and performance-based pay		475	
Related-party holdings			
Number of shares	319,551,415		

Related-party transactions 2020

EUR 1,000	Parent company	Key management personnel	Others*
Loans		2,333	6,110,000
Other receivables	197		942,849
Deposits	518,260	1,377	6,433,991
Other liabilities	2,329		613,565
Interest income	1,582	10	35,858
Interest expenses	2,814	1	100,370
Commission income	89	1	12,625
Commission expenses			15,899
Net investment income			168,517
Other operating income	1,783		8,387
Operating expenses	66,821		128,069
Contingent liabilities and derivatives			
Off-balance-sheet commitments			
Guarantees			12,500
Other guarantee liabilities			1,387
Derivative contracts			
Nominal values			6,284,886
Credit equivalents			66,833
Salaries, other short-term benefits and performance-based pay			
Salaries, other short-term benefits and performance-based pay		509	
Related-party holdings			
Number of shares	319,551,415		

* Other related-party entities include OP Bank Group Pension Foundation, OP Financial Group's Personnel Fund and their sister companies within OP Cooperative Consolidated.

Board member fees 2021

In financial year 2021, the members of the Board of Directors did not receive from OP Corporate Bank any monthly fees or share-based bonuses. No separate meeting allowances were paid in 2021 to the members of the Board of Directors employed by OP Cooperative or its subsidiaries. The meeting allowance paid to the Board members employed by OP Financial Group's cooperative banks amounted to 600 euros per meeting in 2021.

Salaries and bonuses paid to the President and CEO Katja Keitaanniemi in the financial year ending 31 December 2021 EUR 474.529.

The period of notice applicable under the President and CEO's executive contract is six months. According to this contract, the company must pay the President and CEO severance pay equalling his 6-month total salary, in addition to compensation for loss of office, if the company dismisses him or he has to resign or terminate the contract due to a reason attributable to the company. In case the executive contract terminates due to reasons attributable to the company, the President and CEO will also be entitled to bonuses under the performance-based bonus scheme for the year of contract termination and any possible deferred bonuses under regulation, provided that the scheme's performance criteria and the criteria for payment under the scheme's terms and conditions are fulfilled.

Pension obligations of key management persons

The President and CEO is covered by TyEL (the Finnish Employees Pensions Act) which provides pension benefits based on the years of employment and earnings as prescribed in the Act. The retirement age of the President and CEO is the age equivalent to the lowest pensionable age under the Employees Pensions Act (TyEL). The supplementary pension plan for the President and CEO has been arranged through OP Life Assurance Company Ltd. The costs of the supplementary pension plan for the President and CEO totalled EUR 85,560 (83,160). No pension obligations apply to Board members. This also applies to former Board members. More detailed information on OP Corporate Bank plc's pension plans can be found in Note 27. Provisions and other liabilities.

Pension costs of President and CEO, thousands of euros	2021	2020
Pension costs of defined contribution plans under TyEL	118	120
Pension costs of supplementary defined contribution plans	86	83

Note 47. Events after the balance sheet date

On 27 January 2022, OP Corporate Bank plc issued a green bond worth EUR 500 million in accordance with its updated Green Bond Framework. The green bond will support the green transition, and proceeds raised with it will be allocated to sustainable corporate lending. Targeted at international responsible institutional investors, the bond is OP Corporate Bank's first senior non-preferred, unsecured green bond, which amounts to EUR 500 million and has a maturity of 5.5 years. Eligible sectors to be funded include renewable energy, green buildings and environmentally sustainable management of living natural resources and land use.

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 Corporate Bank's CET1 ratio will be an estimated 12%. Application of the floor is a temporary capital measure which will not affect OP Corporate 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.

Signatures for the Financial Statements and Report by the Board of Directors

Helsinki, 1 March 2022

Timo Ritakallio
Chair of the Board of Directors

Olli-Pekka Saario

Pasi Sorri

Jarmo Viitanen

Katja Keitaanniemi
CEO

Auditors' note

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

Helsinki, 2 March 2022

KPMG Oy Ab
Audit firm

Juha-Pekka Mylén
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 Corporate Bank plc

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of OP Corporate Bank Plc (business identity code 0199920-7) for the year ended on 31 December 2021. The financial statements comprise the 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 company's financial position, financial performance 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 11 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

Measurement of receivables from customers (notes 1, 12, 17 and 34 to the financial statements)

Receivables from customers, totalling EUR 26.2 billion, are the most significant item on OP Corporate Bank's balance sheet representing 28 percent of the total assets.

Calculation of expected credit losses (ECL) in accordance with IFRS 9 Financial Instruments involves assumptions, estimates and management judgement, for example, in respect of determining the probability and amount of expected credit losses as well as the significant increases in credit risk.

The elements of accounting for expected credit losses are updated and defined, based on materialised credit risk developments, validation and improvement of the accounting process as well as on regulations and changes therein.

Due to the significance of the carrying amount involved, complexity of the accounting methods used for measurement purposes and management judgement involved, measurement of receivables is addressed as a key audit matter.

We evaluated compliance with the lending instructions and assessed principles and controls over recognition and monitoring of loan receivables.

We assessed the methods and the key assumptions for calculating expected credit losses as well as tested the controls related to the calculation process and credit risk models for the expected credit losses.

The main focus areas in our audit of ECL were the most significant factors requiring management judgement in the calculation of ECL, cash flow based ECL calculation based on expert assessment, impacts of the COVID-19 pandemic on the credit risk position and accounting for expected credit losses, validation process for ECL models as well as recalculation of the most significant ECL models and sensitivity analysis.

Our IFRS and financial instruments specialists were involved in the audit.

Furthermore, we considered the appropriateness of the notes provided by OP Corporate Bank in respect of receivables and expected credit losses.

Measurement of investment assets and derivative contracts (notes 1, 7, 16, 18 and 34 to the financial statements)

The carrying value of investment assets totals EUR 17.4 billion mainly consisting of investments measured at fair value. The aggregate derivative assets are EUR 3.7 billion and derivative liabilities EUR 2.7 billion comprising contracts held for trading and hedging purposes. Derivatives are measured at fair value in preparing financial statements.

The fair value of financial instruments is determined using either prices quoted in an active market or OP Corporate Bank's own valuation techniques where no active market exists. Determining fair values for investments and derivatives involves management judgements, especially in respect of those instruments for which market-based data is not available.

Due to the significant balances associated with investment assets and derivative positions involved, and management judgement related to the measurement of illiquid investments, valuation of these assets is addressed as a key audit matter.

We evaluated the appropriateness of the accounting principles applied and the valuation techniques used by OP Corporate Bank, and tested accounting for and valuation of investment assets and derivative contracts.

In respect of derivative contracts, we considered the accounting treatment and the valuation process in relation to the requirements set under IFRS.

As part of our year-end audit procedures, we compared the fair values used in measurement of investment assets and derivatives with market quotations and other external price references. We assessed the accuracy of the input data used in valuations as well as the reasonableness of the assumptions and estimates applied.

We also assessed the impairment principles applied and techniques used by OP Corporate Bank in respect of investments.

Our IFRS and financial instruments specialists were involved in the audit.

Finally, we considered the appropriateness of the notes on investment assets and derivative contracts.

Structural arrangements and OP Corporate Bank plc's transition to the IFRS financial statements (note 3 to the financial statements)

OP Corporate Bank plc carried out the following corporate transactions during the financial year:

- Partial demerger where the shares of Pohjola Insurance Ltd conducting non-life insurance business were transferred to OP Cooperative on 30 November 2021.
- OP Corporate Bank's Baltic subsidiaries were merged into the parent company on 31 October 2021.
- OP Corporate Bank plc sold the shares of OP Custody Ltd to OP Cooperative on 30 November 2021.

In relation to the structural arrangements carried out during the financial year we have performed the following procedures:

- We have acquainted ourselves to the execution of the partial demerger and the mergers and we have issued the auditor's statements required by legislation.
- We have assessed impacts of the structural arrangements on OP Corporate Bank plc's financial position and financial performance as well as accounting treatment and presentation

As a result of the structural arrangements carried out in 2021 OP Corporate Bank plc no longer constitutes a group as of 31 December 2021 and the company doesn't prepare consolidated financial statements. As from 31 December 2021 OP Corporate Bank plc started preparing the financial statements and interim reports under the International IFRS standards. Interim reports published during the financial year were prepared for the OP Corporate Bank Group.

Due to the significance and non-recurring nature structural arrangements and OP Corporate Bank plc's transition to the IFRS financial statements are addressed as a key audit matter in the audit of financial year 2021.

of the transactions in relation to the requirements set under IFRS.

— We have assessed the preparation process, presentation and disclosure information of the first IFRS financial statements of OP Corporate Bank plc.

Our IFRS and transaction specialists were involved in the audit.

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 EUand 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 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

JUHA-PEKKA MYLÉN
Authorised Public Accountant, KHT