OP Financial Group's Report by the Board of Directors and Financial Statements 2023

OP Financial Group's Report by the Board of Directors 1 January–31 December 2023:

Operating profit EUR 2,050 million – Record amount of benefits for owner-customers

Operating profit Q1–4/2023	Net interest income Q1–4/2023	Total income Q1–4/2023	Total expenses Q1–4/2023	CET1 ratio 31 Dec 2023
€2,050 mill.	+77%	+41%	+12%	19.2%

- Operating profit was EUR 2,050 million (1,120).
- Income from customer business, or net interest income, insurance service result and net commissions and fees, increased by 45% to EUR 3,860 million (2,666). Net interest income grew by 77% to EUR 2,871 million (1,618). Insurance service result decreased by 23% to EUR 81 million (106) and net commissions and fees by 4% to EUR 908 million (942).
- Impairment loss on receivables in the income statement was EUR 269 million (115), accounting for 0.26% (0.11) of the loan and guarantee portfolio.
- Investment income increased by 59% to EUR 389 million (245).
- Total expenses increased by 12% to EUR 2,201 million (1,961). The cost/income ratio improved to 46% (58).
- The loan portfolio decreased by 1% to EUR 98.9 billion (100.2) and deposits by 5% to EUR 74.5 billion (78.0).
- CET1 ratio was 19.2% (17.4), which exceeds the minimum regulatory requirement by 6.9 percentage points. During the first quarter, OP Financial Group adopted the Standardised Approach to credit risk.
- Retail Banking operating profit rose to EUR 1,223 million (502). Net interest income grew by 89% to EUR 2,258 million (1,194). Impairment loss on receivables increased by EUR 77 million to EUR 173 million (96). Net commissions and fees decreased by 11% to EUR 686 million (773). The cost/income ratio improved to 46% (62). The loan portfolio decreased by 2% and deposits by 6%.
- Corporate Banking operating profit decreased to EUR 408 million (416). Net interest income grew by 29% to EUR 591 million (457). Impairment loss on receivables increased by EUR 78 million to EUR 96 million (18). Net commissions and fees grew by 32% to EUR 219 million (166). The cost/income ratio improved to 40% (41). The loan portfolio increased by 1% and deposits decreased by 2%.
- Insurance operating profit increased to EUR 414 million (293). Insurance service result decreased by EUR 25 million to EUR 81 million (106). Investment income grew by EUR 193 million to EUR 347 million (154). Non-life Insurance recorded a combined ratio of 94% (90).
- Group Functions operating loss was EUR –26 million (–91).
- OP Financial Group paid 30% extra on OP bonuses earned by owner-customers for 2023. The value of the new OP bonuses earned totalled EUR 275 million (215). In addition, owner-customers will get daily banking services without monthly charges from October 2023 until the end of 2024. The value of this benefit was EUR 22 million for 2023.
- OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. At the same time, the Group ceased to apply the overlay approach. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. Note 3 (Changes in accounting policies and presentation) of the Financial Statements provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.
- Operating profit for 2024 is expected to be at a good level but lower than that for 2023. For more detailed information on the outlook, see "Outlook for 2024".

OP Financial Group's key indicators

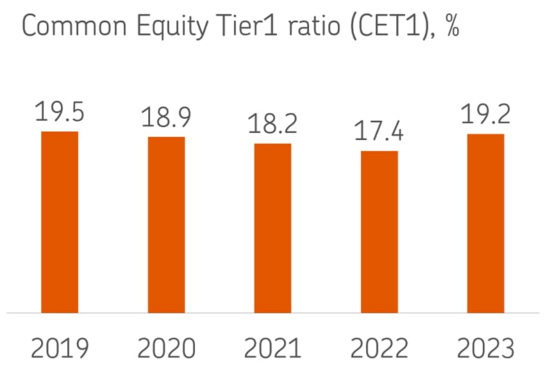
	Q1–4/2023	Q1–4/2022	Change, %
Operating profit, € million	2,050	1,120	83.0
Retail Banking	1,223	502	143.5
Corporate Banking	408	416	-2.1
Insurance	414	293	41.4
Group Functions	-26	-91	-
New OP bonuses accrued to owner-customers, € million	-275	-215	28.0
Total income	4,775	3,394	40.7
Total expenses	-2,201	-1,961	12.2
Cost/income ratio, %	46.1	57.8	-11.7*
Return on equity (ROE), %	10.6	6.3	4.3*
Return on equity, excluding OP bonuses, %	12.0	7.5	4.5*
Return on assets (ROA), %	0.98	0.51	0.46*
Return on assets, excluding OP bonuses, %	1.11	0.61	0.50*
	31 Dec 2023	31 Dec 2022	Change, %
CET1 ratio, %	19.2	17.4	1.8*
Loan portfolio, € billion**	98.9	100.2	-1.4
Deposits, € billion**	74.5	78.0	-4.6
Ratio of non-performing exposures to exposures, % **	2.94	2.31	0.6*
Ratio of impairment loss on receivables to loan and guarantee portfolio, %	0.26	0.11	0.15*
Owner-customers (1,000)	2,094	2,066	1.4

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. The preceding years' figures (2019, 2020 and 2021) have not been adjusted. Note 3 (Changes in accounting policies and presentation) of the Financial Statements provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

Comparatives for the income statement are based on the corresponding figures in 2022. Unless otherwise specified, figures from 31 December 2022 are used as comparatives for balance-sheet and other cross-sectional items.

* Change in ratio

** As of 1 January 2023, the loan portfolio and deposits exclude changes in the fair value of loans and deposits in hedge accounting. Comparatives have been adjusted to correspond to the current definition.



Comments by the President and Group Chief Executive Officer

The Finnish economy entered a recession, inflation eased, and interest rates remained higher than in recent years

The Finnish economy was affected by exceptional uncertainty and instability in 2023. A mild recession began late in the year and unemployment rose slightly. Inflation slowed down but remained clearly higher than in the preceding years. Despite lowering at the year end, market rates remained considerably higher than previously familiar levels, due to the ECB's continuation of its tight monetary policy.

On the housing market, home sale volumes and demand for home loans were clearly lower than a year earlier. In addition, home prices continued their downward trend.

The year-end fall in market rates boosted the stock markets, raising share prices on several stock exchanges, but indexes on the Nasdaq Helsinki declined.

The downturn was exceptionally severe in construction and the related sectors. Risks also grew markedly across the real estate sector. There was a clear rise in the number of bankruptcies compared to previous years.

Geopolitical risks were high throughout the year, intensifying in late 2023 as a result of the Middle East crisis in particular.

OP Financial Group had an outstandingly successful year – its strong performance enables better benefits for owner-customers

Despite the challenges in the business environment, OP Financial Group's business operations developed extremely well in 2023. Operating profit grew by 83 per cent on the previous year, to 2,050 million euros.

Because of this strong performance, we are providing our almost 2.1 million owner-customers with better benefits in 2024, playing our part to ease the strain on households in these economically challenging times. We will pay 40% extra on OP bonuses earned in 2024 and will not charge our owner-customers any monthly fees for daily services throughout the year. The total value of higher benefits on OP bonuses and daily services will rise to around 400 million euros – a major benefit for owner-customers. Being customer-owned, OP Financial Group will continue sharing its financial success through a range of financial and other benefits for its owner-customers.

Strong capital adequacy and excellent liquidity provide security in an uncertain business environment

OP Financial Group's CET1 ratio strengthened again, to 19.2 per cent, which exceeds the minimum regulatory requirement by 6.9 percentage points. OP Financial Group is one of the most financially solid large banks in Europe.

Furthermore, our liquidity remained excellent. Strong capital adequacy, excellent liquidity and broad trust among customers and other stakeholders are vital both for banks and insurance companies. OP Financial Group is in great shape in all these respects.

OP Financial Group's income from customer business continued to grow vigorously, spurred by the strong increase in net interest income. Meanwhile, there was a clear rise in deposit and wholesale funding costs. Investment income developed well, despite the difficult capital market environment, whereas net commissions and fees were slightly down year on year. The insurance service result was clearly below that of 2022, principally weighed down by higher claims expenditure in health insurance and rising operating expenses. Total income grew by 41 per cent on the previous year.

OP Financial Group's costs grew by 12 per cent on the year before, due in particular to growth in personnel costs and higher investments in ICT development. OP Financial Group's cost-income ratio improved considerably, reaching the excellent level of 46 per cent.

All three business segments performed well. Growth was particularly strong in Retail Banking, whose operating profit grew by 143 per cent to 1,223 million euros, following favourable developments in net interest income. Insurance's result also clearly improved year on year, lifted by considerably higher investment income in particular. Corporate Banking's result was a few per cent below that of 2022.

Deposit and loan volumes turned downwards – customers' repayment capacity remained sound

The deposit portfolio diminished by almost five per cent during the year, mainly due to a clear reduction in deposits by corporate and institutional customers. However, household deposits fell by less than one per cent and OP Financial Group's market share of household deposits grew.

OP Financial Group's loan portfolio shrank by around one per cent during the year, with demand for new home loans and corporate loans visibly down from 2022. This decrease was driven by a considerable fall in year-on-year demand for new home loans and a steep rise in premature home loan repayments in response to interest rate rises.

Despite higher interest rates, OP's home loan customers have been repaying their loans diligently and on schedule. The number of loan modification applications was actually lower than in recent years. However, there was a rise in the number of corporate customers with non-performing loans, especially in construction and in the real estate sector in general. Estimated loss provisions and non-performing exposures grew as the economy deteriorated.

In August, we published credit portfolio emissions reduction targets for three of our customer sectors: energy production, agriculture and housing. These sectors account for more than 90 per cent of emissions related to OP Financial Group's credit portfolio. We set such targets in order to promote the green transition, by encouraging our customers to move towards carbon neutrality.

We want to help people in Finland to prosper financially

We aim to coach our customers in making better financial choices and have worked on easing their personal financial management in multiple ways, while enabling and supporting long-term saving and investing. Asset and wealth management is one of our growth focus areas: we aim to achieve clear growth in this business activity in the coming years.

Preparation for the future featured prominently in customer behaviour. Demand for savings and investment products continued to grow briskly. Higher interest rates, particularly in the second half of the year, led to a clear rise in the number of Growth Return Accounts compared to 2022. A record 654,000 systematic investment agreements were valid in December. OP Financial Group's mutual funds already have more than 1.2 million unitholders. In addition, around 74,000 new equity savings accounts and book-entry accounts were opened in 2023.

Demand for insurance continued to grow

Our customers' desire to prepare for possible risks was reflected by growing demand for insurance products. Pohjola Insurance's premiums written grew by just under 6 per cent to 1.8 billion euros. Demand for health insurance increased most. Claims expenditure grew substantially by almost 6 per cent. Around 990,000 claims applications were filed and 94 per cent of reported claims were compensated.

Our customers took out 27 per cent more term life insurance than in 2022.

Growth in the use of digital services continued

Use of digital services grew substantially again. Our personal and corporate customers increasingly use digital channels for banking and insurance, logging into OP-mobile an average of 52.8 million times a month. OP-mobile already has more than 1.6 million active users.

We continued with ICT investments in 2023, primarily to improve the customer experience and ensure data security and service continuity in all circumstances. AI will play a growing role in our ICT development, enabling us to provide customers with even better services. Accordingly, we are investing heavily in information security and data protection through extensive training of personnel and high-level technology solutions. Responsible data use is a core aspect of our work.

Together through time – also during the current recession

OP Financial Group is in good shape and we are ready to support customers during the mild recession now underway. For example, I would encourage customers experiencing loan repayment problems to contact their OP cooperative bank at the earliest possible stage, so that we can find the best solution together.

My warm thanks to all our customers for the trust they showed in OP Financial Group in 2023. We aim to continue being worthy of the confidence you place in us. I would also like to thank our employees and governing bodies for their excellent work in 2023.

Timo Ritakallio
President and Group CEO

OP Financial Group's Report by the Board of Directors and Financial Statements 1 January–31 December 2023

Report by the Board of Directors

Financial statements

Business environment

According to preliminary information, world economic growth in 2023 was slightly slower than the longer-term average. Economic survey results weakened towards the end of the year. GDP in the euro area grew slowly and contracted during the latter half of the year. The inflation rate in the euro area slowed down to 2.9% in December from 9.2% at the end of the previous year.

In the last quarter, stock prices rose as market rates began to fall, and were higher than at the beginning of the year in most countries. Stock prices in Finland were lower than at the end of 2022.

The European Central Bank (ECB) raised its main refinancing rate several times between January and September. Following the rate increase of 0.25 percentage points in September, the deposit facility rate remained at 4.00% during the rest of the year. The 12-month Euribor began to decrease towards the year end, standing at 3.51% at the end of December, which was only slightly higher than a year ago.

The Finnish GDP declined slightly in 2023. In December, the unemployment rate rose to 7.6%, compared to 6.9% at the end of 2022. Inflation slowed down to 3.6% in December, compared to 9.1% a year earlier. The rise in interest rates slowed down home purchases, and home prices went down.

The economic outlook will remain subdued and uncertain in early 2024. Decelerating inflation is expected to enable a decrease in interest rates, which will pave the way for economic recovery towards the year end.

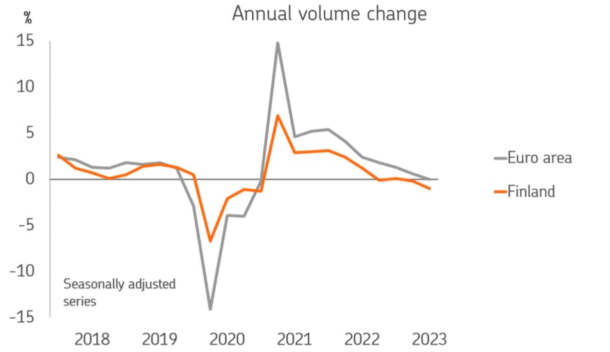
In December, total loans were 0.4% higher than a year earlier. The volume of corporate loans decreased by 0.6% on a year earlier. Total household loans decreased by 1.3% from the end of 2022, due especially to weak demand for home loans. In December, the annual growth rate of consumer loans was 2.5% (3.3).

Total deposits decreased by 1.5% from the end of 2022. Corporate deposits decreased by 8.7% and household deposits by 2.6% on a year earlier.

The value of the assets of mutual funds registered in Finland increased from EUR 134 billion to EUR 149 billion in the year to December. New assets worth a total of EUR 3.2 billion were invested in mutual funds registered in Finland.

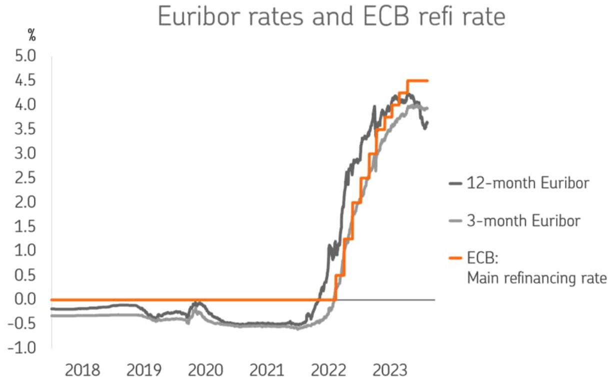
Demand for insurance products remained stable. Inflation that has remained high for a long time increased claims incurred and was also reflected in insurance prices. A rise in stock prices on a global scale improved insurance companies' profitability.

GDP
Annual volume change



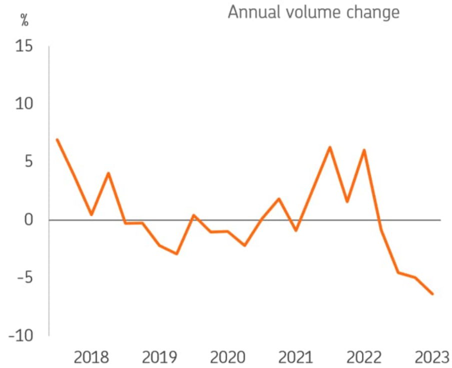
Sources: Eurostat, Statistics Finland

Euribor rates and ECB refi rate



Source: Bank of Finland

Fixed investments in Finland
Annual volume change



Source: Statistics Finland

Change in financial sector volumes
in the past 12 months

Sources: Bank of Finland, Investment Research Finland

Earnings analysis and balance sheet

Earnings analysis, € million	Q1–4/ 2023	Q1–4/ 2022	Change, %	Q4/ 2023	Q4/ 2022	Change, %
Operating profit	2,050	1,120	83.0	480	354	35.7
Retail Banking	1,223	502	143.5	304	166	83.0
Corporate Banking	408	416	-2.1	87	197	-55.8
Insurance	414	293	41.4	116	146	-20.4
Group Functions	-26	-91	-	-24	-75	-
Net interest income	2,871	1,618	77.4	792	496	59.6
Impairment loss on receivables	-269	-115	134.0	-99	-45	120.8
Net commissions and fees	908	942	-3.7	223	234	-4.5
Insurance service result	81	106	-23.2	23	28	-20.0
Insurance revenue	2,000	1,898	5.4	534	491	8.8
Insurance service expenses	-1,824	-1,898	-3.9	-455	-434	4.7
Reinsurance contracts	-95	106	-	-56	-28	102.9
Investment income	389	245	58.9	96	106	-9.7
Other operating income	40	67	-40.4	12	15	-19.7
Personnel costs	-964	-856	12.7	-262	-239	9.6
Depreciation/amortisation and impairment loss	-226	-214	5.7	-89	-55	62.6
Other operating expenses	-1,011	-892	13.4	-287	-247	15.9
Transfers to insurance service result	485	416	16.6	137	111	23.6
OP bonuses to owner-customers	-255	-198	28.6	-67	-51	30.9

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. Note 3 (Changes in accounting policies and presentation) of the Financial Statements provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

Key indicators, € million	31 Dec 2023	31 Dec 2022	Change, %
Loan portfolio*	98,871	100,234	-1.4
Home loans	41,856	42,304	-1.1
Corporate loans	28,181	27,621	2.0
Housing company loans**	10,656	10,822	-1.5
Other loans to corporations and institutions	6,838	7,872	-13.1
Other consumer loans	11,339	11,615	-2.4
Guarantee portfolio	4,136	3,974	4.1
Other exposures	13,005	14,502	-10.3
Deposits*	74,465	78,036	-4.6
Assets under management (gross)	102,844	98,226	4.7
Mutual funds	30,010	27,575	8.8
Institutional clients	35,878	35,713	0.5
Private Banking	24,378	23,326	4.5
Unit-linked insurance assets	12,579	11,612	8.3
Balance sheet total	160,391	175,691	-8.7
Investment assets	21,896	20,742	5.6
Insurance contract liabilities	11,589	11,446	1.3
Debt securities issued to the public	37,511	37,438	0.2
Equity capital	16,262	14,668	10.9

* As of 1 January 2023, the loan portfolio and deposits exclude changes in the fair value of loans and deposits in hedge accounting. Comparatives have been adjusted to correspond to the current definition.

** Housing company loans includes housing companies and housing investment companies.

January–December

OP Financial Group's operating profit (earnings before tax) was EUR 2,050 million (1 120), up by EUR 929 million year on year. Income from customer business, or net interest income, net commissions and fees and insurance service result, increased by a total of 44.8% to EUR 3,860 million (2,666). The cost/income ratio improved to 46.1% (57.8).

Net interest income grew by 77.4% to EUR 2,871 million. The rise in market rates that began in spring 2022 increased net interest income. Net interest income reported by the Retail Banking segment increased by EUR 1,064 million and that by the Corporate Banking segment by EUR 134 million. OP Financial Group's loan portfolio decreased by 1.4% to EUR 98.9 billion and deposits by 4.6% to EUR 74.5 billion. New loans drawn down by customers during the financial year totalled EUR 22.0 billion (24.5).

Impairment loss on loans and receivables, which reduces earnings, totalled EUR 267 million (154). Expected credit losses concerning the construction and real estate sectors increased. Final credit losses recognised totalled EUR 77 million (118). Loss allowance at the end of the financial year was EUR 929 million (736), of which management overlay accounted for EUR 109 million (66). Non-performing exposures accounted for 2.9% (2.3) of total exposures. Impairment loss on loans and receivables accounted for 0.26% (0.11) of the loan and guarantee portfolio.

Net commissions and fees decreased by 3.7% to EUR 908 million. Owner-customers have got daily banking services without monthly charges since October 2023. Net commissions and fees for payment transfer services decreased by EUR 12 million to EUR 291 million, and those for residential brokerage by EUR 8 million to EUR 63 million. Sales commissions on insurance contracts decreased by EUR 9 million to EUR 33 million. Meanwhile, net commissions and fees for lending increased by EUR 9 million to EUR 159 million and those for asset and wealth management by EUR 7 million to EUR 43 million.

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. Insurance service result decreased by 23.2% to EUR 81 million during the financial year as a result of the increase in net claims incurred and operating expenses. The rise in the general level of costs and the higher number of claims in health insurance increased claims incurred, whereas the number of large claims decreased year on year. Insurance service result includes EUR 485 million (416) in operating expenses. Non-life insurance revenue increased by 4.6% to EUR 1,758 million, net claims incurred after reinsurer's share by 5.6% to EUR 1,076 million and operating expenses by 15.6% to EUR 487 million. Combined ratio reported by non-life insurance weakened to 93.8% (89.8).

Investment income, or net investment income, net insurance finance expenses and income from financial assets held for trading, increased by a total of 58.9% to EUR 389 million. Investment income grew as a result of the increase in the value of shares.

OP Financial Group adopted IFRS 17 Insurance Contracts and stopped applying the overlay approach. The Insurance segment's investment result at fair value is fully recognised in the income statement. The impact of economic assumptions, such as the changes in interest rates, on the value of insurance contract liabilities is recognised in net finance income in the income statement. Net investment income together with net finance income describe investment profitability in the insurance business. The combined return on investments at fair value of OP Financial Group's insurance companies was 8.2% (-13.1). A year ago, the negative figure was affected by the rise in interest rates and the fall in stock prices.

Net income from financial assets recognised at fair value through profit or loss, or notes and bonds, shares and derivatives, totalled EUR 1,706 million (–2,822). Net income from investment contract liabilities totalled EUR –642 million (812). Net insurance finance expenses totalled EUR –722 million (2,226). Net income from investment property decreased by EUR 39 million to EUR –22 million as a result of the decline in the fair value of properties.

In banking, net income from financial assets held for trading increased by a total of EUR 84 million to EUR 55 million due to the increase in interest income from notes and bonds and derivatives.

Other operating income decreased to EUR 40 million (67). A year ago, the sale of Pohjola Hospital increased other operating income by EUR 32 million.

Total expenses increased by 12.2% to EUR 2,201 million. Personnel costs rose by 12.7% to EUR 964 million. The increase was affected by higher headcount and growth in the provision for performance-based bonuses as well as pay rises. Depreciation/amortisation and impairment loss on PPE and intangible assets increased by 5.7% to EUR 226 million. Impairment loss recognised mainly on information systems and property in own use totalled EUR 60 million (9). Other operating expenses increased by 13.4% to EUR 1,011 million. ICT costs totalled EUR 460 million (382). Development costs were EUR 294 million (216). Charges of financial authorities fell by EUR 5 million to EUR 77 million.

The income statement item 'OP bonuses to owner-customers' grew by 28.6% to EUR 255 million as a result of the additional bonuses paid for 2023.

Income tax amounted to EUR 408 million (213). The effective tax rate for the financial year was 19.9% (19.0). A year ago, the tax-exempt capital gain of EUR 32 million on the sale of Pohjola Hospital reduced the effective tax rate. Corporate tax payable by OP Financial Group for 2023 is estimated to amount to EUR 396 million (227).

Comprehensive income after tax totalled EUR 1,719 million (525). Changes in the fair value reserve increased comprehensive income by EUR 70 million (–478).

OP Financial Group's equity amounted to EUR 16.3 billion (14.7). Equity included EUR 3.3 billion (3.4) in Profit Shares, terminated Profit Shares accounting for EUR 0.4 billion (0.4).

OP Financial Group's funding position and liquidity is strong. At the end of the financial year, the Group's LCR was 199% (217) and NSFR was 130% (128). In the financial year, OP Financial Group repaid in full the EUR 12.0 billion in TLTRO III loans.

Key income statement items by quarter

€ million	Q1/ 2023	Q2/ 2023	Q3/ 2023	Q4/ 2023	Q1–4/ 2023	Q1–4/ 2022	Change, %
Net interest income	615	684	780	792	2,871	1,618	77
Impairment loss on receivables	-23	-76	-72	-99	-269	-115	134
Net commissions and fees	244	226	215	223	908	942	-4
Insurance service result	-2	10	51	23	81	106	-23
Insurance revenue	485	482	499	534	2,000	1,898	5
Insurance service expenses	-485	-447	-438	-455	-1,824	-1,898	-4
Reinsurance contracts	-3	-25	-11	-56	-95	106	-189
Investment income	128	123	43	96	389	245	59
Other operating income	6	15	7	12	40	67	-40
Personnel costs	-222	-262	-218	-262	-964	-856	13
Depreciation/amortisation and impairment loss	-47	-45	-45	-89	-226	-214	6
Other operating expenses	-284	-220	-221	-287	-1,011	-892	13
Transfers to insurance service result	120	117	112	137	485	416	17
OP bonuses	-55	-66	-67	-67	-255	-198	29
Operating profit	**480**	**506**	**584**	**480**	**2,050**	**1,120**	**83**

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. The preceding years' figures (2019, 2020 and 2021) have not been adjusted. Note 3 (Changes in accounting policies and presentation) of the Financial Statements provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

2023 highlights

Additional benefits for owner-customers

OP Financial Group allocates part of its profitability improvement to provide additional benefits to owner-customers. OP Financial Group increased the OP bonuses earned by owner-customers in 2024 by 40% – an estimated additional bonus of EUR 86 million to owner-customers. In 2023, the Group increased the OP bonuses by 30%, which meant an additional bonus of EUR 60 million.

Owner-customers get daily banking services without monthly charges from October 2023 until the end of 2024. The value of this benefit was EUR 22 million for 2023 and will be an estimated EUR 88 million for 2024.

The total value of these additional benefits to owner-customers was EUR 82 million for 2023 and will be an estimated EUR 174 million for 2024.

From 1 November 2023 onwards, owner-customers have got a 0.25% interest on deposits in their current accounts. This benefit applies to owner-customers who have an owner-customer membership and a current account with the same OP cooperative bank.

Adoption of IFRS 17 Insurance Contracts

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. At the same time, the Group ceased to apply the overlay approach. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. Solvency II valuations are used in the financial conglomerate's FiCo calculation, so the adoption of IFRS 17 did not affect the FiCo ratio. Note 3 (Changes in accounting policies and presentation) of the Financial Statements provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

OP Financial Group adopted the Standardised Approach

OP Financial Group adopted the Standardised Approach in its capital adequacy measurement and reporting during the first quarter of 2023. The transition to the Standardised Approach had no impact on OP Financial Group's capital adequacy or risk profile. On 13 March 2023, the European Central Bank (ECB) issued its decision on the application of the Standardised Approach in OP Financial Group's capital adequacy measurement.

New members of OP Cooperative's Executive Management Team

OP Financial Group is seeking significant growth in saving and investment services. On 26 September 2023, Hanna Porkka (53), M.Sc. (Econ. & Bus. Adm.), was appointed Executive Vice President, Wealth Management of OP Financial Group. The role is new, and Hanna Porkka will simultaneously become a member of OP Cooperative's Executive Management Team. She will take up her duties on 1 April 2024, at the latest. Porkka's appointment is conditional and subject to regulatory approval.

Rami Kinnala (54), LL.M., M.Sc. (Econ. & Bus. Adm.), was appointed Chief Legal Officer and Group General Counsel of OP Financial Group on 24 October 2023. In this position, he will lead OP Financial Group's legal affairs and the Legal Services and Compliance function of the central cooperative consolidated. On 1 January 2024, Kinnala took up his duties and also became a member of OP Cooperative's Executive Management Team. Tiia Tuovinen, Kinnala's predecessor, has requested to resign from OP Financial Group as of 1 July 2024. She acts as Senior Advisor from the beginning of January until the end of June.

OP Financial Group and Nordea will establish a joint venture to improve payment services in Finland

OP and Nordea are establishing a joint venture to create solutions for payment challenges. They aim to develop phone number-based payment and e-invoice management solutions for consumers and companies. The solution will be open to other market actors. The aim is for the company to start operating in 2024. Until then, customers can continue using the Siirto service as before. Realisation of the venture must await the approval of the competition authorities.

OP Financial Group's strategic targets and priorities

OP Financial Group has a strategy process in which it assesses, reshapes and implements its strategy on an ongoing basis. The Group systematically assesses its business environment and operating model to be able to make and implement new strategic choices when needed.

OP Financial Group's mission, values, vision and strategic priorities form a whole whose parts complement each other. OP Financial Group's vision is to be the leading and most appealing financial services group in Finland. Continuous monitoring of the business environment and the strategic priorities will help achieve the shared vision and guide all actions.

On 24 August 2023, OP Cooperative's Supervisory Council confirmed OP Financial Group's strategy and updated strategic targets. In the next few years, the Group's operations will be guided by the following five strategic priorities:

- Value for customers
- Profitable growth
- Efficient, high-quality operations
- Responsible business
- Highly skilled, motivated and satisfied personnel.

OP Financial Group's operations are based on a strong culture of risk management and compliance.

OP Financial Group's strategic targets

	2023	2022	Target 2027
Return on equity (ROE excluding OP bonuses), %	12.0	7.5	9.0
CET1 ratio, %	19.2	17.4	At least CET1 requirement + 4 pps*
Brand recommendations, bNPS (Net Promoter Score, personal and corporate customers)**	Banking: 1 Insurance: 3	Banking: 1 Insurance: 3	Banking: 1 Insurance: 1
Credit rating	AA-/Aa3	AA-/Aa3	At least at the level of AA-/Aa3

* OP Financial Group's target CET1 ratio is at least the CET1 capital adequacy requirement plus four percentage points. The CET1 target calculated by applying the December 2023 end capital adequacy requirement was 16.3%.

** Ranking in the survey on switching bank and insurer by Kantar Finland Oy and in a nationwide survey on SMEs by Red Note Oy.

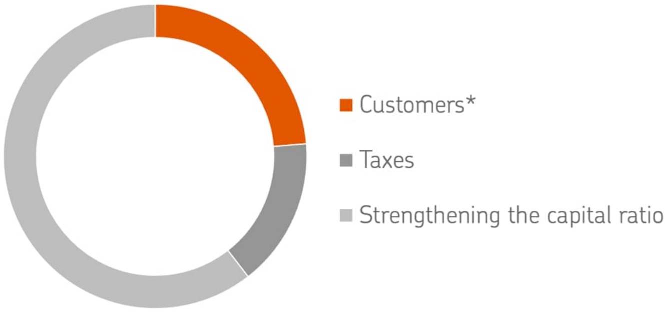
Promotion of the success of owner-customers and operating region

OP Financial Group's mission is to promote the sustainable prosperity, security and wellbeing of its owner-customers and operating region. The Group's operations are based on its values, mission, a strong capital base, capable risk management and customer respect.

Allocation of earnings

OP Financial Group aims to provide its owner-customers with the services they need, as efficiently as possible. The shared success will be used for the benefit of owner-customers in the form of loyalty benefits and other financial benefits as well as the maintenance and further development of service capabilities.

OP Financial Group's estimated earnings allocation for 2023 that is to be confirmed after the end of the financial year:



*) Customers = OP bonuses, discounts and interest on Profit Shares to owner-customers

Implementing OP Financial Group's mission successfully requires a strong capital base which the requirements set by the authorities also necessitate. A stronger capital base will require efficiency and earnings power of the Group in the years to come too. In addition to the part returned to owner-customers, a significant part of earnings is used to strengthen OP Financial Group's capital base.

Benefits created by OP Financial Group are allocated to owner-customers on the basis of the extent to which each owner-customer of an OP cooperative bank uses the Group's services. The owner-customers' loyalty benefit programme consists of OP bonuses – accrued on the basis of an owner-customer's transactions with OP – as well as benefits and discounts granted on OP's banking services, insurance contracts and savings and investment services. Owner-customers also have the opportunity to contribute capital to their own OP cooperative bank through Profit Shares. Interest will be paid annually on Profit Shares as the banks' profit distribution.

OP Financial Group wants to allocate part of its strong profitability to further improving its customer service and to carrying out various corporate responsibility actions. In 2023, the Group focused on the wellbeing of children and young people in particular. The Group supported young people's hobbies and activities promoting their financial literacy and employment around Finland through donations and sponsorships of nearly EUR 4.5 million.

OP Financial Group is one of the largest taxpayers in Finland measured by tax on profits. As a major taxpayer, OP is contributing to prosperity in the whole of Finland. OP Financial Group paid EUR 227 million in corporate tax for 2022. Corporate tax payable by OP Financial for 2023 is estimated to amount to EUR 396 million.

Owner-customers and customer benefits

OP Financial Group had a total of 2.1 million (2.1) owner-customers at the end of the financial year. The number of owner-customers increased by 28,000 year on year.

OP cooperative banks' owner-customers earn OP bonuses through banking, insurance and wealth management transactions. OP Financial Group increased the OP bonuses earned for 2023 by 30%. The value of the new OP bonuses earned totalled EUR 275 million (215).

During the financial year, a total of EUR 99 million (101) of OP bonuses were used to pay for banking and wealth management services and EUR 145 million (114) to pay non-life insurance premiums.

Owner-customers benefitted EUR 98 million (72) from the reduced price of the daily services package of Retail Banking. At the beginning of 2023, the calculation method for the retail service package discounts was changed and the discounts for 2022 were adjusted for comparability. Owner-customers were provided with EUR 63 million (60) in non-life insurance loyalty discounts. They also bought, sold and switched units in most mutual funds without separate charges. The value of this benefit amounted to EUR 6 million (8).

Owner-customer benefits

€ million	2023	2022
New OP bonuses earned	275	215
Retail Banking's daily services packages	98	72
Non-life Insurance's loyalty discounts	63	60
Benefits on mutual funds	6	8
Total	442	355

The abovementioned OP bonuses and customer benefits totalled EUR 442 million (355), accounting for 17.7% (24.1) of OP Financial Group's operating profit before granted benefits.

Owner-customers get daily banking services without monthly charges from October 2023 until the end of 2024. The value of this benefit was EUR 22 million for 2023 and will be an estimated EUR 88 million for 2024.

Contributions made by OP cooperative banks' owner-customers to the OP cooperative banks' Profit Shares and cooperative shares totalled EUR 3.6 billion (3.6). The return target for Profit Shares for 2023 was an interest rate of 4.50% (4.45). Interest payable on Profit Shares accrued during the financial year is estimated to total EUR 148 million (144). The return target for Profit Shares for 2024 is an interest rate of 5.50% (4.50).

Multichannel services

OP Financial Group has a multichannel service network comprising online, mobile, branch and telephone services. In December, the Group's mobile channels (OP-mobile, OP Business mobile) had more than 1.6 million active users (1.4). The Group provides personal customer service both at branches and digitally.

Mobile and online services, no. of logins (million)

	Q1–4/2023	Q1–4/2022	Change, %
OP-mobile, personal customers	606.9	513.6	18.2
OP-mobile, corporate customers*	27.1	-	-
OP Business mobile	35.3	27.3	29.3
Pivo	38.6	43.4	-11.1
Op.fi	68.8	73.8	-6.8
	31 Dec 2023	31 Dec 2022	Change, %
Siirto payment, registered customers (OP)	1,220,989	1,148,218	6.3

* OP-mobile services for corporate customers were launched in November 2022.

In March 2023, OP expanded its mobile payment services by introducing the Apple Pay service in OP's Mastercards, alongside OP's Visa cards. The service enables customers to pay for their purchases using phones or smartwatches in contactless payment readers and on apps and online stores. In December 2022, OP extended the Google Pay service that works on Android phones or smartwatches to cover customers using Mastercard.

OP Financial Group has an extensive branch network with 289 branches (297) across the country. In addition, Pohjola Insurance has a comprehensive network of agencies and partnerships.

Report on non-financial information

OP Financial Group is made up of 102 OP cooperative banks and the central cooperative which they own, including its subsidiaries and affiliated entities. On 31 December 2023, OP Financial Group had 13,806 employees (12,999). The Group's business consists of the following three business segments: Retail Banking (Banking Personal and SME Customers), Corporate Banking (Banking Corporate and Institutional customers), and Insurance (Insurance

Customers). The Group's main area of operation is Finland. In addition, OP Corporate Bank operates in Estonia, Latvia and Lithuania.

The entire financial sector is being shaped by higher ESG expectations among customers and other stakeholders, regulation on sustainable finance, and supervisory requirements. Responsible business is one of OP Financial Group's strategic priorities. The Group has defined the following values that guide its operations and support its mission: people first, responsibility, and succeeding together.

OP Financial Group follows the Code of Business Ethics in its operations. This includes the key principles for corporate responsibility and environmental impact that all employees and members of governing bodies of OP Financial Group must observe. The Group is committed to complying with international principles that guide operational responsibility. The most important of these are the principles of the United Nations Global Compact initiative, the Principles for Responsible Banking under the United Nations Environment Programme Finance Initiative (UNEP FI), the UN Principles for Responsible Investment (UN PRI) and the UN Principles for Sustainable Insurance (UN PSI). OP is one of the founding members of Finland's Sustainable Investment Forum (Finsif) and an active member of Finnish Business & Society (FIBS), the largest corporate responsibility network in the Nordic countries.

OP Financial Group's corporate responsibility activities are guided by a Group-level sustainability programme approved by OP Cooperative's Supervisory Council.

OP Financial Group will publish its sustainability report for 2023 as part of its annual review. The report is based on the GRI Universal Standards and includes information supplementing this report. The report also includes a review based on the TCFD framework (Task-force on Climate related Financial Disclosures). OP Financial Group will publish its sustainability report for 2023 as part of its annual review in week 11. As of 2024, OP Financial Group reports in accordance with the European Sustainability Reporting Standards (ESRS) under the EU's Corporate Sustainability Reporting Directive (CSRD).

Environmental and climate-related aspects

The financial sector plays a key role in the fight against climate change, particularly in financing and investment operations, but also as part of sustainable insurance and claims management. OP Financial Group wants its operations to have a positive effect on the climate and the environment, and is active in reducing adverse environmental impacts. The Group supports its customers' preparation for the effects of climate change and their shift towards low-carbon operations by, for example, providing them with green loans tailored for environmentally friendly projects.

OP Financial Group is committed to the Paris Agreement, which aims to hold the increase in the global average temperature well below 2°C above pre-industrial levels and to limit the rise in temperatures to 1.5°C above pre-industrial levels. OP Financial Group has developed several products based on the international framework for sustainable finance, such as green loans, sustainability-linked loans and sustainable supply chain finance, which encourages supply chains to more sustainable operations by linking financing to supplier sustainability. Green loans are designed for corporate customers that can make a commitment to using the borrowed funds to promote specific projects. 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 6.6 billion (5.2) in 2023. The purpose of sustainable supply chain finance is to encourage supply chains to more sustainable operations through sustainability-linked financing. OP Financial Group has issued four green bonds: the EUR 500 million green bond (2019) and EUR 500 million green senior non-preferred bond (2022) issued by OP Corporate Bank, and the EUR 750 million green covered bond (2021) and the EUR 1,000 million green covered bond (2022) issued by OP Mortgage Bank. In March 2023, OP Financial Group launched a green loan product for SMEs. At the end of the year, green loans granted to SMEs totalled EUR 62 million (0).

In its loan decisions, OP Financial Group 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. OP Financial Group prepares an ESG analysis of its corporate customers as part of assessing their creditworthiness. The purpose of the analysis is to assess how well the companies have included essential ESG themes in their business models and how these themes will affect their business operations and potential.

OP Financial Group's goal is to make its own operations carbon neutral by 2025, which means not producing emissions from the energy and fuels that the Group uses. These direct (Scope 1) and indirect (Scope 2) emissions include emissions from the oil used by heating and stand-by generators, district heating, district cooling as well as energy production. The aim is to minimise energy consumption. To achieve this goal, the Group has been building an energy management system in order to get more detailed information on the energy consumption and emissions of its properties. OP Financial Group calculates emissions from its own operations in accordance with the Greenhouse Gas Protocol (GHG), and greenhouse gases are indicated as CO2 equivalents. In 2023, Scope 1 and Scope 2 emissions totalled 282 CO2e tonnes (7,156).

OP Financial Group's most significant climate impacts arise through its financing and investments. With respect to indirect emissions, OP Financial Group reports the emission distribution of its exposures for the most significant sectors. OP Financial Group is part of financial institutions' international Partnership for Carbon Accounting Financials (PCAF), which aims to develop and implement a harmonised approach to assessing and disclosing greenhouse gas emissions associated with loans and investments. A harmonised accounting approach will provide financial institutions with a basis for achieving the goals of the Paris Agreement. Comparable climate emissions data is important to the development of sustainable investment products and credit risk management, among other things. In 2023, Scope 3 category 15 financed emissions totalled 5.2 million CO2e tonnes.

In 2023, OP Financial Group set sector-specific emissions reduction targets for three sectors. Measured from the 2022 initial level, the goal is to reduce by 2030 the emissions intensity of energy production by 50%, the absolute emissions associated with the agricultural sector by 30%, and the emissions intensity of home loans by 45%.

OP Financial Group is committed to ensuring that its corporate loan portfolios are carbon neutral by 2050. In addition to this long-term target, the Group has a roadmap for major reductions in emissions before 2050, especially in Finland, its main corporate financing market. OP Financial Group will cut 25% of its corporate loan portfolio emissions by 2030, compared with the 2022 level.

OP Financial Group complies with the UNEP FI Principles for Responsible Banking and is committed to aligning its loan portfolio with the Paris Agreement.

The Group will not finance new coal power plants or coal mines, including companies that plan to build them. Neither will the Group finance new corporate customers whose financial dependence on using coal as an energy source is over 5%, measured in net sales. This policy can be deviated from if the corporate customer is committed to shifting towards a low-carbon economy and demonstrating a credible plan to withdraw from coal.

OP Financial Group aims to be carbon neutral in its managed funds by 2050. In addition, the Group will halve the greenhouse gas emission intensity of its mutual funds by 2030, compared with the 2019 level. OP Financial Group will stepwise tighten its coal-exclusion policy in such a way that, by the end of 2030, its direct and active investments exclude business related to coal mining or coal power generation.

OP Fund Management Company publishes carbon footprint calculations for its managed equity and fixed income funds twice a year, and fund-specific ESG analyses for the majority of such funds four times a year. These analyses show not only the overall sustainability and corporate responsibility score for the whole portfolio but also the percentage of the portfolio companies' net sales attributable to renewable energy, energy efficiency and green buildings.

At the end of 2023, a total of 87.7% of OP Financial Group's mutual funds were funds that promote ESG characteristics (EU regulation on sustainable finance, article 8 or 9). In 2023, the Group added OP-Sustainable Wellbeing to its range of sustainability-themed funds. The fund's investment operations pay attention to the principles of sustainable development, placing a particular emphasis on social issues. The fund invests in companies whose business supports the sustainable wellbeing of people and society or which are an exemplary employer in terms of social issues. The other sustainability-themed funds are OP-Sustainable World, OP-Climate, OP-Clean Water and OP-Low-carbon World. In addition to theme funds, responsible investment funds include index funds and target funds. Five index funds (OP-America Index, OP-Europe Index, OP-World Index, OP-Asia Index and OP-Nordic Countries Index) track ESG indexes which place greater weight on companies that integrate ESG risks better than their peers. These funds do not invest in companies that have ties to the manufacture of controversial weapons or that have violated international standards. Target funds, too, place greater weight on companies that integrate ESG risks better than their peers, and target funds avoid investments in controversial sectors. Assets under management invested through responsible investment funds totalled EUR 27.2 billion (13.0) at the end of 2023.

OP Real Estate Asset Management Ltd is committed to promoting carbon neutrality in its property investment operations. Its responsibility targets include carbon neutral energy by 2030 and carbon neutral construction by 2050.

In addition to its GRI sustainability reporting, OP evaluates its impacts on climate change in the annual CDP survey. In the survey for 2023, OP Financial Group reached the score B.

Aspects related to personnel and other areas of social responsibility

OP Financial Group is committed to being a responsible actor and respecting all recognised human rights, including employee rights and the ILO Declaration on Fundamental Principles and Rights at Work. Compliance with these principles and rights extends not only to our personnel but also to the players in our value chains, and we require our suppliers to commit to compliance with the same principles in their operations. OP Financial Group is also committed to the UN Global Compact initiative and to respecting human rights, labour standards, environmental protection and anti-corruption. The Group's value descriptions emphasise value to the customer, diversity of personnel, appreciating differences and viewing them as strengths, as well as transformation and continuous learning. OP Financial Group aims to prevent discrimination in all its activities. Equal treatment is manifested in employee selections, remuneration, career development, training and general practices in the workplace.

One of OP Financial Group's strategic priorities is highly skilled, motivated and satisfied personnel. The aim of the Group's employee wellbeing policy is to maintain and promote the health and wellbeing of all employees through close and well-organised management of occupational health and safety and wellbeing at work. This creates the basis for a good employee experience. Key elements supporting employee wellbeing at OP Financial Group include early intervention, extensive occupational healthcare services, rehabilitation, flexibility at work and diversity management.

Employee experience is measured through regular personnel surveys and by monitoring the health rate indicator. In 2023, sickness absences accounted for 3.2% of regular working hours. The 'health rate' (percentage of personnel with no sickness absences) was 39.0% of all personnel in 2023.

OP Financial Group aims to promote diversity in its organisations. The goal is to have a personnel structure that reflects the diversity of the Group's clientele regarding age, gender, nationality and other background factors. The Group's corporate culture and practices are non-discriminating and diverse and promote a sense of belonging, and this is what its sustainability programme aims to reinforce. The Group considers diversity to be an asset and guarantees equal opportunities, rights and fair treatment for everyone. The Group's employees have equal opportunities and rights at all stages of the employment relationship, including recruitment, career transitions and salary. We pay attention to our personnel's diverse experiences and competencies. We regularly monitor and promote the implementation and development of equality and diversity by means such as personnel surveys and candidate experience measurement during recruitment.

To promote diversity, OP Financial Group's objective is at least 40% gender representation in defined executive positions. The proportion of women in these positions was 31% (31) at the end of 2023. At the end of 2017, the proportion of women in executive positions was 21%. The Group monitors on an annual basis the distribution of personnel in various task groups by factors such as gender, pay and age.

OP Financial Group requires that its personnel have diverse skills, in addition to regulatory competence requirements. The Group supervises these competencies and reports them through completed e-courses, according to various needs. Online courses compulsory to all OP Financial Group employees include preventing money laundering, code of business ethics, cybersecurity in the workplace and security training. As of 2023, all employees must complete a mandatory ESG training, too.

Increasing financial literacy in Finland is an integral part of OP Financial Group's corporate responsibility efforts. In 2023, the Group strengthened the financial literacy of 91,000 (90,000) children and young people. The Group also provided training in digital skills to a total of 26,000 (12,000) older people.

OP Financial Group's charity donations in 2023 totalled around EUR 4.9 million (2.7). The donations were channelled in line with themes that support the Group's sustainability programme and values.

Aspects related to human rights

OP Financial Group is committed to being a responsible actor and respecting human rights, such as those included in the UN's Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. OP Financial Group's activities promoting human rights are guided by, for example, the UN Guiding Principles On Business and Human Rights (UNGP) and the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct. The Group is committed to the UN Global Compact initiative and to respecting human rights, labour standards, environmental protection and anti-corruption. In 2023, OP Financial Group published its Human Rights Statement and Human Rights Policy. As part of its human rights work, the Group has assessed its human rights impact, both in its own operations and across its value chains. In accordance with the corporate sustainability due diligence requirements, the Group continuously develops its policies and practices aimed at further preventing and mitigating any adverse impacts. Indirectly, such impacts may arise from the supply chain or from the operations of investees and financed parties. OP Financial Group's Supplier Code of Conduct requires that product and service suppliers ensure the fulfilment of human rights in their supply chains, too. The Group monitors, for example, the number of discrimination incidents and the number of reports filed through the whistleblowing channel and carries out various types of surveys for identifying development needs.

OP Financial Group performs ESG analyses on large corporate customers to systematically assess their social impacts and risks, in addition to environmental matters. Human rights aspects are included in OP Asset Management's process of keeping up with and influencing international standards. OP Financial Group does not make active direct investments in companies that have violated international norms and where engagement to urge corrective measures has been unsuccessful.

OP Financial Group processes its customers' personal data with care to prevent their misuse or use for criminal purposes. The Group's data protection and data security practices are aimed at protecting customer information and ensuring that all stakeholders can trust the Group's operations.

OP Financial Group aims to improve equal opportunities in the digital society by developing the accessibility of the Group's digital services and improving people's digital skills. OP Accessible – an easy-to-use, clear-language web service for daily banking – is the OP service which best meets accessibility requirements. It is also easy to use with various assistive software and devices. Accessibility of OP Financial Group's other digital services is continuously improving as development efforts progress. The Group's mobile apps accept login with fingerprint and facial recognition, and key code lists are also available in Braille. OP's guides for older people help them to independently take care of their banking matters without a computer or a smartphone. In addition, OP Financial Group and its member cooperative banks arrange training events on digital skills.

Prevention of corruption and financial crime

OP Financial Group complies with its Code of Business Ethics. Responsibility involves managing conflicts of interest and abolishing corruption. The Group has compiled a mandatory online course for all employees to ensure that the Code of Business Ethics is observed. Employees must successfully complete the course every year. All employees must also pass the online course on managing conflicts of interest and anti-corruption on an annual basis.

In accordance with its guidelines 'Operational risk management procedures', OP Financial Group regularly assesses its operational risks, which also include aspects related to corruption. As required by regulation and guidelines issued by authorities, the Group has drawn up policies and procedures for knowing its customers and performing ongoing customer due diligence as well as for staff training, instructions and protection.

OP Financial Group is continuously improving its anti-financial crime processes. The Group has increased the number of employees in these tasks and invested in training and system development. All Group employees must annually pass the online course on preventing money laundering. During 2023, we repaired a significant number of the deficiencies found in our internal processes by the AML audits conducted by the Finnish Financial Supervisory Authority in 2022.

Any suspicious transactions will be reported to the Financial Intelligence Unit in line with regulatory requirements. Internal control is complemented by the opportunity of anyone employed by the Group and other stakeholders to report through an independent channel if they suspect discrimination or a violation of rules or regulations (whistleblowing). Such reports may also concern actions that are against OP Financial Group's values or good banking or insurance practice. Reports can be filed at any time via OP Financial Group's intranet or website. All reports are processed with confidentiality by designated specialists of the independent Compliance function. In Finland, the whistleblowing channel is available in Finnish, Swedish and English. In addition, each branch operating as part of OP Corporate Bank in the Baltic countries provides a whistleblowing channel for filing reports in the local language (Estonian, Latvian or Lithuanian) or in English.

Risks and their management in respect of non-financial information

Changes related to climate and the environment may be channelled into financial risks in the banking and insurance business through various impact chains. Climate and environmental risk factors can be divided into physical risk factors and transition risk factors. Physical risks include risks arising from extreme weather phenomena, such as floods and heatwaves, or from other environmental risk factors such as the scarcity or contamination of natural resources. Transition risks may arise if climate policy actions to reduce emissions are taken too abruptly or too late. Risks arise from new regulations, changes in customer behaviour or the adoption of new technology.

Credit risk is affected by, for example, the sector in which the debtor or investee company operates. Physical risks may affect the value of real property, including the value of collateral through buildings, for example. The transition to a low-carbon economy may affect the value of assets that are dependent on energy inefficient or fossil fuels, for example.

Climate and environmental factors can contribute to risks affecting OP Financial Group. The transition towards a low-carbon and more environmentally sustainable economy will have direct and indirect impacts on OP Financial Group. Risk factors (physical and transition risks) will impact on the Group's business through stakeholders, in particular. Extreme weather phenomena may cause physical damage and pose operational risks to OP Financial Group's business locations. Indirect risks may arise, for example, from climate or environmental policy decisions, technological development, market confidence, and changes in customer choices.

From the social perspective, risks may affect OP Financial Group through its own operations or those of its stakeholders. From the human rights perspective, risks related to, for example, personnel may arise in the Group's own operations or indirectly from the subcontracting chains of stakeholders. Corruption and bribery risks may arise in connection with financing decisions or due to wilful negligence in customer due diligence procedures.

The business concerned and process owners are responsible for the management of risks that apply to their own activities.

OP Financial Group's risk management and compliance organisations also oversee risks, risk management and compliance related to ESG factors. The Risk Committee of OP Cooperative's Board of Directors oversees risk management, including that related to climate and environmental factors.

EU Taxonomy – Environmentally sustainable economic activities

The aim of the EU Taxonomy for sustainable finance (Taxonomy Regulation EU/2020/852) that entered into force in 2021 is to define the sustainability of financial and investment instruments. For the years 2021 and 2022, the financing sector reported on taxonomy eligibility, and in 2023, key performance indicators (KPIs) related to taxonomy alignment will be reported for the first time using the templates required by the regulation. Separate reporting guidelines have been issued for credit institutions, asset managers, investment firms and insurance institutions. Since OP Financial Group engages in investment operations worldwide, a significant part of its investments does not fall within the scope of EU taxonomy reporting.

For 2023, taxonomy alignment in terms of climate change mitigation and adaptation is reported. An important KPI is the Green Asset Ratio (GAR), which indicates the percentage of taxonomy-aligned assets of the credit institution's total assets. The Green Asset Ratio (GAR) of OP Financial Group's loan portfolio was 5.9 per cent based on counterparties' turnover KPI and 6.6 per cent based on counterparties' capital expenditure (CapEx) KPI. OP Financial Group does not report taxonomy eligibility for the four other environmental objectives as the data has not been made publicly available by customer companies.

OP Financial Group constantly assesses the impacts of the EU Taxonomy on the Group, its strategy and customers. The Group guides its customers in preparing for and adapting to the various effects of climate change and the related risks. The Group is monitoring developments in sustainable finance regulation and the EU taxonomy since they will change the business environment and the conditions for success.

At the end of 2023, the KPIs indicating the taxonomy alignment of OP Financial Group were 4.9 per cent based on turnover and 5.4 per cent based on capital expenditure. OP Financial Group's KPIs are calculated as weighted averages of the KPIs of business segments (credit institutions, insurance companies, investment managers and investment firms).

For corporate financing, the taxonomy data on NFRD (Non-Financial Reporting Directive) exposures have been collected during 2023 from companies' public annual reports for the year 2022. OP Financial Group's NFRD taxonomy alignment ratios, taxonomy eligibility and taxonomy alignment have been formed based on this data in accordance with the Climate Delegated Act (EU 2021/2139) of the EU Taxonomy. The majority of taxonomy-aligned turnover from corporate financing by OP Financial Group, with the exception of financial sector companies, consists of electricity production. In the energy sector, the economic activities of counterparties have achieved taxonomy criteria to a good degree. Based on the results, it would appear that the real estate and construction sectors are currently struggling to meet taxonomy criteria. This is reflected in the sectors' low taxonomy alignment in relation to their significant taxonomy eligibility. A considerably share of taxonomy-aligned turnover consists of transition activities, the taxonomy criteria of which will become more stringent over time. A review of the capital expenditure of OP Financial Group's customer companies shows that expenditures in energy production and the forest industry are increasingly directed towards taxonomy-aligned economic activities. When viewing all taxonomy-eligible sectors, however, the proportion of taxonomy-aligned activities remains at a relatively low level based on the first round of companies' taxonomy alignment reporting.

In corporate financing, OP Financial Group analyses and monitors the development of companies' taxonomy alignment and market developments in the use of the taxonomy. According to evolving market practice, green financing criteria will increasingly comprise of applicable criteria of the EU Taxonomy. OP Financial Group is prepared for the weight of taxonomy-aligned economic activities to increase in the future. Companies that fall within the scope of taxonomy reporting will grow in number as the scope of application of the Corporate Sustainability Reporting Directive (CSRD) expands. In addition, the taxonomy will expand to cover new activities as the Environmental Delegated Act and updates to the climate criteria take effect. With these changes, OP Financial Group's proportion of taxonomy-aligned activities is expected to increase.

In August 2023, OP Financial Group set sector-specific emissions reduction targets for three sectors, which account for more than 90.0% of the emissions of OP Financial Group's loan portfolio. Measured from the 2022 baseline, the goal is to reduce, by 2030: 1) the emissions intensity of energy production by 50.0%; 2) the absolute emissions associated with the agricultural sector by 30.0%; and 3) the emissions intensity of home loans by 45.0%. Promotion of taxonomy alignment also supports the realisation of emissions reduction targets in energy production and home loans. In addition, OP Financial Group published a biodiversity roadmap in December 2023. As part of preparing the roadmap, OP Financial Group promotes the use of taxonomy criteria in financing related to the circular economy and biodiversity.

Regarding home loans granted to households, OP Financial Group monitors the realisation of substantial contributions to climate change mitigation – in other words, criteria based on the energy efficiency of financed homes – by using data from the energy performance certificate database maintained by the Housing Finance and Development Centre of Finland (Ara). Energy performance certificate data for homes financed by OP Financial Group has been combined using several methods. The realisation of these substantial contribution criteria is assessed in relation to national threshold values calculated based on the taxonomy. Energy performance certificate data cannot be connected to all financed homes. One of the reasons for this is that an energy performance certificate is not available for all buildings. The criteria for substantial contribution are not met for these financed homes. In addition, OP Financial Group has assessed the physical climate risks of home loans. Taxonomy alignment reporting includes assets that do not involve substantial physical climate risks based on the assessment. Those financed homes which meet the criteria for providing a substantial contribution and are not exposed to significant physical climate risks, such as flooding, are considered taxonomy-aligned.

OP Financial Group is the market leader in home loans in Finland. A total of 102 member cooperative banks of OP Financial Group finance home loans across Finland. OP encourages measures that improve the energy efficiency of homes all over Finland. To achieve the common objectives, measures are needed in both growth centres and other regions. OP Financial Group monitors the development of market practices related to the taxonomy and green loans and assesses their impact in its product development.

Vehicle loans and a part of home improvement loans are taxonomy-eligible, but the data on taxonomy alignment is insufficient in certain areas. More information about the taxonomy eligibility of OP Financial Group's vehicle and home improvement loans can be found in the section "Voluntary information supplementing taxonomy reporting".

Taxonomy reporting on OP Financial Group's investment activities makes use of reported taxonomy data from the previous financial year of investee companies that fall within the scope of regulations. The data is collected by an external service provider and covers all equity and fixed income investments in these companies. The data service provider has collected the data as it is reported by companies, and any deficiencies in the templates reported by companies will have a direct impact on certain calculation charts and results. In addition, taxonomy alignment data by an external service provider is used in investment activities as part of the responsible investment analysis model, which identifies activities that are in line with the EU Taxonomy as positive environmental objectives. This data is also reported to OP Financial Group's customers. Using this analysis model, a minimum allocation of taxonomy-aligned investments has been set for certain investment funds.

Economic activities related to climate change mitigation are emphasised in taxonomy alignment calculations. The taxonomy alignment calculations of real estate investment assets are based on a taxonomy analysis by a service provider. The calculations take into account combined assets under management for those taxonomy-aligned properties that have generated rental income and for which investments have been made in the form of capital expenditure. The analyses are based on the taxonomy's technical screening criteria for climate change mitigation.

Taxonomy-aligned insurance revenue must meet all of the technical screening criteria listed in Article 10(1) of the Delegated Act (EU) 2021/2139. As the interpretation of the criteria involves several uncertainties, Pohjola Insurance has assessed them with the help of an independent expert. The conclusion of the assessment was that the screening criteria are not met in all respects. Development needs remain in criteria related to climate risk modelling and pricing, product design and innovative insurance solutions. On the other hand, in the areas of data sharing and high level of service in post-disaster situations, the criteria on do no significant harm and minimum social safeguards are met to a good degree at Pohjola Insurance.

Responsible business is one of Pohjola Insurance's strategic focus areas. The company takes climate and environmental impacts into consideration in its product and service development. Pohjola Insurance's insurance products support climate change adaptation, and climate risks and other factors set by the EU Taxonomy are taken into consideration in the company's product design. The modelling of climate risks will be developed further. In future, the company will make more extensive use of the results of risk models in its economic activities and product development. The number of products in line with the EU Taxonomy risk modelling was adopted as one of the company's KPIs in 2024. Pohjola Insurance continues the development of products in line with EU's taxonomy criteria in other respects as well.

Minimum social safeguards

In line with Article 18 of the EU Taxonomy Regulation (EU 2020/852), minimum safeguards refer to procedures implemented by a company carrying out economic activities to ensure alignment with:

- the OECD Guidelines for Multinational Enterprises
- the UN Guiding Principles on Business and Human Rights
- the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work
- the International Bill of Human Rights

The purpose of the minimum safeguards included in the Taxonomy Regulation is to prevent the classification of activities and investments as sustainable if they involve violations of key social principles, human rights or labour rights or fail to align with the minimum norms for responsible business.

OP Financial Group has assessed the minimum safeguards related to respect for human rights, anti-bribery and anti-corruption, fair competition and taxation. The assessment of alignment with minimum safeguards is based on the Taxonomy Regulation as well as the Commission Notice (2023/C 211/01) on their interpretation as well as the Final Report on Minimum Safeguards by the EU Platform on Sustainable Finance. OP Financial Group's Code of Business Ethics, Human Rights Statement and Human Rights Policy as well as other related policies and guidelines set and describe the principles and requirements that OP Financial Group employees, suppliers and other partners must observe with respect to human rights, anti-bribery and anti-corruption, fair competition and taxation. OP Financial Group's Human Rights Policy describes the approach to respect for human rights and preventing, mitigating and correcting any identified substantial human rights impacts. Reviews of the Human Rights Policy and human rights impacts cover all of OP Financial Group's activities, including customers, sectors, supply chains and suppliers operating in the value chain. The measures, requirements and procedures in line with the due diligence obligation are described in more detail in the report OP Financial Group's Year 2023 and Sustainability in the sections "Risk management and compliance", "We respect human rights in our operations" and "One of the biggest taxpayers in Finland". Based on this assessment, OP Financial Group has found that the Group's activities are aligned with the minimum safeguards.

Voluntary information supplementing taxonomy reporting

Based on taxonomy regulation applied to the financial sector, OP Financial Group discloses voluntary information as part of taxonomy reporting. At the end of 2023, OP Financial Group had issued around 1,815 million euros in taxonomy-aligned motor vehicle loans to households, of which 31.0 per cent contributed substantially to climate change mitigation. However, these were not classified as taxonomy-aligned economic activities as based on the data available at the end of 2023, it was not possible to demonstrate that they meet all of the 'do no significant harm' criteria of the Climate Delegated Act (EU 2021/2139) of the taxonomy in terms of rolling noise requirements and rolling resistance coefficient of tyres in the respective energy efficiency classes, as well as in terms of the sound level of motor vehicles and replacement silencing systems.

According to registration data from the Finnish Transport and Communications Agency Traficom, OP is Finland's market leader in the financing of low-emission personal cars among companies engaged in financing and leasing activities, with a market share of 21.5 per cent. Low emissions is defined according to the technical screening criteria for substantial contributions to climate change mitigation, as described in section 6.5 of the Climate Delegated Act.

At the end of 2023, OP Financial Group had issued around 139 million euros in taxonomy-aligned home improvement loans to households, of which 45.0 per cent contributed substantially to climate change mitigation (solar panels). However, these were not classified as taxonomy-aligned economic activities as based on the data available at the end of 2023, it was not possible to demonstrate that they meet all of the 'do no significant harm' criteria of the Climate Delegated Act (EU 2021/2139). For taxonomy-eligible home improvement loans other than investments in solar panels, such as ground source heat pumps, obtaining the data required by the taxonomy's screening criteria proved difficult.

Sustainability and corporate responsibility

Sustainability and corporate responsibility form an integral part of OP Financial Group's business and strategy, and responsible business is one of OP Financial Group's strategic priorities. OP Financial Group's sustainability programme is built around three themes: Climate and the environment, People and communities and Corporate governance.

The programme is based on OP Financial Group's values, megatrends in the business environment and materiality assessment. The Climate and environment section sets goals for the provision of sustainable financial and investment products, the emission reductions of loan and investment portfolios as well as the promotion of biodiversity. The People and communities section focuses on the wellbeing of local communities and on supporting management of personal finances and financial literacy. The Corporate governance section involves integrating responsibility with all business and related risk-taking and a goal to enhance governance diversity. Read more about the sustainability programme at op.fi/op-financial-group/corporate-social-responsibility.

Sustainability and corporate responsibility highlights 2023

In March 2023, OP Financial Group launched three different EIF risk sharing guarantees for the Finnish market in cooperation with the European Investment Fund (EIF). The guarantees are intended for SMEs and housing companies investing in sustainable development and innovation. The purpose of EIF's loan guarantee is to help small businesses and housing companies to invest in sustainable solutions and to boost product and service development and digitalisation. The guarantee agreement is based on the European Union's InvestEU Programme. In spring 2023, OP Financial Group launched sustainable supply chain finance to encourage supply chains to more sustainable operations through sustainability-linked financing.

In the summer, the Group provided more than 2,000 young people with a summer job through its campaign "Summer jobs paid for by OP": OP cooperative banks donated funding to non-profit associations for hiring young people aged from 15 to 17 for two weeks. In July, OP and Hope ry organised for the seventh time the Backpack for every back campaign to collect school backpacks at OP cooperative banks across Finland. In 2023, more than 2,800 backpacks were collected for the children of families living on limited means. OP Financial Group's cooperation with sports federations is one of the concrete steps OP takes to improve wellbeing and provide children with opportunities to exercise and try out new sports on a national basis.

In 2023, OP Financial Group's charitable donations totalled EUR 4.9 million. These donations support hobbies for children and young people, promote the wellbeing and diversity of nature, support mental health care and the management of personal finances and promote financial literacy. The supported charities include Save the Children Finland, SOS-Children's Villages Foundation, the Finnish Paralympic Committee, the John Nurminen Foundation, MIELI Mental Health Finland and the Taloustaito financial literacy project coordinated by the Helsinki Deaconess Foundation.

The OP Financial Group Research Foundation established by the OP Financial Group supports economic research. In 2023, the Foundation distributed a total of EUR 1.4 million in grants for economic research, funding the work of 54 researchers and research groups. In addition, in 2022 the Foundation granted a total of EUR 1.2 million to a three-year special initiative, which brings together the knowledge and collaborative networks of three university departments researching the financial sector and financial institutions.

Together with several OP cooperative banks, Pohjola Insurance is involved in supporting the Children and Youth Foundation's Dreams programme, which aims to improve young people's wellbeing and faith in the future. The results of the Dreams cooperation have been excellent, and the activity has aroused excitement in schools across Finland. From autumn 2022 to the end of 2023, Dreams reached more than 50,000 young people and more than 3,600 teachers during 185 schools visits around Finland.

In November, OP Financial Group introduced OP-Sustainable Wellbeing, a thematic fund that focuses on social themes. The fund's investment operations pay attention to the principles of sustainable development, placing a particular emphasis on social issues. The fund invests in companies whose business supports the sustainable wellbeing of people and society or which are an exemplary employer in terms of social issues.

In December, OP Financial Group published a biodiversity road map that includes measures to promote biodiversity at OP Financial Group. The aim is to create a nature positive handprint by 2030. 'Nature positive' means that OP Financial Group's operations will have a net positive impact (NPI) on nature.

In December, OP Financial Group also published a Human Rights Statement and Human Rights Policy. The Group respects all recognised human rights. The Human Rights Statement includes the requirements and expectations that OP Financial Group has set for itself and for the actors in its value chains. OP Financial Group is committed to remediation actions if it causes adverse human rights impacts.

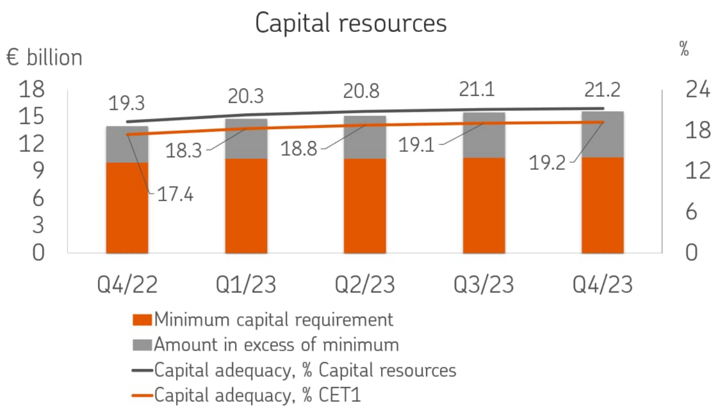
In late 2023, OP Financial Group attended the COP28 UN Climate Change Conference together with other Finnish companies representing various industries. The goals of the first-ever Finnish pavilion in the Conference were to highlight Finnish companies' solutions and Finland as the cutting edge of green technology and to support climate change negotiations with pioneering companies.

To promote diversity, OP Financial Group's objective is that the proportion of both women and men in defined executive positions is at least 40%. Women accounted for 31% (31) at the end of December.

Capital adequacy and capital base

Capital adequacy ratio under the Act on the Supervision of Financial and Insurance Conglomerates

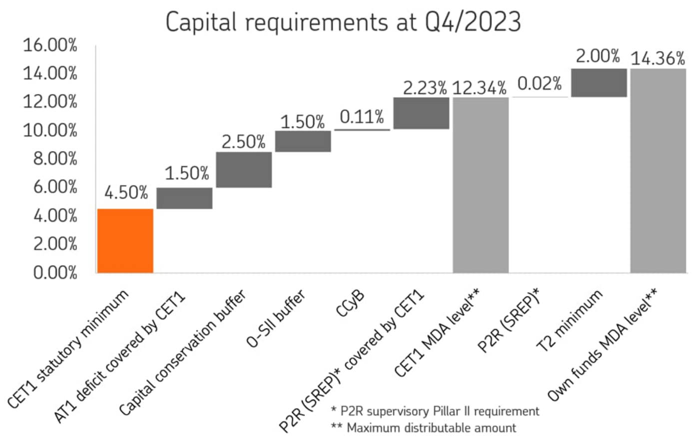
OP Financial Group's capital base, calculated according to the Act on the Supervision of Financial and Insurance Conglomerates (FiCo), exceeded the minimum amount specified in the Act by EUR 5.2 billion (4.1). Banking capital requirement was 14.4% (13.8), calculated on risk-weighted assets. The ratio of OP Financial Group's capital base to the minimum capital requirement was 144% (137). As a result of the buffer requirements for banking and the solvency requirements for insurance companies, the minimum FiCo solvency of 100% reflects the level within which the conglomerate can operate without regulatory obligations resulting from buffers below the required level.



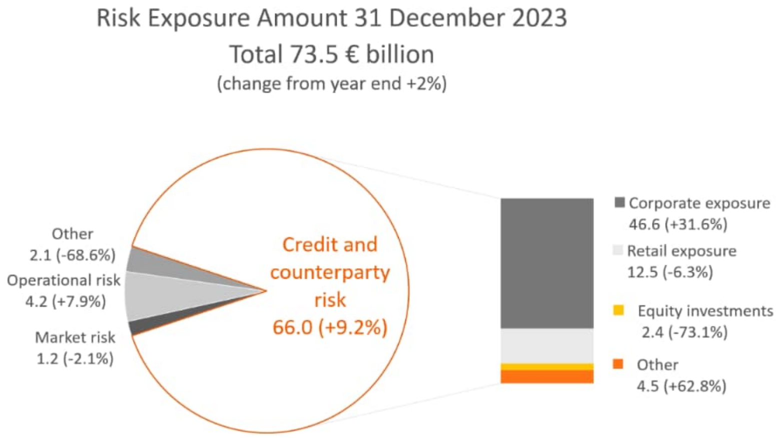
Capital adequacy for credit institutions

OP Financial Group's CET1 ratio was 19.2% (17.4), which exceeds the minimum regulatory requirement by 6.9 percentage points. The ratio was improved by profit for the financial year.

As a credit institution, OP Financial Group'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 minimum requirement of 1.5% for AT1 and T2, which needs to be covered with CET1, raises the CET1 minimum to 6.0%. The requirement for the capital conservation buffer of 2.5% under the Act on Credit Institutions, the O-SII buffer of 1.5%, the change in the countercyclical capital buffer for foreign exposures, and the ECB's P2R requirement increase, in practice, the minimum total capital ratio to 14.4% and the minimum CET1 ratio to 12.3%, including the shortfalls of Additional Tier 1 (AT1) and Tier 2 (T2) capital.



The CET1 capital of OP Financial Group as credit institution was EUR 14.1 billion (12.6). The CET1 capital was improved by Banking earnings and the elimination of the allowance for expected losses based on the IRBA, which resulted from the transition to the Standardised Approach to credit risk. The amount of Profit Shares in CET1 capital was EUR 3.1 billion (3.2).



The total risk exposure amount (TREA) was EUR 73.5 billion (72.3). In the first quarter, OP Financial Group adopted the Standardised Approach in its capital adequacy measurement, instead of the internal ratings-based approach that it applied earlier. The transition increased the total risk exposure amount, but the change had no impact on capital adequacy.

OP Financial Group treats insurance holdings within the financial conglomerate as risk-weighted assets, based on permission from the ECB. Equity investments include EUR 2.3 billion in risk-weighted assets of the Group's internal insurance holdings. Under the Standardised Approach, the risk weight of insurance company holdings is 100%.

The Finnish Financial Supervisory Authority (FIN-FSA) makes a macroprudential policy decision on a quarterly basis. In December 2023, the FIN-FSA reiterated its decision not to impose a countercyclical capital buffer requirement on banks. In its macroprudential policy decision in March 2023, the FIN-FSA set a systematic risk buffer of 1% for OP Financial Group, effective as of 1 April 2024.

The minimum leverage ratio for OP Financial Group's Banking was 9.5% (7.6). The higher ratio was particularly due to the repayment of TLTRO III funding, and earnings performance. The regulatory minimum requirement is 3%.

The future changes in the EU Capital Requirements Regulation (CRR3), which will implement the final elements of Basel III, are assessed to not have a substantial effect on the capital adequacy of OP Financial Group. The changes should take effect in 2025.

OP Amalgamation's Pillar III information for 2023 will be published in week 11.

Insurance

The solvency position of insurance companies is strong. On 30 September 2023, the life insurance business waived the application of the transitional provision in its solvency measurement. Both companies' solvency ratio weakened due to a higher capital requirement. The increase in capital requirement was due to the rise in equity risk, which forms part of market risk.

	Non-life insurance		Life insurance	
	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
Capital base, € mill.	1,747	1,658	1,466	1,369
Solvency capital requirement (SCR), € mill.	851	670	660	589
Solvency ratio, %	205	247	222	232

ECB's supervision

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

On 13 March 2023, the ECB issued its decision on the application of the Standardised Approach to credit risk in OP Financial Group's capital adequacy measurement. OP Financial Group adopted the Standardised Approach to credit risk as of 31 March 2023.

The ECB has set a capital requirement for OP Financial Group based on the supervisory review and evaluation process (SREP). The capital buffer requirement (P2R) set by the ECB has been 2.25% since 1 January 2022.

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 case of resolution.

The SRB updated the Minimum Requirement for Own Funds and Eligible Liabilities (MREL) for OP Financial Group in March 2023. As part of the MREL, the resolution authority has updated OP Financial Group's subordination requirement in accordance with the Single Resolution Mechanisms Regulation. The subordination requirement determines how much of the MREL must be fulfilled with own funds or subordinated liabilities. The MREL is 22.30% of the total risk exposure and 26.41% of the total risk exposure including a combined buffer requirement, and 7.40% of leverage ratio exposures. The updated subordination requirement supplementing the MREL was decreased to 14.66% of the total risk exposure amount and 18.77% of the total risk exposure amount including a combined buffer requirement, and 7.40% of leverage ratio exposures. This took effect on 15 March 2023.

From the beginning of 2024, the MREL will be 22.89% of the total risk exposure and 27.0% of the total risk exposure including a combined buffer requirement, and 7.40% of leverage ratio exposures. The requirements include a combined buffer requirement (CBR) of 4.11%.

OP Financial Group's buffer for the MREL was EUR 7.9 billion and for the subordination requirement EUR 5.6 billion. The amount of senior non-preferred (SNP) bonds issued by OP Financial Group totalled EUR 3.8 billion. These bonds provide funds for the MREL subordination requirement.

OP Financial Group clearly exceeds the new MREL requirement. OP Financial Group's MREL ratio was 37.1% of the total risk exposure amount and, based on the subordination requirement, the MREL ratio for subordinated liabilities was 26.4% of leverage ratio exposures.

Key principles of risk management

At OP Financial Group, OP Cooperative's Board of Directors is the most important decision-making body for duties related to risk management. OP Cooperative's Supervisory Council confirms the decisions by the Board of Directors that apply to OP Financial Group's risk appetite. The Risk Committee of the Board of Directors assists the Board of Directors in performing duties related to risk-taking and risk management. Based on the decision by the President and Group Chief Executive Officer, the Executive Management Team has set up a Risk Management Committee, Steering and Compliance Committee and Banking ALM Committee that approve instructions and policy descriptions specifying the Risk Appetite Statement and the Risk Appetite Framework. The risk management-related tasks of various bodies are described in more detail in their respective charters.

Senior management prepares business divisions' strategic choices that, in terms of risk-taking, are based on OP Financial Group's Risk Appetite Statement (RAS), confirmed by OP Cooperative's Supervisory Council. The Risk Appetite Statement outlines and gives grounds for what risks each business is ready to take and to what extent. Businesses are obliged to operate within the limits of these restrictions. Senior management decides on the division of responsibilities related to risk-taking: what risks different revenue logics (product and service packages) can take, and any potential elaborations on what risks legal entities and various functions within those revenue logics can take.

Governance structures provide a basis for the proper preparation and determination of key operational principles and the related specific policies and operating instructions, and for ensuring that each operation is appropriately assessed and monitored in terms of its quality, extent and complexity by expert parties that are independent of business, in addition to monitoring performed by the business concerned. Senior management must ensure the maintenance and development of sufficient resourcing and expertise for the monitoring functions of the first, second and third line of defence.

OP Financial Group's Risk Appetite Framework defines the general intent of the risk management process and specifies this intent by revenue logic. The Framework sets preconditions for how senior management should organise the risk management process at OP Financial Group.

Control of joint and several liability between the central cooperative and member cooperative banks is based on the document, Principles of corporate governance as required under joint and several liability.

OP Financial Group's remuneration schemes are built in line with the Group's mission, values and targets, while taking account of regulatory compliance. Remuneration must not incentivise unnecessary risk-taking or the taking of actions against the customer's interests. The same risk measurement methods are used in remuneration as in capital and liquidity adequacy assessment processes. In addition, any risk adjustments to be made before payment of remuneration must be based on other risk management metrics. If said metrics are adjusted as part of risk management processes, corresponding adjustments must be made in remuneration.

In addition, the principles of internal control, good corporate governance, good business practices and corporate security set preconditions for practices.

Bases for risk profile management and the business environment

OP Financial Group's risk-taking starts from the fact that the Group assumes risks that are associated with executing the Group's mission. In all operations, the Group emphasises moderation and careful preparation in risk taking. Risk-taking is directed and limited by means of principles and limits prepared by senior management and approved by OP Cooperative's Board of Directors.

OP Financial Group's success is based on accumulated trust capital, on the adequacy of capital and liquidity, and on extensive data and knowledge of customers. Risk-taking is based on deep understanding of change factors affecting customer preferences, operations and future 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 ongoing risk assessment activities and 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 currently shaping the business environment include climate, biodiversity loss, scientific and technological innovations, demography and geopolitics. External business environment factors are considered thoroughly, so that their effects on customers' future success are understood. Advice and business decisions promote the sustainable financial success, security and wellbeing of owner-customers and the operating region while managing OP Financial Group's risk profile on a longer-term basis. Advice for customers, risk-based service sizing, contract lifecycle management, decision-making, management and reporting are based on correct and comprehensive information.

Considering that OP Financial Group's business covers various areas of the financial sector on an extensive basis, unexpected external shocks from the economic environment may cause various direct and indirect effects on the prosperity of OP Financial Group's customers and on the Group's premises, IT infrastructure and personnel. If materialised, they may affect the risk profile, capitalisation, liquidity and the continuity of daily business in various ways. OP Financial Group assesses the effects of such potential shocks by means of scenario work. The Group is constantly prepared for such events by making various action plans for them and testing these plans.

Operational risks

There was a major change in the cybersecurity environment in 2022 due to the changed security situation in Europe. The cybersecurity threat level has remained elevated since early 2022, including in Finland. OP Financial Group protects its operations and the data of its customers and other stakeholders by maintaining a strong digital infrastructure, data security capabilities and cyber preparedness. This task extends to the level of the financial sector and the entire society.

Cooperation with the authorities and within the financial sector has been stepped up in Finland and the Nordic countries. This has proven an effective way to maintain resilience against cyber attacks throughout the financial sector. OP Financial Group has developed its cybersecurity on a long-term basis, taking account of cyber risks and the continuous changes in external threats. To ensure high-quality operations, the Group emphasises continuous practice, testing of activities, maintenance of competencies and sufficient resourcing. An analysis of successfully stopped attacks and systems-related vulnerabilities has shown that OP Financial Group has a good reaction speed and strong preventative capabilities, combining expertise, processes and technologies.

In late 2023, the denial of service (DoS) attacks towards Finnish companies and other organisations increased. The number of DoS attacks targeted at OP Financial Group trebled in 2023. These operations have caused only minor, short-term effects on the availability of services provided by OP Financial Group. OP Financial Group's ability to protect itself against and stop denial of service attacks is strong.

Besides these attacks, the volume of phishing messages from cybercriminals for data breach purposes has increased. The number of suspicious emails sent to OP Financial Group employees increased by 15%, and employees reported more than 12,000 messages identified as phishing emails in 2023.

Phishing attempts towards our customers quadrupled, but we responded effectively to the actions taken by criminals. In the future, AI will enable even more elaborate types of fraud crime.

At the end of 2023, we announced a data breach in the email of one of our employees. As a result of the data breach, an unauthorised party may have obtained the personal details of a limited group of customers, which is small in proportion to the total number of OP customers. The data breach did not target OP Financial Group's actual customer information systems, or the information held in them, but the email of an individual employee. It was executed using a very sophisticated attack technique that is difficult to detect and enables the bypassing of two-factor identification. This case is part of the phishing campaign about which the National Cyber Security Centre of Traficom warned organisations in the autumn of 2023.

OP Financial Group is systematically maintaining its operational capability and continuing the holistic development of its cybersecurity. Despite the preparedness of OP Financial Group, the financial sector and authorities, the risk of cyber attacks and other operations remains elevated.

On 7 September 2023, the Finnish Financial Supervisory Authority (FIN-FSA) issued a public warning to Pohjola Insurance concerning claim processing times of workers' compensation and occupational accident and disease insurance during 2019–2022. The FIN-FSA highlighted the related deficiencies in information systems and internal control. According to the FIN-FSA, Pohjola Insurance had significant deficiencies in adhering to statutory time limits, especially at the beginning of the review period. The observed deficiencies were corrected by the end of 2023.

During the financial year, OP Financial Group continued to correct the matters observed in the AML audits completed by the FIN-FSA in 2022. The audits were performed as part of the FIN-FSA's normal supervisory and audit activities, applying to OP Corporate Bank plc, Etelä-Karjalan Osuuspankki, Turun Seudun Osuuspankki and OP Cooperative to the extent the audited banks had outsourced their tasks to it. The FIN-FSA did not make any observations that would indicate money laundering or terrorist financing. The FIN-FSA found matters requiring improvement in the assessment of money laundering risks, obtaining KYC information and keeping it up to date, assessment of risks associated with customer relationships, and matters related to internal control of AML.
For several years, OP Financial Group has invested heavily in the development of money laundering risk management. A significant part of the corrective measures related to the supervisor's observations were taken by the end of the year.

In April 2023, the FIN-FSA began an AML audit at OP Retail Customers plc as part of its normal supervisory and audit activities. The audit was underway at the end of the financial year and is expected to be completed during spring 2024.

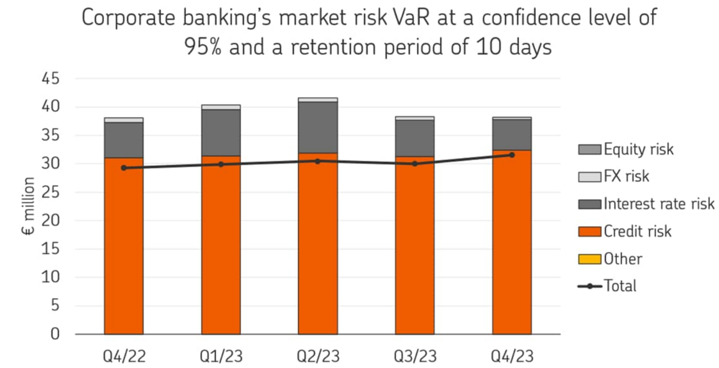
At the end of the financial year, around 500 specialists worked in financial crime prevention in OP Financial Group's central cooperative. Employees of OP cooperative banks and OP Financial Group's other companies also play an important role in financial crime prevention.

During the financial year, the volume of materialised operational risks decreased slightly at OP Financial Group, resulting in EUR 6 million (7) in losses. As regards other risks, the risk profile is discussed in more detail by business segment.

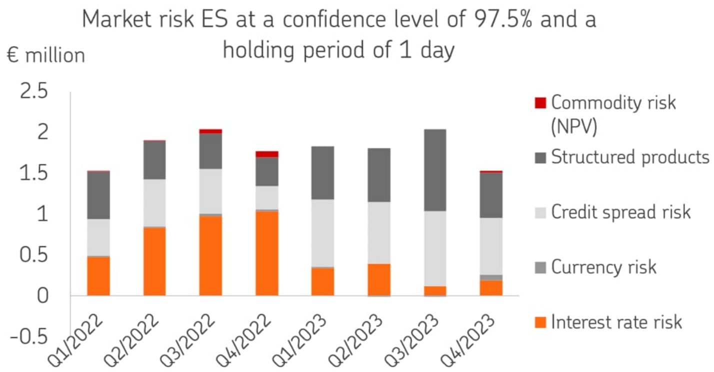
Retail Banking and Corporate Banking

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

Banking credit risk exposure remained stable, the risk level was moderate and the overall quality of the loan portfolio was good although higher interest rates and inflation had a negative impact on the quality of the loan portfolio related to the construction and real estate sectors.



The VaR, a measure of market risks associated with OP Corporate Bank's investments, was EUR 32 million (29) on 31 December 2023. The market risk level increased during the fourth quarter. The VaR risk metric includes banking's bond investments, derivatives that hedge their interest rate risk as well as investments in money market papers. No major changes were made to the asset class allocation during the financial year.



Market risks associated with the Markets function decreased during the fourth quarter. Since the beginning of 2023, OP Financial Group has used the Stressed Expected Shortfall (ES) risk measure. The Stressed ES is a more conservative risk measure than the unstressed ES used previously.

Deposits within the scope of deposit guarantee and managed by OP Financial Group totalled EUR 44.2 billion (44.2) at the end of December, which equals 59.3% of deposits (56.7). The Deposit Guarantee Fund compensates a maximum of EUR 100,000 for each OP Financial Group customer.

Non-performing and forborne exposures

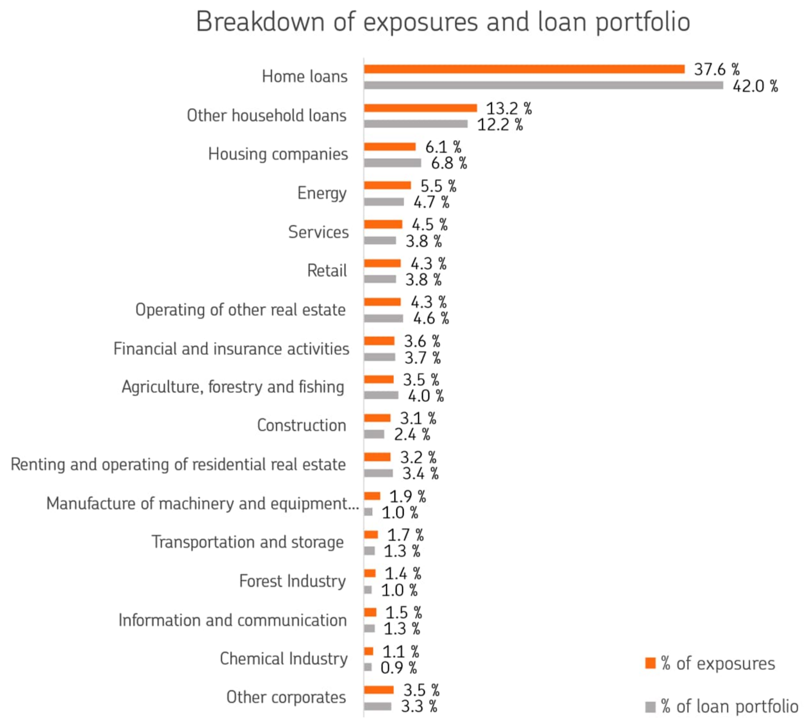
	Performing forborne exposures (gross)		Non-performing exposures (gross)		Doubtful receivables (gross)		Loss allowance		Doubtful receivables (net)	
	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
Over 90 days past due, € billion			0.59	0.52	0.59	0.52	0.21	0.19	0.38	0.33
Unlikely to be paid, € billion			1.37	0.91	1.37	0.91	0.21	0.16	1.16	0.75
Forborne exposures, € billion	3.33	3.38	1.45	1.32	4.78	4.70	0.20	0.18	4.59	4.51
Total, € billion	3.33	3.38	3.41	2.74	6.74	6.12	0.61	0.53	6.13	5.59

	OP Financial Group		Retail Banking		Corporate Banking	
Key ratios	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
Ratio of doubtful receivables to exposures, %*	5.81	5.16	7.30	6.64	2.52	1.92
Ratio of non-performing exposures to exposures, %*	2.94	2.31	3.25	2.67	2.23	1.53
Ratio of performing forborne exposures to exposures, %*	2.87	2.85	4.06	3.97	0.29	0.39
Ratio of performing forborne exposures to doubtful receivables, %	49.5	55.2	55.6	59.8	11.5	20.3
Ratio of loss allowance (receivables from customers) to doubtful receivables, %	13.7	12.0	10.4	8.5	34.8	38.4

* As of 1 January 2023, the loan portfolio included in exposures excludes changes in the fair value of loans in hedge accounting. Comparatives have been adjusted to correspond to the current definition.

No single customer's exposure exceeded 10% of OP Financial Group's capital base after allowances and other recognition of credit risk mitigation.

Breakdown of exposures and loan portfolio

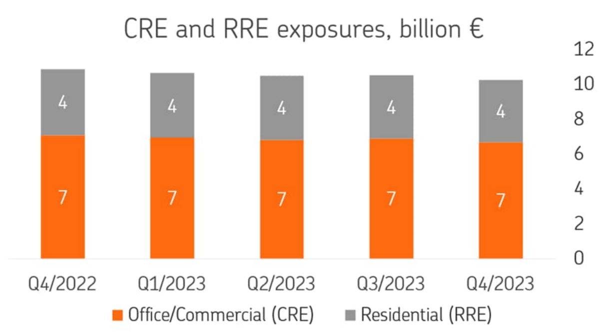


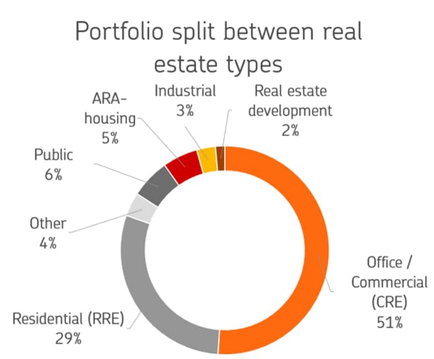
The graph shows the breakdown of OP Financial Group's exposures and loans by sector as percentages at the end of the financial year.

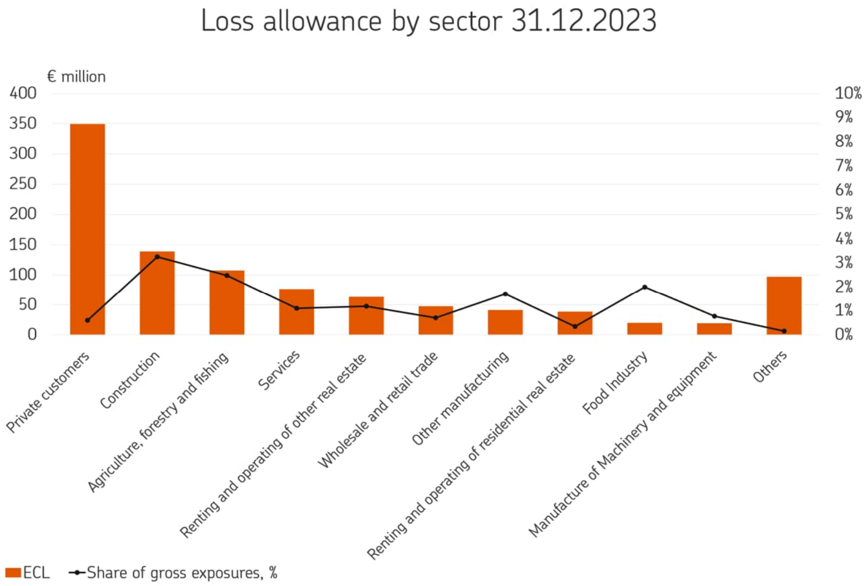
Below is a more detailed description of the development of OP Financial Group's exposures to the real estate sector, and the breakdown of exposures by type of real estate. An increase in risk has been identified in the real estate sector due to the changed interest rate environment. In the graph above, exposures to the real estate sector are mainly included in Operating of other real estate, and Renting and operating of residential real estate.

OP Financial Group's exposures to the real estate sector totalled 8.9% (9.3) of all exposures at the end of the financial year. These exposures are well spread across different types of real estate. The largest type of real estate is commercial real estate units, which includes offices. On 31 December 2023, 63.0% of OP Financial Group's real estate portfolio was held by Corporate Banking and 37.0% by Retail Banking.

At the end of December, 4.63% of the real estate exposures (1.74%) were classified as non-performing exposures.







The graph shows the loss allowance of different sectors and the ratio of loss allowance to gross exposures of the sector at the end of the financial year, 31 December 2023.

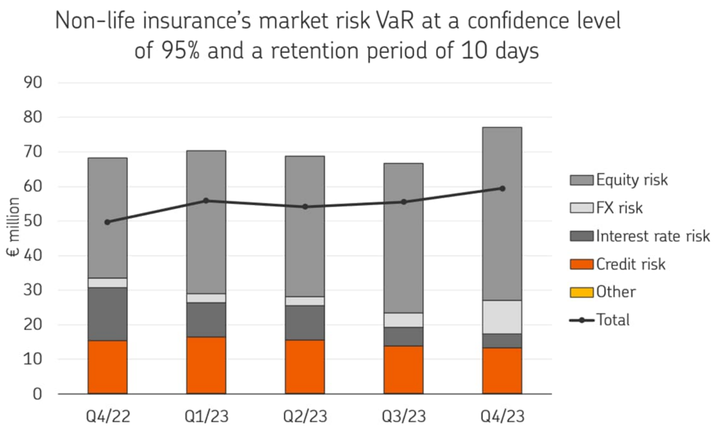
Interest rate risk

Retail Banking's interest rate risk in the banking book measured as the effect of a one-percentage point interest rate increase on net interest income was EUR 130 million (286) and as the effect of a one-percentage point decrease EUR –137 million (–289) on the average per year. 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.

Corporate Banking's interest rate risk in the banking book measured as the effect of a one-percentage point interest rate increase on net interest income was EUR 17 million (16) and as the effect of a one-percentage point decrease EUR –18 million (–16) on the average per year.

Insurance

Non-life insurance



Major risks within non-life insurance include underwriting risks associated with claims developments, market risks associated with investments covering insurance contract liabilities, a faster-than-expected increase in life expectancy of the beneficiaries related to insurance contract liabilities for annuities, and interest rates used in the valuation of insurance contract liabilities.

A 5% decrease in mortality assumptions would have an annual impact of EUR –15 million (–15) on insurance contract liabilities. A one percentage point decrease in interest rates used in the valuation of insurance contract liabilities would have an annual impact of EUR –176 million (–161) on such liabilities.

No significant changes took place in non-life insurance's underwriting risks during the financial year. Non-life insurance's significant market risks include the equity risk, and lower market interest rates that increase the value of insurance contract liabilities and the capital requirement.

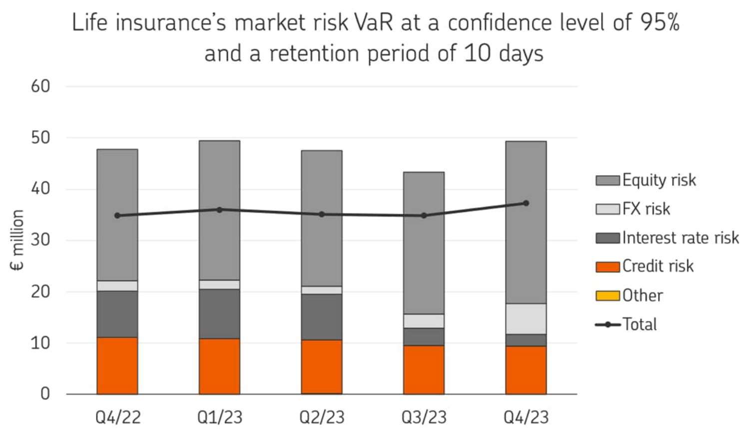
Compared to the previous report, non-life insurance interest rate risk on investments decreased. The VaR, a measure of market risk, was EUR 59 million (49) on 31 December 2023. VaR includes the company's investment balance including investments, insurance contract liabilities and derivatives that hedge against interest rate risk associated with insurance contract liabilities.

Life insurance

The key risks associated with life insurance are the market risks of life insurance's investment assets, the interest rate used for the valuation of insurance contract liabilities, changes in mortality rates among those insured, and the lapse risk arising from changes in customer behaviour.

Longevity, or the decline in mortality, increases payments made from pension portfolios. Overall, a 5% decrease in mortality assumptions would have an annual impact of EUR 22 million (20) on insurance contract liabilities related to annuity portfolios. Meanwhile, in term life insurance portfolios, the growth in mortality rates increases the number of claims. Overall, a 5% increase in mortality assumptions would have an annual impact of EUR 21 million (17) on insurance contract liabilities related to term life insurance portfolios. A 10% increase in the insurance policy lapse rate would have an annual impact of EUR 58 million (50) on insurance contract liabilities. A one percentage point decrease in interest rates used in the valuation of insurance contract liabilities would have an annual impact of EUR 177 million (184) on such liabilities.

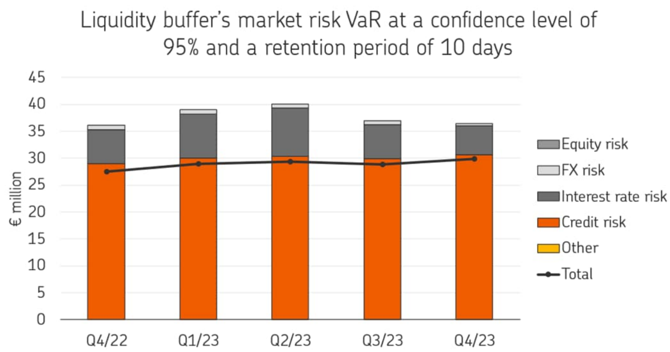
Investment risks associated with separated insurance portfolios and risks associated with changes in customer behaviour have been buffered. The buffer is sufficient to cover a significant negative return on the investment assets included in the separated portfolios, after which OP Financial Group will bear the risks associated with the portfolios. The buffers totalled EUR 245 million (246) on 31 December 2023.



VaR, a measure of market risk, was EUR 37 million (35) at the end of the financial year. VaR includes the life insurance's investment balance, including investments, insurance contract liabilities and derivatives that hedge against interest rate risk associated with insurance contract liabilities. Market risks associated with separated life insurance portfolios, assets that buffer against those risks or customer bonuses, are not included in the calculation.

Group Functions

Major risks related to the Group Functions 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's funding position and liquidity is strong. In 2023, OP Financial Group issued long-term bonds worth a total of EUR 5.2 billion (8.0).

The VaR risk metric that measures market risk associated with the liquidity buffer was EUR 30 million

(27) on 31 December 2023. The market risk level increased during the fourth quarter. The VaR risk metric includes bond investments in the liquidity buffer, derivatives that hedge their interest rate risk as well as investment in money market papers. No major changes occurred in the asset class allocation.

OP Financial Group secures its liquidity through a liquidity buffer which consists 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 199% (217) at the end of the financial year.

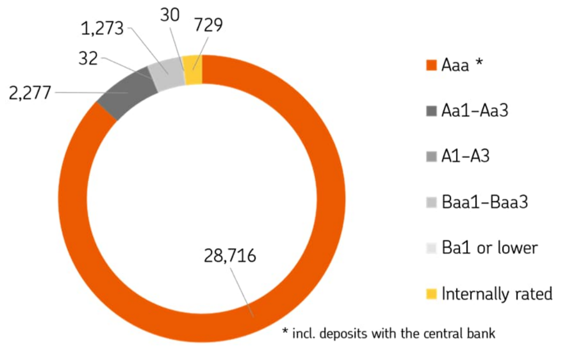
OP Financial Group monitors its long-term funding sufficiency, for example, by means of the Net Stable Funding Ratio (NSFR), which measures structural funding risk. According to regulation, the NSFR must be at least 100%. OP Financial Group's NSFR was 130% (128) at the end of the financial year.

Liquidity buffer

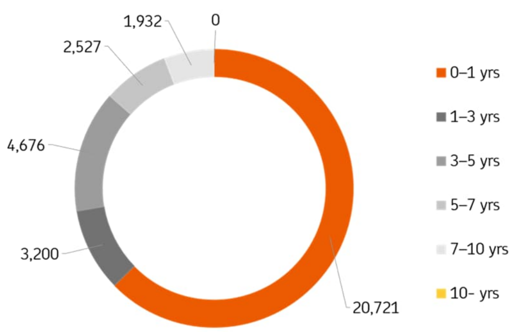
€ billion	31 Dec 2023	31 Dec 2022	Change, %
Deposits with central banks	19.6	34.8	-43.8
Notes and bonds eligible as collateral	11.8	2.1	461.8
Loan receivables eligible as collateral	1.1	-	-
Total	32.4	36.9	-12.2
Receivables ineligible as collateral	0.7	0.7	-6.2
Liquidity buffer at market value	33.1	37.6	-12.1
Collateral haircut	-0.7	-0.2	-
Liquidity buffer at collateral value	32.3	37.4	-13.5

The liquidity buffer comprises notes and bonds issued by governments, municipalities, financial institutions and companies all showing good credit ratings, securitised assets and loan receivables eligible as collateral. In the financial year, OP Financial Group repaid in full the EUR 12.0 billion in TLTRO III loans. At the end of the financial year, the liquidity buffer included bonds worth EUR 622 million (0), classified at amortised cost and issued by non-OP Financial Group issuers. The fair value of these bonds amounted to EUR 640 million (0) at the end of the financial year. In the above information on the liquidity buffer, these bonds are measured at fair value.

Financial assets included in the liquidity buffer by credit rating on 31 December 2023, € million



Financial assets included in the liquidity buffer by maturity on 31 December 2023, € million



Credit ratings

Credit ratings 31 December 2023

	OP Corporate Bank plc				Pohjola Insurance Ltd	
Rating agency	Short-term debt	Outlook	Long-term debt	Outlook	Financial strength rating	Outlook
Standard & Poor's	A-1+	-	AA-	Stable	A+	Stable
Moody's	P-1	Stable	Aa3	Stable	A2	Stable

OP Corporate Bank plc and Pohjola Insurance Ltd have credit ratings affirmed by Standard & Poor's Global Ratings Europe Limited and Moody's Investors Service (Nordics) AB. When assessing OP Corporate Bank's credit rating, credit rating agencies take account of the entire OP Financial Group's financial position. The credit ratings did not change in 2023.

Financial performance by segment

OP Financial Group's business segments are Retail Banking (Banking Personal and SME Customers), Corporate Banking (Banking Corporate and Institutional Customers) and Insurance (Insurance Customers). Non-business segment operations are presented under the Group Functions segment. OP Financial Group prepares its segment reporting in compliance with its accounting policies.

Retail Banking

- Operating profit increased to EUR 1,223 million (502) and the cost/income ratio improved to 45.8% (61.6).
- Total income increased by 49.1% to EUR 2,976 million. Income from customer business increased by a total of 49.8%: net interest income increased by 89.2% to EUR 2,258 million and net commissions and fees decreased by 11.2% to EUR 686 million. The decrease in net commissions and fees was affected by the fact that owner-customers have got their daily banking services free of monthly charges since October 2023.
- Impairment loss on receivables increased to EUR 173 million (96). Non-performing exposures (gross) accounted for 3.2% (2.7) of total exposures.
- Total expenses increased by 10.9% to EUR 1,363 million. Personnel costs increased by 9.7% to EUR 500 million and other operating expenses by 11.9% to EUR 806 million.
- OP bonuses to owner-customers increased by 28.7% to EUR 217 million (168).
- The loan portfolio decreased by 1.6% to EUR 70.9 billion and deposits by 5.6% to EUR 61.2 billion.
- The most significant development investments focused on upgrading the core banking system and developing digital services.

Key figures and ratios

€ million	Q1–4/2023	Q1–4/2022	Change, %
Net interest income	2,258	1,194	89.2
Impairment loss on receivables	-173	-96	79.2
Net commissions and fees	686	773	-11.2
Investment income	-29	-9	-
Other operating income	61	39	57.3
Personnel costs	-500	-455	9.7
Depreciation/amortisation and impairment loss	-57	-53	6.7
Other operating expenses	-806	-720	11.9
OP bonuses to owner-customers	-217	-168	28.7
Operating profit	1,223	502	143.5
Total income	2,976	1,996	49.1
Total expenses	-1,363	-1,229	10.9
Cost/income ratio, %	45.8	61.6	-15.8*
Ratio of non-performing exposures to exposures, % ***	3.2	2.7	0.5*
Ratio of impairment loss on receivables to loan and guarantee portfolio, %	0.24	0.13	0.11*
Return on assets (ROA), %	0.99	0.40	0.59*
Return on assets, excluding OP bonuses, %	1.17	0.54	0.63*

€ million	Q1–4/2023	Q1–4/2022	Change, %
Home loans drawn down	5,569	7,513	-25.9
Corporate loans drawn down	1,996	2,702	-26.1
No. of brokered residential property and property transactions	8,949	10,844	-17.6

€ billion	31 Dec 2023	31 Dec 2022	Change, %
Loan portfolio**			
Home loans	41.9	42.3	-1.1
Corporate loans	7.9	8.3	-5.6
Housing companies****	8.6	8.8	-1.9
Other loans to corporations and institutions	4.2	4.1	3.0
Other consumer loans	8.4	8.6	-2.0
Total loan portfolio	70.9	72.1	-1.6
Guarantee portfolio	1.0	1.0	1.0
Other exposures	7.6	8.3	-8.4
Deposits**			
Current and payment transfer deposits	36.8	43.3	-14.9
Investment deposits	24.4	21.6	13.0
Total deposits	61.2	64.8	-5.6

*Change in ratio

** As of 1 January 2023, the loan portfolio and deposits exclude changes in the fair value of loans and deposits in hedge accounting. Comparatives have been adjusted to correspond to the current definition.

*** As of 1 January 2023, in the calculation of this ratio, the exposures item excludes changes in the fair value of loans in hedge accounting. Comparatives have been adjusted to correspond to the current definition.

**** Housing company loans includes housing companies and housing investment companies.

OP Financial Group's Retail Banking segment consists of banking and asset management services for personal and SME customers at OP cooperative banks and at the central cooperative consolidated.

The loan portfolio decreased by 1.6% to EUR 70.9 billion. The home loan portfolio decreased by 1.1% to EUR 41.9 billion. High inflation and the rise in reference interest rates had a major impact on the housing market. As a result of the prolonged slack home loan market, the amount of home loans drawn down totalled EUR 5.6 billion, representing a decrease of 25.9% year on year. However, in October–December 2023, the amount of home loans drawn down increased by 5.5% year on year thanks to the transfer tax exemption granted to first-time home buyers, which boosted home sales and purchases. The volume of home and real property sales brokered by OP Koti real estate agents totalled 8,932, a decrease of 17.6% year on year. At the end of the financial year, 80.6% (89.5) of the home loan portfolio was tied to the 12-month Euribor, 16.0% (7.4) to shorter Euribor rates, and 3.4% (3.1) to the OP-Prime rate and a fixed interest rate. The corporate loan portfolio decreased by 5.6% to EUR 7.9 billion due to the decline in the willingness of SMEs to invest. The housing company loan portfolio decreased by 1.9% to EUR 8.6 billion. Other loans to corporations and institutions increased by 3.0% to EUR 4.2 billion. Other consumer loans decreased by 2.0% to EUR 8.4 billion.

On 31 December 2023, a total of 34.4% (32.8) of personal customers' home loans were covered by interest rate protection. On the same date, the interest expenses of around 160,000 home loans were being cut by an interest rate cap; the loans' aggregate principal totalled EUR 14.1 billion. In financial terms, the net benefit gained by customers from interest rate caps totalled EUR 168 million in 2023.

The deposit portfolio decreased by 5.6% to EUR 61.2 billion. This was mainly attributable to the decrease in corporate customers' payment transfer deposits. Deposits on current and payment transfer accounts decreased by 14.9% and investment deposits increased by 13.0%.

In March, OP Financial Group launched a green loan for SMEs and housing companies. The new green loan boosts investments in areas such as energy-efficient construction, renewable energy, and infrastructure for low-emission transport. At the end of December, green loans granted to SMEs totalled EUR 62 million (0).

OP Financial Group customers' interest in saving and investing continued. During the financial year, OP's mutual funds attracted 65,000 new unitholders, and customers made 126,000 new systematic investment plans on mutual funds. At the end of the financial year, OP's mutual funds had almost 1.28 million unitholders. The number of active equity investor customers was record high, showing a growth of 16.0% year on year. In share trading, the number of executed orders was 1.9% higher than a year ago.

OP Financial Group paid 30% extra on OP bonuses earned by owner-customers for 2023. The value of the new OP bonuses earned totalled EUR 275 million (215). OP Financial Group will pay 40% extra on OP bonuses earned for 2024 – an estimated additional bonus of EUR 86 million for owner-customers. In addition, owner-customers will get daily banking services without monthly charges from October 2023 until the end of 2024. The value of this benefit was EUR 22 million for 2023 and will be an estimated EUR 88 million for 2024.

From 1 November 2023 onwards, owner-customers have got a 0.25% interest on deposits in their current accounts. This benefit applies to owner-customers who have an owner-customer membership and a current account with the same OP cooperative bank.

During the financial year, the most significant development investments focused on upgrading the core banking system and developing digital services.

In December, OP announced that OP and Nordea are establishing a joint venture to create Finnish solutions for payment challenges. They aim to develop phone number-based payment and e-invoice management solutions for consumers and companies. The solution will be open to other market actors. Realisation of the venture must await the approval of the competition authorities.

On 31 December 2023, the number of OP cooperative banks was 102 (108). Merger projects between OP cooperative banks are underway in different parts of Finland.

Earnings

Retail Banking's operating profit amounted to EUR 1,223 million (502). Total income increased by 49.1% to EUR 2,976 million. Net interest income grew by 89.2% to EUR 2,258 million due to the rise in market interest rates that began in spring 2022.

Net commissions and fees decreased by 11.2% to EUR 686 million. Owner-customers have got daily banking services without monthly charges since October 2023. In addition, Retail Banking's net commissions and fees were reduced by the change in the operating model applied to hedging interest rate risk associated with derivative contracts between Corporate Banking and Retail Banking, which was implemented at the end of 2022.

Impairment loss on receivables grew by 79.2% to EUR 173 million (96). Expected credit losses concerning the construction and real estate sectors increased. Final net loan losses recognised for the financial year totalled EUR 36 million (32). Non-performing exposures accounted for 3.2% (2.7) of total exposures.

Total expenses increased by 10.9% to EUR 1,363 million. Personnel costs rose by 9.7% to EUR 500 million. The increase was affected by higher headcount and growth in the provision for performance-based bonuses as well as pay rises. Other operating expenses increased by 11.9% to EUR 806 million. The increase was mainly due to higher ICT costs. Depreciation/amortisation and impairment loss increased by 6.7% from the previous year, to EUR 57 million.

OP bonuses to owner-customers grew by 28.7% to EUR 217 million as a result of the additional bonuses paid for 2023.

Corporate Banking

- Operating profit decreased to EUR 408 million (416) and the cost/income ratio improved to 40.1% (41.4).
- Total income grew to EUR 885 million (776). Net interest income grew by 29.3% to EUR 591 million (457) and net commissions and fees by 32.2% to EUR 219 million (166). Investment income decreased to EUR 53 million (136).
- Impairment loss on receivables totalled EUR 96 million (18). Non-performing exposures (gross) accounted for 2.2% (1.5) of total exposures.
- Total expenses increased to EUR 354 million (321). Personnel costs increased by 9.8% to EUR 104 million (95). Depreciation/amortisation and impairment losses decreased by 63.3% to EUR 3 million (8). Other operating expenses increased by 13.4% to EUR 247 million.
- The loan portfolio grew by 0.9% to EUR 28.1 billion and deposits decreased by 1.6% to EUR 13.8 billion. Assets under management by Corporate Banking increased by 3.4% to EUR 74.7 billion.
- The most significant development investments involved the upgrades of customer relationship management, payment and asset management systems, and sustainability.

Key figures and ratios

€ million	Q1–4/2023	Q1–4/2022	Change, %
Net interest income	591	457	29.3
Impairment loss on receivables	-96	-18	424.6
Net commissions and fees	219	166	32.2
Investment income	53	136	-60.7
Other operating income	21	18	20.4
Personnel costs	-104	-95	9.8
Depreciation/amortisation and impairment loss	-3	-8	-63.3
Other operating expenses	-247	-218	13.4
OP bonuses to owner-customers	-26	-20	30.1
Operating profit	408	416	-2.1
Total income	885	776	14.0
Total expenses	-354	-321	10.4
Cost/income ratio, %	40.1	41.4	-1.3*
Ratio of non-performing exposures to exposures, % **	2.2	1.5	0.7*
Ratio of impairment loss on receivables to loan and guarantee portfolio, %	0.31	0.06	0.25*
Return on assets (ROA), %	0.93	1.00	-0.07*
Return on assets, excluding OP bonuses, %	0.99	1.05	-0.05*

€ billion	31 Dec 2023	31 Dec 2022	Change, %
Loan portfolio***			
Corporate loans	20.4	19.9	2.7
Housing companies****	2.0	2.1	-3.1
Other consumer loans	3.2	2.8	14.9
Other loans	2.3	3.0	-21.3
Total loan portfolio	28.1	27.8	0.9
Guarantee portfolio	3.2	3.4	-6.7
Other exposures	5.7	6.4	-10.9
Deposits***	13.8	14.0	-1.6
Assets under management (gross)			
Mutual funds	30.0	27.6	8.8
Institutional clients	35.9	35.7	0.8
Private Banking	8.8	9.0	-2.8
Total (gross)	74.7	72.3	3.4
€ million	Q1–4/2023	Q1–4/2022	
Net inflows			
Private Banking clients	174	-1	-
Institutional clients	-313	-356	-12.2
Total net inflows	-139	-357	-61.1

*Change in ratio.

** As of 1 January 2023, in the calculation of this ratio, the exposures item excludes changes in the fair value of loans in hedge accounting. Comparatives have been adjusted to correspond to the current definition.

*** As of 1 January 2023, the loan portfolio and deposits exclude changes in the fair value of loans and deposits in hedge accounting. Comparatives have been adjusted to correspond to the current definition.

**** Housing company loans includes housing companies and housing investment companies.

OP Financial Group's Corporate Banking segment consists of banking and asset management services for corporate and institutional customers. The segment comprises OP Corporate Bank plc's banking, OP Asset Management Ltd, OP Fund Management Company Ltd, OP Custody Ltd and OP Real Estate Asset Management Ltd.

The loan portfolio grew by 0.9% to EUR 28.1 billion. The slowdown in companies' willingness to invest, reduced international trade and a lower need for working capital affected the development of the loan portfolio. On the other hand, the loan portfolio grew due to the increase in consumer finance, especially car finance. During 2023, OP Corporate Bank became the market leader of passenger car finance.

The deposit portfolio grew during the fourth quarter, but overall the deposit portfolio decreased by 1.6% to EUR 13.8 billion during 2023.

Investments by Corporate Banking in promoting a sustainable economy increased the commitment portfolio of sustainable finance to EUR 6.5 billion (5.2). Demand for sustainable financing has remained strong and companies have made active use of Corporate Banking's expertise in financing the sustainable economy.

The most significant Corporate Banking development investments involved the upgrades of customer relationship management, payment, finance and asset management systems, and sustainability. With the implementation of the new Group-level customer relationship management system, Corporate Banking aims at better customer experience and higher quality and more efficient operations. The upgrade of core payment systems and improvement of digital services will continue further. In asset and wealth management, fund management processes and customer service will be further upgraded.

Within asset management, net assets inflow was EUR –139 million (–357). Despite the challenging market conditions, assets under management by Corporate Banking increased by 3.2% to EUR 74.7 billion (72.3). This included EUR 23.2 billion (23.2) in assets of the companies belonging to OP Financial Group.

In the fourth quarter, Corporate Banking established the new OP-Sustainable Wellbeing fund in order to strengthen the social dimension of ESG in the range of mutual funds provided by OP Financial Group by promoting the sustainable wellbeing of people and societies.

At the end of 2023, large Finnish corporations again ranked OP Corporate Bank as Finland's best corporate bank, achieving a shared first position in the Prospera survey. OP Corporate Bank is the only corporate bank in Finland to have been in the top two of the Prospera survey for six consecutive years.

Earnings

Corporate Banking's operating profit amounted to EUR 408 million (416). The cost/income ratio was 40.1% (41.4). Net interest income grew by 29.3% to EUR 591 million (457). The rise in market rates that has continued since the spring of 2022 increased net interest income.

Impairment loss on receivables totalled EUR 96 million (18). During the financial year, impairment loss on receivables increased as a result of the deteriorated situation in the construction and real estate sectors, among others. An additional management overlay provision of EUR 9 million was included in impairment loss on receivables, mainly targeted at the construction industry. Non-performing exposures accounted for 2.2% (1.5) of total exposures.

Corporate Banking's net commissions and fees totalled EUR 219 million (166). The change in the operating model applied to hedging interest rate risk associated with derivative contracts between Corporate Banking and Retail Banking, which was implemented at the end of 2022, improved net commissions and fees and, correspondingly, reduced investment income.

Corporate Banking segment's net commissions and fees

€ million	Q1–4/2023	Q1–4/2022	Change, %
Mutual funds	125	127	-1.9
Asset management	33	16	109.6
Other	60	22	172.5
Total	219	166	32.2

Investment income decreased to EUR 53 million (136). Value changes in Credit Valuation Adjustment (CVA) in derivatives owing to market changes decreased earnings by EUR 6 million (4).

Personnel costs rose by 9.8% to EUR 104 million. The increase was affected by higher headcount and growth in the provision for performance-based bonuses as well as pay rises. Other operating expenses increased by 13.4% to EUR 247 million. The increase was due to higher intra-Group charges at OP Financial Group.

Insurance

- Operating profit increased to EUR 414 million (293).
- Insurance service result was EUR 81 million (106). Investment income totalled EUR 347 million (154).
- Non-life insurance premiums written increased by 5.7% to EUR 1,792 million. Non-life insurance combined ratio was 93.8% (89.8).
- In life insurance, unit-linked insurance assets increased by 8.3% to EUR 12.6 billion. Premiums written in term life insurance grew by 10.2%.
- Return on investments by non-life insurance at fair value was 8.1% (–10.8) and that by life insurance was 8.3% (–16.1).
- Total expenses increased to EUR 548 million (462). Development investments focused on the core system upgrades and the development of digital services.

Key figures and ratios

€ million	Q1–4/2023	Q1–4/2022	Change, %
Insurance service result	81	106	-23.2
Net finance income	-722	2,226	-
Net investment income	1,069	-2,072	-
Investment income	347	154	125.1
Net commissions and fees	56	50	12.9
Other net income	4	39	-89.7
Personnel costs	-167	-147	13.6
Depreciation/amortisation and impairment loss	-64	-51	24.5
Other operating expenses	-317	-264	20.0
Total expenses	-548	-462	18.5
Transfers to insurance service result	485	416	16.6
OP bonuses to owner-customers	-12	-10	22.8
Operating profit	414	293	41.4
Return on assets (ROA), %	1.54	1.11	0.44*
Return on assets, excluding OP bonuses, %	1.64	1.18	0.46*

*Change in ratio

OP Financial Group's Insurance segment comprises life and non-life insurance business. The segment includes Pohjola Insurance Ltd and OP Life Assurance Company Ltd.

In non-life insurance, the number of prime customer households using Pohjola Insurance as their main insurer increased by 8,453, to 707,689 households. In particular, demand for health insurance was strong, and the number of those insured grew during the year.

The amount of claims reported grew by 10%. Health insurance showed the largest growth rate, 15%, due to a higher number of visits to doctors. The number of large claims decreased year on year.

In the life insurance business, premiums written in term life insurance grew by 10.2%. In life insurance, unit-linked insurance assets increased by 8.3% to EUR 12.6 billion (11.6).

Earnings

Operating profit improved to EUR 414 million (293). Insurance service result was EUR 81 million (106).

Investment income increased to EUR 347 million (154). Net investment income grew following the increase in the value of shares. The value of insurance contract liabilities increased as a result of the decrease in interest rates in the fourth quarter, which decreased net finance income. A year ago, the rise in interest rates decreased the value of insurance contract liabilities and increased net finance income.

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The new method of recognition changed the timing of insurance service result. Expected loss is immediately recognised in the income statement. The investment result is recognised at fair value in the income statement. The impact of economic assumptions, such as the changes in interest rates, on the value of insurance contract liabilities is recognised in net finance income. Net investment income and net finance income together indicate the profitability of investment operations.

Investment income

€ million	Q1–4/2023	Q1–4/2022
Insurance companies' investments		
Fixed income investments	403	-852
Quoted shares	167	-240
Other liquid investments	0	-8
Property investment	20	83
Other illiquid investments	13	39
Insurance companies' net investment income	604	-977
Net finance income*	-223	1,144
Interest on subordinated loans, and other income and expenses	-25	13
Investment income	356	180
Net income from separated balance sheets	-3	-5
Net income from customers' savings and investments agreements	-7	-22
Total investment income	347	154

* Excluding net finance income from separated balance sheets and customers' savings and investments agreements

Non-life insurance financial performance

Non-life insurance operating profit amounted to EUR 236 million (344). Positive developments in the value of shares strengthened the investment result. Profitability weakened, year on year, as a result of higher net claims incurred and operating expenses. A year ago, other income included a capital gain of EUR 32 million on the sale of Pohjola Hospital.

€ million	Q1–4/2023	Q1–4/2022	Change, %
Insurance revenue	1,758	1,680	4.6
Claims incurred	-1,087	-1,210	-10.2
Operating expenses	-487	-421	15.6
Insurance service result, gross	185	50	271.6
Reinsurer's share of insurance revenue	-98	-80	22.6
Reinsurer's share of insurance service expenses	16	194	-91.8
Net income from reinsurance	-82	114	-
Insurance service result	103	164	-37.3
Net finance income	-182	584	-
Income from investment activities	332	-435	-
Investment income	149	149	0.6
Other net income	-17	32	-
Operating profit	236	344	-31.6
Combined ratio	93.8	89.8	
Risk ratio	64.8	63.7	
Cost ratio	29.0	26.1	

Non-life insurance: premiums written

€ million	Q1–4/2023	Q1–4/2022	Change, %
Personal customers	987	929	6.3
Corporate customers	805	767	5.0
Total	1,792	1,696	5.7

Premiums written increased by 5.7% to EUR 1,792 million. Besides the growth in the number of customers, the increase was attributable to the rise in the general level of costs and the resulting index increments and price increases in insurance premiums. Net insurance revenue was burdened by a rise in reinsurance costs. Net insurance revenue including reinsurer's share grew by 3.7% to EUR 1,660 million.

Claims incurred before reinsurer's share decreased by 10.2% to EUR 1,087 million as a result of a year-on-year decrease in claims incurred associated with large claims. Meanwhile, the rise in the general level of costs and higher claims volumes, particularly in health insurance, increased claims incurred. Net claims incurred after reinsurer's share grew by 5.6% to EUR 1,076 million.

In 2023, the reported number of large claims under property and business liability insurance (in excess of EUR 0.3 million) amounted to 123 (121), with their claims incurred retained for own account totalling EUR 112 million (180). Non-life insurance operating risk ratio was 64.8% (63.7).

Operating expenses increased by 15.6% to EUR 487 million due to higher personnel costs and ICT development costs. Personnel costs increased due to pay rises and a higher headcount. ICT development costs increased as a result of a change in the capitalisation practice. These costs are no longer capitalised because development has been migrated to the cloud environment. Write-downs on development projects are included in other net income.

In non-life insurance, the cost ratio was 29.0% (26.1). Combined ratio reported by non-life insurance weakened to 93.8% (89.8). This was attributable to the substantial growth of claims incurred in health insurance, and higher operating expenses.

Non-life insurance: investment income

€ million	Q1–4/2023	Q1–4/2022
Net finance income and expenses	-182	584
Fixed income investments	219	-372
Quoted shares	103	-132
Other liquid investments	0	-4
Property investment	14	60
Other illiquid investments	8	21
Income from investment activities	343	-427
Interest on subordinated loans, and other income and expenses	-12	-9
Total investment income	149	149

Non-life insurance: key investment indicators

	Q1–4/2023	Q1–4/2022
Return on investments at fair value, %	8.1	-10.8
Fixed income investments' running yield, %	2.4	1.4
	31 Dec 2023	31 Dec 2022
Investment portfolio, € million	4,334	4,071
Investments within the investment grade category, %	90	92
At least A-rated receivables, %	53	56
Modified duration	3.5	2.8

Life insurance financial performance

Operating profit amounted to EUR 178 million (–57) due to a stronger investment performance. Insurance service result improved by EUR 36 million but remained negative as a result of the increase in the loss component of defined benefit group pension insurance following the updates of the calculation model. A contractual service margin of EUR 68 million (35) was recognised in the insurance service result. Positive developments in the value of investments strengthened the investment result. An update of calculation assumptions related to bonuses and rebates increased net finance income by EUR 30 million. Expenses increased by EUR 7 million to EUR 77 million. Development costs increased as a result of the core system reforms that were launched during the financial year in term life insurance and individual unit-linked insurance.

€ million	Q1–4/2023	Q1–4/2022	Change, %
Insurance service result	-22	-58	-
Net finance income and expenses	-540	1,642	-
Income from investment activities	736	-1,643	-
Investment income	196	-1	-
Net commissions and fees	47	40	18.0
Other operating income and expenses	4	3	24.0
Personnel costs	-14	-13	13.2
Depreciation/amortisation and impairment loss	-16	-20	-18.4
Other operating expenses	-47	-37	25.6
Total expenses	-77	-70	11.0
Transfers to insurance service result	42	38	8.6
OP bonuses to owner-customers	-12	-10	22.8
Operating profit	178	-57	-
Cost/income ratio, %	29	312	-
Contractual service margin at period end	756	787	-4.0

Life insurance: investment income

€ million	Q1–4/2023	Q1–4/2022
Insurance company's investments		
Fixed income investments	184	-480
Quoted shares	64	-108
Other liquid investments	0	-4
Property investment	7	23
Other illiquid investments	5	19
Insurance company's net investment income	261	-550
Net finance income*	-40	560
Interest on subordinated loans, and other income and expenses	-15	16
Investment income	206	26
Net income from separated balance sheets	-3	-5
Net income from customers' savings and investments agreements	-7	-22
Total investment income	196	-1

* Excluding net finance income from separated balance sheets and customers' savings and investments agreements

Life insurance: key investment indicators*

	Q1–4/2023	Q1–4/2022
Return on investments at fair value, %	8.3	-16.1
Fixed income investments' running yield, %	2.1	1.3
	31 Dec 2023	31 Dec 2022
Investment portfolio, € million	3,201	3,235
Investments within the investment grade category, %	91	90
A-rated receivables, minimum, %	53	50
Modified duration	3.3	2.8

* Excluding the separated balance sheets

Group Functions

Key figures and ratios

€ million	Q1–4/2023	Q1–4/2022	Change, %
Net interest income	1	-62	-
Impairment loss on receivables	0	0	-
Net commissions and fees	-1	0	-
Investment income	10	-11	-
Other operating income	741	657	12.8
Personnel costs	-232	-195	19.1
Depreciation/amortisation and impairment loss	-104	-103	0.8
Other operating expenses	-441	-376	17.2
Operating loss	-26	-91	-

The Group Functions segment consists of OP Cooperative's functions tasked with the support and assurance of business segments, as well as OP Corporate Bank plc's treasury functions.

Earnings

Group Functions operating loss was EUR –26 million (–91). Net interest income was EUR 1 million (–62). A rise in market interest rates had a positive effect on net interest income.

Investment income totalled EUR 10 million (-11). Other operating income increased by 12.8% to EUR 741 million. Other operating income mainly includes OP Financial Group's intra-group items.

Personnel costs rose by 19.1% to EUR 232 million. The increase was affected by higher headcount and growth in the provision for performance-based bonuses as well as general pay increases. Depreciation/amortisation and impairment loss on PPE and intangible assets increased by 0.8% to EUR 104 million. Other operating expenses increased by 17.2% to EUR 441 million. ICT costs increased by 15.5% to EUR 307 million.

OP Financial Group's funding position and liquidity is strong. At the end of the financial year, the Group's LCR was 199% (217) and NSFR was 130% (128). At the end of the financial year, OP Financial Group's balance sheet assets included bonds worth EUR 623 million (1), which are not measured at fair value in accounting. On 31 December 2023, the fair value of these bonds amounted to EUR 641 million (1).

On 31 December 2023, the average margin of OP Financial Group's senior and senior non-preferred wholesale funding and covered bonds was 34 basis points (27). In 2023, OP Financial Group issued long-term bonds worth a total of EUR 5.2 billion (8.0). In the financial year, OP Financial Group repaid in full the EUR 12.0 billion in TLTRO III loans.

ICT investments

OP Financial Group invests in developing its operations and improving customer experience on an ongoing basis. The central cooperative with its subsidiaries is responsible for the development of OP Financial Group's products and services, digital channels and shared technology, data and cybersecurity capabilities, while safeguarding the high quality, availability and data security of the services. ICT costs make up a significant portion of development costs.

OP Financial Group and Microsoft will deepen their IT partnership and OP Financial Group will switch over to using Microsoft cloud services on an extensive basis. This cloud migration is a significant investment for the Group in new technology, IT expertise and operating model. On 22 August 2023, OP announced its decision to build its new digital services and data platforms based on Microsoft Azure and concentrate its IT services on the cloud ecosystem located in Finland, which will foster digital growth in the whole of Finland. Along with the partnership and migration to the cloud environment, OP Financial Group can further improve the services provided to its customers.

OP Financial Group's development expenditure totalled EUR 356 million (313). This included licence fees, purchased services, other external costs related to projects, and in-house work. The capitalised development expenditure totalled EUR 62 million (97). More detailed information on OP Financial Group's investments can be found in the business segment reports in this Report by the Board of Directors.

Personnel

On 31 December 2023, OP Financial Group had 13,806 employees (12,999). The number of employees averaged 13,533 (13,077). During the financial year, the number of employees increased in areas such as service development, sales, customer service, risk management and compliance.

Personnel at year-end

	31 Dec 2023	31 Dec 2022
Retail Banking	7,785	7,450
Corporate Banking	1,010	962
Insurance	2,494	2,373
Group Functions	2,517	2,214
Total	13,806	12,999

During the financial year, 206 OP Financial Group employees (265) retired at an average age of 62.9 years (62.8).

On 24 July 2023, OP Financial Group announced that it will hire 300 new IT professionals in Helsinki and Oulu. These recruitments are part of OP's long-term investments in areas such as AI expertise, data utilisation and cloud services. Alongside new recruitment, OP is developing the competencies of current employees to meet future requirements.

Variable remuneration applied by OP Financial Group in 2023 consisted 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 were taken into account in the metrics used in the performance-based bonus scheme and in the personnel fund. In drawing up the remuneration schemes, OP has taken account of the regulation regarding the financial sector's remuneration schemes.

Changes in OP Financial Group's structure

At the end of the financial year, OP Financial Group's consolidated financial statements included the accounts of 102 OP cooperative banks (108) and OP Cooperative Consolidated. The number of OP cooperative banks decreased during the financial year due to mergers.

Kiteen Seudun Osuuspankki and Rääkkylän Osuuspankki merged into Pohjois-Karjalan Osuuspankki on 31 March 2023.

Pohjolan Osuuspankki and Tornion Osuuspankki merged into Oulun Osuuspankki on 30 April 2023. Consequently, the business name of Oulun Osuuspankki was changed to Pohjolan Osuuspankki.

Korsnäsin Osuuspankki merged into Vaasan Osuuspankki on 31 October 2023.

Päijät-Hämeen Osuuspankki merged into Etelä-Hämeen Osuuspankki on 31 December 2023. Consequently, the business name of Etelä-Hämeen Osuuspankki was changed to Hämeen Osuuspankki.

On 27 September 2023, Etelä-Karjalan Osuuspankki and Kymenlaakson Osuuspankki accepted a merger plan, according to which the latter will merge into the former. The planned date for the execution of the merger is 30 April 2024. Consequently, the business name of Etelä-Karjalan Osuuspankki will change to Kaakkois-Suomen Osuuspankki.

Governance of OP Cooperative

On 1 December 2022, the Supervisory Council of OP Cooperative (the central cooperative of OP Financial Group) elected the members of the Board of Directors of OP Cooperative for the term of office from 1 January to 31 December 2023. The composition of the Board of Directors remained unchanged. In addition, according to the bylaws of OP Cooperative, the President and Group CEO is a Board member during their term of office.

The following members continued on the Board in 2023: Jarna Heinonen (Professor in Entrepreneurship, Turku School of Economics), Jari Himanen (kauppaneuvos, Finnish honorary title; Managing Director, Suur-Savon Osuuspankki), Kati Levoranta (Executive Vice President, Operational Activities, P2X Solutions Ltd), Pekka Loikkanen (board professional), Tero Ojanperä (Chair of the Board of Directors, Silo AI Ltd), Riitta Palomäki (board professional), Jaakko Pehkonen (rahoitusneuvos, Finnish honorary title; Professor of Economics, University of Jyväskylä), Timo Ritakallio (President and Group CEO, OP Financial Group), Petri Sahlström (Professor of Accounting and Finance, University of Oulu), Olli Tarkkanen (Managing Director, Etelä-Pohjanmaan Osuuspankki) and Mervi Väisänen (Senior Lecturer in Marketing, Kajaani University of Applied Sciences).

On 21 December 2022, the Board of Directors elected from among its members the chairs, vice chairs and other members to the statutory Board Committees for the new term. Jaakko Pehkonen continued as Chair and Jarna Heinonen as Vice Chair of the Board of Directors. On 2 May 2023, the Nomination and Remuneration Committee of the Board of Directors was divided into two separate committees. Consequently, the Board has four statutory committees: the Audit Committee, the Risk Committee, the Remuneration Committee and the Nomination Committee. On 2 May 2023, the Board of Directors updated the composition of its committees.

On 5 December 2023, the Supervisory Council elected Matti Kiuru, M.Sc. (Econ. & Bus. Adm.), eMBA, and Katja Kuosa-Kaartti, M.Sc. (Econ. & Bus. Adm.), Authorised Public Accountant, as new members of the Board of Directors of OP Cooperative. Jari Himanen's and Mervi Väisänen's term of office in the Board of Directors ended on 31 December 2023. Other members of the Board will continue in their position for the term 1 January–31 December 2024.

On 20 December 2023, the Board of Directors elected from among its members the chairs, vice chairs and other members to the statutory Board Committees for the new term. Jaakko Pehkonen will continue as Chair and Jarna Heinonen as Vice Chair of the Board of Directors.

On 26 April 2023, OP Cooperative held its Annual Cooperative Meeting which elected members of the Supervisory Council and the auditor.

The Supervisory Council comprises 36 members. The Meeting re-elected the following members to the Supervisory Council who were due to resign: M.Sc. Eeva Harju, Professor Saara Julkunen, Managing Director Matti Kiuru, Senior Agricultural Economist Päivi Kujala, Authorised Public Accountant Katja Kuosa-Kaartti, Senior

Manager Anssi Mäkelä, Managing Director Kari Mäkelä, Managing Director Heikki Palosaari, Managing Director Jyrki Rantala, Managing Director Teemu Sarhemaa and Managing Director Ari Väänänen.

New Supervisory Council members elected were Sales Manager Jan Drugge, HR Director Titta Saksa and entrepreneur Miika Sunikka.

At its reorganising meeting on 26 April 2023, the Supervisory Council elected the presiding officers of the Supervisory Council. Chair of the Board of Directors Annukka Nikola was elected as Chair and entrepreneur Taija Jurmu and Managing Director Ari Väänänen as Vice Chairs of the Supervisory Council.

Eeva Harju's membership in the Supervisory Council ended on 18 May 2023, that of Jyrki Rantala on 9 November 2023 and that of Matti Kiuru and Katja Kuosa-Kaartti on 31 December 2023. The Supervisory Council will continue until the end of its term of office with 32 members.

The Annual Cooperative Meeting re-elected KPMG Oy Ab, an audit firm, to act as the auditor for the financial year 2023, with Juha-Pekka Mylén, APA, acting as the chief auditor, appointed by KPMG Oy Ab.

Legal structure of OP Financial Group

Group structure

OP Financial Group (later the Group) is a Finnish financial services group owned by its customers. It is constituted by OP Cooperative as the Group's central body and the parent undertaking of OP Cooperative Consolidated (later the central cooperative), its subsidiaries and local OP cooperative banks. The central cooperative, its subsidiary credit institutions and other financial subsidiaries, and the central cooperative's member cooperative banks together constitute an amalgamation of deposit banks (later OP Amalgamation) within the meaning of the Finnish Amalgamation Act (599/2010, later the Amalgamation Act). OP Cooperative is the central body, and its credit institution subsidiaries and the OP cooperative banks (later the affiliated credit institutions) are credit institutions affiliated to the central body within the meaning of Article 10 of the Capital Requirements Regulation (Regulation (EU) No 575/2013, later the Capital Requirements Regulation).

Credit institutions whose bylaws comply with the requirements of the Amalgamation Act and have been approved by the central cooperative, can be accepted as members of the central cooperative. New members are accepted by the Supervisory Council of the central cooperative. An affiliated credit institution has the right to withdraw from the amalgamation. It can also be expelled from the amalgamation in accordance with the Finnish Co-operatives Act (421/2013, later the Co-operatives Act) or if it has neglected its obligations towards the Amalgamation as specified in the bylaws of the central cooperative.

The affiliated credit institutions of the central cooperative consist of:

- credit institution subsidiaries of the central cooperative (OP Corporate Bank plc, which provides corporate financing, acts as the Group Treasury and is responsible for the Group's wholesale funding; OP Retail Customers plc, which administers the credit cards issued by the Group; and OP Mortgage Bank, which issues mortgage bonds backed by the residential loan portfolios of the affiliated credit institutions); and
- 102 local and regional co-operative banks, which carry out retail banking business and which are members of OP Cooperative, thus exercising the decision-making powers at the highest administrational level of the Group.

Apart from the central cooperative and its affiliated credit institutions, OP Financial Group also includes, as subsidiaries of the central cooperative, an investment firm (OP Asset Management Ltd), a fund management company (OP Fund Management Company Ltd), a life insurance company (OP Life Assurance Company Ltd), a non-life insurance company (Pohjola Insurance Ltd) and some minor companies as well as the real estate agencies owned jointly by OP cooperative banks under the brand name OP Koti.

OP Amalgamation and the insurance and financial subsidiaries of OP Cooperative together constitute a bank-dominated financial conglomerate within the meaning of the Directive (2002/87/EC) and the Finnish Act on the

Supervision of Financial and Insurance Conglomerates (699/2004, later the Financial Conglomerates Act). The European Central Bank has waived, until further notice, the application of the said Act to the financial conglomerate constituted by the central cooperative consolidated.

Corporate governance in OP Financial Group

The highest decision-making body in OP Financial Group is the Cooperative Meeting of the central cooperative consisting of the representatives of the affiliated credit institutions. The Meeting elects the central cooperative's Supervisory Council (36 members). The Supervisory Council elects the central cooperative's Board of Directors, which consists of the President and Group CEO and 9–13 other members. At least four of the members of the Board must be independent of the central cooperative and other entities belonging to OP Financial Group. The Board of Directors carries out the tasks of the management body in its management function as well as the tasks of the management body in its supervisory function, as defined in the Capital Requirements Directive (2013/36/EU) and in the Guidelines on Internal Governance by the European Banking Authority.

The affiliated credit institutions are separate legal entities that have administrative bodies of their own in accordance with the general company law. In the member cooperative banks, the highest decision-making body is the Cooperative Meeting or the Representative Assembly Meeting. It elects the OP cooperative bank's Supervisory Council, which in turn elects the OP cooperative bank's Board of Directors. The subsidiaries of the central cooperative have a Board of Directors nominated by the central cooperative in accordance with the Limited Liability Companies Act.

Financial reporting, supervision and internal audit

OP Amalgamation

OP Financial Group publishes an annual consolidated financial statement covering all significant companies within the Group. Pursuant to the Amalgamation Act, the financial statements of OP Financial Group must be drawn up in accordance with the international financial reporting standards referred to in the Finnish Accounting Act (1336/1997). The Finnish Financial Supervisory Authority (FIN-FSA) has issued more detailed regulations on the financial statements of amalgamations. The accounting principles applied to OP Financial Group's financial statements are disclosed in the notes to the financial statements.

The central cooperative has an obligation to provide the affiliated credit institutions and other companies belonging to OP Amalgamation with guidelines on compliance with standardised accounting policies in the preparation of the consolidated financial statements. The companies belonging to OP Amalgamation must submit the necessary data to the central cooperative for the purpose of drawing up the consolidated financial statements.

OP Financial Group's financial statements are audited by the auditors of the central cooperative in accordance with the requirements laid down in the Finnish Act on Credit Institutions (610/2014, later the Credit Institutions Act), as applicable. The auditors have the right to obtain a copy of all audit documents of the companies belonging to OP Amalgamation. The financial statements are presented to the Annual Cooperative Meeting of the central cooperative.

OP Amalgamation is supervised by the ECB on the basis of its consolidated financial position, while the insurance companies are supervised by FIN-FSA. FIN-FSA also supervises compliance with the conduct rules applied to banking and asset management.

OP Amalgamation must comply, on the basis of its consolidated financial position, with the statutory prudential requirements for credit institutions laid down in the Credit Institutions Act and the Capital Requirements Regulation. The amount of consolidated own funds at the level of the Amalgamation must meet the requirements laid down in chapter 10, section 1 of the Credit Institutions Act.

The internal audit of undertakings belonging to OP Financial Group is carried out by the Internal Audit unit, which reports directly to the President and Group CEO. Internal Audit is an independent function within OP Financial Group, which audits the adequacy and effectiveness of internal control arrangements, risk management and corporate governance. The Chief Audit Executive regularly reports to the President and Group CEO and the Audit Committee of the Board of Directors of OP Cooperative. Internal Audit is responsible for the internal audit of the central cooperative, its subsidiaries and the affiliated credit institutions and their subsidiaries. Internal audits are carried out in accordance with the International Standards for the Professional Practice of Internal Auditing, ethical rules and the Internal Audit Charter approved by the Board of Directors of OP Cooperative.

Central cooperative consolidated

OP Cooperative also prepares and publishes a consolidated financial statement of the group that comprises OP Cooperative and its subsidiaries. The consolidated financial statement complies with the Finnish Accounting Act and the Act on Credit Institutions. Regulatory requirements concerning consolidated capital adequacy and liquidity do not apply at the level of the sub-consolidation group formed by the central cooperative consolidated.

Financial conglomerate

Pursuant to section 30 of the Financial Conglomerates Act, the accounting regime laid down in the said Act is not applicable to OP Financial Group as its financial statements are drawn up in accordance with the international financial reporting standards.

Compliance with the requirements laid down in the Financial Conglomerates Act, including the aggregate capital requirement, is supervised by the ECB.

Affiliated credit institutions and other companies within OP Amalgamation

The affiliated credit institutions and other companies within OP Amalgamation draw up their individual financial statements in accordance with the guidelines issued by the central cooperative, and they are audited in accordance with the Credit Institutions Act. The obligation to disclose interim financial reports pursuant to chapter 12, section 12 of the Credit Institutions Act is not applied to companies within OP Amalgamation. Nor are they obliged to disclose regulatory information on their capital adequacy and liquidity (so called Pillar III) on a solo basis. Such information is disclosed only on the basis of the consolidated financial position of OP Amalgamation.

According to the Amalgamation Act, the supervisory authority can grant the central cooperative a permission to waive the application of the quantitative rules on the amount of own funds, liquidity and large exposure limits as well as the qualitative rules on risk management. The affiliated credit institutions must, however, comply with the minimum capital requirements laid down in the Amalgamation Act, which are lower than those applied to other credit institutions. The waiver cannot be granted to an affiliated credit institution which has grossly or recurringly failed to comply with the instructions issued by the central cooperative pursuant to section 17 of the Amalgamation Act or the preconditions for the waiver. Such exception may be granted for a maximum period of three years at a time. The central cooperative has utilised the permission granted by the supervisor to waive the application of the own funds, liquidity and risk management requirements on the affiliated credit institutions.

The roles of the central cooperative and the affiliated credit institutions in OP Amalgamation

OP Cooperative operates as the statutory central body of OP Amalgamation and as a holding company for the strategic holdings of OP Financial Group.

The central cooperative is under a statutory obligation to:

- supervise the affiliated credit institutions
- issue binding instructions to them on risk management, good corporate governance and internal control to secure liquidity and capital adequacy of the amalgamation; and
- issue binding instructions on compliance with standardised accounting policies in the preparation of the consolidated financial statements.

In the manner specified in its bylaws, the central cooperative may also confirm general principles to be followed by the affiliated credit institutions in their operations relevant to OP Amalgamation. The affiliated credit institutions are, among other things, bound by OP Financial Group's Risk Appetite Statement, Risk Appetite Framework and detailed risk policies as confirmed by the central cooperative's Board of Directors. The risk management of OP Financial Group is described in more detail in other chapters of this Report by the Board of Directors and in OP Financial Group's Capital Adequacy and Risk Management Report.

The central cooperative supervises the affiliated credit institutions in order to ensure that they comply with the instructions issued and principles confirmed by the central cooperative, notably that they do not, in the course of their operations, take any risk of such magnitude that poses a substantial danger to the consolidated financial position of OP Amalgamation. The affiliated credit institutions are accountable to the central cooperative in accordance with the principles of joint and several liability. Based on said principles, the central cooperative can take measures vis-à-vis the affiliated credit institutions. These measures range from tighter monitoring to expelling the affiliated credit institution from the Amalgamation.

The central cooperative is responsible for providing centralised services to the affiliated credit institutions, including strategic and capital planning, liquidity and funding, risk management, accounting, financial and supervisory reporting, legal services, HR services, development and maintenance of IT systems, service development, and marketing. The affiliated credit institutions, while operationally dependent on the centralised services provided by the central cooperative, are independent in maintaining their capital base and deciding on the distribution of their profits (within the limits of the Group capital plan) as well as in respect of their customer selection and individual business decisions.

Solidarity mechanism

General principles

The mutual solidarity mechanism applied within OP Amalgamation is laid down in the Amalgamation Act. The central cooperative it is responsible for the implementation of the solidarity mechanism (calculation of contributions from the affiliated credit institutions and the collection of the contributions as well as forwarding the contributions to the affiliated credit institution being supported) and it has the ultimate liability for the obligations of the affiliated credit institutions. The affiliated credit institutions have a recourse right on the central cooperative for the amount of the contribution they have made to the central cooperative under the solidarity mechanism. The central cooperative has, in turn, a recourse right on the supported affiliated credit institution for the amount paid to it by the central cooperative.

The solidarity mechanism consists of the following elements:

- mutual capital support to ensure the capital adequacy of an affiliated credit institution which does not meet its statutory capital requirements;
- joint and several liability between the affiliated credit institutions to ensure the liquidity of an affiliated credit institution that cannot meet its due obligations;
- the additional payment obligation of the affiliated credit institutions in the insolvency of the central cooperative in accordance with the Finnish Co-operatives Act.

An affiliated credit institution will remain liable for its obligations under the solidarity mechanism for the first five years after withdrawal or expulsion from OP Amalgamation.

Mutual capital support

Each affiliated credit institution has the obligation to lend to the central cooperative an annual amount of up to 0.5% of its balance sheet total, to be used by the central cooperative to recapitalise an affiliated credit institution that fails to meet its statutory capital requirements.

Joint and several liability

A creditor who has not received payment for an overdue claim from an affiliated credit institution may demand payment from the central cooperative. An affiliated credit institution may not be declared bankrupt upon a creditor's petition before the creditor has demanded the repayment of the principal debt from the central cooperative.

Other affiliated credit institutions have a statutory obligation to lend to the central cooperative the amount it has paid on behalf of the affiliated credit institution that has failed to meet its payment obligation. The proportional share of each affiliated credit institution is calculated on the basis of the share of its balance sheet total of the aggregate balance sheet total of all affiliated credit institutions.

OP Corporate Bank is, on a centralised basis, in charge of the Group's liquidity reserve and it guarantees the liquidity of the central cooperative and the affiliated credit institutions in all situations. Because the joint liability is thus automatically implemented by a single liquidity pool within OP Amalgamation, the procedural provisions laid down in the Amalgamation Act need not be applied in practice.

Refinancing liability of the affiliated credit institutions in the central cooperative's insolvency

The affiliated credit institutions, as members of the central cooperative, have unlimited refinancing liability in case of the central cooperative's liquidation or bankruptcy, in accordance with chapter 14 of the Co-operatives Act. The liability of each member is determined on the basis of its balance sheet total assets.

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

According to the legislation governing the Deposit Guarantee Fund, the deposit banks belonging to an amalgamation of deposit banks are considered to constitute a single bank in respect of deposit guarantee.

The Deposit Guarantee Fund reimburses a maximum total of 100,000 euros to an individual account holder who has receivables from one or more affiliated credit institutions of OP Amalgamation.

Under the legislation concerning the Investors' Compensation Fund, the amalgamation of deposit banks is also considered to constitute a single credit institution in respect of investor compensation. The Investors' Compensation Fund's assets may be used to compensate an investor's receivables from one or more affiliated credit institutions of OP Amalgamation up to a total maximum of 20,000 euros.

The Finnish Financial Stability Authority is responsible for deposit protection. It administers the Financial Stability Fund, which is a public fund outside the government budget. The Fund consists of a resolution fund accrued by collecting annual stability fees from credit institutions and investment firms, and a deposit protection fund accrued by collecting annual deposit protection fees from deposit banks.

Outlook for 2024

The economy is expected to decline in early 2024 but decelerating inflation and falling interest rates will pave the way for economic recovery towards the year end. An exceptional degree of uncertainty is still associated with the business environment. Combined with increased geopolitical crises and tensions, developments in capital markets may abruptly affect the business environment.

OP Financial Group's operating profit for 2024 is expected to be at a good level but lower than that for 2023.

The most significant uncertainties affecting OP Financial Group's earnings performance are associated with developments in the business environment, changes in the interest rate and investment environment and developments in impairment loss on receivables. 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 on developments in the economy, and actual results may differ materially from those expressed in the forward-looking statements.

Key income statement and balance sheet items, and financial indicators

Key income statement items, € million	2023	2022	2021	2020	2019
Net interest income	2,871	1,618	1,409	1,284	1,241
Impairment loss on receivables	-269	-115	-158	-225	-87
Net commissions and fees	908	942	1,034	931	936
Insurance service result	81	106			
Insurance revenue	2,000	1,898			
Insurance service expenses	-1,824	-1,898			
Reinsurance contracts	-95	106			
Net insurance income			743	572	421
Investment income	389	245			
Net investment income			376	184	530
Overlay approach			-118	-3	-105
Other operating income	40	67	54	132	53
Personnel costs	-964	-856	-914	-715	-781
Depreciation/amortisation and impairment loss	-226	-214	-283	-273	-278
Other operating expenses	-1,011	-892	-810	-852	-844
Transfers to insurance service result	485	416			
OP bonuses to owner-customers	-255	-198	-205	-251	-249
Operating profit	2,050	1,120	1,127	785	838

Key balance sheet items – assets, € million	2023	2022	2021	2020	2019
Cash and cash equivalents	19,755	35,004	32,846	21,827	11,988
Receivables from credit institutions	858	798	541	306	246
Receivables from customers	97,836	98,546	96,947	93,644	91,463
Derivative contracts	3,401	4,117	3,467	5,215	4,824
Investment assets	21,896	20,742	22,945	23,562	23,509
Assets covering unit-linked contracts	12,581	11,597	13,137	11,285	10,831
Insurance contract assets	0	0			
Reinsurance contract assets	106	245			
Intangible assets and property, plant and equipment	1,462	1,576	1,658	1,944	1,930
Other items	2,495	3,065	2,569	2,424	2,232
Total assets	160,391	175,619	174,110	160,207	147,024

Key balance sheet items – liabilities and equity, € million	2023	2022	2021	2020	2019
Liabilities to credit institutions	66	12,301	16,650	8,086	2,632
Liabilities to customers	76,656	81,468	77,898	73,422	68,289
Derivative contracts	3,271	4,432	2,266	3,424	3,316
Insurance contract liabilities	11,589	11,446			
Reinsurance contract liabilities	0	2			
Insurance liabilities			8,773	9,374	9,476
Liabilities from investment agreements	7,944	7,211	13,210	11,323	10,862
Debt securities issued to the public	37,511	37,438	34,895	34,706	34,369
Other liabilities	7,092	6,724	6,233	6,761	5,510
Equity capital	16,262	14,668	14,184	13,112	12,570
Total liabilities and shareholders' equity	160,391	175,691	174,110	160,207	147,024

Figures and ratios	2023	2022	2021	2020	2019
Return on equity, ROE, %	10.6	6.3	6.6	5.0	5.5
Return on assets, ROA, %	1.0	0.5	0.5	0.4	0.5
Cost/income ratio, %	46	58	55	59	60
Average personnel	13,533	13,077	13,009	12,486	12,376
Common Equity Tier 1 (CET1) capital ratio, %	19.2	17.4	18.2	18.9	19.5
Capital adequacy ratio, %	21.2	19.3	20.4	21.7	21.1
Capital adequacy under the Act on the Supervision of Financial and Insurance Conglomerates, %	144	137	146	150	138

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. The preceding years' figures (2019, 2020 and 2021) have not been adjusted. Note 3 (Changes in accounting policies and presentation) of the Financial Statements provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

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. The formulas for the key figures and ratios can be derived from the figures presented in the Financial Statements and the Report by the Board of Directors, so separate reconciliation statements for the Alternative Performance Measures are not presented.

Alternative Performance Measures

Key figure or ratio	Formula		Description
Return on equity (ROE), %	Profit for the financial year / Equity (average at beginning and end of period)	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 / Equity (average at beginning and end of period)	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 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 / 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.
Cost/income ratio, %	Total expenses / Total income	x 100	The ratio describes the ratio of expenses to income. The lower that ratio, the better.
Total income	Net interest income + Net commissions and fees + Insurance service result + Investment income + Other operating income + Transfers to insurance service result		The figure describes the development of all income.
Total expenses	Personnel costs + Depreciation/amortisation and impairment loss + Other operating expenses		The figure describes the development of all expenses.
Investment income	Net insurance finance income + Net interest income from financial assets held for trading + Net investment income		The figure describes the development of all income related to investment.

Loan portfolio	Loans and loss allowance included in the balance sheet item Receivables from customers.		Total amount of loans granted to customers.
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 that ratio, the better.
Deposits	Deposits included in balance sheet item Liabilities to customers		Total amount of deposits by customers.
Coverage ratio, %	Loss allowance / Balance sheet items involving credit risk + Credit equivalent of off-balance-sheet items	x 100	The ratio describes the extent to which 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 model (significant increase in credit risk), in other words how many contracts were in stage 2 before moving to stage 3.
Income from customer business	Net interest income + insurance service result + net commissions and fees		Income from customer business describes the development of net interest income, insurance service result and net commissions and fees. Income directly from customers is presented mainly under these items.
Non-life insurance:			
Combined ratio, %	Risk ratio + Cost ratio		The combined ratio is a key indicator of efficiency for non-life insurance companies. The ratio describes whether the insurance revenue is sufficient to cover the company's expenses during the financial year.
Risk ratio, %	Claims incurred, net / Net insurance revenue	x 100	The ratio describes how much of the insurance revenue is spent on claims paid. Claims incurred (net) are calculated by deducting operating expenses and reinsurers' share from insurance service expenses. Net insurance revenue is calculated by deducting reinsurers' share from insurance revenue.
Cost ratio, %	Operating expenses, net / Net insurance revenue	x 100	The ratio describes the ratio of the company's costs (acquisition, management, administration and claims settlement expenses) to its insurance revenue.

Key indicators based on a separate calculation

Capital adequacy ratio, %	Total own funds / Total risk exposure amount	x 100	The ratio describes a credit institution's capital adequacy and shows the ratio of own funds 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.
Common Equity Tier 1 (CET1) capital 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.
Solvency ratio, %	Capital base / Solvency capital requirement (SCR)	x 100	The ratio describes an insurance company's solvency and shows the ratio of the capital base 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 end of financial year	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 end of financial year	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 end of financial year	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, %	$\frac{\text{Performing forborne exposures (gross)}}{\text{Doubtful receivables at end of financial year}}$	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, %	$\frac{\text{Loss allowance for receivables from customers in the balance sheet}}{\text{Doubtful receivables at end of financial year}}$	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, € mill.	31 Dec 2023	31 Dec 2022
OP Financial Group's equity capital	16,262	14,668*
Excluding the effect of insurance companies on the Group's equity	-1,297	-1,045*
Fair value reserve, cash flow hedge	212	337
Common Equity Tier 1 (CET1) before deductions	15,177	13,951
Intangible assets	-314	-343
Excess funding of pension liability and valuation adjustments	-216	-231
Cooperative capital deducted from own funds	-198	-163
Planned profit distribution and unpaid profit distribution for previous FY	-148	-144
Shortfall of ECL minus expected losses		-425
Insufficient coverage for non-performing exposures	-190	-76
CET1 capital	14,111	12,569
Tier 1 capital (T1)	14,111	12,569
Debenture loans	1,308	1,308
Debentures to which transition rules apply	57	91
General credit risk adjustments	120	
Tier 2 capital (T2)	1,484	1,399
Total own funds	15,595	13,968

Risk exposure amount, € million	31 Dec 2023	31 Dec 2022
Credit and counterparty risk	65,997	60,437
Standardised Approach (SA)**	65,997	8,476
Central government and central banks exposure	509	495
Credit institution exposure	603	627
Corporate exposure	27,591	5,244
Retail exposure	10,174	1,245
Mortgage-backed exposure	18,988	153
Defaulted exposure	2,309	72
Items of especially high risk	1,697	
Covered bonds	608	540
Receivables to which a short-term credit rating can be applied		0
Collective investment undertakings (CIU)	201	0
Equity investments	2,410	1
Other	907	99
Internal Ratings-based Approach (IRB)		51,960
Corporate exposure		29,997
Retail exposure		12,002
Equity investments		8,944
Other		1,018
Risks of the CCP's default fund	1	0
Securitisations	50	111
Market and settlement risk (Standardised Approach)	1,006	1,070
Operational risk (Standardised Approach)	4,156	3,851
Valuation adjustment (CVA)	217	179
Other risks***	2,084	6,678
Total risk exposure amount	73,511	72,327

* Adoption of IFRS 17 Insurance Contracts on 1 January 2023 has been taken into account in equity capital.
** OP Financial Group adopted the Standardised Approach in its capital adequacy measurement and reporting during the first quarter of 2023.
*** Risks not otherwise covered. A year ago, the risk-weighted assets (RWA) floor based on the Standardised Approach.

Ratios, %	31 Dec 2023	31 Dec 2022
CET1 capital ratio	19.2	17.4
Tier 1 ratio	19.2	17.4
Capital adequacy ratio	21.2	19.3

Ratios, fully loaded, %	31 Dec 2023	31 Dec 2022
CET1 capital ratio	19.2	17.4
Tier 1 ratio	19.2	17.4
Capital adequacy ratio	21.1	19.2

Capital requirement, EUR million	31 Dec 2023	31 Dec 2022
Own funds	15,595	13,968
Capital requirement	10,558	9,979
Buffer for capital requirements	5,037	3,989

The capital requirement of 14.4% comprises the minimum requirement of 8%, the capital conservation buffer of 2.5%, the O-SII buffer requirement of 1.5%, the minimum requirement (P2R) of 2.25% set by the ECB and the country-specific countercyclical capital buffers for foreign exposures.

Leverage ratio, EUR million	31 Dec 2023	31 Dec 2022
Tier 1 capital (T1)	14,111	12,569
Total exposure	148,849	165,362
Leverage ratio, %	9.5	7.6

The leverage ratio describes indebtedness. The minimum requirement for the leverage ratio is 3%.

OP Financial Group's capital adequacy under the Act on the Supervision of Financial and Insurance Conglomerates

€ million	31 Dec 2023	31 Dec 2022
OP Financial Group's equity capital	16,262	14,668****
Other items included in Banking's Tier 1 and Tier 2 capital	1,484	1,399
Other sector-specific items excluded from capital base	-574	-442
Goodwill and intangible assets	-1,000	-1,077
Insurance business valuation differences*	855	749****
Proposed profit distribution	-148	-144
Items under IFRS deducted from capital base**	48	177
Shortfall of ECL minus expected losses		-370
Conglomerate's total capital base	16,928	14,961
Regulatory capital requirement for credit institutions***	10,227	9,661
Regulatory capital requirement for insurance operations*	1,511	1,237
Conglomerate's total minimum capital requirement	11,738	10,898
Conglomerate's capital adequacy	5,190	4,063
Conglomerate's capital adequacy ratio (capital base/minimum of capital base) (%)	144	137

* Differences between fair values and carrying amounts based on the solvency of insurance companies and an estimate of SCR
** Excess funding of pension liability, portion of cash flow hedge of fair value reserve
*** Total risk exposure amount x 14.4%
**** Adoption of IFRS 17 Insurance Contracts on 1 January 2023 has been taken into account in equity capital
Transitional provisions have been taken into account in figures.

EU taxonomy – Information concerning environmentally sustainable economic activities

Disclosure required under Article 8 of Regulation (EU) 2020/852 (asset managers)
OP Fund Management Company Ltd and OP Real Estate Asset Management Ltd
All monetary values are reported in MEUR.

The weighted average value of all the investments that are directed at funding, or are associated with taxonomy-aligned economic activities **relative to the value of total assets covered by the KPI**, with following weights for investments in undertakings per below: Turnover-based: 8.4% Capital expenditures-based: 4.8%	The weighted average value of all the investments that are directed at funding, or are associated with taxonomy-aligned economic activities, with following weights for investments in undertakings per below: Turnover-based: 2,035 Capital expenditures-based: 1,172
The percentage of assets covered by the KPI relative to total investments (total AuM). Excluding investments in sovereign entities. Coverage ratio: 92.3%	The monetary value of assets covered by the KPI. Excluding investments in sovereign entities. Coverage: 24,338
Additional, complementary disclosures: breakdown of **denominator** of the KPI	
The percentage of derivatives relative to total assets covered by the KPI: 0.1%	The value in monetary amounts of derivatives: 36
The proportion of **exposures to EU financial and non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 4.8% For financial undertakings: 4.6%	Value of **exposures to EU financial and non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 1,172 For financial undertakings: 1,117
The proportion of **exposures to financial and non-financial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 36.3% For financial undertakings: 10.1%	Value of **exposures to financial and non-financial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 8,828 For financial undertakings: 2,466
The proportion of **exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 15.4% For financial undertakings: 6.1%	Value of **exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 3,754 For financial undertakings: 1,483
The proportion of **exposures to other counterparties and assets (including investments in real estate) over** total assets covered by the KPI: 22.5%	Value of **exposures to other counterparties and assets (including investments in real estate)**: 5,481
The value of all the investments that are funding **economic activities that are not taxonomy-eligible** relative to the value of total assets covered by the KPI: Turnover-based: 85.7% Capital expenditures-based: 84.1%	Value of all the investments that are funding **economic activities that are not taxonomy-eligible**: Turnover-based: 20,860 Capital expenditures-based: 20,466
The value of all the investments that are funding taxonomy-eligible economic activities, **but not taxonomy-aligned** relative to the value of total assets covered by the KPI: Turnover-based: 5.9% Capital expenditures-based: 11.1%	Value of all the investments that are funding taxonomy-eligible economic activities, **but not taxonomy-aligned**: Turnover-based: 1,443 Capital expenditures-based: 2,700

Disclosure required under Article 8 of Regulation (EU) 2020/852 (asset managers)
OP Fund Management Company Ltd and OP Real Estate Asset Management Ltd
All monetary values are reported in MEUR.

Additional, complementary disclosures: breakdown of **numerator** of the KPI		
The proportion of **taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: Turnover-based: 1.3% Capital expenditures-based: 2.1% For financial undertakings: Turnover-based: - Capital expenditures-based: -		Value of **taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: Turnover-based: 319 Capital expenditures-based: 514 For financial undertakings: Turnover-based: - Capital expenditures-based: -
The proportion of **taxonomy-aligned exposures to other counterparties and assets (including investments in real estate)** over total assets covered by the KPI: Turnover-based: 7.1% Capital expenditures-based: 2.7%		Value of **taxonomy-aligned exposures to other counterparties and assets (including investments in real estate)**: Turnover-based: 1,716 Capital expenditures-based: 658
Breakdown of the numerator of the KPI per environmental objective		
Taxonomy-aligned activities:		
(1) Climate change mitigation	Turnover: 8.3% CapEx: 4.8%	Transitional activities: 0.2% (Turnover); 0.2% (CapEx) Enabling activities: 0.6% (Turnover); 0.7% (CapEx)
(2) Climate change adaptation	Turnover: 0.0% CapEx: 0.0%	Enabling activities: 0.0% (Turnover); 0.0% (CapEx)

0. Summary of KPIs to be disclosed by credit institutions under Article 8 Taxonomy Regulation
OP Amalgamation
All monetary values are reported in MEUR.

		Total environmentally sustainable assets	KPI (1)	KPI (2)	% coverage (over total assets) (3)	% of assets excluded from the numerator of the GAR (Article 7(2) and (3) and Section 1.1.2. of Annex V)	% of assets excluded from the denominator of the GAR (Article 7(1) and Section 1.2.4 of Annex V)
Main KPI	**Green asset ratio (GAR) stock**	6,680	5.9%	6.6%	80.1%	57.0%	20.0%

		Total environmentally sustainable activities	KPI	KPI	% coverage (over total assets)	% of assets excluded from the numerator of the GAR (Article 7(2) and (3) and Section 1.1.2. of Annex V)	% of assets excluded from the denominator of the GAR (Article 7(1) and Section 1.2.4 of Annex V)
Additional KPIs (4)	GAR (flow)	956	5.6%	6.3%	45.9%	74.7%	54.1%
	Financial guarantees	16	8.2%	42.5%			
	Assets under management	2,946	8.6%	4.0%			

1) based on the turnover KPI of the counterparty
2) based on the CapEx KPI of the counterparty
3) % of assets covered by the KPI over banks´ total assets
4) Disclosure of KPIs relating to trading stocks and fee and commission income applies from 2026 onwards.

1. Assets for the calculation of GAR
OP Amalgamation
Based on turnover
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	i	j	ab	ac	ad	ae	af
	Million EUR	Total [gross] carrying amount	Disclosure reference date T													
			Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)				
			Of which towards taxonomy relevant sectors (Taxonomy-eligible)					Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				
				Of which environmentally sustainable (Taxonomy-aligned)					Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)			
					Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling
	GAR - Covered assets in both numerator and denominator															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	60,422	49,294	6,656	5,567	631	178	42	24	0	20	49,337	6,680	5,567	631	197
2	**Financial undertakings**	**6,534**	**2,191**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,191**	**0**	**0**	**0**	**0**
3	Credit institutions	4,282	1,166	0	0	0	0	0	0	0	0	1,166	0	0	0	0
4	Loans and advances	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Debt securities, including UoP	4,274	1,166	0	0	0	0	0	0	0	0	1,166	0	0	0	0
6	Equity instruments	0	0	0		0	0	0	0		0	0	0		0	0
7	Other financial corporations	2,252	1,025	0	0	0	0	0	0	0	0	1,025	0	0	0	0
8	of which investment firms	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Loans and advances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Debt securities, including UoP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Equity instruments	0	0	0		0	0	0	0		0	0	0		0	0
12	of which management companies	140	19	0	0	0	0	0	0	0	0	19	0	0	0	0
13	Loans and advances	140	19	0	0	0	0	0	0	0	0	19	0	0	0	0
14	Debt securities, including UoP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Equity instruments	0	0	0		0	0	0	0		0	0	0		0	0
16	of which insurance undertakings	2,077	1,006	0	0	0	0	0	0	0	0	1,006	0	0	0	0
17	Loans and advances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Debt securities, including UoP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Equity instruments	2,077	1,006	0		0	0	0	0		0	1,006	0		0	0
20	**Non-financial undertakings**	**7,063**	**2,325**	**1,089**	**0**	**631**	**178**	**42**	**24**	**0**	**20**	**2,368**	**1,113**	**0**	**631**	**197**
21	Loans and advances	6,678	2,173	979	0	567	139	39	22	0	18	2,212	1,001	0	567	156
22	Debt securities, including UoP	384	152	110	0	64	39	4	2	0	2	156	112	0	64	41
23	Equity instruments	1	0	0		0	0	0	0		0	0	0		0	0
24	**Households**	**46,825**	**44,778**	**5,567**	**5,567**	**0**	**0**	**0**	**0**	**0**	**0**	**44,778**	**5,567**	**5,567**	**0**	**0**
25	of which loans collateralised by residential immovable property	44,509	42,696	5,567	5,567	0	0	0	0	0	0	42,696	5,567	5,567	0	0
26	of which building renovation loans	2,248	2,032	0	0	0	0	0	0	0	0	2,032	0	0	0	0
27	of which motor vehicle loans	2,019	1,816	0	0	0	0					1,816	0	0	0	0
28	**Local governments financing**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
29	Housing financing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Other local government financing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	**Collateral obtained by taking possession: residential and commercial immovable properties**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
32	**Assets excluded from the numerator for GAR calculation (covered in the denominator)**	**52,056**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
33	**Financial and Non-financial undertakings**	**39,188**														
34	SMEs and NFCs (other than SMEs) not subject to NFRD disclosure obligations	36,407														
35	Loans and advances	34,205														
36	of which loans collateralised by commercial immovable property	9,231														
37	of which building renovation loans	2,937														
38	Debt securities	1,934														
39	Equity instruments	269														
40	Non-EU country counterparties not subject to NFRD disclosure obligations	2,781														
41	Loans and advances	538														
42	Debt securities	2,243														
43	Equity instruments	0														
44	**Derivatives**	**1,227**														
45	**On demand interbank loans**	**195**														
46	**Cash and cash-related assets**	**160**														
47	**Other categories of assets (e.g. Goodwill, commodities etc.)**	**11,286**														
48	Total GAR assets	112,479	49,294	6,656	5,567	631	178	42	24	0	20	49,337	6,680	5,567	631	197
49	**Assets not covered for GAR calculation**	**28,030**														
50	**Central governments and Supranational issuers**	**5,343**														
51	**Central banks exposure**	**20,195**														
52	**Trading book**	**2,492**														
53	Total assets	140,508	49,294	6,656	5,567	631	178	42	24	0	20	49,337	6,680	5,567	631	197
	Off-balance sheet exposures - Undertakings subject to NFRD disclosure obligations															
54	Financial guarantees	201	31	9	0	1	6	8	8	0	0	39	16	0	1	6
55	Assets under management	34,404	4,633	2,931	0	69	972	3	16	0	13	4,636	2,946	0	69	985
56	Of which debt securities	6,464	356	117	0	11	43	0	3	0	2	356	120	0	11	45
57	Of which equity instruments	21,781	1,657	1,098	0	58	930	3	12	0	11	1,660	1,110	0	58	940

Columns k–aa have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.
Columns ag–bk have been omitted from the table as they relate to data from the previous reference period that are not yet available.

1. Assets for the calculation of GAR
OP Amalgamation
Based on CapEx
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	i	j	ab	ac	ad	ae	af
	Million EUR	Total [gross] carrying amount	Disclosure reference date T													
			Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)				
			Of which towards taxonomy relevant sectors (Taxonomy-eligible)					Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				
				Of which environmentally sustainable (Taxonomy-aligned)					Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)			
					Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling
	GAR - Covered assets in both numerator and denominator															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	60,422	50,334	7,354	5,567	628	219	57	19	0	4	50,391	7,372	5,567	628	223
2	**Financial undertakings**	**6,534**	**2,129**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,129**	**0**	**0**	**0**	**0**
3	Credit institutions	4,282	1,104	0	0	0	0	0	0	0	0	1,104	0	0	0	0
4	Loans and advances	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Debt securities, including UoP	4,274	1,104	0	0	0	0	0	0	0	0	1,104	0	0	0	0
6	Equity instruments	0	0	0		0	0	0	0		0	0	0		0	0
7	Other financial corporations	2,252	1,025	0	0	0	0	0	0	0	0	1,025	0	0	0	0
8	of which investment firms	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Loans and advances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Debt securities, including UoP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Equity instruments	0	0	0		0	0	0	0		0	0	0		0	0
12	of which management companies	140	19	0	0	0	0	0	0	0	0	19	0	0	0	0
13	Loans and advances	140	19	0	0	0	0	0	0	0	0	19	0	0	0	0
14	Debt securities, including UoP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Equity instruments	0	0	0		0	0	0	0		0	0	0		0	0
16	of which insurance undertakings	2,077	1,006	0	0	0	0	0	0	0	0	1,006	0	0	0	0
17	Loans and advances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Debt securities, including UoP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Equity instruments	2,077	1,006	0		0	0	0	0		0	1,006	0		0	0
20	**Non-financial undertakings**	**7,063**	**3,427**	**1,787**	**0**	**628**	**219**	**57**	**19**	**0**	**4**	**3,484**	**1,806**	**0**	**628**	**223**
21	Loans and advances	6,678	3,247	1,654	0	561	169	54	18	0	4	3,301	1,672	0	561	172
22	Debt securities, including UoP	384	180	133	0	67	50	3	0	0	0	183	133	0	67	51
23	Equity instruments	1	0	0		0	0	0	0		0	0	0		0	0
24	**Households**	**46,825**	**44,778**	**5,567**	**5,567**	**0**	**0**	**0**	**0**	**0**	**0**	**44,778**	**5,567**	**5,567**	**0**	**0**
25	of which loans collateralised by residential immovable property	44,509	42,696	5,567	5,567	0	0	0	0	0	0	42,696	5,567	5,567	0	0
26	of which building renovation loans	2,248	2,032	0	0	0	0	0	0	0	0	2,032	0	0	0	0
27	of which motor vehicle loans	2,019	1,816	0	0	0	0					1,816	0	0	0	0
28	**Local governments financing**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
29	Housing financing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Other local government financing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	**Collateral obtained by taking possession: residential and commercial immovable properties**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
32	**Assets excluded from the numerator for GAR calculation (covered in the denominator)**	**52,056**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
33	**Financial and Non-financial undertakings**	**39,188**														
34	SMEs and NFCs (other than SMEs) not subject to NFRD disclosure obligations	36,407														
35	Loans and advances	34,205														
36	of which loans collateralised by commercial immovable property	9,231														
37	of which building renovation loans	2,937														
38	Debt securities	1,934														
39	Equity instruments	269														
40	Non-EU country counterparties not subject to NFRD disclosure obligations	2,781														
41	Loans and advances	538														
42	Debt securities	2,243														
43	Equity instruments	0														
44	**Derivatives**	**1,227**														
45	**On demand interbank loans**	**195**														
46	**Cash and cash-related assets**	**160**														
47	**Other categories of assets (e.g. Goodwill, commodities etc.)**	**11,286**														
48	**Total GAR assets**	**112,479**	**50,334**	**7,354**	**5,567**	**628**	**219**	**57**	**19**	**0**	**4**	**50,391**	**7,372**	**5,567**	**628**	**223**
49	**Assets not covered for GAR calculation**	28,030														
50	**Central governments and Supranational issuers**	5,343														
51	**Central banks exposure**	20,195														
52	**Trading book**	2,492														
53	**Total assets**	**140,508**	**50,334**	**7,354**	**5,567**	**628**	**219**	**57**	**19**	**0**	**4**	**50,391**	**7,372**	**5,567**	**628**	**223**
	Off-balance sheet exposures - Undertakings subject to NFRD disclosure obligations															
54	Financial guarantees	201	66	52	0	3	24	34	34	0	0	100	86	0	3	24
55	Assets under management	34,404	5,890	1,376	0	68	260	0	16	0	11	5,890	1,392	0	68	271
56	Of which debt securities	6,464	473	170	0	13	59	0	6	0	4	473	177	0	13	64
57	Of which equity instruments	21,781	2,798	547	0	55	201	0	9	0	7	2,798	557	0	55	207

Columns k–aa have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.
Columns ag–bk have been omitted from the table as they relate to data from the previous reference period that are not yet available.

2. GAR sector information
OP Amalgamation
Based on turnover
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	y	z	aa	ab
		Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)			
		Non-Financial corporates (Subject to NFRD)		SMEs and other NFC not subject to NFRD		Non-Financial corporates (Subject to NFRD)		SMEs and other NFC not subject to NFRD		Non-Financial corporates (Subject to NFRD)		SMEs and other NFC not subject to NFRD	
	Breakdown by sector - NACE 4 digits level (code and label)	[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount	
		Mn EUR	Of which environmentally sustainable (CCM)	Mn EUR	Of which environmentally sustainable (CCM)	Mn EUR	Of which environmentally sustainable (CCA)	Mn EUR	Of which environmentally sustainable (CCA)	Mn EUR	Of which environmentally sustainable (CCM + CCA)	Mn EUR	Of which environmentally sustainable (CCM + CCA)
1	0812 Operation of gravel and sand pits; mining of clays and kaolin	0	0			0	0			0	0		
2	1031 Processing and preserving of potatoes	0	0			0	0			0	0		
3	1101 Distilling, rectifying and blending of spirits	1	0			0	0			1	0		
4	1610 Sawmilling and planing of wood	0	0			0	0			0	0		
5	1621 Manufacture of veneer sheets and wood-based panels	0	0			0	0			0	0		
6	1629 Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	0	0			0	0			0	0		
7	1711 Manufacture of pulp	0	0			0	0			0	0		
8	1712 Manufacture of paper and paperboard	17	17			0	0			17	17		
9	1721 Manufacture of corrugated paper and paperboard and of containers of paper and paperboard	0	0			0	0			0	0		
10	1812 Other printing	0	0			1	0			1	0		
11	1920 Manufacture of refined petroleum products	100	92			0	0			100	92		
12	2013 Manufacture of other inorganic basic chemicals	0	0			0	0			0	0		
13	2015 Manufacture of fertilisers and nitrogen compounds	0	0			0	0			0	0		
14	2059 Manufacture of other chemical products n.e.c.	0	0			0	0			0	0		
15	2211 Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres	63	63			0	0			63	63		
16	2219 Manufacture of other rubber products	0	0			0	0			0	0		
17	2221 Manufacture of plastic plates, sheets, tubes and profiles	0	0			0	0			0	0		
18	2313 Manufacture of hollow glass	0	0			0	0			0	0		
19	2351 Manufacture of cement	0	0			0	0			0	0		
20	2361 Manufacture of concrete products for construction purposes	0	0			0	0			0	0		
21	2363 Manufacture of ready-mixed concrete	0	0			0	0			0	0		
22	2410 Manufacture of basic iron and steel and of ferro-alloys	74	63			0	0			74	63		
23	2511 Manufacture of metal structures and parts of structures	0	0			0	0			0	0		
24	2512 Manufacture of doors and windows of metal	0	0			0	0			0	0		
25	2573 Manufacture of tools	0	0			0	0			0	0		
26	2599 Manufacture of other fabricated metal products n.e.c.	0	0			0	0			0	0		
27	2611 Manufacture of electronic components	22	3			3	3			25	6		
28	2630 Manufacture of communication equipment	0	0			0	0			0	0		
29	2651 Manufacture of instruments and appliances for measuring, testing and navigation	0	0			0	0			0	0		
30	2660 Manufacture of irradiation, electromedical and electrotherapeutic equipment	0	0			0	0			0	0		
31	2711 Manufacture of electric motors, generators and transformers	2	1			0	0			2	1		
32	2712 Manufacture of electricity distribution and control apparatus	1	0			0	0			1	0		
33	2790 Manufacture of other electrical equipment	0	0			0	0			1	0		
34	2811 Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	7	0			0	0			7	0		
35	2814 Manufacture of other taps and valves	0	0			0	0			0	0		
36	2822 Manufacture of lifting and handling equipment	104	18			0	0			104	18		
37	2825 Manufacture of non-domestic cooling and ventilation equipment	0	0			0	0			0	0		
38	2829 Manufacture of other general-purpose machinery n.e.c.	0	0			0	0			0	0		
39	2849 Manufacture of other machine tools	0	0			0	0			0	0		
40	2892 Manufacture of machinery for mining, quarrying and construction	1	0			0	0			1	0		
41	2895 Manufacture of machinery for paper and paperboard production	1	1			0	0			1	1		
42	2899 Manufacture of other special-purpose machinery n.e.c.	0	0			0	0			0	0		
43	2910 Manufacture of motor vehicles	0	0			0	0			0	0		
44	2931 Manufacture of electrical and electronic equipment for motor vehicles	0	0			0	0			0	0		
45	3011 Building of ships and floating structures	0	0			0	0			0	0		
46	3020 Manufacture of railway locomotives and rolling stock	40	32			0	0			40	32		
47	3030 Manufacture of air and spacecraft and related machinery	0	0			0	0			0	0		
48	3312 Repair of machinery	2	0			0	0			2	0		
49	3315 Repair and maintenance of ships and boats	0	0			0	0			0	0		
50	3317 Repair and maintenance of other transport equipment	0	0			0	0			0	0		
51	3320 Installation of industrial machinery and equipment	0	0			0	0			0	0		
52	3511 Production of electricity	768	673			0	0			768	673		
53	3513 Distribution of electricity	0	0			0	0			0	0		
54	3514 Trade of electricity	0	0			0	0			0	0		
55	3522 Distribution of gaseous fuels through mains	6	4			0	0			6	4		
56	3523 Trade of gas through mains	7	4			0	0			7	4		
57	3530 Steam and air conditioning supply	0	0			0	0			0	0		
58	3700 Sewerage	0	0			0	0			0	0		
59	3811 Collection of non-hazardous waste	11	10			0	0			11	10		
60	3822 Treatment and disposal of hazardous waste	1	1			0	0			1	1		
61	4110 Development of building projects	229	13			0	0			229	13		
62	4120 Construction of residential and non-residential buildings	145	7			0	0			145	7		
63	4211 Construction of roads and motorways	3	0			0	0			3	0		
64	4222 Construction of utility projects for electricity and telecommunications	9	8			0	0			9	8		
65	4321 Electrical installation	0	0			0	0			0	0		
66	4322 Plumbing, heat and air-conditioning installation	0	0			0	0			0	0		
67	4329 Other construction installation	0	0			0	0			0	0		
68	4332 Joinery installation	0	0			0	0			0	0		
69	4399 Other specialised construction activities n.e.c.	0	0			0	0			0	0		
70	4511 Sale of cars and light motor vehicles	1	0			0	0			1	0		

71	4519 Sale of other motor vehicles	1	0		0	0		1	0	
72	4531 Wholesale trade of motor vehicle parts and accessories	0	0		0	0		0	0	
73	4532 Retail trade of motor vehicle parts and accessories	0	0		0	0		0	0	
74	4614 Agents involved in the sale of machinery, industrial equipment, ships and aircraft	0	0		0	0		0	0	
75	4634 Wholesale of beverages	0	0		0	0		0	0	
76	4639 Non-specialised wholesale of food, beverages and tobacco	0	0		0	0		0	0	
77	4649 Wholesale of other household goods	0	0		0	0		0	0	
78	4651 Wholesale of computers, computer peripheral equipment and software	2	0		0	0		2	0	
79	4652 Wholesale of electronic and telecommunications equipment and parts	0	0		0	0		0	0	
80	4662 Wholesale of machine tools	0	0		0	0		0	0	
81	4663 Wholesale of mining, construction and civil engineering machinery	0	0		0	0		0	0	
82	4669 Wholesale of other machinery and equipment	3	0		0	0		3	0	
83	4671 Wholesale of solid, liquid and gaseous fuels and related products	3	2		0	0		3	2	
84	4673 Wholesale of wood, construction materials and sanitary equipment	0	0		0	0		0	0	
85	4674 Wholesale of hardware, plumbing and heating equipment and supplies	0	0		0	0		0	0	
86	4676 Wholesale of other intermediate products	0	0		0	0		0	0	
87	4690 Non-specialised wholesale trade	1	0		0	0		1	0	
88	4752 Retail sale of hardware, paints and glass in specialised stores	0	0		0	0		0	0	
89	5010 Sea and coastal passenger water transport	0	0		0	0		0	0	
90	5020 Sea and coastal freight water transport	17	1		0	0		17	1	
91	5224 Cargo handling	0	0		0	0		0	0	
92	5229 Other transportation support activities	0	0		0	0		0	0	
93	5320 Other postal and courier activities	0	0		2	0		2	0	
94	5610 Restaurants and mobile food service activities	0	0		0	0		0	0	
95	5813 Publishing of newspapers	0	0		7	0		7	0	
96	5814 Publishing of journals and periodicals	0	0		18	18		18	18	
97	6110 Wired telecommunications activities	0	0		0	0		0	0	
98	6120 Wireless telecommunications activities	2	1		3	3		5	4	
99	6190 Other telecommunications activities	0	0		0	0		0	0	
100	6201 Computer programming activities	0	0		0	0		0	0	
101	6202 Computer consultancy activities	17	2		0	0		17	2	
102	6203 Computer facilities management activities	42	0		0	0		42	0	
103	6399 Other information service activities n.e.c.	0	0		0	0		0	0	
104	6420 Activities of holding companies	25	8		0	0		25	8	
105	6619 Other activities auxiliary to financial services, except insurance and pension funding	0	0		0	0		0	0	
106	6810 Buying and selling of own real estate	0	0		0	0		0	0	
107	6820 Renting and operating of own or leased real estate	403	14		0	0		403	14	
108	6832 Management of real estate on a fee or contract basis	1	1		0	0		1	1	
109	7010 Activities of head offices	139	47		0	0		139	47	
110	7022 Business and other management consultancy activities	20	1		5	0		25	1	
111	7112 Engineering activities and related technical consultancy	1	0		1	0		2	0	
112	7312 Media representation	0	0		0	0		0	0	
113	7711 Renting and leasing of cars and light motor vehicles	15	0		0	0		15	0	
114	7732 Renting and leasing of construction and civil engineering machinery and equipment	11	1		0	0		11	1	
115	8010 Private security activities	0	0		0	0		0	0	
116	8110 Combined facilities support activities	0	0		0	0		0	0	
117	8121 General cleaning of buildings	0	0		0	0		0	0	
118	8219 Photocopying, document preparation and other specialised office support activities	0	0		1	0		1	0	
119	8622 Specialist medical practice activities	0	0		1	0		1	0	
120	8623 Dental practice activities	0	0		0	0		0	0	
121	8690 Other human health activities	0	0		0	0		0	0	

Columns i–x have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.

2. GAR sector information
OP Amalgamation
Based on CapEx
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	y	z	aa	ab
		Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)			
	Breakdown by sector - NACE 4 digits level (code and label)	Non-Financial corporates (Subject to NFRD)		SMEs and other NFC not subject to NFRD		Non-Financial corporates (Subject to NFRD)		SMEs and other NFC not subject to NFRD		Non-Financial corporates (Subject to NFRD)		SMEs and other NFC not subject to NFRD	
		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount	
		Mn EUR	Of which environmentally sustainable (CCM)	Mn EUR	Of which environmentally sustainable (CCM)	Mn EUR	Of which environmentally sustainable (CCA)	Mn EUR	Of which environmentally sustainable (CCA)	Mn EUR	Of which environmentally sustainable (CCM + CCA)	Mn EUR	Of which environmentally sustainable (CCM + CCA)
1	0812 Operation of gravel and sand pits; mining of clays and kaolin	0	0			0	0			0	0		
2	1031 Processing and preserving of potatoes	0	0			0	0			0	0		
3	1089 Manufacture of other food products n.e.c.	0	0			0	0			0	0		
4	1101 Distilling, rectifying and blending of spirits	0	0			0	0			0	0		
5	1105 Manufacture of beer	0	0			0	0			0	0		
6	1610 Sawmilling and planing of wood	1	1			0	0			1	1		
7	1621 Manufacture of veneer sheets and wood-based panels	0	0			0	0			0	0		
8	1629 Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	0	0			0	0			0	0		
9	1711 Manufacture of pulp	172	168			0	0			172	168		
10	1712 Manufacture of paper and paperboard	186	176			0	0			186	176		
11	1721 Manufacture of corrugated paper and paperboard and of containers of paper and paperboard	0	0			0	0			0	0		
12	1812 Other printing	0	0			1	0			1	0		
13	1920 Manufacture of refined petroleum products	267	235			0	0			267	235		
14	2013 Manufacture of other inorganic basic chemicals	0	0			0	0			0	0		
15	2015 Manufacture of fertilisers and nitrogen compounds	1	0			0	0			1	0		
16	2059 Manufacture of other chemical products n.e.c.	0	0			0	0			0	0		
17	2211 Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres	33	33			0	0			33	33		
18	2219 Manufacture of other rubber products	0	0			0	0			0	0		
19	2221 Manufacture of plastic plates, sheets, tubes and profiles	0	0			0	0			0	0		
20	2313 Manufacture of hollow glass	0	0			0	0			0	0		
21	2351 Manufacture of cement	0	0			0	0			0	0		
22	2361 Manufacture of concrete products for construction purposes	0	0			0	0			0	0		
23	2363 Manufacture of ready-mixed concrete	0	0			0	0			0	0		
24	2410 Manufacture of basic iron and steel and of ferro-alloys	46	30			0	0			46	30		
25	2511 Manufacture of metal structures and parts of structures	0	0			0	0			0	0		
26	2512 Manufacture of doors and windows of metal	0	0			0	0			0	0		
27	2573 Manufacture of tools	0	0			0	0			0	0		
28	2599 Manufacture of other fabricated metal products n.e.c.	0	0			0	0			0	0		
29	2611 Manufacture of electronic components	22	7			1	1			22	8		
30	2630 Manufacture of communication equipment	0	0			0	0			0	0		
31	2651 Manufacture of instruments and appliances for measuring, testing and navigation	0	0			0	0			0	0		
32	2660 Manufacture of irradiation, electromedical and electrotherapeutic equipment	0	0			0	0			0	0		
33	2711 Manufacture of electric motors, generators and transformers	4	1			0	0			4	1		
34	2712 Manufacture of electricity distribution and control apparatus	5	5			0	0			5	5		
35	2790 Manufacture of other electrical equipment	1	0			0	0			1	0		
36	2811 Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	16	0			0	0			16	0		
37	2814 Manufacture of other taps and valves	0	0			0	0			0	0		
38	2822 Manufacture of lifting and handling equipment	43	6			0	0			43	6		
39	2825 Manufacture of non-domestic cooling and ventilation equipment	0	0			0	0			0	0		
40	2829 Manufacture of other general-purpose machinery n.e.c.	0	0			0	0			0	0		
41	2849 Manufacture of other machine tools	0	0			0	0			0	0		
42	2892 Manufacture of machinery for mining, quarrying and construction	3	0			0	0			3	0		
43	2895 Manufacture of machinery for paper and paperboard production	1	1			0	0			1	1		
44	2899 Manufacture of other special-purpose machinery n.e.c.	0	0			0	0			0	0		
45	2910 Manufacture of motor vehicles	0	0			0	0			0	0		
46	2931 Manufacture of electrical and electronic equipment for motor vehicles	0	0			0	0			0	0		
47	3011 Building of ships and floating structures	0	0			0	0			0	0		
48	3020 Manufacture of railway locomotives and rolling stock	56	47			0	0			56	47		
49	3030 Manufacture of air and spacecraft and related machinery	0	0			0	0			0	0		
50	3230 Manufacture of sports goods	1	0			0	0			1	0		
51	3312 Repair of machinery	4	0			0	0			4	0		
52	3315 Repair and maintenance of ships and boats	0	0			0	0			0	0		
53	3317 Repair and maintenance of other transport equipment	0	0			0	0			0	0		
54	3320 Installation of industrial machinery and equipment	0	0			0	0			0	0		
55	3511 Production of electricity	850	730			0	0			850	730		
56	3513 Distribution of electricity	0	0			0	0			0	0		
57	3514 Trade of electricity	0	0			0	0			0	0		
58	3522 Distribution of gaseous fuels through mains	14	14			0	0			14	14		
59	3523 Trade of gas through mains	16	16			0	0			16	16		
60	3530 Steam and air conditioning supply	0	0			0	0			0	0		
61	3700 Sewerage	0	0			0	0			0	0		
62	3811 Collection of non-hazardous waste	9	7			0	0			9	7		
63	3822 Treatment and disposal of hazardous waste	1	1			0	0			1	1		
64	4110 Development of building projects	233	12			0	0			233	12		
65	4120 Construction of residential and non-residential buildings	145	5			0	0			145	5		
66	4211 Construction of roads and motorways	2	0			0	0			2	0		
67	4222 Construction of utility projects for electricity and telecommunications	7	7			0	0			7	7		
68	4321 Electrical installation	0	0			0	0			0	0		
69	4322 Plumbing, heat and air-conditioning installation	0	0			0	0			0	0		
70	4329 Other construction installation	0	0			0	0			0	0		

71	4332 Joinery installation	0	0		0	0		0	0	
72	4399 Other specialised construction activities n.e.c.	0	0		0	0		0	0	
73	4511 Sale of cars and light motor vehicles	2	0		0	0		2	0	
74	4519 Sale of other motor vehicles	1	0		0	0		1	0	
75	4531 Wholesale trade of motor vehicle parts and accessories	0	0		0	0		0	0	
76	4532 Retail trade of motor vehicle parts and accessories	0	0		0	0		0	0	
77	4614 Agents involved in the sale of machinery, industrial equipment, ships and aircraft	0	0		0	0		0	0	
78	4634 Wholesale of beverages	0	0		0	0		0	0	
79	4638 Wholesale of other food, including fish, crustaceans and molluscs	0	0		0	0		0	0	
80	4639 Non-specialised wholesale of food, beverages and tobacco	0	0		0	0		0	0	
81	4649 Wholesale of other household goods	4	1		0	0		4	1	
82	4651 Wholesale of computers, computer peripheral equipment and software	4	0		0	0		4	0	
83	4652 Wholesale of electronic and telecommunications equipment and parts	0	0		0	0		0	0	
84	4662 Wholesale of machine tools	0	0		0	0		0	0	
85	4663 Wholesale of mining, construction and civil engineering machinery	0	0		0	0		0	0	
86	4669 Wholesale of other machinery and equipment	1	0		0	0		1	0	
87	4671 Wholesale of solid, liquid and gaseous fuels and related products	7	6		0	0		7	6	
88	4673 Wholesale of wood, construction materials and sanitary equipment	0	0		0	0		0	0	
89	4674 Wholesale of hardware, plumbing and heating equipment and supplies	81	24		0	0		81	24	
90	4676 Wholesale of other intermediate products	0	0		0	0		0	0	
91	4690 Non-specialised wholesale trade	284	84		0	0		284	84	
92	4752 Retail sale of hardware, paints and glass in specialised stores	0	0		0	0		0	0	
93	4771 Retail sale of clothing in specialised stores	0	0		0	0		0	0	
94	5010 Sea and coastal passenger water transport	1	0		0	0		1	0	
95	5020 Sea and coastal freight water transport	44	28		0	0		44	28	
96	5110 Passenger air transport	0	0		0	0		0	0	
97	5224 Cargo handling	0	0		0	0		0	0	
98	5229 Other transportation support activities	0	0		0	0		0	0	
99	5320 Other postal and courier activities	0	0		3	0		3	0	
100	5510 Hotels and similar accommodation	0	0		0	0		0	0	
101	5610 Restaurants and mobile food service activities	0	0		0	0		0	0	
102	5813 Publishing of newspapers	0	0		10	0		10	0	
103	5814 Publishing of journals and periodicals	0	0		17	17		17	17	
104	6110 Wired telecommunications activities	0	0		0	0		0	0	
105	6120 Wireless telecommunications activities	2	1		1	1		3	2	
106	6190 Other telecommunications activities	0	0		0	0		0	0	
107	6201 Computer programming activities	0	0		0	0		0	0	
108	6202 Computer consultancy activities	17	2		0	0		17	2	
109	6203 Computer facilities management activities	149	0		0	0		149	0	
110	6399 Other information service activities n.e.c.	0	0		0	0		0	0	
111	6420 Activities of holding companies	53	35		0	0		53	35	
112	6619 Other activities auxiliary to financial services, except insurance and pension funding	0	0		0	0		0	0	
113	6820 Renting and operating of own or leased real estate	411	8		0	0		411	8	
114	7010 Activities of head offices	182	93		0	0		183	93	
115	7022 Business and other management consultancy activities	6	0		20	0		25	0	
116	7112 Engineering activities and related technical consultancy	3	0		1	0		4	0	
117	7711 Renting and leasing of cars and light motor vehicles	17	0		0	0		17	0	
118	7731 Renting and leasing of agricultural machinery and equipment	0	0		0	0		0	0	
119	7732 Renting and leasing of construction and civil engineering machinery and equipment	11	1		0	0		11	1	
120	8010 Private security activities	0	0		0	0		0	0	
121	8110 Combined facilities support activities	0	0		0	0		0	0	
122	8121 General cleaning of buildings	0	0		0	0		0	0	
123	8219 Photocopying, document preparation and other specialised office support activities	0	0		1	0		1	0	
124	8622 Specialist medical practice activities	0	0		2	0		2	0	
125	8623 Dental practice activities	0	0		0	0		0	0	
126	8690 Other human health activities	0	0		0	0		0	0	
127	8730 Residential care activities for the elderly and disabled	0	0		0	0		0	0	
128	8790 Other residential care activities	0	0		0	0		0	0	

Columns i–x have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.

3. GAR KPI stock
OP Amalgamation
Based on turnover

		a	b	c	d	e	f	g	h	i	aa	ab	ac	ad	ae	af
% (compared to total covered assets in the **denominator**)		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)					
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total assets covered
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
GAR - Covered assets in both numerator and denominator																
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	81.6%	11.0%	9.2%	1.0%	0.3%	0.1%	0.0%	0.0%	0.0%	81.7%	11.1%	9.2%	1.0%	0.3%	43.0%
2	**Financial undertakings**	**33.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**33.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**4.7%**
3	Credit institutions	27.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.2%	0.0%	0.0%	0.0%	0.0%	3.1%
4	Loans and advances	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
5	Debt securities, including UoP	27.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.3%	0.0%	0.0%	0.0%	0.0%	3.0%
6	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
7	Other financial corporations	45.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.5%	0.0%	0.0%	0.0%	0.0%	1.6%
8	of which investment firms	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
12	of which management companies	13.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	0.0%	0.0%	0.0%	0.0%	0.1%
13	Loans and advances	13.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	0.0%	0.0%	0.0%	0.0%	0.1%
14	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
16	of which insurance undertakings	48.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.4%	0.0%	0.0%	0.0%	0.0%	1.5%
17	Loans and advances	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%
18	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Equity instruments	48.4%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	48.4%	0.0%		0.0%	0.0%	1.5%
20	**Non-financial undertakings**	**32.9%**	**15.4%**	**0.0%**	**8.9%**	**2.5%**	**0.6%**	**0.3%**	**0.0%**	**0.3%**	**33.5%**	**15.8%**	**0.0%**	**8.9%**	**2.8%**	**5.0%**
21	Loans and advances	32.5%	14.7%	0.0%	8.5%	2.1%	0.6%	0.3%	0.0%	0.3%	33.1%	15.0%	0.0%	8.5%	2.3%	4.8%
22	Debt securities, including UoP	39.7%	28.6%	0.0%	16.7%	10.1%	0.9%	0.5%	0.0%	0.5%	40.6%	29.1%	0.0%	16.7%	10.6%	0.3%
23	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
24	**Households**	**95.6%**	**11.9%**	**11.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**95.6%**	**11.9%**	**11.9%**	**0.0%**	**0.0%**	**33.3%**
25	of which loans collateralised by residential immovable property	95.9%	12.5%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	95.9%	12.5%	12.5%	0.0%	0.0%	31.7%
26	of which building renovation loans	90.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.4%	0.0%	0.0%	0.0%	0.0%	1.6%
27	of which motor vehicle loans	90.0%	0.0%	0.0%	0.0%	0.0%					90.0%	0.0%	0.0%	0.0%	0.0%	1.4%
28	**Local governments financing**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
29	Housing financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30	Other local government financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
31	**Collateral obtained by taking possession: residential and commercial immovable properties**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
32	Total GAR assets	43.8%	5.9%	5.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	43.9%	5.9%	5.0%	0.6%	0.2%	80.1%

Columns j–z have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.
Columns ag–bk have been omitted from the table as they relate to data from the previous reference period that are not yet available.

3. GAR KPI stock
OP Amalgamation
Based on CapEx

	% (compared to total covered assets in the **denominator**)	a	b	c	d	e	f	g	h	i	aa	ab	ac	ad	ae	af
		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)					
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total assets covered
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
	GAR - Covered assets in both numerator and denominator															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	83.3%	12.2%	9.2%	1.0%	0.4%	0.1%	0.0%	0.0%	0.0%	83.4%	12.2%	9.2%	1.0%	0.4%	43.0%
2	**Financial undertakings**	**32.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**32.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**4.7%**
3	Credit institutions	25.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%	0.0%	0.0%	0.0%	0.0%	3.1%
4	Loans and advances	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
5	Debt securities, including UoP	25.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%	0.0%	0.0%	0.0%	0.0%	3.0%
6	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
7	Other financial corporations	45.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.5%	0.0%	0.0%	0.0%	0.0%	1.6%
8	of which investment firms	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
12	of which management companies	13.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	0.0%	0.0%	0.0%	0.0%	0.1%
13	Loans and advances	13.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	0.0%	0.0%	0.0%	0.0%	0.1%
14	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
16	of which insurance undertakings	48.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.4%	0.0%	0.0%	0.0%	0.0%	1.5%
17	Loans and advances	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%
18	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Equity instruments	48.4%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	48.4%	0.0%		0.0%	0.0%	1.5%
20	**Non-financial undertakings**	**48.5%**	**25.3%**	**0.0%**	**8.9%**	**3.1%**	**0.8%**	**0.3%**	**0.0%**	**0.1%**	**49.3%**	**25.6%**	**0.0%**	**8.9%**	**3.2%**	**5.0%**
21	Loans and advances	48.6%	24.8%	0.0%	8.4%	2.5%	0.8%	0.3%	0.0%	0.1%	49.4%	25.0%	0.0%	8.4%	2.6%	4.8%
22	Debt securities, including UoP	46.8%	34.7%	0.0%	17.4%	13.1%	0.8%	0.1%	0.0%	0.1%	47.6%	34.8%	0.0%	17.4%	13.2%	0.3%
23	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
24	**Households**	**95.6%**	**11.9%**	**11.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**95.6%**	**11.9%**	**11.9%**	**0.0%**	**0.0%**	**33.3%**
25	of which loans collateralised by residential immovable property	95.9%	12.5%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	95.9%	12.5%	12.5%	0.0%	0.0%	31.7%
26	of which building renovation loans	90.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.4%	0.0%	0.0%	0.0%	0.0%	1.6%
27	of which motor vehicle loans	90.0%	0.0%	0.0%	0.0%	0.0%					90.0%	0.0%	0.0%	0.0%	0.0%	1.4%
28	**Local governments financing**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
29	Housing financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30	Other local government financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
31	**Collateral obtained by taking possession: residential and commercial immovable properties**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
32	Total GAR assets	44.8%	6.5%	5.0%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%	44.8%	6.6%	5.0%	0.6%	0.2%	80.1%

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4. GAR KPI flow
OP Amalgamation
Based on turnover

		a	b	c	d	e	f	g	h	i	aa	ab	ac	ad	ae	af
		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)					
	% (compared to flow of total eligible assets)	Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total new assets covered
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
	GAR - Covered assets in both numerator and denominator															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	72.6%	10.0%	9.1%	0.2%	0.6%	0.2%	0.2%	0.0%	0.2%	72.9%	10.2%	9.1%	0.2%	0.8%	25.3%
2	**Financial undertakings**	32.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0%	0.0%	0.0%	0.0%	0.0%	2.6%
3	Credit institutions	32.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0%	0.0%	0.0%	0.0%	0.0%	2.6%
4	Loans and advances	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%
5	Debt securities, including UoP	32.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0%	0.0%	0.0%	0.0%	0.0%	2.6%
6	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
7	Other financial corporations	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8	of which investment firms	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
12	of which management companies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
16	of which insurance undertakings	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
20	**Non-financial undertakings**	22.5%	4.5%	0.0%	0.9%	2.9%	1.0%	0.9%	0.0%	0.9%	23.5%	5.4%	0.0%	0.9%	3.7%	5.1%
21	Loans and advances	22.2%	4.1%	0.0%	0.7%	2.7%	1.0%	1.0%	0.0%	0.9%	23.2%	5.1%	0.0%	0.7%	3.6%	4.9%
22	Debt securities, including UoP	31.3%	17.3%	0.0%	9.1%	6.2%	0.3%	0.0%	0.0%	0.0%	31.5%	17.3%	0.0%	9.1%	6.2%	0.2%
23	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
24	**Households**	93.1%	13.0%	13.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	93.1%	13.0%	13.0%	0.0%	0.0%	17.6%
25	of which loans collateralised by residential immovable property	93.1%	16.2%	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	93.1%	16.2%	16.2%	0.0%	0.0%	14.1%
26	of which building renovation loans	74.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	74.3%	0.0%	0.0%	0.0%	0.0%	0.7%
27	of which motor vehicle loans	91.2%	0.0%	0.0%	0.0%	0.0%					91.2%	0.0%	0.0%	0.0%	0.0%	3.4%
28	**Local governments financing**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
29	Housing financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30	Other local government financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
31	**Collateral obtained by taking possession: residential and commercial immovable properties**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
32	**Total GAR assets**	40.1%	5.5%	5.0%	0.1%	0.3%	0.1%	0.1%	0.0%	0.1%	40.2%	5.6%	5.0%	0.1%	0.4%	45.9%

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4. GAR KPI flow
OP Amalgamation
Based on CapEx

		a	b	c	d	e	f	g	h	i	aa	ab	ac	ad	ae	af
		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)					
	% (compared to flow of total eligible assets)	Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total new assets covered
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
	GAR - Covered assets in both numerator and denominator															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	76.0%	11.3%	9.1%	0.6%	0.7%	0.2%	0.2%	0.0%	0.0%	76.2%	11.5%	9.1%	0.6%	0.8%	25.3%
2	**Financial undertakings**	30.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.2%	0.0%	0.0%	0.0%	0.0%	2.6%
3	Credit institutions	30.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.2%	0.0%	0.0%	0.0%	0.0%	2.6%
4	Loans and advances	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%
5	Debt securities, including UoP	30.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.2%	0.0%	0.0%	0.0%	0.0%	2.6%
6	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
7	Other financial corporations	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8	of which investment firms	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
12	of which management companies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
16	of which insurance undertakings	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	Loans and advances	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	Debt securities, including UoP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
20	**Non-financial undertakings**	40.0%	11.2%	0.0%	3.1%	3.6%	1.1%	0.9%	0.0%	0.2%	41.0%	12.1%	0.0%	3.1%	3.8%	5.1%
21	Loans and advances	40.1%	10.9%	0.0%	2.9%	3.6%	1.1%	0.9%	0.0%	0.2%	41.2%	11.9%	0.0%	2.9%	3.8%	4.9%
22	Debt securities, including UoP	35.7%	19.2%	0.0%	10.9%	3.1%	0.5%	0.0%	0.0%	0.0%	36.1%	19.2%	0.0%	10.9%	3.1%	0.2%
23	Equity instruments	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
24	**Households**	93.1%	13.0%	13.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	93.1%	13.0%	13.0%	0.0%	0.0%	17.6%
25	of which loans collateralised by residential immovable property	93.1%	16.2%	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	93.1%	16.2%	16.2%	0.0%	0.0%	14.1%
26	of which building renovation loans	74.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	74.3%	0.0%	0.0%	0.0%	0.0%	0.7%
27	of which motor vehicle loans	91.2%	0.0%	0.0%	0.0%	0.0%					91.2%	0.0%	0.0%	0.0%	0.0%	3.4%
28	**Local governments financing**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
29	Housing financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30	Other local government financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
31	**Collateral obtained by taking possession: residential and commercial immovable properties**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
32	Total GAR assets	41.9%	6.2%	5.0%	0.4%	0.4%	0.1%	0.1%	0.0%	0.0%	42.0%	6.3%	5.0%	0.4%	0.4%	45.9%

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5. KPI off-balance sheet exposures
OP Amalgamation
Based on turnover
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	i	aa	ab	ac	ad	ae
	% (compared to total eligible off-balance sheet assets)	Disclosure reference date T													
		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)				
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)			
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling
1	Financial guarantees (FinGuar KPI)	15.4%	4.3%	0.0%	0.3%	3.2%	3.9%	3.9%	0.0%	0.0%	19.3%	8.2%	0.0%	0.3%	3.2%
2	Assets under management (AuM KPI)	13.5%	8.5%	0.0%	0.2%	2.8%	0.0%	0.0%	0.0%	0.0%	13.5%	8.6%	0.0%	0.2%	2.9%

Columns j–z have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.
Columns ag–bk have been omitted from the table as they relate to data from the previous reference period that are not yet available.

5. KPI off-balance sheet exposures
OP Amalgamation
Based on CapEx
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	i	aa	ab	ac	ad	ae
	% (compared to total eligible off-balance sheet assets)	Disclosure reference date T													
		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				TOTAL (CCM + CCA)				
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)			
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling
1	Financial guarantees (FinGuar KPI)	32.7%	25.8%	0.0%	1.3%	11.8%	16.8%	16.8%	0.0%	0.0%	49.5%	42.5%	0.0%	1.3%	11.8%
2	Assets under management (AuM KPI)	17.1%	4.0%	0.0%	0.2%	0.8%	0.0%	0.0%	0.0%	0.0%	17.1%	4.0%	0.0%	0.2%	0.8%

Columns j–z have been omitted from the table as they relate to environmental objectives for which there is not yet publicly available information on taxonomy regulation eligibility or alignment with taxonomy regulation of counterparties' economic activities.
Columns ag–bk have been omitted from the table as they relate to data from the previous reference period that are not yet available.

0. Summary of KPIs to be disclosed by investment firms under Article 8 Taxonomy Regulation
OP Asset Management Ltd and OP Custody Ltd
All monetary values are reported in MEUR.

		Total environmentally sustainable assets	KPI (2)	KPI (3)	% coverage (over total assets) (4)
Main KPI (for dealing on own account) (1)	Green asset ratio				
		Total revenue from environmentally sustainable services and activities	KPI	KPI	% coverage (over total revenue)
Main KPI (for services and activities other than dealing on own account)	KPI on Revenue (5)	1	6.0%	2.3%	89.9%

1) No data are reported in this row because the investment firms in OP Group do not trade on own account.
2) based on the turnover KPI of the counterparty
3) based on the CapEx KPI of the counterparty
4) % of assets covered by the KPI over total assets
5) fees, commissions and other monetary benefits

2. KPI IF – Other services
OP Asset Management Ltd and OP Custody Ltd
Based on turnover
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	j	w	x	y	z
				Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)			TOTAL (CCM + CCA)			
		Total	Of which covered by the KPI	Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)	Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)	Of which transitional (%)	Of which enabling (%)	Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)	Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)	Of which enabling (%)	Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)	Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)	Of which transitional (%)	Of which enabling (%)
1	**Revenue (i.e. fees, commissions and other monetary benefits) from investment and services and activities other than dealing on own account (as per Section A of Annex I of Directive 2014/65/EU)**	17	15	8.5%	6.0%	0.3%	5.1%	0.0%	0.1%	0.1%	8.5%	6.0%	0.3%	5.2%
2	Reception and transmission of orders in relation to one or more financial instruments	0	0	1.3%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	1.3%	0.4%	0.0%	0.1%
3	Execution of orders on behalf of clients*													
4	Portfolio management	9	7	4.4%	1.8%	0.4%	0.7%	0.0%	0.1%	0.1%	4.4%	1.9%	0.4%	0.8%
5	Investment advice	8	8	12.2%	9.8%	0.2%	9.2%	0.0%	0.0%	0.0%	12.2%	9.8%	0.2%	9.3%
6	Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis*													
7	Placing of financial instruments without a firm commitment basis*													
8	Operation of an MTF*													
9	Operation of an OTF*													

*No data are reported for rows 3, 6, 7, 8 or 9 because the investment firms in the OP Group do not have revenues from related services or activities.

2. KPI IF – Other services
OP Asset Management Ltd and OP Custody Ltd
Based on CapEx
All monetary values are reported in MEUR.

		a	b	c	d	e	f	g	h	j	w	x	y	z
				Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)			TOTAL (CCM + CCA)			
		Total	Of which covered by the KPI	Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)	Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)	Of which transitional (%)	Of which enabling (%)	Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)	Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)	Of which enabling (%)	Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)	Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)	Of which transitional (%)	Of which enabling (%)
1	**Revenue (i.e. fees, commissions and other monetary benefits) from investment and services and activities other than dealing on own account (as per Section A of Annex I of Directive 2014/65/EU)**	17	15	14.4%	2.3%	0.3%	0.8%	0.0%	0.0%	0.0%	14.4%	2.3%	0.3%	0.9%
2	Reception and transmission of orders in relation to one or more financial instruments	0	0	1.9%	0.6%	0.0%	0.2%	0.0%	0.0%	0.0%	1.9%	0.7%	0.0%	0.2%
3	Execution of orders on behalf of clients*													
4	Portfolio management	9	7	7.0%	2.9%	0.4%	0.9%	0.0%	0.1%	0.1%	7.0%	3.0%	0.4%	1.0%
5	Investment advice	8	8	21.3%	1.7%	0.2%	0.7%	0.0%	0.0%	0.0%	21.3%	1.7%	0.2%	0.7%
6	Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis*													
7	Placing of financial instruments without a firm commitment basis*													
8	Operation of an MTF*													
9	Operation of an OTF*													

*No data are reported for rows 3, 6, 7, 8 or 9 because the investment firms in the OP Group do not have revenues from related services or activities.

The underwriting KPI for non-life insurance and reinsurance undertakings
Pohjola Insurance Ltd
All monetary values are reported in MEUR.

	Substantial contribution to climate change adaptation			DNSH (Do No Significant Harm)					
Economic activities (1)	Absolute premiums, year t (2)	Proportion of premiums, year t (3)	Proportion of premiums, year t-1 (4)	Climate change mitigation (5)	Water and marine resources (6)	Circular economy (7)	Pollution (8)	Biodiversity and ecosystems (9)	Minimum safeguards (10)
	Currency	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
A.1. Non-life insurance and reinsurance underwriting Taxonomy-aligned activities (environmentally sustainable)	0	0.0%	0.0%	Y	Y	Y	Y	Y	Y
A.1.1 Of which reinsured	0	0.0%	0.0%	Y	Y	Y	Y	Y	Y
A.1.2 Of which stemming from reinsurance activity	0	0.0%	0.0%	Y	Y	Y	Y	Y	Y
A.1.2.1 Of which reinsured (retrocession)	0	0.0%	0.0%	Y	Y	Y	Y	Y	Y
A.2 Non-life insurance and reinsurance underwriting Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)	1,533	87.2%	86.7%	Y	Y	Y	Y	Y	Y
B. Non-life insurance and reinsurance underwriting Taxonomy-non-eligible activities	226	12.8%	13.3%	Y	Y	Y	Y	Y	Y
Total (A.1 + A.2 +B)	1,758	100 %	100 %						

The proportion of the insurance or reinsurance undertaking's investments that are directed at funding, or are associated with, taxonomy-aligned in relation to total investments
OP Life Assurance Company Ltd and Pohjola Insurance Ltd
All monetary values are reported in MEUR.

The weighted average value of all the investments of insurance or reinsurance undertakings that are directed at funding, or are associated with taxonomy-aligned economic activities **relative to the value of total assets covered by the KPI**, with following weights for investments in undertakings per below: Turnover-based: 1.8% Capital expenditures-based: 2.7%		The weighted average value of all the investments of insurance or reinsurance undertakings that are directed at funding, or are associated with taxonomy-aligned economic activities, with following weights for investments in undertakings per below: Turnover-based: 221 Capital expenditures-based: 325
The percentage of assets covered by the KPI relative to total investments of insurance or reinsurance undertakings (total AuM). Excluding investments in sovereign entities. Coverage ratio: 88.0%		The monetary value of assets covered by the KPI. Excluding investments in sovereign entities. Coverage: 12,124
Additional, complementary disclosures: breakdown of **denominator** of the KPI		
The percentage of derivatives relative to total assets covered by the KPI. 0.0 %		The value in monetary amounts of derivatives: 0
The proportion of **exposures to EU financial and non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 3.4% For financial undertakings: 0.7%		Value of **exposures to EU financial and non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 412 For financial undertakings: 82
The proportion of **exposures to financial and non-financial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 9.6% For financial undertakings: 1.6%		Value of **exposures to financial and non-financial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 1,158 For financial undertakings: 200
The proportion of **exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 4.4% For financial undertakings: 8.9%		Value of **exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 529 For financial undertakings: 1,084
The proportion of **exposures to other counterparties and assets (including investments in real estate) over** total assets covered by the KPI: 11.1 %		Value of **exposures to other counterparties and assets (including investments in real estate)**: 1,340
The proportion of the insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**, that are directed at funding, or are associated with, taxonomy-aligned economic activities: 60.4 %		Value of insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**, that are directed at funding, or are associated with, taxonomy-aligned economic activities: 7,320
The value of all the investments that are funding **economic activities that are not taxonomy-eligible** relative to the value of total assets covered by the KPI: Turnover-based: 94.5% Capital expenditures-based: 92.9%		Value of all the investments that are funding **economic activities that are not taxonomy-eligible**: Turnover-based: 11,457 Capital expenditures-based: 11,267
The value of all the investments that are funding taxonomy-eligible economic activities, **but not taxonomy-aligned** relative to the value of total assets covered by the KPI: Turnover-based: 3.7% Capital expenditures-based: 4.4%		Value of all the investments that are funding taxonomy- eligible economic activities, **but not taxonomy-aligned**: Turnover-based: 446 Capital expenditures-based: 532
Additional, complementary disclosures: breakdown of **numerator** of the KPI		
The proportion of **taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: Turnover-based: 0.5% Capital expenditures-based: 0.7% For financial undertakings: Turnover-based: - Capital expenditures-based: -		Value of **taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: Turnover-based: 65 Capital expenditures-based: 89 For financial undertakings: Turnover-based: - Capital expenditures-based: -
The proportion of the insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**, that are directed at funding, or are associated with, taxonomy-aligned: Turnover-based: 0.9% Capital expenditures-based: 1.6%		Value of insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**, that are directed at funding, or are associated with, taxonomy-aligned: Turnover-based: 112 Capital expenditures-based: 192
The proportion of **taxonomy-aligned exposures to other counterparties and assets (including investments in real estate) over** total assets covered by the KPI: Turnover-based: 0.4% Capital expenditures-based: 0.4%		Value of **taxonomy-aligned exposures to other counterparties and assets (including investments in real estate)**: Turnover-based: 44 Capital expenditures-based: 44
Breakdown of the numerator of the KPI per environmental objective		
Taxonomy-aligned activities:		
(1) Climate change mitigation	Turnover: 1.8% CapEx: 2.6%	Transitional activities: 0.3% (Turnover); 0.3% (CapEx) Enabling activities: 0.5% (Turnover); 0.7% (CapEx)
(2) Climate change adaptation	Turnover: 0.0% CapEx: 0.1%	Enabling activities: 0.0% (Turnover); 0.1% (CapEx)

Template 1 Nuclear and fossil gas related activities
Credit institutions
Green asset ratio (GAR) stock
Based on turnover

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	YES
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	YES

Template 1 Nuclear and fossil gas related activities
Credit institutions
Green asset ratio (GAR) stock
Based on CapEx

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

Template 1 Nuclear and fossil gas related activities
Credit institutions
Assets under management
Based on turnover

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	YES

Template 1 Nuclear and fossil gas related activities
Credit institutions
Assets under management
Based on CapEx

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	YES

Template 1 Nuclear and fossil gas related activities
Insurance undertakings
Investments
Based on turnover

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	YES

Template 1 Nuclear and fossil gas related activities
Insurance undertakings
Investments
Based on CapEx

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	YES

Template 2 Taxonomy-aligned economic activities (denominator)
Credit institutions
Green asset ratio (GAR) stock
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	10	0.0%	10	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	515	0.5%	515	0.5%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	6,154	5.5%	6,130	5.5%	24	0.0%
8.	**Total applicable KPI**	6,680	5.9%	6,656	5.9%	24	0.0%

Template 2 Taxonomy-aligned economic activities (denominator)
Credit institutions
Green asset ratio (GAR) stock
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	285	0.3%	285	0.3%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	122	0.1%	122	0.1%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	6,965	6.2%	6,946	6.2%	19	0.0%
8.	**Total applicable KPI**	7,372	6.6%	7,354	6.5%	19	0.0%

Template 2 Taxonomy-aligned economic activities (denominator)
Credit institutions
Assets under management
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	1	0.0%	1	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	29	0.1%	29	0.1%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	2,916	8.5%	2,900	8.4%	16	0.0%
8.	**Total applicable KPI**	2,946	8.6%	2,931	8.5%	16	0.0%

Template 2 Taxonomy-aligned economic activities (denominator)
Credit institutions
Assets under management
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	8	0.0%	8	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	1,384	4.0%	1,368	4.0%	16	0.0%
8.	**Total applicable KPI**	1,392	4.0%	1,376	4.0%	16	0.0%

Template 2 Taxonomy-aligned economic activities (denominator)
Insurance undertakings
Investments
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	1	0.0%	1	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	21	0.2%	21	0.2%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	200	1.6%	194	1.6%	6	0.0%
8.	**Total applicable KPI**	221	1.8%	215	1.8%	6	0.0%

Template 2 Taxonomy-aligned economic activities (denominator)
Insurance undertakings
Investments
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	5	0.0%	5	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	320	2.6%	309	2.5%	11	0.1%
8.	**Total applicable KPI**	325	2.7%	314	2.6%	11	0.1%

Template 3 Taxonomy-aligned economic activities (numerator)
Credit institutions
Green asset ratio (GAR) stock
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	10	0.2%	10	0.2%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	515	7.7%	515	7.7%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	6,154	92.1%	6,130	91.8%	24	0.4%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	6,680	**100.0%**	6,656	99.6%	24	0.4%

Template 3 Taxonomy-aligned economic activities (numerator)
Credit institutions
Green asset ratio (GAR) stock
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	285	3.9%	285	3.9%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	122	1.7%	122	1.7%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	6,965	94.5%	6,946	94.2%	19	0.3%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	7,372	**100.0%**	7,354	99.7%	19	0.3%

Template 3 Taxonomy-aligned economic activities (numerator)
Credit institutions
Assets under management
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	1	0.0%	1	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	29	1.0%	29	1.0%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	2,916	99.0%	2,900	98.4%	16	0.5%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	2,946	**100.0%**	2,931	99.5%	16	0.5%

Template 3 Taxonomy-aligned economic activities (numerator)
Credit institutions
Assets under management
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	8	0.6%	8	0.6%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	1,384	99.4%	1,368	98.3%	16	1.1%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	1,392	**100.0%**	1,376	98.9%	16	1.1%

Template 3 Taxonomy-aligned economic activities (numerator)
Insurance undertakings
Investments
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	1	0.2%	1	0.2%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	21	9.4%	21	9.4%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	200	90.3%	194	87.7%	6	2.6%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	221	**100.0%**	215	97.4%	6	2.6%

Template 3 Taxonomy-aligned economic activities (numerator)
Insurance undertakings
Investments
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	5	1.6%	5	1.6%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/ 2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	320	98.3%	309	95.1%	11	3.3%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	325	**100.0%**	314	96.7%	11	3.3%

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities
Credit institutions
Green asset ratio (GAR) stock
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	23	0.0%	23	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	55	0.0%	55	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	42,579	37.9%	42,561	37.8%	18	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	42,657	37.9%	42,639	37.9%	18	0.0%

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities
Credit institutions
Green asset ratio (GAR) stock
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	42	0.0%	42	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	42,976	38.2%	42,937	38.2%	39	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	43,018	38.2%	42,980	38.2%	39	0.0%

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities
Credit institutions
Assets under management
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1	0.0%	1	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	32	0.1%	32	0.1%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	34	0.1%	34	0.1%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	3	0.0%	3	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	1,620	4.7%	1,620	4.7%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	1,689	4.9%	1,689	4.9%	0	0.0%

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities
Credit institutions
Assets under management
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	22	0.1%	22	0.1%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	30	0.1%	30	0.1%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2	0.0%	2	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	4,445	12.9%	4,445	12.9%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	4,499	13.1%	4,499	13.1%	0	0.0%

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities
Insurance undertakings
Investments
Based on turnover

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	16	0.1%	16	0.1%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	29	0.2%	29	0.2%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	3	0.0%	3	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	398	3.3%	398	3.3%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	446	3.7%	446	3.7%	0	0.0%

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities
Insurance undertakings
Investments
Based on CapEx

Row	Economic activities	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	9	0.1%	9	0.1%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	26	0.2%	26	0.2%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2	0.0%	2	0.0%	0	0.0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	495	4.1%	495	4.1%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	532	4.4%	532	4.4%	0	0.0%

Template 5 Taxonomy non-eligible economic activities
Credit institutions
Green asset ratio (GAR) stock
Based on turnover

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	63,142	56.1%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	63,142	56.1%

Template 5 Taxonomy non-eligible economic activities
Credit institutions
Green asset ratio (GAR) stock
Based on CapEx

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	62,088	55.2%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	62,088	55.2%

Template 5 Taxonomy non-eligible economic activities
Credit institutions
Assets under management
Based on turnover

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	29,767	86.5%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	29,768	86.5%

Template 5 Taxonomy non-eligible economic activities
Credit institutions
Assets under management
Based on CapEx

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	28,510	82.9%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	28,514	82.9%

Template 5 Taxonomy non-eligible economic activities
Insurance undertakings
Investments
Based on turnover

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	11,455	94.5%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	11,457	94.5%

Template 5 Taxonomy non-eligible economic activities
Insurance undertakings
Investments
Based on CapEx

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	11,265	92.9%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	11,267	92.9%

Income statement

€ million	Notes	2023	Adjusted 2022
Interest income		5,480	1,833
Interest expenses		-2,609	-215
Net interest income	5	2,871	1,618
Impairment loss on receivables	6	-269	-115
Commission income		1,038	1,077
Commission expenses		-130	-134
Net commissions and fees	7	908	942
Insurance revenue		2,000	1,898
Insurance service expenses		-1,824	-1,898
Net income from reinsurance contracts		-95	106
Insurance service result	8	81	106
Net finance income (+)/expenses (–) related to insurance		-722	2,228
Net finance income (+)/expenses (–) related to reinsurance		0	-1
Net insurance finance income (+)/expenses (–)	9	-722	2,226
Net interest income from financial assets held for trading	10	55	-29
Net investment income	11	1,057	-1,952
Other operating income	12	40	67
Personnel costs	13	-964	-856
Depreciation/amortisation and impairment loss	14	-226	-214
Other operating expenses	15	-1,011	-892
Transfers to insurance service result	16	485	416
Operating expenses		-1,716	-1,545
OP bonuses to owner-customers	17	-255	-198
Operating profit (loss)		**2,050**	**1,120**
Earnings before tax		**2,050**	**1,120**
Income tax	18	-408	-213
Profit for the financial year		**1,642**	**907**
Attributable to:			
Profit for the financial year attributable to owners		1,637	898
Profit for the financial year attributable to non-controlling interest		5	9
Profit for the financial year		**1,642**	**907**

Statement of comprehensive income

€ million	Notes	2023	Adjusted 2022
Profit for the financial year		**1,642**	**907**
Items that will not be reclassified to profit or loss			
Gains/(losses) arising from remeasurement of defined benefit plans		8	120
Items that may later be reclassified to the profit or loss			
Change in fair value reserve			
On fair value measurement	36	-68	-58
On cash flow hedging	36	156	-540
Income tax			
On items not reclassified to profit or loss			
On gains/(losses) arising from measurement of defined benefit plans		-2	-24
On items that may subsequently be reclassified to profit or loss			
On fair value measurement	36	14	12
On cash flow hedging	36	-31	108
Other comprehensive income items		**77**	**-382**
Total comprehensive income for the financial year		**1,719**	**525**
Comprehensive income for the financial year attributable to:			
Comprehensive income for the financial year attributable to owners		1,714	516
Comprehensive income for the financial year attributable to non-controlling interests		5	9
Total		**1,719**	**525**

Balance sheet

€ million	Notes	31 Dec 2023	Adjusted 31 Dec 2022	Adjusted 1 Jan 2022
Cash and cash equivalents	19	19,755	35,004	32,846
Receivables from credit institutions	20	858	798	541
Receivables from customers	21	97,836	98,546	96,947
Derivative contracts	22	3,401	4,117	3,467
Investment assets	23	21,896	20,742	22,941
Assets covering unit-linked contracts	24	12,581	11,597	13,137
Reinsurance contract assets	32	106	245	114
Intangible assets	25	1,065	1,153	1,212
Property, plant and equipment	26	398	423	446
Other assets	28	2,222	2,401	2,176
Tax assets	29	273	664	156
Non-current assets held for sale				8
Total assets		**160,391**	**175,691**	**173,991**
Liabilities to credit institutions	30	66	12,301	16,650
Liabilities to customers	31	76,656	81,468	77,898
Derivative contracts	22	3,271	4,432	2,266
Insurance contract liabilities	32	11,589	11,446	13,968
Reinsurance contract liabilities	32	0	2	13
Liabilities from investment agreements		7,944	7,211	7,880
Debt securities issued to the public and debentures	33	37,511	37,438	34,895
Provisions and other liabilities	34	4,450	3,818	3,118
Tax liabilities	29	1,229	1,522	1,180
Subordinated liabilities	35	1,414	1,384	1,982
Liabilities associated with non-current assets held for sale				8
Total liabilities		**144,129**	**161,023**	**159,858**
Equity capital				
Capital and reserves attributable to OP Financial Group owners				
Cooperative capital				
Member cooperative shares	36	219	217	215
Profit Shares	36	3,335	3,369	3,244
Fair value reserve	36	-290	-360	118
Other reserves	36	2,172	2,172	2,184
Retained earnings	36	10,703	9,153	8,244
Non-controlling interests		**124**	**118**	**128**
Total equity		**16,262**	**14,668**	**14,133**
Total liabilities and equity		**160,391**	**175,691**	**173,991**

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. The figures in the income statement and balance sheet for 2022 have been adjusted. Note 3 Changes in accounting policies and presentation to this Annual Report provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

Statement of changes in equity

	Attributable to owners						
€ million	Coope-rative capital	Fair value reserve	Other reserves	Retained earnings	Total	Non-controlling interests	Total equity capital
Equity capital 31 December 2021	**3,459**	**323**	**2,184**	**8,090**	**14,057**	**128**	**14,184**
Effect of IFRS 17 transition 1 January 2022		-205		154	-52		-52
Equity capital 1 January 2022	**3,459**	**118**	**2,184**	**8,244**	**14,005**	**128**	**14,133**
Total comprehensive income for the financial year		-478		994	516	9	525
Profit for the financial year				898	898	9	907
Other comprehensive income items		-478		96	-382		-382
Profit distribution				-96	-96	-7	-103
Changes in membership and profit shares	127				127		127
Transfers between reserves			-12	12			
Other				-1	-1	-11	-12
Equity capital 31 December 2022	**3,586**	**- 360**	**2,172**	**9,153**	**14,550**	**118**	**14,668**

	Attributable to owners						
€ million	Coope-rative capital	Fair value reserve	Other reserves	Retained earnings	Total	Non-controlling interests	Total equity capital
Equity capital 1 January 2023	**3,586**	**- 360**	**2,172**	**9,153**	**14,550**	**118**	**14,668**
Total comprehensive income for the period		70		1,644	1,714	5	1,719
Profit for the period				1,637	1,637	5	1,642
Other comprehensive income items		70		7	77		77
Profit distribution				-144	-144	-4	-148
Changes in membership and profit shares	-32				-32		-32
Other*			0	51	51	5	56
Equity capital 31 December 2023	**3,554**	**- 290**	**2,172**	**10,703**	**16,139**	**124**	**16,262**

* Deferred tax adjustment of EUR 55 million on the transition date of the adoption of IFRS 17 on 1 January 2022 has been entered in item Other. Note 3. Changes in accounting policies and presentation.

Cash flow statement

	Notes	2023	Adjusted 2022
Cash flow from operating activities			
Profit for the financial year		1,642	907
Adjustments to profit for the financial year		345	2,387
Increase (-) or decrease (+) in operating assets		**897**	**-4,105**
Receivables from credit institutions	20	-521	84
Receivables from customers	21	1,162	-3,333
Derivative contracts, assets	22	199	-369
Investment assets	23	-130	-244
Assets covering unit-linked contracts	24	-74	80
Reinsurance contract assets	32	139	-131
Other assets	28	122	-191
Increase (+) or decrease (–) in operating liabilities		**-16,793**	**-1,316**
Liabilities to credit institutions	30	-12,249	-4,279
Liabilities to customers	31	-5,311	4,592
Derivative contracts, liabilities	22	-105	539
Insurance contract liabilities	32	146	-2,523
Reinsurance contract liabilities	32	-2	-11
Liabilities from investment agreements		0	0
Provisions and other liabilities	34	727	366
Income tax paid		-275	-283
Dividends received		47	102
A. Net cash from operating activities		**-14,136**	**-2,308**
Cash flow from investing activities			
Acquisition of subsidiaries, net of cash and cash equivalents acquired	23	-51	
Disposal of subsidiaries, net of cash and cash equivalents disposed of	76	0	33
Purchase of PPE and intangible assets	25, 26	-99	-123
Proceeds from sale of PPE and intangible assets	25, 26	11	11
B. Net cash used in investing activities		**-139**	**-79**
Cash flow from financing activities			
Subordinated liabilities, increases	35		6
Subordinated liabilities, decreases	35	-5	-522
Debt securities issued to the public and debentures, increases	33	13,488	21,728
Debt securities issued to the public and debentures, decreases	33	-14,663	-16,593
Increases in cooperative and share capital	36	130	292
Decreases in cooperative and share capital	36	-162	-165
Dividends paid and interest on cooperative capital		-144	-96
Lease liabilities		-33	-33
C. Net cash used in financing activities		**-1,389**	**4,615**
Net change in cash and cash equivalents (A+B+C)		**-15,663**	**2,228**
Cash and cash equivalents at period start		**35,656**	**33,129**
Effect of foreign exchange rate changes		-46	299
Cash and cash equivalents at period end		**19,947**	**35,656**

€ million		2023	2022
Interest received		**8,364**	**2,298**
Interest paid		**-5,562**	**-747**
Adjustments to profit for the financial year			
Non-cash items and other adjustments			
Impairment losses on receivables		285	130
Changes in technical items		-265	685
Changes in value of financial instruments		-281	1,254
Changes in fair value of investment property		29	17
Defined benefit pension plans		-1	7
Depreciation/amortisation		226	214
Share of associates' profits/losses		-3	-25
Income tax adjustments		408	213
Other		-52	-75
Items presented outside cash flow from operating activities			
Capital gains, share of cash flow from investing activities			-33
Total adjustments		**345**	**2,387**
Cash and cash equivalents			
Liquid assets	19	19,755	35,004
Receivables from credit institutions payable on demand		191	652
Total		**19,947**	**35,656**

Notes to financial statements

Contents

Notes to risk management

Other notes

Note 1. OP Financial Group's accounting policies under IFRS

OP Financial Group is a financial entity as referred to in §9 of the Act on the Amalgamation of Deposit Banks. OP Financial Group's financial statements have been prepared as a combination of the financial statements and consolidated financial statements of OP Cooperative and its subsidiaries and member credit institutions.

OP Financial Group does not form a consolidation group, as referred to in the Accounting Act, because OP Cooperative and its member cooperative banks do not have control over each other, as referred to in general consolidated accounting policies. For this reason, a technical parent company has been determined for OP Financial Group (Note 79. Ownership interests in subsidiaries, structured entities and joint operations).

OP Cooperative acts as the entire OP Financial Group's strategic owner institution and as a central cooperative in charge of Group control and supervision.

The Act on the Amalgamation of Deposit Banks requires OP Financial Group's central cooperative, OP Cooperative, to prepare consolidated financial statements for OP Financial Group. OP Cooperative's Board of Directors is responsible for preparing the financial statements in accordance with applicable regulations.

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

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

The Board of Directors of OP Cooperative approved OP Financial Group's financial statements bulletin for issue on 7 February 2024 and the Board of Directors approved the financial statements on 5 March 2024.

1. Basis of preparation

OP Financial Group's 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 2023. 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 Financial Group's obligation to prepare its financial statements in accordance with IFRS is based on the Act on the Amalgamation of Deposit Banks. OP Financial Group's notes also conform to the requirements of Finnish accounting and company legislation that complement IFRS regulations.

In 2023, OP Financial Group adopted the following standards and interpretations:

- Note 3 to the financial statements provides information on the changes in the accounting policies and presentation regarding the adoption of IFRS 17 Insurance contracts on 1 January 2023.

- Amendments to IAS 1, IAS 8 and IAS 12 took effect on 1 January 2023. The amendments will not have any significant effect on OP Financial Group's financial statements.

OP Financial Group's consolidated 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) 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 euros. 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.

According to the Act on the Amalgamation of Deposit Banks and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors, OP Cooperative's Board of Directors must confirm any applicable accounting policies for which the IFRSs provide no guidelines. In accordance with the above, OP Cooperative's Board of Directors has confirmed the principle that OP Financial Group's technical parent company consists of OP Financial Group member cooperative banks.

OP Financial Group presents Pillar 3 disclosures in compliance with EU Regulation No. 575/2013 of the European Parliament and of the Council in the OP Amalgamation capital adequacy tables. A summary of capital adequacy is presented in OP Financial Group's Report by the Board of Directors.

1.1 2023 highlights

OP Financial Group has applied IFRS 17 Insurance Contracts as of 1 January 2023. As a result of the IFRS 17 transition, OP Financial Group's equity capital on 1 January 2022 decreased by EUR 52 million on the date of transition. At the same time, the application of the overlay approach concerning the classification of financial assets came to an end. The figures in the income statement and balance sheet for 2022 have been adjusted retrospectively. Solvency II valuations are used in the financial conglomerate's FiCo calculation, so the adoption of IFRS 17 did not affect the FiCo ratio. Note 3. Changes in accounting policies and presentation provides more information on the adoption of IFRS 17 and the changes in the format of the income statement and balance sheet.

2. Critical accounting judgements and key sources of estimation uncertainty

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.

Critical accounting judgements

2.1 Sustainability and corporate responsibility

Sustainability and corporate responsibility form an integral part of OP Financial Group's business and strategy, and responsible business is one of the Group's strategic priorities. OP Financial Group's sustainability programme and its policy priorities implement OP Financial Group's strategy, guiding the sustainability actions taken by the business units and OP cooperative banks. OP Financial Group's sustainability programme is built around three themes: Climate and the environment, People and communities and Corporate governance.

The management has assessed that the sustainability themes affect the following sub-areas in the financial statements:

- Expected credit losses (Note 37. Loss allowance regarding receivables and notes and bonds)
- Estimate of future cash flows in impairment testing for goodwill and assets with indefinite useful lives (Note 25. Intangible assets)
- Green bonds (Note 33. Debt securities issued to the public)
- Green loans and sustainability-linked loans (Note 21. Receivables from customers)

2.2 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 judgements 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 measured using the 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.
- Management overlays related to a certain industry.
- 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 judgement 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, in addition to recovery times set by the authorities.

The actual measurement of ECL figures is performed using the ECL models, 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 judgement. Management judgement is involved in expert judgements.

Extra provisions based on management overlay 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 ECL models take account of Environmental, Social and Governance (ESG) risks of sustainable development, as follows:

- An assessment of economic impacts has been included in the measurement of the ECL models in the macro scenario where the use of fossil energy is reduced, so that carbon neutrality will be achieved by 2035.
- Since the beginning of 2023, OP Financial Group has started to use an ESG warning signal in the credit rating process of large corporations based on expert judgement that consists of an estimate of ESG risk factors. The ESG warning signal identifies situations where the ESG risk factors have an effect on the customer's rating grade. If necessary, the customer's credit rating can be lowered with the ESG warning signal and thereby increase the PD risk parameter and loss allowance of the customer's contracts. So far the ESG warning signal has not yet have any significant effect on PD risk parameters.

Calculations of loss allowance regarding receivables and the related key uncertainties are presented in Note 37. Loss allowance regarding receivables and notes and bonds. Section 7.4 includes a description of the accounting policies used in expected credit losses.

2.3 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 41. Recurring fair value measurements by valuation technique describes key uncertainties related to fair value measurement. The determination principles used in the fair value of financial instruments are described in section 7.1.

2.4 Measurement of insurance contracts

In applying IFRS 17, risk adjustment is one of the components in the measurement of insurance contracts and the management has exercised the following judgement:

- In the calculation of risk adjustment, 5% has been set as the level of the cost of capital (CoC) parameter. The CoC level is shared by OP Life Assurance Company Ltd and Pohjola Insurance Ltd in the measurement of insurance contracts. OP Financial Group assesses the value of the cost of capital parameter at least once a year and it is changed, if necessary. The parameter can also be revised if the management deems it necessary on the basis of a business change or the market situation, for example. The methods and assumptions used have not changed during the financial year.
- Risk adjustment is determined for OP Life Assurance Company Ltd and Pohjola Insurance Ltd separately and diversification benefits between the companies are not taken into account when determining risk adjustment.

- The confidence level for Pohjola Insurance varies between 70% and 75% and for OP Life Assurance Company between 90% and 95%. A scaling technique related to the confidence level of normal distribution, in which the confidence level represents a one-year time horizon, has been used as the confidence level determination technique. OP Financial Group's combined confidence level is 85%.

Management has exercised judgement in the determination of the discount rate used in the calculation of insurance contracts, as follows:

- Discounting curves are derived as the sum of the risk-free interest rate and liquidity premium dependent on the characteristics of insurance contracts. The management exercises judgement in defining the principles for the parameters of the risk-free discounting curve, the liquidity premium and maximum maturity. Insurance contract cash flows typically extend over a longer term than liquid market quotes, so euro swap rates are directly taken into account only until the defined maximum maturity (20 years). Thenceforth, the risk-free curve is extrapolated towards a long-term balance level. A credit risk component is removed from the swap rates, if necessary.
- Liquidity premium is determined by means of the investment universe that takes account of each insurance company's exposure. The investment universe means a portfolio allocation. When creating it, the amount of exposure is taken into account in weightings and index choices, the maturities of exposure and investment cash flows as well as cash flow predictability. The investment universe includes reference indices and their weights for government bonds, IG corporate bonds (IG, credit rating AAA-BBB and higher-risk corporate bonds (HY, credit rating BB-C). The management reviews the investment allocation on a regular basis.
- The movements of the discount rate affect earnings through the value change of cash flows and the selection of the interest rate model has a significant impact on earnings. At least once a year, OP Financial Group reviews the values of the parameters used in the yield curve modelling. The parameters can also be revised if the management deems it necessary. During the financial year, used assumptions were changed in such a way that the maximum maturity of the USD yield curve has been set at 30 years (previously 50 years) and the long-term equilibrium interest rate of the EUR, USD, NOK and SEK is set at 3.3 per cent in accordance with the UFR analysis of the EIOPA (previously 3.45 per cent). Changes have not been made to other parameters. The calculation of the long-term equilibrium interest rate has the biggest impact, which increases the value of non-life insurance insurance contract liabilities by an estimated EUR 3 million.

Judgement exercised by the management to measure insurance contracts in the adoption of IFRS 17 and the assessment process of the input data of these methods:

- When measuring groups of insurance contracts, estimates concerning future cash flows reflect future assumptions made on the measurement date that include an adjustment that reflects the time value of money and financial risks associated with future cash flows to the extent that the financial risks are not included in the values of future cash flows as well as an estimate of risk adjustment to other than the financial risk.
- The objective of estimating future cash flows is to determine the expected value, or probability-weighted mean, of the full range of possible outcomes, considering all reasonable and supportable information available at the reporting date without undue cost or effort. Reasonable and supportable information available at the reporting date without undue cost or effort includes information on past events and current conditions, and forecasts of future conditions.
- Deterministic insurance contract liability models are used to model the expected value unless cash flows are affected by factors requiring complex stochastic simulation. OP Financial Group uses simulation in the calculation of time value of customer bonuses in OP Life Assurance Company's insurance contracts.
- Mortality models based on the latest mortality studies are used in cash flow assumptions. OP Financial Group monitors the relevance of the mortality models on an ongoing basis and, if needed, updates the models. In addition, customer behaviour assumptions and assumptions of operating expenses have a significant impact on insurance contract cash flows. The assumptions have been modelled using statistics and are continuously monitored and updated with increasing information. Since endowment and single-premium savings policies are often sold as long-term contracts, some policyholders terminate their contracts by surrendering the policies according to their needs before the date of expiry under the contract. The risk of surrender in individual pension plans is very low, since law limits surrender opportunities only in specific cases mentioned in the law such as divorce and long-term unemployment. In addition to mortality assumptions, the term life insurance is significantly affected by lapse rate assumptions, or how customers decide to terminate their insurance

- Cash flows from claims and operating expenses consist of provisions for unknown and known claims, discretionary extra provisions and their operating expense loading, and they are determined by the principles described below.
    - Provision will be made for known claims if claims expenditure is estimated to exceed the defined euro value. The claim-specific provision for such large claims is made based on the assessments by claims specialists in compliance with provision guidelines approved by the Actuarial function. In addition, provisions for all known foreign underwriting business claims are made on a case-by-case basis, including claims where the proportion of reinsurers of non-proportional reinsurance does not deviate from zero.
    - Unknown claims and the proportion of known claims for which no provision is made are statistically assessed using the observed speed of settling claims, risk ratio developments and assumptions of changes, if any. At the same time, the amount of claim-specific provisions is adjusted collectively to the best estimate. The collective method is used for a statistical forecast method applicable to each risk group, mainly methods based on development factors and the Cape Cod method. The forecasts place the heaviest emphasis mainly on the year of occurrence itself and its immediate years. Furthermore, the forecasts emphasise years of occurrence with a large volume and where a significant proportion of claims has already been paid out. Collective estimates are implemented with accuracy that is relevant to the product risk and phenomenon.
    - Provision for outstanding claims in pension insurance benefits are made on a claim-specific basis by applying the reference mortality model produced by the Insurance Centre.
    - The insurance contract liability is supplemented on a discretionary basis through special provisions, utilising assessments by the business unit, claims processing and Actuarial function specialists unless there is sufficient statistical data on the phenomenon to calculate the statistical provision. Such special provisions can be made in case there is some other known reason or phenomenon on the basis of which the provision for outstanding claims must be supplemented. For example, provision for delay in processing can be made in a situation where the number of unprocessed claims has become exceptionally large compared with the basic situation.
    - If a certain loss event, such as a storm, causes several claims with a total estimated value exceeding the specified value, a provision can be made for a claim accumulation.
    - Future cash flows from operating expenses consist of forecasts of insurance management and administrative expenses as well as a forecast of claims settlement expenses. Forecasts of claims settlement expenses are formed as the best estimate by loading cash flows related to claims forecasts. Forecasts of other operating expenses are formed by means of amortising insurance premiums on a pro rata basis by applying operating expense factor to them.

Judgement exercised by the management in the application of the Variable Fee Approach (VFA) in the adoption of IFRS 17:

- OP Financial Group grants endowment, unit-linked and pension insurance policies. According to the contract concerned, their objective is to produce, or is expected to produce, investment-related services and receive a fee from the services as compensation that is determined based on the underlying items. The insurance contract may contain various investment products.
- On initial recognition, such contracts must be assessed whether they include direct participation features using the following criteria:
    - under the contract, the policyholder is entitled to participate in the share of the underlying investment products;
    - OP Financial Group expects to pay to the policyholder an amount equal to a substantial share of the fair value returns on the underlying items;
    - OP Financial Group expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items.
- OP Financial Group assesses the fulfilment of the VFA terms applied to insurance contracts according to the expectations prevailing at inception of a contract and does not reassess the terms afterwards, except if changes are made to the contract. In selecting a valuation model, OP Financial Group considers all substantive rights and obligations to which all terms and conditions are included in the contract. A unit of account under IFRS 17 is a group of contracts, which is why the same valuation model is applied to the entire Group according to the characteristics of its cash flows. All contracts with similar risks belong to the group of insurance contracts and they are managed together.

Judgement exercised by the management in the adoption of IFRS 17 in defining coverage units that determine recognition:

- The contractual service margin included in the contract in the group of insurance contracts is recognised an amount in profit or loss in each period to reflect the insurance contract services provided under the group of insurance contracts in that period. The amount of the contractual service margin recognised in profit or loss is determined using coverage units included in the group of contracts. The coverage units describe the quantity of insurance contract services provided by the contracts in the group, determined by considering for each contract the quantity of the benefits provided under a contract and the contract's duration.
- For typical non-life insurance contracts of short duration, insurance service is interpreted to be provided evenly during the coverage period and insurance premiums received from contracts in the same insurance group are used as the basis for the coverage unit at insurance group level. The forecast lifecycle recognition of the contractual service margin of life insurance products in profit or loss, depending on the contract type, is affected by the saved amount by group, expected duration of the contract, amount of compensation or savings, lapses and future insurance premiums. Release of the contractual service margin and the basis of coverage units vary by insurance line: the basis is the development of the amount of assets for endowment-type insurance products and the development of capital at risk for term life insurance.
- The insurance products of OP Financial Group, where both investment service and insurance service are provided, are produced evenly and in the same proportion over the expected duration of the contract. In addition, both services are produced at the same time and their contract periods are of the same duration.

Judgement exercised by the management in the adoption of IFRS 17 related to the determination of investment components:

- Management has identified that some life insurance contracts of OP Financial Group include investment components. Their size is determined at the amount that OP Financial Group must pay back to the policyholder under the insurance contract in all circumstances. Examples of these situations include those where an insurance event occurs or the contract expires or cease to be in effect without the occurrence of an insurance event.
- The following life insurance contracts include significant investment components determined as follows:
    - Unit-linked and pension insurance:
        - if death cover is over 100%, the investment component is the amount of savings.
        - if death cover is less than 100%, the investment component is the amount covered with death cover.
    - In separated balance sheets, the investment component is the amount of claims paid.

Judgement related to fair value determination and the modifications under the MRA used in the IFRS 17 transition:

- The method of transition to the MRA has been applied to the majority of insurance contracts granted by Pohjola Insurance. The values of transition to IFRS 17 have separately been determined for typical insurance contracts and insurance contracts requiring special treatment. Typical insurance contracts mean contracts of short duration, generally duration of one year or sometimes a few years. The MRA transition method is applied to them. Pohjola uses the modification to especially adjust cash flows that have already realised in order to avoid undue cost and effort in the determination of the values of transition.
- The fair value transition approach has been applied to OP Life Assurance Company contracts, which is due to the long-term nature of the products. The contracts have already been in force before the date when reasonable and supportable information needed for retrospective calculation was available that could be used without hindsight.
- To apply the fair value approach, OP Financial Group has determined the contractual service margin included in the contract or the fair value of the loss component of the debt for the remaining coverage period of the group of insurance contracts on the date of transition and the difference of the fulfilment cash flows resulting from the fulfilment of the contract determined on the date concerned. Under IFRS 17, the contractual service margin of the group of insurance contracts reflects the group's expected future profit that is recognised during the future life cycle of the group of insurance contracts.
- The fair value determination determined for the group of insurance contracts takes account of the discounted present value of the future cash flows of the group of insurance contracts and risk adjustment, in view of the future profit or loss arising from the insurance premiums already accrued in the group of insurance contracts as

well as the future profit or loss arising from future insurance premiums on the date of transition on 1 January 2022 and the risk premiums generally required by the market participant in connection with the sale of the portfolio. The management has exercised judgement in the determination of the used valuation parameters in determining cash flows, the discount rate and risk margin, for example. In practice, there are no active and established markets for selling insurance portfolios but potential sales are often executed in bilateral transactions that would correspond to the most favourable market.

2.5 Investments made in structured entities

When estimating the control over structured entities, OP Financial Group takes into account the investor's power to direct the investee's relevant activities and the exposure or right to variable returns from its involvement with the investee. Discretion is exercised when estimating power to direct relevant activities and variable returns. The emergence of control is evaluated in more detail when the investment accounts for 10–20% of the investee's net assets and returns. The investee is consolidated as a subsidiary at the latest when OP Financial Group's share of the variable returns exceeds 37% and there is a link between the control and the returns (Note 79. Ownership interests in subsidiaries, structured entities and joint operations). The accounting policies used in structured entities are described in section 3.

2.6 Wealth management OP bonuses

In wealth management, OP bonuses mainly accrue from mutual fund management fees and unit-linked insurance fees paid by clients. The OP bonuses of these items are close to considerations paid to clients under IFRS 15 that are accounted for as a reduction of the transaction prices and thereby revenue. Wealth management commission income accrues from Retail Banking and Corporate Banking segments. Netting wealth management OP bonuses from asset management commission income would, based on management judgement, lead to the fact that OP bonuses accrued in OP Financial Group's and the Retail Banking and Corporate Banking segments' income statement would not give a true picture of their total amount. Consequently, wealth management OP bonuses are presented in the OP bonuses to owner-customers row in the income statement, in addition to the banking OP bonuses (Note 17. OP bonuses to owner-customers). The accounting policies used in OP bonuses are described in section 18.

Key sources of estimation uncertainty

2.7 Impairment testing of goodwill and intangible assets

Goodwill, assets with indefinite useful lives and intangible assets not yet available for use are tested annually for impairment. The recoverable amount determined in the impairment test is usually based on value in use, and its calculation requires estimates of future cash flows and the applicable discount rate. Note 25. Intangible assets describes key sources of uncertainty associated with impairment testing. The accounting policies used in impairment testing are described in section 10.1.

2.8 Real estate

The measurement of investment property at fair value is partially based on the management's estimates of the market value of property holdings (Note 23. Investment assets). Income probably generated in the future by property in own use is based on the management's judgement of the property's value in use. Note 26. Property, plant and equipment describes key sources of uncertainty associated with fair value determination. The accounting policies used in real property are described in sections 8 Investment property and 10.1 Property in own use.

3. Consolidation principles

3.1 Technical parent company

The Act on the Amalgamation of Deposit Banks Act prescribes that the consolidated financial statements of OP Financial Group must be a combination of the financial statements or consolidated financial statements of OP Cooperative and its member credit institutions. The consolidated financial statements also include the accounts of entities over which the abovementioned entities jointly have control as prescribed in the Accounting Act. OP Financial Group's cooperative capital comprises such cooperative contributions paid by members of cooperative banks which the member banks have an unconditional right to refuse the redemption. In accordance with the above principles, OP Financial Group has formed a technical parent company (Note 79. Ownership interests in subsidiaries, structured entities and joint operations).

Within the technical parent company, intra-Group holdings, transactions, receivables and liabilities, internal distribution of profit and internal margins are eliminated.

3.2 Subsidiaries, associates and joint arrangements

The financial statements of the technical parent company and companies over which it exercises control are consolidated into those of OP Financial Group. OP Financial Group has control over an entity if it is exposed, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity (including structured entities). Most of the subsidiaries are wholly owned by OP Financial Group, which means that the Group's control is based on votes.

OP Financial Group acts as investor and manages various mutual funds in order to gain investment income and various commissions. Funds that have been classified as structured entities have been consolidated into the Group's financial statements when OP Financial Group's control is not based on votes but the control of significant operations, exposure to variable returns from the fund, and organising the fund's management. Changes in control concerning various fund investments consolidated into OP Financial Group are monitored quarterly. When estimating the amount of control, the Group takes into account the investor's power to direct relevant activities over an investee and the investor's exposure to varying returns. When OP Financial Group ceases to have control any retained interest in the entity is remeasured to its fair value at the date when control is lost, with the change in carrying amount recognised in the income statement. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial assets. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if OP Financial Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to the income statement.

Intra-Group holdings have been eliminated using the acquisition method. The consideration transferred and the acquiree's identifiable assets acquired and liabilities assumed are measured at fair value at the time of acquisition. Acquisition cost in excess of net assets is presented under goodwill. If the acquisition cost is lower than the fair value of net assets, the difference is recognised in profit and loss.

Acquisition-related costs are expensed as incurred. Any contingent consideration is measured at fair value and classified as a liability or equity. Contingent consideration classified as a liability is measured at fair value in the income statement on the balance sheet date.

Associated companies over which OP Financial Group companies exercise significant influence are accounted for using the equity method. Significant influence generally arises if the Group holds 20–50% of the other company's votes or otherwise exercises influence, not control, over the company. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. OP Financial Group's investment in associates includes goodwill identified on the acquisition date. If the consolidation group's share of losses in an associate exceeds its interest in the associate, the investment is entered in the balance sheet at zero value, and further losses exceeding the carrying amount are not recognised unless OP Financial Group is committed to fulfilling the obligations of associates.

Private equity funds treated as associates are measured at fair value through profit or loss in compliance with IFRS 9 as permitted by IAS 28. Changes in the fair value of these private equity funds are recognised directly in the income statement and presented in net investment income (Note 23. Investment assets).

A joint arrangement is an arrangement of which two or more parties have joint control. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. A joint arrangement is either a joint operation or a joint venture. A joint venture is an arrangement in which OP Financial Group has rights to the arrangement's net assets, while in a joint operation OP Financial Group has both rights to assets and obligations for the liabilities relating to the arrangement. Property companies are incorporated into OP Financial Group's financial statements as joint operations by consolidating the proportionate share of OP Financial Group's holding of the property company's assets and liabilities.

Subsidiaries, associates or joint arrangements acquired during the financial year are consolidated from the date on which control or significant influence is transferred to OP Financial Group while those that have been sold are de-consolidated from the date on which control or significant influence ceases.

Internal transactions, receivables, liabilities and profit distribution are eliminated in the preparation of the financial statements.

3.3 Non-controlling interests

Profit for the financial year attributable to the owners of the technical parent company and non-controlling interests is presented in the income statement, and total comprehensive income attributable to the owners of the parent and non-controlling interests is presented in the statement of comprehensive income. Profit for the financial year shown in the income statement and the statement of comprehensive income is also attributed to non-controlling interests in the event that their share, as a result, would become negative. Non-controlling interests are presented as part of equity capital in the balance sheet. If the investee's equity does not fulfil the equity classification criteria under IAS 32, the non-controlling parties' share of the net assets is presented as liability.

Non-controlling interests in an acquiree are measured either at fair value or as the proportionate share of net assets of the acquiree. The valuation principle applied is determined separately for each acquiree.

4. Foreign currency translation

OP Financial Group's financial statements are presented in euros, which is the functional and presentation currency of the parent. 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 11. Net investment income).

5. Summary of presentation of income statement items

Net interest income (interest income and interest expenses)	Received and paid interest on fixed income instruments, received and paid negative interest, 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.
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.
Net commissions and fees (commission income and commission expenses)	Commission income from lending, deposits, payment transactions, securities brokerage, securities issuance, mutual funds, investment management, legal services, guarantees, real estate services, sales commissions on insurance contracts and life insurance investment contracts. Commission expenses for lending, payment transactions, securities brokerage, securities issuance, mutual funds, asset management, guarantees and sales commissions on insurance contracts.
Insurance service result	Non-life and life insurance insurance revenue, non-life and life insurance insurance service expenses as well as net income from reinsurance contracts.
Net insurance finance expenses	Finance income and expenses GMM related to non-life direct insurance (unwinding of discount rate on insurance contract liabilities, effect of changes in assumptions related to interest rates on insurance contracts, and exchange rate differences of insurance contracts) and finance income and expenses related to reinsurance in non-life insurance. Finance income and expenses GMM related to life insurance (unwinding of discount rate on insurance contract liabilities, effect of changes in assumptions related to interest rates on insurance contracts and economic assumptions. Finance income and expenses VFA related to life insurance direct insurance (insurance contract net financing items of risk mitigation, effect of changes related to assumptions of interest rates on insurance contracts and net financing items of fair value changes of underlying insurance contract items). Finance income and expenses related to life insurance reinsurance contracts.
Net interest income from financial assets held for trading	Interest income and expenses of held-for-trading notes and bonds and derivatives in Banking and Group Functions, and fair value gains and losses. Also, fair value gains and losses on equities, and dividends. Financial assets held for trading are measured at fair value through profit or loss.
Net investment income	Realised capital gains and losses on notes and bonds recognised at fair value through other comprehensive income, interest income, as well as impairment losses and their reversals. Interest income and expenses of held-for-trading notes and bonds and derivatives in insurance, and fair value gains and losses. Financial assets designated at fair value through profit or loss include fair value changes in insurance financial instruments, interest income as well as dividends and participations. Income from assets covering unit-linked insurance and investment contracts. Fair value changes in investment property, rents and other property-related expenses. Income from loans and receivables recognised at amortised cost, and impairment loss. Associated companies' income consolidated using the fair value and equity method. Investment contract liabilities' net income from financial assets designated at fair value through profit or loss.
Other operating income	Rental income and sales revenues from property in own use, and other income.
Operating expenses	Includes the following rows in the income statement: personnel costs, depreciation/amortisation and impairment loss, other operating expenses and transfers to insurance service result.

Personnel costs	Wages and salaries, pension costs and indirect personnel costs.
Depreciation/amortisation and impairment loss	Amortisation and impairment loss on goodwill, brands, customer relationships related to insurance contracts and insurance acquisition expenses as well as information systems.
Other operating expenses	ICT production and development costs, costs for facilities, purchased services, charges of financial authorities, charges of auditors, telecommunications costs, marketing costs, corporate responsibility expenses, insurance and security costs and other expenses.
Transfers to insurance service result	Insurance operating expenses are presented as part of the insurance service result. Income statement rows personnel costs, depreciation/amortisation and impairment loss as well as other operating expenses are presented also including insurance operating expenses so that the income statement directly shows the amounts of expenses of the entire OP Financial Group.
OP bonuses to owner-customers	Services used by OP cooperative banks' owner-customers bring OP bonuses. OP bonuses in banking and wealth management are expensed in the income statement as they are earned in the row OP bonuses to owner-customers.

6. Revenue recognition

6.1 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 section 7.2.1 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)

6.2 Commission income

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 Retail Banking segment, commissions and fees are charged from personal customers and corporate customers. Commissions and fees consist mainly of those from lending and payment transactions. In addition, the segment charges fees, for example, for legal services, guarantees, deposits, mutual funds and real estate agency services as well as insurance sales. The abovementioned items consist of several hundreds of 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, guarantee and mutual fund fees are mainly fulfilled over time while other those of other retail banking fees at a point in time. The amount of consideration for the services is mainly the list price or a contractually stated price. Owner-customers get a discount on daily banking services, which is considered in the amount of the fees recognised as revenue. OP Financial Group charges its customers the fees on a monthly basis or after the service performance according to the contract terms.

In the Corporate Banking segment, commissions and fees are charged from personal and corporate customers. Banking commissions and fees consist of those from lending and payment transactions. In addition, Corporate Banking charges fees, for example, for guarantees and the issue of securities. The abovementioned items consist of several hundreds of 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 and guarantee fees are mainly fulfilled over time while other those of other banking-related fees at a point in time. Commission income related to the Corporate Banking segment asset management operations consists of mutual fund and investment management fees. Commissions related to wealth management are mainly recognised as revenue over time during the contract period, and the monthly consideration is a contractual percentage of the client's investments or insurance savings under management. Mutual fund and investment management fees include performance-based management fees tied to investment performance. The performance-based management fees are not recognised as revenue until the criteria measuring the success of investment has been met highly likely.

The Insurance segment's contracts with which no underwriting risk is associated are recognised as revenue under IFRS 15 and presented in net commissions and fees. Commission income mainly consists of the life insurance expense loading of investment contracts, returns of unit-linked management fees (mutual funds) and of insurance sales commissions. Life insurance investment contracts include a subscription fee and management fee charged from investment contracts. OP Financial Group's partners pay commission income from selling insurance policies according to the consideration specified in the contract. The performance obligations are fulfilled over time and the fees are charged from customers on a monthly basis.

Fees of the Group Functions segment mainly consist of payment transfer fees. The performance obligations are fulfilled over time and the consideration amount is as agreed. The fees are charged based on the actual payment transactions.

Revenue from contracts with customers is presented in Note 7. Net commissions and fees by segment.

6.3 Dividend income

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

7. Financial instruments

7.1 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 41. 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 (e.g. OTC derivatives), 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. 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 Financial Group's investment assets.

The illiquid financial liabilities (investment contracts) of the Group's life insurance operations are measured at fair value according to IFRS 9. The investment contracts' fair value is measured using a valuation technique which takes account, for example, of the time value of money and the fair value of financial assets that are used to cover them. However, the value of the liability may not be lower than the contract's surrender value. These contracts have been categorised on Level 3 in the fair value hierarchy.

7.2 Financial assets and liabilities

OP Financial Group's financial assets are shown in Notes 19. Cash and cash equivalents, 20. Receivables from credit institutions, 21. Receivables from customers, 22. Derivative contracts, 23. Investment assets, 24. Assets covering unit-linked contracts and 28. Other assets. Financial liabilities are shown in Notes 30. Liabilities to credit institutions, 31. Liabilities to customers, 22. Derivative contracts, 33. Debt securities issued to the public, 34. Provisions and other liabilities and 35. Subordinated liabilities.

7.2.1 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 Financial Group 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 service and origination fees related to loan drawdown and they are amortised over the expected life of the financial instrument or a shorter period if that is appropriate. Fees that are not an integral part of the effective interest rate of a financial instrument are accounted for in accordance with IFRS 15. These include fees charged for servicing a loan, for example.

Interest income

Interest income has been calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for: Financial assets that are not purchased or originated credit-impaired financial assets but subsequently have become credit-impaired financial assets but because they are over 90 days past due (that are in stage 3). In such a case, accrual revenue recognition of the interest of these financial assets ends and changes to a cash basis.

7.2.2. Initial recognition and measurement

At initial recognition, OP Financial Group 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.

7.3 Classification and subsequent measurement of financial assets

OP Financial Group classifies financial assets into the following categories:

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

7.3.1 Loans and notes and bonds

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

- OP Financial Group's business model for managing the financial assets
- The contractual cash flow characteristics of the financial asset.

On the basis of these factors, OP Financial Group 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 Financial Group manages its financial assets in order to generate cash flows. OP Financial Group'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 Financial Group 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 Financial Group holds home loans it has granted to collect contractual cash flows. Likewise, for example, the objective of the business model of OP Financial Group'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 Financial Group's operations. OP Cooperative's Board of Directors decides on changes in the business model. The business model changes in case OP Financial Group 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 loss allowance). 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.

OP Financial Group's business model did not see any changes during 2022–2023.

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 Financial Group's business model is other than trading, OP Financial Group 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 Financial Group's financial assets are basic lending arrangements.

All loans to personal customers and some corporate customer loans granted by OP Financial Group 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 Financial Group grants its corporate customers sustainable finance loans, in which the achievement of company-specific sustainability targets has been agreed on (such as on the reduction of greenhouse gas emissions) that affect the level of the loan margin. OP Financial Group has assessed that the cash flows of such agreements solely constitute payment of capital and the interest on the remaining capital amount.

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

7.3.2 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, except when OP Financial Group has made an irrevocable election at initial recognition for particular investments in equity instruments that would otherwise be measured at fair value through profit or loss to present subsequent changes in fair value in other comprehensive income. Such investments do not currently exist. Capital gains or losses on these investments are not recognised through profit or loss but their dividends are recognised in other operating income. Dividends of equity instruments held for trading are recognised in net investment income in the income statement.

7.3.3 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, for example, means a moratorium for a limited time. Generally, in these cases, the contractual cash flows of a loan are renegotiated or otherwise modified and the renegotiation or modification does not result in the derecognition of that loan. In such a case, OP Financial Group recalculates the gross carrying amount of the loan and recognises a profit or loss on the modification in net interest income in the income statement. In addition, the loan's categorisation as forbearance transfers the loan to at least impairment stage 2 and falls within expected credit loss calculated for the entire period of validity for at least two years until the customer's repayment capacity has recovered.

Another precondition for the recovery is that after a probation period of at least two years:

- The customer has made regular and timely payments during at least half of the probation period, leading to the payment of a substantial aggregate amount of the principal or interest.
- None of the customer's exposures has been more than 30 days past due during the previous three months.

Payment modifications are subject to regular monitoring and reporting to the management as an indicator describing customers' solvency.

If modifications to the loan terms are significant or the loan is renegotiated, OP Financial Group 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 Financial Group 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 Financial Group 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.

7.3.4 Insurance companies' financial assets measured at fair value through profit or loss

The insurance company's interest rate risk on the balance sheet (ALM) is reviewed and managed on a holistic basis. Interest rate risk on the balance sheet means an aggregate of liquid fixed income investments, interest rate derivatives and technical provisions. The interest rate risk management strategy in the investment policy determines how and in what way the company is prepared to bear an open risk in relation to the market risk associated with the technical provisions. Fixed income and interest rate derivative investments are used to manage market risks associated with technical provisions. Fixed income investments are mainly government or corporate bonds and derivatives interest rate swaps in practice or options to them. The basic weight of the strategic allocation and the targeted interest rate sensitivity ratio of investments have been determined in such a way that the risk-adjusted investment return is as high as possible, considering the market situation, the company's risk-bearing capacity and solvency targets.

The classification of financial assets follows the investment policy and OP Financial Group has designated all financial assets covering insurance contracts as at fair value through profit or loss (fair value option) so as to eliminate or significantly reduce the so-called accounting mismatch in the measurement of these financial assets and the related insurance contract liabilities. The value change in these financial items is also recognised in profit or loss.

This financial asset classification applies to all Pohjola Insurance and OP Life Assurance Company investments. Investments covering life-insurance unit-linked policies, which can be both fixed income and equity investments, are designated investments as measured at fair value through profit or loss because the related insurance contract liability or investment contract liability is recognised at fair value through profit or loss.

The row Assets covering unit-linked contracts on the balance sheet include assets covering unit-linked insurance and investment contracts measured both under IFRS 17 Insurance contracts and IFRS 9 Financial instruments. The value change in these assets is presented in the income statement under Net investment income.

7.4 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 37. Loss allowance regarding receivables and notes and bonds). Expected credit losses are recognised at each reporting date, reflecting:

1. an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes
2. the time value of money and
3. 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.

7.4.1 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 for which a lifetime ECL is also calculated.

Definition of default
In the IFRS 9 based calculation, OP Financial Group applies the same definition of default as in internal credit risk models. OP Financial Group 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 a public payment default record 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 per cent) of personal customer exposures are defaulted. In addition, the contract is in default when a payment related to a financial asset is over 90 days past due, at the latest.

The customer's default status 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. Non-performing exposure is defined in accordance with Article 47a of the Capital Requirements Regulation (EU) No. 575/2013. OP Financial Group uses non-performing exposures as the classification criterion for impairment stage 3.

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

Significant increase in credit risk

The expected credit losses will be calculated for each contract for 12 months or lifetime, depending on whether the instrument's credit risk on the reporting date has increased significantly since initial recognition. Both qualitative and quantitative criteria are used to assess for each contract whether the credit risk has increased significantly. Forbearance and a comparable breach of covenant are regarded as a qualitative criterion for a significant increase in credit risk and thereby give rise to transfers to impairment stage 2. Likewise, an entry on the watch list generated by the early warning system and an over threefold increase of the annualised PD from the original value are regarded as criteria for a significant increase in credit risk. However, the annualised PD must be over 0.3 per cent, so the so-called low credit risk assumption permitted by IFRS 9 is applied here.

OP Financial Group 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 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 on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due.

OP Financial Group 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.

7.4.2 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. In addition to this, the cash flow based ECL measurement method based on expert judgement is used for the largest corporate exposures on the watch list and covered by the R rating model, whose exposures have, in general, been moved to stage 2 or 3 in the ECL measurement.

7.4.2.1 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 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 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.

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 lifetime LGD consists of the following three components:

1. cure rate
2. collateral return and
3. non-collateral return.

The cure rate in personal customer exposures has been estimated at a product category level, whereas estimates concerning corporate customer exposures are industry-specific. The collateral return describes how much of the cash flows received from collateral securities covers the remaining amount of exposure. The collateral return is calculated by means of a lower-than-market value of collateral (haircut). The lower-than-market values have been estimated by comparing the realisation values of collateral by type of collateral in relation to the fair value of collateral, also considering the direct expenses incurred due to collateral repossession and sale. Finally, a margin of conservatism has been added to the lower-than-market-value estimates because of uncertainties associated with collateral data and estimation. The non-collateral return describes cash flows that have been estimated for the remaining exposure amount at product category level, which the collateral return does not cover.

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 13 years.

In stage 3, additional drawdowns following the default status are taken into account in loan commitments, bank guarantees and standby credit facilities using the credit conversion factor (CCF).

Forward-looking information

The calculation model includes forward-looking information and macroeconomic scenarios. OP Financial Group's economists update macroeconomic scenarios on a quarterly basis and the scenarios are the same that OP Financial Group 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 Financial Group's economic forecast are also taken into account in defining alternative scenarios. Three scenarios are used: baseline, upside and downside. The macroeconomic factors used are GDP growth rate, unemployment rate, investment growth rate, inflation rate, change in income level, 12-month Euribor 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 Financial Group 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 Financial Group's best view of potential scenarios and outcomes.

Macroeconomic forecasts and ESG

Macroeconomic scenarios take account of impacts from climate change, the related change in the economy and adjustment on the economy. An assessment of economic impacts has been made in calculating macroeconomic scenarios where the use of fossil energy is reduced, so that carbon neutrality will be achieved by 2035. In this scenario, the Finnish GDP growth rate is an average of 0.3 percentage points slower for many years than in the baseline scenario. However, the calculation may overestimate the slowing down of the economy if the economic adjustment capacity proves to be better than usual. For this reason, the negative effect is included in a weaker scenario.

Estimates of the economic impacts resulting from climate change will be specified as new research data on the impacts becomes available that can be applied to the scenario calculations for the period they cover.

7.4.2.2 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 measurement. Such expert judgement 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 judgement 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.

7.4.3 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 Financial Group 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 Financial Group 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/insurance line (seniority, covered bond status) and these are not separately assessed for each issuer or investment. 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.

7.4.3.1 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.

7.4.4 Impairment of off-balance-sheet items

Several products provided by OP Financial Group 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 life cycle. 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 Financial Group 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 Financial Group 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 Financial Group'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 Financial Group 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 Financial Group has a contractual ability to demand repayment and cancel the undrawn commitment but it does not limit the Group's exposure to credit losses during the contractual notice period.

7.4.5 Recognition of expected credit losses

OP Financial Group 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 Financial Group 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.

7.4.6 Extra impairment provisions based on management judgement (management overlay)

OP Financial Group may make an ECL provision in situations where an external factor changes very rapidly (for example in global crisis, such as pandemic or war or a rise in Euribor rates). The provision is temporary and remains valid as long as risk parameters used in ECL measurement have been updated to describe the changed situation. OP Financial Group has so far used only the so-called post-model management overlay concerning the loss allowance amount. However, OP Financial Group may also perform the so-called in-model management overlay concerning, for example, the PD risk parameter. Strict monitoring criteria are applied to the extra impairment provisions made based on management judgement and they are quarterly reported to Group Executive Management.

7.4.7 Write-off

A write-off constitutes a derecognition event. When OP Financial Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof, the final credit loss is recognised to 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, or when a notification has been received from the trustee in bankruptcy that no proportional share of the estate exists, or debt rescheduling or financial restructuring has come to an end or when collection measures have ended. Since early 2022, OP Financial Group has partially written off the amount not received already when the payment plan of the debt rescheduling or financial restructuring has been confirmed and the loan has no other parties or realisable assets. Payments received after the derecognition are recognised as an adjustment to impairment losses on receivables.

7.5 Cash and cash equivalents

Cash and cash equivalents consist of cash and receivables from credit institutions repayable on demand (Note 19. Cash and cash equivalents).

7.6 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. In addition, investment contracts with no entitlement to discretionary participation feature issued by insurance companies are designated as 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 Financial Group has certain designated financial liabilities as measured at fair value through profit or loss to reduce accounting mismatch.

OP Financial Group 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 Financial Group 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 Financial Group has not made any exchanges of financial liabilities for the existing financial liabilities.

7.7 Netting

Financial assets and liabilities are offset in the balance sheet if OP Financial Group 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 44. Financial assets and liabilities offset in the balance sheet or subject to enforceable master netting arrangements or similar agreements).

7.8 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 measured at fair value at all times (Note 22. 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.

7.8.1 Hedging instruments

OP Financial Group 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 Financial Group 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 Financial Group, the hedgeable risk categories are fair value and cash flow interest rate risks and 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 Financial Group also concludes derivative contracts which are in fact used to hedge against financial risks according to the risk management strategy but which do not fulfil these criteria or to which hedge accounting is not applied. Interest rate hedge is the most significant of these that concerns non-life and life insurance fixed income investments denominated in euro terms. Fixed income and interest rate derivative investments are used to manage market risks associated with technical provisions. Fixed income investments are mainly government or corporate bonds and derivatives interest rate swaps in practice or options to them, and all are recognised at fair value in profit or loss.

Hedge accounting will be discontinued prospectively if the hedging instrument expires, is sold, terminated or exercised or hedging no longer fulfils the criteria set for the application of hedge accounting or its designation as a hedge is revoked. For this purpose, the replacement or rollover of a hedging instrument into another hedging instrument is not an expiration or termination if such a replacement or rollover is part of the entity's documented hedging strategy. Additionally, for this purpose there is not an expiration or termination of the hedging instrument if as a consequence of laws or regulations or the introduction of laws or regulations, the parties to the hedging instrument agree that one or more clearing counterparties replace their original counterparty to become the new counterparty to each of the parties. For this purpose, a clearing counterparty is an entity that acts as a counterparty in order to effect clearing by a central counterparty.

7.8.2 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.

7.9 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 the Risk Appetite Framework, 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 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, OP Financial Group 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 Financial Group's hedging relationship. OP Financial Group 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 the reference rates of a hedged item or hedging derivative or when the hedging relationship ceases to exist. OP Financial Group applies hedge accounting based on IAS 39 and the related changes caused by the Interest Rate Benchmark Reform.

OP Financial Group has a Reference Interest Rate Committee tasked with monitoring the progress of the Interest rate Benchmark Reform and its effects on OP Financial Group and reporting the progress to the management on a regular basis. OP Financial Group has made a business continuity plan required by the Benchmarks Regulation that determines a substitute rate for contracts if the reference rates now used were no longer available and where the existing contract terms by product are identified and the effects on different parts of business are assessed. OP Financial Group will adopt reformed reference rates in new contracts, based on market practice. When it comes to the old portfolio of contracts, the changes have already been implemented by adopting practices applied in the market to replace IBORs.

7.9.1 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 Financial Group applies a fair-value portfolio hedging model based on the IAS 39 EU carve-out version to hedging against interest rate risk involved in the derivative clause of certain loans, demand deposit current and savings accounts with an interest rate cap or a fixed interest rate. For these hedging relationships, the prepayment option related to the hedged item causes ineffectiveness only rarely. OP Financial Group uses interest rate options, forward exchange contracts and interest rate and currency swaps (OTC swaps) as hedging instruments.

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 measured at fair value during the period for which the hedge is designated, and any fair value changes of the hedged risk 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. 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.

When discontinuing hedge accounting, the carrying amount adjustment to fair value of the hedged financial instrument due to the risk to be hedged, to which the effective interest method applies, must be amortised to profit or loss by the financial instrument's maturity date. The adjustment is amortised based on a recalculated effective interest rate or using the straight-line method in portfolio hedges. However, if the hedged item during the discontinuance of hedging is derecognised, the fair value adjustment will also immediately be recognised in profit or loss.

Governed by the EU Benchmarks Regulation, the methodology for the determination of the Euribor has been reformed. The European Securities and Market Authority (ESMA) has supervised Euribors since early 2022. OP Financial Group expects that the Euribor will remain the reference interest rate in the future too because the Euribor panel could have been reinforced. The European Money Market Institute (EMMI), the administrator of the Euribor rate, began to publish the forward-looking €STR derivative market EFTERM rate (Euro Forward-looking term rate) during Q4/2022 for use as a replacement rate. The EONIA rate (Euro Over Night Index Average) ceased to exist on 3 January 2022 and was replaced by the €STR published by the ECB.

7.9.2 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 mainly used as hedging instruments.

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 financial year when hedged items affect net income. If the hedged cash flows are no longer expected to occur, the fair value changes from the hedging instrument are transferred from equity as an adjustment due to reclassification to profit or loss. In respect of revoked hedge designations, if the hedged cash flows are still expected to occur, accrued fair value changes will remain in equity as a separate item until the hedged cash flows affect the income statement if cash flows are expected to affect several reporting periods, the accrued amount will be amortised using the straight-line method.

OP Financial Group 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. In respect of cash flow hedges, OP Financial Group has not seen that the Reform causes any uncertainty with timing or Euribor cash flows on the reporting date of 31 December 2023. LIBORs (excl. USD LIBOR) ceased to exist on 12/2021 and USD LIBOR ceased to exist on 6/2023. OP Financial Group was prepared for the cessation of the USD LIBOR and carried out appropriate changes in the terms and conditions of agreements.

8. 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 OP Financial Group's balance sheet (Note 23. 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 in net income from investment property under net investment income.

The fair value of property, 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 Financial Group's internal expertise. In the fair value of undeveloped plots, OP Financial Group 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 41. Recurring fair value measurements by valuation technique).

9. Intangible assets and goodwill

Goodwill, brands, acquired insurance portfolios, customer relationships, information systems and other intangible assets are presented in the intangible assets group on the balance sheet (Note 25. Intangible assets). Section 10.1 Impairment of PPE and intangible assets describes impairment of intangible assets.

9.1 Goodwill

For business combinations, OP Financial Group recognises the resulting goodwill to the amount at which the combined fair value of the consideration transferred, the recognised amount of any non-controlling interest in the acquiree and the previous holding exceeds OP Financial Group's share of the fair value of the acquired assets and assumed liabilities.

Goodwill is carried at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill is allocated to cash-generating units (CGU), which are business segments, entities belonging to them or their internal business divisions. From the time of acquisition, goodwill is allocated to those CGUs or groups generating cash flow that are expected to benefit from synergies arising from the combination of businesses, and also to the lowest level with which goodwill is monitored for the purpose of internal management. If OP Financial Group reorganises its internal reporting structure, goodwill is allocated to the CGUs subject to such reorganisation in proportion to their fair values or on the basis of another method, which would better reflect goodwill related to the transferred business.

9.2 Testing goodwill for impairment

The cash-generating unit (CGU) to which goodwill has been allocated is subject to an annual impairment test or whenever there is any indication of the lowered goodwill of the unit. The value of the CGUs of OP Financial Group was, for the goodwill testing, determined by the Excess Returns method. Accordingly, the return on equity capital is deducted from the recoverable amount for the current and future financial periods. Excess/negative return is discounted by a discount rate corresponding to the return rate on equity capital in order to determine the present value of cash flows.

Forecasts used in cash flow statements are based on the cash flow expected for the next five years and on the terminal value of the testing unit that are discounted to present value. Cash flow forecasts derive from the strategy process based on the guidelines for OP Financial Group's development confirmed by the Supervisory Council of OP Cooperative and the related derived expectations of the future development of businesses.

Impairment loss on goodwill may not be reversed under any circumstances.

9.3 Value of acquired insurance portfolio

An intangible asset corresponding to the value of an acquired insurance portfolio is recognised if the insurance portfolio is acquired directly from another insurance company or through the acquisition of a subsidiary. The fair value of acquired insurance contracts is determined by estimating the present value of future cash flows on the basis of the insurance portfolio on the date of acquisition. Upon initial recognition, the fair value of acquired insurance contracts is divided into two parts: a liability associated with insurance contracts measured in accordance with the applicable principles on the acquisition date, and an intangible asset. Subsequent to the acquisition, the intangible asset is amortised, depending on the business, either on a front-loaded basis or on a straight-line basis over the estimated effective lives of the acquired contracts. The effective lives are reviewed annually and the value is amortised over 1–4 years for non-life insurance and 10–15 years for life insurance. An intangible asset is tested annually for impairment in connection with testing the adequacy of the liability associated with insurance contracts.

9.4 Customer relationships

Identifiable customer relationships acquired through business combinations are measured at fair value upon acquisition. This intangible asset arising from customer relationships is amortised on a straight-line basis over the asset's estimated useful life. The estimated useful life of OP Financial Group's acquired customer relationships is 5–15 years.

9.5 Brands

Identifiable brands acquired through business combinations are measured at fair value upon acquisition. The estimated useful lives of brands are estimated to be indefinite since they will generate cash flows for an indefinable period. These will not be amortised. OP Financial Group's brands originate entirely from the acquisition of Pohjola Group plc's business operations. Impairment testing was carried out separately for the Pohjola and A-Vakuutus (A-Insurance) brands, in accordance with IAS 36.

The value of brands is tested annually for impairment. The value of the brands was determined by using a method where their value was determined to be royalty savings accrued in the future from owning the brands, discounted to the present. The discount rate used in testing brands is the market-based equity cost defined for the non-life insurance business plus an asset-specific risk premium or 3%. The testing period of the brands has been determined to be five years under IAS 36.

9.6 Information systems

Information systems are measured at cost less 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 information systems 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. Information systems are written off from accounting when they have gone out of use. Acquisition costs of information systems in Note 25. Intangible assets contain only those assets whose acquisition costs have not yet fully recognised as amortisation expense.

9.7. 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 Financial Group 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 Financial Group. 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.

10. Property, plant and equipment

Property, plant and equipment (PPE) assets are carried at cost less accumulated 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 26. Property, plant and equipment).

The estimated useful lives are mainly as follows:

Buildings	20–50 years
Machinery and equipment	3–10 years
Cars	2–6 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. PPE assets are written off from accounting when they have gone out of use.

10.1 Impairment of PPE and intangible assets

On each balance sheet date, OP Financial Group 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.

In respect of property in own use, OP Financial Group 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.

11. Leases

At the inception of the lease, OP Financial Group 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 Financial Group companies or its employees have the right to decide on the use of the asset throughout the lease period when OP Financial Group is the lessee and the customer and its Group companies have decision-making powers related to the use of the asset when OP Financial Group is the lessor.
- The contract includes rights and obligations and related payments.
- The asset identified in the contract is used only by OP Financial Group companies or employees when OP Financial Group is the lessee, and by the customer or its Group companies when OP Financial Group is the lessor.

11.1 Recognition of assets leased out

On the date of inception, OP Financial Group 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. The asset is recognised 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.

11.2 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 Financial Group defines the lease term as follows:

- a fixed term that cannot be extended or terminated without any good reason or sanction or
- 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 Financial Group 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.
- 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 end of the notice period unless the lease has been terminated. When determining the lease term, OP Financial Group 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
- 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 Financial Group usually uses the incremental borrowing rate of the lessor. The interest rate quoted by the OP Financial Group Treasury is used as the incremental borrowing rate that Treasury uses to lend OP cooperative banks and OP Financial Group's subsidiaries.

OP Financial Group applies entry concessions allowed for lessees. 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 Financial Group applies IAS 36 Impairment of assets to determine whether the right-of-use asset concerned has impaired. On every day at the end of the reporting period, OP Financial Group assesses whether there is any indication of impairment of an asset. If there is such indication, OP Financial Group will assess the asset's recoverable amount. An asset has impaired when its carrying amount exceeds its recoverable amount.

OP Financial Group's leased contracts are mainly those related to premises, company cars and safety devices (Note 27. Leases).

12. Employee benefits

12.1 Pension benefits

Statutory pension cover for OP Financial Group companies' employees is arranged by Ilmarinen Mutual Pension Insurance Company. Some OP Financial Group companies provide their employees with supplementary pension cover through OP-Eläkesäätiö (pension foundation) or an insurance company.

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-Eläkesäätiö 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-Eläkesäätiö 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-Eläkesäätiö 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.

12.2 Short-term employee benefits

OP Financial Group has in place a performance-based bonus scheme and a personnel fund. Bonuses will be paid for work performed during the performance year 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.

12.2.1 Performance-based bonus scheme

The performance period of the performance-based bonus scheme is 6 or 12 months. Performance-based bonuses are based on targets deriving from the annual plan, set for each company, team and person and covering all personnel of OP Financial Group.

The bonus is determined by the job grade and the maximum bonuses correspond to a 1–12-month annual salary.

Performance metrics of the performance-based bonus scheme in 2023

A factor applies to the bonus created through the achievement of the targets achieved in the central cooperative that is based on the central cooperative consolidated's EBT. Targets shown in the balanced scorecards and derived from annual planning are decided by the business lines/functions.

Performance-based remuneration in OP cooperative banks is based on shared bank-level targets team-specific and personal targets. Customer experience, commission income, sales and the strategy-based targets, among other things, are highlighted in the metrics.

Group-level metrics for all OP Financial Group managers/directors included OP Financial Group's cost/income ratio with a weight or 20 per cent and a net increase of customers meeting the cross-product metric criteria with a weight of 20 per cent.

In addition to the achievement of the performance metrics related to the performance-based bonus, qualitative assessment affects bonus payout, where the supervisor assesses a person's performance in view of compliance with regulation and instructions. The assessment also takes account of sustainability risks regarding the roles of persons for whom consideration of sustainability risks is an integral part of their duties. The performance-based bonus will be cut on the basis of the severity and number of offences using a factor of 0–1.

12.2.2 Personnel fund

OP Financial Group has a personnel fund into which bonuses are paid on the basis of pre-agreed principles, depending on the achievement of OP Financial Group's targets. Bonuses transferred to the Fund are recognised under 'Wages and salaries' in the profit and loss account and the counterpart as 'Deferred expenses' in the balance sheet until they are disbursed to their beneficiaries.

Payment of profit-based bonuses to OP Financial Group's Personnel Fund in 2023 was based on the achievement of the following targets: the cost/income ratio with a weight of 50% and net growth in customers fulfilling the criterion for the cross-product loyalty metric with a weight of 50%.

13. Insurance assets and liabilities

Assets and liabilities related to insurance business are specified in Note 32. Insurance assets and liabilities. Notes 23. Investment assets and 24. Assets covering unit-linked contracts present investments related to insurance business.

13.1 Classification of financial assets within insurance business

All financial assets related to insurance business are classified at fair value through profit or loss. The section 'Classification and recognition' under Financial Instruments contains information on the financial assets within OP Financial Group's insurance business.

13.2 Recognition and measurement insurance contracts

IFRS 17 is applied to contracts under which OP Financial Group accepts significant insurance risk from another party. When making an assessment, OP Financial Group takes account of all terms included in a contract, explicit or implied, but OP Financial Group shall disregard terms that have no commercial substance. Contracts held by OP Financial Group that transfer significant insurance risk of underlying insurance contracts to another party are classified as reinsurance contracts and are included within the scope of the standard. Insurance contracts and reinsurance contracts expose OP Financial Group to financial risk too. Changes in assumptions of financial risk and changes in liability arising from market changes can be reversed with changes in the fair value of assets in income/expenses.

Almost all of the contracts issued by the non-life insurer are insurance contracts. These include insurance for private individuals, motor vehicle insurance, statutory workers' compensation insurance, perpetual insurance and latent defect insurance under the Housing Transactions Act. Contracts in which the difference between realised and estimated losses are balanced with a supplementary premium and which involve no underwriting risk are categorised as claims management contracts and they are do not belong within the scope of IFRS 17.

Life insurance contracts include single and regular premium endowment policies where the sum insured is to be paid at termination of the policy, individual pension policies, group pension policies supplementing statutory pension cover, and term insurance policies issued mainly for death. Life and pension insurance savings can have either a guaranteed interest rate, with a discretionary participation in the profit of the insurer, or unit-linked in which the investment risk has been transferred to policyholders.

Capital redemption contracts issued by a life insurer and such endowment and pension insurance contracts under which, in the case of the insured person's death, purely savings will be paid to beneficiaries or an amount that differs slightly from it and is measured under IFRS 9 Financial instruments, are classified as insurance contracts because they do not include any significant underwriting risk (such as mortality or morbidity risk) and their policyholder has no right to change the contracts to include underwriting risk. The valuation of the liability of unit-linked insurance contracts and investment contracts is determined based on the value performance of the related investments, in which case the market income of the asset covering the insurance contract liability is credited as income to the policy. Unit-linked investment contracts are presented under Liabilities from unit-linked insurance. Commission income related to life insurance company investment contracts is presented in Note 7 Net commissions and fees. The commission income is presented in the row Sales commissions on insurance contracts, Life insurance investment contract and in the row mutual funds that includes all management fees for investment contracts granted by the life insurer.

13.2.1 Measurement methods in use

Insurance contracts with no direct participation features are measured using the General Measurement Model (GMM). This measurement model is applied to typical non-life insurance contracts and the life insurance contracts that do not fulfil the criteria of the variable fee approach (VFA). Insurance contracts with direct participation features are measured using the VFA. These are unit-linked insurance contracts issued by the life insurer which have a significant insurance risk. On initial recognition, OP Financial Group assesses whether the contract includes direct participation features using the following criteria:

- The contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items (e.g. investment basket).
- OP Financial Group expects to pay to the policyholder an amount equal to a substantial share of the fair value returns on the underlying items.

- OP Financial Group expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items.

13.2.2 Initial measurement and grouping of insurance contracts

For initial measurement, insurance contracts are identified and grouped into those subject to similar risks and managed together. This classification of non-life contracts takes account of the insured object, differences in the duration of contracts or the average length of the period between the occurrence of a loss event and the date of the fully-paid claim (claim settlement period). As to life insurance policies, OP Financial Group takes account of whether savings are accumulated, how the return of the savings is determined and whether the contract is for life or death risk. Insurance contracts are measured at cohort level that is created by means of a product line, customer group and cohort year. Contracts are grouped further based on their level of profitability and if the group of contracts is onerous on initial recognition or the existing group becomes onerous, the loss is immediately recognised in the income statement.

Insurance acquisition expenses are capitalised in assets in the balance sheet to the extent they can be deemed to relate to the renewal of the contracts. Capitalised acquisition expenses are allocated to the groups of future insurance contracts based on experience data using a systematic and rational method, which is presented in Other assets in the balance sheet. Capitalised cash flows are derecognised and are included in the measurement of the related new group of insurance contracts at the date of initial recognition. OP Financial Group regularly assesses the recoverability of an asset for insurance acquisition cash flows. OP Financial Group recognises an impairment loss in profit or loss if facts and circumstances indicate that the asset may be impaired. This is applied to the non-life insurance products where it is typical that some customers renew short 12-month policies, when the capitalisation criteria are fulfilled. In particular, policies for private individuals, motor-vehicle policies and statutory workers' compensation policies are usually continuous annual policies.

OP Financial Group recognises a group of insurance contracts are from the earliest of the following:

- the beginning of the coverage period of the group of contracts
- the date when the first payment from a policyholder in the group becomes due
- the date when the group of contracts becomes onerous.

The fulfilment cash flow of the group of insurance contracts is a sum of the following components:

- the fulfilment cash flows adjusted for the time value of money
- risk adjustment that reflects OP Financial Group's risk appetite
- the contractual service margin that is a residual item and represents unearned profit.

If the contractual service margin is negative, the group of contracts is onerous and the loss is immediately recognised in loss.

The following items are included in the cash flows of groups of insurance contracts:

- cash flows within the boundary of an insurance contract and those that relate directly to the fulfilment of the contract (such as insurance premiums received, paid compensation. claims settlement expenses and administrative expenses as well as net commission expenses), including cash flows for which OP Financial Group has discretion over the amount and timing.
- investment components with a high interrelation with insurance contracts as master agreements.
- any potential embedded derivatives closely related to insurance contracts as the master agreement.
- a promise that may be included in insurance contracts to provide non-insurance services or products when it is the question of ancillary cash flows.
- salvage and subrogation reimbursements that include damaged property which has come to the company's possession in connection with claims settlement or undisputable subrogation reimbursements related to claims.

Some life insurance contracts include investment components where their determination varies by contract type. The expenses of these investment components are presented separate from other incurred insurance service expenses.

13.2.3 Subsequent measurement of insurance contracts

Subsequently, at the end of each reporting period, the carrying amount in the balance sheet of the group of insurance contracts includes:

- the liability for remaining coverage (LRC) period that includes measurements of the components defined in initial recognition on the reporting day, cash flows of the contracts related to the future service to be provided and the value of contractual service margin.
- the liability incurred for claims (LIC) that includes claims and expenses for past service allocated to the group of insurance contracts at that date that have not yet been paid and claims that have occurred but have not yet been reported. This provision for outstanding claims consists of both claims reserved for individual cases and statistically reserved claims. The provision, included in the provision for outstanding claims, for the future settlement of expenses is based on estimated costs.

When measuring groups of insurance contracts, estimates of future cash flows reflect future assumptions made at the measurement date, the discount rate used is the rates at the measurement date and the estimate of risk adjustment for non-financial risk is revised. Discount rates used to determine the rate accreting on the contractual service margin are locked-in rates determined for contracts under the GMM model at the beginning of the group of contracts and for contracts under the VFA model the rate at the reporting date. Non-life insurance receivables based on insurance contracts are included in the insurance contract liability and they are tested for impairment on each balance sheet date. If there is objective evidence of an impaired receivable, its carrying amount is reduced through profit or loss. Both final impairment losses (loan losses) and impairment losses established statistically on the basis of the phase of collecting the charge are deducted from receivables.

Changes in the capital value of the cash flows arising from the fulfilment of insurance contracts are recognised in the following way:

- Changes that relate to services produced in the future are adjusted at the contractual service carrying amount in the balance sheet (or the insurance service result in the income statement if the group of insurance contracts is onerous).
- Changes that relate to service for the reporting period or past service are recognised in the insurance service result in the income statement.
- Changes in the discount rate and the effect of other financial changes on the value of the insurance contract liability and the effect of the passage of time (unwinding of discount) are recognised in the net insurance finance income and expenses in the income statement.

Interest rate risk associated with the insurance contract liability is reduced by entering into interest rate derivative contracts and making direct fixed income investments that are recognised at fair value through profit or loss on the balance sheet. The company's interest rate risk on the balance sheet (ALM) is reviewed and managed on a holistic basis. Interest rate risk on the balance sheet means an aggregate of liquid fixed income investments, interest rate derivatives and technical provisions, and fixed income investments and interest rate derivatives are used to manage market risks associated with the insurance contract liability.

13.2.4 Principle of determination of risk adjustment for non-financial risk

Risk adjustment for non-financial risk is one of the components in the measurement of insurance contracts and is included both the LRC and LIC calculation. In this context, risk adjustment means compensation that the company management requires to bear uncertainty concerning the amount of future cash flows of insurance contracts and timing that is caused by risk other than financial risk. The remaining risk adjustment amount is presented in the insurance contract liability reconciliation statement and risk adjustment related to a separately produced service (recognised portion). OP Financial Group applies the cost of capital method in determining risk adjustment. The risk adjustment calculation takes account of uncertainty associated with risk other than financial risk in respect of the groups of insurance contracts under IFRS 17. Risk adjustment is modelled as the difference between the best estimate and the present values of the stressed cash flow. The stressed cash flow is calculated at the confidence level or 99.5%, or the same confidence level as the insurance capital requirement.

The stressed cash flow calibration uses the cash flow stresses of the capital adequacy calculation and, as applicable, the company's internal calculation models. Stress scenarios that affect the amount of the risk adjustment in the group of insurance contracts concerned depend on the groups of insurance contracts and insurance lines. In term life policies, for example, growth in the mortality rate and the insurance lapse rate constitute the most significant stress scenarios. Risks associated with general activities have been excluded from risk adjustment.

A larger risk adjustment results from long-term cash flows in risks of the groups of insurance contracts. As a result of setting assumptions in new insurance contracts, risk adjustment is determined higher. With increasing information, the assumptions will be updated and therefore the risk adjustment will decrease as the best estimate based on the starting point is further specified. Risk adjustments of OP Financial Group's insurance companies represent the proportion of the risk adjustment remaining with their responsibility after the effect reducing reinsurance risk adjustment. Risk adjustment is recognised based on the cash flow forecasts used in the calculation. All interest rate-sensitive risk adjustment items are presented as part of net finance income and expenses in the income statement. As of 1 January 2023, this presentation also applies to the nominal cash flow of the risk adjustment cash flow. A year ago in 2022, this interest rate-sensitive proportion was presented in the insurance service result. The rest of the risk adjustment changes is presented as part of the insurance service result.

13.2.5 Discount rate determination principle

All cash flows are discounted at a rate and discounting curves are derived as the sum of the risk-free interest rate and the liquidity premium dependent on the characteristics of insurance contracts (bottom-up approach), extrapolating long-term interest rates. The risk-free interest rate is the same for all OP Financial Group insurance companies but the liquidity premium depends on the characteristics of insurance contracts, so the calculation uses several different discount rate curves for significant currencies. Swap rate quotes are used as market data for risk-free discount rate curves in selected liquid maturities. A credit risk component is removed from the swap rates, if necessary.

Liquidity premium is determined by means of the investment universe that takes account of each insurance company's exposure. The investment universe means a portfolio allocation. When creating it, the amount of exposure is taken into account in weightings and index choices, the maturities of exposure and investment cash flows as well as cash flow predictability. The investment universe includes reference indices and their weights for government bonds, IG corporate bonds (IG, credit rating AAA–BBB and higher-risk corporate bonds (HY, credit rating BB–C).

The movements of the discount rate affect earnings through the value change of cash flows and the selection of the interest rate model has a significant impact on earnings. At least once a year, OP Financial Group reviews the values of the parameters used in the yield curve modelling.

The discount rate used to determine the rate accreting on the contractual service margin are locked-in rates determined for contracts under the GMM at the beginning of the group of contracts determined at the beginning of the group of contracts.

13.2.6 Contractual service margin and its recognition

At the start of the reporting period, the contractual service margin is recognised in the insurance contract liability of all profitable contracts and its amount changes by new contracts added to the group, as a result of the discount rate and services provided. In the VFA, the service margin is also adjusted for a change in the life insurance proportion of the fair value of underlying items, except to the extent when risk mitigation is applied. Life insurance applies the option of risk mitigation to the with-profit cash flows of certain life insurance contracts. For this reason, changes in cash flows, which are hedged according to the insurance company's target and strategy of the management of market risks on the balance sheet in respect of financial risks, can be transferred from the service margin to the income statement.

The contractual service margin represents the unearned profit of the group of insurance contracts and an amount of the contractual service margin is recognised in profit or loss in each period to reflect the insurance contract services provided under the group of insurance contracts in that period. On the other hand, if the fulfilment cash flows exceed the carrying amount of the contractual service margin, this will give rise to a loss that is recognised in profit or loss as soon as the loss is realised. The amount of the contractual service margin recognised in profit or loss is determined by:

- identifying the coverage units in the group of insurance contracts. The number of coverage units in a group is the quantity of insurance contract services provided by the contracts in the group, determined by considering for each contract the quantity of the benefits provided under a contract and the contract's duration.

- allocating the contractual service margin at the end of the period (before recognising any amounts in profit or loss to reflect the insurance contract services provided in the period) equally to each coverage unit provided in the current period and expected to be provided in the future.
- recognising in profit or loss the amount allocated to coverage units provided in the period.

At OP Financial Group, coverage units are determined for the forecast lifecycle of the contract. For typical non-life insurance contracts of short duration, insurance service is interpreted to be provided evenly during the coverage period and insurance premiums received from contracts in the same insurance group are used as the basis for the coverage unit at insurance group level. The forecast lifecycle recognition of the contractual service margin of life insurance products in profit or loss, depending on the contract type, is affected by the saved amount by group, expected duration of the contract, amount of compensation or savings, lapses and future insurance premiums. Release of the contractual service margin and the basis of coverage units vary by insurance line: the basis is the development of the amount of assets for endowment-type insurance products and the development of capital at risk for term life insurance. In the reference year 2022, the basis is, however, an insurance premium with respect to term life insurance products.

The insurance products of OP Financial Group, where both investment service and insurance service are provided, are produced evenly and in the same proportion over the expected duration of the contract. In addition, both services are provided at the same time and their contract periods are of the same duration.

13.2.7 Reinsurance contracts

Reinsurance taken out by OP Financial Group refers to an insurance contract which meets the classification requirements set for insurance contracts and under which the Group may be paid compensation by another insurer if the Group becomes liable to pay compensation on the basis of other insurance contracts (ceded reinsurance). Reinsurance contracts are grouped using the same principle as direct insurance contracts, but proportional and non-proportional reinsurance contracts are additionally grouped separately. OP Financial Group applies the GMM to measurement of all reinsurance contracts held and the date of their initial recognition is earlier of the following:

- The start date of the coverage period of the group of reinsurance contracts. If this date is later than the start date of the coverage period of the group of reinsurance contracts, recognition is delayed until the underlying insurance contract has been initially recognised.
- The date when OP Financial Group recognises an onerous group of underlying direct insurance contracts when OP Financial Group entered into the related reinsurance contract held in the group of reinsurance contracts held at or before that date.

In measurement of cash flows of reinsurance contracts and recognition in profit or loss, OP Financial Group uses consistent assumptions with measurement and recognition of the cash flows of groups of underlying insurance contracts but with the addition that the expected value of the obligor's default is subtracted from cash flows. Subsequent changes in non-performance risk are immediately recognised through profit or loss. Fees paid by OP Financial Group to a third party is included as part of future cash flows of the reinsurance contract and they are recognised as revenue according to the revenue recognition of underlying insurance contracts.

The amount paid (premium) for the purchase of reinsurance cover typically exceeds the present value of future cash flows and the amount of risk adjustment for non-financial risk, in which case contractual service margin represents net expense. Net cost or net gain (contractual service margin) on reinsurance contracts held is recognised as revenue using defined coverage units as service is received. This follows the same mechanism as revenue recognition of the contractual service margin of underlying insurance contracts. When recognising a loss either in connection with initial recognition of the group of underlying onerous reinsurance contracts or when adding underlying onerous insurance contracts to the group, the contractual service margin is adjusted and, as a result of this, income is recognised. This adjustment to the contractual service margin and the resulting income are determined by multiplying:

- the loss recognised on the underlying insurance contracts
- the percentage of claims on the underlying insurance contracts OP Financial Group expects to recover from the group of reinsurance contracts held.

13.2.8 Presenting insurance contracts in the income statement and balance sheet

Income of the group of insurance contracts is presented in the row Insurance revenue in the income statement, comprising the measurement of the following components: future cash flows, risk adjustment for non-financial risk and contractual service margin. Expenses related to the group of insurance contracts consist of claims incurred, losses from onerous contracts, changes related to prior periods and operating expenses and they are presented in the row Insurance service expenses. Expenses and income related to reinsurance contracts are presented in the row Net income from reinsurance contracts.

The income statement item Net insurance finance income and expenses includes the effect of change in the discount rate and other financial changes on the value of insurance contract liability and the effect of the passage of time, meaning unwinding of discount. In addition, the item includes an option of risk mitigation to apply to certain life insurance contracts. Applying this option gives an opportunity to adjust accounting for contracts under the VFA model in such a way that those changes in cash flows involving a hedgeable position in respect of financial risk under the investment strategy are transferred from the contractual service margin to the income statement.

In the balance sheet, future cash flows related to contracts are presented in net terms and grouped into insurance contract liabilities or assets at portfolio level and into reinsurance contract liabilities or assets at portfolio level. The previous presentation under IFRS 4 based on expense types in the income statement will change because, as a result of IFRS 17, a proportion of personnel costs, depreciation/amortisation and other operating expenses is included in the calculation of insurance contract liability under IFRS 17 and presented in Insurance service expenses.

OP Financial Group has made the following significant choices related to the accounting policies:

- Presenting financial income and expenses related to the insurance for the period through profit or loss; discounting curves are derived as the sum of the risk-free interest rate and the liquidity premium dependent on the characteristics of insurance contracts (bottom-up approach), extrapolating long-term interest rates. Similarly, investments related to insurance contract liability are reclassified in such a way that their fair value is presented through profit or loss. The overlay approach applied to equity investments allowed by IFRS 4 ceases to be effective at the date of initial application.
- A risk mitigation option is used for certain contracts based on the VFA that are hedged according to the goal and strategy of the management of market risks in interest rate risk on the balance sheet. This removes the result mismatch.
- The Cost of Capital Method is used to determine risk adjustment.
  OP Financial Group does not apply the Premium Allocation Approach (PAA), nor does it apply the option allowed by IFRS 17 adopted in the European Union to group together several annual cohorts.

13.2.9 Coinsurance and pools

OP Financial Group is involved in a few coinsurance arrangements with other insurers. Of the coinsurance contracts, OP Financial Group treats only its share of the contract as insurance contracts and OP Financial Group's liability is limited to this share.

OP Financial Group also underwrites shares of insurance contracts through pools, whose members are primarily responsible for their own proportionate share of the underwriting risk. These shares are based on contracts confirmed annually. OP Financial Group treats as insurance contracts its own proportionate share of the direct insurance business managed by pools and of the reinsurance business from the pool to its members.

The pool's share of these insurance contracts is treated as reinsurance. In some pools, members are responsible for an insolvent member's liabilities in proportion to their shares in the pool. OP Financial Group recognises liabilities and receivables based on joint liability if joint liability is likely to materialise.

13.2.10 Principle of equity concerning life insurance

With the exception of unit-linked parts of life insurance contracts, almost all life insurance contracts and a small number of capital redemption contracts entitle to a discretionary participation feature to the profit, in addition to guaranteed benefits, which may account for a significant portion of the total contractual benefits, but whose amount and timing is at the discretion of the company under the contract. Some unit-linked policies include an option for a discretionary participation feature. Additional benefits are distributed as additional return in excess of technical interest, additional death benefit or reduced premiums.

The distribution of the surplus is based on the principle of equity referred to in the Insurance Companies Act which requires that a reasonable amount of the surplus to which the contracts are entitled is distributed to these policyholders, provided the solvency requirements do not prevent this. It is necessary to aim at continuity with respect to the level of additional benefits. Nevertheless, the principle of equity will not enable policyholders to demand any funds as debt. OP Financial Group has published its life-insurance additional benefit principles and its realisation on its website.

Separated balance sheets with a profit distribution policy differing from other life insurance operations have been created from the endowment policies and individual pension policies transferred from Suomi Mutual Life Assurance Company. The amount with which the assets on the separated balance sheets exceed the insurance contract liabilities measured by discounting using a swap curve on a market consistency basis is reserved as liability for future bonuses.

14. 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 (Note 34. Provisions and other liabilities).

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 Financial Group'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 43. Contingent liabilities and assets).

15. Equity capital

OP Financial Group categorises instruments it has issued on the basis of their nature either as equity or financial liability. Incremental costs directly attributable to the issue or purchase of equity instruments are shown in equity as an allowance.

Cooperative capital, divided into cooperative bank members' cooperative contributions and Profit shares, are classified as equity instruments. Cooperative banks have an unconditional right to refuse to redeem both cooperative shares and Profit Shares. However, cooperative banks may decide to redeem cooperative shares, within the limits set by the authorities.

Member cooperative contributions and the resultant owner-customer membership entitle owner-customers to take part in the bank's decision-making. Cooperative banks have an unconditional right to refuse redemption of cooperative contributions. No interest is paid on cooperative contributions.

Profit Shares confer no voting rights. Cooperative banks have an unconditional right to refuse payment of Profit Share capital or interest. Any interest payable on Profit Shares is the same for all Profit Shares. The interest is recognised as liability and deducted from equity once the decision for payment has been made (Note 36. Equity capital).

16. Income tax

Income tax expense shown in the income statement includes current tax, based on the taxable income of OP Financial Group companies for the financial year, and income tax for prior financial years and deferred tax expense or income. Taxes are recognised in 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 temporary taxable differences between the carrying amount of assets and liabilities and their tax base. Deferred tax assets are calculated on tax-deductible temporary differences between the carrying amount and taxable value included in the financial statements, and on losses confirmed for tax purposes. Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Deferred tax assets are not recognised where generation of taxable profits, against which taxable losses or refunds could be utilised, is not likely. The greatest temporary differences in OP

Financial Group are caused by tax provisions (such as loan loss provision) and measurement of investments at fair value (Note 18. Income tax).

17. Charges of financial authorities

OP Financial Group pays charges to various authorities. The Financial Stability Authority is in charge of deposit guarantee. Responsibility for banking supervision rests with the European Central Bank. The Finnish Financial Supervisory Authority is responsible for insurance supervision, 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 15. Other operating expenses)

17.1 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.

17.2 Deposit guarantee contribution

Amounts contributed to the former Deposit Guarantee Fund (VTS fund) currently exceed the EU requirements governing the deposit guarantee level. By virtue of its rules, the VTS Fund takes charge of the deposit guarantee contributions payable by its member banks to the new Deposit Guarantee Fund managed by the Finnish Financial Stability Authority (FFSA) in proportion to which each member bank has made contributions to the former Deposit Guarantee Fund over the years.

As member of the VTS Fund, OP Financial Group has the right to cover deposit guarantee contributions to the FFSA from the VTS Fund, in full or in part. In 2023, OP Financial Group paid 44 million euros in deposit guarantee contribution that was covered from the VTS Fund. The target level of the deposit guarantee fund managed by the FFSA is expected to be met in spring 2024. As member of the VTS Fund, OP Financial Group has the right to still cover any future deposit guarantee contributions to the FFSA from the VTS Fund by around 365 million euros. The deposit guarantee contribution had no effect on OP Financial Group's income statement in 2022 and 2023 in terms of expenses.

17.3 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.

17.4 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.

17.5 European Central Bank's supervisory fee

The ECB supervisory fee is determined based on the bank's importance and risk profile.

18. OP bonuses to owner-customers

In the income statement, OP bonuses to owner-customers are presented as a separate item. OP cooperative banks' owner-customers earn OP bonuses through the use of banking, non-life insurance and wealth management services. OP bonuses are expensed in the income statement as they are earned and recognised as accrued expenses in the balance sheet. Earned bonuses are used automatically for banking and wealth management service fees and non-life insurance premiums starting from the oldest ones, and the accrued expenses are reversed (Note 17. OP bonuses to owner-customers).

19. 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.

20. New standards and interpretations

The IASB (International Accounting Standards Board) has issued the following significant future IFRS amendments.

20.1 International tax reform – Pillar 2 model rules –Amendments to IAS 12 Income Taxes

Various agreements have been made on a global basis to solve the challenges related to uneven profit distribution and taxes in the digitalised economy. Many countries are currently amending their local laws to introduce a global minimum top-up tax. The EU directive is based on the so-called OECD Pillar Two regulation aimed at levying at least a minimum level of tax on groups of companies independent of the country of operation. The minimum tax level would be assessed for each country and the actual tax level should be at least 15 per cent. Regulation applies to the group's units that are located within the EU and are part of a multinational group or a large Finnish group if the total net sales referred to in group regulation are at least 750 million euros. In Finland, law on the minimum tax for large groups entered into force on 1 January 2024. Reports to the Finnish Tax Administration under Pillar 2 must be made after 15 months of the end of the financial year, at the latest. The time limit corresponding to the transition year (i.e. the first financial year during which the group belongs within the scope of Pillar 2) is 18 months from the date of the end of the financial year.

Regulation under Pillar 2 is applied to OP Financial Group companies and groups as required by law. Since the law on the minimum tax for large groups of companies was not in force on the reporting date of 31 December 2023, OP Financial Group has not recognised income taxes under Pillar 2.

The IASB amended the IAS 12 Income Taxes in May 2023. The amendment extended the IAS 12 Income Taxes to concern income taxes under the OECD Pillar Two and disclose them in the financial statements. The amendments also introduced a temporary exception from accounting for deferred taxes arising from the implementation of the Pillar 2 model rules. This temporary exception is applied retrospectively in accordance with IAS 8. In accordance with the temporary exception, an entity shall neither recognise nor disclose information about deferred tax assets and liabilities related to Pillar 2 income taxes. OP Financial Group applies the temporary exception under IAS 12 Income Taxes.

A project and clarifications are underway at OP Financial Group in respect of Pillar 2. Based on the information available on the balance sheet date, OP Financial Group assesses that income tax under Pillar 2 has no material effect on its financial statements.

20.2 Other upcoming amendments

Amendments to IAS 1 Presentation of Financial Statements, IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures will enter into force on 1 January 2024. Amendments to IAS 21 The Effects of Changes in Foreign Exchange Rates will enter into force on 1 January 2025. The amendments will not have any significant effect on OP Financial Group's financial statements.

Note 2. OP Financial Group's Risk Appetite Framework

1 Overview of OP Financial Group's significant risks

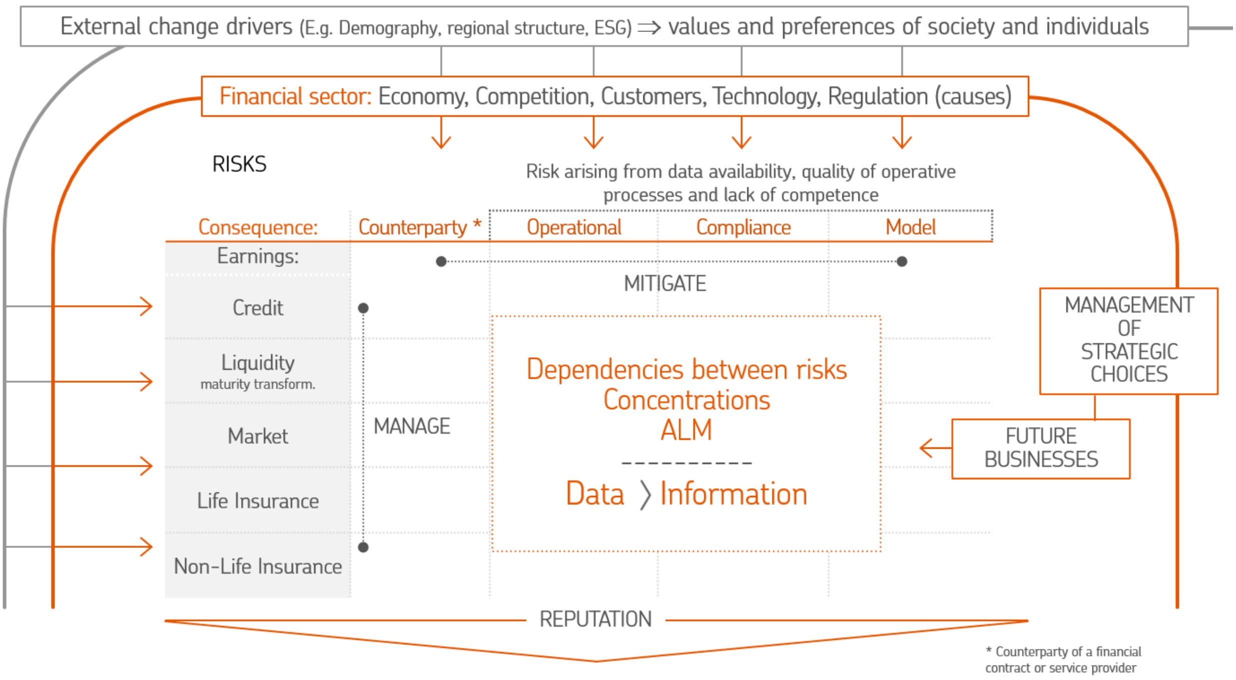
OP Financial Group's Risk Appetite Statement and Risk Appetite Framework cover all operations. Its general risk management principles are further specified by revenue logic (by product and service). The bases for establishing revenue logics include services provided to customers; processes needed in service production, operational analyses and reporting; and understanding of the risks involved for OP Financial Group in providing the services.

Due to the characteristics of OP Financial Group's business and industry, risks have two distinct fundamental principles: OP Financial Group may earn revenue through risks (earnings risks) or risks may be a consequence of something (consequential risks). Reviewing earnings risks involves the examination of OP Financial Group's critical success factors from the business perspective. For this reason, OP presents the sources and management of earnings risk in detailed descriptions of significant risks by revenue logic, except for Group-level risks that apply to all revenue logics. Most consequential risks are Group-level. Reducing potential negative impacts is the key focus of consequential risk reviews.

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. The negative effect of 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 functions of earnings and consequential risks, OP Corporate Bank primarily aims to manage earnings risks, whereas it primarily aims to reduce consequential risks.



OP Financial Group's revenue logics are: Banking through the balance sheet, Banking – Markets, Banking – Asset Management, Non-life Insurance and Life Insurance. The revenue logic, Banking through the balance sheet, is further divided by business segment between Corporate Banking, Retail Banking, and Group Treasury (included in other operations according to OP Financial Group's segment division). Banking's revenue logics include both the Retail Banking segment and the Corporate Banking segment. The Life and non-life Insurance revenue logics belong to the Insurance segment.

OP Financial Group's risk management and compliance are based on the three lines of defence principle. The first line of defence comprises businesses, the second line of defence comprises the Risk Management and Compliance assurance functions independent of the businesses, and the third line of defence comprises Internal Audit (independent of the other lines of defence). 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 available in advance. The lines of defence jointly create the risk management process, which takes account of the special features of OP Financial Group's business. There is a clear division of responsibilities between the first and second lines of defence.

- OP Financial Group's businesses fulfil its strategy and are responsible for planning and efficiently and effectively implementing their own operations and for 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. The businesses' routines include reporting on risks concerning business operations.
- The second line of defence prepares a risk management framework for approval by OP Financial Group's management. Within this framework, the first line of defence takes and manages risks related to its daily business. The second line of defence supports the first line of defence by consulting and constructively challenging it, especially in matters forming part of its own expertise. In addition, the second line of defence oversees compliance with regulation and OP Financial Group's guidance framework, and independently analyses the balance between earnings, risks, and capital and liquidity acting as buffers. It also analyses how business continuity can be ensured during incidents. Risk Management also assesses whether the businesses' strategic goals and choices are in line with the Risk Appetite Statement set by management, and other principles covering risk-taking and risk management.
- Internal Audit, which is independent of other lines of defence, acts as the third line of defence.

2 OP Financial Group'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 of a contracting party to a financial instrument being unable to fulfil its contractual repayment obligations, and thereby causing a financial loss to the other party.
Liquidity risks	A liquidity risk is the risk of liquidity or capital availability being insufficient to realise business goals as laid down in the strategy. It is caused by the timing of inflowing or outgoing cashflows (payments) and/or imbalances between them. Liquidity risks include concentration risk, market liquidity risk and refinancing risk. Concentration risk is caused by the concentration of financing across time, or between certain counterparties or instruments. Market liquidity risk is the risk of failure to execute market transactions within a desired time and/or at an estimated price, or of a contraction in the liquid assets owned by a bank. Refinancing risk involves the risk that a debt cannot be refinanced on the market.
Structural interest rate risk on the balance sheet	Risk arising from the effects of interest rate movements on Banking's annual net interest income, and on the insurance company's earnings (IFRS 17) and solvency. The banking book consists of non-trading book customer agreements

	(loans and deposits), financing from the wholesale financial market, equity capital, liquidity buffer (fixed income investment and cash) and interest rate derivatives (items that balance risks and liquidity). In the insurance companies, net interest income comprises technical provisions, interest rate-sensitive investments and interest rate derivatives used to manage interest rate risk.
Other market risks	Other 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.
Non-life insurance risks	Non-life insurance risks comprise risk of loss or damage, and provision risk. Risk of loss or damage occurs when there are an above-average number of losses, or they are exceptionally large. Provision risk arises when the claims expenditure incurred for losses that have already occurred is higher than expected or the timing of the payment of claims deviates from expectations.
Life insurance risks	Life insurance risks comprise biometric risks, cost risk and customer behaviour risks. Biometric risk arises when forecasts of the insured's life expectancy diverge from actual life expectancy in the case of products that include an endowment risk, or when mortality forecasts concerning the insured (for example, unpredicted growth in mortality caused by a catastrophe) diverge from actual mortality in the case of products that cover the risk of death. Biometric risk also arises when forecasts, of when the insured person's incapacity for work will begin, diverge from the actual beginning of incapacity in the case of products that cover disability risk. However, the aforementioned risk is very small in OP Life Assurance Company.
Counterparty risks	Counterparty risk refers to the risk that a party to a derivative contract, repurchase agreement (Repo), trade or reinsurance contract will fail to fulfil its financial obligations, accompanied by a risk of the growing costs associated with having to obtain a corresponding replacement contract. A special feature of counterparty risk is a change in the risk level alongside the agreement's market value, due to which contractual risk can grow after an agreement is made.
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. Operational risk related to data capital 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 related to non-compliance with regulations and guidelines
Model risks	Model risk occurs when a model created to describe a certain phenomenon or behaviour fails to do so in the intended manner. Model risk can be used to monitor financial 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 such models. The model risk management model provides a way of describing, quantifying or simulating a certain phenomenon

	or behaviour. A model translates source data based on mathematics, statistics and expert assessments into data guiding business decisions or quantitative or qualitative data related to financial risk exposure. Source data/inputs can be quantitative and/or qualitative, or based on expert assessments.
Reputational risks	This is the risk of a weakening in reputation or trust, primarily due to the simultaneous realisation of an individual risk or several risks, or to some other kind of negative publicity.
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. This also includes risk arising from inadequate internal reaction and inflexibility in the business and competitive environment, or changes in customers' values or in technology.

Risks associated with future business are not dealt with as a separate whole, because they may emerge in the form of various significant risks, or as part of different 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 a lingering risk which a party cannot or does not want to eliminate, or that remains after possible risk reduction measures. Residual risk can be considered synonymous with risk. As such, residual risk is not an equivalent concept to the significant risks described above, but may apply to any of those risks.

Drivers of change in the business environment, such as technological or climate change and other sustainability factors (ESG factors – Environmental, Social and Governance), affect the needs and preferences of customers and other members of society. ESG factors are external megatrends – examples of root causes on OP Financial Group's risk map. They are defined as change factors affecting different risk types, not as separate risks, in risk identification processes.

Worsening climate change and environmental damage create physical risk factors:

- Acute risk factors include extreme weather conditions such as events related to drought, floods and storms or, for example, an individual environmental catastrophe.
- Longer-term changes emerge more slowly: examples include global warming, rising sea levels, reduction in biodiversity, land and water pollution, and the destruction of living environments.

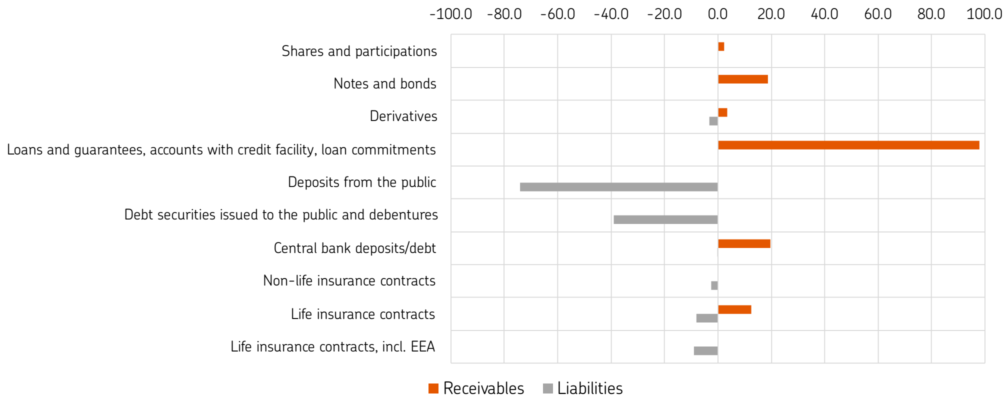
The transition towards a low-carbon and more environmentally sustainable economy will have direct and indirect impacts. These include, for example, climate or environmental policy decisions, technological development, market confidence, and changes in customer choices.

Physical and transition risks will impact on OP Financial Group's business and financial success through customers and other stakeholders, in particular. If they materialise, such risks may affect the risk profile, capitalisation, liquidity and continuity of daily business in various ways.

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 2023).

Key instruments, associated risk types and volumes, € billion



	Credit	Market	Opera-tional	Under-writing	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
Debt securities issued to the public and debentures		x	x		x
Central bank deposits/debt		x	x		x
Non-life insurance contracts		x	x	x	x
Life insurance contracts		x	x	x	x
Life insurance contracts, incl. EEA		x	x	x	x

2.2 Banking risks

2.2.1 Credit risks

Credit risk related to customer relationships in banking mainly concerns bilateral promissory notes agreed with Finnish customers. As a rule, the terms of these promissory notes do not allow them to be sold onwards. Exposure's maturities vary from short-term products with credit limits to longer-term promissory notes, but the latter dominate the balance sheet quantitatively. The average maturity of personal customer exposures is based on mortgages, and that of corporate customers is based on promissory notes with 3–7-year maturity periods. The credit risk transfer of these assets to the markets, either individually or in portfolios, is not part of OP Financial Group's business model. Personal customers can repay variable-rate loans faster than required by the repayment schedule. Correspondingly, successful companies often use their negotiation power to refinance variable-rate loans prematurely, when the new loan is available for a lower loan margin than the current one. This results in faster contraction of assets based on borrowers with improved creditworthiness, than on those whose credit risk has increased.

The above require that OP Financial Group succeed overall in:

- proactively steering the overall portfolio structure so that each portfolio goes overweight in terms of customer groups (portfolio segments) with homogeneous risks, which are likely to succeed in the future business environment,

- excelling our competitors at selecting customers from the overall customer population that improve/maintain their creditworthiness and retaining such customers and their loans on the basis of the original, risk-based terms. Conversely, the pricing of each customer with deteriorating creditworthiness must be adjustable to cover the growing risk.

To succeed in risk management, senior management needs top-quality, continuously updated data on individual groups of connected clients, the financial status of each group of connected clients, and the related, explanatory factors (particularly how such factors change in different future business environment scenarios). In addition, senior management must identify mutual dependencies between individual actors. Through this information, it must assess the repayment ability of groups of connected clients on the basis of forecast free cash flow and the related uncertainty. Such assessment requires comprehensive, continuously updated data on customers, their "balance sheet", and the management of current agreements, as well as analyses in support of decision-making.

Phases of credit risk management strategy

To arrange credit risk management in line with risk appetite, senior management must define and describe the following matters, and implement them in processes:

- **A consistent picture of processes:** The basis of all activities must be a shared view of the customer financing process, the related credit risk management process phases, and dependencies between these phases. Each process forms a whole whose phased tasks, the outputs of such tasks, and the data needed and created at each phase must be defined. The credit risk management principles are also applied to management of Corporate Banking's bond portfolio.

- **A clear picture of homogenous groups**: customer and/or transaction groups (portfolio segmentation) with homogeneous credit risks must be defined on the basis of the borrower's income sources and collateral types. Repayment of loans and/or the refinancing of debts depends on the borrower's ability to generate free cash flows. For this reason, their income source is the primary segmentation criterion and segmentation must be adjusted by collateral type. Grounds must be given for not adjusting segmentation in this way. Although agreements' legal terms and conditions are not used as grounds for credit risk segmentation, such information must be taken into account when advising the customer and assessing credit risk.

- **Credit risk management:** consistent customer relationship management and agreement management practices, and analysis and measurement methods, must be defined for portfolio segments. This must take account of legal terms and conditions in the agreement that affect the size of the credit risk (PD, LGD and EAD). When risk parameters are assessed at portfolio level, account must be taken of e.g. probability of default (PD) and collateral value dependencies. These consistently defined practices must be systematically applied at the various phases of the financing process. This group of portfolio segment-specific practices (the credit rating system) must form the basis of operations and their development.

- **Definition of data needs:** The same systematic practices can be applied in different portfolio-specific credit rating systems, but such systems differ in terms of the data required. Data must be defined for each portfolio, to enable the various phases of financing and credit risk management processes. In addition, possible deficiencies in data availability and usability must be reported to the management and the data owner.

- **Processes and instructions:** Customer financing service processes and the related credit risk management processes must take account of the above matters, to ensure that the required source data can be collected from customer processes and external sources, and that quantitative data generated in various process phases is made available for other phases.

Credit risk management phases of customer relationship

Maintenance of customer's basic information: The legal basis for determining groups of connected clients must be recorded and customers' basic information kept up to date, to enable high-quality and efficient risk management.

Continuous profiling of the customer and collateral: the customer business's revenue logic, current status and current realisation value of assets to be pledged as collateral must be determined. Information must also be collected to enable assessment of the customer's financial success and how collateral value will develop in various scenarios. Customer analysis is done whenever a new customer is onboarded or the customer's situation changes. Senior management must arrange at least the following:

- The financial statements and balance sheet information of groups of connected clients must be kept up to date, and historical data must be maintained. If a borrower is in default and their information must be updated, a quantitative grading and collateral liquidation value are required.

- A granular assessment must be performed of the customer's revenue logic and of factors affecting future free cash flow and asset values. The customer's vulnerability to price risks on the markets – whether they involve production factors, financial assets or end products – must be determined. The customer's financial statements must be closely analysed to identify balance sheet and profit dependencies on particular product ranges or customers, suppliers and market areas etc, so that actual groups of connected clients can be identified.

- Assessment of financial sustainability must include taking account of climate-related factors as part of financing decisions. Collateral valuation must include assessment of how climate and biodiversity-related factors impact on projected values. Our corporate customers must be sorted into ESG (Environmental, Social, Governance) categories based on industry exposure to ESG factors, and an ESG analysis must be performed, if necessary.

- Information on the customer and collateral must be updated sufficiently often and used as the basis for assessing the customer's or transaction's credit rating and/or collateral liquidation value. The credit rating methodology (specific to the credit rating system) and collateral valuation methodologies must be described.

- The probability of default (PD) trends of individual borrowers in each rating grade and loss given default (LGD) ratios must be assessed over time.

Sizing and pricing of new loans

When the customer and their collateral have been assessed, the results must be used to measure and price any new loans, or to restructure the customer's current loan portfolio.

Granting of loans must be based on the customer's repayment capacity and the loan terms and conditions. The current and future repayment capacity set limits on the loan amount and other terms. In addition, loan sizing must take account of how future terms will impact on the customer's financial success. The purpose of collateral is to limit potential credit loss – collateral is only realised in cases of default.

Agreement pricing must include the customer's PD over time and LGD over time, but in such a way as to avoid allocating the entire portfolio's diversification or concentration impacts to these risk parameter values. It must also take account of interdependencies between (as well as developments in) default and collateral value, and the loan repayment schedule and seniority of creditors. Within the framework of the pricing principles, senior management must build more detailed portfolio segment-specific pricing models.

Deciding on and implementing agreements

Because credit decisions involve a decision to take a risk, there must be sufficient, accurate and up-to-date information about the factors affecting the project and decision. The decisions and its grounds must be recorded in the decision-making system. Financing decision-making is based on the principle of segregation, whereby the person preparing financing may not make the financing decision alone. Decisions that deviate from the target risk profile specified in the risk policy must be explained on a broader basis.

Credit management during the agreement's validity

Credit control and proactive customer-specific assessment must be based on the same information (on the customer, collateral and agreement terms) as credit granting. The agreement terms set must be based on such information, or indicators derived from it.

To identify the customer's financial situation (particularly possible financial distress), credit control processes must comply with the practices defined for the credit rating system. Precise indicators and their threshold values must be defined, on the basis of which the customer/loan is assigned to a certain credit risk-cycle phase. Comprehensive information must be available across the credit life cycle about different credit risk-cycle phases and rating grades, and about any realised losses, to enable the allocation of collateral assets to the correct exposures. As the values of defined indicators change, the responsible parties must take action in accordance with agreed practices and report the matter to management.

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 measures to resolve the customer's situation from the bank's perspective, and minimise any risk that might materialise for the bank.

Senior management must define and describe how work is divided between the first and second lines of defence for the above customer-specific credit risk management. As a general principle, the first line of defence is responsible for all credit risk management tasks except the following second line of defence roles: credit rating methodology, verification of rating grades and collateral values, and quantification of risk parameters.

Phases of portfolio-level credit risk management

Due to OP Financial Group's structure, there is no single, centralised party that could decide on the portfolio structure and its adjustment. Senior management must arrange portfolio management and the organisation of tasks based on the following phases:

- **Basic monitoring of the credit risk portfolio:** Assets must be divided into portfolio segments and rating grades, customer and transaction specifically. Descriptive indicators must be defined for such assets, which make monitoring of risk allocation easy. The grounds for portfolio diversification benefits and concentrations, and the impacts of such benefits and concentrations on capital need, must be reported separately.

- **Preparation of target portfolio and risk policy:** A target portfolio for credit risk assets in banking must be prepared annually, as part of the annual planning process. This target portfolio must take account of the current portfolio structure and its economic capital, business strategy priorities, forecast changes in the external business environment, and customers' needs. Portfolio segment/credit rating-specific weightings for new lending and pricing, and indicators and impact analyses that give an accurate picture of assets, must be specified for the risk policy.

- **Preparation of detailed credit policy:** The credit policy must define portfolio-specific weightings for new sales and pricing, for inclusion in the risk policy. Customer-specific credit risk taking is steered by the credit policy, which provides portfolio segment-specific policies for rating grades, collateral shortfalls and loan repayment terms and conditions. Implementation of the credit policy must be reported and monitored on the basis of the portfolio segment-specific return on risk-adjusted capital (RORAC). Accordingly, the economic capital metrics used must make different asset types mutually comparable, to enable credit risk taking in line with the credit policy.

- **Detailed analysis and reporting and ad-hoc reporting of the credit risk portfolio:** The risk parameters of assets, and the impact of sectors and large, individual customers in the portfolio, must be reported for banking as a whole and broken down between the Retail and Corporate Banking segments. Moreover, senior management must be capable of producing specific reports based on separately defined target groups and scenarios, not on portfolio segmentation.

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 must also take account of liquidity risks. At least once a year, the Risk Management function and representatives of the business concerned make a comprehensive liquidity risk assessment to ensure that the internal liquidity adequacy assessment process (ILAAP) is appropriate and adequate in relation to the Group's liquidity risks.

Assessment and measurement

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

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

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

The Group measures funding concentration risk by calculating the amount of bond funding with a maturity of rolling 12 months and 3 months. In the time horizon of less than 12 months, OP Financial 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 central cooperative consolidated 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 defined 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's 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

OP Financial Group's funding plan defines guidelines for wholesale funding for the next few years. In its funding plan, OP Financial Group must take account of its member banks' estimate of the funding need for years to come. 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 key wholesale funding sources in view of market depth and sufficient diversification. It also defines the related decision-making powers. Moreover, the funding plan must take account of unfavourable scenarios lasting several years, and of any abrupt changes in key funding items.

OP Financial Group's liquidity and wholesale funding plan and authorisations to raise capital are subject to approval by the Boards of Directors of OP Corporate Bank and OP Mortgage Bank.

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 per cent of the amalgamation's balance sheet total. The Group monitors significant currencies every month when it produces its liquidity report for 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 at an amount that allows it to 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 if there is 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 held by OP Corporate Bank 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. To the appropriate extent, the investment plan establishes 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

In this context, collateral securities mean OP Financial Group's assets used as collateral to fulfil liquidity needs, either in normal or 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. Central bank operations and the derivatives business are the other main sources of asset encumbrance. From the perspective of preparing for liquidity needs, the central cooperative consolidated restricts asset encumbrance through the 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, even during a liquidity crisis. The plan provides well-defined operational guidelines and operating models for reducing liquidity risk: these enable the detection of elevated liquidity risks and steer OP Financial Group towards timely and appropriate measures if the threat of a crisis has grown. It specifies control and monitoring practices for each liquidity level, which become more rigorous as escalation proceeds. The liquidity contingency plan is subject to approval by the central cooperative's senior management.

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

Liquidity risk reporting

The Group reports liquidity risks to the central cooperative's management on a regular basis, switching to weekly or daily reporting if the liquidity preparedness level is raised. OP Financial Group's companies report regularly to boards of directors on liquidity risks. 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 liquidity risks.

Liquidity management and control within the amalgamation

Liquidity regulation as such is not applied to the amalgamation's companies. However, with the ECB's permission, the central cooperative may give member banks special permission 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 the Act, the liquidity requirements set for credit institutions mentioned in Part VI of the EU Capital Requirements Regulation are not applied to OP Cooperative's member credit institutions. Liquidity based on the regulation is subject to supervision and reporting at the level of the cooperative banks' amalgamation. To fulfil the prerequisite for granting special permission, the central cooperative gives the amalgamation's companies instructions on the risk management needed to secure liquidity and meet 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 liquidity strategy policy lines. It must ensure that management and supervision of the amalgamation's liquidity accord with the scope and quality of business, and fulfil regulatory requirements, at all times. 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.

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. OP Financial Group places its entities' liquidity in its Treasury's cheque account with the Bank of Finland. This means that the Group always manages its overall liquidity position through the central bank cheque account. 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. In addition, OP Financial Group's Group Treasury ensures that liquidity and maintenance of the minimum reserve are managed in accordance with each country's regulatory requirements. OP Corporate Bank manages the Group's wholesale funding on a centralised basis, in the form of debt capital and equity capital, while OP Mortgage Bank manages wholesale funding based on covered bonds. Companies that fall within the scope of joint and several liability of market-based financing seek financing from Group Treasury and other companies from OP Corporate Bank's banking operation.

Based on a decision by the Board of Directors or a body it has authorised, in normal situations Group Treasury may use collateral securities from anywhere in OP Financial Group. In a severe liquidity crisis caused by money and capital market disruptions or other events, or in preparing for such a crisis, the central cooperative's Board of Directors can, upon a proposal by the President and Group CEO, oblige the amalgamation's member banks to place part of their loan portfolio with OP Mortgage Bank as collateral for the covered bond issued by OP MB through an intermediary loan. The loan amounts 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 any 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.

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 principles adopted by OP Cooperative's Board of Directors. 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 through some other practice.

2.2.3 Market risks

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

The interest rate risk in the banking book arises from retail banking transactions and the size of risk is affected by developments in customer credit and deposits. The interest rate risk in the banking book has been defined as one of OP Financial Group's significant risks.

The general principles for managing interest rate risk in the banking book are as follows:

- Senior management is responsible for arranging the management of interest rate risks in the banking book as part of OP Financial Group's banking activities, in line with the interest rate risk management strategy and grounded, stable and documented practices. Such methods must ensure that realisation of interest rate risk in the banking book (IRRBB) remains at Group level and within the limits set for each bank, and that the IRRBB is compliant with regulations.
- IRRBB limits set the size of interest rate risk at a level matching each member bank's risk-bearing capacity, taking account of each bank's deposit funding structure. This is particularly necessary when an attempt is made to increase net interest income using spreads between long-term and short-term interest rates.
- Member banks of the central cooperative manage 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. Member banks must understand how interest rate movements and customer behaviour affect net interest income and have sufficient expertise in the use of derivatives in order to manage interest rate risks related to products provided by the Group Treasury. 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.
- Overall interest rate risk in the banking book (IRRBB) is monitored by OP Financial Group's Treasury, and the Banking ALM Committee can provide member banks with recommendations on how to manage interest risk. Such recommendations can also be binding.
- The central cooperative must ensure that, through centralised hedge accounting, the financial statements of the Group and its major companies take account of interest rate risk transfer, in accordance with the nature of businesses in question.
- Interest income risk metrics are used to assess changes in net interest income and present value risk metrics to measure changes in the value of on-balance sheet and off-balance sheet items over the entire term to maturity assumed for the contracts. The interest rate outlook must include an assessment of how changes in the general interest rate and the shape of the rate curve will impact on net interest income and the present value of balance sheet items.
- When measuring interest rate risk, account must be taken of optionalities included in assets and liabilities, so as to make their impact visible in future cash flows. The models' functionality is ensured in accordance with the model risk management principles.
- When measuring interest rate risk, equity capital items – equity capital, cooperative capital and retained earnings – are non-interest-bearing items which are placed on a timeline in accordance with the term structure set for them. In risk calculation, subordinated loans in own funds are treated in accordance with their contractual terms and conditions. In the case of Profit Shares, cash flows must be set in accordance with the customer promise in each case.
- Regular stress tests must be performed regarding interest rate risk. In particular, this involves testing any change in customer behaviour in relation to how credit, deposits and Profit Shares have performed historically as portfolios. Changes in other key operational assumptions must also be tested, such as removal of the zero interest rate floor or the possible impacts of climate or biodiversity risk factors on interest rate risk.

- The risk assessment procedure applied to OP Financial Group's new products, services, operating models, processes and systems must ensure that the requirements of interest rate risk management are appropriately described and taken into account when developing customer business.
- Economic capital is allocated for interest rate risk in the banking book.

Management of other market risks in Banking through the balance sheet

Other market risks associated with the 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.

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

- 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 business models, the goals of investment activities and the principles of portfolio management. OP Corporate Bank's Board of Directors approves the investment plan.
- The Group 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 a lending business.

The following methods are used to manage and monitor OP Corporate Bank's bond portfolio:

- The banking risk policy determines the risk measurement methods and risk-taking limits, and other restrictions.
- An investment plan is prepared for the portfolio, describing the goals of investment activities and the principles of portfolio management.
- Investment decisions for the portfolio comply with OP Corporate Bank's corporate responsibility principles.

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.

If surplus liquidity emerges in an OP cooperative bank's customer business, it will be channelled to investment products provided by the OP Financial 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. In their social role, OP cooperative banks may invest in local private equity funds in their operating region. With their investments, the banks, according to their cooperative values, support prosperity in their region and economic activity in their region and among the bank's customer base.

Risk management in Markets

OP Financial Group's trading in capital market products has been centralised in OP Corporate Bank's Markets function. The risks taken include market risks such as interest rate risk in different currencies, currency risk, volatility risk related to options, credit spread risks, and credit risks such as counterparty and issuer risks. Repurchases of structured investment products also generate a degree of equity risk. Markets manages risk exposures by actively trading on the market. Risks and earnings in Markets are monitored on a daily basis. In addition, Markets' risks are reported to the Board of Directors' Risk Committee and the senior management, as part of OP Financial Group's risk analysis.

The Markets function is exposed to risks associated with liquidity and market liquidity. Risk associated with failure to meet financial obligations is due to secured derivative contracts' collateral requirements dependent on market values. This is managed as part of other liquidity management conducted by Treasury. The low market liquidity of some markets and products, general market liquidity weakening or technical malfunction on the part of the central counterparty may lead to a situation where the needed transactions cannot be executed at the expected price or following the selected hedging strategy is not possible. Regarding risks associated with the liquidity of markets, it is necessary to ensure that customers have been proactively informed of the consequences of any possible differing market situations. Furthermore, it is necessary to create preparedness to use, if needed, an alternative central counterparty to ensure the continuity of customer business.

Market risks taken by the Markets function 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. Economic capital is calculated in relation to market risks taken by the Markets function. 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 tightly constrained.

Entering into derivative contracts gives rise to counterparty credit risk, which is managed by applying customer-specific limits. Limits are decided by OP Corporate Bank's credit decision-making process, taking account of OP Corporate Bank's corporate responsibility principles. The counterparty risk associated with derivatives is included in economic capital related to credit risk. 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.

Ownership of bonds and money market instruments causes issuer risk. The risk is limited by setting limits on portfolio composition in the Markets supplementary limit framework or by setting issuer specific limits.

Risk management for the Asset Management business model

The key risks associated with the Asset Management revenue logic are operational and compliance risks related to the provision of asset management services. OP Financial Group manages these risks in accordance with its operational risk and compliance risk management framework and the framework's procedures. 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 the business model to market risk. Economic capital is assigned to the asset management revenue logic under the risk type, operational risks. It is also allocated to cover future business risks, such as unexpected changes in the competition or customer behaviour.

In asset management business activities, low liquidity may be a feature of an investment (for example, real estate) or liquidity may become weaker in exceptional market conditions, in which, for example, certain securities are not traded actively or differ greatly in their bid and ask prices. Liquidity risk may also arise due to unexpected customer behaviour, especially in turbulent markets, for example in terms of larger-than-usual redemption requests sent to a mutual fund. This may result in a situation where the fund cannot perform the redemptions. Liquidity risk associated with the asset management business must be managed in advance by informing customers of liquidity risks associated with the investment product in marketing materials. The liquidity of OP Mutual Funds must be assessed through stress tests. In problem situations, liquidity risk is managed by delaying and interrupting redemptions, charging redemption fees or changing pricing and possibly increasing cash allocation.

By ensuring that the product range meets customer demand and needs, customer retention can be improved in situations where clients want to switch or diversify their investments.

2.3 Risks of insurance operations

2.3.1 Life insurance risks

Biometric risks associated with life insurance products (both investment contracts and insurance contracts) consist of claim payouts: mainly due to a higher number of deaths, or pension disbursement periods being longer, than expected. Mortality and life expectancy affect a life insurance company's risk exposure in pure life insurance policies and pension policies. Longevity risk is particularly significant for group pension insurance policies under a defined benefit plan and in other portfolios of lifelong pensions, because these contracts do not contain any significant mortality risk to counterbalance the risk exposure.

The policyholders' customer behaviour gives rise to lapse risk. Policyholders have the right to stop paying their premiums, terminate the contract early, or change the contract based on an embedded option in a way which results in higher risk for the company. One example of such options is the customer's right to change the profit type of their assets from unit-linked to one with technical interest, which increases interest expenses. Another example is the postponement of pension, which increases the longevity risk and lapse risk. Endowment policies and capital redemption contracts with the right of surrender, and term life policies (which the policyholder can terminate anytime), are particularly susceptible to lapse risk related to customer behaviour. Pension insurance can only be surrendered in exceptional circumstances.

Expense risk refers to a situation in which incurred insurance contract management, maintenance and claims management expenses differ from those estimated in premium rating. The early lapse of insurance policies may also jeopardise the accuracy of cost assumptions used for premium rating and thereby contribute to the materialisation of expense risk.

The need for capital required by life insurance underwriting risks is assessed by applying the Solvency Capital Requirement (SCR) and the economic capital. Stress tests are used to supplement the assessment.

Life insurance underwriting risks are managed by means of strict risk selection and pricing and by ensuring the right level of measurement of insurance contract liabilities. The customer and risk selection policies are described in the customer and risk selection guidelines, which are updated frequently.

Risks related to mortality and longevity are priced in a secure way on the basis of the conditions and situation prevailing when the policy is issued. The company can only change the prices of these long-term contracts to a very limited extent. This is why risk caused by any later changes in the premium rating bases is borne by the insurance company, which raises the premiums of new policies and records an insurance contract liability supplement for sold policies. Offering insurance policies with the opposite risk exposures reduces the net risk incurred by the entire insurance portfolio.

Early lapse risks related to customer behaviour, and the risk of customers exercising their option to change the profit type of their assets to a guaranteed-interest model, are managed through a competitive range of products, suitable product structures, and incentives and sanctions in the contract terms and conditions.

The Group manages expense risks through adequate cost control and prudent pricing. Realisation of assumptions concerning premium rating is regularly monitored and, if necessary, the premiums of new policies are raised. In addition, assumptions used in the measurement of insurance contract liability are assessed and updated on a regular basis.

Reinsurance is also used to mitigate risk. The reinsurance level is determined in the reinsurance principles approved by OP Life Assurance Company's board of directors. The reinsurance principles set limits for the maximum retention and catastrophe protection capacity.

In relation to OP Life Assurance Company insurance risks, the largest risk concentrations particularly concern individual counterparties associated with the same reinsurance contract. The reinsurance principles also set limits on authority to take reinsurance counterparty risk – the document sets limits based on the counterparty's rating grade and the reinsurance contract type (contract business, facultative).

Each year, the actuary in charge presents the company's Board of Directors with a statement of continuous compliance with the insurance contract liability requirements and the requirements set by the nature of the underwriting business. The actuarial function presents the company's Board of Directors with annual statements on its policy concerning insurance and on reinsurance arrangements, and a report on completed actuarial tasks. The economic capital tied up in underwriting risks is limited in relation to OP Financial Group's internal capital. Underwriting risks are, for their part, also guided by a target set in the capital plan for the ratio of own funds to solvency capital requirement.

2.3.2 Non-life insurance risks

The largest insurance risks pertain to risk selection and pricing, the acquisition of reinsurance cover, and the adequacy of technical provisions. In non-life insurance, the risk inherent in technical provisions lies mainly in insurance lines characterised by a long claims settlement period. Biometric risks also arise from granting non-life policies where the non-life insurer pays annuities stemming from non-life obligations as a result of an insurance event causing longevity risk. Inflationary development too may cause the materialisation of underwriting risk through compensation inflation.

Risks of loss or damage are managed by means of strict risk selection and pricing, and provision risks are managed by ensuring the right level of the measurement of insurance contract liabilities.

Premium rating is based on risk correlation, which means that the insurance risk premium corresponds to at least the claims incurred from the insurance. The insurance premium also includes components for operating expenses and capital cost.

The bases for risk selection (customer selection and related criteria, as well as decision-making limits by insurance line) are specified in the risk policy, which is updated annually, and the guidelines, which supplement the risk policy. The documents specify decision-making powers on a multistage basis according to the size of underwriting risk, as well as risks by insurance line underwritten only to a limited extent and at the discretion of Pohjola Insurance's Management Team or the company's Pricing and Risk Selection Management Team.

Insurance periods within non-life insurance are mainly one year or less, and changes in the underwriting risk level can usually be passed quickly onto insurance premiums. In respect of long-term insurance lines where risk inter-independence does not perhaps materialise, risk is managed by setting underwriting limits.

Pohjola Insurance's underwriting risk concentrations tend to be geographical in nature, or to consist of several insured assets categorised under the same risk. Another substantial risk concentration consists of assets insured against storm risk in Finland.

Reinsurance is also used to mitigate risk. The reinsurance level is determined in the reinsurance principles approved by the boards of directors. Reinsurance is implemented mainly through risk-specific (insured object) and loss-event-specific reinsurance cover. Potential gaps in reinsurance cover are eliminated in accordance with detailed underwriting guidelines. The risk arising from reinsurance availability is subject to strict supervision. Irrespective of the insurance line, large individual risks, such as claim accumulations arising from natural disasters or human activity, are reinsured.

The reinsurance principles set limits for the maximum retention and catastrophe protection capacity. The reinsurance principles also restrict authorisations to take reinsurance counterparty risk because the document sets limits based on the counterparty's rating grade and the reinsurance contract type (contract business, facultative, fronting). Local risk concentrations are included in the Estimated Maximum Loss (EML) for property and business interruption risks, and through EML breakthrough cover included in reinsurance cover.

Reinsurance principles are supplemented by the Reinsurance principles practical application guide, approved by the Pricing and Risk Selection Management Team. The guide describes reinsurance tasks and the related division of responsibilities.

The amount of insurance contract liabilities is estimated securely in such a way that it would be sufficient to fulfil the obligations arising from insurance contracts. Irrespective of the calculation framework (FAS, IFRS 17, Solvency II), a risk component must be added on top of technical provisions based on the best estimate as a result of the uncertainty of technical provisions. Each year, the actuary in charge presents the company's Board of Directors with a statement of continuous compliance with the insurance contract liability requirements and the requirements set by the nature of the underwriting business. The actuarial function presents the company's Board of Directors with annual statements on the general insurance policy and on completed actuarial tasks. Non-life insurance underwriting risks are assessed by applying the Solvency Capital Requirement (SCR) and economic capital. Stress tests are used to supplement the assessment. The economic capital tied up in underwriting risks is limited relative to OP Financial Group's internal capital. Underwriting risks are also restricted by a target set in the capital plan for the ratio of the capital base to the solvency capital requirement.

2.3.3 Market and counterparty risk management in life and non-life insurance

Management of structural interest rate risk and other investment risks

The management of market risks in life and non-life insurance covers all of the market risks on the balance sheet, consisting of insurance contract liabilities, investments and derivatives. Investment operations aim to ensure customer income, obtain assets covering insurance contract liabilities, and invest profitably to generate returns. Investment operations take account of factors such as the structural interest rate risk arising from the cash flow structure of insurance contract liabilities, and the other requirements that insurance contract liabilities impose on investment assets and their liquidity. For this reason, companies must divide future cash flows, the related uncertainties and causes of uncertainty by insurance type and asset class. In addition, in their investment plan, companies must define and give grounds for which investment instruments are covered by which part of insurance contract liabilities and how large a deviation will be allowed between the duration of investment portfolio and insurance contract liability cash flows, interest rate sensitivity and other relevant key figures. Application of the principle of equity in life insurance also affects investment targets and the amount of risk taken.

An analysis of structural interest rate risk – interest rate risk on the balance sheet – begins by assessing how well cash flows from fixed income investments and insurance contract liability match each other (Asset and Liability Management, ALM). Interest rate movements affect the value of derivatives used to hedge against interest rate risks posed by insurance contract liabilities, investments and technical provisions. The companies' market risks on the balance sheet are managed in line with investment plans, using investment allocation and insurance contract liabilities as hedging, while taking account of expected returns.

In the Solvency II framework and the economic capital need model, the insurance contract liability discounting curve includes a volatility adjustment, which also exposes to credit spread risk on the balance sheet in terms of structural interest rate risk. In respect of the level of the credit spread related to interest rate risk on the balance sheet, the consistency of the risk profiles of assets and liabilities is essential. Differences between the company's fixed income investments and volatility adjustment portfolio may be related to geographical distribution, corporate loan sectors, credit ratings or maturities. Fixed income investments involve a risk of credit loss and a lower credit rating for the investment in question; sufficient diversification is used to manage such risk.

The magnitude of market risks is measured and limited by the Value at Risk metric and various sensitivity indicators, as well as the amount of the economic capital and the solvency capital requirement (SCR). Stress tests are used to supplement the assessment. Insurance companies' risk concentrations within asset classes are assessed by examining the asset class allocation distribution.

Market risks are limited using risk limits, which are set in revenue logic-specific risk policies and investment policies confirmed by the Board of Directors. Risk policies set limits for market risks that are determined based on the limits based on OP Financial Group's Risk Appetite Statement. Technical-provision interest rate hedging targets are set in the companies' investment policies. Asset class limits are set for liquid and illiquid investments. Credit rating limits are used to manage credit risks related to the investment portfolio. The insurance companies' boards also approve principles for the use of derivatives. In addition to the Group's risk policy lines and limits, investment portfolios are restricted by the responsible investment principles confirmed by the companies' boards of directors.

Insurance companies' investment activities involve a country risk due to the geographical distribution of investments. Such risk is limited by setting a maximum limit based on a credit rating from outside the country in question (the risk country) – a credit rating given by an international rating agency. On the basis of OP Financial Group's maximum limits for each country, company-specific country limits are allocated separately to OP Life Assurance Company and Pohjola Insurance in order to limit geographical concentrations in their investments. The geographical distribution of investment risks is regularly monitored.

The insurance companies' insurance contract liabilities do not, in principle, cause currency risks because their insurance contract liabilities are normally denominated in euros. For OP Life Assurance Company, all insurance contract liabilities are denominated in euros. For this reason, a substantial proportion of investments covering insurance contract liabilities are allocated to euro-denominated securities, or open currency risks are hedged.

Liquidity risks arise in insurance companies' insurance and investment activities, due to imbalances between incoming and outgoing cash flow. Such imbalances can be caused by fast growth in insurance contract cancellations leading to reimbursements of premiums and decreases in premiums written, by sudden growth in loss expenditure, by exceptionally high amounts of major losses, or by defaults by reinsurers. Regarding investment, liquidity needs can be caused by changes in the market environment, such as the impacts of interest-rate rises on the collateral requirements of interest rate derivatives. Insurance contract liabilities are valuated using a yield curve that takes account of the liquidity premium, providing the company with partial protection against illiquid financial markets. To ensure that the liquidity position remains good and keep illiquid investments at conservative level, the liquidity position is analysed on a regular basis by the Actuarial function, Risk Management and investment activities. The analyses include stress testing of liability and the cash flows of investments, considering liquidity needs arising, for example, from collateral and underwriting risks. The company's short-term minimum liquidity requirement is limited.

Counterparty risk management

The counterparty risk of reinsurers is managed using limits for specific rating grades and counterparties, in accordance with the reinsurance principles confirmed by the Board of Directors and in the investment policies.

The counterparty risk related to the investment portfolio is limited using limits, which are included in investment policies. Diversification limits are set for direct and fund investments. Sufficient diversification of insurance companies' investment portfolios is ensured by issuer limits set in the companies' investment policies. Derivative-related counterparty risk is limited on the basis of the counterparties' credit ratings. The derivative instruments to be used and related practices are described in the documentation, approved by the Board of Directors, on the principles underlying the use of derivatives.

Capital is reserved for counterparty risks in the economic capital model and the SCR measurement.

Note 3. Changes in accounting policies and presentation

1. Adoption of IFRS 17 Insurance Contracts

OP Financial Group has applied IFRS 17 Insurance Contracts since 1 January 2023, which is the mandatory effective date. The European Union adopted IFRS 17 on 19 November 2021. In addition, OP Financial Group has applied an amendment to IFRS 17 that allows a classification overlay for financial assets. This removed an accounting mismatch between insurance contract liabilities and related financial assets due to the adoption of IFRS 17 for the adjusted comparative information. The European Union adopted the amendment on 8 September 2022.

IFRS 17 affects the measurement and recognition of OP Financial Group's non-life and life insurance products as well as their presentation in the financial statements. For the presentation of the balance sheet, the rights and obligations involved in insurance contracts are netted and presented either in assets or liabilities. In the income statement, the insurance service result is presented as a subtotal and separately investment income. In addition, the new standard means more qualitative and quantitative requirements for notes to the financial statements, such as reconciliation statements for changes in the net carrying amounts of insurance contracts during the period and an analysis of insurance service income per valuation component.

The most important goal of the standard is to harmonise the measurement of insurance contract liability on a global basis; the previous measurement under IFRS 4 was based on national measurements. Under IFRS 17, measurement is based on current estimates, as is the case in insurance companies' solvency measurement. However, IFRS 17 differs from solvency measurement in terms of its purpose and principle basis. The previous practice under IFRS 4, in which insurance contract liability may contain implicit margins of risk-bearing and future profits, ceases to exist, leading to explaining changes in liability in a transparent way.

Transition to IFRS 17 1 January 2022

In the transition to IFRS 17, the modified retrospective approach is applied to non-life insurance contracts covering all types of insurance contracts to which fully retrospective transition approach cannot be applied. The modification is especially used to adjust cash flows that have already realised and to determine the discount rate. Insofar as complete data are not in all respects available for applying the full retrospective approach, the modified retrospective approach, permitted by the standard, is applied to in situations where reasonable and supportable information can, however, be used that is available without undue cost or effort. The end results of the modified retrospective approach will quite closely correspond to those of the full retrospective approach.

In addition, the fair value approach is applied to life insurance contracts and other non-life insurance contracts to which the modified retrospective approach is not applied. According to the option allowed by the transitional provisions, all contracts are grouped on a portfolio basis into one transition cohort. The full retrospective approach is the primary transition model, but it must be able to be applied without hindsight relating, for example, to data concerning cash flows received and paid before the transition, their estimates and changes itemised for each group of insurance contracts in view of the inception year of contracts.

As a result of the IFRS 17 transition, OP Financial Group's equity capital on 1 January 2022 decreased by EUR 52 million on the date of transition. Solvency II valuations are used in FiCo calculation, so this change to OP Financial Group's equity capital will not affect the FiCo ratio.

The change in equity capital on the date of transition on 1 January 2022 is itemised in the table below. Equity capital was increased by the non-life insurance capitalised acquisition costs recognised in "Other assets", totalling 238 million euros. On the date of transition, insurance contract liabilities measured under IFRS 17 were higher than those measured under IFRS 4, which lowered equity capital. Risk adjustment added to insurance contract liabilities under IFRS 17 was higher than the margin included in the calculation under IFRS 4. As a result of the reclassification of investments at fair value through profit or loss, the valuation difference previously accrued in the investments of insurance companies was reversed from the fair value reserve that was recognised in retained earnings.

Effect of the date of transition to IFRS 17 on equity capital on 1 January 2022

€ million	Cooperative capital	Fair value reserve*	Other reserves	Retained earnings	Total
Equity capital 31 Dec 2021	**3,459**	**323**	**2,184**	**8,090**	**14,057**
Effect of the non-life insurance transition date		-121		324	202
Effect of the life insurance transition date		-99		-123	-223
Effect of consolidation adjustments		15		4	19
Change in deferred tax asset/liability				-51	-51
Effect of IFRS 17 transition 1 Jan. 2022, in total		**-205**		**154**	**-52**
Equity capital on 1 Jan 2022 (capital and reserved attributable to parent company owners)	**3,459**	**118**	**2,184**	**8,244**	**14,005**

* The figures also include changes in deferred taxes

OP Financial Group's 2022 earnings before tax measured under IFRS 17 are estimated to be EUR 1,120 million, or EUR 145 million lower than reported in the financial statements 2022 (EUR 1,265 million lower). This earnings difference comes mainly from a change in life insurance earnings that is caused, for example, by timing differences. Furthermore, changes in the provisions for upcoming customer bonuses due to higher interest rates caused the difference. Entry into force of IFRS 17 will have no effect of the overall profitability of insurance contracts. There may be differences in the timing of recognition in profit or loss between the measurement models under IFRS 4 and IFRS 17.

Changes in opening balance 1 January 2022

OP Financial Group opening balance 1 January 2022, €	31 Dec 2021	Changes	1 Jan 2022
Cash and cash equivalents	32,846		32,846
Receivables from credit institutions	541		541
Derivative contracts	3,467		3,467
Receivables from customers	96,947		96,947
Insurance contract assets			0
Reinsurance contract assets		114	114
Investment assets	22,945	-4	22,941
Assets covering unit-linked contracts	13,137		13,137
Intangible assets	1,212		1,212
Property, plant and equipment	446		446
Other assets	2,419	-244	2,176
Tax assets	141	15	156
Non-current assets held for sale	8		8
Total assets	**174,110**	**-119**	**173,991**
Liabilities to credit institutions	16,650		16,650
Derivative contracts	2,266		2,266
Liabilities to customers	77,898		77,898
Insurance liabilities	8,773	-8,773	
Insurance contract liabilities		13,968	13,968
Reinsurance contract liabilities		13	13
Liabilities from unit-linked insurance and investment contracts	13,210	-13,210	
Liabilities from investment agreements		7,880	7,880
Debt securities issued to the public and debentures	34,895		34,895
Provisions and other liabilities	3,134	-16	3,118
Tax liabilities	1,109	71	1,180
Subordinated liabilities	1,982		1,982
Liabilities associated with non-current assets held for sale	8		8
Total liabilities	**159,926**	**-67**	**159,858**

Equity capital			
Capital and reserves attributable to			
Cooperative capital			
Membership capital contributions	215		215
Profit Shares	3,244		3,244
Fair value reserve	323	-205	118
Other reserves	2,184		2,184
Retained earnings	8,090	154	8,244
Non-controlling interests	**128**		**128**
Total equity	**14,184**	**-52**	**14,133**
Total liabilities and equity	**174,110**	**-119**	**173,991**

In addition to entries due to transition to IFRS 17, changes in the opening balance sheet includes changes in recognition related to clearer presentation. Changes to presentation did not affect the amount of equity capital on 1 January 2022. Of the investment asset changes on 1 January 2022, totalling EUR–4 million, the effect of transition to IFRS 17 in the reclassification of investments was EUR 2 million and the transfer due to the change in presentation to other assets was EUR –6 million. The effect of the transition to IFRS 17 in changes in other assets, EUR 244 million, was EUR –249 million and the transfer of presentation from investment assets EUR 6 million.

Insurance contract liabilities on the date of transition 1 January 2022 divided by transition model

Insurance contract liabilities 1 Jan 2022 € million	**Modified retrospective approach (MRA)**	**Fair value approach (FVA)**	**Total**
Non-life insurance	2,956	28	2,985
Discounted cash flows	2,750	11	2,761
Risk adjustment	129	0	130
Contractual service margin (CSM)	77	17	94
Loss component	6	2	9
Life insurance		10,984	10,984
Discounted cash flows		10,014	10,014
Risk adjustment		284	284
Contractual service margin (CSM)		686	686
Loss component		229	229
OP Financial Group, total	**2,956**	**11,012**	**13,968**

Adjusted figures for 2022

In the income statement, Insurance service result will replace Net insurance income. Insurance revenue and Insurance service expenses are included in insurance service result. Insurance revenue includes recognition of the contractual service margin (CSM) in profit or loss, change of expected claims and operating expenses as well as risk adjustments and changes to prior period payments. Insurance service expenses include operating expenses of insurance contract, claims incurred and the losses of onerous contracts and changes related to prior periods. Insurance contract operating expenses include operating expenses and net commission expenses. Net income from reinsurance contracts in the income statement is presented in its specific row as part of Insurance service result. "Net insurance finance income and expenses" is a new item in the income statement. The item includes the effect of change in the discount rate and other financial changes on the value of insurance contract liability and the effect of the passage of time, meaning unwinding of discount. In addition, the item includes an option of risk mitigation to apply to certain life insurance contracts. Applying this option gives an opportunity to adjust accounting for contracts under the VFA model in such a way that those changes in cash flows involving a hedgeable position in respect of funding risk are transferred from the contractual service margin to the income statement. This acts as a counterpart to the value change of the hedging portfolio.

Net investment income shows return on investment assets in terms of fair value. Net investment income together with in net insurance finance income and expenses describe investment profitability.

Expenses in the income statement decreased because the operating expenses of insurance contracts measured under IFRS 17 are transferred to insurance service result. The item OP bonuses to owner-customers decreased because the cash flows payable from insurance contracts are included in the cash flows under IFRS 17 calculation, in case they are included as part of the insurance service result.

OP Financial Group's income statement under IFRS 17

€ million	Q1–4/2022
Net interest income	1,618
Impairment loss on receivables	-115
Net commissions and fees	942
Insurance premium revenue	1,898
Insurance service expenses	-1,898
Net income from reinsurance contracts	106
Insurance service result	**106**
Net finance income (+)/expenses (–) related to insurance	2,228
Net finance income (+)/expenses (–) related to reinsurance	-1
Net insurance finance income (+)/expenses (–)	2,226
Net interest income from financial assets held for trading	-29
Net investment income	-1,952
Other operating income	67
Personnel costs	-856
Depreciation/amortisation and impairment loss	-214
Other operating expenses	-892
Transfers to insurance service result	416
Operating expenses	-1,545
OP bonuses to owner-customers	-198
Operating profit (loss)	**1,120**
Earnings before tax	**1,120**
Income tax	-213
Profit for the period	**907**
Earnings before tax disclosed in the 2022 financial statements	**1,265**

Insurance revenue: Recognition of the contractual service margin (CSM) in profit or loss, change of expected claims and operating expenses as well as risk adjustments and changes to prior period payments.

Insurance service expenses: Claims incurred and the losses of onerous contracts and changes related to prior periods, plus operating expenses.

Net insurance finance income expenses: The unwinding of discount during the period, the effect of change in the discount rate and other financial changes on the value of insurance contract liability, the effect of risk mitigation through life insurance.

The insurance service result includes **operating expenses for contracts measured under IFRS 17**, in other words, operating expenses and net commission expenses. In the income statement, these have been included as part of the insurance service result.

OP Financial Group's IFRS 17 balance sheet on 31 Dec 2022

€ million	31 Dec 2022
Cash and cash equivalents	35 004
Receivables from credit institutions	798
Receivables from customers	98,546
Derivative contracts	4,117
Investment assets	20,742
Assets covering unit-linked contracts	11,597
Insurance contract assets	0
Reinsurance contract assets	245
Intangible assets	1,153
Property, plant and equipment	423
Other assets	2,401
Tax assets	664
Total assets	**175,691**
Liabilities to credit institutions	12,301
Liabilities to customers	81,468
Derivative contracts	4,432
Insurance contract liabilities	11,446
Reinsurance contract liabilities	2
Liabilities from investment agreements	7,211
Debt securities issued to the public and debentures	37,438
Provisions and other liabilities	3,818
Tax liabilities	1,522
Subordinated liabilities	1,384
Total liabilities	**161,023**
Equity capital	
Capital and reserves attributable to OP Financial Group owners	
Cooperative capital	
Membership capital contributions	217
Profit Shares	3,369
Fair value reserve	-360
Other reserves	2,172
Retained earnings	9,153
Non-controlling interests	**118**
Total equity	**14,668**
Total liabilities and equity	**175,691**

In OP Financial Group's balance sheet, assets of reinsurance contracts measured under IFRS 17 are in the balance sheet assets. The acquisition costs capitalised in non-life insurance are recognised in "Other assets". Insurance contract liabilities in the balance sheet replaced insurance liabilities under IFRS 4.

Insurance contract liabilities, € million	**31 Dec 2022**
Non-life insurance	2,536
Life insurance	8,906
Total	**11,442**

The fair value reserve in equity capital decreased because investments related to the insurance contract liability of non-life and life insurance has been reclassified so that their fair value is now entirely presented in profit or loss based on the option allowed by IFRS 17.

On the date of transition on 1 January 2022, the contractual service margin amounted to an estimated EUR 780 million of which life insurance accounted for an estimated EUR 690 million and non-life insurance for an estimated EUR 90 million. Non-life insurance contracts have mainly duration of one year. At the beginning of the period, new insurance contracts involve a contractual service margin, releasing during the period. In life insurance, the contractual service margin is released in the result through long-term contracts, even in the course of decades. A new contractual service margin is also created in new sales of portfolios. Recognition of the contractual service margin in profit or loss in relation to a new CSM was around 7% in the reference year. In the reference year, term life insurance coverage units were determined using premiums and capital at risk is used in coverage units from the beginning of 2023. This change has no significant effect on OP Financial Group's result.

Amount of the contractual service margin CSM and recognition in profit or loss:

€ million	1 Jan 2022	31 Dec 2022	CSM recognition during the period
Non-life insurance	94	116	231
Life insurance	686	787	47
OP Financial Group, total	**780**	**903**	**278**

Adjusted figures in OP Financial Group's income statement **€ million**	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Interest income	339	675	1,070	1,833
Interest expenses	-6	-1	52	-215
Net interest income	334	675	1,122	1,618
Impairment loss on receivables	-83	-100	-70	-115
Commission income	280	546	809	1,077
Commission expenses	-33	-68	-100	-134
Net commissions and fees	247	478	709	942
Insurance premium revenue	451	916	1,407	1,898
Insurance service expenses	-447	-893	-1,463	-1,898
Net income from reinsurance contracts	16	33	134	106
Insurance service result	21	56	77	106
Net finance income (+)/expenses (–) related to insurance	839	1,866	2,223	2,228
Net finance income (+)/expenses (–) related to reinsurance	-2	-5	-3	-1
Net insurance finance income (+) /expenses (–)	837	1,861	2,219	2,226
Net interest income from financial assets held for trading	-19	-48	-62	-29
Net investment income	-748	-1,688	-2,019	-1,952
Other operating income	39	46	52	67
Personnel costs	-211	-427	-617	-856
Depreciation/amortisation and impairment loss	-57	-110	-159	-214
Other operating expenses	-246	-451	-644	-892
Transfers to insurance service result	106	207	305	416
Operating expenses	-407	-781	-1,115	-1,545
OP bonuses to owner-customers	-46	-96	-147	-198
Operating profit (loss)	**174**	**402**	**766**	**1,120**
Earnings before tax	**174**	**402**	**766**	**1,120**
Income tax	-25	-72	-142	-213
Profit for the period	**148**	**330**	**624**	**907**

Differences between Solvency II solvency measurement and measurement under IFRS 17

IFRS 17 changes the measurement of insurance contracts for those contracts to which the standard is applied. Measurement is market-based and close to measurement in line with Solvency II solvency measurement. Mainly the same cash flows of insurance contracts as in solvency measurement form the basis. These cash flows are discounted at a risk-free interest and liquidity premium. The risk-free interest is the same as the risk-free interest in solvency measurement and the liquidity premium corresponds to the volatility adjustment, but its size is determined based on the nature of the insurance contract liability of the Group's insurance companies and the investment universe. The risk adjustment calculated using the Cost of Capital method is added to the value of insurance contracts that conceptually corresponds to the risk margin in solvency measurement but it has been calculated using the company's own parameters. As part of the IFRS 17 insurance contract liability, a contractual service margin is reserved that spreads out the profits of insurance contracts for the coverage period. In solvency measurement, the item corresponding to the contractual service margin is not deducted from own funds but the profit of insurance contracts increases own funds directly on the first measurement date. Of the acquisition expenses of insurance contracts under IFRS 17, the portion that is considered to be allocated to future annual cohorts are capitalised in the balance sheet assets. Capitalised acquisition costs are not taken into account in Solvency II own funds.

Equity capital adjustment 31 Dec 2023

The effect of the IFRS 17 transition on 1 January 2022 on OP Financial Group's equity capital was EUR –52 million. When reassessing deferred taxes in late 2023, OP Financial Group noticed that, on 1 January 2022, it had recognised too much deferred tax liabilities from the difference between the fair value and carrying amount of investments with the result that equity capital was EUR 55 million too small on 1 January 2022. Equity capital was revised for 31 December 2023 by reducing tax liability and increasing retained earnings by EUR 55 million. In practice, any retroactive adjustment was no longer possible on 1 January 2022.

2. Changes in the 2023 income statement and balance sheet format

OP Financial Group changed its official income statement and balance sheet format as of 1 January 2023. It has made changes retrospectively for 2022 too. Income statement income is presented without a sign and expenses with minus signs. The key changes in income statement and balance sheet format are as follows:

a) The rows Total income and Total expenses were removed because insurance income and expenses (such as personnel costs) have been presented in the row Insurance service result since the entry into force of IFRS 17 on 1 January 2023.
b) The sub-rows of Net interest income (interest income and interest expenses) and Net commissions and fees (commission income and commission expenses) have been broken down in presentation.
c) Impairment loss on receivables was transferred from the end of the income statement next to net interest income to operating items.
d) New items under IFRS 17, Insurance service result and Net insurance finance income were added to the income statement. The former row Net insurance income was removed.
e) Net income from financial assets held for trading is presented on a specific row separate from Net investment income. Net income from financial assets held for trading includes only Banking and Group Functions items. Net investment income includes net income from financial assets at fair value recognised through comprehensive income, net income from financial assets recognised through profit or loss, net income from investment property, net income from financial assets carried at amortised cost, the result of the associate or joint venture as well as net income from life insurance investment contract liabilities recognised according to IFRS 9.
f) Operating expenses Personnel costs, Depreciation/amortisation and impairment loss and Other operating expenses are mainly presented the same way as previously, showing OP Financial Group's total expenses, but item Transfers to insurance service result next to these items has been added. It describes how much of these expenses are presented in Investment service result.
g) OP bonuses to owner-customers no longer include OP bonuses of insurance contracts measured under IFRS 17 because they are presented in the insurance service result.
h) A new row, Operating profit, is presented in the income statement.
i) The balance sheet presents new balance sheet items under IFRS 17: Insurance contract assets, Reinsurance contract assets, Insurance contract liabilities and Reinsurance liabilities.
j) The balance sheet item Investment contract liabilities presents life investment contracts measured in accordance with IFRS 9.

Income statement

	Explanation of the format change:
Interest income	b) New row
Interest expenses	b) New row
Net interest income	No change
Impairment loss on receivables	c) Moved to another place in the format
Commission income	b) New row
Commission expenses	b) New row
Net commissions and fees	No change
Insurance revenue	d) New row under IFRS 17
Insurance service expenses	d) New row under IFRS 17
Net income from reinsurance contracts	d) New row under IFRS 17
Insurance service result	d) New row under IFRS 17
Net insurance finance income (+) /expenses (–)	d) New row under IFRS 17
Net interest income from financial assets held for trading	e) New row
Net investment income	e) Item content has changed
Other operating income	No change
Personnel costs	No change
Depreciation/amortisation and impairment loss	No change
Other operating expenses	No change
Transfers to insurance service result	f) New row related to the adoption of IFRS 17
Operating expenses	f) New row related to the adoption of IFRS 17
OP bonuses to owner-customers	g) Item content has changed
Operating profit (loss)	**h) New row**
Earnings before tax	**No change**
Income tax	No change
Profit for the period	**No change**

Balance sheet

	Explanation of the format change:
Cash and cash equivalents	No change
Receivables from credit institutions	No change
Receivables from customers	No change
Derivative contracts	No change
Investment assets	No change
Assets covering unit-linked contracts	No change
Insurance contract assets	i) New row under IFRS 17
Reinsurance contract assets	i) New row under IFRS 17
Intangible assets	No change
Property, plant and equipment	No change
Other assets	No change
Tax assets	No change
Total assets	**No change**
Liabilities to credit institutions	No change
Liabilities to customers	No change
Derivative contracts	No change
Insurance contract liabilities	i) New row under IFRS 17
Reinsurance contract liabilities	i) New row under IFRS 17
Liabilities from investment agreements	i) New row under IFRS 17
Debt securities issued to the public	No change
Provisions and other liabilities	No change
Tax liabilities	No change
Subordinated liabilities	No change
Total liabilities	**No change**
Equity capital	No change
Cooperative capital	No change
Member cooperative shares	No change
Profit Shares	No change
Fair value reserve	No change
Other reserves	No change
Retained earnings	No change
Non-controlling interests	No change
Total equity	**No change**
Total liabilities and equity	**No change**

Note 4. Segment reporting

Segment information

OP Financial Group's business segments are Retail Banking, Corporate Banking, and Insurance. Non-business segment operations are presented under the Group Functions segment. OP Financial Group prepares its segment reporting in compliance with its accounting policies. Defining segments and presentation are based on management reporting. The segments' earnings and profitability is assessed in terms of earnings before tax.

Companies in the Retail Banking segment include OP cooperative banks, OP Koti real estate agencies, OP Retail Customers plc, OP Mortgage Bank and Pivo Wallet Oy. Net interest income forms the most significant income item of the segment. Income also comes from commissions and fees and investment. Expenses arise mainly from personnel and ICT costs and the costs of the branch network and OP bonuses to owner-customers. The most significant risk category pertains to credit risk but business also involves market risks and operational risks.

Companies in the Corporate Banking segment include OP Corporate Bank plc (excl. treasury functions), OP Custody Ltd, OP Asset Management Ltd, OP Property Management Ltd and OP Fund Management Company Ltd. Net interest income forms the most significant income item of the segment. Income also comes from banking and wealth management in terms of commission income and from investment operations. Expenses mainly come from personnel and ICT costs. The most significant risk category pertains to credit risk but business also involves market risks and operational risks.

The Insurance segment consists of OP Financial Group's non-life insurance company Pohjola Insurance Ltd and life insurance company OP Life Assurance Company Ltd. The segment's products include non-life and life insurance products sold to corporate and personal customers. Income generated by the segment derives mainly from income from insurance premium revenue, commission income and net investment income. The Insurance segment's most significant risks are underwriting and investment risks.

The Group Functions segment consists of functions that support other segments. The segment includes the majority of OP Cooperative Ltd and OP Corporate Bank plc's treasury functions. Costs of the services for the business segments are allocated to the segments in the form of internal service charges. Income from the Other Operations segment mainly consists of Treasury income and OP Financial Group's internal charges recognised in other operating income.

Segment accounting policies

OP Financial Group's segment reporting is based on accounting policies applied in its financial statements. 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. Income, expenses, investments and capital which have not been allocated to segments, and inter-segment Group eliminations are reported under 'Group eliminations'.

Q1-4 earnings 2023, € million	Retail Banking	Corporate Banking	Insurance	Group Functions	Group eliminations	OP Financial Group
Interest income	3,756	1,790	1	2,636	-2,704	5,480
Interest expenses	-1,499	-1,199	-1	-2,636	2,725	-2,609
Net interest income	2,258	591	0	1	21	2,871
of which inter-segment items	0	-387		387	0	0
Impairment loss on receivables	-173	-96		0	0	-269
Commission income	735	393	81	21	-192	1,038
Commission expenses	-50	-174	-25	-21	139	-130
Net commissions and fees	686	219	56	-1	-52	908
Insurance revenue			2,000			2,000
Insurance service expenses			-1,824			-1,824
Net income from reinsurance contracts			-95			-95
Insurance service result			81		0	81
Net finance income (+)/expenses (–) related to insurance			-722			-722
Net finance income (+)/expenses (–) related to reinsurance			0		0	0
Net insurance finance income (+)/expenses (–)			-722		0	-722
Net interest income from financial assets held for trading	3	53	-1	6	-6	55
Net investment income	-32	0	1,070	4	15	1,057
Other operating income	61	21	4	741	-788	40
Personnel costs	-500	-104	-167	-232	38	-964
Depreciation/amortisation and impairment loss	-57	-3	-64	-104	2	-226
Other operating expenses	-806	-247	-317	-441	801	-1,011
Transfers to insurance service result			485		0	485
Operating expenses	-1,363	-354	-62	-777	841	-1,716
OP bonuses to owner-customers	-217	-26	-12		0	-255
Operating profit (loss)	**1,223**	**408**	**414**	**-26**	**31**	**2,050**
Earnings before tax	**1,223**	**408**	**414**	**-26**	**31**	**2,050**

The calculated ineffectiveness of fair value hedges arising from the elimination of internal items is presented in Group eliminations.

Net income of OP Corporate Bank's Baltic branches totalled 42 million euros.

Adjusted Q1-4 earnings 2022, € million	Retail Banking	Corporate Banking	Insurance	Group Functions	Group eliminations	OP Financial Group
Interest income	1,305	548	1	319	-339	1,833
Interest expenses	-111	-91	-2	-381	370	-215
Net interest income	1,194	457	-1	-62	31	1,618
of which inter-segment items		-35		35	0	0
Impairment loss on receivables	-96	-18	0	0	0	-115
Commission income	814	395	84	14	-230	1,077
Commission expenses	-41	-229	-34	-15	184	-134
Net commissions and fees	773	166	50	0	-45	942
Insurance premium revenue			1,898			1,898
Insurance service expenses			-1,898			-1,898
Net income from reinsurance contracts			106		0	106
Insurance service result			106		0	106
Net finance income (+)/expenses (–) related to insurance			2,228		0	2,228
Net finance income (+)/expenses (–) related to reinsurance			-1		0	-1
Net insurance finance income (+)/expenses (–)			2,226		0	2,226
Net interest income from financial assets held for trading	-4	132	-1	-22	-133	-29
Net investment income	-5	4	-2,070	11	108	-1,952
Other operating income	39	18	39	657	-686	67
Personnel costs	-455	-95	-147	-195	36	-856
Depreciation/amortisation and impairment loss	-53	-8	-51	-103	2	-214
Other operating expenses	-720	-218	-264	-376	687	-892
Transfers to insurance service result			416			416
Operating expenses	-1,229	-321	-46	-674	725	-1,545
OP bonuses to owner-customers	-168	-20	-10		0	-198
Operating profit (loss)	**502**	**416**	**293**	**-91**	**-1**	**1,120**
Earnings before tax	**502**	**416**	**293**	**-91**	**-1**	**1,120**

Net income of OP Corporate Bank's Baltic branches totalled 30 million euros.

Balance sheet 31 December, € million	Retail Banking	Corporate Banking	Insurance	Group Functions	Group eliminations	OP Financial Group
Cash and cash equivalents	45	125		19,585	0	19,755
Receivables from credit institutions	24,254	209	570	12,705	-36,880	858
Receivables from customers	70,157	28,061	0	-53	-329	97,836
Derivative contracts	902	4,538	58	242	-2,340	3,401
Investment assets	453	555	9,460	16,223	-4,794	21,896
Assets covering unit-linked contracts			12,581			12,581
Reinsurance contract assets			106		0	106
Intangible assets	22	179	634	169	62	1,065
Property, plant and equipment	260	3	3	137	-4	398
Other assets	1,176	264	558	914	-690	2,222
Tax assets	101	1	82	48	41	273
Total assets	**97,370**	**33,935**	**24,051**	**49,969**	**-44,934**	**160,391**
Liabilities to credit institutions	10,638	5	59	25,006	-35,642	66
Liabilities to customers	60,817	13,656		3,509	-1,325	76,656
Derivative contracts	1,158	4,106	27	390	-2,410	3,271
Insurance contract liabilities			11,589		0	11,589
Reinsurance contract liabilities			0			0
Liabilities from investment agreements			7,944			7,944
Debt securities issued to the public and debentures	14,190	2,466		21,492	-637	37,511
Provisions and other liabilities	1,699	1,056	316	1,937	-559	4,450
Tax liabilities	581	4	248	391	5	1,229
Subordinated liabilities	0	0	380	1,414	-380	1,414
Total liabilities	**89,083**	**21,292**	**20,563**	**54,138**	**-40,947**	**144,129**
Equity capital						**16,262**

Net assets of OP Corporate Bank's Baltic branches totalled 1.400 million euros.

Adjusted Balance sheet 31 December 2022, € million	Retail Banking	Corporate Banking	Insurance	Group Functions	Group eliminations	OP Financial Group
Cash and cash equivalents	52	154	0	34,797	0	35,004
Receivables from credit institutions	29,713	310	904	13,173	-43,301	798
Receivables from customers	70,729	27,803		383	-369	98,546
Derivative contracts	1,266	5,612	76	169	-3,007	4,117
Investment assets	537	298	8,702	20,485	-9,280	20,742
Assets covering unit-linked contracts			11,597			11,597
Reinsurance contract assets			245		0	245
Intangible assets	23	181	717	202	29	1,153
Property, plant and equipment	285	4	2	136	-4	423
Other assets	635	1,756	762	-493	-259	2,401
Tax assets	137	3	456	24	44	664
Assets	**103,378**	**36,120**	**23,462**	**68,877**	**-56,146**	**175,691**
Liabilities to credit institutions	11,615	-36	65	42,621	-41,965	12,301
Liabilities to customers	63,951	14,043		4,876	-1,402	81,468
Derivative contracts	1,667	5,295	60	443	-3,033	4,432
Insurance contract liabilities			11,446		0	11,446
Reinsurance contract liabilities			2			2
Liabilities from investment agreements			7,211			7,211
Debt securities issued to the public and debentures	16,941	1,672		23,537	-4,711	37,438
Provisions and other liabilities	846	891	347	1,954	-221	3,818
Tax liabilities	514	2	631	372	4	1,522
Subordinated liabilities	0	-51	380	1,435	-380	1,384
Liabilities	**95,535**	**21,816**	**20,142**	**75,239**	**-51,709**	**161,023**
Equity capital						**14,668**

Net assets of OP Corporate Bank's Baltic branches totalled EUR 619 million.

Notes to the income statement

Note 5. Net interest income

€ million	2,023	2,022
Interest income		
Receivables from credit institutions	656	111
Receivables from customers		
Loans	3,963	593
Finance lease receivables	87	35
Fair value adjustments under hedge accounting	-402	-618
Total	3,648	10
Notes and bonds		
Measured at fair value through profit or loss	0	0
At fair value through other comprehensive income	131	66
Amortised cost	7	0
Fair value adjustments under hedge accounting	551	-1,479
Total	690	-1,414
Derivative contracts*		
Fair value hedges	491	3,073
Cash flow hedges	-84	27
Other		0
Total	407	3,101
Liabilities to credit institutions		
Interest	0	-23
Liabilities to customers		
Negative interest	4	24
Other	75	24
Total	**5,480**	**1,833**
Interest expenses		
Liabilities to credit institutions		
Interest expenses for liabilities to credit institutions	-76	2
Fair value adjustments under hedge accounting	-363	1,007
Total	-439	1,009
Liabilities to customers	-1,037	2
Debt securities issued to the public and debentures		
Interest expenses for debt securities issued to the public and debentures	-665	-198
Fair value adjustments under hedge accounting	-946	2,411
Total	-1,611	2,213
Subordinated liabilities		
Other	-29	-35
Fair value adjustments under hedge accounting	-35	82
Total	-63	47
Derivative contracts*		
Fair value hedges	558	-3,438
Other	71	40
Total	629	-3,398
Receivables from credit institutions		
Negative interest	0	-73
Other	-86	-14
Total	**-2,609**	**-215**
Total interest expenses	**2,871**	**1,618**

* Includes the valuation of derivatives and interest.

Interest income calculated using the effective interest method totalled EUR 4,709 (1,770) million.

Note 6. Impairment losses on receivables

€ million	2023	2022
Receivables written down as loan and guarantee losses	-93	-133
Recoveries of receivables written down	16	15
Expected credit losses* (ECL) on receivables from customers and off-balance-sheet items	-192	3
Expected credit losses* (ECL) on notes and bonds	0	0
Total	**-269**	**-115**

* Loss allowance is itemised in Note 37. Loss allowance regarding receivables and notes and bonds.

Note 7. Net commissions and fees

Q1–4 2023, € million	Retail Banking	Corporate Banking	Insurance	Other operations	Group eliminations	OP Financial Group
Commission income						
Lending	108	54		0	-2	160
Deposits	23	2		0	0	25
Payment transfers	285	32		19	-19	317
Securities brokerage	6	18		0	-7	18
Securities issuance	0	5		0	0	5
Mutual funds	48	231	48		-47	279
Asset management	31	28		1	-13	46
Legal services	23	0			0	23
Guarantees	11	12		0	0	23
Housing agency	63				0	63
Sales commissions on insurance contracts	92		9		-64	38
Life insurance contracts			25			25
Other	44	10		1	-40	14
Total	**735**	**393**	**81**	**21**	**-192**	**1,038**
Commission expenses						
Lending	0	-2		0	1	0
Payment transfers	-30	-7	-2	-3	16	-26
Securities brokerage		-3		0	0	-3
Securities issuance	0	-5		0	0	-5
Mutual funds		-106	0		47	-58
Asset management		-8	5	-1		-4
Guarantees		0				0
Sales commissions on insurance contracts			-28		23	-5
Other	-20	-44	-1	-16	52	-29
Total	**-50**	**-174**	**-25**	**-21**	**139**	**-130**
Total net commissions and fees	**686**	**219**	**56**	**-1**	**-52**	**908**

Adjusted Q1–4 2022, € million	Retail Banking	Corporate Banking	Insurance	Other operations	Group eliminations	OP Financial Group
Commission income						
Lending	104	48		0	-1	150
Deposits	22	3		0	0	25
Payment transfers	298	32		11	-12	329
Securities brokerage	8	22			-8	22
Securities issuance	0	6		0	0	6
Mutual funds	47	237	48	0	-46	286
Asset management	33	27		1	-13	48
Legal services	27	0				27
Guarantees	12	13		0	0	25
Housing agency	72				0	72
Sales commissions on insurance contracts	96		10		-60	46
Life insurance contracts			24			24
Other	94	8	1	2	-90	16
Total	**814**	**395**	**84**	**14**	**-230**	**1,077**
Commission expenses						
Lending	0	-2		0	1	0
Payment transfers	-29	-3	-1	-2	10	-25
Securities brokerage		-4		0	0	-4
Securities issuance	0	-4		0	4	0
Mutual funds		-110	0		46	-64
Asset management		-9	0	-4		-13
Guarantees		0				0
Sales commissions on insurance contracts	5		-31		21	-5
Other	-16	-98	-2	-8	102	-23
Total	**-41**	**-229**	**-34**	**-15**	**184**	**-134**
Total net commissions and fees	**773**	**166**	**50**	**0**	**-45**	**942**

Note 8. Net insurance income

€ million	2023	2022
Non-life insurance		
Expected claims incurred and other directly allocated insurance service costs	1,309	1,269
Changes in risk adjustment (other than adjustments related to funding risks)	11	21
Contractual service margin of services produced during the period	249	231
Recognition of insurance acquisition cash flows as revenue	124	124
Other changes in insurance revenue	65	34
Non-life insurance revenue according to the General Measurement Model (GMM), total	**1,758**	**1,680**
Life insurance		
Expected claims incurred and other directly allocated insurance service costs	119	112
Changes in risk adjustment (other than adjustments related to funding risks)	10	14
Contractual service margin of services produced during the period	64	40
Recognition of insurance acquisition cash flows as revenue	14	20
Other changes in insurance revenue	9	2
Life insurance revenue according to the General Measurement Model (GMM), total	**216**	**189**
Expected claims incurred and other directly allocated insurance service costs	17	19
Changes in risk adjustment (other than adjustments related to funding risks)	4	9
Contractual service margin of services produced during the period	5	6
Recognition of insurance acquisition cash flows as revenue	2	2
Other changes in insurance revenue	-2	-7
Life insurance revenue according to the Variable Fee Approach (VFA), total	**26**	**29**
Total life insurance revenue	**242**	**217**
Total insurance revenue	**2,000**	**1,898**
Non-life insurance		
Actual claims incurred and other directly allocated insurance service costs	-1,295	-1,454
Changes arising from insurance events occurred in services for past periods	-116	-41
Insurance contract acquisition costs	-124	-124
Impairment loss on amortised acquisition costs of insurance contracts, and their reversals		0
Losses and reversals of onerous contracts	-33	-8
Non-life insurance insurance service expenses according to the General Measurement Model (GMM), total	**-1,568**	**-1,627**
Life insurance		
Actual claims incurred and other directly allocated insurance service costs	-135	-120
Changes arising from insurance events occurred in services for past periods	-2	-7
Insurance contract acquisition costs	-14	-20
Losses and reversals of onerous contracts	-53	-101
Life insurance insurance service expenses according to the General Measurement Model (GMM), total	-205	-248
Actual claims incurred and other directly allocated insurance service costs	-26	-21
Changes arising from insurance events occurred in services for past periods	-1	-1
Insurance contract acquisition costs	-2	-2
Losses and reversals of onerous contracts	-24	1
Life insurance insurance service expenses according to the Variable Fee Approach (VFA), total	-52	-23
Life insurance insurance service expenses, total	**-256**	**-271**
Total insurance service expenses	**-1,824**	**-1,898**
Net income from non-life insurance reinsurance contracts	-88	111
Net income from life insurance reinsurance contracts	-7	-5
Total net income from reinsurance contracts	**-95**	**106**
Insurance service result	**81**	**106**

Note 9. Net insurance finance income (+)/expenses (–)

€ million	2023	2022
Non-life insurance		
Unwinding of discount of insurance liability	-33	-1
Effect of insurance contract interest rates and changes in economic assumptions	-153	595
Exchange rate differences of insurance contracts	0	-1
Finance income and expenses related to non-life insurance direct insurance contracts (GMM), total	-186	593
Finance income and expenses related to non-life insurance reinsurance contracts, total	4	-10
Life insurance		
Unwinding of discount of insurance liability	12	27
Effect of insurance contract interest rates and changes in economic assumptions	-119	533
Finance income and expenses related to life insurance direct insurance contracts (GMM), total	-107	560
Insurance contract net financing items, risk mitigation	-53	363
Effect of insurance contract interest rates and changes in economic assumptions	0	
Net financing items of fair value changes of underlying insurance contract items	-377	711
Finance income and expenses related to life insurance direct insurance contracts (VFA), total	-429	1,074
Finance income and expenses related to life insurance reinsurance contracts, total	-3	8
Net insurance finance income (+)/expenses (–)	**-722**	**2,226**

Note 10. Net interest income from financial assets held for trading

Financial assets held for trading

€ million	2023	2022
Notes and bonds		
Interest income and expenses	20	4
Fair value gains and losses of notes and bonds	5	-24
Total	26	-20
Shares and participations		
Fair value gains and losses	1	9
Dividend income and share of profits	4	2
Total	4	11
Derivatives		
Interest income and expenses	67	-17
Fair value gains and losses	-42	-2
Total	25	-20
Total	**55**	**-29**

Note 11. Net investment income

€ million	2023	2022
Net income from assets at fair value through other comprehensive income		
Notes and bonds		
Capital gains and losses	5	10
Other income and expenses	0	-1
Total	**5**	**9**

Net income from financial assets recognised at fair value through profit or loss

Financial assets held for trading, insurance business

€ million	2023	Adjusted 2022
Derivatives		
Interest income and expenses	-22	10
Fair value gains and losses	106	-443
Total	84	-433
Total	**84**	**-433**

Financial assets that must be measured at fair value through profit or loss		
Shares and participations		
Fair value gains and losses		-1
Dividend income and share of profits	0	5
Total	0	3
Total	**0**	**3**

Financial assets designated as at fair value through profit or loss		
Notes and bonds		
Interest income	136	102
Fair value gains and losses	278	-812
Total	414	-710
Shares and participations		
Fair value gains and losses	152	-230
Dividend income and share of profits	43	93
Total	195	-137
Total	**609**	**-847**
Income from assets covering unit-linked insurance and investment contracts		
Interest income	103	-85
Fair value gains and losses	910	-1,460
Total	**1,013**	**-1,545**
Net income from financial assets designated as at fair value through profit or loss, total	**1,622**	**-2,392**
Total net income from financial assets recognised at fair value through profit or loss	**1,706**	**-2,822**

Net income from investment property		
Rental income	52	52
Fair value gains and losses	-29	6
Maintenance charges and expenses	-46	-42
Other	0	1
Total net income from investment property	**-22**	**17**
Net income from loans and receivables recognised at amortised cost		
Interest income	12	3
Interest expenses	-2	1
Impairment losses and their reversals	-2	2
Total net income from loans and receivables recognised at amortised cost	**8**	**6**
Associates and joint ventures		
Accounted for using the fair value method, associates	0	17
Consolidated using the equity method, associates	2	8
Joint ventures	0	
Total	**3**	**25**
Financial liabilities designated as at fair value through profit or loss		
Premiums written from insurance contracts	448	503
Claims paid under investment contracts	-358	-359
Change in investment contract liabilities	-733	668
Total net income from investment contract liabilities	-642	812
Other net investment income of insurance		
Currency fair value gains/losses related to insurance service result	0	-1
Other income and expenses from loans and receivables	0	
Total	**0**	**-1**
Total net investment income	**1,057**	**-1,952**

Note 12. Other operating income

€ million	**2023**	Adjusted **2022**
Rental income from property in own use	7	9
Capital gains on property in own use	1	2
Rental income from subleases	1	
Income from corporate transactions	5	0
Other operating income*	18	51
Other operating income	8	5
Total	**40**	**67**

* A year ago, the sale of Pohjola Hospital increased other operating income by EUR 32 million.

Note 13. Personnel costs

€ million	**2023**	Adjusted **2022**
Wages and salaries	-685	-626
Variable remuneration	-113	-75
Pension costs		
Defined contribution plans	-134	-121
Defined benefit plans*	1	-7
Other personnel related costs	-32	-27
Total	**-964**	**-856**

* Note 34.

Personnel fund

About 95% of all personnel are members of the OP Financial Group Personnel Fund. Profit-based bonuses for 2023 transferred to the Fund account for about 3% (1.5%) of the combined salaries and wages earned by the Fund's members.

Expenses recognised for variable remuneration*

€ million	**2023**	**2022**
Personnel fund	-19	-5
Performance-based bonuses	-94	-69
Total	**-113**	**-75**

* Excl. social expenses.

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

Note 14. Depreciation/amortisation and impairment loss

€ million	2023	Adjusted 2022
Depreciation and amortisation		
Buildings	-11	-11
Machinery and equipment	-8	-9
Intangible assets related to business combinations	-9	-10
Information systems and other	-108	-147
Right-of-use assets	-27	-26
Leased out assets		1
Other	-2	-2
Total	-165	-204
Impairment loss		
Property in own use	-22	-6
Information systems	-36	0
Right-of-use assets	0	-2
Other	-3	-1
Total	-60	-9
Total	**-226**	**-214**

Note 15. Other operating expenses

€ million	2023	Adjusted 2022
ICT costs		
Production	-238	-228
Development	-222	-153
Buildings	-58	-58
Government charges and audit fees*	-82	-88
Service purchases	-143	-123
Expert services	-55	-46
Telecommunications	-33	-32
Marketing	-44	-39
Donations	-14	-14
Insurance and security costs	-15	-12
Expenses of short-term and low-value leases	-6	-6
Other	-101	-93
Total	**-1,011**	**-892**

* In 2023, audit fees paid to auditors totalled EUR 3.9 million (3.4), whereas assignments as referred to in chapter 1, section 1, subsection 1, paragraph 2 of the Auditing Act totalled 0.1 million (0.1), fees for tax advisory services EUR 0.2 million (0.2) and fees for other services EUR 1.8 million (1.1). Non-audit services provided by KPMG Oy Ab to OP Financial Group companies totalled EUR 2.0 million (1.3) (excl. VAT).

OP Financial Group's stability contribution calculated for 2023 amounted to EUR 60.9 million (68.0).

The deposit guarantee contribution of EUR 43.9 million (37.7) calculated for OP Financial Group for 2023 has been fully covered by payments accounted for from the old Deposit Guarantee Fund.

Development costs

€ million	2023	2022
ICT development costs	-222	-153
Share of own work	-72	-63
Total development costs in the income statement	**-294**	**-216**
Capitalised ICT costs	-51	-81
Transfer of capitalised costs/personnel costs	-12	-16
Total capitalised development costs	-62	-97
Total development costs	**-356**	**-313**
Total development costs	-142	-145

Note 16. Transfers to insurance service result

€ million	2023	2022
Personnel costs	159	144
Depreciation and amortisation	33	40
Other operating expenses	294	233
Transfers to insurance service result	**485**	**416**

The item transfers in operating expenses to insurance service result is related to the calculation of the insurance contract liability. Expenses for the financial year are recognised according to the determinations of the coverage units, and the recognition in respect of the capitalised acquisition costs takes place in the same cycle with the income allocated to them and are shown in insurance revenue or insurance service expenses.

Note 17. OP bonuses to owner-customers

€ million	2023	Adjusted 2022
New OP bonuses accrued to owner-customers	-275	-215
Unused, expired OP bonuses	6	5
Transfers to insurance service result	14	11
Total	**-255**	**-198**

Note 18. Income tax

€ million	**2023**	Adjusted **2022**
Current tax	-394	-221
Tax for previous financial years	-7	0
Deferred tax	-7	7
Income tax expense	**-408**	**-213**
Corporate income tax rate	20	20

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

Earnings before tax	2,050	1,120
Tax calculated at a tax rate of 20%	-410	-224
Tax for previous financial years	-7	0
Tax-exempt income	2	10
Non-deductible expenses	-7	-4
Re-evaluation of unrecognised tax losses	0	0
Tax adjustments	13	5
Effect of capital gain on intra-Group transaction		0
Other items	1	0
Tax expense	**-408**	**-213**

Notes to assets

Note 19. Liquid assets

€ million	31 Dec 2023	31 Dec 2022
Cash	160	183
Deposits with central banks repayable on demand*	19,595	34,820
Total liquid assets	**19,755**	**35,004**

* Deposits with central banks repayable on demand includes an overnight deposit of EUR 18,861 million made with the Bank of Finland (33,970).

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 20. Receivables from credit institutions

€ million	31 Dec 2023	31 Dec 2022
Receivables from credit institutions		
Deposits		
Repayable on demand	191	652
Other	593	69
Total	784	721
Loans and receivables		
Repayable on demand		0
Other	76	79
Total	76	79
Total	860	800
Loss allowance*	-1	-2
Total receivables from credit institutions	**858**	**798**

* Loss allowance is itemised in Note 37. Loss allowance regarding receivables and notes and bonds.

Note 21. Receivables from customers

€ million	31 Dec 2023	31 Dec 2022
Loans to the public and public sector entities	96,341	97,012
Finance lease receivables*	2,372	2,228
Guarantee receivables	4	5
Total	98,717	99,246
Loss allowance**	-881	-699
Total receivables from customers	**97,836**	**98,546**

* Finance lease receivables are itemised in Note 27.

** Loss allowance is itemised in Note 37. Loss allowance regarding receivables and notes and bonds.

Note 22. Derivative contracts

Assets

€ million	31 Dec 2023	31 Dec 2022
Held for trading		
Interest rate derivatives	1,661	2,114
Currency derivatives	575	717
Equity and index derivatives		0
Commodity derivatives	20	42
Total	2,256	2,873
Hedging derivative contracts*		
Fair value hedging		
Interest rate derivatives	1,008	1,182
Currency derivatives	137	62
Interest rate derivatives	0	0
Total	1,145	1,244
Total derivative contracts	**3,401**	**4,117**

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

Liabilities

€ million	31 Dec 2023	31 Dec 2022
Held for trading		
Interest rate derivatives	2,300	3,259
Currency derivatives	576	683
Equity and index derivatives	0	
Other	19	39
Total	2,895	3,980
Hedging derivative contracts*		
Fair value hedging		
Interest rate derivatives	260	313
Currency derivatives	115	135
Cash flow hedge		
Interest rate derivatives	0	4
Total	375	452
Total derivative contracts	**3,271**	**4,432**

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

Derivatives held for trading 31 December 2023

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	14,589	30,625	40,176	85,389	682	1,246
Cleared by the central counterparty	13,020	19,673	24,398	57,091	50	9
Settled-to-market (STM)	9,798	18,963	24,263	53,024	49	9
Collateralised-to-market (CTM)	3,222	710	135	4,066	1	0
OTC interest rate options						
Call and caps						
Purchased	1,332	104	753	2,189	189	-46
Written	1,790	3,121	3,718	8,629	66	362
Put and floors						
Purchased	5,435	4,042	4,455	13,932	401	82
Written	4,987	2,721	1,188	8,896	24	245
Total OTC interest rate derivatives	28,133	40,613	50,290	119,036	1,363	1,888
Interest rate futures	1,173	95		1,268	0	1
Total exchange traded derivatives	1,173	95		1,268	0	1
Total interest rate derivatives	29,306	40,708	50,290	120,304	1,363	1,889
Currency derivatives						
Forward exchange agreements	54,587	1,063		55,650	573	568
Interest rate and currency swaps	1,373	2,321	941	4,635	206	233
Currency options						
Call						
Purchased	183			183	2	0
Written	191			191	0	3
Put						
Purchased	190			190	2	1
Written	202			202	1	1
Total currency derivatives	56,726	3,385	941	61,051	784	806
Credit derivatives						
Credit default swaps	42	104	9	154	10	8
Total credit derivatives	42	104	9	154	10	8
Other						
Other forward contracts	106	68		173	11	10
Other swaps	288	812	39	1,139	82	65
Total other OTC derivatives	394	879	39	1,312	94	75
Other futures contracts	45	19		64	0	0
Total other derivatives	438	898	39	1,375	94	76
Total derivatives held for trading	**86,512**	**45,095**	**51,278**	**182,885**	**2,251**	**2,779**

Derivatives held for trading 31 December 2022

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	11,949	24,758	46,177	82,884	845	1,980
Cleared by the central counterparty	10,000	16,055	29,841	55,896	114	73
Settled-to-market (STM)	7,979	15,524	29,621	53,124	113	71
Collateralised-to-market (CTM)	2,022	531	220	2,772	1	2
Forward rate agreements						
OTC interest rate options						
Call and caps						
Purchased	1,089	2,529	-643	2,976	286	-56
Written	589	4,223	2,919	7,731	46	417
Put and floors						
Purchased	953	7,390	5,237	13,581	522	85
Written	1,082	7,120	1,452	9,654	22	375
Total OTC interest rate derivatives	15,661	46,021	55,142	116,824	1,722	2,801
Interest rate futures	838	1,050		1,888	0	0
Total exchange traded derivatives	838	1,050		1,888	0	0
Total interest rate derivatives	16,499	47,071	55,142	118,712	1,722	2,801
Currency derivatives						
Forward exchange agreements	51,317	604	4	51,924	705	674
Interest rate and currency swaps	91	2,826	401	3,318	185	175
Currency options						
Call						
Purchased	192	1		193	3	0
Written	190	1		191	0	3
Put						
Purchased	187			187	2	2
Written	208			208	1	2
Total OTC currency derivatives	52,184	3,431	405	56,020	896	856
Total currency derivatives	52,184	3,431	405	56,020	896	856
Credit derivatives						
Credit default swaps	34	63	13	110	1	34
Total credit derivatives	34	63	13	110	1	34
Other						
Other forward contracts	102	57		159	10	5
Other swaps	286	816	26	1,128	79	75
Total other OTC derivatives	387	873	26	1,287	89	80
Other futures contracts	52	16		68	1	2
Total other derivatives	439	889	26	1,355	91	82
Total derivatives held for trading	**69,157**	**51,453**	**55,587**	**176,197**	**2,710**	**3,772**

Derivative contracts for hedging purposes - fair value hedging 31 December 2023

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	13,552	46,000	21,679	81,231	58	71
Cleared by the central counterparty	13,572	45,880	21,521	80,973	52	69
Settled-to-market (STM)	4,836	18,240	7,424	30,500	11	34
Collateralised-to-market (CTM)	8,736	27,640	14,096	50,473	41	35
OTC interest rate options						
Call and caps						
Purchased	1,790	7,579	7,252	16,621	959	104
Put and floors						
Purchased		193		193	3	2
Written	1,208	5,179	257	6,643	67	74
Total OTC interest rate derivatives	16,550	58,951	29,187	104,688	1,086	251
Total interest rate derivatives	16,550	58,951	29,187	104,688	1,086	251
Currency derivatives						
Interest rate and currency swaps		1,485	463	1,947	4	122
Total OTC currency derivatives		1,485	463	1,947	4	122
Total currency derivatives		1,485	463	1,947	4	122
Total derivative contracts, fair value hedge	**16,550**	**60,436**	**29,650**	**106,636**	**1,090**	**374**

Derivative contracts for hedging purposes – cash flow hedge 31 December 2023

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	1,341	3,581	832	5,753	1	3
Cleared by the central counterparty	1,341	3,581	832	5,753	1	3
Settled-to-market (STM)	241	2,580	673	3,494	1	3
Collateralised-to-market (CTM)	1,100	1,001	159	2,259	0	0
Total OTC interest rate derivatives	1,341	3,581	832	5,753	1	3
Total interest rate derivatives	1,341	3,581	832	5,753	1	3
Currency derivatives						
Forward exchange agreements	3,195			3,195	134	115
Total OTC currency derivatives	3,195			3,195	134	115
Total currency derivatives	3,195			3,195	134	115
Total derivative contracts, cash flow hedge	4,536	3,581	832	8,948	135	119
Total derivative contracts held for hedging	**21,086**	**64,017**	**30,482**	**115,584**	**1,225**	**493**

Derivative contracts for hedging purposes – fair value hedging 31 December 2022

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	11,471	40,499	23,786	75,756	76	108
Cleared by the central counterparty	11,451	40,469	23,688	75,608	76	100
Settled-to-market (STM)	3,364	18,079	7,679	29,121	13	49
Collateralised-to-market (CTM)	8,088	22,390	16,009	46,487	62	51
Forward rate agreements						
OTC interest rate options						
Call and caps						
Purchased	1,300	7,652	7,253	16,205	1,105	92
Put and floors						
Purchased		43	150	193	3	2
Written		5,703	994	6,697	67	74
Total OTC interest rate derivatives	12,771	53,897	32,183	98,851	1,250	276
Total interest rate derivatives	12,771	53,897	32,183	98,851	1,250	276
Currency derivatives						
Forward exchange agreements	42			42	38	10
Interest rate and currency swaps		1,872	681	2,553	11	166
Total OTC currency derivatives	42	1,872	681	2,595	49	176
Total currency derivatives	42	1,872	681	2,595	49	176
Total derivative contracts, fair value hedge	**12,813**	**55,769**	**32,864**	**101,446**	**1,300**	**452**

Derivative contracts for hedging purposes – cash flow hedge 31 December 2022

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives						
Interest rate swaps	693	4,242	2,087	7,021	9	18
Cleared by the central counterparty	692	4,192	2,072	6,956	0	18
Settled-to-market (STM)	192	1,592	1,912	3,696	0	14
Collateralised-to-market (CTM)	500	2,600	159	3,259	0	5
Total OTC interest rate derivatives	693	4,242	2,087	7,021	9	18
Total interest rate derivatives	693	4,242	2,087	7,021	9	18
Currency derivatives						
Forward exchange agreements	3,735			3,735	12	125
Total OTC currency derivatives	3,735			3,735	12	125
Total currency derivatives	3,735			3,735	12	125
Total derivative contracts, cash flow hedge	**4,428**	**4,242**	**2,087**	**10,756**	**21**	**143**
Total derivative contracts held for hedging	**17,241**	**60,010**	**34,951**	**112,202**	**1,321**	**596**

Total derivatives 31 December 2023

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives	47,197	103,240	80,309	230,746	2,451	2,144
Cleared by the central counterparty	27,933	69,134	46,751	143,817	103	81
Settled-to-market (STM)	14,874	39,783	32,361	87,019	61	46
Collateralised-to-market (CTM)	13,059	29,351	14,390	56,799	42	35
Currency derivatives	59,921	4,869	1,404	66,193	922	1,044
Credit derivatives	42	104	9	154	10	8
Other derivatives	438	898	39	1,375	94	76
Total derivatives	107,598	109,111	81,760	298,469	3,477	3,271

Total derivatives 31 December 2022

	Nominal values/residual maturity				Fair values*	
€ million	<1 year	1–5 years	>5 years	Total	Assets	Liabilities
Interest rate derivatives	29,963	105,209	89,412	224,584	2,981	3,096
Cleared by the central counterparty	22,144	60,716	55,600	138,460	190	191
Settled-to-market (STM)	11,535	35,194	39,212	85,941	126	134
Collateralised-to-market (CTM)	10,609	25,521	16,388	52,519	64	58
Currency derivatives	55,961	5,303	1,086	62,350	958	1,157
Credit derivatives	34	63	13	110	1	34
Other derivatives	439	889	26	1,355	91	82
Total derivatives	86,398	111,463	90,538	288,399	4,031	4,368

* Fair values include accrued interest which is shown under other assets or provisions and other liabilities in the balance sheet. In addition, the fair value of derivatives for central counterparty clearing is offset in the balance sheet.

Interest rate derivatives for central counterparty clearing are offset in the balance sheet. The effects of netting can be found in Note 44 below. Other derivative contracts are presented on a gross basis in the balance sheet. In its capital adequacy measurement, OP Amalgamation also applies netting of derivatives.

Average interest rates of interest rate derivative contracts in hedge accounting – fair value 31 December 2023

	<1 year	1–5 years	>5 years	Total
Interest rate derivatives				
Cleared by the central counterparty	2.578	4.265	4.666	4.008
OTC interest rate derivatives	-0.450	-0.221	3.009	0.379
Total interest rate derivatives	1.064	2.022	3.838	2.194

Average interest rates of interest rate derivative contracts in hedge accounting – fair value 31 December 2022

	<1 year	1–5 years	>5 years	Total
Interest rate derivatives				
Cleared by the central counterparty	0.701	0.642	0.586	0.635
OTC interest rate derivatives		3.086	3.006	3.040
Total interest rate derivatives	0.701	0.646	0.596	0.640

Average prices of currency derivatives in hedge accounting concerning significant currencies 31 December 2023

	<1 year	1–5 years	>5 years	Total
Forward exchange agreements: EUR:USD				

Average prices of currency derivatives in hedge accounting concerning significant currencies 31 December 2022

	<1 year	1–5 years	>5 years	Total
Forward exchange agreements: EUR:USD	1.041			1.041

Average interest rates of interest rate swaps and currency swaps in hedge accounting related to significant currencies 31 December 2023

	<1 year	1–5 years	>5 years	Total
AUD			2.440	2.440
GBP		2.318		2.318
HKD		2.940		2.940
JPY		0.700	1.300	1.000
SEK		4.450		4.450
NOK			4.334	4.334
USD			3.607	3.607

Average interest rates of interest rate swaps and currency swaps in hedge accounting related to significant currencies 31 December 2022

	<1 year	1–5 years	>5 years	Total
AUD			2.440	2.440
GBP		2.151		2.151
HKD		2.959		2.959
JPY		0.700	1.300	1.000
SEK			4.432	4.432
NOK		4.454		4.454
USD	2.328	1.675	3.611	2.538

Average interest rates of interest rate derivative contracts in hedge accounting – cash flow hedge 31 December 2023

	<1 year	1–5 years	>5 years	Total
Interest rate derivatives				
Cleared by the central counterparty				
OTC interest rate derivatives	2.537	1.966	0.876	1.862
Total interest rate derivatives	2.537	1.966	0.876	1.862

Average interest rates of interest rate derivative contracts in hedge accounting – cash flow hedge 31 December 2022

	<1 year	1–5 years	>5 years	Total
Interest rate derivatives				
OTC interest rate derivatives	0.940	0.792	0.876	0.841
Total interest rate derivatives	0.940	0.792	0.876	0.841

Average prices of currency derivatives in hedge accounting concerning significant currencies 31 December 2023

	<1 year	1–5 years	>5 years	Total
Currency derivatives				
Forward exchange agreements				
Average EUR:CHF	0.942			0.942
Average EUR:GBP	0.886			0.886
Average EUR:USD	1.094			1.094

Average prices of currency derivatives in hedge accounting concerning significant currencies 31 December 2022

	<1 year	1–5 years	>5 years	Total
Currency derivatives				
Forward exchange agreements				
Average EUR:AUD	1.4896			1.4896
Average EUR:CHF	0.9703			0.9703
Average EUR:GBP	0.8618			0.8618
Average EUR:USD	1.0645			1.0645

Effects of hedge accounting on financial position and result

€ million	Interest rate risk hedge 31 Dec 2023	31 Dec 2022
Fair value hedges		
Carrying amount of hedged receivables*	35,906	35,445
- of which the accrued amount of hedge adjustments**	-1,774	-3,139
Carrying amount of hedged liabilities***	38,409	34,780
- of which the accrued amount of hedge adjustments	-1,770	-3,166
Remaining hedge adjustment amount of discontinued hedges	82	86

* Presented under Receivables from customers and Investment assets in the balance sheet.
** The figures also take account of adjustments between the fair value reserve and the income statement related to hedge accounting.
*** Presented in the balance sheet under Liabilities to customers, Debt securities issued to the public and Subordinated liabilities.

€ million	Interest rate risk hedge 31 Dec 2023	31 Dec 2022
Fair value hedges		
Changes in fair value of hedging derivatives	1,324	-481
Change in value of hedged item that is used as basis for recognition of ineffective hedge during period	-1,313	465
Hedge ineffectiveness presented in income statement	12	-16

€ million	Interest rate risk hedge 31 Dec 2023	31 Dec 2022
Cash flow hedges		
Changes in fair value of hedging derivatives	130	-558
Change in value of hedged item that is used as basis for recognition of ineffective hedge during period	-123	540
Hedge ineffectiveness presented in income statement	7	-17
Change in cash flow hedge reserve concerning continuous hedges	156	-540
Change in cash flow hedge reserve concerning terminated hedges	8	2

Note 23. Investment assets

€ million	31 Dec 2023	Adjusted 31 Dec 2022
Financial assets at fair value through other comprehensive income		
Notes and bonds	11,588	11,755
Shares and participations	0	0
Total	11,588	11,756
Financial assets held for trading		
Notes and bonds	216	295
Shares and participations	84	86
Total	300	381
Financial assets that must measured at fair value through profit or loss		
Notes and bonds		0
Shares and participations	1	2
Total	1	2
Financial assets designated as at fair value through profit or loss		
Notes and bonds	6,367	6,247
Shares and participations	2,349	1,653
Total	8,716	7,900
Amortised cost		
Notes and bonds	623	1
Other	4	-7
Total	626	-6
Investment property	527	561
Associates and joint ventures		
Associated companies		
Companies consolidated using the equity method	31	54
Companies consolidated using the mark-to-market method	106	94
Joint ventures	1	0
Total	138	148
Total investment assets	**21,896**	**20,742**

Investments in associates and joint ventures
OP Financial Group has 14 (15) associates and 3 (3) joint ventures which are not significant when reviewing them one by one. The table below shows OP Financial Group's share of the profit/loss of these associates and joint ventures. 11 (12) of the private equity funds treated as associates have been measured at fair value in accordance with IAS 28.

OP Financial Group's investments in associates and joint ventures have no quoted market price.

No contingent liabilities are involved in the associates or joint ventures. No such unrecognised commitments are related to the joint ventures that concern the provision of financing or resources or an obligation to buy another investor's interest in case certain future events occur.

Changes in investment property, € million	2023	2022
At financial year start	**561**	**687**
Increases due to purchases	0	24
Transfer from property in own use	15	13
Fair value changes	-29	6
Decreases due to sales	-21	-170
At financial year end	**527**	**561**

Increases in investment property include in capitalised expenses recognised after the acquisition. Any changes in the fair value of investment property are recognised under net investment income. OP Financial Group sold five hospital buildings in March 2022.

OP Financial Group companies do not own investment property to which restrictions concerning their transfer and sales price under the legislation on state-subsidised housing loans would apply.

Breakdown of investment property leased out under operating lease can be found in Note 27.

Investment property contains property used as collateral worth EUR 0 million (1).

Note 24. Assets covering unit-linked contracts

€ million	31 Dec 2023	31 Dec 2022
Shares and participations	12,020	11,237
Notes and bonds	561	360
Total	**12,581**	**11,597**

The underlying items of the unit-linked contracts' fair value based on the VFA under IFRS 17 Insurance contracts amount to EUR 1,641 million (1,556). The item consists of shares and participations as well as notes and bonds. The remaining assets are included in contracts measured under IFRS 9 Financial instruments.

Note 25. Intangible assets

Changes in intangible assets, € million	Goodwill	Brands	Customer relationships related to insurance contracts and policy acquisition costs	Information systems	Total
Acquisition cost 1 January 2023	631	166	507	831	2,135
Increases*				67	67
Decreases				-3	-3
Transfers between items				0	0
Acquisition cost 31 December 2023	631	166	507	895	2,199
Acc. amortisation and impairments 1 January 2023	-3	-4	-470	-506	-983
Amortisation during the financial year			-9	-108	-117
Impairments during the financial year				-36	-36
Decreases				1	1
Acc. amortisation and impairments 31 December 2023	-3	-4	-480	-649	-1,135
Carrying amount 31 December 2023	629	162	28	246	1,065

* Internal development work accounts for EUR 12 million.

Changes in intangible assets, € million	Goodwill	Brands	Customer relationships related to insurance contracts and policy acquisition costs	Information systems	Total
Acquisition cost 1 January 2022	631	166	507	932	2,236
Increases*				97	97
Decreases				-201	-201
Transfer of itemised non-current assets held for sale				2	2
Acquisition cost 31 December 2022	631	166	507	831	2,135
Acc. amortisation and impairments 1 January 2022	-3	-4	-461	-558	-1,025
Amortisation for the period			-10	-147	-157
Impairments for the period				0	0
Decreases				199	199
Other changes				0	0
Accumulated amortisation and impairments 31 December 2022	-3	-4	-470	-506	-983
Carrying amount 31 December 2022	629	162	37	325	1,153

* Internal development work accounts for EUR 16 million.

Information systems

Carrying amount, € million	31 Dec 2023	31 Dec 2022
Information systems	135	180
Information systems under development	111	145
Total	**246**	**325**

An impairment test is performed for intangible rights whenever their is any indication that the asset's value may have decreased. An intangible right not yet available for use is also tested for impairment twice a year and whenever there is any indication that the value of the unfinished intangible right may be impaired. An unfinished intangible asset is tested for its ability to generate sufficient future economic benefits to recover its carrying amount and that OP has the capability to make the asset technically ready.

Intangible assets with indefinite economic lives

€ million	31 Dec 2023	31 Dec 2022
Goodwill	629	629
Brands	162	162
Total	**791**	**791**

The useful lives of brands acquired through business combinations are estimated to be indefinite, since they will generate cash flows for an indefinable period. OP Financial Group's brands, Pohjola and A-Vakuutus, originate entirely from the acquisition of Pohjola Group plc's business operations.

Customer relationships pertaining to insurance contracts and policy acquisition costs

An intangible asset related to customer relationships and insurance contracts has been allocated to OP Financial Group's balance sheet that arose as part of the acquisition of Aurum Investment Insurance Ltd in 2012 and the transfers of Suomi Mutual's portfolio in 2015 and 2016. Intangible assets originating from life insurance customer relationships as well as from life insurance contracts are charged to expenses over their estimated useful lives.

Goodwill impairment test

Goodwill, € million

Segment	Acquired business	31 Dec 2023	31 Dec 2022
Insurance	Acquisition of Pohjola Group plc's non-life and life businesses and the ICT functions of Pohjola Group plc.	449	449
Corporate Banking	The acquisition of Pohjola Group plc's fund and asset management services and the acquisition of Pohjola Finance Ltd's businesses	180	180
Total		**629**	**629**

Testing goodwill for impairment

At the end of 2023, goodwill amounted to a total of EUR 629 million (629).

The testing period and the duration of cash flows for the forecast period were determined to be five years under IAS 36. A growth expectation in cash flows for the post-forecast period was reviewed for each cash-generating unit and a growth expectation for the previous forecast period or a maximum of 2% was used as the constant growth of the terminal period. Cash flow forecasts derive from the strategy process based on the guidelines for OP Financial Group's development confirmed by the Supervisory Council of OP Cooperative and the related derived expectations of the future development of businesses. The goals of OP Financial Group's sustainability programme have been taken into account in the planning of businesses and the business target setting. Cash flow forecasts for each testing unit has been approved by the board of directors of the business that made the forecast. Income tax has been deducted from the cash flow forecasts, according to the valid income tax rate. In testing, the surplus/deficit after return on equity requirements for the forecast cash flows of cash-generating units was discounted at present value using a discount rate corresponding to the return on equity requirement. Market information available in each sector has been used as the basis for calculating the discount rate, and the discount rate reflects investors' view of business risks and of the expected return on capital tied to the investment. In 2023, the discount rate used in the calculations before tax varied from 6.8 to 9.2%. In 2022, the discount rate varied from 6.3 to 7.9%. Based on market information, OP Financial Group increased the discount rate for non-life and life insurance by 0.8 percentage points to 8.2 percentage points. For asset management and mutual fund business, the discount rate was increased by 1.3 percentage points to 9.2 percentage points. The discount rate for Transaction Banking increased by 0.5 percentage points to 6.8 percentage points. Impairment testing in 2023 proved that the recoverable amount of the tested cash-generating units exceeded their requirement for return on equity, and the surplus/deficit was positive in each tested cash-generating unit. So, no need for impairment loss recognition of goodwill was discovered based on the testing. Accounting policies governing testing goodwill for impairment are described in Note 1 under 9.2.

Sensitivity analysis of goodwill

A sensitivity analysis applied to the cash-generating units was carried out separately for each cash-generating unit on the basis of key variables of each cash-generating unit. Sensitivity was reviewed as a change in one variable in relation to values used in forecasts. The sensitivity analysis does not include simultaneous changes in all key variables. In addition, a relative change of each cash-generating unit's key variable, which would cause goodwill impairment risk, was derived from the sensitivity analysis.

Key assumptions used in calculating the recoverable amount of a cash-generating unit and a relative change that would cause goodwill impairment risk.

Segment	Cash-generating unit	Goodwill, € million	Key variables	Value used in cashflow forecasts, %	Change caused by impairment risk, pp
Insurance	Pohjola Insurance Ltd	400	Discount rate, %	8.2	6.8
			Combined ratio, %	92,1–95,9	6.4
			Net investment income, %	1,9–2,9	-3.1
	OP Life Assurance Company Ltd	49	Discount rate, %	8.2	7.9
			Growth in operating expenses, %	0,8–42,8	7.4
			Net investment income percentage, %	-0,5–1,7	-1.8
Corporate Banking	OP Asset Management Ltd	97	Discount rate, %	9.2	9.1
			Growth in assets under management, %	2,0-11,0	-6.2
			Growth in expenses, %	-1,1-6,0	7.8
	OP Fund Management Company Ltc	71	Discount rate, %	9.2	21.3
			Growth in mutual fund assets, %	2,0-11,0	-13.7
			Growth in expenses of fixed type, %	-1,1-6,0	18.4
	Transaction Banking business division	13	Discount rate, %	6.8	6.8
			Loan portfolio growth, %	0,3-2,3	-27.2
			Growth in expenses, %	-0,2–3,9	34.5

Impairment testing for brands

Impairment testing for brands was carried out separately for the Pohjola and A-Vakuutus (A-Insurance) brands. Forecasts used in cash flow statements are based on long-term plans approved by the Non-life Insurance management and on cash flow forecasts for the next 5 years derived from them. A 2% growth expectation was used as growth in cash flows for post-forecast periods. On the basis of impairment testing, there is no need to recognise any impairment loss on brands in the financial statements 2023. The principles related to the valuation of brands and their impairment loss are described in Note 1 under 9.5.

Note 26. Property, plant and equipment

€ million	31 Dec 2023	31 Dec 2022
Property in Group use		
Land and water areas	33	35
Buildings	153	190
Machinery and equipment	26	27
Other tangible assets	14	14
Right-of-use assets	172	158
Total property, plant and equipment	**398**	**423**
of which construction in progress	1	1

Changes in property, plant and equipment (PPE), and investment property, € million	Property in Group use	Machinery and equipment	Other tangible assets	Leased-out assets	Total PPE
Acquisition cost 1 January 2023	566	56	15	1	638
Increases	12	13	6		31
Decreases	-20	-16	-7		-42
Transfers between items	-15	0			-15
Acquisition cost 31 December 2023	544	52	15	1	612
Accumulated depreciation and impairments 1 January 2023	-341	-30	-1	-1	-373
Depreciation for the financial year	-11	-8	0		-19
Impairments for the financial year	-22				-22
Reversal of impairments during the financial year	0				0
Decreases	16	12	0		28
Accumulated depreciation and impairments 31 December 2023	-357	-26	-1	-1	-386
Right-of-use asset*					172
Carrying amount 31 December 2023	186	26	14		398

Changes in property, plant and equipment (PPE), and investment property, € million	Property in Group use	Machinery and equipment	Other tangible assets	Leased-out assets	Total PPE
Acquisition cost 1 January 2022	619	69	16	1	705
Increases	35	13	0		49
Decreases	-75	-26	-1	0	-103
Transfers to liabilities associated with non-current assets held for sale		0			0
Transfers between items	-13			0	-13
Acquisition cost 31 December 2022	566	56	15	1	638
Accumulated depreciations and impairments 1 January 2022	-378	-42	-1	-1	-422
Depreciation for the financial year	-11	-9	0		-20
Impairments for the financial year	-6				-6
Reversal of impairments during the financial year	0		1		0
Decreases	55	21			76
Other changes	0		0		0
Accumulated depreciations and impairments 31 December 2022	-341	-30	-1	-1	-372
Right-of-use asset*					158
Carrying amount 31 December 2022	225	27	14	0	423

* Note 27.

Note 27. Leases

Right-of-use assets, € million	Buildings	Cars	IT equipment	Machinery and equipment	Total
Carrying amount 1 January 2023	153	2	1	2	158
Increases	15	0		1	16
Decreases				0	0
Depreciation for the financial year	-24	-1	-1	-1	-27
Impairment loss on receivables in financial year	0				0
Value changes for the financial year	24	0		0	24
Other changes	0				0
Carrying amount 31 December 2023	168	1	0	2	172

Right-of-use assets, € million	Buildings	Cars	IT equipment	Machinery and equipment	Total
Carrying amount 1 January 2022	154	2	2	7	165
Increases	17	1	1	1	19
Decreases		0	0	-4	-5
Depreciation for the financial year	-22	-1	-1	-2	-26
Impairment loss on receivables in financial year	-1				-1
Value changes for the financial year	4	0		0	4
Other changes	2				2
Carrying amount 31 December 2022	153	2	1	2	158

Lease liabilities, € million	31 Dec 2023	31 Dec 2022
* Carrying amount	239	231
Contractual maturities		
< 1 year	36	32
1–2 years	33	30
2–3 years	32	27
3–4 years	23	23
4–5 years	21	19
Over 5 years	111	118

* Note 34 Provisions and other liabilities.

Items entered in the income statement, € million	31 Dec 2023	31 Dec 2022
Interest expenses	-4	-3
Depreciation on right-of-use assets	-27	-26
Impairment of right-of-use assets	0	-1
Lease income received from sublease	1	2
Expenses related to variable lease payments not included in lease liabilities	0	0
Gains or losses arising from sale and leaseback transactions	0	-1
Expenses of short-term and low-value leases	-6	-11
Total cash flow from leases	-47	-47

Lessor's operating leases

OP Financial Group companies have leased out investment property they own.

Minimum lease payments receivable under operating leases

€ million	31 Dec 2023	31 Dec 2022
< 1 year	42	41
1–2 years	26	30
2–3 years	22	26
3–4 years	21	21
4–5 years	18	19
Over 5 years	82	86
Total	210	223

Finance lease receivables

OP uses finance leases to finance moveable capital assets, real property units and other premises.

€ million	31 Dec 2023	31 Dec 2022
Maturity of finance lease receivables		
< 1 year	770	763
1–2 years	598	590
2–3 years	482	390
3–4 years	286	294
4–5 years	182	138
Over 5 years	218	216
Gross investment in finance leases	2,536	2,391
Unearned finance income (–)	-164	-162
Present value of minimum lease payments	**2,372**	**2,229**
Present value of minimum lease payment receivables		
< 1 year	719	707
1–2 years	563	552
2–3 years	459	366
3–4 years	272	280
4–5 years	173	131
Over 5 years	186	192
Total	**2,372**	**2,229**

Items entered in the income statement, € million	31 Dec 2023	31 Dec 2022
Interest income from finance lease receivables	87	35
Capital gain/loss accrued from finance leases		1

Note 28. Other assets

€ million	31 Dec 2023	Ajusted 31 Dec 2022
Payment transfer receivables	147	206
Pension assets	194	183
Accrued income and prepaid expenses		
Deferred interest income	556	436
Deferred interest income from derivatives	49	41
Commission receivables from asset management	1	4
Subscription, redemption and management fee receivables	27	28
Insurance contract acquisition costs	247	231
Other accrued income	191	170
Derivatives receivables, central counterparty clearing	11	47
CSA receivables from derivative contracts	308	353
Securities receivables	26	14
Receivable from insurance business	180	15
Other receivables	286	672
Total	**2,222**	**2,401**

Note 29. Tax assets and liabilities

€ million	31 Dec 2023	31 Dec 2022
Income tax assets	22	59
Deferred tax assets	251	605
Total tax assets	**273**	**664**

€ million	31 Dec 2023	31 Dec 2022
Income tax liabilities	156	67
Deferred tax liabilities	1,073	1,455
Total tax liabilities	**1,229**	**1,522**

Deferred tax assets, € million	1 Jan 2023	Transfers between item	Recognised in the income statement	Recognised in other comprehensive income	Recognised in equity	31 Dec 2023
Tax losses	0		32			32
Impairment loss and depreciation/amortisation on PPE and intangible assets	6		-5			2
Notes and bonds	1			13		14
Provisions	2		-2			0
Impairment loss on receivables			0			0
Cash flow hedges	78			-31		47
Defined benefit pension plans	15	3	1	-1		18
Insurance and reinsurance contracts	45	-45	3			3
Right-of-use assets*	15		-1			13
Derivative timing differences	50		-17			32
Measurement of insurance investments at fair value	320	-258	-76			-14
Measurement of investment property at fair value	-1	1	0			0
Consolidations	27		1			28
Other temporary differences	46	32	-3			75
Total	**605**	**-267**	**-68**	**-19**		**251**

Deferred tax liabilities, € million	1 Jan 2023	Transfers between item	Recognised in the income statement	Recognised in other comprehensive income	Recognised in equity	31 Dec 2023
Tax provisions	760	17	-6			770
Notes and bonds	-2			0		-2
Cash flow hedges	1			0		1
Measurement of insurance investments at fair value	126	-35	18		-55	53
Defined benefit pension plans	46	3	0	1		50
Insurance and reinsurance contracts	477	-267	-67			143
Measurement of intangible and PPE assets at fair value in business combinations	38		-1			36
Sijoitusten käypäänarvoon arvostaminen	8		-1			7
Consolidations	19	-6	-2			11
Other temporary differences	-18	22	-1			4
Total	**1,455**	**-266**	**-61**	**0**	**-55**	**1,073**
Change in deferred tax in the income statement			-7	-19		

* Deferred tax assets and liabilities have been netted concerning leases in the balance sheet. At the end of 2023, deferred tax assets related to leases amounted to EUR 48 million and deferred tax liabilities EUR 34 million.

Deferred tax assets, € million	1 Jan 2022	Transfers between item	Effect of the adoption of IFRS 17 on 1 January 2022	Recognised in the income statement	Recognised in other comprehensive income	Recognised in equity	31 Dec 2022
Tax losses	4			-4			0
Impairment loss and depreciation/amortisation on PPE and intangible assets	11			-4			6
Notes and bonds	-1			0	1		1
Provisions	3			0			2
Impairment loss on receivables							
Cash flow hedges	0				78		78
Defined benefit pension plans	15			1	-1		15
Insurance and reinsurance contracts			45				45
Right-of-use assets*	16			-2			15
Derivative timing differences	20			30			50
Measurement of insurance investments at fair value			-25	345			320
Measurement of investment property at fair value				-1			-1
Consolidations	27			0			27
Other temporary differences	39	-1		8	0		46
Total	**135**	**-1**	**20**	**373**	**78**		**605**

Deferred tax liabilities, € million	1 Jan 2022	Transfers between item	Effect of the adoption of IFRS 17 on 1 January 2022	Recognised in the income statement	Recognised in other comprehensive income	Recognised in equity	31 Dec 2022
Tax provisions	739			21			760
Notes and bonds	9				-11		-2
Cash flow hedges	32				-30	-1	1
Due to elimination of equalisation provision	82		-82				
Measurement of insurance investments at fair value	95		31				126
Defined benefit pension plans	26			-2	23		46
Insurance and reinsurance contracts			122	355			477
Measurement of intangible and PPE assets at fair value in business combinations	38						38
Measurement of investment property at fair value	18			-9			8
Consolidations	19			0			19
Other temporary differences	-23	3		1			-18
Total	**1,034**	**3**	**71**	**366**	**-18**	**-1**	**1,455**
Change in deferred tax in the income statement				7	96		

On the 2022 balance sheet, tax assets and liabilities were netted in respect of deferred tax. That is why the specification of the note does not match with the information presented in the adjusted 2022 balance sheet. The specification of the note has also been adjusted to correspond to the new 2023 presentation model.

* Deferred tax assets and liabilities have been netted concerning leases in the balance sheet. At the end of 2023, deferred tax assets related to leases amounted to EUR 48 million and deferred tax liabilities EUR 33 million.

Tax losses for which a deferred tax asset was not recognised came to EUR 46 million (EUR 8 million) at the end of 2023. The losses will expired before 2034.

Notes to liabilities and equity capital

Note 30. Liabilities to credit institutions

€ million	31 Dec 2023	31 Dec 2022
Liabilities to central banks*	0	11,977
Liabilities to credit institutions		
Repayable on demand		
Deposits	65	246
Other liabilities	0	1
Total	65	247
Other than repayable on demand		
Deposits**	0	69
Other liabilities	1	9
Total	1	78
Total liabilities to credit institutions and central banks	**66**	**12,301**

* During the financial year, OP Corporate Bank paid off the TLTRO III refinancing of EUR 12.0 billion provided by the European Central Bank.

** The item includes LCR deposits by member credit institutions.

Note 31. Liabilities to customers

€ million	31 Dec 2023	31 Dec 2022
Deposits		
Repayable on demand		
Private	45,438	45,997
Companies and public-sector entities	26,333	29,690
Total	71,771	75,688
Other		
Private	1,124	901
Companies and public-sector entities	1,150	533
Total	2,274	1,434
Total deposits	74,045	77,121
Other financial liabilities		
Repayable on demand		
Private	7	7
Companies and public-sector entities	4	7
Total	11	14
Other		
Companies and public-sector entities	2,600	4,333
Total	2,600	4,333
Total other financial liabilities	2,611	4,347
Total liabilities to customers	**76,656**	**81,468**

Note 32. Insurance contract assets and liabilities

Reinsurance contract assets

€ million	31 Dec 2023	31 Dec 2022
Non-life insurance		
Reinsurance contract assets for the remaining coverage period	-18	-24
Reinsurance contract liability for occurred losses	124	268
Total reinsurance contract assets	**106**	**245**

Insurance contract liabilities

€ million	31 Dec 2023	31 Dec 2022
Non-life insurance		
Liabilities for the remaining coverage period, GMM	230	180
Liability for occurred losses, GMM	2,303	2,356
Total non-life insurance contract liabilities	2,533	2,536
Life insurance		
Liabilities for the remaining coverage period, GMM	3,177	3,260
Liability for occurred losses, GMM	14	12
Liabilities for the remaining coverage period, VFA total	5,824	5,586
Liability for occurred losses (VFA), total	41	51
Total life insurance contract liabilities	9,056	8,909
Total insurance contract liabilities	**11,589**	**11,446**

Reinsurance contract liabilities

€ million	31 Dec 2023	31 Dec 2022
Reinsurance contract liabilities for the remaining coverage period	0	2
Total life insurance reinsurance contract liabilities	0	2
Total reinsurance contract liabilities	**0**	**2**

Discount rates used

The table below shows discount rates that have been used in discounting the cash flows of insurance contracts. The cash flows of insurance products that do not vary (nvar) based on the returns on the underlying item are discounted using the nvar rate which includes risk-free yield curve (rfr) and liquidity premium. Such products are typically those that a measured using the General Measurement Model (GMM). The cash flows of insurance products that vary (var) based on the returns on the underlying item are discounted with the var rate (rfr) which reflects this variation/investment return. However, certain fixed cash flows included in the contract are discounted using the nvar rate (such as insurance premiums, overhead expenses). Such products are typically unit-linked insurance contracts measured using the Variable Fee Approach (VFA). The cash flows of insurance products that include two types of cash flows; cash flows that vary based on the returns and fixed coupon-related cash flows are specified and discounted separately using either the var or nvar discount rates. These include certain life insurance contracts measured using the VFA.

Non-life Insurance

Currency interest rates are used to discount direct insurance and reinsurance contracts' cash flows that include foreign cash flows; eur rates are used for all other products

	2023					
Insurance contract cash flow	1 year	5 year	10 year	15 year	20 year	30 year
EUR	3.65 %	2.51 %	2.90 %	2.80 %	2.47 %	3.02 %
NOK	3.99 %	2.77 %	3.25 %	3.26 %	3.27 %	3.28 %
SEK	2.92 %	1.78 %	2.55 %	3.19 %	3.29 %	3.30 %
USD	4.94 %	3.68 %	3.69 %	3.75 %	3.36 %	2.76 %
EUR - weighted	3.86 %	2.63 %	2.67 %	2.76 %	2.73 %	2.83 %

	2022					
Insurance contract cash flow	1 year	5 year	10 year	15 year	20 year	30 year
EUR	3.47 %	3.33 %	3.43 %	2.88 %	2.20 %	3.09 %
NOK	3.44 %	2.94 %	3.37 %	3.38 %	3.40 %	3.43 %
SEK	3.46 %	2.86 %	2.98 %	3.37 %	3.44 %	3.46 %
USD	4.99 %	3.47 %	4.03 %	3.64 %	3.02 %	2.08 %
EUR - weighted	3.39 %	3.43 %	3.38 %	3.33 %	2.96 %	3.03 %

Life Insurance

	2023					
Insurance contract cash flow	1 year	5 year	10 year	15 year	20 year	30 year
nvar + GMM	3.63 %	2.49 %	2.88 %	2.78 %	2.45 %	3.02 %
Risk-free var rate (VFA)	3.36 %	2.22 %	2.61 %	2.51 %	2.21 %	2.96 %
Separated balance sheet 1 yield curve	3.58 %	2.44 %	2.83 %	2.73 %	2.41 %	3.01 %
Separated balance sheet 2 yield curve	3.52 %	2.38 %	2.77 %	2.67 %	2.35 %	2.99 %

	2022					
Insurance contract cash flow	1 year	5 year	10 year	15 year	20 year	30 year
nvar + GMM	3.46 %	3.32 %	3.42 %	2.87 %	2.19 %	3.08 %
Risk-free var rate (VFA)	3.18 %	3.04 %	3.14 %	2.59 %	1.95 %	3.03 %
Separated balance sheet 1 yield curve	3.38 %	3.24 %	3.34 %	2.79 %	2.12 %	3.07 %
Separated balance sheet 2 yield curve	3.29 %	3.15 %	3.25 %	2.70 %	2.04 %	3.05 %

Reconciliation statement of insurance contracts for the remaining coverage period and incurred

31 Dec 2023, € million	Liabilities for Remaining Coverage: Excluding loss component	Liabilities for Remaining Coverage: Loss component	Liabilities for Incurred Claims	Total
Net Opening balance	**169**	**11**	**2,356**	**2,536**
Insurance revenue - Modified Retrospective Approach	**-7**			**-7**
CSM recognized for services provided	-1			-1
Change in risk adjustment for non-financial risk for risk expired	0			0
Expected insurance service expenses incurred:	**0**			**0**
Claims	0			0
Expenses	0			0
Recovery of insurance acquisition cash flows	0			0
Experience adjustments not related to future service	16			16
Restatement and Other Changes	-21			-21
Insurance revenue - Fair Value Approach	**-5**			**-5**
CSM recognized for services provided	0			0
Change in risk adjustment for non-financial risk for risk expired	0			0
Expected insurance service expenses incurred:	**-4**			**-4**
Claims	-3			-3
Expenses	-1			-1
Recovery of insurance acquisition cash flows	0			0
Insurance revenue - Post Transition	**-1,747**			**-1,747**
CSM recognized for services provided	-248			-248
Change in risk adjustment for non-financial risk for risk expired	-11			-11
Expected insurance service expenses incurred:	**-1,304**			**-1,304**
Claims	-1,008			-1,008
Expenses	-297			-297
Recovery of insurance acquisition cash flows	-123			-123
Experience adjustments not related to future service	-9			-9
Restatement and Other Changes	-51			-51
Total Insurance revenue - All Transition Methods	**-1,758**			**-1,758**
Insurance Service Expenses				
Incurred insurance service expenses:		**-44**	**1,302**	**1,258**
Claims		-37	983	946
Expenses		-7	319	312
Amortisation of insurance acquisition cash flows	124			124
Changes that relate to past service (changes in fulfilment cash flows re LIC)			116	116
Changes that relate to future service		**70**		**70**
Losses for the net outflow recognized on initial recognition		48		48
Losses and reversal of losses on onerous contracts - subsequent measurement		22		22
Total Insurance Service Expenses	**124**	**26**	**1,418**	**1,568**
Total Insurance Service result	**-1,635**	**26**	**1,418**	**-191**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	22	3	160	186
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts	0		-1	0
Total Insurance Finance Income or Expense	**23**	**3**	**160**	**186**
Total Changes in the Statement of Financial Performance	**-1,612**	**29**	**1,578**	**-5**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax received	1,755			1,755
Claims and other insurance service expenses paid, including investment components			-1,632	-1,632
Insurance acquisition cash flows	-122			-122
Total Cash flows	**1,633**		**-1,632**	**2**
Net Closing balance	**191**	**39**	**2,303**	**2,533**

Reconciliation statement of insurance contracts for the remaining coverage period and incurred

31 Dec 2022, € million	Liabilities for Remaining Coverage: Excluding loss component	Liabilities for Remaining Coverage: Loss component	Liabilities for Incurred Claims	Total
Net Opening balance	**181**	**9**	**2,795**	**2,985**
Insurance revenue - Modified Retrospective Approach	**-568**			**-568**
CSM recognized for services provided	-62			-62
Change in risk adjustment for non-financial risk for risk expired	-5			-5
Expected insurance service expenses incurred:	**-443**			**-443**
Claims	-344			-344
Expenses	-99			-99
Recovery of insurance acquisition cash flows	-45			-45
Experience adjustments not related to future service	4			4
Restatement and Other Changes	-16			-16
Insurance revenue - Fair Value Approach	**-5**			**-5**
CSM recognized for services provided	0			0
Change in risk adjustment for non-financial risk for risk expired	0			0
Expected insurance service expenses incurred:	**-5**			**-5**
Claims	-3			-3
Expenses	-1			-1
Recovery of insurance acquisition cash flows	0			0
Insurance revenue - Post Transition	**-1,108**			**-1,108**
CSM recognized for services provided	-169			-169
Change in risk adjustment for non-financial risk for risk expired	-17			-17
Expected insurance service expenses incurred:	**-821**			**-821**
Claims	-641			-641
Expenses	-180			-180
Recovery of insurance acquisition cash flows	-79			-79
Experience adjustments not related to future service	1			1
Restatement and Other Changes	-23			-23
Total Insurance revenue - All Transition Methods	**-1,680**			**-1,680**
Insurance Service Expenses				
Incurred insurance service expenses:		**-46**	**1,459**	**1,413**
Claims		-40	1,171	1,130
Expenses		-6	289	283
Amortisation of insurance acquisition cash flows	124			124
Changes that relate to past service (changes in fulfilment cash flows re LIC)			41	41
Changes that relate to future service		**48**		**48**
Losses for the net outflow recognized on initial recognition		33		33
Losses and reversal of losses on onerous contracts - subsequent measurement		15		15
Total Insurance Service Expenses	**124**	**2**	**1,501**	**1,627**
Total Insurance Service result	**-1,556**	**2**	**1,501**	**-53**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	-14	0	-580	-594
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts	0		0	1
Total Insurance Finance Income or Expense	**-14**	**0**	**-579**	**-593**
Total Changes in the Statement of Financial Performance	**-1,570**	**2**	**922**	**-647**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax received	1,683			1,683
Claims and other insurance service expenses paid, including investment components			-1,360	-1,360
Insurance acquisition cash flows	-125			-125
Total Cash flows	**1,558**		**-1,360**	**198**
Net Closing balance	**169**	**11**	**2,356**	**2,536**

Reconciliation statement of insurance contract liability by calculation component, non-life insurance, GMM

31 Dec 2023, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM: Modified Retrospective Approach	CSM: Fair Value Approach	CSM: Post Transition	Total
Net Opening balance	**2,335**	**86**	**7**	**17**	**92**	**2,536**
Changes that relate to current services	**-122**	**-5**	**-1**	**0**	**-248**	**-377**
CSM recognized for services provided			-1	0	-248	-249
Change in risk adjustment for non-financial risk for risk expired		-5				-5
Experience adjustments not related to future service	-50					-50
Restatement and Other Changes	-72					-72
Changes that relate to future services	**-174**	**11**	**0**	**0**	**233**	**70**
Contracts initially recognised in the year	-243	14			277	48
Changes in estimates that adjust the CSM	47	-2	0	0	-44	0
Changes in estimates that relate to losses and reversal of losses on onerous contracts	22	0				22
Changes that relate to past services	**123**	**-7**				**116**
Changes in estimates in LIC fulfilment cash flows	78	-1				77
Experience adjustments in claims and other insurance service expenses in LIC	45	-6				39
Total Insurance Service result	**-173**	**-1**	**-1**	**0**	**-15**	**-191**
Insurance Finance Income or Expense						
The effect of and changes in time of time value of money and financial risk	169	11	0	0	7	186
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts	0	0				0
Total Insurance Finance Income or Expense	**169**	**11**	**0**	**0**	**7**	**186**
Total Changes in the Statement of Financial Performance	**-4**	**10**	**-1**	**0**	**-9**	**-5**
Cash flows (Actual cashflows in the period)						
Premiums and premium tax received	1,755					1,755
Claims and other insurance service expenses paid, including investment components	-1,632					-1,632
Insurance acquisition cash flows	-122					-122
Total Cash flows	**2**					**2**
Net Closing balance	**2,332**	**95**	**6**	**17**	**83**	**2,533**

Reconciliation statement of insurance contract liability by calculation component, non-life insurance, GMM

31 Dec 2022, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM Modified Retrospective Approach	CSM Fair Value Approach	CSM Post Transition	Total
Net Opening balance	**2,761**	**130**	**77**	**17**		**2,985**
Changes that relate to current services	**90**	**-1**	**-62**	**0**	**-169**	**-143**
CSM recognized for services provided			-62	0	-169	-231
Change in risk adjustment for non-financial risk for risk expired		-1				-1
Experience adjustments not related to future service	129					129
Restatement and Other Changes	-39					-39
Changes that relate to future services	**-228**	**21**	**-7**	**0**	**262**	**48**
Contracts initially recognised in the year	-210	23			220	33
Changes in estimates that adjust the CSM	-32	-3	-7	0	42	0
Changes in estimates that relate to losses and reversal of losses on onerous contracts	14	0				15
Changes that relate to past services	**64**	**-23**				**41**
Changes in estimates in LIC fulfilment cash flows	106	-17				89
Experience adjustments in claims and other insurance service expenses in LIC	-42	-6				-48
Total Insurance Service result	**-74**	**-3**	**-69**	**0**	**93**	**-53**
Insurance Finance Income or Expense						
The effect of and changes in time of time value of money and financial risk	-552	-41	0	0	-1	-594
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts	1					1
Total Insurance Finance Income or Expense	**-551**	**-41**	**0**	**0**	**-1**	**-593**
Total Changes in the Statement of Financial Performance	**-625**	**-44**	**-70**	**0**	**92**	**-647**
Cash flows (Actual cashflows in the period)						
Premiums and premium tax received	1,683					1,683
Claims and other insurance service expenses paid, including investment components	-1,360					-1,360
Insurance acquisition cash flows	-125					-125
Total Cash flows	**198**					**198**
Net Closing balance	**2,335**	**86**	**7**	**17**	**92**	**2,536**

Reconciliation statement of reinsurance contracts for the remaining coverage period and incurred clair

31 Dec 2023, € million	Remaining Coverage Component Excluding Loss-recovery Component	Remaining Coverage Component Loss-recovery Component	Incurred Claims Component	Total
Net Opening balance	**-24**	**0**	**268**	**245**
Allocation of the premiums paid - Modified retrospective approach	**-6**			**-6**
Expected recoveries of incurred claims and other insurance service expense	0			0
Experience adjustment not related to future service	-4			-4
Restatement and Other Changes	-3			-3
Allocation of the premiums paid - Post transition	**-92**			**-92**
CSM recognized for services provided	-19			-19
Change in risk adjustment for non-financial risk for risk transferred	-1			-1
Expected recoveries of incurred claims and other insurance service expense	-62			-62
Experience adjustment not related to future service	-9			-9
Restatement and Other Changes	-1			-1
Total Allocation of premiums paid	**-98**			**-98**
Amounts Recovered from Reinsurance				
Recoveries of incurred claims and other insurance service expense		-1	25	24
Changes related to past service (changes related to incurred claims component)			-14	-14
Changes that relate to future service:		**0**		**0**
Recoveries of losses on onerous underlying contracts on initial recognition		1		1
Recoveries and reversals of recoveries of losses on onerous underlying contracts - subsequent measurement		-1		-1
Total Amounts Recovered from Reinsurance		**0**	**11**	**11**
Effect of changes in Non-performance risk of Reinsurers	**0**		**0**	**0**
Total Net Expenses from Reinsurance	**-98**	**0**	**11**	**-88**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	0	0	3	4
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts	0			0
Total Insurance Finance Income or Expense	**0**	**0**	**3**	**4**
Total Changes in the Statement of Financial Performance	**-98**	**0**	**14**	**-84**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax paid	104			104
Amounts recovered			-159	-159
Total Cash flows	**104**		**-159**	**-55**
Net Closing balance	**-18**	**0**	**124**	**106**

Reconciliation statement of reinsurance contracts for the remaining coverage period and incurred clair

31 Dec 2022, € million	Remaining Coverage Component: Excluding Loss-recovery Component	Remaining Coverage Component: Loss-recovery Component	Incurred Claims Component	Total
Net Opening balance	**-12**		**125**	**114**
Allocation of the premiums paid - Modified retrospective approach	**-8**			**-8**
CSM recognized for services provided	-4			-4
Change in risk adjustment for non-financial risk for risk transferred	0			0
Expected recoveries of incurred claims and other insurance service expense	-5			-5
Experience adjustment not related to future service	1			1
Allocation of the premiums paid - Post transition	**-72**			**-72**
CSM recognized for services provided	-39			-39
Change in risk adjustment for non-financial risk for risk transferred	0			0
Expected recoveries of incurred claims and other insurance service expense	-33			-33
Total Allocation of premiums paid	**-80**			**-80**
Amounts Recovered from Reinsurance				
Recoveries of incurred claims and other insurance service expense		0	46	46
Changes related to past service (changes related to incurred claims component)			145	145
Changes that relate to future service:		**1**		**1**
Recoveries of losses on onerous underlying contracts on initial recognition		0		0
Recoveries and reversals of recoveries of losses on onerous underlying contracts - subsequent measurement		0		0
Total Amounts Recovered from Reinsurance		**0**	**191**	**191**
Effect of changes in Non-performance risk of Reinsurers	**0**		**0**	**0**
Total Net Expenses from Reinsurance	**-80**	**0**	**190**	**111**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	0	0	-9	-10
Total Insurance Finance Income or Expense	**0**	**0**	**-9**	**-10**
Total Changes in the Statement of Financial Performance	**-80**	**0**	**181**	**101**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax paid	68			68
Amounts recovered			-38	-38
Total Cash flows	**68**		**-38**	**30**
Net Closing balance	**-24**	**0**	**268**	**245**

Reconciliation statement of reinsurance contracts by calculation component, non-life insurance, GMM

31 Dec 2023, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM: Modified Retrospective Approach	CSM: Fair Value Approach	CSM: Post Transition	Total
Net Opening Balance	**237**	**5**	**-8**		**11**	**245**
Changes that relate to current services	**-55**	**0**			**-19**	**-75**
CSM recognised for services received					-19	-19
Change in risk adjustment for non-financial risk for risk expired		0				0
Experience adjustments not related to future service	-52					-52
Restatement and Other Changes	-3					-3
Changes that relate to future services	**-15**	**1**			**15**	**0**
Contracts initially recognised in the year	-35	1			36	1
Changes in estimates that adjust the CSM	21	0			-21	0
Changes in estimates that adjust recoveries of losses on onerous underlying contracts	0	0				0
Changes in recoveries of losses on onerous underlying contracts that adjust the CSM					0	0
Changes that relate to past services	**-10**	**-4**				**-14**
Changes in fulfilment cash flows re LIC	32	-1				30
Experience adjustments in claims and other insurance service expenses in LIC	-42	-2				-44
Effect of changes in non-performance risk of reinsurance	**0**					**0**
Total Net Expenses from Reinsurance	**-80**	**-3**			**-4**	**-88**
Insurance Finance Income or Expense						
The effect of and changes in time of time value of money and financial risk	2	0	0		1	4
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts	0					0
Total Insurance Finance Income or Expense	**2**	**0**	**0**		**1**	**4**
Total Changes in the Statement of Financial Performance	**-78**	**-3**	**0**		**-3**	**-84**
Cash flows						
Premiums and premium tax paid	104					104
Amounts recovered	-159					-159
Total Cash Flows	**-55**					**-55**
Net Closing Balance	**104**	**2**	**-8**		**7**	**106**

Reconciliation statement of reinsurance contracts by calculation component, non-life insurance, GMM

31 Dec 2022, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM: Modified Retrospective Approach	CSM: Fair Value Approach	CSM: Post Transition	Total
Net Opening Balance	**114**	**2**	**-2**			**114**
Changes that relate to current services	**8**	**0**	**-4**		**-39**	**-35**
CSM recognised for services received			-4		-39	-43
Change in risk adjustment for non-financial risk for risk expired		0				0
Experience adjustments not related to future service	8					8
Changes that relate to future services	**-47**	**1**	**-2**		**50**	**1**
Contracts initially recognised in the year	-39	1			39	0
Changes in estimates that adjust the CSM	-8	0	-2		10	0
Changes in estimates that adjust recoveries of losses on onerous underlying contracts	0	0				0
Changes in recoveries of losses on onerous underlying contracts that adjust the CSM					0	0
Changes that relate to past services	**142**	**3**				**145**
Changes in fulfilment cash flows re LIC	187	4				191
Experience adjustments in claims and other insurance service expenses in LIC	-46	-1				-46
Effect of changes in non-performance risk of reinsurance	**0**					**0**
Total Net Expenses from Reinsurance	**102**	**4**	**-6**		**11**	**111**
Insurance Finance Income or Expense						
The effect of and changes in time of time value of money and financial risk	-9	0	0		0	-10
Total Insurance Finance Income or Expense	**-9**	**0**	**0**		**0**	**-10**
Total Changes in the Statement of Financial Performance	**93**	**3**	**-6**		**11**	**101**
Cash flows						
Premiums and premium tax paid	68					68
Amounts recovered	-38					-38
Total Cash Flows	**30**					**30**
Net Closing Balance	**237**	**5**	**-8**		**11**	**245**

Reconciliation of the acquisition costs of insurance contracts, non-life insurance

€ million	31 Dec 2023	31 Dec 2022
Opening balance	231	238
Amount incurred during the year	134	113
Amount derecognised and included in the measurement of insurance contracts	-118	-121
Impairment losses		0
Change in allocation assumptions	0	0
Closing balance	247	231

Effect of contracts recognised during the financial year, non-life insurance

31 Dec 2023, € million	Non-Onerous Groups of Contracts: Contracts acquired in transfers or business combinations	Non-Onerous: Other contracts	Non-Onerous: Total	Onerous Groups of Contracts: Contracts acquired in transfers or business combinations	Onerous: Other contracts	Onerous: Total	Total
Insurance Contracts Issued Initially Recognised in the Period							
Estimates of the present value of future cash outflows:		1,168	1,168		350	350	1,518
Insurance acquisition cash flows		103	103		18	18	121
Claims and other cash outflows		1,065	1,065		332	332	1,397
Estimates of the present value of future cash inflows		-1,457	-1,457		-303	-303	-1,761
Risk adjustment for non-financial risk		12	12		2	2	14
Contractual service margin		277	277				277
Losses for the net outflow recognized on initial recognition		0	0		48	48	48

Effect of contracts recognised during the financial year, non-life insurance

31 Dec 2022, € million	Non-Onerous Groups of Contracts: Contracts acquired in transfers or business combinations	Non-Onerous: Other contracts	Non-Onerous: Total	Onerous Groups of Contracts: Contracts acquired in transfers or business combinations	Onerous: Other contracts	Onerous: Total	Total
Insurance Contracts Issued Initially Recognised in the Period							
Estimates of the present value of future cash outflows:		1,267	1,267		190	190	1,457
Insurance acquisition cash flows		113	113		11	11	124
Claims and other cash outflows		1,154	1,154		179	179	1,333
Estimates of the present value of future cash inflows		-1,509	-1,509		-158	-158	-1,667
Risk adjustment for non-financial risk		22	22		1	1	23
Contractual service margin		220	220				220
Losses for the net outflow recognized on initial recognition		0	0		33	33	33

Contractual service margin

31 Dec 2023, € million	< 1 y	1-2 y	2-3 y	3-4 y	4-5 y	5-10 y	> 10 y	Total
Insurance contracts issued	84	1	1	1	1	1	17	106
Reinsurance contracts held	-7	0	0				7	1
Total	**77**	**1**	**1**	**1**	**1**	**1**	**24**	**107**

Contractual service margin

31 Dec 2022, € million	< 1 y	1-2 y	2-3 y	3-4 y	4-5 y	5-10 y	> 10 y	Total
Insurance contracts issued	93	1	1	1	1	2	17	116
Reinsurance contracts held	-7						4	-3
Total	**86**	**1**	**1**	**1**	**1**	**2**	**21**	**114**

Claims development on non-life insurance contracts

The table shows the total claims development as of the year of occurrence 2016. Claims development is presented on a gross basis and on a net basis after reinsurance. The effect of the discount rate was calculated by using the market rate of 31 December 2023 (IFRS 17 yield curve).

	Claims year								
Total claims, gross, € million, 31 December 2023	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
At end of occurrence year	871	889	975	1,079	1,027	1,071	1,314	1,282	**8,508**
One year later	880	912	986	1,080	990	1,030	1,319		**7,198**
Two years later	862	908	1,004	1,047	969	1,024			**5,814**
Three years later	850	909	988	1,036	949				**4,731**
Four years later	853	902	981	1,034					**3,770**
Five years later	854	902	984						**2,740**
Six years later	850	898							**1,749**
Seven years later	855								**855**
Claims paid, cumulative, gross	768	809	891	946	820	889	1,064	772	**6,958**
Remaining provision, gross	88	89	93	88	129	136	256	510	**1,389**
Remaining provision before year 2017, gross									**1,522**
Effect of discounting, gross									**-699**
Effect of risk adjustment, gross									**91**
Provision for outstanding claims - LIC, gross									**2,303**

Total claims, net, € million, 31 December 2023	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
At end of occurrence year	865	863	940	1,056	1,009	1,014	1,146	1,258	**8,151**
One year later	877	870	951	1,053	956	973	1,157		**6,836**
Two years later	858	869	968	1,023	924	967			**5,609**
Three years later	847	870	958	1,011	913				**4,600**
Four years later	850	867	952	1,009					**3,678**
Five years later	851	863	956						**2,670**
Six years later	848	859							**1,707**
Seven years later	853								**853**
Claims paid, cumulative, net	765	775	875	924	806	856	929	764	**6,693**
Remaining provision, net	88	85	81	85	107	111	229	494	**1,278**
Remaining provision before year 2017, net									**1,505**
Effect of discounting, net									**-693**
Effect of risk adjustment, net									**89**
Provision for outstanding claims - LIC, net									**2,179**

Reconciliation statement of insurance contract liabilities for the remaining coverage period and incurred claims liabilities, non-life insurance, life insurance GMM

31 Dec 2023, € million	Liabilities for Remaining Coverage: Excluding loss component	Liabilities for Remaining Coverage: Loss component	Liabilities for Incurred claims	Total
Net Opening balance	**3,027**	**233**	**12**	**3,272**
Insurance revenue - Fair Value Approach	**-190**			**-190**
CSM recognized for services provided	-54			-54
Change in risk adjustment for non-financial risk for risk expired	-8			-8
Expected insurance service expenses incurred:	**-109**			**-109**
Claims	-92			-92
Expenses	-17			-17
Recovery of insurance acquisition cash flows	-10			-10
Experience adjustments not related to future service	-8			-8
Restatement and Other Changes				
Insurance revenue - Post Transition	**-26**			**-26**
CSM recognized for services provided	-10			-10
Change in risk adjustment for non-financial risk for risk expired	-1			-1
Expected insurance service expenses incurred:	**-10**			**-10**
Claims	-7			-7
Expenses	-3			-3
Recovery of insurance acquisition cash flows	-4			-4
Experience adjustments not related to future service	-1			-1
Total Insurance revenue - All Transition Methods	**-216**			**-216**
Insurance Service Expenses				
Incurred insurance service expenses:		**-12**	**136**	**124**
Claims		-11	106	95
Expenses		0	29	29
Amortisation of insurance acquisition cash flows	14			14
Changes that relate to past service (changes in fulfilment cash flows re LIC)			2	2
Changes that relate to future service		**65**		**65**
Losses for the net outflow recognized on initial recognition		0		0
Losses and reversal of losses on onerous contracts - subsequent measurement		65		65
Total Insurance Service Expenses	**14**	**53**	**137**	**205**
Investment Components	**-214**		**214**	**0**
Total Insurance Service result	**-416**	**53**	**352**	**-11**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	108	-1	0	107
Total Insurance Finance Income or Expense	**108**	**-1**	**0**	**107**
Total Changes in the Statement of Financial Performance	**-308**	**52**	**352**	**96**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax received	180			180
Claims and other insurance service expenses paid, including investment components			-350	-350
Insurance acquisition cash flows	-8			-8
Total Cash flows	**172**		**-350**	**-178**
Net Closing balance	**2,891**	**286**	**14**	**3,190**

Reconciliation statement of insurance contract liabilities for the remaining coverage period and incurred claims liabilities, non-life insurance, life insurance GMM

31 Dec 2022, € million	Liabilities for Remaining Coverage: Excluding loss component	Liabilities for Remaining Coverage: Loss component	Liabilities for Incurred claims	Total
Net Opening balance	3,878	133	11	4,022
Insurance revenue - Fair Value Approach	-174			-174
CSM recognized for services provided	-38			-38
Change in risk adjustment for non-financial risk for risk expired	-13			-13
Expected insurance service expenses incurred:	-104			-104
Claims	-88			-88
Expenses	-15			-15
Recovery of insurance acquisition cash flows	-17			-17
Experience adjustments not related to future service	-2			-2
Insurance revenue - Post Transition	-14			-14
CSM recognized for services provided	-2			-2
Change in risk adjustment for non-financial risk for risk expired	-1			-1
Expected insurance service expenses incurred:	-9			-9
Claims	-6			-6
Expenses	-2			-2
Recovery of insurance acquisition cash flows	-2			-2
Experience adjustments not related to future service	0			0
Total Insurance revenue - All Transition Methods	-189			-189
Insurance Service Expenses				
Incurred insurance service expenses:		-7	120	113
Claims		-7	89	82
Expenses		0	31	31
Amortisation of insurance acquisition cash flows	20			20
Changes that relate to past service (changes in fulfilment cash flows re LIC)			7	7
Changes that relate to future service		108		108
Losses for the net outflow recognized on initial recognition		0		0
Losses and reversal of losses on onerous contracts - subsequent measurement		108		108
Total Insurance Service Expenses	20	101	127	248
Investment Components	-234		234	0
Total Insurance Service result	-403	101	361	59
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	-559	-1	0	-560
Total Insurance Finance Income or Expense	-559	-1	0	-560
Total Changes in the Statement of Financial Performance	-962	100	361	-501
Cash flows (Actual cashflows in the period)				
Premiums and premium tax received	133			133
Claims and other insurance service expenses paid, including investment components			-360	-360
Insurance acquisition cash flows	-22			-22
Total Cash flows	111		-360	-249
Net Closing balance	3,027	233	12	3,272

Reconciliation statement of insurance contract liability by calculation component, life insurance, GMM

31 Dec 2023, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM: Modified Retrospective Approach	CSM: Fair Value Approach	CSM: Post Transition	Total
Net Opening balance	2,460	105		651	56	3,272
Changes that relate to current services	-4	-10		-54	-10	-78
CSM recognized for services provided				-54	-10	-64
Change in risk adjustment for non-financial risk for risk expired		-10				-10
Experience adjustments not related to future service	-4					-4
Restatement and Other Changes						
Changes that relate to future services	-16	31		-2	52	65
Contracts initially recognised in the year	-37	8			29	0
Changes in estimates that adjust the CSM	-36	15		-2	23	0
Changes in estimates that relate to losses and reversal of losses on onerous contracts	57	8				65
Changes that relate to past services	2					2
Changes in estimates in LIC fulfilment cash flows	3					3
Experience adjustments in claims and other insurance service expenses in LIC	-2					-2
Total Insurance Service result	-18	21		-56	42	-11
Insurance Finance Income or Expense						
The effect of and changes in time of time value of money and financial risk	103	6		-2	0	107
Total Insurance Finance Income or Expense	103	6		-2	0	107
Total Changes in the Statement of Financial Performance	84	27		-58	43	96
Cash flows (Actual cashflows in the period)						
Premiums and premium tax received	180					180
Claims and other insurance service expenses paid, including investment components	-350					-350
Insurance acquisition cash flows	-8					-8
Total Cash flows	-178					-178
Net Closing balance	2,366	132		594	99	3,190

Reconciliation statement of insurance contract liability by calculation component, life insurance, GMM

31 Dec 2022, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM Modified Retrospective Approach	CSM Fair Value Approach	CSM Post Transition	Total
Net Opening balance	**3,198**	**174**		**650**		**4,022**
Changes that relate to current services	**-1**	**-14**		**-38**	**-2**	**-56**
CSM recognized for services provided				-38	-2	-40
Change in risk adjustment for non-financial risk for risk expired		-14				-14
Experience adjustments not related to future service	-1					-1
Changes that relate to future services	**28**	**-22**		**43**	**59**	**108**
Contracts initially recognised in the year	-41	12			29	0
Changes in estimates that adjust the CSM	-42	-31		43	29	0
Changes in estimates that relate to losses and reversal of losses on onerous contracts	111	-3				108
Changes that relate to past services	**7**					**7**
Changes in estimates in LIC fulfilment cash flows	7					7
Experience adjustments in claims and other insurance service expenses in LIC	0					0
Total Insurance Service result	**34**	**-36**		**5**	**56**	**59**
Insurance Finance Income or Expense						
The effect of and changes in time of time value of money and financial risk	-524	-32		-4	0	-560
Foreign exchange differences on changes in the carrying amount of groups of insurance contracts						
Total Insurance Finance Income or Expense	**-524**	**-32**		**-4**	**0**	**-560**
Total Changes in the Statement of Financial Performance	**-490**	**-68**		**1**	**56**	**-501**
Cash flows (Actual cashflows in the period)						
Premiums and premium tax received	133					133
Claims and other insurance service expenses paid, including investment components	-360					-360
Insurance acquisition cash flows	-22					-22
Total Cash flows	**-249**					**-249**
Net Closing balance	**2,460**	**105**		**651**	**56**	**3,272**

Reconciliation statement of insurance contract liabilities for the remaining coverage period and incurred claims liabilities, non-life insurance, life insurance VFA

31 Dec 2023, € million	Liabilities for Remaining Coverage: Excluding Loss component	Liabilities for Remaining Coverage: Loss component	Liabilities for Incurred Claims	Total
Net Opening balance	**5,492**	**95**	**51**	**5,637**
Insurance revenue - Fair Value approach	**-26**			**-26**
CSM recognized for services provided	-5			-5
Change in risk adjustment for non-financial risk for risk expired	-4			-4
Expected insurance service expenses incurred:	**-17**			**-17**
Claims	2			2
Expenses	-19			-19
Recovery of insurance acquisition cash flows	-2			-2
Experience adjustments not related to future service	2			2
Total Insurance revenue - All Transition Methods	**-26**			**-26**
Insurance service expenses				
Incurred insurance service expenses:		**-1**	**26**	**26**
Claims		0	-3	-3
Expenses		-1	29	28
Amortisation of insurance acquisition cash flows	2			2
Changes that relate to past service (changes in fulfilment cash flows re LIC)			1	1
Changes that relate to future service:		**24**		**24**
Losses and reversal of losses on onerous contracts - subsequent measurement		24		24
Total Insurance Service expenses	**2**	**23**	**27**	**52**
Investment Components	**-348**		**348**	**0**
Total Insurance Service result	**-373**	**23**	**375**	**26**
Insurance Finance Income or Expense				
Net finance expenses from insurance contracts	429	0	0	429
Total Insurance Finance Income or Expense	**429**	**0**	**0**	**429**
Total Changes in the Statement of Financial Performance	**57**	**23**	**375**	**455**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax received	162			162
Claims and other insurance service expenses paid, including investment components			-385	-385
Insurance acquisition cash flows	-4			-4
Total Cash flows	**158**		**-385**	**-227**
Net Closing balance	**5,706**	**118**	**41**	**5,865**

Reconciliation statement of insurance contract liabilities for the remaining coverage period and incurred claims liabilities, non-life insurance, life insurance VFA

31 Dec 2022, € million	Liabilities for Remaining Coverage: Excluding Loss component	Liabilities for Remaining Coverage: Loss component	Liabilities for Incurred Claims	Total
Net Opening balance	6,806	96	59	6,962
Insurance revenue - Fair Value approach	-29			-29
CSM recognized for services provided	-6			-6
Change in risk adjustment for non-financial risk for risk expired	-9			-9
Expected insurance service expenses incurred:	-19			-19
Claims	2			2
Expenses	-21			-21
Recovery of insurance acquisition cash flows	-2			-2
Experience adjustments not related to future service	7			7
Total Insurance revenue - All Transition Methods	-29			-29
Insurance service expenses				
Incurred insurance service expenses:		0	21	21
Claims		0	-4	-4
Expenses		0	25	25
Amortisation of insurance acquisition cash flows	2			2
Changes that relate to past service (changes in fulfilment cash flows re LIC)			1	1
Changes that relate to future service:		-1		-1
Losses and reversal of losses on onerous contracts - subsequent measurement		-1		-1
Total Insurance Service expenses	2	-2	22	23
Investment Components	-383		383	0
Total Insurance Service result	-410	-2	406	-6
Insurance Finance Income or Expense				
Net finance expenses from insurance contracts	-1,074	0	0	-1,074
Total Insurance Finance Income or Expense	-1,074	0	0	-1,074
Total Changes in the Statement of Financial Performance	-1,484	-2	406	-1,080
Cash flows (Actual cashflows in the period)				
Premiums and premium tax received	174			174
Claims and other insurance service expenses paid, including investment components			-414	-414
Insurance acquisition cash flows	-5			-5
Total Cash flows	169		-414	-245
Net Closing balance	5,492	95	51	5,637

Reconciliation statement of insurance contract liability by calculation component, life insurance, VFA

31 Dec 2023, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM: Full Retrospective Approach	CSM: Modified Retrospective Approach	CSM: Fair Value Approach	CSM: Post Transition	Total
Net Opening balance	5,513	44			80		5,637
Changes that relate to current services	10	-4			-5		1
CSM recognized for services provided					-5		-5
Change in risk adjustment for non-financial risk for risk expired		-4					-4
Experience adjustments not related to future service	10						10
Changes that relate to future services	29	6			-11		24
Changes in estimates that adjust the CSM	8	3			-11		0
Changes in estimates that relate to losses and reversal of losses on onerous contracts	21	3					24
Changes that relate to past services	1						1
Changes in estimates in LIC fulfilment cash flows	1						1
Experience adjustments in claims and other insurance service expenses in LIC	0						0
Total Insurance Service result	40	2			-16		26
Insurance Finance Income or Expense							
Net finance expenses from insurance contracts	429						429
Total Insurance Finance Income or Expense	429						429
Total Changes in the Statement of Financial Performance	470	2			-16		455
Cash flows (Actual cashflows in the period)							
Premiums and premium tax received	162						162
Claims and other insurance service expenses paid, including investment components	-385						-385
Insurance acquisition cash flows	-4						-4
Total Cash flows	-227						-227
Net Closing balance	5,756	46			64		5,865

Reconciliation statement of insurance contract liability by calculation component, life insurance, VFA

31 Dec 2022, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM Full Retrospective Approach	CSM Modified Retrospective Approach	CSM Fair Value Approach	CSM Post Transition	Total
Net Opening balance	**6,816**	**110**			**35**		**6,962**
Changes that relate to current services	**9**	**-9**			**-6**		**-6**
CSM recognized for services provided					-6		-6
Change in risk adjustment for non-financial risk for risk expired		-9					-9
Experience adjustments not related to future service	9						9
Changes that relate to future services	**6**	**-57**			**50**		**-1**
Changes in estimates that adjust the CSM	-55	5			50		0
Changes in estimates that relate to losses and reversal of losses on onerous contracts	61	-62					-1
Changes that relate to past services	**1**						**1**
Changes in estimates in LIC fulfilment cash flows	1						1
Experience adjustments in claims and other insurance service expenses in LIC	0						0
Total Insurance Service result	**16**	**-66**			**44**		**-6**
Insurance Finance Income or Expense							
Net finance expenses from insurance contracts	-1,074						-1,074
Total Insurance Finance Income or Expense	**-1,074**						**-1,074**
Total Changes in the Statement of Financial Performance	**-1,058**	**-66**			**44**		**-1,080**
Cash flows (Actual cashflows in the period)							
Premiums and premium tax received	174						174
Claims and other insurance service expenses paid, including investment components	-414						-414
Insurance acquisition cash flows	-5						-5
Total Cash flows	**-245**						**-245**
Net Closing balance	**5,513**	**44**			**80**		**5,637**

Reconciliation statement of reinsurance contracts for the remaining coverage period and incurred claims, life insurance

31 Dec 2023, € million	Remaining Coverage Component: Excluding Loss-recovery Component	Remaining Coverage Component: Loss-recovery Component	Incurred Claims Component	Total
Net Opening balance	**-2**		**0**	**-2**
Allocation of the premiums paid - Fair value approach	**-7**			**-7**
CSM recognized for services provided	-4			-4
Expected recoveries of incurred claims and other insurance service expense	-3			-3
Allocation of the premiums paid - Post transition	**-4**			**-4**
CSM recognized for services provided	-3			-3
Expected recoveries of incurred claims and other insurance service expense	0			0
Total Allocation of premiums paid	**-11**			**-11**
Amounts Recovered from Reinsurance				
Recoveries of incurred claims and other insurance service expense			4	4
Total Amounts Recovered from Reinsurance			**4**	**4**
Effect of changes in Non-performance risk of Reinsurers	**0**			**0**
Total Net Expenses from Reinsurance	**-11**		**4**	**-7**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	-3			-3
Total Insurance Finance Income or Expense	**-3**			**-3**
Total Changes in the Statement of Financial Performance	**-14**		**4**	**-10**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax paid	16			16
Amounts recovered			-4	-4
Total Cash flows	**16**		**-4**	**12**
Net Closing balance	**0**		**0**	**0**

Reconciliation statement of reinsurance contracts for the remaining coverage period and incurred claims, life insurance

31 Dec 2022, € million	Remaining Coverage Component: Excluding Loss-recovery Component	Remaining Coverage Component: Loss-recovery Component	Incurred Claims Component	Total
Net Opening balance	**-13**			**-13**
Allocation of the premiums paid - Fair value approach	**-7**			**-7**
CSM recognized for services provided	-3			-3
Expected recoveries of incurred claims and other insurance service expense	-3			-3
Allocation of the premiums paid - Post transition	**-2**			**-2**
CSM recognized for services provided	-2			-2
Total Allocation of premiums paid	**-9**			**-9**
Amounts Recovered from Reinsurance				
Recoveries of incurred claims and other insurance service expense			4	4
Total Amounts Recovered from Reinsurance			**4**	**4**
Effect of changes in Non-performance risk of Reinsurers	**0**			**0**
Total Net Expenses from Reinsurance	**-9**		**4**	**-5**
Insurance Finance Income or Expense				
The effect of and changes in time of time value of money and financial risk	8			8
Total Insurance Finance Income or Expense	**8**			**8**
Total Changes in the Statement of Financial Performance	**-1**		**4**	**3**
Cash flows (Actual cashflows in the period)				
Premiums and premium tax paid	11			11
Amounts recovered			-4	-4
Total Cash flows	**11**		**-4**	**7**
Net Closing balance	**-2**		**0**	**-2**

Reconciliation statement of reinsurance contracts by calculation component, life insurance

31 Dec 2023, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM: Full Retrospective Approach	CSM: Modified Retrospective Approach	CSM: Fair Value Approach	CSM: Post Transition	Total
Net Opening Balance	**-34**				**21**	**11**	**-2**
Changes that relate to current services	**1**				**-4**	**-3**	**-7**
CSM recognised for services received					-4	-3	-7
Experience adjustments not related to future service	1						1
Changes that relate to future services	**-14**				**4**	**10**	**0**
Contracts initially recognised in the year	-6					6	0
Changes in estimates that adjust the CSM	-8				4	4	0
Effect of changes in non-performance risk of reinsurance	**0**						**0**
Total Net Expenses from Reinsurance	**-14**				**0**	**7**	**-7**
Insurance Finance Income or Expense							
The effect of and changes in time of time value of money and financial risk	-3				0	0	-3
Total Insurance Finance Income or Expense	**-3**				**0**	**0**	**-3**
Total Changes in the Statement of Financial Performance	**-17**				**0**	**7**	**-10**
Cash flows							
Premiums and premium tax paid	16						16
Amounts recovered	-4						-4
Total Cash Flows	**12**						**12**
Net Closing Balance	**-39**				**21**	**18**	**0**

Reconciliation statement of reinsurance contracts by calculation component, life insurance

31 Dec 2022, € million	Estimates of Present Value of Future Cash Flows	Risk Adjustment for Non-financial Risk	CSM Full Retrospective Approach	Modified Retrospective Approach	Fair Value Approach	Post Transition	Total
Net Opening Balance	**8**				**-20**		**-13**
Changes that relate to current services	**1**				**-3**	**-2**	**-5**
CSM recognised for services received					-3	-2	-5
Experience adjustments not related to future service	1						1
Changes that relate to future services	**-58**				**44**	**13**	**0**
Contracts initially recognised in the year	-2					2	0
Changes in estimates that adjust the CSM	-56				44	11	0
Effect of changes in non-performance risk of reinsurance	**0**						**0**
Total Net Expenses from Reinsurance	**-57**				**41**	**11**	**-5**
Insurance Finance Income or Expense							
The effect of and changes in time of time value of money and financial risk	8				0	0	8
Total Insurance Finance Income or Expense	**8**				**0**	**0**	**8**
Total Changes in the Statement of Financial Performance	**-49**				**41**	**11**	**3**
Cash flows							
Premiums and premium tax paid	11						11
Amounts recovered	-4						-4
Total Cash Flows	**7**						**7**
Net Closing Balance	**-34**				**21**	**11**	**-2**

Effect of contracts recognised during the financial year, life insurance

31 Dec 2023, € million	Non-Onerous Groups of Contracts Contracts acquired in transfers or business combinations	Other contracts	Total	Onerous Groups of Contracts Contracts acquired in transfers or business combinations	Other contracts	Total	Total
Opening balance							
Amount incurred during the year		34	34		0	0	34
Amount derecognised and included in the measurement of insurance contracts		4	4		0	0	4
Impairment losses		30	30		0	0	30
Reversals of impairment losses		-71	-71		0	0	-71
Change in allocation assumptions		8	8		0	0	8
Effect of movement in exchange rates		29	29				29
Closing balance		0	0		0	0	0

Effect of contracts recognised during the financial year, life insurance

31 Dec 2022, € million	Non-Onerous Groups of Contracts Contracts acquired in transfers or business combinations	Other contracts	Total	Onerous Groups of Contracts Contracts acquired in transfers or business combinations	Other contracts	Total	Total
Opening balance							
Amount incurred during the year		37	37		0	0	37
Amount derecognised and included in the measurement of insurance contracts		2	2		0	0	2
Impairment losses		34	34		0	0	34
Reversals of impairment losses		-78	-78		0	0	-78
Change in allocation assumptions		12	12		0	0	12
Effect of movement in exchange rates		29	29				29
Closing balance		0	0		0	0	0

Contractual service margin

31 Dec 2023, € million	< 1 y	1-2 y	2-3 y	3-4 y	4-5 y	5-10 y	> 10 y	Total
Insurance contracts issued	63	58	53	49	45	179	308	756
Reinsurance contracts held	-6	-5	-4	-4	-3	-10	-8	-39
Total	**58**	**54**	**49**	**45**	**42**	**169**	**300**	**717**

Contractual service margin

31 Dec 2022, € million	< 1 y	1-2 y	2-3 y	3-4 y	4-5 y	5-10 y	> 10 y	Total
Insurance contracts issued	44	43	41	39	36	162	423	787
Reinsurance contracts held	-4	-4	-3	-3	-2	-8	-8	-32
Total	**40**	**39**	**38**	**36**	**34**	**153**	**415**	**755**

Note 33. Liabilities from unit-linked investment contracts

€ million	31 Dec 2023	31 Dec 2022
Bonds	12,845	10,563
Subordinated bonds (SNP)	4,045	4,306
Covered bonds	13,871	12,262
Other		
Certificates of deposit	668	1,083
Commercial paper	6,128	9,287
Included in own portfolio in trading (–)*	-46	-63
Total debt securities issued to the public	37,511	37,438

* Own bonds held by OP Financial Group have been set off against liabilities.

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

€ million	Debt securities issued to the public	Subordinated liabilities
Balance sheet value 1 January 2023	37,438	1,384
Changes in cash flows from financing activities		
Increases in bonds	2,637	
Increases in covered bonds	2,986	
Increases in certificates of deposit	713	
Increases in commercial papers	7,153	
Increases total	13,488	
Decreases in bonds	-984	
Decreases in covered bonds	-2,238	
Decreases in certificates of deposit	-1,128	
Decreases in commercial papers	-10,312	
Decreases in debentures		-5
Decreases total	-14,663	-5
Total changes in cash flows from financing activities	-1,174	-5
Valuations	1,246	35
Balance sheet value 31 December 2023	37,511	1,414

€ million	Debt securities issued to the public	Subordinated liabilities
Balance sheet value 1 January 2022	34,895	1,982
Changes in cash flows from financing activities		
Increases in bonds	5,310	
Increases in covered bonds	2,782	
Increases in certificates of deposit	1,194	
Increases in commercial papers	12,443	
Increases total	21,728	6
Decreases in bonds	-3,946	
Decreases in covered bonds	-1,545	
Decreases in certificates of deposit	-407	
Decreases in commercial papers	-10,695	
Decreases in debentures		-522
Decreases total	-16,593	-522
Total changes in cash flows from financing activities	5,135	-517
Valuations	-2,591	-82
Balance sheet value 31 December 2022	37,438	1,384

Most significant issues in 2023	Book value	Fair value	Interest rate
OP Corporate Bank plc			
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	440.5	Fixed 0,375 %
OP Mortgage Bank			
OP Mortgage Bank issue of EUR 1.000.000.000 2,750 per cent. Covered Notes due 25 January 2030 under the EUR 25.000.000.000 Euro Medium Term Covered Bond (Premium) Programme	1,000.0		Fixed 2,750 %
OP Mortgage Bank issue of EUR 1.000.000.000 3,125 per cent. Covered Notes due 20 October 2029 under the EUR 25.000.000.000 Euro Medium Term Covered Bond (Premium) Programme	1,000.0		Fixed 3,125 %
OP Mortgage Bank issue of EUR 1.000.000.000 3,375 per cent. Covered Notes due 15 February 2027 under the EUR 25.000.000.000 Euro Medium Term Covered Bond (Premium) Programme	1,000.0		Fixed 3,375 %

Note 34. Provisions and other liabilities

€ million	31 Dec 2023	Adjusted 31 Dec 2022
Provisions		
Loss allowance on off-balance sheet items	44	32
Reorganisation provision	0	1
Other provisions	1	3
Total	45	37
Other liabilities		
Payment transfer liabilities	1,148	1,122
Accrued expenses		
Interest payable	710	186
Interest payable on derivatives	67	34
Other accrued expenses	580	509
Derivative CSA and other liabilities	1,197	1,290
Pension liabilities	28	30
Lease liabilities	239	231
Accounts payable on securities	41	6
Payables based on purchase invoices	44	14
Dividend distribution liabilities	0	0
Other liabilities of insurance business	110	184
Total	4,165	3,607
Financial liabilities held for trading	5	0
Other	234	174
Total provisions and other liabilities	**4,450**	**3,818**

Changes in provisions

€ million	Loss allowance	Reorgani-sation	Other provisions	Total
1 January 2023	33	1	3	37
Increase in provisions	12		1	13
Provisions used		0	-1	-2
Reversal of unused provisions		0	-2	-2
31 December 2023	44	0	1	45

€ million	Loss allowance	Reorgani-sation	Other provisions	Total
1 January 2022	22	0	6	28
Increase in provisions	11	1	2	13
Provisions used			-1	-1
31 December 2022	33	1	3	37

Claims administration contracts

Claims administration contracts are contracts which are not insurance contracts, but on the basis of which claims are paid on behalf of another party which has full risk for its own account. Among these contracts, the most important are captive arrangements in which the insured risk is reinsured with a captive company belonging to the same Group of companies with the customer; index increases in annuities of statutory workers' compensation, motor liability and patient insurance policies; certain other increases in benefits; and medical treatment indemnities payable over ten years after the occurrence of the accident; as well as public sector patient insurance.

Defined benefit pension plans

OP Financial Group has funded assets of its pension schemes through insurance companies and the OP-Eläkesäätiö pension foundation. Schemes related to supplementary pensions in OP-Eläkesäätiö and insurance companies 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 for employees provided by the employers within OP Financial Group. 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.

At national level, the supplementary pension foundation complies with the Act on supplementary pension foundations and supplementary pension funds (unofficial translation of "Laki lisäeläkesäätiöistä ja lisäeläkekassoista" (LESKL)). As a result, the most significant risk is that of the actual return on investment assets being lower than the target set for the minimum return. If such a risk were to materialise in several consecutive years, it would result in the charging of insurance premiums.

Furthermore, the most significant actuarial risks of OP-Eläkesäätiö pension foundation are associated with interest rate and market risks, systematically increasing life expectancy and inflation risk.

Responsible for investment, the Board of Trustees of the Pension Foundation approves the Foundation'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. In general, the insured persons are entitled to retire on an old-age pension at the age of 63. In addition, the insured is entitled to disability pension and, after the insured person's death, beneficiaries are entitled to burial grant and survivors' pension. Insurance contributions are collected based on the retirement age of 65. The employer pays the uncovered portion of the pension on a lump-sum basis when the person retires at the promised retirement age of 63.

In some plans, the retirement age of the insured persons' supplementary pension vary from 62 and 65 years and insurance contributions are collected in such a way that the promised benefit will have been fully covered by the retirement age.

Payable benefits are tied to the TyEL index. The employer will annually be charged an additional payment if the insurance company's own index compensation is smaller than the index given to benefits.

When reporting promised benefits under IAS 19, the key risks are associated with inflationary expectation, wage inflation and interest rates on the balance sheet date. The most significant risk in these plans is inflation assumption that affects the pension obligation through assumption for an increase in benefits. The used interest rate affects not only the pension obligation but also the value of assets corresponding to the obligation, reducing the effect of any change on net benefit liability or receivable to be recognised.

	Defined benefit obligations		Fair value of pension assets		Net liabilities (assets)	
Balance sheet value of defined benefit plans, € million	2023	2022	2023	2022	2023	2022
Opening balance 1 Jan	**449**	**617**	**-602**	**-654**	**-153**	**-37**
Defined benefit pension costs recognised in income statement						
Current service cost	4	6			4	6
Interest expense (income)	15	6	-21	-6	-6	0
Administrative expenses			1	1	1	1
Total	**19**	**12**	**-20**	**-5**	**-1**	**7**
Losses (gains) recognised in other comprehensive income arising from						
Actuarial losses (gains) arising from changes in economic expectations	7	-160			7	-160
Experience adjustments	13	3			13	3
Return on plan assets, excluding amount (–) of net defined benefit liability (asset)			-29	36	-29	36
Total	**20**	**-156**	**-29**	**36**	**-8**	**-120**
Other						
Employer contributions			-4	-3	-4	-3
Benefits paid	-25	-24	25	24		
Total	**-25**	**-24**	**21**	**21**	**-4**	**-3**
Closing balance 31 Dec	**463**	**449**	**-629**	**-602**	**-166**	**-153**

Liabilities and assets recognised in the balance sheet, € million	31 Dec 2023	31 Dec 2022
Net assets (-) (Pension Foundation)	-192	-183
Net liabilities (Supplementary pension schemes of insurance companies)	28	30
Net assets (-) (Supplementary pension schemes of insurance companies)	-2	
Total net liabilities	**28**	**30**
Total net assets	**-194**	**-183**

Pension Foundation assets, € million	31 Dec 2023	31 Dec 2022
Shares and participations	99	101
Notes and bonds	102	112
Real property	5	7
Mutual funds	344	289
Derivatives	0	1
Other assets	14	32
Total	**565**	**543**

Pension plan assets include, € million,	31 Dec 2023	31 Dec 2022
Other receivables from OP Financial Group companies	14	33
Total	**14**	**33**

Contributions payable under the defined benefit pension plan in 2024 are estimated at EUR 4 million.

The duration of the defined benefit pension obligation in the pension foundation on 31 December 2023 was 12.5 years and in other plans 16.6 years.

	31 Dec 2023		31 Dec 2022	
Key actuarial assumptions used	Pension Foundation	ance companies	sion Foundation	-ance companies
Discount rate, %	3.1	3.2	3.6	3.4
Future pay increase assumption, %	3.0	3.1	3.3	3.3
Future pension increases, %	2.4	2.5	2.7	2.7
Turnover rate, %				
Inflation rate, %	2.2	2.3	2.5	2.5
Estimated remaining service life of employees in years	4.2	6.0	5.1	7.0
Life expectancy for 65-year old people				
Men	21.4	21.4	21.4	21.4
Women	25.4	25.4	25.4	25.4
Life expectancy for 45-year old people after 20 years				
Men	23.7	23.7	23.7	23.7
Women	28.1	28.1	28.1	28.1

Sensitivity analysis of key actuarial assumptions, 31 December 2023	Pension Foundation Change in defined benefit pension obligation € million	%	Supplementary pension schemes of insurance companies change in defined benefit net pension liability € million	%
Discount rate				
0.5 pp increase	-21	-5.6	-2	-8.5
0.5 pp decrease	22	6.2	2	9.7
Pension increases				
0.5 pp increase	22	5.8	6	27.9
0.5 pp decrease	-20	-5.5	-6	-25.9
Mortality				
1-year increase in life expectancy	13	3.3	1	2.8
1-year decrease in life expectancy	-12	-3.3	-1	-2.8

Sensitivity analysis of key actuarial assumptions, 31 December 2022	Pension Foundation Change in defined benefit pension obligation € million	%	Supplementary pension schemes of insurance companies change in defined benefit net pension liability € million	%
Discount rate				
0.5 pp increase	-20	-5.6	-2	-8.5
0.5 pp decrease	22	6.2	3	9.6
Pension increases				
0.5 pp increase	21	5.7	6	24.3
0.5 pp decrease	-19	-5.4	-6	-22.6
Mortality				
1-year increase in life expectancy	12	3.2	1	2.9
1-year decrease in life expectancy	-11	-3.1	-1	-2.8

Note 35. Subordinated liabilities

€ million	31 Dec 2023	31 Dec 2022
Subordinated loans	0	0
Debentures	1,414	1,384
Total subordinated liabilities	**1,414**	**1,384**

Debentures

Debenture loan of JPY 10 billion (euro equivalent 64 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%.

The debenture loan of EUR 100 million, 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.

Debenture loan of SEK 3,250 million (euro equivalent 293 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%.

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 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 36. Equity capital

€ million	31 Dec 2023	Adjusted 31 Dec 2022
Capital and reserves attributable to OP Financial Group owners		
Cooperative capital, cooperative shares	219	217
of which cancelled cooperative shares	7	8
Cooperative capital, profit shares	3,335	3,369
of which cancelled profit shares	388	377
Reserves		
Restricted reserves		
Reserve fund	795	795
Fair value reserve		
Cash flow hedge	-212	-337
Measurement at fair value	-78	-24
Other restricted reserves	1	1
Non-restricted reserves		
Other non-restricted reserves	1,375	1,375
Retained earnings		
Profit (loss) for previous financial years	9,066	8,254
Profit (loss) for the financial year	1,637	898
Equity capital attributable to OP Financial Group's owners	**16,139**	**14,550**
Non-controlling interests	**124**	**118**
Total equity capital	**16,262**	**14,668**

Cooperative capital, cooperative shares

The equity capital of OP Financial Group includes cooperative shares paid by Group member cooperative bank members, and the bank has an absolute right to refuse to pay interest on them and refund the capital. Cooperative contributions and the following customer ownership entitle the customer to take part in the bank's administration and decision-making.

Cooperative capital, profit shares

The equity capital of OP Financial Group also includes investments in Profit Shares made by OP cooperative bank members, and the bank has an absolute right to refuse to pay interest on them and refund the capital. The return target for 2023 was 4.50% (4.45). The return target for 2024 is 5.50%. The interest payable is confirmed afterwards every year. The return target may change on an annual basis. No owner-customer rights are involved in profit shares and they do not confer any voting rights.

If a member cooperative bank has not refused a refund, the cooperative contribution and the profit share contribution may be refunded within 12 months after the end of the financial year when membership terminated or the profit share has been cancelled by its holder. If the refund cannot be made in full in any given year, the balance will be refunded from disposable equity capital based on subsequent financial statements. However, this entitlement to the refund for the balance will terminate after the fifth financial statements. No interest will be paid on the balance.

Number of Group cooperative shares

(1 000)	Cooperative capital, member shares	Cooperative capital, profit shares	Total number of cooperative shares
1 January 2022	2,153	32,440	34,593
Increase in cooperative capital	92	2,857	2,949
Refund of cooperative capital	-77	-1,611	-1,688
31 December 2022	**2,168**	**33,686**	**35,854**
Increase in cooperative capital	95	1,232	1,327
Refund of cooperative capital	-72	-1,572	-1,645
31 December 2023	**2,191**	**33,346**	**35,537**

Reserves

Reserve fund

The reserve fund consists of profits transferred to it during previous periods and of the portion transferred to it from member cooperative banks' revaluation reserves and loan loss provisions. The reserve fund may be used to cover losses for which non-restricted equity capital is not sufficient. The reserve fund may also be used to raise the share capital and it can be lowered in the same way as the share capital. In cooperative credit institutions, the reserve fund can only be used to cover losses. In a limited liability company, it has not been possible to increase the reserve fund since 1 September 2006.

Fair value reserve

The reserve includes the change in the fair value of notes and bonds recognised through the statement of comprehensive income. Items included in this reserve are derecognised and recorded in the income statement when the notes and bonds are disposed of. The expected loss on notes and bonds recognised through other comprehensive income is recognised to adjust 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

	Fair value through other comprehensive income			
€ million	Notes and bonds	Shares and participations (overlay approach)	Cash flow hedging	Total
Closing balance 31 December 2021	**63**	**164**	**96**	**323**
Effect of transition to IFRS 17 Insurance Contracts	-41	-164		-205
Opening balance 1 January 2022	**23**		**96**	**118**
Fair value changes	-48		-512	-561
Capital gains transferred to income statement	-10			-10
Transfers to net interest income			-28	-28
Deferred tax	12		108	120
Closing balance 31 December 2022	**-24**		**-337**	**-360**

	Fair value through other comprehensive income		
€ million	Notes and bonds	Cash flow hedging	Total
Opening balance 1 January 2023	**-24**	**-337**	**-360**
Fair value changes	-62	72	10
Capital gains transferred to income statement	-6		-6
Transfers to net interest income		84	84
Deferred tax	14	-31	-18
Closing balance 31 December 2023	**-78**	**-212**	**-290**

The fair value reserve before tax amounted to EUR -363 million (-450) at the end of the reporting period and the related deferred tax asset/liability was EUR 73 million (90). The loss allowance on notes and bonds recognised at fair value through other comprehensive income totalled EUR 0 million (0) in the fair value reserve during the reporting period.

The investment environment was challenging due to higher market interest rates and lower stock prices.

Other restricted reserves

The reserves consist of retained earnings for prior financial years based on the Articles of Association or other rules defining their purpose. The revaluation reserve includes the difference between the carrying amount and fair value of the investment property previously in own use at the time of reclassification.

Other non-restricted reserves

These reserves consist of retained earnings based on the Articles of Association or other rules, or decisions taken by the General Meeting, Representatives' Meeting, or Cooperative Meeting.

Retained earnings

Retained earnings also contain voluntary provisions and depreciation difference included in the separate financial statements of Group companies and insurance companies' equalisation provisions and profits/(losses) due to the redefinition of defined benefit pension plans less deferred tax.

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

Note 37. Loss allowance regarding receivables and notes and bonds

Credit risk exposures and related loss allowance

A description of OP Financial Group's credit risk formation and management can be found in section 2.2 of Note 2. The measurement principles of expected credit losses are described in section 7.4 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 Financial Group 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 2023

Exposures	Stage 1	Stage 2			Stage 3 *	
€ million		Not more than 30 DPD	More than 30 DPD	Total		Total exposure
Receivables from customers (gross)						
Retail Banking	55,280	11,893	61	11,955	2,373	69,608
Corporate Banking	25,988	3,064	150	3,214	707	29,909
Total	**81,269**	**14,957**	**211**	**15,168**	**3,080**	**99,517**
Off-balance-sheet limits						
Retail Banking	1,449	354	0	354	8	1,811
Corporate Banking	2,960	173	0	173	8	3,141
Total	**4,410**	**526**	**0**	**527**	**16**	**4,952**
Other off-balance-sheet commitments						
Retail Banking	721	36		36	17	775
Corporate Banking	2,632	216		216	46	2,895
Total	**3,354**	**253**		**253**	**63**	**3,670**
Notes and bonds**						
Group Functions	12,737	69		69	3	12,809
Total	**12,737**	**69**		**69**	**3**	**12,809**
Total exposures within the scope of accounting for expected credit losses	**101,769**	**15,805**	**212**	**16,017**	**3,163**	**120,948**

* A total of EUR 184 million of Stage 3 exposures are purchased or originated credit-impaired financial assets (POCI).
** Notes and bonds related to the insurance business have been measured at fair value through profit or loss since 1 January 2023 in connection with the adoption of IFRS 17. So, the expected credit loss will no longer be calculated. The figures in comparative year have been adjusted.

Loss allowance by stage 2023

On-balance-sheet exposures and related off-balance-sheet limits*	Stage 1	Stage 2			Stage 3 ****	
€ million		Not more than 30 DPD	More than 30 DPD	Total		Total loss allowance
Receivables from customers						
Retail Banking	-21	-160	-1	-161	-413	-594
Corporate Banking	-33	-76	-7	-83	-173	-288
Total	**-53**	**-236**	**-8**	**-243**	**-586**	**-882**
Off-balance-sheet commitments**						
Retail Banking	-1	-1		-1	-5	-7
Corporate Banking	-3	-11		-11	-23	-37
Total	**-3**	**-13**		**-13**	**-29**	**-44**
Notes and bonds***						
Group Functions	-1	-1		-1	-1	-2
Total notes and bonds	-1	-1		-1	-1	-2
Total	**-58**	**-249**	**-8**	**-257**	**-615**	**-929**

* Loss allowance for on- and related off-balance sheet limits 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.
****EUR 54 million of Stage 3 loss allowance relates to purchased or originated credit-impaired financial assets (POCI).
Notes and bonds related to the insurance business have been measured at fair value through profit or loss since 1 January 2023 in connection with the adoption of IFRS 17. So, the expected credit loss will no longer be calculated. The figures in comparative year have been adjusted.

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 2023	Stage 1	Stage 2			Stage 3	
€ million		Not more than 30 DPD	More than 30 DPD	Total		Total
Receivables from customers; on-balance-sheet and off-balance-sheet items						
Retail Banking	57,451	12,283	62	12,345	2,398	72,194
Corporate Banking	31,581	3,453	150	3,603	761	35,945
Loss allowance						
Retail Banking	-21	-161	-1	-162	-418	-602
Corporate Banking	-35	-87	-7	-94	-196	-325
Coverage ratio, %						
Retail Banking	-0.04 %	-1.31 %	-1.42 %	-1.31 %	-17.43 %	-0.83 %
Corporate Banking	-0.11 %	-2.52 %	-4.54 %	-2.60 %	-25.78 %	-0.90 %
Receivables from customers; total on-balance-sheet and off-balance-sheet items	**89,032**	**15,736**	**212**	**15,948**	**3,159**	**108,139**
Total loss allowance	**-57**	**-248**	**-8**	**-256**	**-614**	**-927**
Total coverage ratio, %	**-0.06 %**	**-1.58 %**	**-3.64 %**	**-1.60 %**	**-19.44 %**	**-0.86 %**
Carrying amount, notes and bonds						
Group Functions	12,737	69		69	3	12,809
Loss allowance						
Group Functions	-1	-1		-1	-1	-2
Coverage ratio, %						
Group Functions	-0.01 %	-0.93 %		-0.93 %	-16.38 %	-0.02 %
Total notes and bonds	**12,737**	**69**		**69**	**3**	**12,809**
Total loss allowance	**-1**	**-1**		**-1**	**-1**	**-2**
Total coverage ratio, %	**-0.01 %**	**-0.93 %**		**-0.93 %**	**-16.38 %**	**-0.02 %**

Exposures within the scope of accounting for expected credit losses by impairment stage 31 December 2022*

Exposures	Stage 1	Stage 2			Stage 3 *	
€ million		Not more than 30 DPD	More than 30 DPD	Total		Total exposure
Receivables from customers (gross)						
Retail Banking	60,769	7,933	49	7,982	2,041	70,791
Corporate Banking	26,623	2,518	109	2,627	452	29,703
Total	**87,391**	**10,451**	**158**	**10,609**	**2,493**	**100,494**
Off-balance-sheet limits						
Retail Banking	2,836	155	0	155	5	2,996
Corporate Banking	3,139	129	2	130	6	3,275
Total	**5,975**	**284**	**2**	**286**	**11**	**6,272**
Other off-balance-sheet commitments						
Retail Banking	413	26		26	12	451
Corporate Banking	2,706	176		176	33	2,915
Total	**3,119**	**202**		**202**	**45**	**3,366**
Notes and bonds						
Group Functions	12,982	73		73		13,055
Total	**12,982**	**73**		**73**		**13,055**
Total exposures within the scope of accounting for expected credit losses	**109,468**	**11,010**	**160**	**11,170**	**2,549**	**123,187**

* A total of 70 million euros of Stage 3 exposures are purchased or originated credit-impaired financial assets (POCI).

Loss allowance by stage 31 December 2022

On-balance-sheet exposures and related off-balance-sheet limits*	Stage 1	Stage 2			Stage 3 ****	
€ million		Not more than 30 DPD	More than 30 DPD	Total		Total loss allowance
Receivables from customers						
Retail Banking	-18	-78	-1	-79	-363	-461
Corporate Banking	-30	-23	-5	-28	-182	-240
Total	**-48**	**-101**	**-6**	**-108**	**-546**	**-701**
Other off-balance-sheet commitments**						
Retail Banking	-1	-1		-1	-2	-4
Corporate Banking	-3	-2		-2	-24	-29
Total	**-4**	**-3**		**-3**	**-26**	**-32**
Notes and bonds***						
Group Functions	-1	-1		-1		-2
Total notes and bonds	**-1**	**-1**		**-1**		**-2**
Total	**-53**	**-105**	**-6**	**-111**	**-572**	**-736**

* Loss allowance for on- and related off-balance sheet limits 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.

**** EUR 45 million of Stage 3 loss allowance relates to purchased or originated credit-impaired financial assets (POCI).

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 2022	Stage 1	Stage 2			Stage 3	
€ million		Not more than 30 DPD	More than 30 DPD	Total		Total
Receivables from customers; on-balance-sheet and off-balance-sheet items						
Retail Banking	64,018	8,114	49	8,163	2,058	74,239
Corporate Banking	32,468	2,823	111	2,934	491	35,892
Loss allowance						
Retail Banking	-19	-79	-1	-80	-366	-460
Corporate Banking	-33	-25	-5	-30	-206	-274
Coverage ratio, %						
Retail Banking	-0.03 %	-0.98 %	-2.04 %	-0.98 %	-17.77 %	-0.62 %
Corporate Banking	-0.10 %	-0.87 %	-4.73 %	-1.02 %	-42.00 %	-0.76 %
Receivables from customers; total on-balance-sheet and off-balance-sheet items	**96,485**	**10,937**	**160**	**11,097**	**2,549**	**110,131**
Total loss allowance	**-52**	**-104**	**-6**	**-110**	**-572**	**-734**
Total coverage ratio, %	**-0.05 %**	**-0.95 %**	**-3.90 %**	**-0.99 %**	**-22.44 %**	**-0.67 %**
Carrying amount, notes and bonds						
Group Functions	12,982	73		73		13,055
Loss allowance						
Group Functions	-1	-1		-1		-2
Coverage ratio, %						
Group Functions	-0.01 %	-1.18 %		-1.18 %		-0.02 %
Total notes and bonds	**12,982**	**73**		**73**		**13,055**
Total loss allowance	**-1**	**-1**		**-1**		**-2**
Total coverage ratio, %	**-0.01 %**	**-1.18 %**		**-1.18 %**		**-0.02 %**

OP Financial Group's credit risk management measures to reduce credit risk are described in Note 2, section 2.2. The most common measures to reduce credit risk is to use various collateral securities. Home loans and standby credit facilities are the largest credit groups among households. Home loans account for 77% (77%) of household exposures. Residential property is typically used as collateral for home loans.

The table below presents a breakdown of home loans on 31 December 2021 by LTV level with loss allowance. The LTV (loan-to-value) ratio describes the loan's balance sheet value relative to the fair value of the residential property collateral. The loan may also have other collateral securities but these have not been taken into account in the table. The lower the LTV ratio, the larger the collateral value in relation to the loan amount. Loss allowance is lower in relative terms, the lower the LTV ratio is.

31. Dec 2023

LTV %, € million	Total home loans: Exopsure amount in balance sheet	Total home loans: Loss allowance*
0–50%	9,838	0
51–70%	15,804	-20
Over 70%	16,505	-78
Total	**42,148**	**-99**

31. Dec 2022

LTV %, € million	Total home loans: Exopsure amount in balance sheet	Total home loans: Loss allowance*
0–50%	10,985	0
51–70%	17,798	-19
Over 70%	13,754	-55
Total	**42,536**	**-74**

*without management overlay provisions

The table below shows a change in exposures within the scope of the measurement of expected credit losses by impairment Stage for 2023 resulting from the effect of the following factors:
Note 1, section 7.4.1 describes impairment stages.

Receivables from customers and off-balance-sheet items, € million	Stage 1	Stage 2	Stage 3	Total
Receivables from customers; on-balance-sheet and off-balance-sheet items 1 January 2023	96,485	11,097	2,549	110,131
Transfers from Stage 1 to Stage 2, incl. repayments	-9,329	8,887		-442
Transfers from Stage 1 to Stage 3, incl. repayments	-756		719	-37
Transfers from Stage 2 to Stage 1, incl. repayments	3,245	-3,379		-135
Transfers from Stage 2 to Stage 3, incl. repayments		-704	630	-74
Transfers from Stage 3 to Stage 1, incl. repayments	53		-65	-12
Transfers from Stage 3 to Stage 2, incl. repayments		263	-297	-34
Increases due to origination and acquisition	15,116	1,138	165	16,419
Decreases due to derecognition	-10,038	-1,078	-343	-11,459
Unchanged Stage, incl. repayments	-5,744	-274	-109	-6,124
Recognised as final credit loss	0	-1	-91	-95
Receivables from customers; on-balance-sheet and off-balance-sheet items 31 December 2023	89,032	15,948	3,159	108,139

Transfers from stage 1 to stage 2 include the transfer of EUR 3,2 million concerning exposures related to a management overlay provision.

Changes in loss allowance during financial year

The table below shows a change in exposures within the scope of the calculation of expected credit losses by impairment Stage for 2023 resulting from the effect of the following factors:

Receivables from customers and off-balance-sheet items, € million	Stage 1 12 months	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance 1 January 2023	52	110	572	734
Transfers from Stage 1 to Stage 2	-8	132		124
Transfers from Stage 1 to Stage 3	-1		84	83
Transfers from Stage 2 to Stage 1	2	-16		-15
Transfers from Stage 2 to Stage 3		-11	67	56
Transfers from Stage 3 to Stage 1	0		-9	-8
Transfers from Stage 3 to Stage 2		5	-31	-26
Increases due to origination and acquisition	12	32	35	79
Decreases due to derecognition	-11	-12	-71	-94
Changes in risk parameters (net)	11	17	32	59
Changes due to update in the methodology for estimation (net)				
Decrease in allowance account due to write-offs		0	-65	-65
Net change in expected credit losses	**5**	**146**	**42**	**193**
Loss allowance 31 December 2023	**57**	**256**	**614**	**927**

Transfers from stage 1 to stage 2 include the transfer of an increase of EUR 64 million concerning a management overlay provision.

Transfers from Stage 1 to Stage 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 77% (see the default capture rate below) have been reported in Stage 2 during 2021, 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 within2023 with a delay of at least 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 personal 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. Non-performing loans are identified on a real-time basis, immediately causing a transfer to Stage 3.

Non-performing exposures are classified into Stage 3, i.e. its definition is the same as credit impaired financial assets due to credit risk under IFRS 9.

The weak outlook for the construction industry is reflected in an increase in credit losses in stages 2 and 3.

OP Financial Group has added the over triple growth of probability of default (PD) in Q3/2023 (annualised) as a new criterion for elevated credit risk in stage 2 transfers. This caused a transfer of exposures totalling slightly under EUR 400 million from stage 1 to stage 2 and an increase of EUR 1.4 million in expected credit losses (ECL). According to the criterion, the annualised PD must, however, be over 0.3%, so OP Financial Group uses for the first time in this connection the so-called low credit risk assumption mentioned in IFRS 9.

OP Financial Group has assessed the financial effects caused by Russia's war of aggression in Ukraine on its customers' credit risk and the related remaining EUR 2 million of the management overlay provision made in Q1/2022. The provision was reversed in Q2/2023.

OP Financial Group has assessed the impacts of a rise in inflation and Euribor rates as well as a fall in the price of residential property collateral on the credit risk associated with home loans. The assessment was carried out as a stress test which measured the cash flow of households, on the basis of which potential customers whose repayment capacity is jeopardised were assessed. Based on the analysis, an additional management overlay of EUR 42.4 million was made in Q4/2022. This was reduced by EUR 6.4 million in Q3/2023 as the effect of inflation was removed from the stress test. In addition, the management overlay was extended to cover all exposures to personal customers. The stress test of the personal customer provision was updated with new assumptions in Q4/2023. The assumption is that the interest rate will go down slowly, the unemployment rate will rise to 8% and home prices will further decrease by 2%. However, the amount of the management overlay provision remained unchanged at EUR 35.9 million in Q4/2023.

In Q4/2022, the management overlay was used to perform the ECL provision for the construction industry worth EUR 5.3 million, based on OP Financial Group's analysis. The analysis was updated in Q2/2023 due to the further deteriorating outlook in the industry. The analysis was made as a stress test based on the baseline scenario (weight of 60%) and the downside scenario (weight of 40%) with the assumptions that net sales decrease by 20%/35%, profitability weakens by 20%/40%, equity ratio decreases by 10%/20%, interest rates stand at 4%/6% and the prices of new homes have fallen by 15%//30%. Based on the update, the provision was increased by EUR 11.7 million to EUR 17.0 million. The provision was updated in Q4/2023 by stressing rating grades under different scenarios. In addition, the provision was extended to cover small construction companies, too. The weak outlook for the construction industry is expected to continue until 2025. The provision was increased by EUR 21.7 million to EUR 38.7 million.

In Q2/2023, a management overlay provision of EUR 27.2 million was made in the real estate sector based on the weaker outlook in the sector. The analysis was made as a stress test based on the baseline scenario (weight of 70%) and the downside scenario (weight of 30%) with the assumptions that net sales increase by 3%/0%, profitability weakens by 5%/10%, equity ratio decreases by 10%/20%, interest rates stand at 4%/6%. The provision was updated in Q4/2023 and it was reversed by EUR 13 million to EUR 14.2 million because a rise in the inflation rate and the interest rate has been realised for the most part and credit grades have been performed.

In addition, OP Financial Group was prepared in Q4/2022 for the retrospective correction of the data stock on forborne exposures with a 5-million euro management overlay ECL provision to be performed in the first half of 2023.

In addition, OP Financial Group was prepared in Q4/2022 for the retrospective correction of the data stock on forborne exposures with a 5-million euro management overlay provision to be performed in the first half of 2023. The provision was reversed in Q2/2023 because the correction of the data stock has been entered into systems and within the scope of ECL accounting.

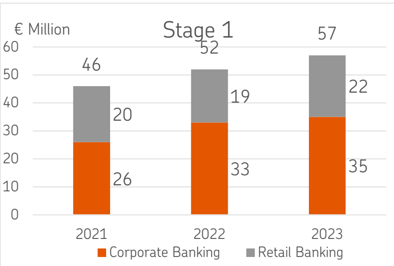
In Q4/2023, OP Financial Group made a new management overlay provision to improve the processes for the early warning system (EWS) and a group of connected clients. The improvement will be carried out during 2024. The process improvement is expected to increase expected credit losses by roughly EUR 14.1 million in the Retail Banking segment.

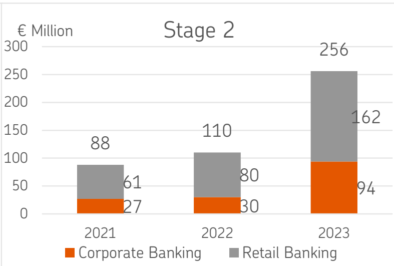
The table below shows the ECL before the discretionary provisions under management overlay, management overlay provisions described above and the total ECL.

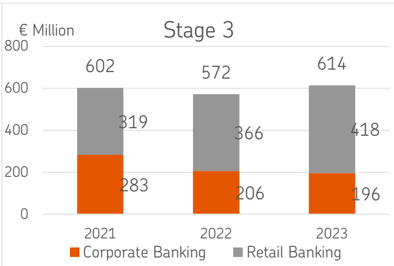
Loss allowance 31 December 2023	Retail Banking	Corporete Banking	Total
Loss allowance before discretionary provisions	**13**	**1**	**14**
Discretionary provisions under management overlay			
Personal customers: inflation, interest rates and value of collateral securities	35	1	36
Construction industry	29	9	39
Real estate sector	13	1	14
Collateral valuation of CRE backed loans	6		6
Improvement to the identification processes for EWS and connected clients	14		14
Total discretionary provisions under management overlay	**98**	**11**	**109**
Total reported loss allowance	**602**	**325**	**927**

Loss allowance 31 December 2022	Retail Banking	Corporete Banking	Total
Loss allowance before discretionary provisions	**401**	**267**	**668**
Discretionary provisions under management overlay			
Russia-Ukraine war	2		2
Price of electricity, interest rates & value of collateral	42		42
Construction industry	3	3	5
Future retrospective correction to forborne exposures	5		5
Collateral valuation of CRE backed loans	11		11
Total discretionary provisions under management overlay	**63**	**3**	**66**
Total reported loss allowance	**465**	**269**	**734**

The following graphs illustrate the trend in the expected credit losses of customer receivables by impairment stage during the last few years.







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 2023 have increased expected credit losses by EUR 3 million.

Notes and bonds, € million	Stage 1 12 months	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance 1 January 2023	**1**	**1**		**2**
Transfers from Stage 1 to Stage 2	0	0		0
Transfers from Stage 1 to Stage 3	0		1	0
Transfers from Stage 2 to Stage 1	0	0		0
Increases due to origination and acquisition	0	0		0
Decreases due to derecognition	0			0
Changes in risk parameters (net)	0	0		0
Net change in expected credit losses	0	0	1	0
Loss allowance 31 December 2023	**1**	**1**	**1**	**2**

The table below shows a change in exposures within the scope of the measurement of expected credit losses by impairment Stage for 2022 resulting from the effect of the following factors:

Receivables from customers and off-balance-sheet items, € million	Stage 1	Stage 2	Stage 3	Total
Receivables from customers; on-balance-sheet and off-balance-sheet items 1 January 2022	**93,044**	**8,806**	**2,530**	**104,380**
Transfers from Stage 1 to Stage 2, incl. repayments	-5,695	5,491		-203
Transfers from Stage 1 to Stage 3, incl. repayments	-376		339	-37
Transfers from Stage 2 to Stage 1, incl. repayments	2,684	-2,976		-292
Transfers from Stage 2 to Stage 3, incl. repayments		-536	486	-50
Transfers from Stage 3 to Stage 1, incl. repayments	49		-51	-2
Transfers from Stage 3 to Stage 2, incl. repayments		218	-247	-29
Increases due to origination and acquisition	19,141	1,077	138	20,355
Decreases due to derecognition	-11,465	-890	-365	-12,720
Unchanged Stage, incl. repayments	-896	-93	-171	-1,160
Recognised as final credit loss	0	0	-110	-111
Receivables from customers; on-balance-sheet and off-balance-sheet items 31 December 2022	**96,485**	**11,097**	**2,549**	**110,131**

The table below shows the change in loss allowance by impairment stage during 2022 in respect of the effect of the following factors:

Receivables from customers and off-balance-sheet items, € million	Stage 1 12 months	Stage 2 Lifetime	Stage 3 Lifetime	Total
Loss allowance 1 January 2022	**46**	**89**	**603**	**737**
Transfers from Stage 1 to Stage 2	-5	38		33
Transfers from Stage 1 to Stage 3	-3		67	64
Transfers from Stage 2 to Stage 1	2	-18		-16
Transfers from Stage 2 to Stage 3		-12	57	45
Transfers from Stage 3 to Stage 1		4	-23	-19
Transfers from Stage 3 to Stage 2	1		-6	-6
Increases due to origination and acquisition	17	14	30	61
Decreases due to derecognition	-8	-14	-92	-114
Changes in risk parameters (net)	4	7	40	51
Changes due to update in the methodology for estimation (net)	0	2	5	7
Changes in model assumptions and methodology	0	0	-108	-108
Decrease in allowance account due to write-offs				
Net change in expected credit losses	6	21	-31	-3
Loss allowance 31 December 2022	**52**	**110**	**572**	**734**

Transfers from Stage 1 to Stage 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 76% (see the default capture rate below) have been reported in Stage 2 during 2022, 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 2022 with a delay of at least 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 personal 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. Non-performing loans are identified on a real-time basis, immediately causing a transfer to Stage 3.

Non-performing exposures are classified into Stage 3, i.e. its definition is the same as credit impaired financial assets due to credit risk under IFRS 9.

In June 2022, OP Financial Group updated lifetime EAD models and the maturity model. Changes in the models increased OP Corporate Bank's expected credit losses by 7 million euros, which is reported in the table above on row "changes in model assumptions and methodology". Lifetime EAD models are used in the ECL measurement under IFRS 9 to estimate a contract's on-balance-sheet exposures at default for the contract's lifetime. The maturity model is used in the ECL measurement under IFRS 9 to estimate a contract's lifetime for standby credit facilities of personal and corporate customer exposures whose credit risk has increased significantly, meaning that their ECL is measured for the contract's lifetime (Stage 2). The maturity model is used for the standby credit facilities of personal and corporate customer exposures because they have no contractual maturity.

OP Financial Group has updated its assessments of the financial effects of Russia's war of aggression in Ukraine on the credit risk of its customers. The management overlay provision of EUR 34 million included in the Q1/2022 effects of the war in Ukraine, which concerned the riskiest sectors, that is to say agriculture, construction, energy and transport, has mainly been reversed because of the abovementioned reasons. The effects were expected to arise, for example, from the closedown of business and a rise in the costs of energy, raw materials and other production, but they have been more tepid than expected because higher production costs could have been passed on to prices and government support measures have been channelled to agriculture and the energy sector, in particular.

OP Financial Group has updated its assessment of the impact of a rise in the price of electricity and Euribor rates as well as a fall in the price of residential property collateral on the credit risk associated with home loans. The assessment made as a stress test measured the cash flow of households, on the basis of which potential customers were assessed whose repayment capacity is jeopardised. Based on the analysis, the management overlay ECL provision previously made in Q1 was increased by EUR 17.4 million to EUR 42.4 million. Several uncertain factors will affect the price development of electricity in Finland.

In Q4/2022, based on its analysis, OP Financial Group made a management overlay ECL provision of EUR 5.3 million in the construction industry. The analysis was based on the weakened outlook for the industry. It was conducted as a stress test with the assumptions that net sales will decrease by 10%, cost inflation will increase by 8% and interest rates by 3%.

In addition, OP Financial Group was prepared in Q4/2022 for the retrospective correction of the data stock on forborne exposures with a 5-million euro management overlay ECL provision to be performed in the first half of 2023.

At the end of 2021, OP Financial Group made a 34-million euro additional ECL provision concerning CRE backed loans. The provision was aimed at anticipating growth in the ECL caused by the update of the collateral assessment of the riskiest collateral real estate holdings and probable default statutes. The provision was reversed during 2022 corresponding to the part of the agreements where the updates have been made to collateral values and default statuses. Provision not reversed totalled EUR 11 million at the end of the year.

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 2022 have increased expected credit losses by EUR 4 million.

Notes and bonds, € million	Stage 1	Stage 2	Stage 3	
	12 months	Lifetime	Lifetime	Total
Loss allowance 31 December 2021	**7**	**2**	**5**	**14**
IFRS 17 transition 1 Jan 2022				
Loss allowance 1 January 2022				
Transfers from Stage 1 to Stage 2	0	1		1
Increases due to origination and acquisition	0	0		0
Decreases due to derecognition	0	0		0
Changes in risk parameters (net)	0	0		0
Net change in expected credit losses	0	1		0
Loss allowance 31 December 2022	**1**	**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. Ratings 1–12 are used in the credit rating of public-sector entities and Ratings A–F in the credit rating of households. The ratings have been combined into the table in such a way that the corporate customer rating 2 comprises ratings 2 and 2.5 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.

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€ 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	963			1,914			3,039			-1		
2	2,270	179		465	38		2,515	14		-1	-7	
3	2,854	181		601			2,524	7		-1	-6	
4	7,470	244		1,210	25		4,016	63		-4	-6	
5	9,327	973		1,025	85		3,672	803		-5	-8	
6	8,013	1,184		635	91		2,105	257		-9	-9	
7	5,804	1,232		428	141		1,153	495		-16	-18	
8	1,458	1,671		50	151		249	328		-7	-42	
9		727			58			86			-26	
10		546			101			143			-44	
11			1,241			70			494			-313
12			59			2			41			-41
A	22,554	675		854	4		2,094	18		-1	-4	
B	12,352	1,559		476	23		1,582	104		-2	-5	
C	5,782	1,686		66	18		1,016	144		-3	-7	
D	2,422	2,199		38	33		637	317		-6	-20	
E		2,114			11			383			-52	
F			1,781			7			318			-260
Total	**81,269**	**15,168**	**3,080**	**7,764**	**779**	**79**	**24,602**	**3,162**	**854**	**-57**	**-256**	**-614**

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€ 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	1,280			1,999			3,173			0		
2	2,414	6		812	2		2,536	6		0	0	
3	3,941	9		777			3,140	3		0	0	
4	6,538	195		1,319	10		3,824	204		-3	0	
5	10,425	461		1,028	98		2,872	455		-3	-1	
6	8,763	1,321		947	92		2,426	975		-8	-5	
7	6,306	564		565	66		1,556	123		-13	-5	
8	1,710	1,205		42	121		237	408		-12	-16	
9		400			20			50			-11	
10		160			7			18			-11	
11			863			50			317			-303
12			58			1			45			-44
A	23,707	249		989	2		1,903	10		0	0	
B	12,845	1,013		513	16		1,458	69		-2	-1	
C	6,296	1,451		59	19		937	123		-4	-4	
D	3,166	1,865		45	24		636	258		-7	-14	
E		1,711			9			333			-42	
F			1,572			5			245			-225
Total	**87,391**	**10,609**	**2,493**	**9,094**	**487**	**56**	**24,698**	**3,034**	**608**	**-52**	**-110**	**-572**

OP Financial Group 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 183 (176) million on 31 December 2023.

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 7.4.1).
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 77% on 31 December 2023 (76). The higher the rate is, the better the SICR model can capture a significant increase in credit risk. Contracts in Stage 2 accounted for 12% (11) 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, be 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 2023–2028 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 2023.

Economic variable	Scenario	Average (%)	Minimum (%)	Maksimum (%)
GDP growth	Downside	-1.8	-3.1	-0.3
	Baseline	0.8	-0.3	1.3
	Upside	3.0	-0.3	4.1
Unemployment rate	Downside	8.5	7.2	9.4
	Baseline	7.2	6.5	7.5
	Upside	6.1	4.5	7.2
House price index	Downside	-1.5	-6.0	0.1
	Baseline	0.7	-6.0	3.0
	Upside	2.8	-6.0	5.7
12-month Euribor	Downside	1.1	-0.5	2.2
	Baseline	1.5	-0.3	2.1
	Upside	2.2	-0.2	3.1
3-month real interest rate	Downside	1.0	0.1	2.1
	Baseline	1.1	1.0	1.3
	Upside	1.5	0.7	2.3

On 31 December 2023, the probability weights of the scenarios were Downside 20%, Baseline 60% and Upside 20%.

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 a summary of the values of the five most important macroeconomic variables for 2022–2027 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 2022.

Economic variable	Scenario	Average (%)	Minimum (%)	Maksimum (%)
GDP growth	Downside	-3.6	-3.6	-2.0
	Baseline	-0.5	-0.5	2.0
	Upside	2.7	2.0	3.2
Unemployment rate	Downside	8.1	6.8	8.6
	Baseline	7.0	6.7	7.4
	Upside	6.1	5.2	6.8
House price index	Downside	-0.9	-6.6	0.9
	Baseline	0.8	-5.1	3.0
	Upside	2.3	-3.5	4.5
12-month Euribor	Downside	-0.6	-4.1	0.6
	Baseline	0.3	-0.4	1.6
	Upside	1.2	-0.4	0.7
3-month real interest rate	Downside	-0.2	-0.6	
	Baseline	-0.1	-0.6	0.1
	Upside		-0.6	0.2

On 31 December 2022, 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 table below shows loss allowance regarding significant receivables under various scenarios by impairment stage on 31 December 2023.

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	50	52	46	41
Stage 2*	177	195	176	162
Stage 3*	614	614	614	614
Total	**841**	**861**	**836**	**817**

*without management overlay provisions

The table below shows loss allowance regarding significant receivables under various scenarios by impairment stage on 31 December 2023.

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	47	51	47	43
Stage 2*	95	104	95	88
Stage 3*	520	520	520	520
Total	**662**	**675**	**662**	**651**

*without management overlay provisions

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 has 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 takes account of transfers between Stage 1 and 2 taking place due to a significant increase in credit risk (SICR), which is shown as a decrease in Stage 1 and an increase in Stage 2.

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 31.12.2023	Loss allowance sensitivity analysis*	Proportional change
Households			
Stage 1	-3	-3	1 %
Stage 2	-20	-20	4 %
Corporate customers			
Stage 1	-9	-9	2 %
Stage 2	-39	-45	16 %
Total	**-70**	**-77**	**11 %**

* 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.

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 private 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 private 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.

The table below show the sensitivity of change in the loss allowance of the groups household and corporate customers on 31 December 2022, when the economic situation weakens due to changes in the combined effects of interest rates, investment growth rate and GDP:

Group Stage	Loss allowance 31.12.2022	Loss allowance sensitivity analysis*	Proportional change
Households			
Stage 1	-5	-5	1 %
Stage 2	-17	-19	13 %
Corporate customers			
Stage 1	-8	-9	8 %
Stage 2	-24	-30	23 %
Total	**-55**	**-64**	**16 %**

* 1 percentage point increase in the 12-month Euribor rate, 6 percentage point decrease in the investment growth 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 private 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 private 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 38. Collateral given

€ million	31 Dec 2023	31 Dec 2022
Given on behalf of own liabilities and commitments		
Pledges	241	1
Loans (as collateral for covered bonds)	18,163	21,048
Others	744	14,128
Total collateral given*	**19,148**	**35,176**
Secured derivative liabilities	657	701
Other secured liabilities	168	12,000
Covered bonds	13,871	12,262
Total	**14,696**	**24,962**

* In addition, bonds with a book value of EUR 1.5 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 39. Financial collateral held

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

€ million	31 Dec 2023	31 Dec 2022
Fair value of collateral received		
Derivatives	1,131	1,228
Total	**1,131**	**1,228**

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 1,131 million on the balance sheet date (1,228). The Group had no securities received as collateral on the balance sheet date.

Note 40. Classification of financial assets and liabilities

			Fair value through profit or loss				
Financial assets 31 December 2023, € million	Amortised cost	Fair value through other comprehen-sive income	Financial assets held for trading	Financial assets designated as at fair value through profit or loss	Must be measured at fair value through profit or loss	Hedging derivatives	Carrying amount total
Cash and cash equivalents	19,755						19,755
Receivables from credit institutions	858						858
Receivables from customers	97,836						97,836
Derivative contracts			2,256			1,145	3,401
Assets covering unit-linked contracts				12,581			12,581
Notes and bonds	623	11,588	216	6,367			18,793
Equity instruments		0	84	2,349	1		2,434
Other financial assets	2,226						2,226
Total	**121,298**	**11,588**	**2,556**	**21,297**	**1**	**1,145**	**157,885**

At the end of the reporting period, OP Financial Group's balance sheet had notes and bonds worth EUR 623 million (1), which were not measured at market value due to the measurement category. The fair value of these notes and bonds amounted to EUR 641 million (1) at the end of the financial year.

In the fair value measurement of promissory notes carried at amortised cost, a price is sought for the loan that would be obtained from it on the reporting date if the loan were now granted to the customer. The average margin on the reporting date is determined by rating grade and the so-called valuation curve is created out of the rating grades. The 12-month Euribor is used as the base rate of the valuation curve for euro loans and the 6-month reference rate for other non-euro loans. The valuation curve is used to calculate a discount factor with which the loan's contractual cash flows are discounted to the reporting date. The sum of discounted cash flows is fair value. On 31 December 2023, the fair value of promissory notes was EUR 3.416 million higher than the carrying amount.

Adjusted Financial assets 31 December 2022, € million	Amortised cost	Fair value through other comprehen-sive income	Fair value through profit or loss Financial assets held for trading	Financial assets designated as at fair value through profit or loss	Must be measured at fair value through profit or loss	Hedging derivatives	Carrying amount total
Cash and cash equivalents	35,004						35,004
Receivables from credit institutions	798						798
Receivables from customers	98,546						98,546
Derivative contracts			2,874			1,243	4,117
Assets covering unit-linked contracts				11,597			11,597
Notes and bonds	1	11,755	295	6,247	-0		18,298
Equity instruments		0	86	1,653	2		1,741
Other financial assets	2,394						2,394
Total	136,743	11,756	3,255	19,497	2	1,243	172,496

Financial liabilities 31 December 2023, € million	Financial liabilities at fair value through profit or loss	Other liabilities	Hedging derivatives	Carrying amount total
Liabilities to credit institutions		66		66
Liabilities to customers		76,656		76,656
Derivative contracts	2,895		375	3,271
Liabilities from investment agreements	7,944			7,944
Debt securities issued to the public	2,210	35,300		37,511
Subordinated loans		1,414		1,414
Other financial liabilities		5,739		5,739
Total	13,049	119,176	375	132,600

Adjusted Financial liabilities 31 December 2022, € million	Recognised at fair value through profit or loss	Other liabilities	Hedging derivatives	Carrying amount total
Liabilities to credit institutions		12,301		12,301
Liabilities to customers		81,468		81,468
Derivative contracts	3,980		452	4,432
Liabilities from investment agreements	7,211			7,211
Debt securities issued to the public	1,190	36,248		37,438
Subordinated loans		1,384		1,384
Other financial liabilities		4,508		4,508
Total	12,382	135,909	452	148,743

At the end of December, the fair value of OP Financial Group's senior and senior non-preferred bonds issued to the public and carried at amortised cost totalled around EUR 28,782 million (28,934), of which around EUR 21,424 million (17,311) are included in Level 1, around EUR 4,813 million (5,212) in Level 2 and around EUR 2,543 million (6,411) in Level 3. The fair value is based on information available from the market. All subordinated liabilities are carried at amortised cost. Their fair value is lower than their amortised cost, but determining reliable fair values involves uncertainty.

Note 41. Recurring fair value measurements by valuation technique

Fair value of assets on 31 December 2023, € million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Equity instruments	1,425	263	746	2,434
Debt instruments	5,564	936	83	6,583
Unit-linked contracts	7,624	4,957		12,581
Derivative financial instruments	0	3,303	98	3,401
Fair value through other comprehensive income				
Equity instruments	0			0
Debt instruments	9,166	1,694	727	11,588
Total financial instruments	**23,779**	**11,153**	**1,655**	**36,587**
Investment property			527	527
Total	**23,779**	**11,153**	**2,182**	**37,114**

Fair value of assets on 31 December 2022, € million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Equity instruments	736	265	740	1,741
Debt instruments	5,090	1,382	70	6,542
Unit-linked contracts	7,431	4,167		11,597
Derivative financial instruments	5	4,035	77	4,117
Fair value through other comprehensive income				
Debt instruments	9,193	1,721	801	11,715
Total financial instruments	**22,456**	**11,569**	**1,688**	**35,713**
Investment property			561	561
Total	**22,456**	**11,569**	**2,249**	**36,274**

Fair value of liabilities on 31 December 2023, € million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Unit-linked contracts	4,813	3,129		7,942
Structured notes			2,210	2,210
Other		5		5
Derivative financial instruments	2	3,178	91	3,271
Total	**4,815**	**6,312**	**2,302**	**13,428**

Fair value of liabilities on 31 December 2022, € million	Level 1	Level 2	Level 3	Total
Recognised at fair value through profit or loss				
Unit-linked contracts	4,619	2,590		7,210
Structured notes			1,190	1,190
Derivative financial instruments	7	4,332	94	4,432
Total	**4,626**	**6,922**	**1,284**	**12,832**

Fair value measurement

Derivatives and other financial instruments measured at fair value

OP Financial Group obtains the price of listed derivatives directly from markets. In the fair value measurement of OTC derivatives, OP Corporate Bank uses models and techniques commonly used in markets that best suits financial instrument measurement. 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. However, in the fair value measurement of some contracts, OP Corporate Bank 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 derivative contracts related to banking takes account of credit risk of the parties to the transaction and credit spreads exceeding the financing costs. Credit risk is adjusted with a Credit Valuation Adjustment (CVA) and with a Debt Valuation Adjustment (DVA). CVAs and DVAs are calculated for each counterparty. CVA and DVA adjustments are calculated for each counterparty by simulating the market values of derivatives and events of default based primarily on data obtained from markets. In assessing probabilities of default, OP Financial Group utilises counterparty rating information, liquid credit risk indices and the CDS sector curves of market data providers. OP Financial Group assesses the effect of the financing costs of OTC derivatives on fair value measurement by editing discount curves used in the measurement by means of the statistical differences of credit spreads between credit risk instruments with and without capital.

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'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.

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. Transfers of assets from level 1 to level 2 totalled EUR 1.3 million (1.7) and transfers of assets from level 2 to level 1 totalled EUR 1.2 million (0.9).

Derivatives relevant to OP Financial Group's business are interest rate swaps, interest rate options and structured debt securities. Interest rate swaps are measured by deriving valuation curves from the prices of interest rate swaps and other interest rate derivatives observed in the market. Valuation curves are used to forecast future cash flows and determine the present values of cash flows also through interest rate swaps whose price is not directly observable in the market. The same method applies to the fair value measurement of interest rate options. Volatilities describing the price of interest rate options observed in the market are also used in comparison with interest rate swaps.

In the fair value measurement of complex derivatives or, for example, share structures of structured debt securities, OP Corporate Bank uses a model where the development of market prices is simulated and the actual value of the derivative is calculated in each simulation. The price of the derivate is derived from calculating the average of the simulations.

Level 2 input date include, for example: quoted prices of similar items in active markets and quoted prices of similar items in inactive markets, market interest rates, implied volatilities and credit spreads.

Level 3 input data are input data that are not observable for an item subject to valuation. Level 3 input data include, for example: use of historical volatility in the fair value measurement of an option, such long-term interest rate with no corresponding contracts are not observable in the market.

Real estate investments have no similar daily quoted prices or price sources as in liquid markets. The appraisal process of real estate is based on using external valuers (property value over 1 million euros) or on the business's own appraisal methods.

The main sources of the appraisal of direct real estate investments are appraisal documents given by authorised external valuers. The external valuer independently selects the method that best suits the appraisal of each property. The commonly used methods include the transactions value method, income capitalisation approach and replacement value method. The values of real estate funds are obtained from underlying investee funds on the date determined by the rules of each underlying fund and according to the standard laid down by the rules. The valuations are mainly based on the combined values of the underlying investee fund's real estate units plus the underlying investee fund's net asset. The values of individual property units are mainly based on appraisal reports drawn up by authorised independent valuers.

Valuation techniques whose input parameters involve uncertainty (Level 3)

Specification of financial assets and liabilities

Financial assets, € million	Financial assets at fair value through profit or loss	Derivative contracts	Fair value through other comprehen-sive income	Total assets
Adoption of IFRS 17 and changes for 2022	51		-8	43
Opening balance 1 January 2023	810	77	801	1,688
Total gains/losses in profit or loss	-74	21		-53
Purchases	151			151
Sales	-51			-51
Settlements	-82			-82
Transfers into Level 3	28		229	257
Transfers out of Level 3	-3		-294	-297
Closing balance 31 December 2023	829	98	727	1,655

Financial assets, € 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 2022	916	106	534	1,557
Total gains/losses in profit or loss	-174	-30	0	-204
Total gains/losses in other comprehensive income			-1	-1
Purchases	113		0	113
Sales	-80			-80
Settlements	-9			-9
Transfers into Level 3	46		476	522
Transfers out of Level 3	-2		-208	-210
Closing balance 31 December 2022	810	77	801	1,688

Financial liabilities, € million	Recognised at fair value through profit or loss	Derivative contracts	Total liabilities
Opening balance 1 January 2023	1,190	94	1,284
Total gains/losses in profit or loss	52	-2	50
Muut muutokset	968		968
Closing balance 31 December 2023	2,210	91	2,302

Financial liabilities, € million	Recognised at fair value through profit or loss	Derivative contracts	Total liabilities
Opening balance 1 January 2022	1,176	30	1,207
Total gains/losses in profit or loss	-16	63	47
Muut muutokset	30		30
Closing balance 31 December 2022	1,190	94	1,284

Total gains/losses included in profit or loss by item for the financial year on 31 December 2023

€ 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)	-44	-82		-126
Unrealised net gains (losses)	24			24
Total net gains (losses)	-21	-82		-103

Total gains/losses included in profit or loss by item for the financial year on 31 December 2022

€ 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)	-188	31	0	-158
Unrealised net gains (losses)	-93		-1	-94
Total net gains (losses)	**-281**	**31**	**-1**	**-252**

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 2023.

Sensitivity analysis of input parameters involving uncertainty on 31 December 2023

Type of instrument, € million	Receivables	Liabilities	Net balance	Effect on the income statement	Reasonably possible change in fair value
Recognised at fair value through profit or loss:					
Bond investments	50		50	5.0	10 %
Illiquid investments	171		171	25.7	15 %
Private equity funds*	461		461	46.1	10 %
Real estate funds***	147		147	29.4	20 %
Derivatives:					
Index-linked bond hedges and structured derivatives, and derivatives with a long-term maturity**	98	-91	7	0.8	11 %
Fair value through profit or loss					
Bond investments	727		727	72.7	10 %
Investment property					
Investment property***	527		527	105.4	20 %

* 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.

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

*** In the valuation of real estate funds and investment property, 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.

Sensitivity analysis of input parameters involving uncertainty on 31 December 2022

Type of instrument, € million	Receivables	Liabilities	Net balance	Effect on the income statement	Reasonably possible change in fair value
Recognised at fair value through profit or loss:					
Bond investments	21		21	2.1	10 %
Illiquid investments	169		169	25.4	15 %
Private equity funds*	469		469	46.9	10 %
Real estate funds***	151		151	30.2	20 %
Derivatives:					
Index-linked bond hedges and structured derivatives, and derivatives with a long-term maturity**	77	-94	-17	-1.9	11 %
Fair value through profit or loss					
Bond investments	801		801	80.1	10 %
Investment property					
Investment property***	561		561	112.2	20 %

* 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.

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

*** In the valuation of real estate funds and investment property, 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 42. Off-balance-sheet commitments

€ million	31 Dec 2023	31 Dec 2022
Guarantees	841	570
Other guarantee liabilities	2,743	2,668
Loan commitments	12,525	14,267
Commitments related to short-term trade transactions	553	736
Other*	1,509	1,420
Total off-balance-sheet commitments	18,171	19,662

* Of which Non-life Insurance commitments to private equity funds amount to EUR 224 million (200).

Note 43. Contingent liabilities and assets

Insurance companies belonging to OP Financial Group underwrite insurance policies through pools. Pool members are primarily responsible for their own proportionate share of the risk. Proportionate shares are based on contracts confirmed annually. In certain pools, pool members are responsible for an insolvent member's liabilities in proportion to their shares in the pool. Group insurance companies recognise liabilities and receivables based on joint liability if joint liability is likely to materialise.

Note 44. Financial assets and liabilities offset in the balance sheet or subject to enforceable master netting

Financial assets

				Financial assets not set off in the balance sheet		
31 December 2023, € 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	5,046	-1,644	3,401	-1,964	-1,131	306

				Financial assets not set off in the balance sheet		
31 December 2022, € 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	6,154	-2,037	4,117	-2,624	-1,228	266

Financial liabilities

				Financial liabilities not set off in the balance sheet		
31 December 2023, € million	Gross amount of financial liabilities	Gross amount of financial liabilities deducted from financial assets*	Net amount presented in the balance sheet	Master agreements**	Collateral given	Net amount
Derivatives	4,358	-1,088	3,271	-1,964	-308	999

				Financial liabilities not set off in the balance sheet		
31 December 2022, € million	Gross amount of financial liabilities	Gross amount of financial liabilities deducted from financial assets*	Net amount presented in the balance sheet	Master agreements**	Collateral given	Net amount
Derivatives	5,994	-1,562	4,432	-2,624	-263	1,545

* The cheque account includes EUR -116 (471) million in cash resulting from central counterparty clearing.

** It is OP Financial Group'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 Group will apply to derivative transactions between the Group 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.

Notes to risk management

Note 2 describes OP Financial Group's Risk Appetite Framework.
Notes 45-51 presents the risk exposure by Retail and Corporate Banking, Notes 52–53 present the risk exposure by insurance and Notes 54–75 present the risk exposure by insurance investments. OP Financial Group publishes information under Pillar III disclosures in the OP Capital Adequacy and Risk Management Report.

Risk exposure of Retail and Corporate Banking

Note 45. OP Financial Group's exposure split by geographic region and exposure class

OP Financial Group's receivables by country 2023

€ million	Loans and advances	Cash balances at central banks and other demand deposits	Debt securities	Derivatives	Equity instruments	Gross carrying amount, total
Finland	94,294	19,719	2,103	720	19	116,856
Baltic countries	2,966	19		5		2,991
Other Nordic countries	1,235	2	1,866	69	8	3,180
Germany	205	0	2,779	674		3,657
France	17		1,209	772		1,998
UK	68	5		851		923
Italy	9					9
Spain	42			123		165
Other EU countries	312	2	2,459	157		2,929
Rest of Europe	50	1	0		0	52
USA	40	18		0	56	115
Russia	9	0				9
Asia	120	23				144
Other countries	618	6	2,090	47		2,761
Total	**99,984**	**19,797**	**12,505**	**3,418**	**84**	**135,788**

OP Financial Group's receivables by country 2022

€ million	Loans and advances	Cash balances at central banks and other demand deposits	Debt securities	Derivatives	Equity instruments	Gross carrying amount, total
Finland	94,666	35,128	2,029	1,398	13	133,233
Baltic countries	3,001	12		2		3,015
Other Nordic countries	1,410	3	1,627	80	18	3,137
Germany	158	0	2,823	695		3,676
France	10	16	1,123	806		1,954
UK	79	3	20	771		873
Italy	8					8
Spain	47			96		143
Other EU countries	274	2	2,264	98		2,639
Rest of Europe	49	1	0		0	51
USA	52	268		18	53	391
Russia	15	1				15
Asia	127	29				156
Other countries	26	6	2,211	168		2,411
Total	99,922	**35,468**	**12,096**	**4,132**	**84**	**151,702**

The presentation of the table has been changed for 2023. The 2022 table has been restated to be comparable.

Note 46. Loan losses and impairment losses

€ million	31 Dec 2019	31 Dec 2020	31 Dec 2021	31 Dec 2022	31 Dec 2023
Receivables written down as loan and guarantee losses	-68	-117	-126	-133	-93
Payments on eliminated receivables	23	10	13	15	16
Expected credit losses (ECL) on receivables from customers and off-balance-sheet items	-41	-119	-46	3	-192
Expected credit losses (ECL) on notes and bonds	0	1	0	0	0
Total	**-87**	**-225**	**-158**	**-115**	**-269**

Note 47. Structure of OP Financial Group funding

€ million	31 Dec 2023	%	31 Dec 2022	%
Liabilities to credit institutions	66	0.1	12,301	8.8
Financial liabilities at fair value through profit or loss	5	0.0	0	0.0
Liabilities to customers				
Deposits	74,045	59.9	77,121	55.1
Other	2,611	2.1	4,347	3.1
Debt securities issued to the public				
Certificates of deposit, commercial papers and ECPs (Euro Commercial Paper)	6,796	5.5	10,370	7.4
Bonds*	12,799	10.4	10,501	7.5
Subordinated bonds (SNP)	4,045	3.3	4,306	3.1
Covered bonds	13,871	11.2	12,262	8.8
Other liabilities	4,450	3.6	3,818	2.7
Subordinated liabilities	1,414	1.1	1,384	1.0
Membership capital contributions	219	0.2	217	0.2
Profit shares	3,335	2.7	3,369	2.4
Total	**123,655**	**100.0**	**139,995**	**100.0**

* Include bonds included in own portfolio in trading

Note 48. Maturity of financial assets and liabilities by residual maturity

31 December 2023, € million	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Financial assets						
Liquid assets	19,755					19,755
Receivables from credit institutions	836	22	1	1	0	860
Receivables from customers	6,246	12,161	48,114	26,154	37,452	130,126
Investment assets	591	1,259	10,476	6,152	316	18,793
Total financial assets	**27,428**	**13,441**	**58,592**	**32,307**	**37,767**	**169,535**

Financial liabilities	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Liabilities to credit institutions	61	5				66
Financial liabilities at fair value through profit or			3	2		5
Liabilities to customers	75,154	1,449	111	0		76,714
Debt securities issued to the public	5,501	7,409	18,758	5,661	182	37,511
Subordinated liabilities			1,414			1,414
Total financial liabilities	**80,716**	**8,863**	**20,286**	**5,663**	**182**	**115,710**
Guarantees	105	163	277	36	260	841
Other guarantee liabilities	269	799	730	704	241	2,743
Loan commitments	12,525					12,525
Commitments related to short-term trade transactions	146	313	93	0	1	553
Other	636	321	238	203	111	1,509
Total off-balance-sheet commitments	**13,681**	**1,596**	**1,339**	**942**	**613**	**18,171**

31 December 2022, € million	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Financial assets						
Liquid assets	35,004					35,004
Receivables from credit institutions	755	32	11	0	0	798
Receivables from customers	6,283	11,170	46,183	24,308	28,732	116,676
Investment assets	998	1,220	10,217	5,614	208	18,257
Total financial assets	43,040	12,423	56,411	29,922	28,940	170,736

Financial liabilities	Less than 3 months	3–12 months	1–5 years	5–10 years	More than 10 years	Total
Liabilities to credit institutions	12,301					12,301
Liabilities to customers	80,258	1,150	86	0		81,495
Debt securities issued to the public	5,637	6,950	18,125	6,499	228	37,438
Subordinated liabilities			1,384			1,384
Total financial liabilities	98,196	8,101	19,595	6,499	228	132,618
Guarantees	24	104	176	13	253	570
Other guarantee liabilities	297	738	848	526	258	2,668
Loan commitments	14,267					14,267
Commitments related to short-term trade transactions	120	496	119	0	1	736
Other	555	152	340	250	124	1,420
Total off-balance-sheet commitments	15,263	1,490	1,484	788	637	19,662

Note 49. Maturities of financial assets and liabilities by repricing

31 December 2023, € million	1 month or less	1–3 months	>3–12 months	>1–2 years	>2–5 years	Over 5 years	Total
Financial assets							
Liquid assets	19,755						19,755
Receivables from credit institutions	812	29	18				858
Receivables from customers	13,173	24,441	53,726	503	3,559	2,435	97,836
Investment assets							
Financial assets held for trading	23	20	30	26	93	25	216
Financial assets designated as at fair value through profit or loss	35	472	755	659	2,953	1,493	6,367
Financial assets at fair value through other comprehensive income	583	111	569	895	5,017	4,412	11,588
Amortised cost			1		350	272	623
Total financial assets	34,381	25,073	55,098	2,082	11,973	8,636	137,243
Financial liabilities							
Liabilities to credit institutions	66						66
Financial liabilities at fair value through profit or				0	3	2	5
Liabilities to customers	73,636	1,534	1,426	50	10	0	76,656
Debt securities issued to the public	2,385	5,458	6,736	4,054	13,187	5,690	37,511
Subordinated liabilities	62	285		1,067	0		1,414
Total financial liabilities	76,149	7,277	8,162	5,171	13,200	5,692	115,652

31 December 2022, € million	1 month or less	1–3 months	>3–12 months	>1–2 years	>2–5 years	Over 5 years	Total
Financial assets							
Liquid assets	35,004						35,004
Receivables from credit institutions	735	20	32	11			798
Receivables from customers	12,064	22,483	58,163	586	2,980	2,269	98,546
Investment assets							
Financial assets held for trading	23	103	48	9	94	17	295
Financial assets that must measured at fair value through profit or loss			248	8	27	0	283
Financial assets at fair value through other comprehensive income		8	56	182	702	472	1,420
Financial assets at fair value through other comprehensive income	678	774	1,062	1,643	6,977	5,125	16,259
Amortised cost	0		0	1			1
Total financial assets	48,504	23,388	59,609	2,440	10,780	7,884	152,606
Financial liabilities							
Liabilities to credit institutions	12,301	0	0	0	0	0	12,301
Liabilities to customers	78,055	2,255	1,140	8	11	0	81,468
Debt securities issued to the public	2,801	4,230	7,423	4,076	12,208	6,702	37,438
Subordinated liabilities	67	277			1,040		1,384
Total financial liabilities	93,224	6,761	8,563	4,083	13,258	6,702	132,592

Note 50. Sensitivity analysis of interest rate risk in the banking book and market risk

Table 1 shows information on how rises and falls in market rate parallels would affect OP Financial Group's projected net interest income. The effect is calculated for three years on the recurring balance sheet and the years' average is interpreted as a year's risk. The Group keeps the balance sheet structure unchanged in the calculation by replacing items falling due with corresponding interest rate bases or the fixed-rate maturities. The "Passing on changes in the market interest rate to deposit interest rates" model is applied to calculation of non-maturity deposits and the "Early loan repayment" model is applied to credit.

Table 1 Effect on projected net interest income	1 pp parallel rise	1 pp parallel fall	0.5 pp parallel rise	0.5 pp parallel fall
31.12.2023	152	-160	76	-77
31.12.2022	305	-308	153	-154

Table 2 shows information on how rises and falls in market rate parallels would affect OP Financial Group's reported equity.

Table 2 Effect on reported equity	1 pp parallel rise	1 pp parallel fall	0.5 pp parallel rise	0.5 pp parallel fall
31.12.2023	-18	19	-9	9
31.12.2022	-22	21	-11	10

Changes would affect the reported fair value reserve counted as equity by increasing or decreasing the values of the receivables whose fair value changes are recognised through items in other comprehensive income.

Table 3 shows information on how rises and falls in credit spreads would affect the value of OP Financial Group's long-term investment assets. The effect of credit spreads can be seen in the result through all investment assets.

Table 3 Effect on value of long-term investment assets	1 pp parallel rise	1 pp parallel fall	0.5 pp parallel rise	0.5 pp parallel fall
31.12.2023	-514	514	-257	257
31.12.2022	-475	475	-237	237

Note 51. Liquidity buffer

The liquidity buffer is presented under the Group Functions segment.

Liquidity buffer by maturity and credit rating on 31 December 2023, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Pro-portion, %
Aaa*	19,850	2,211	3,349	2,017	1,290		28,716	86.9
Aa1–Aa3	191	302	940	388	457	0	2,277	6.9
A1–A3	0	5	21	6	0		32	0.1
Baa1–Baa3	336	557	287	93	0		1,273	3.9
Ba1 or lower	12	4	13				30	0.1
Internally rated	332	120	67	24	186		729	2.2
Total	**20,721**	**3,200**	**4,676**	**2,527**	**1,932**	**0**	**33,056**	**100.0**

* incl. deposits with the central bank
The liquidity buffer's (excl. deposits with the central bank) residual term to maturity averages 4.7 years.

Liquidity buffer by maturity and credit rating on 31 December 2022, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Pro-portion, %
Aaa*	34,979	526	388	108	170		36,171	96.1
Aa1–Aa3	119	391	214		35	0	759	2.0
A1–A3	6	0	2	3			12	0.0
Baa1–Baa3	37	42	33	3	0	0	114	0.3
Ba1 or lower	0	42	41	25			108	0.3
Internally rated	158	216	81	2			457	1.2
Total	**35,300**	**1,217**	**759**	**140**	**205**	**0**	**37,621**	**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.

Risk exposure by Insurance

Note 52. Non-life Insurance risk exposure

Sensitivity analysis of non-life insurance

The table below shows a sensitivity analysis showing how somewhat possible changes in insurance contract risk parameters on the end date of the reporting period would have affected profit or loss or equity through a change in the remaining cash flows. The table shows sensitivities before and after reinsurance contracts held and without sensitivity changes in risk adjustment for non-financial risk. Stressed provision for outstanding claims does not include pension provisions.

	2023, € million				2022, € million			
Risk parameter	Effect on earnings, gross	Effect on earnings, net	Effect on equity, gross	Effect on equity, net	Effect on earnings, gross	Effect on earnings, net	Effect on equity, gross	Effect on equity, net
Mortality -5%	-15	-15	-12	-12	-15	-15	-12	-12
Mortality +5%	15	15	12	12	15	15	12	12
Insurance operating expenses +5%	-3	-3	-2	-2	-2	-2	-2	-2
Insurance operating expenses -5%	3	3	2	2	2	2	2	2
Provision for outstanding claims +5%	-69	-62	-55	-50	-70	-56	-56	-45
Provision for outstanding claims -5%	69	62	55	50	70	56	56	45
Interest rate risk -100 bps	-178	-176	-142	-141	-163	-161	-130	-129
Interest rate risk +100 bps	154	152	123	121	140	138	112	111

Non-life insurance insurance liabilities by estimated maturity

31 Dec 2023, € million	2024	2025	2026	2027	2028	2029-2033	2034-	Total
Exposures for remaining period - LRC*	61	55	11	6	4	10	13	159
Exposure of occurred losses - LIC*	593	186	132	119	101	432	1,387	2,951
Total insurance exposure	**654**	**241**	**143**	**125**	**105**	**442**	**1,399**	**3,110**

*Cash flows at nominal value

31 Dec 2022, € million	2023	2024	2025	2026	2027	2028-2032	2033-	Total
Exposures for remaining period - LRC*	22	45	9	5	3	10	14	108
Exposure of occurred losses - LIC*	560	242	132	67	139	432	1,348	2,920
Total insurance exposure	**582**	**287**	**141**	**72**	**142**	**442**	**1,362**	**3,028**

*Cash flows at nominal value

Note 53. Life Insurance risk exposure

Information on the nature of life insurance and sensitivity analysis of insurance contract liabilities

The key risks associated with Life Insurance are the market risks of Life Insurance's investment assets, the interest rate used for the valuation of insurance liabilities and a faster-than-expected life expectancy increase among those insured.

Portfolio of insurance and investment contracts in Life Insurance

	31 Dec 2023		31 Dec 2022	
	Number of insureds or contracts	Duration on yield curve	Number of insureds or contracts	Duration on yield curve
Unit-linked insurance contracts	5,824	10.3	5,586	10.6
Other than unit-linked contracts	3,177	8.5	3,263	8.3
Total	**9,001**	**9.7**	**8,849**	**9.8**

The unit-linked insurance contracts presented in the note mean insurance contract measured using the VFA under IFRS 17.

Other than unit-linked contracts include other OP Life Assurance Company's insurance portfolios measured in accordance with the GMM under IFRS 17.

On 31 December 2015, insurance liabilities transferred from Suomi Mutual to OP Life Assurance Company through a portfolio transfer. At that time, a balance sheet separated from the company's balance sheet was created out of the transferred endowment policies. The individual pension insurance portfolio of Suomi Mutual was consolidated into OP Life Assurance Company Ltd on 30 September 2016. A separated balance sheet was also created out of this portfolio. The separated balance sheets apply their own profit distribution policy specified in the portfolio transfer plans. The separate balance sheets also include liabilities of future supplementary benefits that buffer market and customer behaviour risk associated with the separated balance sheets.

Sensitivity of life insurance contract liability to changes in calculation assumptions

The table below shows a sensitivity analysis showing how somewhat possible changes in insurance contract risk parameters on the end date of the reporting period would have affected profit or loss or equity. The table shows sensitivities before risks have been reduced through reinsurance contracts (gross) held and after taking into account reinsurance. In the case of interest stresses, the effect of discounting on the present values of cash flows, the effect of changed interest on the development of future savings and changes in customer bonuses. Sensitivities of investments related to insurance contracts are presented in Note 62.

Sensitivity analysis of life insurance

	2023, € million				2022, € million			
Risk parameter	Effect on earnings, gross	Effect on earnings, net	Effect on equity, gross	Effect on equity, net	Effect on earnings, gross	Effect on earnings, net	Effect on equity, gross	Effect on equity, net
Mortality +5%	23	23	19	19	18	18	14	14
Mortality -5%	-24	-24	-19	-20	-19	-18	-15	-15
Lapse rate +10%	12	12	9	10	18	17	14	14
Lapse rate -10%	-14	-14	-11	-11	-20	-20	-16	-16
Interest rate risk +100 bps	143	145	114	116	166	169	133	135
Interest rate risk -100 bps	-175	-178	-140	-142	-182	-184	-146	-148
Credit spread change, equities +20%	-54	-55	-43	-44	-53	-53	-42	-43
Credit spread change, equities -20%	76	77	61	62	84	85	67	68

Expected maturity of life insurance and investment contracts

31 Dec 2023, € million	2024–2025	2026–2027	2028–2032	2033–2037	2038–2042	2043–2047	2048–	Total
Unit-linked insurance contracts	664	915	1,946	1,323	1,048	750	1,009	7,655
Other than unit-linked contracts	604	490	886	468	252	164	297	3,160
Total	**1,268**	**1,405**	**2,832**	**1,790**	**1,300**	**914**	**1,306**	**10,815**

The table includes maturity distribution of insurance and investment contracts.

31 Dec 2022, € million	2023–2024	2025–2026	2027–2028	2032–2036	2037–2041	2042–2046	2047–	Total
Unit-linked insurance contracts	552	905	1,938	1,401	1,068	812	1,132	7,808
Other than unit-linked contracts	615	518	951	535	268	174	312	3,373
Total	**1,167**	**1,423**	**2,888**	**1,936**	**1,336**	**986**	**1,444**	**11,180**

The table includes maturity distribution of insurance and investment contracts.

Risk exposure of insurance investments

Note 54. Non-life Insurance asset allocation

Investment asset portfolio allocation	31 Dec 2023 Fair value*, € million	%	31 Dec 2022 Fair value*, € million	%
Money market total	433	**10**	622	**15**
Money market instruments and deposits**	422	10	632	16
Derivatives***	11	0	-10	0
Total bonds and bond funds	**2,662**	**61**	**2,526**	**62**
Governments	304	7	303	7
Inflation-linked bonds		0		0
Investment Grade	1,928	44	1,834	45
Emerging markets and High Yield	234	5	206	5
Structured Investments****	196	5	181	4
Total equities	**872**	**20**	**557**	**14**
Finland	122	3	67	2
Developed markets	582	13	326	8
Emerging markets	90	2	88	2
Unlisted equities	6	0	6	0
Private equity investments	71	2	69	2
Total alternative investments	**29**	**1**	**31**	**1**
Hedge funds	29	1	31	1
Total property investment	**338**	**8**	**336**	**8**
Direct property investment	153	4	155	4
Indirect property investment	186	4	181	4
Total	**4,334**	**100**	**4,071**	**100**

* Includes accrued interest income.

** Includes settlement receivables and liabilities and market value of derivatives.

*** Effect of derivatives on the allocation of the asset class (delta-weighted equivalents).

**** Include covered bonds, bond funds and illiquid bonds.

Note 55. Sensitivity analysis of Non-life Insurance investment risks

The table below shows the sensitivity of investment risks by investment category. The discount rate sensitivity analysis related to the calculation of insurance liabilities is presented in Note 53 dealing with insurance liabilities Effects of changes in investment and insurance liabilities offset one another.

	Effect on earnings, € million		Effect on equity, € million	
Risk exposure of insurance investments	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
Listed shares -20%	-159	-96	-127	-77
Currency -20%	-86	-30	-69	-24
Unlisted shares -20%	-16	-25	-12	-20
Real property -20%	-68	-64	-54	-51
Credit spread change, equities -20%	-77	-90	-61	-72
Credit spread change, equities +20%	52	55	42	44
Interest rate risk +100 bp	-166	-122	-133	-98
Interest rate risk -100 bp	187	133	150	106

Note 56. Risk exposure of Non-life Insurance investments in fixed-income securities

The market risk arising from changes in interest rates is monitored by classifying investments by instrument, in accordance with duration. The table below does not indicate the balancing effect which the insurance contract liabilities have on the interest-rate risk, because only some of the insurance contract liabilities have been discounted using an administrative interest rate (Note 32).

Fair value by duration or repricing date*, € million	31 Dec 2023	31 Dec 2022
0–1 year	699	782
>1–3 years	813	738
>3–5 years	694	827
>5–7 years	415	353
>7–10 years	178	173
>10 years	131	22
Total	**2,930**	**2,895**
Modified duration	3.5	2.8
Effective interest rate, %	2.4	1.4

* Includes money market investments and deposits, bonds, convertible bonds and bond funds.

Fixed-income portfolio by maturity and credit rating on 31 December 2023*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion, %
Aaa	203	24	36	45	7	37	351	12.0
Aa1–Aa3	173	66	100	58	24	46	467	15.9
A1–A3	63	258	195	119	70	18	723	24.7
Baa1–Baa3	153	392	311	163	57	12	1,087	37.1
Ba1 or lower	59	37	22	11	4	10	143	4.9
Internally rated	48	36	30	19	16	9	159	5.4
Total	**699**	**813**	**694**	**415**	**178**	**131**	**2,930**	**100.0**

Fixed-income portfolio by maturity and credit rating on 31 December 2022*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion, %
Aaa	202	79	55	3	3	7	348	12.0
Aa1–Aa3	380	71	92	40	1	6	591	20.4
A1–A3	61	172	273	101	80	4	691	23.9
Baa1–Baa3	90	336	356	179	72	10	1,042	36.0
Ba1 or lower	41	45	26	7	6	4	128	4.4
Internally rated	9	35	25	24	11	-9	95	3.3
Total	**782**	**738**	**827**	**353**	**173**	**22**	**2,895**	**100.0**

* Excludes credit derivatives.

The maturity is presented until the end of the term to maturity. If the paper includes a call option, the maturity is presented until the first possible Call date.

The average credit rating of the Non-life Insurance fixed-income portfolio is Moody's A3.

The term to maturity of the Non-life Insurance fixed-income portfolio averages 3.8 years (calculated on the basis of the Call date and the maturity date).

Note 57. Currency risk associated with Non-life Insurance investments

Foreign currency exposure, € million	31 Dec 2023	31 Dec 2022
USD	202	22
SEK	1	0
JPY	3	
GBP	1	7
Other	32	50
Total*	**239**	**80**

* The currency exposure was 5.5% (2.0%) of the investment portfolio. It is calculated as the sum total of individual currencies' intrinsic values.

Note 58. Counterparty risk associated with non-life insurance

	31 Dec 2023		31 Dec 2022	
Credit rating, consistent with Moody's, € million	Investment*	Insurance**	Investment*	Insurance**
Aaa	351		348	
Aa1–Aa3	467	28	591	63
A1–A3	723	95	691	183
Baa1–Baa3	1,087	0	1,042	
Ba1 or lower	143		128	
Internal rating	159	42	95	40
Total	**2,930**	**165**	**2,895**	**287**

* Includes money market investments, deposits and bonds and bond funds.

** Includes the reinsurers' share of insurance contract liabilities, and receivables from reinsurers.

Note 59. Life Insurance asset allocation

Investment asset portfolio allocation	31 Dec 2023 Fair value*, € million	%	31 Dec 2022 Fair value*, € million	%
Total money market instruments	**367**	**11 %**	**614**	**19 %**
Money market investments and deposits**	361	11 %	601	19 %
Derivatives***	6	0 %	13	0 %
Total bonds and bond funds	**2,070**	**65 %**	**1,976**	**61 %**
Governments	225	7 %	182	6 %
Investment Grade	1,519	47 %	1,469	45 %
Emerging markets and High Yield	156	5 %	161	5 %
Structured investments****	170	5 %	163	5 %
Total equities	**546**	**17 %**	**419**	**13 %**
Finland	82	3 %	44	1 %
Developed markets	343	11 %	240	7 %
Emerging markets	53	2 %	65	2 %
Fixed assets and unquoted equities	3	0 %	3	0 %
Private equity investments	65	2 %	67	2 %
Total alternative investments	**36**	**1 %**	**38**	**1 %**
Hedge funds	36	1 %	38	1 %
Total real property investments	**180**	**6 %**	**189**	**6 %**
Direct property investments	13	0 %	24	1 %
Indirect property investments	168	5 %	165	5 %
Total	**3,201**	**100 %**	**3,235**	**100 %**

* Includes accrued interest income.

** Include settlement receivables and liabilities and market value of derivatives.

*** Effect of derivatives on the allocation of the asset class (delta equivalent).

**** Include covered bonds, bond funds and illiquid bonds.

Note 60. Asset allocation in separated balance sheet 1

In connection with the portfolios' transfer, a separated balance sheet (separated balance sheet 1) was created out of the individual life insurance portfolio (separated balance sheet 1) transferred from Suomi Mutual in 2015 and with a profit distribution policy differing from other life insurance operations.

Investment asset portfolio allocation	31 Dec 2023 Fair value*, € million	%	31 Dec 2022 Fair value*, € million	%
Total money market instruments	**30**	**5 %**	**47**	**8 %**
Money market investments and deposits**	30	5 %	47	8 %
Derivatives***		0 %	0	0 %
Total bonds and bond funds	**497**	**88 %**	**503**	**86 %**
Governments	108	19 %	122	21 %
Investment Grade	316	**56 %**	319	**54 %**
Emerging markets and High Yield	25	4 %	21	4 %
Structured investments****	49	9 %	42	7 %
Total equities	**27**	**5 %**	**26**	**4 %**
Developed markets	17	3 %	16	3 %
Emerging markets	2	0 %	2	0 %
Fixed assets and unquoted equities		0 %	0	0 %
Private equity investments	7	1 %	8	1 %
Total real property investments	**9**	**2 %**	**10**	**2 %**
Direct property investments	0	0 %	0	0 %
Indirect property investments	9	2 %	10	2 %
Total	**563**	**100 %**	**586**	**100 %**

* Includes accrued interest income.

** Include settlement receivables and liabilities and market value of derivatives.

*** Effect of derivatives on the allocation of the asset class (delta equivalent).

**** Include covered bonds, bond funds and illiquid bonds.

Net return on investments at fair value totalled EUR 11 million (-10). Net return on investments at fair value is calculated by deducting the value change in market-consistent insurance liability from income from investment assets.

Note 61. Asset allocation in separated balance sheet 2

In connection with the portfolios' transfer, a separated balance sheet (separated balance sheet 2) was created out of the individual life insurance portfolio (separated balance sheet 1) transferred from Suomi Mutual in 2015 and with a profit distribution policy differing from other life insurance operations.

	31 Dec 2023		31 Dec 2022	
Investment asset portfolio allocation	Fair value*, € million	%	Fair value*, € million	%
Total money market instruments	**84**	**7 %**	**106**	**8 %**
Money market investments and deposits**	84	7 %	106	8 %
Total bonds and bond funds	**1,094**	**86 %**	**1,168**	**86 %**
Governments	346	27 %	390	29 %
Investment Grade	623	49 %	636	47 %
Emerging markets and High Yield	5	0 %	1	0 %
Structured investments****	119	9 %	141	10 %
Total equities	**52**	**4 %**	**53**	**4 %**
Developed markets	28	2 %	26	2 %
Emerging markets	3	0 %	3	0 %
Fixed assets and unquoted equities	0	0 %	0	0 %
Private equity investments	21	2 %	24	2 %
Total real property investments	**37**	**3 %**	**38**	**3 %**
Direct property investments	15	1 %	16	1 %
Indirect property investments	22	2 %	22	2 %
Total	**1,266**	**100 %**	**1,365**	**100 %**

* Includes accrued interest income.

** Include settlement receivables and liabilities and market value of derivatives.

*** Effect of derivatives on the allocation of the asset class (delta equivalent).

**** Include covered bonds, bond funds and illiquid bonds.

Net return on investments at fair value totalled EUR 18 million (-16). Net return on investments at fair value is calculated by deducting the value change in market-consistent insurance liability from income from investment assets.

Note 62. Sensitivity analysis of Life Insurance investment risks

The table below shows the sensitivity of investment risks. The sensitivity analysis of the discount rate related to the calculation of insurance liability is presented in Note 53. concerning insurance liability. The effects of changes in investments and insurance liability cancel each other.

	Effect on earnings, € million		Effect on equity, € million	
	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
Listed shares -20%	-100	-69	-80	-55
Currency -20%	-54	-21	-43	-17
Unlisted shares -20%	-14	-14	-11	-11
Real property -20%	-36	-38	-29	-30
Credit spread change, equities -20%	-60	-74	-48	-59
Credit spread change, equities +20%	41	44	33	35
Interest rate risk +100 bp	-139	-115	-111	-92
Interest rate risk -100 bp	167	135	133	108

Note 63. Sensitivity analysis of investment risks under separated balance sheet 1

Investment risk associated with portfolios in the separated balance sheet is buffered by liability of future supplementary benefits. In the current situation, the buffer is sufficient to cover negative return on investment assets in accordance with sensitivity analyses. Therefore, scenarios according to the sensitivity analysis do not directly reveal the earnings effect. Liability of future supplementary benefits in the separated balance sheet 1 is EUR 89 million (87).

Note 64. Sensitivity analysis of investment risks under separated balance sheet 2

Investment risk associated with portfolios in the separated balance sheet is buffered by liability of future supplementary benefits. In the current situation, the buffer is sufficient to cover negative return on investment assets in accordance with sensitivity analyses. Therefore, scenarios according to the sensitivity analysis do not directly reveal the earnings effect. Liability of future supplementary benefits in the separated balance sheet 2 is EUR 157 million (160).

Note 65. Risk exposure of Life Insurance investments in fixed-income securities

Fair value by term to maturity or repricing date, € million *	31 Dec 2023	31 Dec 2022
0–1 year	520	570
>1–3 years	585	506
>3–5 years	596	674
>5–7 years	304	244
>7–10 years	128	153
>10 years	88	57
Total	**2,221**	**2,204**
Modified duration	3.3	2.8
Average interest rate, %	2.1	1.3

* Includes money market investments and deposits, bonds, convertible bonds and bond funds.

Fixed-income portfolio by maturity and credit rating on 31 December 2023*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion
Aaa	150	35	50	26	23	19	304	13.7 %
Aa1–Aa3	146	38	69	32	16	37	338	15.2 %
A1–A3	57	176	162	82	38	10	524	23.6 %
Baa1–Baa3	121	284	269	141	41	9	865	39.0 %
Ba1 or lower	37	25	14	6	3	6	91	4.1 %
Internally rated	10	27	31	17	7	6	98	4.4 %
Total	**520**	**585**	**596**	**304**	**128**	**88**	**2,221**	**100.0 %**

Fixed-income portfolio by maturity and credit rating on 31 December 2022*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion
Aaa	250	16	43	4	44		357	16.2 %
Aa1–Aa3	116	35	59	20	5	19	253	11.5 %
A1–A3	45	126	189	72	50	10	493	22.3 %
Baa1–Baa3	123	256	332	118	46	10	884	40.1 %
Ba1 or lower	29	35	20	4	5	3	96	4.4 %
Internally rated	8	38	31	25	4	15	121	5.5 %
Total	**570**	**506**	**674**	**244**	**153**	**57**	**2,204**	**100.0 %**

* Excludes credit derivatives.

The maturity is presented until the end of the term to maturity. If the paper includes a call option, the maturity is presented until the first possible Call date.

The average credit rating of a Life Insurance portfolio by Moody's is A3.

The average residual term to maturity of a Life Insurance fixed-income portfolio is 3.8 years (calculated on the basis of the Call date and maturity date).

Note 66. Risk exposure associated with fixed-income investments under separated balance sheet 1

Fair value by term to maturity or repricing date, € million *	31 Dec 2023	31 Dec 2022
0–1 year	58	62
>1–3 years	116	108
>3–5 years	126	176
>5–7 years	94	67
>7–10 years	54	56
>10 years	31	31
Total	**479**	**500**
Modified duration	4.5	4.3
Average interest rate, %	2.1	1.0

* Includes money market investments and deposits, bonds, convertible bonds and bond funds.

Fixed-income portfolio by maturity and credit rating on 31 December 2023*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion
Aaa	11	9	15	17	21	8	81	16.8 %
Aa1–Aa3	21	6	16	15	7	16	79	16.6 %
A1–A3	2	34	30	21	10	6	102	21.3 %
Baa1–Baa3	15	59	54	38	15	1	182	37.9 %
Ba1 or lower	7	6	4	1	0	0	18	3.8 %
Internally rated	3	3	7	3	1		17	3.6 %
Total	**58**	**116**	**126**	**94**	**54**	**31**	**479**	**100.0 %**

Fixed-income portfolio by maturity and credit rating on 31 December 2022*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion
Aaa	2	12	40	12	27	11	105	20.9 %
Aa1–Aa3	41	13	14	8	5	13	93	18.6 %
A1–A3	3	23	45	13	7	5	96	19.3 %
Baa1–Baa3	5	49	63	26	12	2	158	31.6 %
Ba1 or lower	5	6	3	1	0	0	15	3.0 %
Internally rated	6	5	10	7	5		33	6.6 %
Total	**62**	**108**	**176**	**67**	**56**	**31**	**500**	**100.0 %**

* Excludes credit derivatives.

The maturity is presented until the end of the term to maturity. If the paper includes a call option, the maturity is presented until the first possible Call date.

The average credit rating of the fixed-income portfolio in the separated balance sheet 1 is A2, according to Moody's rating.

The average residual term to maturity of the fixed-income portfolio in the separated balance sheet 1 (based on call dates and maturity dates) is 5.0 years.

Note 67. Risk exposure of fixed-income investments under separated balance sheet 2

Fair value by term to maturity or repricing date, € million *	31 Dec 2023	31 Dec 2022
0–1 year	82	108
>1–3 years	212	238
>3–5 years	311	353
>5–7 years	195	144
>7–10 years	107	137
>10 years	115	106
Total	**1,022**	**1,086**
Modified duration	4.8	4.6
Average interest rate, %	2.1	1.0

* Includes money market investments and deposits, bonds, convertible bonds and bond funds.

Fixed-income portfolio by maturity and credit rating on 31 December 2023*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion
Aaa	15	24	61	37	52	27	215	21.0 %
Aa1–Aa3	35	11	56	37	14	76	227	22.3 %
A1–A3	5	45	74	64	10	5	202	19.8 %
Baa1–Baa3	25	125	109	51	28	8	347	33.9 %
Internally rated	2	8	11	6	3		31	3.0 %
Total	**82**	**212**	**311**	**195**	**107**	**115**	**1,022**	**100.0 %**

Fixed-income portfolio by maturity and credit rating on 31 December 2022*, € million

Year(s)	0–1	1–3	3–5	5–7	7–10	10–	Total	Proportion
Aaa	2	63	85	45	69	36	300	27.6 %
Aa1–Aa3	63	22	35	25	18	62	226	20.8 %
A1–A3	10	60	80	30	15	3	197	18.2 %
Baa1–Baa3	25	87	134	32	23	6	308	28.3 %
Internally rated	8	6	19	13	11		56	5.1 %
Total	**108**	**238**	**353**	**144**	**137**	**106**	**1,086**	**100.0 %**

* Excludes credit derivatives.

The maturity is presented until the end of the term to maturity. If the paper includes a call option, the maturity is presented until the first possible Call date.

The average credit rating of the fixed-income portfolio in the separated balance sheet 2 is A1, according to Moody's rating.

The average residual term to maturity of the fixed-income portfolio in the separated balance sheet 2 (based on call dates and maturity dates) is 5.8 years.

Note 68. Currency risk associated with Life Insurance investments

Foreign currency exposure, € million	31 Dec 2023	31 Dec 2022
USD	121	18
SEK	0	0
JPY	2	
GBP	0	7
Other	5	37
Total*	**128**	**61**

* Total net currency exposure.

The currency exposure was 4.0% (1.9) of the investment portfolio.

Note 69. Currency risk associated with investments under separated balance sheet 1

Foreign currency exposure, € million	31 Dec 2023	31 Dec 2022
USD	9	9
SEK	0	0
GBP	0	1
Other	6	6
Total*	**16**	**16**

* Total net currency exposure.

The currency exposure was 2.8% (2.8) of the investment portfolio.

Note 70. Currency risk associated with investments under separated balance sheet 2

Foreign currency exposure, € million	31 Dec 2023	31 Dec 2022
USD	29	28
SEK	0	0
GBP	0	1
Other	14	15
Total*	**44**	**43**

* Total net currency exposure.

The currency exposure was 3.4% (3.2) of the investment portfolio.

Note 71. Counterparty risk associated with Life Insurance investments

Credit rating, € million Moody's equivalent	31 Dec 2023 Investment*	31 Dec 2022 Investment*
Aaa	304	357
Aa1–Aa3	338	253
A1–A3	524	493
Baa1–Baa3	865	884
Ba1 or lower	91	96
Internally rated	98	121
Total	2,221	2,204

* Includes money-market investments and deposits, bonds, and bond funds.

Note 72. Counterparty risk associated with investments under separated balance sheet 1

Credit rating, € million Moody's equivalent	31 Dec 2023 Investment*	31 Dec 2022 Investment*
Aaa	81	105
Aa1–Aa3	79	93
A1–A3	102	96
Baa1–Baa3	182	158
Ba1 or lower	18	15
Internally rated	17	33
Total	479	500

* Includes money-market investments and deposits, bonds, and bond funds.

Note 73. Counterparty risk associated with investments under separated balance sheet 2

Credit rating, € million Moody's equivalent	31 Dec 2023 Investment*	31 Dec 2022 Investment*
Aaa	215	300
Aa1–Aa3	227	226
A1–A3	202	197
Baa1–Baa3	347	308
Internally rated	31	56
Total	1,022	1,086

* Includes money-market investments and deposits, bonds, and bond funds.

Note 74. Credit risk associated with investments under separated balance sheet 1

	31 Dec 2023		31 Dec 2022		Change in fair value arising from change in credit risk	
Investments exposed to credit risk	Fair value*, € million	Credit derivative par value, € million	Fair value*, € million	Credit derivative par value, € million	Investments change**** € million	Credit derivatives change***** € million
Total money market instruments	30		47			
Money market investments and deposits**	30		47			
Total bonds and bond funds	497		503		0	0
Governments	108		122		0	
Investment Grade	316		319		1	0
Emerging markets and High Yield	25		21		-1	
Structured investments***	49		42			
Total equities	27		26			
Developed markets	17		16			
Emerging markets	2		2			
Fixed assets and unquoted equities	0		0			
Private equity investments	7		8			
Total real property investments	9		10			
Direct property investments	0		0			
Indirect property investments	9		10			
Total	563		586		0	0

Exclude money market investments and convertible bond investments.

* Includes accrued interest income.

** Include settlement receivables and liabilities.

*** Include covered bonds, bond funds and illiquid bonds.

**** Running yield deducted from total return of liquid fixed income investments, excluding Money market and investment result relative to the EUR swap curve.

***** Total return in direct credit risk derivatives. The method is not suitable for structured investments.

Note 75. Credit risk associated with investments under separated balance sheet 2

Investments exposed to credit risk	31 Dec 2023 Fair value*, € million	31 Dec 2023 Credit derivative par value, € million	31 Dec 2022 Fair value*, € million	31 Dec 2022 Credit derivative par value, € million	Change in fair value arising from change in credit risk: Investments change**** € million	Change in fair value arising from change in credit risk: Credit derivatives change***** € million
Total money market instruments	84		106			
Money market investments and deposits**	84		106			
Total bonds and bond funds	1,094		1,168		3	0
Governments	346		390		-1	
Investment Grade	623		636		3	0
Emerging markets and High Yield	5		1		0	
Structured investments***	119		141			
Total equities	52		53			
Developed markets	28		26			
Emerging markets	3		3			
Fixed assets and unquoted equities	0		0			
Private equity investments	21		24			
Total real property investments	37		38			
Direct property investments	15		16			
Indirect property investments	22		22			
Total	1,266		1,365		3	0

Exclude money market investments and convertible bond investments.

* Includes accrued interest income.

** Include settlement receivables and liabilities.

*** Include covered bonds, bond funds and illiquid bonds.

**** Running yield deducted from total return of liquid fixed income investments, excluding Money market and investment result relative to the EUR swap curve.

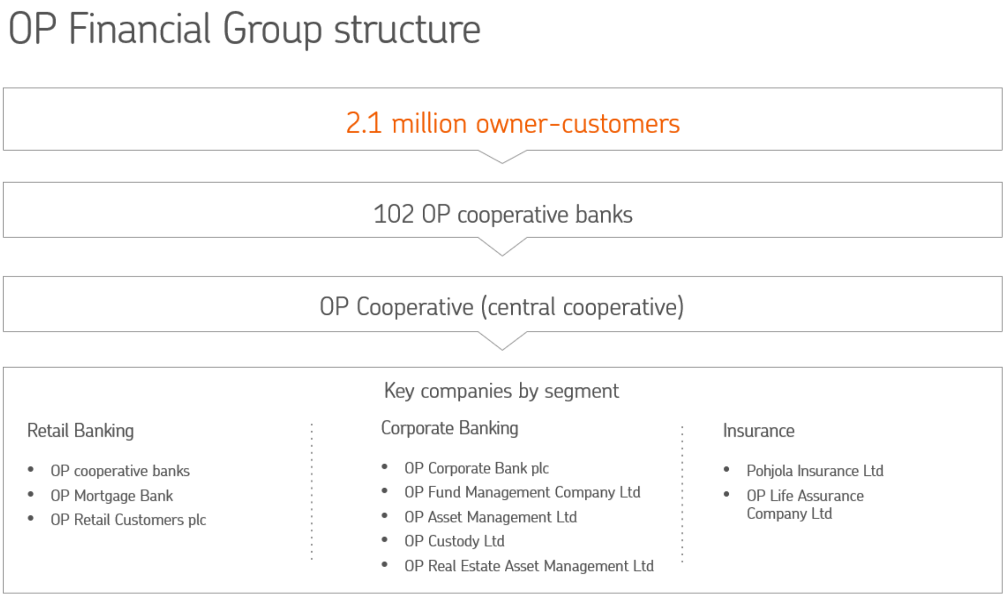
***** Total return in direct credit risk derivatives. The method is not suitable for structured investments.

Other notes

Note 76. Ownership interests in subsidiaries, structured entities and joint operations

OP Financial Group's structure

The following figure describes the structure of OP Financial Group. Group member cooperative banks constitute the Group's technical parent company. In addition to the member cooperative banks, the most important subsidiaries, OP Cooperative (central cooperative) and its subsidiaries, associates and various joint arrangements are consolidated into OP Financial Group.



Changes occurred in subsidiaries and structured entities during the financial year

In the financial year, no major change occurred.

Major subsidiaries included in the financial statements of OP Financial Group in 2023

Major OP Financial Group subsidiaries include companies whose business is subject to licence and other major companies relevant to business operations. All major consolidated subsidiaries are wholly owned and accordingly they have no major non-controlling interests.

Company	Domicile/ home country	Interest, %	Votes, %
OP Cooperative	Helsinki	100	100
OP Mortgage Bank	Helsinki	100	100
OP Life Assurance Company Ltd	Helsinki	100	100
OP Retail Customers Plc	Helsinki	100	100
OP Fund Management Company Ltd	Helsinki	100	100
Pivo Wallet Oy	Helsinki	100	100
OP Corporate Bank plc	Helsinki	100	100
OP Property Management Ltd	Helsinki	100	100
OP Asset Management Limited	Helsinki	100	100
Pohjola Insurance Ltd	Helsinki	100	100
OP Custody Ltd	Helsinki	100	100

In addition to the subsidiaries, 30 (34) OP Koti real estate agencies are consolidated into the financial statements of OP Financial Group. These OP Koti real estate agencies, which are wholly owned subsidiaries, provide services for buying and selling real property and dwelling units and house management services. In addition to the real estate agencies, 23 (26) other subsidiaries have been consolidated.

Member cooperative banks forming the technical parent company of OP Financial Group in 2023

Name	Balance sheet 31 Dec 2023, € million	CET1 % 31 Dec 2023	Managing Director 31 Dec 2023
Alajärven Op	392	42.0 %	Minna Sippola
Ala-Satakunnan Op	330	50.4 %	Jari Katila
Alavieskan Op	95	29.3 %	Antero Alahautala
Andelsbanken för Åland	647	25.8 %	Johnny Nordqvist
Andelsbanken Raseborg	516	27.3 %	Mats Enberg
Etelä-Karjalan Op	2,259	39.4 %	Petri Krohns
Etelä-Pirkanmaan Op	849	37.8 %	Juha Luomala
Etelä-Pohjanmaan Op	1,539	29.4 %	Olli Tarkkanen
Euran Op	299	52.2 %	Timo Viitanen
Haapamäen Seudun Op	79	53.4 %	Hannu Petjoi
Hailuodon Op	58	35.9 %	Jani Isomaa
Humppilan-Metsämaan Op	112	53.7 %	Jari Salokangas
Hämeen Op	4,231	31.6 %	Mika Helin
Janakkalan Op	503	50.4 %	Mikko Suutari
Jokilaaksojen Op	482	34.2 %	Juha Pajumaa
Jokioisten Op	161	33.2 %	Ville Aarnio
Joki-Pohjanmaan Op	440	33.2 %	Markku Niskala
Jämsän Seudun Op	426	63.6 %	Kari Mäkelä
Järvi-Hämeen Op	587	44.7 %	Teemu Sarhemaa
Kainuun Op	1,090	41.6 %	Teuvo Perätalo
Kangasalan Seudun Op	663	39.9 %	Jyrki Turtiainen
Kangasniemen Op	235	55.8 %	Seppo Laurila
Kemin Seudun Op	486	45.2 %	Heikki Palosaari
Kerimäen Op	111	48.0 %	Sakari Kangas
Keski-Pohjanmaan Op	1,595	30.9 %	Jyrki Rantala
Keski-Suomen Op	3,894	32.6 %	Pasi Sorri
Koitin-Pertunmaan Op	99	56.8 %	Jorma Somero
Korpilahden Op	124	40.1 %	Tuomas Uppsala
Kronoby Andelsbank	169	44.1 %	Kaj Nylund
Kuhmon Op	268	57.2 %	Martti Pulkkinen
Kuortaneen Op	91	37.0 %	Suvi-Katariina Kangastie
Kuusamon Op	343	32.3 %	Kari Kivelä
Kymenlaakson Op	2,372	39.5 %	Juha Korhonen
Laihian Op	133	33.0 %	Marja Tukeva
Lapin Op	127	41.1 %	Juha Teerialho
Lehtimäen Op	89	25.5 %	Veli-Jussi Haapala
Lemin Op	108	26.9 %	Petteri Mattila
Limingan Op	159	27.9 %	Pirjo Ruottinen
Liperin Op	286	34.4 %	Jukka Asikainen
Lounaismaan Op	2,092	37.9 %	Jouni Hautala
Lounaisrannikon Op	892	30.4 %	Sami Peura
Lounais-Suomen Op	797	48.5 %	Markku Pelkonen
Luumäen Op	132	57.4 %	Tiia Pesonen
Länsi-Kymen Op	684	31.4 %	Saila Rosas
Länsi-Suomen Op	3,686	44.0 %	Matti Kiuru
Maaningan Op	203	33.6 %	Ari Väänänen
Mouhijärven Op	105	35.4 %	Kirsi Soltin
Multian Op	100	47.3 %	Arto Laitinen
Nagu Andelsbank	104	22.9 %	Alice Björklöf
Nakkila-Luvian Op	309	39.3 %	Jussi Kuvaja
Niinijokivarren Op	91	69.1 %	Kaisa Markula
Nilakan Seudun Op	223	37.4 %	Eeva Karppinen
Op Harjuseutu	157	34.7 %	Sanna Metsänranta
Op Vakka-Auranmaa	1,087	45.0 %	Lasse Vehviläinen
Outokummun Op	196	56.7 %	Ari Karhapää
Paltamon Op	90	48.8 %	Maarit Korpinen
Pedersörenejdens Andelsbank	599	32.3 %	Agneta Ström-Hakala
Petäjäveden Op	113	46.9 %	Anu Liimatainen
Pohjois-Hämeen Op	615	38.9 %	Pertti Pyykkö

Pohjois-Karjalan Op	2,602	38.5 %	Jaana Reimasto-Heiskanen
Pohjois-Savon Op	3,795	37.2 %	Mikko Vepsäläinen
Pohjolan Op	6,911	29.1 %	Keijo Posio
Polvijärven Op	183	52.2 %	Ari Noponen
Posion Op	160	53.5 %	Vesa Jurmu
Pudasjärven Op	278	47.8 %	Pertti Purola
Pulkkilan Op	59	47.0 %	Marja Hyvärinen
Punkalaitumen Op	118	62.0 %	Hannu Juhe
Purmo Andelsbank	53	31.5 %	Tony Hellman
Raahentienoon Op	808	43.2 %	Kalle Arvio
Rantasalmen Op	167	37.4 %	Jaana Vänskä
Rautalammin Op	95	39.4 %	Esko-Pekka Markkanen
Riistaveden Op	151	23.7 %	Ismo Salmela
Rymättylän Op	96	32.9 %	Mikko Paijola
Sallan Op	120	46.3 %	Jaakko Ovaskainen
Satapirkan Op	1,482	45.6 %	Janne Pohjolainen
Savitaipaleen Op	152	52.7 %	Samppa Oksanen
Siikajoen Op	71	27.7 %	Jukka Jaurakkajärvi
Siikalatvan Op	108	35.8 %	Jarmo Pistemaa
Suomenselän Op	1,174	39.4 %	Mika Korkia-aho
Suur-Savon Op	2,804	37.6 %	Leena Nikula
Sydänmaan Op	463	41.9 %	Juha Mäki
Taivalkosken Op	113	35.3 %	Piia Mourujärvi
Tampereen Seudun Op	5,532	25.7 %	Jani Vilpponen
Tervolan Op	106	31.4 %	Jussi Kuittinen
Tervon Op	83	27.8 %	Jani Kääriäinen
Turun Seudun Op	4,822	23.0 %	Petteri Rinne
Tuusniemen Op	190	31.8 %	Jari-Pekka Raatikainen
Tyrnävän Op	142	22.6 %	Antto Joutsiniemi
Utajärven Op	251	41.4 %	Terttu Hagelin
Uudenmaan Op	21,291	17.6 %	Olli Lehtilä
Vaara-Karjalan Op	550	47.7 %	Raili Hyvönen
Vasa Andelsbank	1,456	28.2 %	Ulf Nylund
Vehmersalmen Op	138	28.4 %	Petri Tyllinen
Vesannon Op	101	39.4 %	Katri Korhonen
Vimpelin Op	107	44.0 %	Matti Mäkinen
Ylitornion Op	134	46.5 %	Laura Harju-Autti
Ylä-Kainuun Op	344	38.5 %	Eija Sipola
Yläneen Op	85	55.4 %	Heikki Eskola
Ylä-Pirkanmaan Op	537	33.3 %	Leena Selkee
Ylä-Savon Op	585	47.6 %	Mikko Paananen
Ylä-Uudenmaan Op	1,044	41.2 %	Mikko Purmonen
Ypäjän Op	90	51.1 %	Kirsi-Marja Hiidensalo

Structured entities included in the consolidated financial statements

OP Financial Group both acts as investor and manages various mutual funds in order to gain investment income and various commissions. The financial statements of OP Financial Group include the accounts of 2 (2) real estate funds. These funds that have been classified as structured entities because OP Financial Group's control is not based on votes but the control of significant operations, exposure to variable returns from the fund, and organising the fund's management. These funds also involve non-controlling interests most relevant to the Group.

The table below structured entities with a significant number of non-controlling interests

Name	Place of business	Main line of business	Interest, % 2023	Interest, % 2022	Non-controlling interests, %
Real Estate Funds of Funds II Ky	Helsinki	Real Estate Fund	27.8	27.8	72.3

Summary of financial information on subsidiaries with a significant proportion of non-controlling interests

The table below presents a summary of financial information on subsidiaries with a significant proportion of non-controlling interests from OP Financial Group's perspective. The financial information corresponds to the figures presented in the financial statements of the subsidiaries to which, for example, fair value adjustments have been made to correspond to OP Financial Group's accounting policies. The figures below are before the elimination of internal transactions.

Balance sheet in summary	Real Estate Fund of Funds II Ky	
€ million	**2023**	**2022**
Cash and cash equivalents	0	0
Investments	0	2
Other assets	1	1
Total assets	**2**	**3**
Other liabilities	-1	-1
Total liabilities	**-1**	**-1**
Net assets	**3**	**5**
Accrued share of non-controlling interests	2	3
Statement of comprehensive income in summary		
Net sales	-1	-1
Profit or loss of continuing operations after tax	-1	0
Comprehensive income	**-1**	**0**
Comprehensive income attributable to non-controlling interests	-1	0
Share of profit paid to non-controlling interests	0	0
Cash flows in summary		
Net cash flow from operating activities	1	0
Net cash flow from financing activities	-1	0
Net change in cash flows	**0**	**0**
Cash and cash equivalents at year start	0	0
Cash and cash equivalents at year end	0	0

Joint operations

Some 647 (712) property companies are incorporated into OP Financial Group's financial statements as joint operations by consolidating the proportionate share of OP Financial Group's holding of the property company's assets. Classification into joint operations has been made according to the nature of the business although OP Financial Group has control over some of the property companies. The shares of the property companies entitle to the occupancy of certain apartments some of which are in OP Financial Group's own use. Each shareholder of the mutual real estate company is responsible for their share of the company's loans. Some of these joint operations form OP Financial Group's branch network in Finland and they are included in Note 26 Property, plant and equipment on the balance sheet. The rest of the property companies are investment property holdings included in Notes 23.

Summary of the effect of consolidation of joint operations on the balance sheet

€ million	2023	2022
Property in own use	50	111
Investment property	527	561
Total assets	577	672
Total liabilities	1	3

Most significant joint operations consolidated into OP Financial Group's financial statements in 2023

Name	Domicile	Sector	Holding, %
Asunto Oy Oulun Kalevankulma	Helsinki	Property holding and management	100
Kiinteistö Oy Hämeenkivi	Tampere	Property holding and management	100
Kiinteistö Oy Jyväskylän Kassatalo	Jyväskylä	Property holding and management	100
Kiinteistö Oy Koskikatu 9	Joensuu	Property holding and management	57
Kiinteistö Oy Tampereen Hämeenkatu 12	Tampere	Property holding and management	100
Kiinteistö Oy Vammalan Torikeskus	Mikkeli	Property holding and management	100
As Oy Lappeenrannan Mariankulma	Lappeenranta	Property holding and management	100
Kiinteistö Oy Kanta-Sarvis II	Tampere	Property holding and management	100
Kiinteistö Oy STC Viinikkala	Vantaa	Property holding and management	100
Kiinteistö Oy Grand Cargo Terminal 1	Helsinki	Property holding and management	100
Kiinteistö Oy Grand Cargo Terminal 2	Vantaa	Property holding and management	100
Kiinteistö Oy Vantaan Kisällintie 13	Vantaa	Property holding and management	100
Tikkurilan Kauppatalo Oy	Vantaa	Property holding and management	54
Kiinteistö Oy Kouvolan Karhut	Helsinki	Property holding and management	100
Kiinteistö Oy Vuosaaren Pohjoinen Ostoskeskus	Helsinki	Property holding and management	100
Kiinteistö Oy Kanta-Sarvis I	Helsinki	Property holding and management	50
Kiinteistö Oy Koskitammi	Tampere	Property holding and management	100
Kiinteistö Oy Helsingin Frantseninkatu 13	Helsinki	Property holding and management	100
Kiinteistö Oy Topeliuksenkatu 41b	Helsinki	Property holding and management	50
Kiinteistö Oy Tuusulan Jatke	Tuusula	Property holding and management	100
Keskinäinen Kiinteistö Oy Marikko	Helsinki	Property holding and management	100
Kiinteistö Oy Koivuhaan Yrityskeskus	Vantaa	Property holding and management	100
Kiinteistö Oy Aleksis Kiven katu 21-23	Espoo	Property holding and management	50
Kiinteistö Oy Espoon Siuntiontie 3	Espoo	Property holding and management	100
Kiinteistö Oy Hatanpäänkatu 1	Tampere	Property holding and management	50

Most significant joint operations consolidated into OP Financial Group's financial statements in 2022

Name	Domicile	Sector	Holding, %
Asunto Oy Oulun Kalevankulma	Oulu	Property holding and management	100
Kiinteistö Oy Ansatie 5	Helsinki	Property holding and management	100
Kiinteistö Oy Hämeenkivi	Tampere	Property holding and management	100
Kiinteistö Oy Jyväskylän Kassatalo	Jyväskylä	Property holding and management	100
Kiinteistö Oy Koskikatu 9	Joensuu	Property holding and management	57
Kiinteistö Oy Tampereen Hämeenkatu 12	Tampere	Property holding and management	100
Kiinteistö Oy Vammalan Torikeskus	Vammala	Property holding and management	100
Mikkelin Forum Oy	Mikkeli	Property holding and management	87
As Oy Lappeenrannan Mariankulma	Lappeenranta	Property holding and management	100
Kiinteistö Oy Kanta-Sarvis II	Tampere	Property holding and management	100
Kiinteistö Oy STC Viinikkala	Vantaa	Property holding and management	100
Kiinteistö Oy Grand Cargo Terminal 1	Helsinki	Property holding and management	100
Kiinteistö Oy Grand Cargo Terminal 2	Vantaa	Property holding and management	100
Kiinteistö Oy Vantaan Kisällintie 13	Vantaa	Property holding and management	100
Tikkurilan Kauppatalo Oy	Vantaa	Property holding and management	54
Kiinteistö Oy Kouvolan Karhut	Helsinki	Property holding and management	100
Kiinteistö Oy Vuosaaren Pohjoinen Ostoskeskus	Helsinki	Property holding and management	100
Kiinteistö Oy Kanta-Sarvis I	Helsinki	Property holding and management	50
Kiinteistö Oy Koskitammi	Tampere	Property holding and management	100
Kiinteistö Oy Helsingin Frantseninkatu 13	Helsinki	Property holding and management	100
Kiinteistö Oy Topeliuksenkatu 41b	Helsinki	Property holding and management	50
Kiinteistö Oy Tuusulan Jatke	Tuusula	Property holding and management	100
Keskinäinen Kiinteistö Oy Marikko	Helsinki	Property holding and management	100
Kiinteistö Oy Koivuhaan Yrityskeskus	Vantaa	Property holding and management	100
Kiinteistö Oy Aleksis Kiven katu 21-23	Helsinki	Property holding and management	50

The consolidated financial statements include the share of assets and related liabilities under joint control.

Interests in unconsolidated structured entities
OP Fund Management Company Ltd within OP Financial Group manages OP Mutual Funds OP Fund Management Company Ltd uses OP Asset Management Ltd as the portfolio manager for many of the mutual funds it manages In addition, OP Property Management Ltd within the Group manages several real estate funds. In many funds, the fund management company controls significant operations by making investment decisions in accordance with the fund rules. OP Financial Group companies have no interests in the funds managed by the abovementioned companies that would significantly expose the Group to the varying return on the investment and would thereby cause a consolidation obligation.

OP Financial Group receives management fee income from unconsolidated funds that is included in net commissions and fees in the income statement. In addition, OP Financial Group as investor receives from unconsolidated funds income which is recognised in net investment income, depending on in which balance sheet item the investments are recognised in the balance sheet.

OP Financial Group's investments in OP's funds and OP Real Estate Asset Management Ltd's funds have been recognised in investment assets in the balance sheet. OP Financial Group's risk of loss is limited to the investment's balance sheet value. Investments in non-consolidated funds managed by OP Financial Group totalled EUR 349 million (126) on 31 December 2023.

Note 77. Information by country

OP Financial Group operates mainly in Finland. OP Corporate Bank plc has, however, branches engaged in banking and asset and sales finance operations in Estonia, Latvia and Lithuania.

2022

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 31 December 2022, € million	Estonia	Latvia	Lithuania	Total
Total operating income	54	65	119	238
Total EBIT	11	9	22	42
Total current tax	3	4	4	12
Total personnel in man-years	41	38	48	127

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 31 December 2021, € million	Estonia	Latvia	Lithuania	Total
Total operating income	19	18	30	67
Total EBIT	6	5	14	25
Total current tax	1	0	3	4
Total personnel in man-years	39	37	44	120

Note 78. Related-party transactions

OP Financial Group's related parties comprise subsidiaries consolidated into OP Financial Group, associates, key management personnel and their close family members, and other related-party entities. OP Financial Group's key management personnel comprises OP Financial Group's President and Group Chief Executive Officer, members of OP Cooperative's Executive Management Team and directors directly reporting to the President and Group Chief Executive Officer, the Chair and members of OP Cooperative's Board of Directors as well as members of the Supervisory Council. Related parties of the management also include companies over which key management persons or their close family member exercises significant influence. Other entities regarded as related parties include OP Financial Group's Personnel Fund OP Bank Group Pension Foundation.

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

Transactions between OP and its subsidiaries belonging to its related parties have been eliminated in the consolidation of Group accounts and they are not included in the figures of this Note.

Related-party transactions 2023

€ 1,000	Associates	Key management personnel	Others
Loans	110,241	15,787	
Deposits	2,746	11,369	27,910
Interest income	149	154	488
Interest expenses	1,233	537	3,905
Insurance premium revenue		63	9,650
Commission income	1	39	
Salaries and other short-term benefits, and performance-based pay			
Salaries and other short-term benefits		8,303	
Related-party holdings			
Number of holdings		255	

Related-party transactions 2022

€ 1,000	Associates	Key management personnel	Others
Loans	110,233	16,285	
Deposits	3,936	10,720	32,856
Interest income	1,333	146	
Interest expenses	142	8	36
Insurance premium revenue		62	6,073
Commission income	1	30	
Commission expenses		7	15,792
Impairment losses on loans			
Salaries and other short-term benefits, and performance-based pay			
Salaries and other short-term benefits		5,209	
Related-party holdings			
Number of holdings		240	

Employee benefits of key management persons

The central cooperative, OP Cooperative, has a Board of Directors comprising the incumbent President and Group Chief Executive Officer and 9–13 other members appointed by the Supervisory Council. Every year, the Board of Directors appoints from among its members a Chair and Vice Chair. The President and Group Chief Executive Officer may not be appointed to these positions. The President and Group Chief Executive Officer also acts as OP Cooperative's CEO.

The Executive Management Team acts as the central cooperative's management team and supports the President and Group Chief Executive Officer in managing the central cooperative and its consolidation group, preparing strategic policies, preparing and implementing any operational issues of great significance or principal in nature and ensuring effective internal control. In addition to the President and Group Chief Executive Officer, the Executive Management Team has members who are subordinate to him. The Executive Management Team has seven other members, in addition to the President and Group Chief Executive Officer. Key persons in the management also include three directors who directly report to the President and Group Chief Executive Officer.

The period of notice observed by OP Financial Group's Executive Chairman, other OP Central Cooperative's Executive Board members and a deputy member and the employer is a maximum of 6 months. Upon termination of employment in cases specifically stipulated in the executive contract, the Executive Chairman and CEO is entitled to a severance pay and a sum equivalent to a maximum of 12 months' pay, while other Board members, deputy members and the Chief Audit Officer are entitled to a sum equivalent to a maximum of 6 months' pay.

The President and Group Chief Executive Officer's retirement age is 65. Pension benefits are determined in accordance with pension laws and OP Financial Group's own pension plans. The President and Group Chief Executive Officer is covered by OP Bank Group Pension Foundation's supplementary pension scheme. Pension accrued under the supplementary pension scheme may begin to be disbursed as a paid-up pension before the old-age pension if employment with OP Financial Group terminates. Pension costs under IAS 19 arising from the supplementary pension insurance of the President and Group Chief Executive Officer totalled EUR 123,000 (326,000). Compensation paid to members of the Board of Directors is within the scope of TyEL. No supplementary pension obligations apply to Board members.

The retirement age of other Executive Management Team members who became members before 2018 is 63 years. The retirement age of Executive Management Team members who became members in 2018 corresponds to the lowest pensionable age under TyEL. Pension benefits are determined in accordance with pension laws and OP Financial Group's own pension plans. Note 34 provides more detailed information on OP Financial Group's pension plans.

€ 1,000	2023	2022
Pension costs of defined contribution plans under TyEL	1,816	1,678
IFRS expense of voluntary supplementary pension	173	481
Pension obligation of voluntary supplementary pension	10,541	8,643
Pension costs of supplementary defined contribution plans	469	411

Pension costs of defined contribution plans under TyEL include employee and employer shares.

Note 79. Events after the balance sheet date

No significant events after the balance sheet date.

Statement concerning the financial statements

We have approved the Report by the Board of Directors and the consolidated Financial Statements for 1 January–31 December 2023 of OP Financial Group, a financial entity as referred to in section 9 of the Act on the Amalgamation of Deposit Banks. The Report by the Board of Directors and the Financial Statements are presented to, and passed out at, the Annual Cooperative Meeting of OP Cooperative.

Helsinki, 5 March 2024

OP Cooperative's Board of Directors

Jaakko Pehkonen Chair of the Board of Directors	Timo Ritakallio OP Financial Group's President and Group Chief Executive Officer
Jarna Heinonen	Matti Kiuru
Katja Kuosa-Kaartti	Kati Levoranta
Pekka Loikkanen	Tero Ojanperä
Riitta Palomäki	Petri Sahlström
Olli Tarkkanen	

Auditor's note

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

Helsinki, 6 March 2024

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 members of OP Cooperative

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the amalgamation OP Financial Group pursuant to the Act on the Amalgamation of Deposit Banks for the year ended on 31 December 2023. The financial statements comprise the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity capital, cash flow statement and notes, including material accounting policy information.

In our opinion the consolidated financial statements give a true and fair view of OP Financial Group's financial position and financial performance and cash flows in accordance with IFRS Accounting Standards as adopted by the EU.

Our opinion is consistent with the additional report on OP Cooperative Group submitted to the Board of Directors and the Audit Committee of OP Cooperative.

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 member institutions within OP Financial Group 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 member institutions within OP Financial Group 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 15 to the consolidated financial statements.

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

Materiality

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

Key Audit Matters

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

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

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
Receivables from customers - measurement (notes 1, 6, 21 and 37 to the financial statements)	
Receivables from customers, totalling €97.8 billion, are the most significant item on the OP Financial Group's consolidated balance sheet representing 61 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. Development and uncertainty of the economic environment may increase credit risk, which can realize in higher impairment loss on receivables. 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 credit risk management, and assessed principles and controls over recognition and monitoring of loan receivables in the entities of OP Cooperative Consolidated. 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, as well as recalculation of the most significant ECL models and sensitivity analysis. We have also assessed the basis for the temporary extra provisions formed based on management judgement (management overlay). Our IFRS and financial instruments specialists were involved in the audit. We also requested other auditors of OP Financial Group entities to issue an opinion that the entities within OP Financial Group have complied with the instructions provided by OP Cooperative for the financing process. Furthermore, we considered the appropriateness of the notes provided by OP Financial Group in respect of receivables and expected credit losses.

Measurement of investment assets and derivative contracts (notes 1, 11, 22, 23 and 37 to the financial statements)

The carrying value of investment assets totals €21.9 billion mainly consisting of investments measured at fair value. The aggregate derivative assets are €3.4 billion and derivative liabilities €3.3 billion comprising contracts held for trading and hedging purposes. Derivatives are measured at fair value in preparing the financial statements.

The fair value of financial instruments is determined using either prices quoted in an active market or OP Financial Group'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. Fair values of private equity funds and properties may also involve time delay.

Due to the adoption of the IFRS 17 Insurance Contracts standard, application of the temporary overlay approach relating to the classification of equity instruments and mutual fund investments related to OP Financial Group's insurance investment operations was stopped. In the financial statements insurance companies' investments were classified as financial assets measured at fair value through profit or loss in accordance with IFRS 9. The previously accrued valuation difference of the investments of insurance companies was reversed from the fair value reserve to retained earnings 1 January, 2022.

Due to the significant carrying values of investment assets and derivative positions, and management judgements involved in relation to measurement of illiquid investments, measurement 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 Financial Group, and tested accounting and valuation of investments and derivative contracts.

In respect of derivative contracts, we considered the accounting treatment and the valuation process applied 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.

As part of the IFRS 17 transition we assessed the reclassification of the insurance companies' investments and the related accounting treatment.

We also considered the impairment principles applied and techniques used by OP Financial Group in respect of investments.

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

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

Insurance contract liabilities and adoption of IFRS 17 (notes 1, 3, 8, 9 and 32 to the financial statements)

Measurement of insurance contract liabilities, amounting to €11.6 billion on the OP Financial Group's balance sheet, is based on various actuarial assumptions and calculation methods and models.

OP Financial Group has applied IFRS 17 Insurance Contracts since 1 January 2023. IFRS 17 affects the measurement and recognition of OP Financial Group's non-life and life insurance products as well as their presentation in the financial statements. In transition the income statement and balance sheet for the financial period 2022 have been adjusted retrospectively. The transitional impact is disclosed in the Note 3 to the financial statements.

Measurement of insurance contract liabilities and adopting IFRS 17 requires significant management judgement including determination of the discount rate, calculation of risk adjustment for non-financial risks, defining future cash flows and coverage units and selecting transitional methods.

Interest rate risk associated with insurance liabilities is hedged with derivatives and interest rate instruments.

Calculation of insurance contract liabilities relies on data processed in many IT systems and combination of that data. The databases are extensive and data volumes processed by the IT systems are substantial. Transition to IFRS 17 has also required changes to the systems and calculation processes.

The carrying value of insurance contract liabilities is significant and measurement of the liabilities involves complex actuarial models. Adoption of IFRS 17 has required significant judgement and interpretation. As a result insurance contract liabilities and adoption of IFRS 17 are addressed as a key audit matter.

Our audit procedures included assessment of the accounting principles related to calculation and recognition of insurance contract liabilities under IFRS 17.

We assessed internal processes and key controls for accounting insurance contract liabilities and completeness and accuracy of the underlying source data.

In respect of the measurement of insurance contract liabilities we evaluated the key actuarial methods and the reasonableness of key assumptions (expected future cash flows, discount rate, risk adjustment for non-financial risks and defining coverage units) and significant management judgements used in implementation and application of the new standard.

We have tested by recalculation the calculation rules in the IFRS 17 system used by OP.

We analysed the hedging principles of interest rate risk for insurance contract liabilities.

We extensively involved KPMG specialists, especially actuarial and IT specialists.

We assessed the IFRS 17 opening balance sheet as of 1 January 2022 and the transition methods applied.

Furthermore, we evaluated presentation and disclosures in the financial statements including the IFRS 17 transition.

Control environment relating to financial reporting process and IT systems

In respect of the accuracy of the financial statements of OP Financial Group, the key reporting processes are dependent on information systems. Therefore, information technology plays an essential role for business continuity, incident management and the accuracy of financial reporting. Consequently, the IT environment related to the financial reporting process and the application controls of individual IT systems have a significant effect on the selected audit approach.

As the consolidated financial statements of OP Financial Group are based on a large number of data flows from many systems, the financial reporting IT environment is addressed as a key audit matter.

We obtained an understanding of the IT systems related to financial reporting and the associated control environment and tested the effectiveness of the related internal controls.

Our audit procedures also concentrated on monitoring key data flows and transactions, access management, change management, interfaces and outsourcing management.

We tested continuity of the general ledger balances, migration of the key data and conversion related to structural changes in reporting, and assessed general IT controls for the financial system and the system used to calculate and measure insurance contract liabilities.

As part of our audit, we performed extensive substantive procedures and data analyses relating to various aspects in the financial reporting process.

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

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing OP Financial Group'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 OP Financial Group, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

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

As part of an audit in accordance with good auditing practice, we exercise professional judgement 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 OP Financial Group'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 OP Financial Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the 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 OP Financial Group 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.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within OP Financial Group to express an opinion on the consolidated financial statements. We remain solely responsible for our audit opinion.
- Audit of the consolidated financial statements of amalgamation OP Financial Group is based on the financial statements of OP Cooperative Consolidated and member cooperative banks, as well as the auditor's reports submitted for the audit of OP Financial Group's consolidated financial statements.

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 Cooperative Meeting of OP Cooperative in 2002 and our appointment represents a total period of uninterrupted engagement of 22 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, 6 March 2024

KPMG OY AB

JUHA-PEKKA MYLÈN
Authorised Public Accountant, KHT