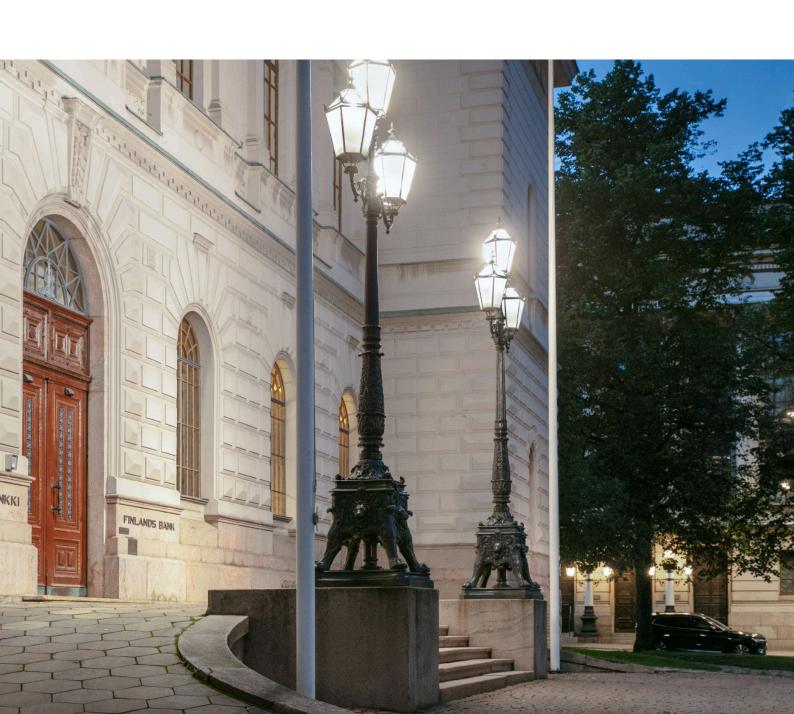


BANK OF FINLAND ANNUAL REPORT 2023



Release notes

Bank of Finland

Street address Snellmaninaukio, Helsinki

Email info@bof.fi forename.surname@bof.fi

SWIFT SPFB FI HH

Regional office

Vantaa Turvalaaksontie 1, Vantaa

PO Box 160, FI-00101 Helsinki

Telephone +358 9 1831

Websites

Bank of Finland bankoffinland.fi

Bank of Finland Bulletin bofbulletin.fi

BOFIT (Bank of Finland Institute for Emerging Economies) bofit.fi PO Box 160, FI-00101 Helsinki Telephone

Telephone national 09 1831 international +358 9 1831

Postal address

Annual Report

annualreport.bankoffinland.fi

Bank of Finland Museum

rahamuseo.fi

Financial Literacy Centre

website

Drafted in accordance with section 19 of the Act on the Bank of Finland.

The figures in the Annual Report are based on data available in February 2024.

This is a translation of the Finnish version of the Annual Report (including the financial statements). In the event of any discrepancies between the Finnish and English versions, the Finnish version shall take precedence.

ISSN 1456-5773 (web publication)

Helsinki 2024

Table of contents

G	REETINGS FROM THE GOVERNOR	4
В	ANK OF FINLAND	7
	BANK OF FINLAND IN 2023	9
	DIVISION OF RESPONSIBILITIES BETWEEN MEMBERS OF THE BOARD	23
	ENVIRONMENTAL IMPACT OF BANK OF FINLAND'S ACTIVITIES IN 2023	26
	BANK OF FINLAND'S INDICATOR TARGETS AND THEIR ACHIEVEMENT IN 2023	30
	ORGANISATION	37
Α	NNUAL REPORT	41
	OPERATING ENVIRONMENT	42
	MONETARY POLICY	49
	FINANCIAL STABILITY	65
	MONEY AND PAYMENT	81
	MANAGEMENT OF FINANCIAL ASSETS	88
FI	NANCIAL STATEMENTS	109
	BALANCE SHEET	110
	PROFIT AND LOSS ACCOUNT	113
	ACCOUNTING POLICIES	115
	NOTES ON THE BALANCE SHEET	121
	NOTES ON THE PROFIT AND LOSS ACCOUNT	145
	APPENDICES TO THE FINANCIAL STATEMENTS	156
	NOTES ON RISK MANAGEMENT	158
	AUDITOR'S REPORT	164
	STATEMENT REGARDING THE AUDIT	166



Greetings from the Governor

22 Mar 2024

The year 2023 was marked by a fall in inflation and a rise in geopolitical tensions. Thanks to the level of preparedness the most pessimistic scenarios were successfully avoided.

The banking sector turmoil in March remained short-lived, and Europe distinguished itself rather well in its management of the energy crisis. At the same time, progress with the vital reform of the Finnish and European economies faltered due to a weakened economic outlook and the global political situation.

* * *

Finland's accession to NATO has strengthened security. The Bank of Finland will continue to play its part in ensuring the operation of critical financial market services, such as payment systems, in all circumstances.

Russia's brutal and illegal war in Ukraine entered its second year. The Ukrainian people are pledging their lives for the freedom and democracy of all of Europe. Our role is a considerably easier one: to continue our unswerving support for Ukraine.

* * *

Inflation slowed in line with the monetary policy objective of the European Central Bank (ECB), and the purchasing power of households also began to rise, in Finland too.

Inflation in the euro area began the year at 8.6% in January and ended at 2.9% in December. Interest rate increases were continued until September, and the volume of securities held for monetary policy purposes was allowed to shrink.

The effects of higher interest rates were felt in the financial and housing markets. Despite the weakness in the economy, Finnish households and businesses for the most part coped well with their higher loan servicing costs.

Credit losses of Finnish banks increased only a little, and there was even an improvement in their profitability and capital adequacy.

* * *

The revolution in digitalisation and technology will affect the tasks carried out by central banks. The Eurosystem's joint project on a digital euro entered its preparation phase in 2023.

A digital euro would complement cash and extend the options available for different forms of payment. It would ensure that the euro is available to people and businesses in both physical and digital form.

The new environment in which we operate also emphasises the significance of datasets and their analysis. The Bank of Finland and the Financial Supervisory Authority (FIN-FSA) have together established a centre of excellence for advanced analytics. Our aim is to be a leader in modern data analytics.

* * *

Climate change was seen and felt tangibly during 2023. Biodiversity loss became an important issue in society.

The Bank of Finland's most significant climate measures concerned implementation of the ECB's climate action plan and the sustainability objectives in the Bank's financial assets management.

* * *

The weak economy highlights the importance of a sustainable long-term economic policy. The country's population is ageing rapidly and, at the same time, the public debt burden is growing. The Bank of Finland's estimate of the sustainability gap grew to 4.5% relative to gross domestic product (GDP).

Finland was built through reliance on entrepreneurship, hard work, high-level expertise and also mutual understanding. Going forward, it's time a path was found along which Finland can renew itself sustainably.

The Bank of Finland was active throughout the year within its sphere of responsibility, promoting a stable economy and sustainable economic growth.

I would like to take this opportunity to thank most sincerely Marja Nykänen, Tuomas Välimäki and Kimmo Virolainen for successfully piloting the Bank of Finland during my autumn leave of absence. I also extend my thanks to our staff and stakeholders for their valuable work and cooperation. The many fruitful results of this are set out here in the pages of our Annual Report.

22 March 2024

Olli Rehn Governor Bank of Finland



Bank of Finland

22 Mar 2024

The Bank of Finland was active throughout the year within its sphere of responsibility, promoting a stable economy and sustainable economic growth.

The Bank of Finland is Finland's monetary authority and national central bank. At the same time it is a part of the Eurosystem, which is responsible for monetary policy and other central bank functions in the countries of the euro area and for administering the world's second largest currency, the euro.

The ECB and the national central banks are the main international partners of the Bank of Finland. The Governor of the Bank of Finland, **Olli Rehn**, is a member of the Eurosystem's highest decision-making body, the Governing Council of the ECB. The Governing Council's principal task is to decide on the monetary policy of the euro area.

Satisfaction at work is monitored at the Bank of Finland using the PeoplePower index. The Bank of Finland was ranked among 'Finland's most inspiring workplaces 2023' in recognition of the results from its staff survey. The title is awarded annually to the best-performing organisations that take part in Eezy Flow's PeoplePower survey.

The Bank of Finland's most significant sustainability measures concerned implementation of the ECB's climate strategy and the sustainability objectives in the Bank's financial assets management. The Bank of Finland continued its preparatory work to take into account climate risks in monetary policy purchases of securities and in the collateral framework. In 2023, the Eurosystem published its first climate report on 'Climate-related financial disclosures of the Eurosystem's corporate sector holdings for monetary policy purposes'.

The Bank of Finland revised its <u>communications policy</u> on the basis of the Bank's strategy. The new core message is 'Securing stability using high-quality data', which indicates the Bank of Finland's role in society.

The key figures set out in the Bank of Finland's Data Balance Sheet provide a picture of the central bank's data-intensive work and its information resources. The key figures, data collections, analytical background information and details of improvements in information management are presented more extensively in the Bank of Finland's Data Balance Sheet, which is to be published in Finnish and in English in April.



Bank of Finland in 2023

22 Mar 2024

9

The Bank of Finland is Finland's monetary authority and is part of the Eurosystem. The Bank of Finland's strategy is centred on its vision statement: 'The Bank of Finland is an influential and respected central bank that maintains price and financial stability in all circumstances with the aim of promoting citizens' wellbeing'.

Bank of Finland's tasks and strategic priorities 2023

The Bank of Finland is Finland's monetary authority and national central bank. At the same time it is a part of the Eurosystem, which is responsible for monetary policy and other central bank functions in the countries of the euro area and for administering the world's second largest currency, the euro.

The main objective of the Eurosystem and the Bank of Finland is price stability, which means making sure that inflation remains low.

The Bank of Finland has both domestic and Eurosystem objectives.

The Bank of Finland

- prepares and implements monetary policy in Finland;
- oversees the stability of the financial system and produces statistics;
- conducts research and participates in economic policy debate;
- takes care of clearing for interbank payments and manages its own investments;
- maintains stable and efficient payment systems and issues banknotes and coins into circulation.

To carry out its tasks, the Bank of Finland has selected five strategic priorities for the next three years.

The Bank of Finland's strategic priorities are:

1. Analysing inflation dynamics and bringing high inflation down to its target level

Preparing monetary policy for conditions in which inflation is high or fluctuating requires new information. The Bank of Finland will deepen its understanding of the euro area's inflation dynamics with the aid of research and analysis.

2. Anticipating financial crises and strengthening bank resolution processes

The Bank of Finland will strengthen its operational readiness for any financial market disruptions.

3. Furthering the resilience of and alternatives for European retail payments

The Bank of Finland will focus strongly on preparatory work for a digital euro and on ensuring that an instant payment service based on European standards is introduced in Finland.

4. Promoting sustainable economic policy in Finland and the EU

The Bank of Finland aims to ensure that Finland's level of competitiveness is high and its economic growth is sustainable, and that the wellbeing of Finland's citizens is underpinned as much as possible by the EU and Monetary Union.

The European Central Bank's (ECB) climate strategy and the Bank of Finland's sustainability work will provide effective support for managing the risks related to climate change and to biodiversity loss.

5. Promoting the data economy

The aim is to make sure that the Bank of Finland and the FIN-FSA have comprehensive access to different datasets, and to ensure the accessibility, usability and efficient management of data and materials.

The Bank of Finland will improve its readiness, ability and competence to apply modern data analytics to data of all kinds and will be agile in creating solutions suitable for different purposes.

Bank of Finland's international cooperation in 2023

Economic and financial issues within the scope of central bank policies are cross-border in nature, so measures to address them call for close international cooperation.

The ECB and the national central banks are the main international partners of the Bank of Finland. The Governor of the Bank of Finland, Olli Rehn, is a member of the Eurosystem's highest decision-making body, the Governing Council of the ECB. The Governing Council's principal task is to decide on the monetary policy of the euro area.

The Governing Council meets regularly in the euro area member countries. In February 2023, the Bank of Finland organised a meeting of the ECB's Governing Council in Inari, Lapland. The Governing Council last held a meeting in Finland in 2011.



The Governing Council of the European Central Bank at the Sámi Cultural Centre Sajos in Inari, Lapland, February 2023.

The Bank of Finland is responsible for Finland's relations with the International Monetary Fund (IMF). The IMF works to foster international cooperation, open and rules-based foreign trade, sustainable economic growth and financial stability.

The Governor of the Bank of Finland is Finland's representative on the IMF's Board of Governors. Finland participates in the decision-making of the IMF as part of the IMF's Nordic-Baltic Constituency (NBC).

The financial support needs of IMF member countries grew in 2023 as a consequence of Russia's war in Ukraine, the surge in inflation and tightening of monetary policy. The IMF responded to the financing needs through actions including temporary emergency funding for countries affected by the food crisis.

<u>IMF communications (in Finnish)</u> emphasised the importance of protecting multilateral cooperation, opposing geoeconomic fragmentation and supporting the green transition.

The Governor of the Bank of Finland also participates in the regular meetings of the governors of the member central banks of the Bank for International Settlements (BIS).

The Bank of Finland participates in the work of EU institutions and committees. The Bank is a member of the EU's Economic and Financial Committee (EFC). The EFC was set up to promote economic policy coordination among EU Member States and to participate in the preparatory work for the EU's Economic and Financial Affairs Council, commonly known as the Ecofin Council.

The financial stability of the European Union is supervised by the European Systemic Risk Board (ESRB), which is responsible for preventing and minimising systemic risks. Governor of the Bank of Finland Olli Rehn was elected First Vice-Chair of the ESRB in April 2023.

The governors of central banks in the Nordic countries met in Copenhagen in May. They discussed the housing market and the transmission of monetary policy, among other things.

See Bank of Finland representatives at the ECB, EU and other international bodies (PDF).

Bank of Finland ranked among 'Finland's most inspiring workplaces 2023'

Satisfaction at work is monitored at the Bank of Finland using the PeoplePower index.

The Bank's index result of 74.5 on a scale of 0–100 was significantly above the norm for expert staff in Finland (72.3). The Bank of Finland was ranked among 'Finland's most inspiring workplaces 2023' in recognition of the results from its staff survey. The title is awarded annually to the best-performing organisations that take part in Eezy Flow's PeoplePower survey.

Chart 1.





The Bank of Finland was ranked among 'Finland's most inspiring workplaces 2023' in recognition of the results from its staff survey.

Sustainability work and climate measures in 2023

Sustainability is one of the key elements of the Bank of Finland's activities. The Bank's sustainability programme focuses on promoting sustainable growth and wellbeing, influencing policy and debate through information provision and active engagement, and managing climate risks.

14

The Bank of Finland's most significant sustainability measures concerned implementation of the ECB's climate strategy and the sustainability objectives in the Bank's financial assets management.

The aim of the ECB's action plan is to reduce the financial risk associated with climate change in the Eurosystem's balance sheet, improve the accessibility of information and support the transition to a greener economy. The Bank of Finland continued its preparatory work to take into account climate risks in monetary policy purchases of securities and in the collateral framework. In 2023, the Eurosystem published its first climate report on 'Climate-related financial disclosures of the Eurosystem's corporate sector holdings for monetary policy purposes'.

The Bank of Finland assesses how climate change will affect the functioning and risks of the financial system. In 2023, the Bank of Finland analysed the impact of climate change on the performance of banks and on macroprudential policy.

The Bank of Finland's financial assets management emphasises responsible investment. This is evident in the management of financial assets and forms a part of the investment policy. In 2023, the Bank of Finland monitored and reported the climate impacts of its investment activities in accordance with the Eurosystem's common reporting requirements.

The Bank of Finland aims to improve the efficiency with which it uses energy and materials in its own activities. As a result of improvements made in energy saving measures in the organisation's properties and changes made in construction investment, total emissions fell significantly in 2023. Take a look at the environmental impacts of the Bank of Finland in 2023.

Sustainability work at the Bank of Finland in 2023



The Bank of Finland was ranked among 'Finland's most inspiring workplaces 2023' in recognition of the results from its staff survey. The total emissions of the Bank of Finland decreased significantly.



purposes'.

The Eurosystem published its first climate report on 'Climate-related financial

disclosures of the Eurosystem's corporate

sector holdings for monetary policy



The Bank of Finland assessed the impact of climate change on the performance of banks and on macroprudential policy.



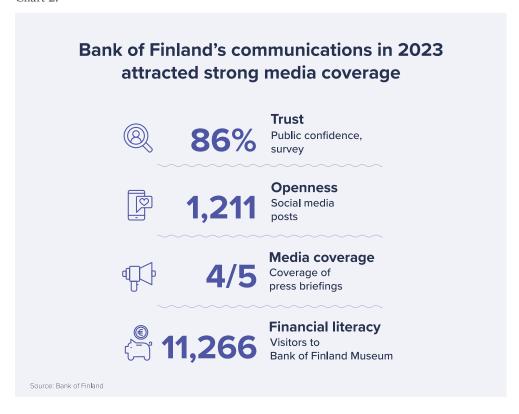
The Bank of Finland reported the climate effects of its investment activities in accordance with the Eurosystem's common reporting requirements.

The Bank of Finland's 2023 communications goals as key figures

The Bank of Finland revised its <u>communications policy</u> on the basis of the Bank's strategy. The new core message is 'Securing stability using high-quality data', which indicates the Bank of Finland's role in society.

The Bank of Finland produces and interprets high-quality data on the economy. The aim is that such data will enable better decisions to be made in society, amid the fake news and information influence activities of today's world.

Chart 2.



Bank of Finland's budget in 2023

The Bank of Finland's objective is to carry out its tasks in an economic and efficient manner. The Board evaluates implementation of the objectives on a quarterly basis.

Table 1.

Bank of Finland	Outturn 2023 EUR m	Budgeted 2024 EUR m
Operating expenses and income		
EXPENSES		
Staff expenses	-39.1	-40.8
Staff-related expenses	-2.7	-3.8
Other expenses	-32.7	-39.1
Banking service expenses	-8.4	-8.2

17

Bank of Finland	Outturn 2023 EUR m	Budgeted 2024 EUR m
Depreciation	-9.1	-9.7
Total	-92.0	-101.5
Banknote acquisition costs	-4.4	-5.9
Pension fund contribution	-8.3	-8.3
Total operating expenses	-104.7	-115.7
INCOME		
Banking service income	1.5	1.4
Real estate	5.1	5.0
Other income	1.3	0.4
Services to FIN-FSA	7.3	7.4
Total income	15.1	14.2
Net	-89.6	-101.5

Table 2.

Bank of Finland	Outturn 2023 EUR m	Budgeted 2024 EUR m
Investment		
Real estate investment	4.1	7.4
Head office premises	1.1	1.7
Vantaa premises	2.5	3.9
Other premises	0.4	1.8
IT equipment and software	3.5	5.7

Bank of Finland	Outturn 2023 EUR m	Budgeted 2024 EUR m
Cash handling machines	0.1	0.1
Security equipment	0.9	1.3
Other	0.0	0.2
Total investment	8.5	14.6

Table 3.

Pension fund	Outturn 2023 EUR m	Budgeted 2024 EUR m
Operating expenses and income		
EXPENSES		
Staff expenses	-0.0	0.0
Expenses for pension fund activities	-0.2	-0.3
Pension fund real estate expenses	-0.7	-0.6
Depreciation	-1.0	-1.0
Pensions paid	-31.5	-33.5
Total expenses	-33.4	-35.4
INCOME		
Employment pension contributions	14.1	15.0
Internal rents	1.8	2.0
Pension fund contribution	10.0	10.0
Total income	25.9	26.9
Net	-7.5	-8.5

Due to rounding, the totals do not necessarily tally.

Table 4.

Financial Supervisory Authority	Outturn 2023 EUR m	Budgeted 2024 EUR m
Operating expenses and income		
EXPENSES		
Staff expenses	-26.3	-28.2
Staff-related expenses	-0.6	-1.3
Other expenses	-6.4	-8.5
Depreciation	-1.0	-1.3
Services from the Bank of Finland	-7.3	-7.4
Pension fund contribution	-1.7	-1.7
Total operating expenses	-43.3	-48.4
FUNDING OF OPERATIONS		
Supervision fees	40.7	41.0
Processing fees	2.1	1.9
Bank of Finland contribution to funding	2.2	2.4
Surplus/deficit transferred from previous year	2.3	3.1
Total income	47.3	48.4
Surplus transferred to next year	-3.9	

Financial Supervisory Authority	Outturn 2023 EUR m	Budgeted 2024 EUR m
Investment		
IT equipment and software	1.8	2.7
Total investment	1.8	2.7

Data Balance Sheet

The key figures set out in the Bank of Finland's Data Balance Sheet provide a picture of the central bank's data-intensive work and its information resources. The key figures, data collections, analytical background information and details of improvements in information management are presented more extensively in the Bank of Finland's Data Balance Sheet, which is to be published in English in April.

Table 5.

	2023	2022
Case management and documents		
Matters entered in case management system	507	566
Documents stored in case management system	2,515	2,447
Documents transferred to digital archive*	20,606	6,505
Documents in digital archive, total	453,427	432,831
Number of visitors to historical archive	12	4
Duration of visits (hours, total)	63	42
Data and statistics assets		
Statistical data collections performed	12	12
Regular reporters of statistics	1,645	1,675
Statistical data collection reports received	26,046	24,771
Time series entries in the time series database	12,047,416	10,265,341
Statistics dashboards in external network	57	37
API calls in open data service (million)	12	2.5
Requests for experts, statements and information		
Requests for experts		17 52
Requests for statements	2	17 38
Requests for information		10 42

 $^{^{*}}$ The archiving function of the electronic workspaces was introduced in June 2023.



Division of responsibilities between members of the Board

22 Mar 2024

The Board consists of three members: Governor Olli Rehn, Deputy Governor Marja Nykänen and Member of the Board Tuomas Välimäki.



Governor of the Bank of Finland Olli Rehn

Governor Olli Rehn's responsibilities at the Bank of Finland cover monetary policy preparation, domestic economic policy, external communications, international affairs and internal audit. The Governor is a member of the Governing Council of the European Central Bank (ECB) and represents Finland on the Board of Governors of the International Monetary Fund (IMF).



Deputy Governor of the Bank of Finland Marja Nykänen

Marja Nykänen's responsibilities cover financial stability issues, macroprudential policy, statistics, legal affairs, financial and personnel administration, and security and real estate issues. She also has responsibility for the risk control of investment activities and of monetary policy, the financial stability process and the activities of the Management Group of the Bank of Finland's Pension Fund. Nykänen is Chair of the Board of the Financial Supervisory Authority (FIN-FSA).



Member of the Board Tuomas Välimäki

Tuomas Välimäki's responsibilities include monetary policy implementation, investment of the Bank of Finland's financial assets, payment systems and cash supply. In addition, his responsibilities cover information management, the development of a digital euro, the Bank's research function and the Bank of Finland Institute for Emerging Economies (BOFIT). Välimäki is an alternate member of the Governing Council of the ECB.

Read more about the Board of the Bank of Finland.

Governor Olli Rehn's leave of absence

Governor Olli Rehn was on leave of absence from 23 September 2023 to 30 January 2024. During that period the duties of Governor of the Bank of Finland were performed by Marja Nykänen. Rehn appointed Tuomas Välimäki to act in his absence as a member of the Governing Council of the ECB.

Decisions regarding deputising arrangements are made by the Parliamentary Supervisory Council. Adviser to the Board Kimmo Virolainen served as Acting Member of the Board of the Bank of Finland.



Environmental impact of Bank of Finland's activities in 2023

22 Mar 2024

The Bank of Finland aims to continuously improve its protection of the environment and to increase the efficiency with which it uses energy and materials. The total emissions of the Bank of Finland and the Financial Supervisory Authority (FIN-FSA) fell significantly in 2023 as a result of energy saving measures in the various properties and changes in construction investment.

IN BRIEF

Carbon footprint

The combined carbon footprint for the Bank of Finland and the FIN-FSA covers the emissions from their own activities and from the value chain. The combined emissions figure for 2023 was 33% lower than the previous year.

Energy saving measures

A number of energy saving measures were made at the Vantaa premises in 2023, reducing the location's overall electricity consumption by 11%. Measures were also taken to reduce energy consumption at the Helsinki premises.

Largest sources of emissions

Suurin osa Suomen Pankin ja Finanssivalvonnan päästöistä syntyy arvokMost of the emissions from the Bank of Finland and the FIN-FSA are generated in the value chain. The most significant emission sources in the value chain in 2023 were construction investment, procurement, purchased services and business travel.

The carbon footprint of the Bank and the FIN-FSA has been measured since 2021 using the internationally approved and recommended Greenhouse Gas (GHG) Protocol guidelines.

No significant changes have been made to the emission calculation for 2023 in comparison with the previous year's calculation. The emission results for 2021–2023 are comparable with each other as they all use the new method of calculation. However, these results are not comparable with emissions data from earlier years.

Bank of Finland's carbon footprint in 2023

Globally recognised GHG Protocol guides calculation of Bank of Finland's carbon footprint

The GHG Protocol is the standardised calculation method that is most widely used internationally to determine and report on the greenhouse gas emissions of companies and other organisations.

The GHG Protocol divides emissions into direct and indirect emissions using three different emission categories or 'scopes'.

Scope 1: these are direct emissions that occur as a result of an organisation's own operations, and they are the easiest to manage. The Scope 1 emission sources of the Bank of Finland and the FIN-FSA relate to fuel consumption in vehicles and equipment owned or hired by the organisation.

Scope 2: these are indirect emission sources related to the use of purchased energy in the organisation's workspaces and facilities, such as emissions from the generation of electricity.

Indirect emissions from the generation of purchased energy were calculated using a market-based calculation method. The calculation therefore takes into account the power generation method used by those supplying energy to the Bank and the FIN-FSA. The energy purchased is more environmentally friendly than the average for Finland as a whole.

27

Scope 3 covers the emission sources for the organisation's entire value chain. Indirect emissions in the value chain relate to the purchases made by the Bank and the FIN-FSA, the services they use, construction investment, primary production of fuels purchased, transport, office waste, business trips, commuting, working from home and the energy consumption of tenants.

Energy saving measures

The Bank of Finland's carbon footprint decreased in 2023 due to energy saving measures and despite the global political situation

The combined carbon footprint for the Bank of Finland and the FIN-FSA in 2023 was 5,514 tCO₂e, which covered emissions from their own operations and from the value chain. This was a reduction of 33% from the previous year's total.

The emissions from the operations of both organisations (Scope 1 and Scope 2) amounted to 1,229 tCO₂e in 2023, representing a reduction of 5% on the previous year's figure.

Scope 2 emissions were affected by several factors. A number of energy saving measures were made at the Vantaa premises in 2023, reducing overall electricity consumption. However, emissions from energy production in Finland rose as a result of Russia's war in Ukraine, making both heat and electricity generation more carbon intensive than previously, and renewable energy sources were used less in production than before.

Energy production will continue to focus on low-emission forms of production. The reduction in electricity consumption will also be reflected in lower emissions in Vantaa.

Some of the lighting at the Vantaa premises was replaced with LED lighting, and frequency converters were installed in the air conditioning system to reduce energy consumption. Thermal insulation of the premises was improved by renewing some of the external glazing with more energy efficient material and by improving the insulation of the building's facade.

These measures reduced electricity consumption by 11%, but differences in heat consumption are likely to be seen only in the years ahead, due to annual temperature fluctuations.

Energy saving measures were also carried out at the Helsinki premises, though their impact on emissions will be seen only after a time lag. Restoration work on the main doors of the Rauhankatu premises and renewal of its main ventilation blowers, and the addition of frequency converters to control them, will reduce energy use, as will the air source heat pumps installed at the Lower Villa in Ramsinniemi.

Bank of Finland's largest sources of emissions in 2023

Most of the emissions from the Bank of Finland are generated in the value chain

Most of the emissions from the Bank of Finland and the FIN-FSA are generated in the value chain (i.e. they are Scope 3 emissions). Scope 3 emissions in 2023 amounted to 4,286 tCO₂e, or 78% of total emissions. The most significant emission sources were construction investment, procurement, purchased services and business travel.

Scope 3 emissions decreased by 39% compared with 2022, particularly as a result of the significantly lower number of construction and renovation projects in comparison with the previous year. In addition, energy saving measures at the Vantaa premises had an impact, which also significantly reduced the indirect emissions of tenants.

Only the emissions from business travel increased significantly compared to the previous year's calculation. This is explained by natural variations from one year to the next and by the post-pandemic normalisation of working practices.

The Bank of Finland and the FIN-FSA monitor the environmental impact of their operations using an indicator that presents emissions in proportion to operating expenses. It takes account of all the emissions from their own operations and from the value chain (Scopes 1–3).

The 2023 figure for emissions in proportion to operating expenses was 48 kg/tCO₂e/EUR 1,000.



The total emissions of the Bank of Finland decreased significantly.



Bank of Finland's indicator targets and their achievement in 2023

22 Mar 2024

The Bank of Finland is an influential and respected central bank

Guiding principle

1. We create added value through expertise, insightful solutions and confidence-building cooperation.

Public survey on the Bank of Finland's reputation and on public confidence in the Bank

Objective > 75% of Finns have confidence in the Bank of Finland

 12/2021
 12/2022
 12/2023

 New indicator
 83%
 86%

Guiding principle

2. We base our statements and decisions on knowledge, research and high-quality analysis.

•	eighted inde	me of research activities x of peer-reviewed
Objective	≥ 32	
12/2021	12/2022	12/2023

Guiding principle

3. We participate in social discourse, reach our stakeholders and engage in constructive dialogue in Finland and the Eurosystem.

	inland's med	ctiveness index of the lia output (Euro & talous
Objective	≥ 4	
	12/2022	12/2023
12/2021	12/2022	,

The Bank of Finland maintains price and financial stability in all circumstances

Guiding principle

4. We provide advanced and reliable central bank services for the changing needs of Finnish society.

TARGET services and collateral management		
Objective ≥ 93%	of responden	ts satisfied
12/2021 Modified indicator	12/2022 100 %	12/2023 100 %

Professional cash handlers			
Objective ≥ 75%	of responden	ts satisfied	
12/2021	12/2022	12/2023	
Modified indicator	90%	95%	

VI-1	- 6	
Objective ≥ 80%	of responden	its satisfied
12/2021	12/2022	12/2023
12/2021	12/2022	12/2023
Modified indicator	91%	81%

Objective	000%		
Objective	satisfied	umer survey respondents	
2/2021	12/2022	12/2023	
19%	91%	90%	

Guiding principle

5. We ensure operational continuity by preparing for changes, disruptions and crises.

Reserve fund + reserves relative to the assessed balance sheet risks.

Objective We accumulate reserves to achieve a sufficiently strong balance sheet under all circumstances.

12/2021 12/2022 12/2023
EUR 6,807 EUR 6,622 EUR 5,650
million million million

Number of severe disruptions. Extensive disruptions or system disturbances to critical business operations affecting the Bank of Finland or the Financial Supervisory Authority and lasting longer than one hour.

Objective	0	
12/2021	12/2022	12/2023
0	0	0

Guiding principle

6. We develop our expertise and working practices on a long-term basis and with an eye to the future.

Our management index surpasses the
outcomes of external peer groups.

Objective	≥ 73.0		
12/2021	12/2022	12/2023	
73.4	75.2	74.5	

Our job satisfaction index surpasses the outcomes of external peer groups.

40/0000
12/2023
every 74.5

Annual implementation of individual development plans

Objective	Over 80% o	f plans implemented well
12/2021	12/2022	12/2023
80%	72 %	78%

The Bank of Finland promotes citizens' wellbeing

Guiding principle

7. We act responsibly and in accordance with the principles of sustainable development.

Carbon footprint, total emissions/operating expenditure of the Bank of Finland and the Financial Supervisory Authority

Downward trend	
12/2022	12/2023
77 kg carbon	48 kg carbon
dioxide / EUR	dioxide / EUR
1,000	1,000
	77 kg carbon dioxide / EUR

Observance of the UN Principles for Responsible Investment

Objective	reporting and/or the assessment framew and integrated with the action planning process	
12/2021	12/2022	12/2023
_	Areas for	Principles
	improvement	complied
	integrated with the	with.
	action plans.	

Guiding principle

8. We carry out our activities effectively and efficiently, maintaining stable profit distribution to the State without jeopardising the Bank's capital adequacy.

Distributed profit to the State			
Objective Pred	ictable profit	distribution	
12/2021	12/2022	12/2023	
EUR 26.3 million	EUR 0	EUR 0	

Interest income on foreign reserves above the average central bank interest (5-year average) on the currencies in the currency reserve

Objective	> 0%		
12/2021	12/2022	12/2023	
0.8%	-0.15%	-0.20%	

Return on long-term investment above the EUR central bank interest rate

Objective	> 0%	
12/2021	12/2022 New indicator	12/2023 4.93 %

Combined full-time equivalent of permanent, fixed-term and temporary staff

Objective	2023: ≤ 398		
12/2021	12/2022	12/2023	
376	375	379	

Aggregate departmental operational expenditure

Objective	2023: ≤ EUR 98 million		
12/2021	12/2022	12/2023	
-	Calculation method	EUR 92	
	changed	million	

Guiding principle

9. We promote citizens' knowledge of the economy, the Bank of Finland and the Eurosystem by providing understandable information.

Number of visits to the Bank of Finland Museum incl. participation in virtual events			
Objective	Upward tre	nd	
12/2021 –	12/2022 10535	12/2023 12154	

Objective	Average duration of	visit ≥ 1 minute
12/2021	12/2022	12/2023
1 minute 06	1 minute 43	1 minute 44
seconds	seconds	seconds

Time spent on the Bank of Finland's websites

Engagement	rate	for	social	media	posts	(X)

Objective	≥ 3%	
12/2021	12/2022	12/2023
1.5 %	2.2 %	2.1 %



Organisation

31 Dec 2023

Parliamentary Supervisory Council

Chair

Antti Lindtman

Vice Chair

Matias Marttinen

Minna Reijonen

Ville Vähämäki

Ben Zyskowicz

Janne Heikkinen

Krista Kiuru

Katri Kulmuni

Sakari Puisto

Secretaries to the Parliamentary Supervisory Council

Kimmo Virolainen

Anne Hedman

37 BANK OF FINLAND

Board

Governor

Olli Rehn

Deputy Governor

Marja Nykänen

Member of the Board

Tuomas Välimäki

Secretary to the Board

Elisa Newby

Departments

Monetary Policy and Research

Juha Kilponen

Forecasting

Meri Obstbaum

Monetary Policy and Euro Area Economy

Markku Lehmus

Bank of Finland Institute for Emerging Economies (BOFIT)

Iikka Korhonen

Research

Esa Jokivuolle

Macroprudential Analysis

Helinä Laakkonen

Macroprudential Policy

Hanna Freystätter

Financial Stability and Statistics

Katja Taipalus

Financial Statistics

Elisabeth Flittner

Statistical Analysis and Information Services

Harri Kuussaari

Market Operations

Marjaana Hohti (Acting Head of Market Operations)

Monetary Policy Implementation

Niko Herrala

Asset Management

Jarno Ilves

Banking Services

Teemu Peltoniemi

Counterparties and Collateral

Katri Järvinen (Acting Head of Division)

Cash Division

Heli Snellman

Oversight of Market Infrastructure

Jussi Terho

Payment Systems

Päivi Heikkinen

Fintech

Aleksi Grym

General Secretariat

Elisa Newby

International Affairs

Satu Kivinen

Legal Affairs

Jutta Koivisto

Communications

Jenni Hellström

Strategy and Organisation

Assistant Services for the Board

Administration

Veli-Matti Lumiala

Administrative Services

Hannu Vesalainen

Personnel and Financial Control

Antti Vuorinen

Language Services

Eija Puttonen

Risk Control and Financial Accounting

Antti Nurminen

Security and Property Management

Marko Lavikkala

Financial Supervision IT services

Meri Verho

ICT and Information Management

Petteri Vuolasto

Bank of Finland IT Services

Petri Salminen

Shared IT Services

Sami Kirjonen

Shared Information Management Services

Mia Ristimäki

- Content Management Services
- **Document Management Services**
- Library and Information Services

Internal Audit

Helena Rantanen

The Financial Supervisory Authority, headed by Tero Kurenmaa, operates in association with the Bank of Finland.



Annual report

22 Mar 2024

A sharp increase in geopolitical tensions and the resulting economic uncertainty characterised the operating environment of the Bank of Finland and the entire Eurosystem in 2023. Central banks curbed inflation by tightening their monetary policy. The effects of higher interest rates were felt in the financial and housing markets.

The Eurosystem, comprising the European Central Bank (ECB) and the national central banks of the euro area, is responsible for conducting monetary policy in the euro area. The Bank of Finland participates in the preparation of and decision-making on the Eurosystem's single monetary policy and is responsible for its implementation in Finland.

The Bank of Finland's tasks include maintaining the stability of the financial system in Finland. The objective is to identify in good time the vulnerabilities that threaten financial stability and to prevent banking and financial crises. The Bank of Finland's economic forecasts and risk assessments make use of high-quality statistics prepared by the Bank.

The Bank of Finland's tasks include the assessment of system risks, work to promote payment efficiency, and analysis that supports these tasks. In payment and settlement systems, the priorities for 2023 were national preparedness and the future of European payments.

One of the statutory tasks of the Bank of Finland is the holding and management of foreign reserves. After a difficult year in 2022, the situation in the financial markets was more favourable for investment returns in 2023.



Operating environment

22 Mar 2024

A sharp increase in geopolitical tensions and the resulting economic uncertainty characterised the operating environment of the Bank of Finland and the entire Eurosystem in 2023. Central banks curbed inflation by tightening their monetary policy. The effects of higher interest rates were felt in the financial and housing markets.

IN BRIEF



Geopolitical tensions and economic uncertainty

In 2023, Russia's war in Ukraine and the trade disputes between the United States and China continued, and the Middle East crisis came to a head in Gaza. These fuelled supply disruptions and trade wars and affected the energy and financial markets. These factors also accelerated inflation and slowed economic growth.

Inflation and tighter central bank monetary policy

The euro area economy was hampered by rising inflation and weaker economic performance in 2023. Like many other central banks, the European Central Bank (ECB) tightened its monetary policy in order to curb price pressures. Inflation did then slow down in the euro area during the course of the year. Globally, monetary policy tightening had a considerable impact on world trade, also reducing aggregate demand in the euro area due to its subdued export markets. With euro area domestic demand also being muted, the economic outlook weakened extensively in 2023.

Monetary policy tightening was transmitted forcefully in Finland

In 2023, the Finnish housing and real estate markets were particularly strongly affected by rising interest rates, as were the loan servicing costs of businesses and households. Inflation eroded purchasing power, and export demand was muted. The Finnish economy slid into recession and the unemployment rate rose. Public finances suffered from the growing deficit and debt level.



Geopolitical tensions accelerated inflation

Geopolitical tensions increased and the global economy became more fragmented in 2023

In 2023 there was great uncertainty in the economic environment, which was fuelled by the various global crises occurring in succession and by geopolitical tensions.

Russia's war in Ukraine was already in its second year. In Europe the energy sector encountered disruptions and price increases. The war which broke out in Gaza in the Middle East also created uncertainty towards the end of 2023 and, among its other impacts, it affected international freight traffic.

International conflicts, trade wars and political disputes caused disruptions to international trade, energy markets and financial markets. Trade wars led to higher tariffs and hampered supply chains, productivity and economic growth, and fuelled inflation.

In 2023, the trade tensions especially between the United States and China also contributed to global economic fragmentation, i.e. the division into competing blocs.

Monetary policy tightening and the euro area's economic challenges

Central banks curbed inflation and tightened their monetary policy in 2023

Efforts to control inflation and maintain financial stability faced a wide range of challenges in 2023 due to global uncertainties.

Many central banks around the world tightened their monetary policies in order to alleviate the price pressures which had spread to the energy and commodity markets, and from there to other parts of the economy.

Euro area economic performance weakened in 2023. Heavy industry, in particular, was in great difficulty due to rising energy and raw material prices. Weak economic growth globally, and particularly in China, also strained the export outlook.

The economy also lacked support from domestic demand, as inflation eroded consumers' purchasing power and the high interest rates dampened construction and investment.

At the beginning of 2023, the annual inflation rate in the euro area was still 8.6%, but this fell steadily throughout the year. Monetary policy tightening reduced demand and eased price pressures. The stabilisation of energy prices was also a major factor contributing to the fall in inflation to 2.9% in December 2023. The annual inflation rate for the whole of 2023 was 5.4%.

End of rise in market rates in the euro area

In 2023, the rise in longer term market interest rates came to an end in the euro area financial markets. Market rates started to decline at the end of the year, as the market anticipated that the ECB would start cutting policy rates during 2024. German 10-year bonds approached a peak of 3% in the autumn, but were at about 2% at year end. The closing level was 0.5 percentage points lower than at the end of 2022.

At the close of 2023, the German 2-year rate was at the same level as the beginning of the year, at around 2.5%. For countries with a lower credit rating, the 10-year yield spreads against Germany narrowed throughout 2023, especially in Greece. Finland's corresponding yield spread against Germany remained unchanged in 2023 (approximately 0.5 percentage points).

On the money market, the 12-month Euribor rose by 0.2 percentage points to 3.5% during 2023. The euro strengthened against the US dollar by 3%, with a year-end exchange rate of USD 1.10. The gold price in euros rose by around 10%, reaching a new nominal peak of nearly EUR 1,900 per ounce at the end of the year.

The euro area equity market had a good year, as interest rate expectations started to decline towards the end of the year and the economic news was favourable, especially in the United States. Euro area equities rose by 14% as measured by the EURO STOXX Index. However, the broad OMX Helsinki Index declined by 7%. Finnish equities slid down due to lacklustre domestic economic performance and an unfavourable sectoral distribution.

Weak performance in Finnish economy in 2023

Finnish economy slid into recession in 2023

The Finnish economy slid into recession in 2023, with gross domestic product (GDP) contracting by 1.0% from the previous year. The reasons for this included the impact of inflation on purchasing power, the tighter financing conditions and the weak performance of export markets. GDP was nevertheless bolstered by the positive figure for net exports as a result of imports declining by more than exports. Finland's cost competitiveness weakened in relation to the euro area.

There was also a broad decline in domestic demand. Consumer confidence was weak, and private consumption contracted by 1.0% from the previous year. The steep increase in interest rates, the rapid rise in costs for businesses and waning demand caused a reduction in residential and non-residential investment.

Because of the weak cyclical conditions, the labour market situation also deteriorated in 2023. The unemployment rate rose to 7.2% and the number of hours worked decreased slightly. However, the employment rate remained fairly good, and many sectors were still suffering from labour shortages.

The fiscal deficit grew to 2.5%, while the final-quarter figure for general government debt rose to 75.8% of GDP.

Higher interest rates reduced investment appetite in Finland in 2023

In 2023, higher interest rates raised the debt servicing costs of businesses and households and made new loans more expensive than before. Changes in money market rates were quickly transmitted to lending rates in Finland, as short-term market rates are widely used by banks as reference rates for mortgages and corporate loans.

Higher interest rates reduced the willingness of households and businesses to take out loans and make major investments.

A slowdown was evident in housing and real estate transactions, in particular. The number of housing transactions was substantially below normal in Finland. The transaction volume increased at the end of the year, when the Government enacted changes to the asset transfer tax arrangements for housing transactions.

Record drop in housing prices in Finland in 2023

The prices of existing dwellings in housing companies in Finland declined by about 10% between June 2022 and December 2023 – the biggest drop since the economic and banking crisis of the early 1990s. The fall in housing prices was especially marked in the Helsinki metropolitan area and in the major cities.

Although the steep decline in the number of new residential construction starts continued in 2023, there were also a large number of completions of previously started projects. The number of bankruptcies among construction companies was higher in 2023 than in 2009, the year following the global financial crisis.

Despite the weakness in the economy, Finnish households and businesses for the most part coped with their higher loan servicing costs.

Finnish banks' credit losses increased only a little. The profitability and capital adequacy of the banks even improved, as higher interest rates expanded their net interest income.

Resilience of the financial system and critical payment systems put to the test

International banking system's resilience withstood the turbulence caused by rising interest rates

In the international financial markets, the most dramatic consequences of the rise in interest rates were seen in March 2023, when the California-based Silicon Valley Bank failed because of its excessive liquidity risks. Shortly afterwards, the Swiss banking giant Credit Suisse, which had long been in difficulty, was sold to its rival.

However, the market turmoil remained short-lived mainly due to the prompt action taken by the US authorities and the robust resilience of the international banking system.

Preparations for payment disruptions and elevated risks continued in 2023

In 2023, payment systems in Finland functioned reliably for the most part and without any major disruptions, despite the strained geopolitical situation.

The Bank of Finland aims to ensure the continued operation of financial market services critical for society, such as payments, during any serious disruptions occurring in normal times, and in exceptional circumstances. With this in mind, backup arrangements were developed further, and drills and testing were increased in 2023. See the Act on Certain Backup and Emergency Arrangements in the Financial Sector (666/2022) (in Finnish).

At the same time, the ECB's extensive system reforms progressed. The Bank of Finland participated actively in these.

The update of the Eurosystem's retail payments strategy in 2023 supported the priorities of the Bank of Finland's own operations in regard to promoting preparedness and single European payments. Progress was made with the Commission's regulatory initiatives concerning the availability of instant payment options to everyone, clarification of the definition of legal tender, and euro cash and a digital euro.

Climate change and biodiversity loss pose risks to the financial sector as well

Climate change was seen and felt tangibly during 2023, with an abundance of extreme weather events around the world and new temperature records being set.

The Synthesis Report of the UN Intergovernmental Panel on Climate Change (IPCC) published in March 2023 noted that the climate has already warmed by 1.1 °C from pre-industrial levels. It was still felt to be possible to limit warming to 1.5 °C, but this would require critical measures.

A unanimous agreement for a transitioning away from fossil fuels was reached at the United Nations Climate Change Conference (COP28) held in Dubai in late November and early December.

In 2023, increasing attention was given to biodiversity loss as a key environmental challenge. Both climate change and the decline in biodiversity pose risks for the economy and the financial sector.

It is essential that central banks assess the impacts of these changes and of transitioning to a carbon-neutral society, so that they can take these into account when safeguarding price stability and the stability of the financial sector.

Data and technology are shaping the operations of central banks

The fourth industrial revolution, namely the huge transformation under way through digitalisation and technology, is profoundly changing the operating environment. The significance and use of data of all kinds is emphasised strongly in this new environment.

The Bank of Finland and the FIN-FSA must keep abreast of developments. The Bank and the FIN-FSA established the Analytics Center of Excellence in 2023, which supports the more effective use of data science, provides peer support and facilitates the development and uptake of new methods. The first information strategy of the Bank of Finland and the FIN-FSA was approved in the latter part of 2023. The information strategy supports a joint data economy promotion project, which will be launched in early 2024.



Monetary policy

22 Mar 2024

The Eurosystem, comprising the European Central Bank (ECB) and the national central banks of the euro area, is responsible for conducting monetary policy in the euro area. The Bank of Finland participates in the preparation of and decision-making on the Eurosystem's single monetary policy and is responsible for its implementation in Finland.

IN BRIEF

Objectives and measures

The main objective of the Eurosystem is to keep euro area inflation at 2% over the medium term. As inflation was significantly above this target at the start of 2023, monetary policy decisions focused on bringing it down.

Implementation and results

The Governing Council of the ECB tightened its monetary policy a number of times during 2023. The most important measures were interest rate increases and reductions in purchase programmes and refinancing operations. Inflation was 8.6% in January and 2.9% in December.

Climate change considerations in monetary policy implementation

In 2023, the Eurosystem published for the first time a report on climate-related disclosures of its corporate securities holdings purchased for monetary policy purposes. The disclosures, prepared in line with international reporting recommendations, increase transparency about the Eurosystem's monetary policy measures.



Monetary policy stance in 2023

The main objective of the Eurosystem is to keep euro area inflation at 2% over the medium term, in line with the ECB's new monetary policy strategy published in 2021. As inflation was significantly above target at the start of 2023, the Governing Council of the European Central Bank (ECB) tightened its monetary policy during the year, particularly by raising interest rates and scaling down purchase programmes and refinancing operations.

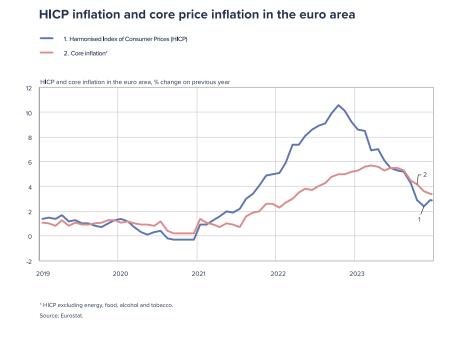
The Governing Council is responsible for taking decisions on monetary policy in the euro area. The Governing Council consists of the six members of the ECB's Executive Board and the governors of all the euro area national central banks, including the Governor of the Bank of Finland, Olli Rehn. During Rehn's leave of absence in autumn 2023, his place on the Governing Council was taken by Member of the Board of the Bank of Finland Tuomas Välimäki.

The Governing Council takes decisions on the key ECB interest rates and asset purchase programmes at its monetary policy meetings. These decisions are supported by analyses and forecasts of developments in the financial markets and the economy, prepared by experts from the ECB and the Eurosystem. The ECB's Governing Council held eight monetary policy meetings in 2023.

Euro area inflation was high at the start of 2023, and the ECB's monetary policy decisions focused on bringing it down.

The Governing Council tightened its monetary policy a number of times during 2023. Inflation fell from 8.6% in January to 2.9% in December as a result of declining energy prices, tighter monetary policy and weaker demand (Chart 3). Long-term inflation expectations have stayed close to the ECB's inflation target of 2%.

Chart 3.



Changes in key ECB interest rates

The ECB has tightened its monetary policy particularly by raising its key interest rates (also known as its policy rates) and reducing the size of its balance sheet.

Monetary policy is calibrated on the basis of the latest data, and during 2023 the key ECB interest rates were raised six times and by altogether 2 percentage points.

In February and March, the Governing Council decided to raise the key rates by 0.50 percentage points. Smaller rate hikes of 0.25 percentage points followed in May, June, July and September. At the last meetings of the year – in October and December – the policy rates were kept unchanged.

The ECB's most important policy rate, the deposit facility rate, was raised from 2.00% to 4.00% in 2023. The interest rate on the main refinancing operations was raised from 2.5% to 4.50%, and the rate on the marginal lending facility from 2.75% to 4.75%. Read more on the ECB's interest rate decisions.

The ECB's deposit facility rate increases were rapidly and fully passed on to the money market. The Governing Council facilitated this by deciding in February 2023 to lower the ceiling for the remuneration of non-monetary policy deposits.

In July, the Governing Council decided to set the remuneration of minimum reserves at 0% in order to improve the efficiency of monetary policy.

Chart 4.





Asset purchases and size of the central bank's balance sheet

The ECB curbed inflation in 2023 not only by raising interest rates but also by reducing the size of its balance sheet. This occurred through reduced reinvestment of maturing securities and via the maturities of refinancing operations.

This process of reducing the balance sheet, or quantitative tightening (QT) of monetary policy, was executed passively by letting the balance sheet shrink as targeted longer-term refinancing operations (TLTROs) matured and as bonds acquired under monetary policy purchase programmes matured and were no longer reinvested in full.

Full reinvestments of the principal payments from maturing securities purchased under the asset purchase programme (APP) were continued until the end of February 2023.

In March 2023, in line with its earlier notification, the ECB started to reduce the size of the APP portfolio by allowing the securities to mature without replacing them. At its meeting in June 2023, the Governing Council decided to discontinue the reinvestments under the APP.

With respect to the pandemic emergency purchase programme (PEPP), reinvestments of the principal payments from maturing securities were continued throughout the year.

In December 2023, the Governing Council <u>decided that full reinvestments of the principal</u> payments from maturing securities under the PEPP would only be maintained up to the end of the first half of 2024.

Over the second half of 2024, PEPP holdings will be allowed to shrink by EUR 7.5 billion per month on average. PEPP reinvestments are intended to be discontinued completely at the end of 2024.

The Eurosystem's APP holdings decreased from EUR 3.254 trillion to EUR 3.026 trillion in 2023.

The ECB publishes the Eurosystem's PEPP holdings every two months. At the end of November 2023, the value of PEPP holdings was EUR 1.660 trillion, a decrease of EUR 23 billion compared with a year earlier.

The Governing Council will continue applying flexibility in reinvesting redemptions coming due in the PEPP portfolio, with a view to countering risks to the monetary policy transmission mechanism related to the pandemic.

As necessary, the ECB may also activate the <u>Transmission Protection Instrument</u> (TPI) to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the euro area.

No new targeted longer-term refinancing operations (TLTROs) have been conducted since 2021. Most of the targeted refinancing operations have already matured, and this has contributed to reducing the Eurosystem's balance sheet. Banks have also voluntarily made early repayments of the TLTRO funds borrowed. All the remaining TLTROs will mature by December 2024.

With the reduction in outstanding TLTROs, the demand for financing by banks in the one-week main refinancing operations (MROs) and the three-month longer-term refinancing operations (LTROs) increased slightly in 2023 but nevertheless remained very low.

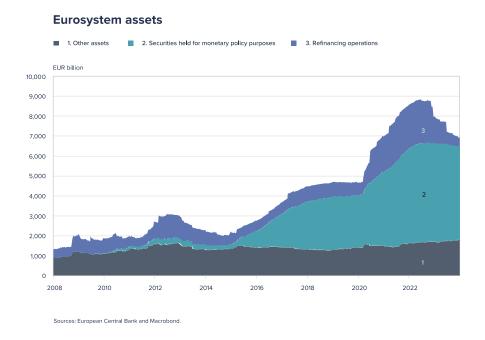
The outstanding amount of Eurosystem refinancing operations decreased in 2023 by EUR 1.323 trillion, to EUR 410 billion. As a consequence, the amount of collateral deposited with the Eurosystem also decreased to an average of EUR 1.900 trillion in 2023 (-28%).

The gradual phasing out of the pandemic collateral easing measures decided by the ECB Governing Council in 2022 continued in 2023 by raising the valuation haircuts for all eligible assets to the pre-pandemic level on the basis of the Eurosystem's updated risk assessment.

During the period of banking turbulence in March 2023, the ECB, together with other major central banks, temporarily increased the frequency of <u>US dollar liquidity-providing operations</u>. However, the demand in these operations remained low.

The Eurosystem's balance sheet shrank by about EUR 1.000 trillion to approximately EUR 7.000 trillion in 2023, due to the maturing of both monetary policy securities and TLTROs. Excess liquidity in the euro area banking system, in turn, decreased by around EUR 500 billion, to EUR 3.500 trillion.

Chart 5.



Monetary policy preparation in 2023

The Bank of Finland is an influential member of the Eurosystem and expresses its views on the basis of data, research and high-quality analysis. These principles guide the preparatory work on monetary policy at the Bank of Finland and in the Eurosystem's Monetary Policy Committee and its working groups. Experts from the Bank of Finland are extensively involved in the activities of the Committee and its working groups.

The preparatory work on monetary policy at the Bank of Finland is overseen by the Monetary Policy Preparation Process, which is a group of experts combining expertise from the Bank's various departments. It is responsible for preparing recommendations for the Bank of Finland Governor in support of the Governor's role in monetary policy decision-making in the ECB Governing Council and in related policy discussions.

The expert group is also tasked with analysing structural issues concerning the monetary policy environment and related conditions and providing support for Finnish and international communication on monetary policy.

In 2023, the focus of monetary policy preparation was on the application of the ECB's new monetary policy strategy and on the transmission of monetary policy in the new inflation environment, taking into account country-specific differences, indebtedness and fiscal implications.

Analysis work carried out by the Bank of Finland in 2023 focused especially on inflation dynamics and measures to bring high inflation down to the target level, and on the development of the ECB's new operational framework for implementing monetary policy.

Analysis and forecasting of euro area economic growth and inflation are an integral part of monetary policy preparation

Before each monetary policy meeting of the ECB, the Bank of Finland draws up a comprehensive analysis of the euro area economy, covering the particular trends and developments in the real economy, prices and financial markets that are relevant to the ECB's monetary policy.

The analysis makes extensive use of topical statistical data, nowcasting models for forecasting economic growth and employment, and the continuously improving inflation models.

On the basis of this analysis, Bank of Finland experts formulate a view on inflation and economic growth in the euro area, in support of monetary policy preparation.

Euro area analysis takes into account analysis of the global economy

The Bank of Finland Institute for Emerging Economies (<u>BOFIT</u>) analyses major economies outside the euro area and conducts <u>research on the macroeconomy and the financial markets</u>.

BOFIT has traditionally focused on Russia and China, and these also featured prominently in the institute's work in 2023. For both economies, BOFIT published two <u>forecasts</u> and also regular <u>weekly reviews</u>.

Topics discussed in BOFIT's publication series included the impacts of Russia's illegal war in Ukraine, the effects of sanctions on Russia's economy, dependency on China and the potential fragmentation of the global economy into blocs.

Monetary policy preparation is also supported by academic research

In 2023, the Bank of Finland continued its high-quality research, which supports the preparatory work on monetary policy in a variety of ways and helps understand the transmission of monetary policy. High-quality research also increases the Bank of Finland's impact and influence, and the interest shown towards it as a potential partner, both in Finland and internationally.

Researchers from the Bank of Finland published more than 20 peer-reviewed research articles in 2023 on various topics in areas such as monetary policy, financial markets and the international economy. The articles discussed, for example, the term structure of interest rates, monetary policy at the zero lower bound and central bank forward guidance.

New research projects and findings were also presented to a wide audience of experts in the Bank of Finland's own Research Discussion Paper series and BoF Economics Review series and, for example, in columns on the VoxEU platform and in the SUERF Policy Briefs. Among the topics discussed were the effectiveness of unconventional monetary policy instruments, the pass-through of negative interest rates to loan rates, the effectiveness of monetary policy in an ageing society and the interest rate elasticity of private consumption.

New research contributions have also been regularly presented at international conferences and the Eurosystem's committees, working groups and research networks.

Each year, the Bank of Finland co-organises various conferences and thematic sessions for its partners. The co-organisers include the Centre for Economic Policy Research (CEPR), the European Money and Finance Forum (SUERF, Société Universitaire Européenne de Recherches Financières) and the Central Bank Research Association (CEBRA). In spring 2023, the Bank of Finland also organised for the first time an <u>international financial literacy conference</u>. The specific themes of the conference were financial literacy gaps and the cost of living crisis. In addition, the Bank hosted a <u>research cluster workshop</u> focusing on financial stability and macroprudential policy in the Eurosystem. The workshop was held in Saariselkä, Lapland.

Forecast for the Finnish economy is part of the euro area macroeconomic projections and monetary policy preparation

The preparation of euro area monetary policy and analysis of the effects of that policy necessitate independent and analytical assessment of the economy covering the immediate years ahead.

There is often a time lag between the introduction of monetary policy measures and their impact on inflation and other macroeconomic phenomena. For this reason, monetary policy decision-makers need an informed view of how decisions taken now would affect the economy many months or even years ahead.

The Bank of Finland draws up forecasts primarily to support the preparation of the euro area's single monetary policy and the related decision-making, and the forecast for the Finnish economy is therefore produced as part of the Eurosystem's macroeconomic projections. The macroeconomic projections are also closely linked to the forecast for the public finances and to the short-term inflation forecast.

Each year, the Bank of Finland publishes four forecasts for the Finnish economy. Two of these, in June and December, are extensive forecasts drawn up in cooperation with the Eurosystem. A considerably more limited interim forecast is published in March and September. The forecasts are drawn up using macroeconomic statistical models. The Bank of Finland's December 2023 forecast had three key messages (Chart 6).

Chart 6.



Participation of the Bank of Finland in domestic economic policy debate in 2023

Bank Finland provides topical and independent analysis and expertise for use by decision-makers and in Finnish society in general. It also participates in the domestic debate on economic policy, in particular through its comments and statements and via speeches given by its Board members. The views expressed by the Bank of Finland are based on the objectives set for it by law and in the EU Treaties and also on its independent status.

The Bank of Finland's key contributions on domestic economic policy in 2023 were the Governor's speech at a stakeholder event on 21 April, the Governor's speech at the opening seminar of the government formation talks on 2 May, the <u>editorial</u> of the Bank of Finland Bulletin published on 20 June, the <u>editorial</u> of the Bank of Finland Bulletin published on 19 December and the Governor's public hearing in Parliament's Commerce Committee on 6 October.

The main themes raised by the Bank of Finland in the domestic economic policy debate in 2023 were the sustainability of the public finances, strengthening the conditions for long-term economic growth, and the transmission of monetary policy tightening to the Finnish economy.

In December 2023, the Bank of Finland's assessment of the public finances was gloomier than in the previous year. General government revenue and expenditure are structurally out of balance. According to the Bank of Finland's December 2023 estimate, the sustainability gap in Finland's public finances was approximately 4.5% of gross domestic product (GDP), and the debt ratio was projected to rise to over 80% by 2026.

Finland's long-term growth prospects are also undermined by the unfavourable trend in the labour market. Labour productivity growth has been slow since the beginning of the 2010s. While the employment level has been supported by a rise in the labour force participation rate, the number of hours worked per employee has been falling for a long time. At the same time, the rise in young people's educational attainment level has halted.

Monetary policy tightening rapidly affected both households and businesses in 2023. Households' loan servicing costs increased, because the majority of mortgages in Finland are variable rate loans.

As Finland's industrial structure is more heavily weighted towards manufacturing and construction, this also increases the economy's sensitivity to interest rate changes. The impact of these factors and the overall economic growth impact of having the same monetary policy in all euro area countries were together clearly more important in 2023 than the extent to which interest rates are variable or fixed among the loan stock.

Over the course of 2023, the Bank of Finland stressed that debt sustainability should be taken as a common economic policy priority and a firm commitment made to ensuring this across parliamentary terms. It is important to not only pursue fiscal consolidation but also ensure the conditions for sustainable economic growth through long-term economic policy that supports innovations and their utilisation.

Monetary policy implementation and its preparation in 2023

Bank of Finland's monetary policy counterparties grew in number in 2023

The Bank of Finland's monetary policy counterparties comprise Finnish credit institutions and branches of Nordic banks operating in Finland. Monetary policy counterparties are required to be subject to financial supervision, to be financially sound and to <u>hold a minimum level of reserves</u>. They must also fulfil the operational requirements set by the Bank of Finland.

At the close of 2023, the Bank of Finland had 20 counterparties, compared with 16 the previous year.

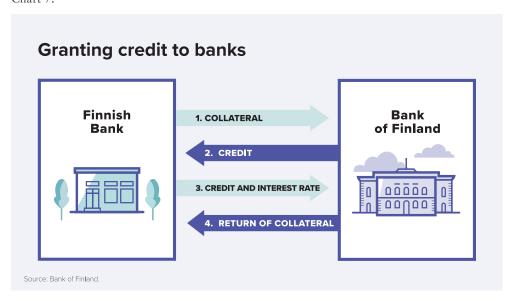
This increase was due to the Bank of Finland's decision in 2023 to supplement its operational requirements with an option for counterparties wishing to have access only to the overnight deposit facility of the standing facilities. The operational requirements are more relaxed under this option than if the counterparty is also granted access to collateralised credit operations.

The Bank of Finland considered that a wider use of the overnight deposit facility would support monetary policy transmission in an environment of abundant liquidity and a positive deposit facility rate.

Monetary policy counterparties are required to comply with the <u>Bank of Finland rules on</u> monetary policy operations and collateral, which were updated three times during 2023.

Bank of Finland counterparties made substantial repayments of refinancing operations in 2023

Chart 7.



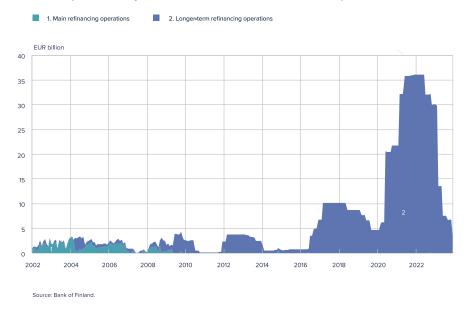
The volume of credit provided by the Bank of Finland to its counterparties in refinancing operations decreased during 2023 from about EUR 30.1 billion to approximately EUR 3.7 billion in 2023 (Chart 8).

In 2023, banks' demand for financing in the weekly main refinancing operations (MROs), the three-month longer-term refinancing operations (LTROs) and the US dollar liquidity operations was very low, both via the Bank of Finland and in the Eurosystem as a whole.

Consequently, as in recent years, outstanding refinancing operations consisted almost entirely of targeted longer-term refinancing operations (TLTROs). The outstanding volumes shrank, however, as no new TLTROs were conducted in 2023 and the amounts borrowed earlier decreased due to maturity and early repayment.

Chart 8.



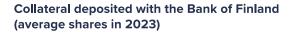


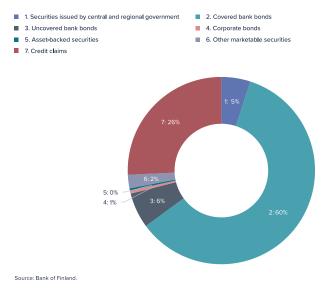
With the repayment of refinancing operations, the amount of collateral deposited by counterparties with the Bank of Finland decreased by 39% in 2023, to an average value of about EUR 24 billion.

However, the amount of collateral deposited did not shrink in the same proportion as the amount of credit. As a consequence, the amount of excess collateral from Bank of Finland counterparties increased by 60%, to an average of 46% in 2023. Excess collateral is the portion of the collateral deposited with the Bank of Finland which is in excess of the outstanding amount of monetary policy loans.

Covered bank bonds and credit claims were the most common asset classes used as collateral among the Bank of Finland's counterparties, accounting respectively for 60% and 26% of all collateral pledged, (Chart 9). Among the asset classes used as collateral, credit claims also saw the biggest growth (7 percentage points), as the amount of credit claims decreased the least.

Chart 9.





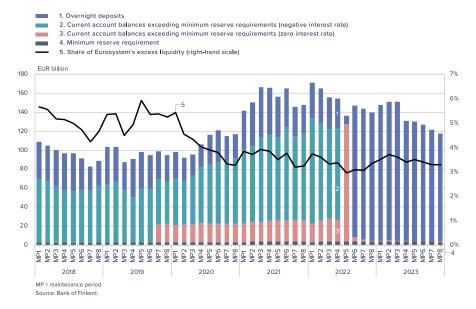
With the reduction in outstanding refinancing operations and purchase programme holdings, the amount of liquidity deposited with the Bank of Finland by institutions required to hold a minimum level of reserves also decreased during the course of 2023, from EUR 140 billion to EUR 122 billion (-13%, Chart 10).

The liquidity deposited with the Bank of Finland remained relatively stable in proportion to the liquidity deposited across the Eurosystem.

Counterparties' liquidity holdings mainly consisted of overnight deposits, which are remunerated at the Eurosystem's deposit facility rate. As the year progressed, counterparties minimised their current account balances exceeding the minimum reserve requirement, which are remunerated at 0%, and made active use of interest-bearing overnight deposits.

Chart 10.





Bank of Finland's purchase programme holdings started to decrease in 2023

Guided by the ECB's monetary policy objectives, the Bank of Finland purchased Finnish public sector debt securities, Finnish covered bonds and a broad range of corporate bonds in 2023.

The Bank of Finland itself bears the risk in public sector securities purchases, but the risks in the private sector purchase programmes are shared among the Eurosystem's central banks.

In 2023, holdings of monetary policy-related securities on the Bank of Finland's balance sheet decreased from EUR 96 billion to EUR 90 billion. Of this total, securities purchased under the APP amounted to EUR 63 billion, and under the PEPP to EUR 28 billion.

At the end of 2023, the amount of Finnish government bonds and government-related bonds purchased under the APP on the Bank of Finland's balance sheet totalled EUR 35.2 billion, and bonds issued by European supranational institutions amounted to EUR 1.7 billion.

Holdings of Finnish central government bonds are published by Statistics Finland on a quarterly basis in the national financial accounts. At the end of September 2023, the Bank of Finland held 32.4% of the total stock of Finnish central government bonds.

At the end of 2023, the amount of corporate bonds purchased under the APP on the Bank of Finland's balance sheet totalled EUR 14.9 billion, and covered bonds amounted to EUR 10.6 billion.

The Eurosystem makes the securities it has acquired under its asset purchase programmes available for securities lending, as appropriate.

The aim of securities lending is to support the liquidity of euro area bonds.

Bank of Finland participated actively during 2023 in the review of the operational framework for implementing monetary policy

In December 2022, the ECB Governing Council announced it would be reviewing its operational framework for implementing monetary policy.

The operational framework is used for controlling short-term money market rates. In the context of the framework review, a timetable is also envisaged for bringing the Eurosystem's balance sheet back to its normal size.

Experts from the Bank of Finland participated actively in the related planning and discussion in the Eurosystem's working groups and committees and at the ECB Governing Council.

You can read more on the subject in the following articles:

Back to the old normal? Monetary policy implementation in a landscape of rising interest rates and a shrinking Eurosystem balance sheet

How will the European Central Bank control interest rates in the future?

Monetary policy implementation in a landscape of rising interest rates and a shrinking <u>Eurosystem balance sheet</u> (speech by Board Member Tuomas Välimäki)

The size and composition of the balance sheet will differ depending on the operational framework. The ECB's operational framework review is due to be concluded in spring 2024.

Incorporation of climate change considerations into the monetary policy framework progressed in 2023

In the context of the monetary policy strategy review in 2021, the ECB Governing Council decided on an action plan for incorporating climate change considerations into the Eurosystem's monetary policy framework.

The Governing Council added detail to the <u>action plan in 2022</u> to account for climate risks in the areas of corporate bond purchases, the collateral framework, risk management and sustainability disclosures.

In order to incorporate climate risks into corporate bond purchases, the Eurosystem introduced in October 2022 an issuer-specific climate score which, together with other risk management aspects, <u>tilts bond purchases towards issuers with a better climate performance</u>.

The overall climate score for an issuer takes into account the issuer's emission levels, decarbonisation targets and climate disclosures. In implementing monetary policy, the climate score has a significant impact on the maximum purchase volumes of corporate-specific bonds, and in this way reduces the climate-related risks in the Eurosystem's balance sheet.

In 2023, the Eurosystem published for the first time a report on its climate-related disclosures of corporate securities holdings purchased for monetary policy purposes. The disclosures, prepared in line with international reporting recommendations, increase transparency about the Eurosystem's monetary policy measures.

The report discusses the governance, strategy, risk management and climate targets and metrics related to corporate sector asset purchases. It also presents the climate stress testing framework and its various climate scenarios used for assessing the longer term impacts of transition risks and physical risks on the Eurosystem's holdings of corporate sector securities.

In 2023, the Bank of Finland also continued its preparatory work to incorporate climaterelated risks into the Eurosystem's collateral framework.



The Eurosystem published its first climate report on 'Climate-related financial disclosures of the Eurosystem's corporate sector holdings for monetary policy purposes'.



Financial stability

22 Mar 2024

The Bank of Finland's tasks include maintaining the stability of the financial system in Finland. The objective is to identify in good time the vulnerabilities that threaten financial stability and to prevent banking and financial crises. The Bank of Finland's economic forecasts and risk assessments make use of high-quality statistics prepared by the Bank.

IN BRIEF



Threats to financial stability

The European Central Bank (ECB) curbed the high rate of inflation in the euro area in 2023 through measures such as raising interest rates. The resilience of the Finnish financial system was put to the test as the rapid rise in interest rates led to a housing market freeze and an increase in corporate bankruptcies, particularly in the construction sector.

Finnish households

The indebtedness of Finnish households declined in 2023 following a period of some 30 years of almost continuous growth. The strong employment situation relative to the state of the economy helped households cope with the higher loan servicing costs.

Global situation and Finland

Geopolitical tensions and the problems experienced by certain banks threatened the stability of the international financial system in 2023. The Finnish financial system remained stable, however.



The Bank of Finland aims to identify in a timely manner the risks and vulnerabilities threatening financial stability. The Bank of Finland also assesses and examines ways to mitigate the risks it has identified.

The materialisation of risks in the banking system or in the housing and real estate markets, for example, could even lead to an economic or financial crisis or exacerbate an existing crisis. The ways to mitigate the risk of a financial crisis include the use of macroprudential policy.

Read more about maintaining financial stability.

Rise in interest rates strained businesses and the housing market

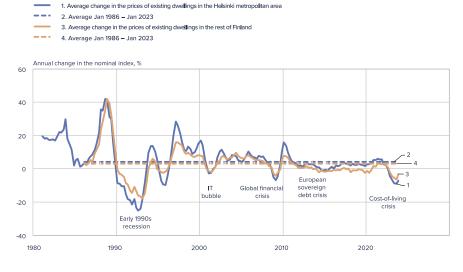
Housing market freeze tested the stability of the Finnish financial system in 2023

The resilience of the Finnish financial system was put to the test in 2023 when the rapid rise in key ECB interest rates, market rates and lending rates and the uncertainty surrounding future interest rates caused many households and residential property investors to either abandon housing purchases or postpone their intentions to purchase.

As a result of the housing market freeze, the prices of existing dwellings declined in Finland more than in any year since the economic and banking crisis of the early 1990s (Chart 11).

Chart 11.





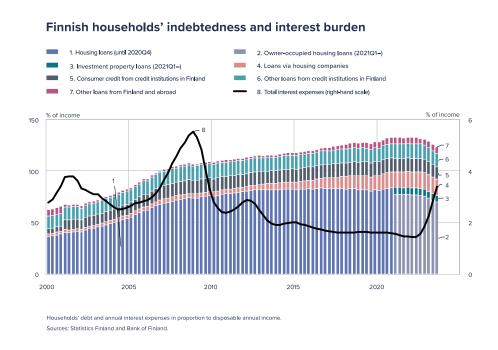
Sources: Statistics Finland and calculations by the Bank of Finland

Household indebtedness decreased in 2023 after a protracted period of growth

Following a period of some 30 years of almost continuous growth, Finnish household indebtedness declined in 2023 (Chart 12) when, exceptionally, the growth in the stock of housing loans turned negative.

The rise in market interest rates was also rapidly reflected in the interest rates on existing loans. Finnish households' interest payments relative to their disposable income therefore increased sharply in 2023 (Chart 12, black curve).

Chart 12.

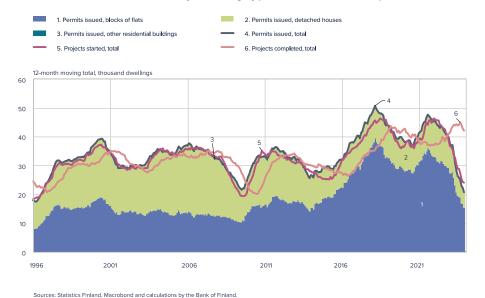


Slowdown in new-build residential construction hit construction companies in 2023

Finnish construction companies suffered the most from the rise in interest rates and the housing market freeze. Although a large number of construction projects already started were brought to completion in 2023, the number of new projects and building permits issued decreased drastically (Chart 13).

Chart 13.

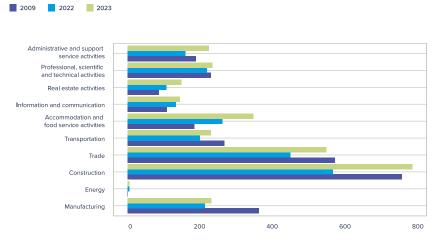




In 2023, the number of bankruptcies in the construction sector was higher than in 2009, the year after the global financial crisis (Chart 14).

Chart 14.





Total number of bankruptcies per year

Source: Statistics Finland.

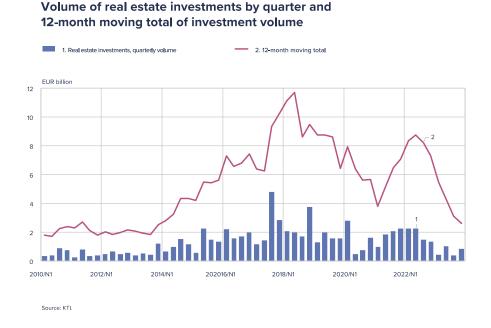
Credit risks of loans to the real estate sector and for real estate investments increased in 2023

Investments in various types of real estate, such as rental housing and office and business premises, decreased notably in 2023 (Chart 15).

An analysis by the Bank of Finland showed that credit risks in the case of loans to the real estate sector and for <u>real estate investments increased in 2023 (in Finnish)</u>.

However, in the Bank's view, the problems in the real estate market did not threaten financial stability. The risks in the Finnish real estate investment market were kept in check by the diversified composition of investors, the large role of pension and life insurance companies and other institutional investors, and the limited number of investors operating with substantial leverage financing.

Chart 15.



Financial stability in Finland remained good in 2023 despite global turbulence

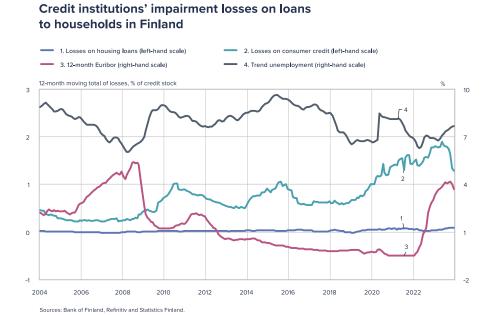
Financial system remained stable

Despite the rise in interest rates, the plunge in the housing market and the increase in bankruptcies, the Finnish financial system remained stable and operated smoothly in 2023.

Finnish households managed to service their debts well enough overall. Banks' impairment losses on loans to households increased only moderately (Chart 16).

The loan-servicing ability of households was supported by the employment situation, which remained fairly strong relative to the state of the economy.

Chart 16.

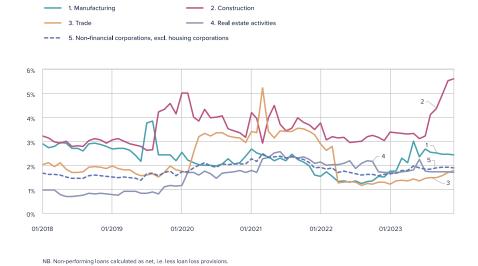


Impairment losses on bank loans to Finnish companies increased only slightly.

Loans to construction companies accounted for only about 5% of banks' corporate credit stock in 2023, and the difficulties of construction companies did not spread extensively to other business sectors (Chart 17).

Chart 17.



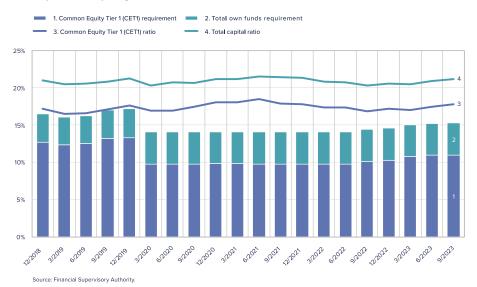


The profitability of Finnish banks even improved and capital positions strengthened in 2023 (Chart 18), as the rise in lending rates boosted banks' net interest income. The liquidity and funding position of banks also remained good, even though Finnish banks are increasingly vulnerable to liquidity risks.

Chart 18.

Source: Bank of Finland

Subdued economic growth did not erode Finnish banks' capital adequacy in 2023



Confidence in the international banking system faltered in March 2023

The resilience of the international financial system was put strongly to the test in March 2023. The rise in interest rates triggered a bank run in the California-based Silicon Valley Bank, which had taken excessive interest rate risks, and in several other US banks with a vulnerable balance sheet.

In addition, Credit Suisse, a major Swiss bank that had long been in difficulty, ended up being sold to its biggest competitor, Union Bank of Switzerland (UBS), with the support of the Swiss authorities.

Nevertheless, in the international financial markets confidence in banks was restored rapidly, mainly due to the swift crisis management measures taken by the US and Swiss authorities.

The increase in geopolitical tensions in autumn 2023 in Finland's neighbouring areas – the damage to the gas pipeline and communication cable between Finland and Estonia in October 2023 and the start of 'orchestrated' migration to Finland in November 2023, at Finland's eastern border crossings – did not erode investor confidence in the Finnish economy or hinder efforts by Finnish companies and financial institutions to obtain financing from international financial markets.

Climate change impacts on banks and on macroprudential policy analysed in 2023

In addition to looking at short and medium-term risks, the Bank of Finland also analysed how longer term agents of social and economic change – such as climate change – will affect the operation of and risks to the financial system in the longer run.

In 2023, the Bank of Finland analysed the impact of climate change on the performance of banks and macroprudential policy (in Finnish).



The Bank of Finland assessed the impact of climate change on the performance of banks and on macroprudential policy.

Bank of Finland participated in preparation of macroprudential policy

The goal of macroprudential policy is to reduce the probability of financial crises and other severe disruptions in the financial system.

Macroprudential policy is used to regulate such matters as the size of capital buffer requirements that may need to be set for banks, and the maximum size of new housing loans.

In Finland, decisions on macroprudential requirements, i.e. the use of macroprudential measures, are taken by the Board of the Financial Supervisory Authority (FIN-FSA). Experts from the Bank of Finland and the FIN-FSA conduct analysis work in support of quarterly macroprudential decisions (in Finnish), and part of this work is published.

In addition, the Bank of Finland issues an official publicly available opinion on a quarterly basis on proposals by the Director General of the FIN-FSA for a FIN-FSA Board decision on the deployment of macroprudential tools.

FIN-FSA set a capital buffer requirement for banks in 2023 due to structural vulnerability of Finnish banking sector

The FIN-FSA Board decided in March 2023 to set for all Finnish credit institutions a capital buffer requirement in the form of a so-called <u>systemic risk buffer</u> amounting to 1% of the risk-weighted assets of the institution in question.

The Board considered that the impacts of banking crises could be particularly large in Finland due to factors such as the substantial size of the Finnish banking system, common risk exposures and tight Nordic interconnectedness.

To ensure the banking sector's loss-absorbing and lending capacity in severe crisis situations, a capital buffer requirement can be used. In its opinion, the Bank of Finland supported the FIN-FSA Director General's proposed decision and its justifications (in Finnish).

FIN-FSA restored housing loan cap to the baseline level of the maximum loan-to-collateral ratio in 2023

In December 2023, the FIN-FSA Board restored the non-first home buyers' housing loan cap, i.e. the maximum loan-to-collateral ratio, to its statutory baseline level of 90% from the previous 85%. The maximum loan-to-collateral ratio means the maximum size of a housing loan relative to eligible collateral.

In its decision, the Board considered that as a result of the decline in mortgage lending and the downturn in the housing market, the grounds for maintaining a stricter than normal housing loan cap set out by law no longer existed.

<u>In its opinion, the Bank of Finland agreed with (in Finnish)</u> the FIN-FSA Director General's proposed decision.

Bank of Finland participated in preparation of household indebtedness report in 2023

In early spring 2023, in connection with the change of government and new parliamentary term, a Ministry of Finance working group prepared a report on the situation of indebted Finnish households and the impact of higher interest rates on borrowers, on the housing market and on banks.

Representatives of the Bank of Finland and the Financial Supervisory Authority participated in the working group as designated experts.

The working group estimated that only a small proportion of indebted households will run into serious difficulties as a result of the rise in interest rates (in Finnish).

To curb the risks related to indebtedness, the working group proposed that a cap on the debtservice-to-income ratio, i.e. a legally binding upper limit on a borrower's debt-servicing burden, be introduced in Finland.

The working group also proposed changes to the tax treatment of housing company loan repayments and that the deductibility of mortgage interest payments should not be restored.

Bank of Finland participated in crisis simulation exercises in 2023

The Bank of Finland participates regularly in crisis simulation exercises. In the simulations, authorities in Finland and elsewhere practice responses and joint cooperation in financial system crises and in exceptional situations affecting society and the economy.

In 2023, the Bank of Finland participated in the Northern Bastion exercise hosted by the European Centre of Excellence for Countering Hybrid Threats. Government-sector representatives from Finland, Sweden, Estonia, Denmark, Norway and the United States took part in the exercise.

This involved a hypothetical situation in which a cybersecurity incident and damage to physical infrastructure caused severe disruptions to the digital processes of the financial sector.

International cooperation promotes financial stability

International cooperation to promote financial stability continued in 2023. The Bank of Finland participated in the work of many committees and working groups, for example at the European Central Bank (ECB), the European Systemic Risk Board (ESRB), the Organisation for Economic Cooperation and Development (OECD) and within the context of Nordic-Baltic cooperation.

Statistical data and development of macroprudential policy

Bank of Finland responds to users' data needs by actively developing its statistics compilation

Compiling statistics is one of the statutory tasks of the Bank of Finland. The Bank meets the information needs of users by actively developing the collection and compilation of statistics and by ensuring that they are up to date, relevant and comprehensive, even in a changing operational environment.

In 2023, the Bank of Finland and Statistics Finland worked together on preparing the collection of 2023 household assets data for the Household Finance and Consumption Survey (HCFS) 2023, which is coordinated by the ECB. The European System of Central Banks (ESCB), in turn, improved its statistical data on wealth by household type to ensure its current relevance.

The Bank of Finland also published initial data from its payment and fraud data collection.

Bank of Finland and Statistics Finland launched the collection of household assets data for the ECB-coordinated HFCS 2023

The Bank of Finland worked with Statistics Finland to prepare for the collection of Finnish household assets data as part of the fifth wave of the ECB's Household Finance and Consumption Survey (HFCS).

The data to be collected covers the year 2023. Statistics Finland will collect the data as of 1 January 2024.

The HFCS will be completed in March 2025. The survey will provide important information on the wealth, debts and consumption of households.

Analysis of household indebtedness is important as the debt-servicing problems of highly indebted households can have negative second-round effects on the economy and financial system.

European System of Central Banks developed experimental household wealth accounts

The ECB publishes experimental statistics on <u>Distributional Wealth Accounts</u> (DWA) for the household sector and is now providing this information on a timelier basis than before. The statistics indicate the distribution of wealth among households in the euro area, excluding Croatia.

The experimental DWA data are based on macroeconomic sector data and will be published quarterly.

The DWA links the household-specific data from the HFCS with financial accounts data on the macro economy. The results of the fourth wave of the HFCS were published in 2023 and were utilised in the creation of the DWA dataset. The results were published in early 2024.

Charts 19 and 20 illustrate that in Finland the increase in household wealth concerns a larger portion of households than those affected by the higher valuation of listed shares.

The wealthiest decile own a majority of the listed shares held by households. Finnish households' net wealth totalled EUR 913 billion at the end of June 2023, which is 27% more than five years ago. The majority of household wealth is in housing assets.

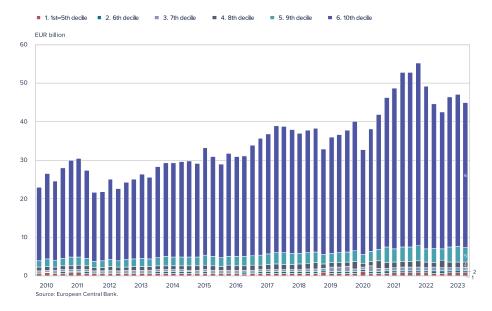
Chart 19.





Chart 20.





Bank of Finland participated actively in reform of the reporting framework for euro area banks in 2023

The Bank of Finland took an active role during the year in the Integrated Reporting Framework (IReF) launched by the ECB's Governing Council in December 2021.

The purpose of the project is to harmonise the collection of statistical data by banks in the euro area, thus reducing the statistical reporting burden particularly for those banks which operate in more than one country. At the same time, however, the ECB is already looking further ahead and seeking harmonisation with the supervisory reporting framework.

The process for compiling statistics will also be reviewed and harmonised across the countries, which will provide more detailed and more timely data for analysis purposes.

In 2023, the ECB carried out a survey that complemented the cost-benefit assessment (CBA) questionnaire conducted in spring 2021. The allocation of costs and benefits will help in the drafting of an IReF regulation, which will proceed swiftly in winter 2024.

The IReF regulation will replace various current ECB statistical regulations, and after its entry into force, the Bank of Finland's RATI, Luoti and TIHA data collections will be discontinued.

Bank of Finland published new payment transaction statistical data in 2023

The Bank of Finland compiles data for the ECB's payment statistics on a quarterly and half-yearly basis.

The data has been compiled since 2022 in connection with the Bank of Finland's payment and fraud data collection, in which, in addition to data on retail payment transactions, the Bank also collects data on, for example, the number of payment cards. In 2014–2021, the data was gathered annually in the collection of payment statistics data.

In 2023, the Bank of Finland published initial data from the payment and fraud data collection.

The new statistical publications included a dashboard of quarterly payment statistics and statistical releases. The Bank also renewed its annual payment statistics dashboard published earlier. The payment and fraud data published in the dashboards were also published in the Bank of Finland's open data service.

The development of payment statistics publications will continue in 2024, when the data content to be published will be extended to cover payment transaction data reported on a half-yearly basis.

The lack of climate statistics in the financial sector and comparable data on the subject have for a long time hampered the assessment of the risks associated with climate change and the financing of the climate transition.

European System of Central Banks launched a review of the Regulation on investment fund statistics in 2023

In 2023, the ESCB launched a review of the Regulation on investment fund statistics. The preparatory phase was completed in 2023. Users were asked about their data needs and mutual funds were asked about the costs of reporting. Based on this information a new regulation is being drafted.

A public consultation was launched in December and the review will continue in 2024. Reporting under the new regulation is expected to start from the data for June 2025.

The key change is that the statistics that are now collected on a quarterly basis will, for the most part, be published on a monthly basis in the future. The Bank of Finland has already been collecting all of this data on a monthly basis.

A more detailed breakdown of other funds will also increase the applicability of the data. In addition, a more detailed itemisation of profit distribution and management costs will enable a quality improvement in reinvested earnings within the balance of payments after enhancement of the data quality in the ESCB's Centralised Securities Database (CSDB).

Europe took significant steps forward in climate changerelated financial statistics

In January 2023, the ESCB published for the first time climate change-related <u>statistical indicators</u>.

The Bank of Finland participated actively in the work overseen by the ESCB Statistics Committee concerning the improvement of climate statistics in the financial sector: a team of specialists used new techniques and developed indicators that describe physical and transitional risks to the financial sector. The granular loan-specific dataset used for the calculation of the indicators thus enables an in-depth analysis of phenomena.

For more detailed information on the transition risks to Finnish banking sector lending, see the article 'Assessing transition risks in banks' corporate loan portfolios'.



Money and payment

22 Mar 2024

The Bank of Finland's tasks include the assessment of system risks, work to promote payment efficiency, and analysis that supports these tasks. In payment and settlement systems, the priorities for 2023 were national preparedness and the future of European payments.

IN BRIEF

Cash services and fostering instant payments

The Bank of Finland coordinated a project that was launched in autumn 2023 for the creation of a Finnish instant payment service that will be compatible with European standards. Although the use of cash remained low in 2023, it still has an important role as a payment instrument. The Bank of Finland also underlined the importance of safeguarding a sufficient level of cash services in Finland via legislative measures.

Development of payment and settlement systems

In 2023, the focus was on national preparedness and the future of European payments. A significant technical step forward was the introduction of the T2 system, which enhances the efficiency of payment and settlement. In addition, the development of a digital euro entered the preparation phase.

TARGET services and international cooperation

The Bank of Finland developed TARGET services for the Nordic banking sector during 2023. In addition, the Bank of Finland and the European Central Bank (ECB) provided the Eurosystem with a new analytical environment for TARGET services. The Bank of Finland also participated in the development of a future new TARGET service, the unified Eurosystem Collateral Management System (ECMS).



Cash services and fostering instant payments

Finland is developing a model for instant payments that will be compatible with European standards

Instant payment refers to a credit transfer that can be made in real time and around the clock, every day of the year.

Payment services provided in Finland have lacked an instant payment service available to all consumers with uniform conditions. In addition, a payment instrument that is not dependent on payment card rails would promote competition and resilience in the field of payments.

A Payments Council working group created a model that would enable the achievement in Finland of the objectives set by the Eurosystem and the European Commission for instant payments. In May 2023, in connection with the <u>Payments Forum (in Finnish)</u>, the working group published a report that outlines the key elements of the model.

In September 2023, the next phase of the project began, with the objective of producing a rule book for instant payments in Finland and a governance model suitable for its maintenance and management.

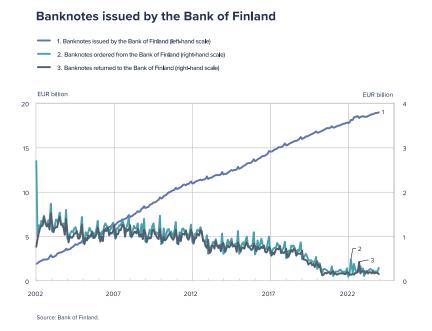
The project is scheduled to be completed by summer 2024, after which it will be essential to ensure the launch of the service.

Bank of Finland wishes to safeguard a sufficient level of cash services

One of the core tasks of the Bank of Finland is to maintain the cash supply and issue banknotes in Finland. The Bank of Finland acts in cooperation with other parties involved in cash supply to ensure the availability, authenticity and fitness of banknotes.

The issuance of banknotes and coins increased in Finland, but, following the peaks of 2022, demand flattened out to the level seen during the pandemic. Particularly in the summer and at the end of the year, the amount of cash ordered from the Bank of Finland exceeded the amount of cash returns.

Chart 21.



There have been no major changes in access to cash and cash availability compared to previous years, even though the decline in cash payment is causing challenges to maintaining the cash network.

The results of the Bank of Finland consumer survey conducted in spring 2023 show that 90% of consumers are satisfied with the availability of cash. Some of the smaller businesses, in particular, are no longer accepting cash payments, however. Still around 40% of consumers consider that having the option of paying by cash is very or fairly important.

The Bank of Finland proposed in 2022 that a sufficient level of cash services must be safeguarded in Finland by legislative measures. In 2023, the Ministry of Finance launched a review of the need for a reform of regulations concerning basic banking services and credit institutions, and the European Commission adopted a legislative proposal on the legal tender of euro banknotes and coins, to safeguard the role of euro cash. The Bank of Finland participated in the discussion both in Finland and in the Eurosystem.

The use of counterfeit euro cash in Finland was low in 2023. A total of 653 counterfeit euro banknotes were detected among banknotes in circulation. This represented a slight increase from the previous year but is still very moderate.

Euro banknotes will be redesigned

Croatia adopted the euro on 1 January 2023, when it became the twentieth member of the euro area. The Bank of Finland signed an agreement with Forex on the exchange of Croatian kuna banknotes for euros, and in January–February 2023 no fees were charged for changing the currency.

The ECB is engaged in a redesign process for the euro banknotes. In summer 2023, the ECB surveyed the public's preferences for the themes of the new banknotes. Based on the preferences expressed by euro area citizens, the ECB's Governing Council in November chose two possible themes for the next stage of the redesign process: 'European culture' and 'rivers and birds'.

Bank of Finland raised public awareness of cash and cash supply in 2023

The Bank of Finland organised annual banknote seminars in March 2023 in Helsinki and Jyväskylä. These focused on the identification of euros and foreign currencies, as well as the prevention of money laundering and counterfeiting.

In December, the Bank of Finland published four short <u>videos</u> on the Bank of Finland's cash supply and cash. These present the life cycle of banknotes from the perspective of the cash supply in Finland.

Development of payment and settlement systems

New T2 payment system is the core of central bank money

The TARGET2 payment system, which was launched in Finland in 2008, was replaced on 20 March 2023 with the new T2 system. The new system provides enhanced liquidity management tools for banks and includes the ISO20022 payment messaging standards that enable a higher level of automation.

The T2 payment system is used by the Bank of Finland's monetary policy counterparties and other Finnish and Nordic credit institutions, central securities depositories and central counterparties.

In 2023, the average daily value of payments settled by the Bank of Finland's participants in the T2 system (and in TARGET2 up to 19 March 2023) was approximately EUR 81 billion.

Euroclear Finland migrated to the T2S securities settlement platform in 2023

T2S (TARGET2-Securities) is a securities settlement platform developed by the Eurosystem and has a total of 24 participant central securities depositories in 23 European countries. It enables real-time delivery-versus-payment (DvP) settlement of securities in central bank money.

The Bank of Finland is the overseer of Euroclear Finland and, together with the Eurosystem, is responsible for providing T2S services in Finland as part of the TARGET services.

In 2023 the Bank of Finland, together with the ECB, prepared for Euroclear Finland's migration to the T2S system and aided its T2S counterparties in their deployment of the system. The system was introduced successfully on 11 September 2023, and Finnish securities transactions have since been settled using T2S.

Digital euro project entered preparation phase in 2023

A digital euro would complement cash and would extend the options available for consumers and businesses for different forms of payment. It would ensure that the single currency is available to people and businesses in the euro area, in both physical and digital form.

No decision on whether to ultimately issue a digital euro has yet been taken, however.

The key objective of a possible digital euro is to support the role of central bank money as a monetary anchor, strengthen Europe's strategic autonomy and promote competition and payment efficiency within the euro area.

In October 2023, the two-year investigation phase of the digital euro project was concluded and the ECB Governing Council took the decision to start the next phase of the project, the two-year preparation phase.

In the investigation phase, the Eurosystem confirmed high-level technical product specifications and user requirements as the digital euro project's guidelines, which will lay the foundation for future preparations.

The key aim of the preparation phase is to prepare for the actual development of a digital euro, and to lay the foundations for enabling potential future design and preparation work by payees and payment service providers.

The Bank of Finland took an active role in 2023 in the preparation of a digital euro.

The most important decision-making body in the project is the High-Level Task Force, where the Bank of Finland is represented by Member of the Board Tuomas Välimäki.

The Bank of Finland participated in groups that support the work of the High-Level Task Force, and the project was also promoted by the work of Eurosystem standing committees.

TARGET services and international cooperation

TARGET services adapt to changing times

TARGET services are market infrastructure services provided by the Eurosystem. These services include liquidity management and payment settlement (T2), services for instant payments (TIPS, TARGET Instant Payment Settlement) and securities settlement (T2S, TARGET2-Securities).

The Bank of Finland provides TARGET services to the Nordic banking sector as part of its statutory tasks.

A feature common to all TARGET services is the real-time settlement of payments or securities transactions in central bank money, which means that because of the central bank's role, the transactions are risk-free.

TARGET services enable the smooth flow of cash and securities in Europe and support the implementation of the single monetary policy.

As a member of the Eurosystem, the Bank of Finland participates actively in the development of TARGET services in the Market Infrastructure Board and its working groups. The Bank of Finland is the national centre of expertise for TARGET services and thus supports its own customers in questions concerning the use of the system. It also coordinates the operation and testing of the system and ensures its smooth functioning in the event of disruptions.

Bank of Finland and ECB provided the Eurosystem with a new analytical environment for TARGET services in 2023

In 2023, the Bank of Finland, together with the ECB, provided the Eurosystem with a new analytical environment and simulation software tool for TARGET services.

This is already the Bank of Finland's second simulator software delivery to the Eurosystem. The simulation tool operates in the ECB's analytical environment and is based on the general-purpose BOF-PSS payment and settlement system simulator developed by the Bank of Finland.

At the end of August 2023, the 21st international simulator seminar was held in Helsinki. The Bank maintained the tradition of organising a training course in conjunction with the simulator seminar, for new users of the BoF-PSS3 simulator.

International cooperation continued to be strong in 2023. The Bank of Finland conducted three international consultations for the central banks of various countries on the introduction of the simulator.

In addition, the Bank of Finland and the International Monetary Fund (IMF) together started an analysis project in which the simulator is used for estimating the scale of damage from cyber threats to payment systems.

Bank of Finland participating in the development of a unified collateral management system

The unified <u>Eurosystem Collateral Management System</u> (ECMS) is a system for managing assets placed as collateral with national central banks in monetary policy operations. These are assets that are currently processed in the systems of 20 national central banks.

During 2023, the Bank of Finland supported its monetary policy counterparties in the preparations for the launch of the ECMS.

Due to challenges related to system testing, the ECB Governing Council decided in November 2023 to reschedule the launch date of the ECMS to November 2024.



Management of financial assets

22 Mar 2024

One of the statutory tasks of the Bank of Finland is the holding and management of foreign reserves. After a difficult year in 2022, the situation in the financial markets was more favourable for investment returns in 2023.

IN BRIEF

Management of financial assets

The financial markets returned to a more positive track in 2023. The Bank of Finland's financial assets yielded an overall return of EUR 586 million.

Financial assets and foreign reserves

Managing foreign reserves is an integral part of the Bank of Finland's statutory tasks. This helps in preparing for future uncertainties and risks. The year 2023 was significantly better for the return on the Bank of Finland's financial assets than the previous year.

Responsible investment and climate reporting

The Bank of Finland's management of financial assets emphasises responsible investment. This is evident in the management of reserves and forms part of the Bank's investment policy. In 2023, the Bank of Finland monitored and reported on the climate impacts of its investment activities in accordance with the Eurosystem's common stance on climate-related disclosures.



Managing the Bank of Finland's financial assets

Financial markets returned to more normal market conditions in 2023

In 2023, the financial markets were characterised by more normal market conditions in terms of investment returns after a very challenging year in 2022.

The Bank of Finland's financial assets yielded an overall return of EUR 586 million in 2023, in which the actual return on investment excluding the impact of exchange rate movements amounted to EUR 543 million.

The Bank of Finland's financial assets consist of the balance sheet items which fall under the Bank's investment activities. At the end of 2023, these assets totalled approximately EUR 13.4 billion.

The Bank's financial assets do not include balance sheet items related to Eurosystem monetary policy measures, for example monetary policy bond purchase programmes or loans to banks.

The Bank of Finland decides on the volume of its financial assets within the framework of the Agreement on Net Financial Assets (ANFA).

ANFA is an agreement between the national central banks in the Eurosystem and the European Central Bank (ECB). It sets rules for the holdings of financial assets that are related to the domestic tasks of the Eurosystem central banks.

The Bank of Finland's financial assets are managed in line with the central bank objectives, taking into account the returns on investment, the risks attached and the responsibility considerations.

Managing foreign reserves is among the Bank of Finland's statutory tasks

Holding and managing foreign reserves are among the statutory tasks of the Bank of Finland. The volume of the Bank of Finland's foreign reserves and the currency composition is a strategic decision based on considerations of preparedness. Decisions related to the management of foreign reserves are taken by the Bank's Board as and when necessary, and at least once every three years.

The currency-specific targets for the period 2022–2024 are set at USD 5 billion, GBP 650 million and JPY 95 billion.

The management of foreign reserves has a key role in the Bank of Finland's endeavours to ensure that it is financially equipped to deal with future uncertainties and risks. Furthermore, the Bank of Finland makes provision for crises that could weaken Finland's external solvency.

Financial assets and foreign reserves

Composition of Bank of Finland's financial assets in 2023

At the end of 2023, the Bank of Finland's financial assets amounted to around EUR 13.4 billion (Table 6).

The updated financial asset framework was adopted at the beginning of the year. Under the framework, the financial assets consist of foreign reserves, long-term investments and gold holdings.

The Bank's foreign reserves comprise direct and indirect foreign currency-denominated fixed-income investments and items denominated in IMF Special Drawing Rights (SDRs).

The Bank of Finland's gold holdings amounted to EUR 2.9 billion at the end of 2023. The Bank did not engage in active investment activity with gold holdings in 2023.

Table 6.

The Bank of Finland's financial assets, EUR million	31 Dec 2023	31 Dec 2022
Gold	2,945	2,690
Foreign reserves	6,923	6,861
SDR	986	933
US dollar-denominated fixed-income	4,296	4,274
Sterling-denominated fixed-income	763	718
Yen-denominated fixed-income	621	684
Fixed-income funds	257	252
Long-term investments	3,553	1,484
Equity funds	1,281	1,328
Real estate funds	172	156
Long-term fixed-income	493	
Cash	1,607	
Total	13,421	11,035
Source: Bank of Finland.		

Bank of Finland's policy on investment in financial assets is a strategic matter

The Bank of Finland's asset investments are guided by the investment policy decided annually by the Bank's Board. The investment policy covers fixed-income investments, long-term investment and the principles of responsible investment.

The fixed-income investment policy for foreign reserves sets a strategic allocation for the Bank's fixed-income investments by asset class and determines an appropriate level of interest rate risk for the various currencies.

Long-term investment has a higher expected return and lower liquidity requirement than with other portfolios. The risk-return ratio improves for the balance sheet as a whole when the portfolio of investments is diversified.

The Bank of Finland updates the <u>principles of responsible investment</u> every year in connection with its investment policy, and at other times as necessary. In addition, the Bank of Finland's Annual Report on Responsible Investment will be published on the Bank's website during spring 2024.

The policy on investment in financial assets establishes a strategic market-based index for direct fixed-income investments that serves as a benchmark for the Bank's investment activities.

The Bank's Asset Management Division may deviate from the strategic index within a pre-set range and in accordance with the investment policy's risk limits.

A long-term investment policy that takes account of balance sheet risks as a whole ensures that the balance sheet is healthy and promotes the Bank of Finland's goal of a steady distribution of profit to the state budget without endangering capital adequacy.

Bank of Finland's fixed-income investments in the foreign reserves portfolio in 2023

The Bank of Finland's fixed-income investments in the foreign reserves portfolio (excluding items denominated in SDRs) were divided between sovereign bonds and central bank deposits (57.6%), supranational or government-related bonds (27.1%), covered bank bonds (4.7%), corporate bonds (10.0%) and cash instruments (0.6%).

Fund-based fixed-income investments worth EUR 257 million were invested in a green bond fund managed by the Bank for International Settlements (BIS).

As a measure of interest rate risk, the average duration, i.e. the average time to maturity, of the fixed-income portfolios at the end of 2023 was 2.3 years. Fixed-income investments are made in debt securities with high credit ratings.

Bank of Finland's long-term investment in 2023

The Bank of Finland makes long-term investments in order to maintain the real value of onbalance sheet capital items deemed to be very long-term.

In 2023, the Bank's long-term investments consisted of equity, real estate, fixed-income and cash investments. The value of the long-term portfolio at the end of the year totalled EUR 3,553 million.

Equity investments were made in index funds that mirror the global index for developed markets and which take account of sustainability and climate issues by means of passive exchange traded funds (ETFs).

Real estate investments are diversified across a number of unlisted European real estate funds. Each of the funds owns real estate in desirable locations, which makes the properties easy to let.

Returns and risks of Bank of Finland's financial assets in 2023

The return on the Bank of Finland's financial assets rose substantially on the previous year (4.5%, compared with -0.2% in 2022).

Market interest rates rose during the first half of the year and, although the regional banking crisis in the United States in March temporarily increased uncertainty, interest rates continued to rise as autumn approached, when the main focus of the markets turned towards the inflation path and central banks' monetary policy.

During the autumn, the economic data showed signs of softening and inflation fell, causing market interest rates to decline towards the end of the year.

The Bank of Finland's financial assets yielded an overall return of 4.5%, or EUR 585.8 million, in 2023. The actual return on investment, excluding the impact of exchange rate movements, gold holdings and items denominated in SDRs, was 5.8%, or EUR 543.2 million.

Table 7.

Return on the Bank of Finland's own financia	ial assets	2023		2022	
		%	EUR m	%	EUR m
Foreign reserves		4.0	238.0	-3.0	-192.0
Long-term investments		8.0	305.0		
Equity funds		20.0	260.0	-17.0	-268.0
Real estate funds		-11.0	-19.0	6.0	10.0
Long-term fixed-income		1.0	4.0		
Cash		3.0	59.0		
Total investment reserves excluding currency revaluation		5.0	543.0	-5.0	-451.0
Currency revaluation	-3.0	-216.0	3.0	263.0	
Total investment reserves including currence	cy revaluation	3.0	326.0	-2.0	-188.0
Gold	9.0	255.0	6	5.0	152.0
SDR	0.0	3.0		1.0	11.0
Total financial assets	4.0	585.0	C	0.0	-24.0
Source: Bank of Finland.					

The yield on the fixed-income investments in the Bank of Finland's foreign reserves portfolio was EUR 238.0 million, of which the majority, or EUR 204.6 million, was from investments denominated in US dollars. The return on sterling-denominated fixed-income investments stood at EUR 33.3 million and the return on fixed-income investments denominated in Japanese yen was slightly negative, at EUR -0.5 million.

The decline in market interest rates towards the end of the year also supported the equity market. This ensured that 2023 as a whole was a strong year on the equity market. Global equity prices rose by around 20% during the year, driven by the United States and major technology companies. The return on the equity investments in the Bank of Finland's long-term portfolio in 2023 was 20.2%, or EUR 260.1 million.

Real estate investment performed weakly throughout the year. The rise in interest rates and the weakening economic outlook in Europe pushed the valuations of real estate investments down.

This was evident in the real estate investments of the Bank of Finland's long-term portfolio, the returns of which were clearly in negative territory in 2023 at -11.6%, or EUR -19.0 million.

The Bank's real estate investments were in unlisted real estate funds investing in the lowest risk section of the market, i.e. core funds. The change in their values lags behind the market for listed real estate funds, and so the 2023 returns were also a reflection of the difficult market conditions the previous year.

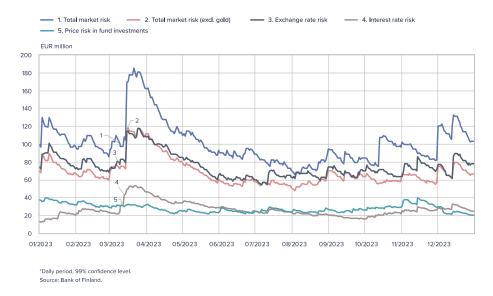
The Bank of Finland's financial assets diminished in euro terms due to exchange rate movements arising from a weakening of the US dollar and Japanese yen against the euro.

The weakening of the dollar caused a revaluation loss of EUR -152.8 million and that of the yen a revaluation loss of EUR -88.2 million during 2023. By contrast, the strengthening of the pound sterling resulted in a revaluation gain of EUR 24.2 million, and the rise in the price of gold also raised the euro-denominated value of the financial assets by EUR 255.0 million in total.

The total market risk associated with the Bank's financial assets (Value-at-Risk 99%, 1 day) varied between EUR 66 million and EUR 186 million in 2023 (Chart 22).

Exchange rate risk is the Bank of Finland's most significant risk associated with its foreign currency-denominated fixed-income investment portfolios. The volume of the Bank's foreign reserves has been scaled to the level required for the functions of a central bank.

VaR figures for market risk in the Bank of Finland's financial assets in 2023*



Share of the European Central Bank's foreign reserves in 2023

The European Central Bank has foreign reserves of its own. Management of the foreign reserves of the ECB is distributed among the national central banks in the Eurosystem according to their respective capital keys.

The Bank of Finland manages part of the ECB's foreign reserves together with the Estonian central bank, Eesti Pank. In the management of the ECB's foreign reserves, the emphasis is on security and liquidity, as the key purpose of the reserves is to ensure the availability of sufficient resources for the Eurosystem's foreign exchange operations.

The value of Finland and Estonia's pooled US dollar-denominated portfolio of ECB foreign reserves at the end of 2023 stood at EUR 1,175 million. For additional information on the management of the ECB's foreign reserves, see the ECB Annual Report.

Responsible investment and climate reporting in 2023

Responsibility is one of the factors guiding the Bank of Finland's investment decisions

The core principles and objectives of central banks' investment operations are typically safety, liquidity and return.

At the Bank of Finland, responsibility has been added alongside these as a fourth objective guiding investment decisions and as an integral part of daily investment activity.

The Bank of Finland's investment assets were managed in accordance with the <u>principles of responsible investment</u> during 2023.

The Bank of Finland has set a carbon neutrality target for its entire investment portfolio, which it aims to achieve by 2050 at the latest. In order to meet the target, qualitative and quantitative interim climate targets have been set for the individual components of the investment portfolio. In 2023, the investment portfolio components were in line with the interim targets set for 2025.

Achieving the carbon neutrality target for the entire investment portfolio depends primarily on how governments succeed in reaching the targets of the Paris Agreement, because a significant portion of the Bank of Finland's investment assets is invested in sovereign bonds, due to its functions as a central bank. In the case of equity and corporate bond investments, it is possible to reach the carbon neutrality target even before 2050.

The Bank of Finland's investment operations were developed and implemented in accordance with the UN-endorsed <u>Principles for Responsible Investment</u>, which the Bank signed in 2019.

The Bank of Finland was given high ratings for its implementation of responsible investment in the PRI Assessment Report for 2022 that was released at the end of 2023.



The Bank of Finland reported the climate effects of its investment activities in accordance with the Eurosystem's common reporting requirements.

Climate-related key figures for the Bank of Finland's investment activities

In April 2023, the Bank of Finland published for the first time an Annual Report on Responsible Investment, covering 2022. The report covers all of the Bank's investment activities, and includes a climate report on financial assets and climate-related key figures by asset class in accordance with the Eurosystem's common stance on climate-related disclosures. The Annual Report on Responsible Investment and the climate-related key figures for 2023 will be published on the Bank of Finland website during spring 2024. This will include the calculation formulae for the climate-related key figures, information on the elements exceeding the Eurosystem's minimum requirements, and forward-looking key figures.

The most significant emissions in the Bank of Finland's investment activity are associated with government bonds. The Bank holds these in its portfolio because of its central bank functions, among other reasons (Table 8).

Table 8.

Climate-related figures for the Bank of Finland's own investment activities 31.12.2023

Sovereign issuers

Sovereign and sub-sovereign

	Production	Consumption	Government
Portfolio value (EUR million)		3,661	
Share of green bonds (EUR million)		39	
WACI (Weighted Average Carbon Intensity, tonnes of carbon dioxide (tCO ₂ e) equivalent per purchasing power parity adjusted GDP)	340	20	340
WACI (climate data coverage)	97%	97%	97%
Absolute carbon emissions (tonnes of carbon dioxide equivalent, tCO ₂ e)	970,000	1,099,000	143,000
Absolute carbon emissions (climate data coverage)	97%	97%	97%
Carbon footprint (tonnes of carbon dioxide equivalent (tCO ₂ e) per EUR million invested)	340	380	50
Carbon footprint (climate data coverage)	97%	97%	97%

Non-sovereign issuers

	TOTAL	Supranational issuers	Covered bonds	Corporate bonds	Equities
Portfolio value (EUR million)	3,676	1,497	273	636	1,270
Share of green bonds (EUR million)	359	336	0	24	
WACI (Weighted Average Carbon Intensity, tonnes of carbon dioxide equivalent (tCO ₂ e) per million USD revenue)	40	<10	<10	60	80
WACI (climate data coverage)	85%	64%	100%	97%	100%

83,000	<100	<100	37,000	46,000
85%	64%	100%	97%	100%
30	<1	<1	60	40
85%	64%	100%	97%	100%
	85%	85% 64% 30 <1	85% 64% 100% 30 <1 <1	85% 64% 100% 97% 30 <1 <1 60

Sources: ISS, C4F and World Bank.

Carbon footprint of equity investments in 2023 decreased as planned and is on course to meet interim target set for 2025

In equity investment, progress was made – continuing from 2022 – towards reaching the interim target set for 2025 of reducing by half the weighted average carbon intensity (WACI) of equity investment from the 2021 baseline figure (Table 9).

Although no further investments were made in climate or ESG funds in 2023, the weighted average carbon intensity of the equity allocation was improved at the end of 2023 by reducing exposures to index funds that track the global indices of developed countries, in order to adjust the overall allocation of the long-term investment portfolio.

Table 9.

Decline in the emission intensity of the Bank of Finland's equity investments between the baseline date and the end of 2023

	31/12/ 2023	31/12/ 2022	31/12/ 2021	2021Q1 (baseline date)
WACI (tonnes of carbon dioxide equivalent (tCO_2e) per million USD revenue)	87	107	135	151
Reduction compared to baseline	-43%	-29%	-11%	-
Source: ISS.				



Management of Bank of Finland's financial risks in 2023

22 Mar 2024

Implementing monetary policy and safeguarding the stability and functioning of the financial system are core central bank tasks. They involve financial risks, which are addressed using risk buffers. In 2023, the Bank of Finland's risk buffers diminished, because higher interest rates raised the amount of interest expenses it paid on central bank deposits.

IN BRIEF

Management of financial risks

In performing central bank tasks, the Bank of Finland is subject to financial risks. These risks are addressed using buffers.

Monetary policy measures

The Bank of Finland's balance sheet is large because of the monetary policy measures conducted by the Bank. The balance sheet will be reduced over time, as the bonds acquired under purchase programmes mature and the longer-term refinancing operations are repaid.

Interest expenses on the balance sheet

The Bank of Finland's balance sheet contains a structural interest rate risk. In 2023, the Bank's risk buffers diminished because the higher level of interest rates raised the amount of interest expenses paid by the Bank on central bank deposits.



Risks arise in Bank of Finland's investment activities and in monetary policy implementation

At the end of 2023, the Bank of Finland's financial assets amounted to approximately EUR 13 billion. These consisted of gold holdings, foreign reserves and long-term investments, which included fixed-income investments, equity and real estate fund investments, and cash. The financial assets do not include items connected with the implementation of monetary policy, such as refinancing operations or securities acquired in monetary policy operations.

Foreign reserves include liquid fixed-income investments. The volume of the Bank's foreign reserves has been scaled to the level required for the functions of a central bank.

A significant proportion of the Bank of Finland's financial assets are debt securities purchased for monetary policy purposes and claims on banks resulting from monetary policy implementation. The Eurosystem's monetary policy measures are implemented on a decentralised basis among the different Member States and the ECB, but the risks and returns are largely shared among the national central banks.

The risk relating to monetary policy assets corresponds, in principle, to each national central bank's <u>capital key</u> share in the aggregate monetary policy assets of the national central banks. At the end of 2023, the Bank of Finland's share was 1.822%.

However, the risks associated with government debt instruments and government-related debt instruments purchased under the public sector purchase programme (PSPP) and the pandemic emergency purchase programme (PEPP) are borne individually by each national central bank involved.

Volume of Bank of Finland's monetary policy assets decreased in 2023

The volume of the Eurosystem's monetary policy assets decreased in 2023 by around EUR 1.2 trillion and was approximately EUR 5.1 trillion at the end of the year. The decrease was due particularly to the repayments of targeted longer-term refinancing operations (TLTROs).

No net purchases were made under the asset purchase programme (APP) or the PEPP in 2023. Reinvestments of maturing bonds under the APP were discontinued in mid-2023. Reinvestments under the PEPP were still continuing at the end of 2023.

The Bank of Finland's share of monetary policy assets declined by around EUR 20 billion and was approximately EUR 86 billion at the end of the year.

Table 10.

Bank of Finland's financial assets and share of monetary policy assets	31 Dec 2023 EUR million	31 Dec 2022 EUR million
Financial assets	13,421	11,037
Gold	2,945	2,690
Foreign reserves	6,923	6,864
Euro-denominated fixed-income investments	0	0
Long-term investments	3,553	1,484
Long-term interest rate investments	493	0
Equity fund investments	1,281	1,328
Real estate fund investments	172	156

Cash	1,607	0
Share of monetary policy assets	85,674	106,168
Refinancing operations	7,476	24,327
Targeted longer-term refinancing operations ¹	7,147	24,203
Other refinancing operations ¹	328	123
Debt instruments under the asset purchase programme	50,537	53,757
Finnish government bonds and government-related bonds	35,208	37,295
Bonds of supranational institutions ¹	4,651	5,056
Covered bonds ¹	4,776	5,085
Corporate bonds ¹	5,902	6,321
Debt instruments under the pandemic emergency purchase programme ²	27,627	28,046
Terminated programmes	35	39
Securities markets programme ¹	35	39
Covered bond purchase programme	0	0
Total	99,095	117,206

¹⁾ Capital key share (1.822% as of 1 Jan 2023) of aggregate claims by national central banks.

In addition to the claims listed in Table 9, the Bank of Finland's assets included EUR 66 billion in intra-Eurosystem claims, consisting mainly of the <u>T2 balance</u>. At the end of 2023, the Bank of Finland's balance sheet total was EUR 178 billion.

Bank of Finland manages its risks through diversification

The Bank of Finland's financial risks consist of market, credit and liquidity risks. Market risk refers to the possibility of financial loss as a result of variation in, for example, exchange rates, interest rates and stock prices.

²⁾ In the case of the pandemic emergency purchasing programme the table shows the amount on the Bank of Finland's balance sheet.

Exchange rate risk is the source of most volatility in the value of the financial assets. The Bank of Finland diversifies its exchange rate risk by investing in the US dollar, the pound sterling and the Japanese yen. The exchange rate risk is also diversified through investment in the Chinese yuan, since the Bank of Finland has receivables from the International Monetary Fund (IMF).

The strategic allocation of investments is determined by means of a benchmark index. This index, together with a highly detailed limits framework, acts as a guide to taking on interest rate and credit risks. In this way, the Bank ensures that the investments are highly liquid and are adequately diversified across various asset classes, countries, maturities and issuers. The Bank's investment focus is on debt securities with high credit ratings.

The Bank of Finland's financial assets also include some investments in the international equity and real estate markets. The investments are made through funds and diversify the other risks on the Bank's balance sheet.

In the implementation of monetary policy purchase programmes, the Bank of Finland, in the same way as the other central banks, complies with the Eurosystem eligibility criteria and other risk-management rules.

The Bank of Finland manages its financial assets in a responsible manner. The counterparties accepted in direct fixed-income investments are delimited using specific sustainability criteria. Assessments of the responsibility and reliability of service providers are also emphasized in the Bank's indirect investment activities.

Structural interest rate risk on the Bank of Finland balance sheet

The liquidity created via the purchase programmes and refinancing operations is reflected on the liabilities side of the Bank of Finland's balance sheet as central bank deposits.

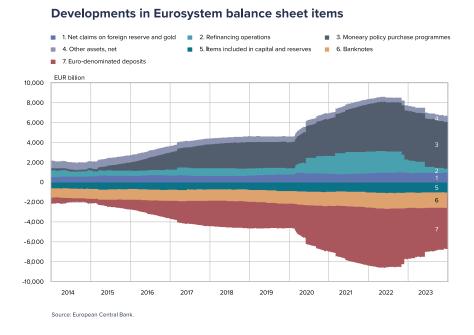
The Eurosystem sets, on monetary policy grounds, the interest payable on the central bank deposits made by commercial banks. The interest rate decision has an immediate effect on the Bank of Finland's interest expenses. Monetary policy assets, however, mainly carry a fixed interest rate. Thus, an increase in the deposit rate weakens the Bank's net interest income. This difference in the interest rates applied to assets and liabilities on the Bank's balance sheet poses a structural interest rate risk for the balance sheet.

For a long time, the Bank's purchases of fixed-rate bonds in connection with monetary policy implementation were made at a low yield level. In the second half of 2022, the Eurosystem's policy interest rates were raised, and the rate increases continued during 2023. As a result, the interest rate on the refinancing operations increased, and reinvestments of maturing bonds under the purchase programmes were carried out at a higher yield than before. However, as policy rates rose, the interest rates on central bank deposits also rose, which had a much greater negative impact on net interest income than the above-mentioned positive impacts.

As a consequence of this financing cost, the Bank of Finland's operating profit was negative in 2023. Based on the interest rate expectations prevailing at the end of 2023, the operating profit will remain in negative territory in the immediate years ahead.

The structural interest rate risk position will decrease as the fixed-rate bonds acquired for monetary policy purposes mature. However, the reinvestment of principal payments from maturing bonds serves, at the same time, to maintain the structural interest rate risk position.

Chart 23.



Quarterly updates of financial risk figures are available on the Bank of Finland's website (suomenpankki.fi), under the section <u>Risk management and control</u>.

Bank of Finland's total risks remained almost unchanged, but risk buffers diminished in 2023

There were no significant changes in the Bank of Finland's total risk exposure in 2023. With monetary policy operations entering their maturing phase, the continuing increase in total risk seen in recent years came to an end.

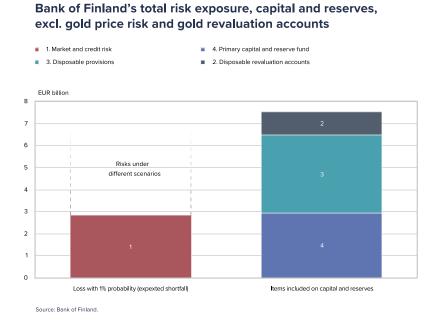
The Bank of Finland measures total risk exposure on the balance sheet using well established statistical methods. In measuring the risk arising from monetary policy, the Bank of Finland uses internal risk reporting produced by the ECB, which is subject to ongoing development by the Eurosystem's Risk Management Committee.

As an estimate of total risk, the Bank of Finland uses a figure representing the loss that would occur in the following year with a probability of 1% (expected shortfall at a 99% confidence level).

The risk estimate is supplemented with stress tests that assess losses which could be incurred under possible, though improbable, scenarios.

At the end of 2023, the total risk estimate was EUR 2.8 billion. This figure does not include the gold price risk, as the gold revaluation account covers a significant decline in value. If the gold price risk is included, the total risk estimate is EUR 3.0 billion.

Chart 24.



At the end of 2023, the Bank of Finland had revaluation accounts totalling EUR 1.1 billion and provisions totalling EUR 3.5 billion available to cover losses. The primary capital and reserve fund amounted to EUR 2.9 billion (Chart 24).

The risk buffers diminished during the year because the negative operating profit resulting from the higher interest rates was covered from provisions. The Bank of Finland's capital adequacy is sufficient to cover the risks arising from the performance of its tasks (Chart 25).

Chart 25.

Risks and risk buffers excl. gold and gold revaluation accounts

- 1. Loss with 1% probability (expected shortfall)
- 2. Disposable provisions and revaluation accounts



Source: Bank of Finland



Financial Statements

31 Dec 2023

The Bank of Finland's audited profit for the financial year 2023 totals EUR 0.00 after a reduction of EUR 1,112 million was made in the general provision in order to cover a negative operating profit. The Bank of Finland's financial result and the structure of its balance sheet are a reflection of the monetary policy measures taken to maintain price stability in accordance with the Bank's mandate.

The European Central Bank (ECB) started raising interest rates in 2022 to reduce the excessively high rate of inflation, and in 2023 it continued to raise rates. The ECB's deposit facility rate reached a level of 4.0% in 2023, after having started the year at 2.0%.

The Bank of Finland holds bonds acquired in asset purchase programmes, and a considerable proportion of these have been issued by Finland's public sector. These are long-term and fixed-rate. The purchasing of these bonds created liquidity, and this then led to an increase in deposits by commercial banks with the central bank. In 2023, the interest paid on these deposits was an average of 3.3%. The differences in the extent to which the Bank of Finland's assets and liabilities are subject to fixed or variable interest rates, in particular, poses a structural interest rate risk for its balance sheet, and this risk has materialised as interest rates have risen.

As a consequence of the higher interest rates, the amount of interest paid on the deposits of commercial banks during the financial year 2023 was EUR 4,472 million, which exceeds the Bank's income from assets. Net interest income in 2023 was EUR -1,044 million, which was EUR 1,503 million less than in 2022.

The figure for central banking profit was EUR -1,027 million in 2023 (2022: EUR 35 million), and includes both interest income on the Bank of Finland's financial assets and the Bank's share of net interest income from the Eurosystem's monetary policy operations. The operating expenses and income of the Bank of Finland and the Financial Supervisory Authority (FIN-FSA), excluding banknote production services and the pension fund contribution, amounted to EUR -70 million (2022: EUR -66 million).



Balance sheet

31 Dec 2023

EUR	? million	31 Dec 2023	31 Dec 2022	
ASS	EETS			
1	Gold and gold receivables	2,945	2,690	
2	Claims on non-euro area residents denominated in foreign currency	12,271	12,430	
	Receivables from the International Monetary Fund (IMF)	5,241	5,314	
	Balances with banks and security investments, external loans and other external assets	7,030	7,116	
3	Claims on euro area residents denominated in foreign currency	100	172	
4	Claims on non-euro area residents denominated in euro	_	-	
5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	3,676	30,096	
6	Other claims on euro area credit institutions denominated in euro	0	16	
7	Securities of euro area residents denominated in euro	90,272	95,900	
	Securities held for monetary policy purposes	90,100	95,745	
	Other securities	172	156	

EUR	million	31 Dec 2023	31 Dec 2022	
8	Intra-Eurosystem claims	67,251	47,769	
	Participating interest in ECB	188	188	
	Claims equivalent to the transfer of foreign reserves	741	741	
	Net claims related to the allocation of euro banknotes within the Eurosystem	7,283	8,010	
	Other claims within the Eurosystem (net)	59,039	38,830	
9	Other assets	1,049	737	
	Coins of euro area	41	41	
	Tangible and intangible fixed assets	79	87	
	Other current assets	31	33	
	Sundry	898	577	
	Total assets	177,565	189,811	

Totals/sub-totals may not add up due to rounding.

EUR	million	31 Dec 2023	31 Dec 2022
LIAB	BILITIES		
1	Banknotes in circulation	26,275	26,567
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	124,040	138,697
	Current accounts (covering the minimum reserve system)	3,651	4,684
	Deposit facility	120,389	134,013
3	Other liabilities to euro area credit institutions denominated in euro	6	354
4	Liabilities to other euro area residents denominated in euro	5,608	1,733
5	Liabilities to non-euro area residents denominated in euro	6,544	5,891
6	Liabilities to euro area residents denominated in foreign currency	-	-

EUR	million	31 Dec 2023	31 Dec 2022
7	Liabilities to non-euro area residents denominated in foreign currency	-	-
8	Counterpart of special drawing rights allocated by the IMF	4,255	4,381
9	Intra-Eurosystem liabilities	_	_
10	Other liabilities	32	522
11	Revaluation accounts	3,728	3,628
12	Provisions	4,137	5,095
13	Capital and reserves	2,941	2,941
	Primary capital	841	841
	Reserve fund	2,100	2,100
14	Profit for the year	_	_
	Total liabilities	177,565	189,811

Helsinki, 27 February 2024

THE BOARD OF THE BANK OF FINLAND

Olli Rehn, Governor

Marja Nykänen, Deputy Governor

Tuomas Välimäki, Member of the Board



Profit and loss account

31 Dec 2023

EUR i	million	1 Jan-31 Dec 2023	1 Jan-31 Dec 2022
1	Interest income	3,880	1,125
2	Interest expense	-4,924	-666
3	NET INTEREST INCOME	-1,044	459
4	Foreign exchange rate differences	161	59
5	Securities price differences	36	19
6	Valuation losses related to currencies and securities	-70	-244
7	Change in foreign exchange rate and price difference provision	-140	165
	NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND RISK PROVISIONS	-1,057	458
8	Income and expenses on fees and commissions	-7	-6
9	Net result of pooling of monetary income	33	-422
10	Share in ECB profit	-	1
11	Income from other equity shares and participating interests	4	4
	CENTRAL BANKING PROFIT	-1,027	35
12	Other income	47	44

EUR	EUR million 1 Jan-31 Dec 2023		1 Jan-31 Dec 2022
	Operating expenses	-132	-126
13	Staff costs	-65	-62
14	Pension fund contribution	-10	-10
15	Administrative expenses	-42	-38
16	Depreciation of fixed assets	-10	-10
17	Banknote production services	-4	-6
18	Other expenses	-0	-0
	OPERATING PROFIT	-1,112	-47
	Profit for the pension fund	-	_
19	Income of the pension fund	33	31
20	Expenses of the pension fund	-33	-31
21	Changes in provisions	1,112	47
22	PROFIT FOR THE YEAR	-	-

Helsinki, 27 February 2024

THE BOARD OF THE BANK OF FINLAND

Olli Rehn, Governor

Marja Nykänen, Deputy Governor

Tuomas Välimäki, Member of the Board



Accounting policies

31 Dec 2023

1. General accounting policies

The Bank of Finland observes the economic-based accounting principles and techniques adopted by the Governing Council of the ECB, and the Bank's annual accounts are drawn up in accordance with these harmonised principles. In accordance with section 11 of the Act on the Bank of Finland, the Parliamentary Supervisory Council confirms, on the proposal of the Board, the principles applied in drawing up the annual accounts.

The Bank of Finland's profit and loss account also comprises income and expenses of the Bank's pension fund and of the Financial Supervisory Authority. The ECB guideline on accounting and financial reporting does not regulate accounting for the pension fund.

2. Revaluation of items denominated in foreign currency and gold

Items denominated in foreign currency and gold are converted into euro at the exchange rate prevailing on the balance sheet date. If the balance sheet date falls on a weekend, the exchange rates of the preceding business day are used. All foreign currency-denominated items are revaluated on a currency-by-currency basis. Revaluation differences related to foreign exchange rate movements and securities price movements are treated separately. Unrealised gains are recorded in revaluation accounts. Unrealised losses are taken to the profit and loss account if they exceed previous corresponding unrealised revaluation gains registered in the revaluation accounts. Unrealised losses taken to the profit and loss account are not reversed against any future unrealised gains in subsequent years. No distinction is made between the price and currency revaluation differences for gold. Instead, a single gold valuation is made. Realised gains and losses related to foreign exchange rate movements during the financial year are calculated on the basis of the daily net average cost method. The exchange rates used in the financial statements are presented in the following Table.

Currency	29 Dec 2023	30 Dec 2022
US dollar	1.1050	1.0666
Japanese yen	156.3300	140.6600
Swedish krona	11.0960	11.1218
Swiss franc	0.9260	0.9847
Pound sterling	0.8691	0.8869
Canadian dollar	1.4642	1.4440
Special Drawing Rights (SDR)	0.8226	0.7989
Gold	1,867.8280	1,706.0750

3. Valuation and amortisation of securities

Income and expenses are recognised in the period in which they are earned or incurred. Realised income and expenses are entered in the profit and loss account. The difference between the acquisition price and nominal value of debt securities is entered as income or expense over the maturity of the security. Gains and losses related to movements in the prices of debt securities are calculated on the basis of the average cost method.

Unrealised gains are recorded in revaluation accounts. Unrealised losses are taken to the profit and loss account if they exceed previous corresponding unrealised revaluation gains registered in the revaluation accounts. Unrealised losses taken to the profit and loss account are not reversed against any future unrealised gains in subsequent years. Both eurodenominated and foreign currency-denominated securities are valued on a security-by-security basis. If unrealised losses are entered in the profit and loss account in respect of a security or a currency, the average price of the security or the net average rate of the currency is adjusted correspondingly before the beginning of the next financial year.

Securities held for monetary policy purposes

Debt securities currently held for monetary policy purposes are accounted for at amortised cost subject to impairment.

Securities other than those held for monetary policy purposes

Marketable securities and similar assets are valued either at the mid-market prices or on the basis of the relevant yield curve prevailing on the balance sheet date, on a security-by-security basis. For 2023, mid-market prices on 29 December 2023 were used.

Marketable investment funds are valued at market prices on a net – fund – basis and not on the basis of the underlying assets provided that they meet certain predetermined criteria, broadly speaking in relation to the level of influence of the Bank of Finland on the day-to-day operations of the fund, the legal status of the fund and the way the investment is evaluated. There is no netting between the revaluation results of different marketable investment funds.

Real estate funds are valued on the basis of the last available price. The prices are reviewed in January when the funds report the prices on the balance sheet date.

Reverse transactions

Reverse repurchase agreements, or reverse repos, are recorded as collateralised outward loans on the assets side of the balance sheet. Repurchase agreements, or repos, are recorded as collateralised inward deposits on the liabilities side of the balance sheet. Securities sold under repurchase agreements remain on the Bank's balance sheet.

Reverse transactions conducted under an automated security lending programme (including security lending transactions) are recorded on the balance sheet at the balance sheet date if collateral is provided in the form of cash placed on an account of the Bank of Finland and this cash is still uninvested.

4. Accounting policies relating to intra-ESCB balances

Intra-Eurosystem balances result primarily from cross-border payments in the EU that are settled in central bank money in euro. These transactions are for the most part initiated by private entities. They are primarily settled in TARGET – the Trans-European Automated Real-time Gross settlement Express Transfer system – and give rise to bilateral balances in the TARGET accounts of EU central banks. Payments conducted by the ECB and the national central banks (NCBs) also affect these accounts. All settlements are automatically aggregated and adjusted to form part of a single position of each NCB visà-vis the ECB. The movements in TARGET accounts are reflected in the accounting records of the ECB and the NCBs on a daily basis. These bilateral balances are netted and then assigned to the ECB on a daily basis, leaving each NCB with a single net bilateral position vis-à-vis the ECB only.

Intra-Eurosystem balances of the Bank of Finland vis-à-vis the ECB arising from TARGET, as well as other intra-Eurosystem balances denominated in euro (e.g. interim ECB profit distributions to NCBs, if any, monetary income results), are presented on the balance sheet of the Bank of Finland as a single net asset or liability position and disclosed under 'Other claims within the Eurosystem (net)' or 'Other liabilities within the Eurosystem (net)'. Intra-ESCB balances versus non-euro area NCBs not arising from TARGET are disclosed either under 'Claims on non-euro area residents denominated in euro' or 'Liabilities to non-euro area residents denominated in euro'.

Intra-Eurosystem claims arising from the Bank of Finland's participating interest in the ECB are reported under 'Participating interest in ECB'. This balance sheet item includes (i) the NCBs' paid-up share in the ECB's subscribed capital, (ii) any net amount paid by the NCBs due to the increase in their shares in the ECB's equity value ¹¹ resulting from all previous ECB capital key adjustments, and (iii) contributions in accordance with Article 48.2 of the Statute of the ESCB with respect to central banks of Member States whose derogations have been abrogated.

Intra-Eurosystem claims arising from the transfer of foreign reserve assets to the ECB by the Bank of Finland at the time of joining the Eurosystem are denominated in euro and reported under 'Claims equivalent to the transfer of foreign reserves'.

Intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are included as a single net asset under 'Net claims related to the allocation of euro banknotes within the Eurosystem' (see 'Banknotes in circulation' in 'Accounting policies').

5. Valuation of fixed assets

Fixed assets are valued at cost less depreciation. Depreciation is calculated on a straight-line basis over the expected economic lifetime of an asset, beginning primarily in the calendar month following acquisition.

The counteritem of buildings and land capitalised in the 1999 balance sheet at market prices is the revaluation account. Depreciation in respect of buildings has been entered by adjusting the revaluation account downwards so that depreciation has no impact on the Bank of Finland's profit and loss account.

The economic lifetimes of assets are calculated as follows:

- computers, related hardware and software, and motor vehicles: 4 years
- machinery and equipment: 10 years
- buildings: 25 years.

Fixed assets with a value of less than EUR 10,000 are written off in the year of acquisition.

6. Banknotes in circulation

The ECB and the euro area NCBs, which together comprise the Eurosystem, issue euro banknotes. The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month in accordance with the banknote allocation key. The ECB has been allocated an 8% share of the total value of euro banknotes in circulation, whereas the remaining 92% has been allocated to NCBs according to the banknote allocation key. The share of banknotes allocated to each NCB is disclosed in the balance sheet under liability item 'Banknotes in circulation'.

The difference between the value of the euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of the euro banknotes that it actually puts into circulation also gives rise to remunerated ⁴ intra-Eurosystem balances. These claims (or liabilities) are disclosed under the item 'Net claims (liabilities) related to the allocation of euro banknotes within the Eurosystem' (see section 'Accounting policies relating to intra-ESCB balances'). In the Bank of Finland's balance sheet, the item is on the assets side. The interest income and expense on these balances is cleared through the accounts of the ECB and is disclosed under 'Net interest income'.

7. Interim profit distribution by the ECB

The Governing Council of the ECB has decided that the seigniorage income of the ECB, which arises from the 8% share of euro banknotes allocated to the ECB, as well as the income arising from the securities held under (a) the Securities Markets Programme (SMP), (b) the third covered bond purchase programme (CBPP3), (c) the asset-backed securities purchase programme (ABSPP), (d) the public sector purchase programme (PSPP), and (e) the pandemic emergency purchase programme (PEPP) is distributed in January of the following year by means of an interim profit distribution, unless otherwise decided by the Governing Council. Any such decision shall be taken where, on the basis of a reasoned estimate prepared by the Executive Board, the Governing Council expects that the ECB will have an overall annual loss or will make an annual net profit that is less than this income. The Governing Council may also decide to transfer all or part of this income to a provision for financial risks.

Furthermore, the Governing Council may decide to reduce the amount of the income on euro banknotes in circulation to be distributed in January by the amount of the costs incurred by the ECB in connection with the issue and handling of euro banknotes. The amount distributed to NCBs is disclosed in the profit and loss account under 'Income from equity shares and participating interest'.

8. Pension fund

The assets of the Bank of Finland's pension fund are included in the Bank's balance sheet. A separate annual report is prepared on the pension fund.

The pension fund's real estate is recorded in the balance sheet at value prevailing on transfer date less annual depreciation. To the extent that the balance sheet value of buildings has been covered by a revaluation, the corresponding depreciation is recorded by reversing the revaluation so that the depreciation has no impact on the Bank of Finland's profit and loss account.

9. Recording of provisions

Provisions can be made in the annual accounts, if they are necessary for safeguarding the real value of the Bank's funds or for smoothing out variations in profit and loss arising from changes in exchange rates or market value of securities. Provisions can also be made, as necessary, to cover the Bank's pension liability.

10. Off-balance sheet commitments

Profits and losses arising from off-balance sheet items are recognised and treated in a similar manner to on-balance sheet instruments. Foreign exchange forward transactions are included in the net foreign currency position for calculating average costs.

Changes in the variation margins of futures contracts are taken to the profit and loss account on a daily basis, so no separate revaluation need be performed for them for the purposes of the financial statements. Changes in the variation margins also affect the currency position. The same procedure is applied on the closing day of the open position, regardless of whether or not delivery takes place. If delivery does take place, the purchase or sale entry is made at market price.

11. Changes in accounting policies

There were no changes in accounting policies in 2023.

- 1) Equity value means the total of the ECB's reserves, revaluation accounts and provisions equivalent to reserves, minus any loss carried forward from previous periods. In the event of capital key adjustments taking place during the financial year, the equity value also includes the ECB's accumulated net profit or net loss until the date of the adjustment.
- 2) Decision of the ECB of 13 December 2010 on the issue of euro banknotes (ECB/2010/29) (2011/67/EU) (OJ L 35, 9.2.2011, p. 26), as amended. The unofficial consolidated text with the list of amendments can be found here.
- 3) Banknote allocation key means the percentages that result from taking into account the ECB's share in the total euro banknote issue and applying the subscribed capital key to the NCBs' share in such total.
- 4) Decision (EU) 2016/2248 of the ECB of 3 November 2016 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (ECB/2016/36), (OJ L 347, 20.12.2016, p. 26), as amended. The unofficial consolidated text with the list of amendments can be found here.
- 5) Decision (EU) 2015/298 of the ECB of 15 December 2014 on the interim distribution of the income of the European Central Bank (ECB/2014/57), (OJ L 53, 25.2.2015, p. 24), as amended. The unofficial consolidated text with the list of amendments can be found here.



Notes on the balance sheet

31 Dec 2023

Assets

1. Gold and gold receivables

The Bank of Finland's holdings of gold total 1,576,487 troy ounces (1 troy ounce = 31.103 g). In the annual accounts, gold has been valued at market price. At the beginning of 1999, the Bank of Finland – and the other national central banks (NCBs) participating in the Eurosystem – transferred about 20% of its gold holdings to the ECB.

Gold	31 Dec 2023	31 Dec 2022
Holdings (troy ounces, million)	1.6	1.6
Price: EUR per troy ounce	1,867.8	1,706.1
Market price (EUR million)	2,944.6	2,689.6
Change in market value (EUR million)	255.0	152.3

2. Claims on non-euro area residents denominated in foreign currency

The item consists of claims on non-euro area residents denominated in foreign currency and included in the Bank of Finland's foreign reserves, and receivables from the International Monetary Fund (IMF).

2.1 Receivables from the International Monetary Fund (IMF)

31 Dec 2023		31 Dec 2022	
EUR million	SDR million	EUR million	SDR million
774.7	637.2	828.9	662.2
4,354.5	3,581.9	4,464.3	3,566.6
112.1	92.2	20.9	16.7
5,241.3	4,311.3	5,314.2	4,245.6
022 and 2023		2023	2022
		0.8082	0.8030
		0.8166	0.7826
		0.8062	0.7621
		0.8226	0.7989
	EUR million 774.7 4,354.5 112.1 5,241.3	EUR million SDR million 774.7 637.2 4,354.5 3,581.9 112.1 92.2 5,241.3 4,311.3	EUR million SDR million EUR million 774.7 637.2 828.9 4,354.5 3,581.9 4,464.3 112.1 92.2 20.9 5,241.3 4,311.3 5,314.2 022 and 2023 2023 0.8082 0.8166 0.8062

Finland's quota in the IMF is SDR 2,410.6 million. The reserve tranche is the part of the Bank of Finland's quota that has been paid to the IMF in foreign currency. Another part of the quota was formerly paid to the IMF in Finnish markka. The IMF has lent this part back to the Bank of Finland. The net effect of the Finnish markka quota on the Bank's balance sheet is zero, since the above-mentioned receivables and the liability are included in the same balance sheet item.

The Bank of Finland's holdings of special drawing rights (SDRs) are equivalent to EUR 4,354.5 million. Special drawing rights are reserve assets created and allocated by the IMF to its member countries. They are used in currency transactions as normal currency units. The amount of the sub-item changes on the basis of currency transactions between the member countries. It is also affected by interest earned and paid as well as remuneration on the Bank's claims in the IMF.

In total, the Bank of Finland's receivables from the IMF amount to EUR 5,241.3 million.

2.2 Balances with banks and security investments, external loans and other external assets

This item consists of foreign currency-denominated security and fund investments as well as external loans and other external assets denominated in foreign currency.

Breakdown of claims on non-euro area residents denominated in foreign currency	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Coupon papers	4,867.9	4,070.5	797.4
Discount papers	_	220.39	-220.4
Fund investments	1,526.1	1,580.8	-54.6
Other	636.0	1,244.3	-608.4
Total	7,030.0	7,116.0	-86.0

Currency breakdown of securities of non-euro area residents denominated in foreign currency					
31 Dec 2023 31 Dec 2022					
Currency	EUR million	%	EUR million	%	
Pound sterling	634.6	13.0	587.8	13.7	
US dollar	4,091.7	84.1	3,569.7	83.2	
Japanese yen	141.5	2.9	133.4	3.1	
Total	4,867.9	100.0	4,290.9	100.0	

Remaining maturity of securities of non-euro area residents denominated in foreign currency					
31 Dec 2023 31 Dec 2022					
Maturity	EUR million	%	EUR million	%	
Up to 1 year	639.5	13.1	1,169.9	27.3	
Over 1 year	4,228.3	86.9	3,121.0	72.7	
Total	4,867.9	100.0	4,290.9	100.0	

3. Claims on euro area residents denominated in foreign currency

This item consists of foreign currency-denominated deposits and securities as well as other claims on euro area residents denominated in foreign currency.

Breakdown of claims on euro area residents denominated in foreign currency	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Deposits	15.6	33.7	-18.1
Coupon papers	86.1	109.1	-22.9
Other	-1.3	29.7	-30.9
Total	100.5	172.4	-71.9

Currency breakdown of securities of euro area residents denominated in foreign currency					
31 Dec 2023 31 Dec 2022					
Currency	EUR million	%	EUR million	%	
Pound sterling	44.2	51.4	61.7	56.5	
US dollar	41.9	48.6	47.4	43.5	
Total	86.1	100.0	109.1	100.0	

Remaining maturity of securities of euro area residents denominated in foreign currency					
	31 Dec 2023		31 Dec 2022		
Maturity	EUR million	%	EUR million	%	
Up to 1 year	28.1	32.6	59.4	54.4	
Over 1 year	58.0	67.4	49.7	45.6	
Total	86.1	100.0	109.1	100.0	

4. Claims on non-euro area residents denominated in euro

As at 31 December 2023, the Bank of Finland did not have any claims on non-euro area residents denominated in euro.

5. Lending to euro area credit institutions related to monetary policy operations denominated in euro

This item presents the monetary policy instruments used by the Bank of Finland to implement monetary policy as part of the Eurosystem. It consists of interest-bearing credit to Finnish credit institutions, and the amount recorded is determined by the credit institutions' liquidity needs.

The total Eurosystem holding of monetary policy assets amounts to EUR 410.3 billion, of which the Bank of Finland holds EUR 3,676.4 million. In accordance with Article 32.4 of the ESCB Statute, losses from monetary policy operations, if they were to materialise, are shared in full by the Eurosystem NCBs, in proportion to the prevailing ECB capital key shares. Losses can only materialise if both the counterparty fails and the recovery of funds received from the resolution of the collateral provided by the counterparty is not sufficient. For specific collateral which can be accepted by NCBs at their own discretion, risk sharing has been excluded by the Governing Council of the ECB.

Lending to euro area credit institutions related to monetary policy operations denominated in euro	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Main refinancing operations	-	_	-
Longer-term refinancing operations	3,676.4	30,096.4	-26,420.0
Fine-tuning reverse operations	-	-	-
Structural reverse opeerations	-	_	-
Marginal lending facility	_	_	_
Credits related to margin calls	-	_	-
Total	3,676.4	30,096.4	-26,420.0

5.1 Main refinancing operations

Main refinancing operations (MROs) are liquidity providing reverse transactions which are executed with a weekly frequency and a maturity of one week, on the basis of standard tenders. They are conducted as fixed rate tender procedures. These operations play a key role in achieving the aims of steering interest rates, managing market liquidity and signalling the monetary policy stance.

5.2 Longer-term refinancing operations

These operations (LTROs) aim to provide counterparties with additional longer-term refinancing. These operations were conducted at fixed rate with allotment of the total amount bid. In addition to the series of seven quarterly targeted longer-term refinancing operations (TLTRO III) introduced in 2019, the Governing Council added three further operations to this series in December 2020, which were conducted between June and December 2021. These operations have a three-year maturity. For all TLTROs-III, starting 12 months after the settlement of each operation, participants have had the option on a quarterly basis of terminating or reducing the amount of TLTRO III concerned before maturity. Borrowing rates in these operations can be as low as 50 basis points below the average interest rate on the deposit facility over the period from 24 June 2020 to 23 June 2022, but in any case may not become less negative than -1%, and as low as the average – for the relevant period – interest rate on the deposit facility during the rest of the life of the same operation. ¹¹

The actual interest rates can only be known at the maturity or early repayment of each operation and before that a reliable estimate is used for calculating the TLTRO III interest accruals. This means that, for the annual accounts 2023, the interest rate for the accruals was indexed to the average applicable key ECB interest rate since the beginning of the last interest period of these operations, which begun on 23 November 2022.

Furthermore, of the four additional pandemic emergency longer-term refinancing operations (PELTROs) allotted in 2021 on a quarterly basis, each with a tenor of approximately one year, the last operation matured in the course of 2023. These operations provided a liquidity backstop to the euro area banking system and contribute to preserving the smooth functioning of the money market during the extended pandemic period. The PELTROs were conducted as fixed rate tender procedures with full allotment. The interest rate was 25 basis points below the average rate applied in the Eurosystem's main refinancing operations over the life of the respective PELTRO.

5.3 Fine-tuning reverse operations

Fine-tuning reverse operations aim to regulate the market liquidity situation and steer interest rates, particularly to smooth the effects on interest rates caused by unexpected market fluctuations. Owing to their nature, they are executed on an adhoc basis.

5.4 Structural reverse operations

These are reverse open-market transactions through standard tenders to enable the Eurosystem to adjust its structural liquidity position vis-à-vis the financial sector.

5.5 Marginal lending facility

Marginal lending facilities may be used by counterparties to obtain overnight liquidity from NCBs at a pre-specified interest rate against eligible assets.

5.6 Credits related to margin calls

This item refers to cash paid to counterparties in those instances where the market value of the collateral exceeds an established trigger point implying an excess of collateral with respect to outstanding monetary policy operations.

6. Other claims on euro area credit institutions denominated in euro

This item consists of euro-denominated deposits and accounts with euro area credit institutions.

Other claims on euro area credit institutions denominated in euro	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Current accounts	0.0	0.0	-0.0
Reverse repurchase agreements	-	_	_
Emergency Liquidity Assistance (ELA)	_	_	_
Other	-	16.4	-16.4
Total	0.0	16.4	-16.4

On 17 May 2017, the Governing Council decided to publish the text of the Emergency Liquidity Assistance (ELA) agreement with the aim of further increasing transparency regarding ELA. This publication replaces the ELA procedures document that has been available on the ECB website since October 2013. For the text of the press release, click on: http://www.ecb.europa.eu/press/pr/date/2017/html/ecb.pr170619.en.html.

7. Securities of euro area residents denominated in euro

7.1 Securities held for monetary policy purchases

As at 31 December 2023 this item consisted of securities acquired by the Bank of Finland within the scope of the Securities Markets Programme (SMP), the third covered bond purchase programme (CBPP3), the public sector purchase programme (PSPP), the corporate sector purchase programme (CSPP) and the pandemic emergency purchase programme (PEPP).

	Start date	End date	Decision	Universe of eligible securities
Complete	d / Terminated p	rogrammes		
CBPP1 ²	July 2009	June 2010	ECB/ 2009/16	Covered bonds of euro area residents
CBPP2 ²	November 2011	October 2012	ECB/ 2011/17	Covered bonds of euro area residents
SMP	May 2010	September 2012	ECB/ 2010/5	Public and private debt securities issued in the euro
Asset puro	chase programm	ne (APP) ⁴		
CBPP3	October 2014	active	ECB/ 2020/8, as amended	Covered bonds of euro area residents
ABSPP	November 2014	active	ECB/ 2014/45, as amended	Senior and guaranteed mezzanine tranches of asset- backed securities of euro area residents
PSPP	March 2015	active	ECB/ 2020/9	Bonds issued by euro-area central, regional or local governments or recognised agencies as well as by international organisations and multilateral development banks located in the euro area
CSPP	June 2016	active	ECB/ 2016/16, as amended	Bonds and commercial papers issued by non-bank corporations established in the euro area
Pandemic	emergency pure	chase programm	e (PEPP)	
PEPP	March 2020	active	ECB/ 2020/17, as amended	All asset categories eligible under the APF
1) Further elig	ibility criteria for the s	specific programmes c	an be found in the G	overning Council's decisions.

programmes (CBPP1 and CBPP2).

³⁾ Only public debt securities issued by five euro area treasuries were purchased under the SMP.

⁴⁾ The reinvestments under the APP were discontinued as of 1 July 2023.

Until the end of February 2023 ^{2]} the Eurosystem continued reinvesting, in full, the principal payments from maturing securities purchased under the asset purchase programme (APP) ^{3]}. Subsequently, the APP portfolio declined at a measured and predictable pace. Until the end of June 2023, the decline amounted to EUR 15 billion per month on average as the Eurosystem did not reinvest all of the principal payments from maturing securities. In June 2023 the Governing Council decided ^{4]} to discontinue the reinvestments under the APP as of July 2023. Thereafter, the APP portfolio was declining due to maturities.

As concerns the PEPP 51, the Eurosystem continued reinvesting, in full, the principal payments from maturing securities purchased throughout the year. The Governing Council intends 60 to continue reinvesting, in full, the principal payments from maturing securities purchased under the PEPP during the first half of 2024. It also intends to reduce the PEPP portfolio by EUR 7.5 billion per month on average over the second half of 2024 and to discontinue reinvestments under the PEPP at the end of the same year. In addition, the Governing Council will continue applying flexibility in reinvesting redemptions coming due in the PEPP portfolio, with a view to countering risks to the monetary policy transmission mechanism related to the pandemic.

The securities purchased under all of these programmes are valued on an amortised cost basis subject to impairment (see 'Valuation and amortisation of securities' in 'Accounting policies'). The amortised cost of the securities held by the Bank of Finland, and their market value (which is not recorded on the balance sheet or in the profit and loss account and is provided for comparison purposes only), are as follows:

Securities held for monetary policy purposes (EUR million)						
	31 Dec	2023	31 Dec	2022	Chan	ge
	Balance sheet value	Market value	Balance sheet value	Market value	Balance sheet value	Market value
SMP	50.7	52.2	50.6	53.6	0.1	-1.4
CBPP3	10,602.3	9,922.2	11,730.2	10,650.6	-1,127.9	-728.4
PSPP - government/ agency securities	35,208.2	31,070.7	37,294.6	31,605.3	-2,086.4	-534.6
PSPP - supranational securities	1,722.9	1,567.2	2,140.5	1,913.1	-417.6	-345.9
CSPP	14,889.5	13,686.9	16,482.8	14,442.2	-1,593.3	-755.3

	31 Dec 2023		31 Dec	31 Dec 2022		ge
	Balance sheet value	Market value	Balance sheet value	Market value	Balance sheet value	Market value
PEPP - covered bonds	175.4	153.4	218.1	187.0	-42.6	-33.6
PEPP - government/ agency securities	22,687.3	19,915.5	22,933.0	19,219.8	-245.7	695.6
PEPP - corporate sector securities	4,763.9	4,161.9	4,894.9	4,017.2	-131.0	144.6
Total	90,100.3	80,530.0	95,744.6	82,088.9	-5,644.3	-1,558.9

The Governing Council assesses on a regular basis the financial risks associated with the securities held under these programmes. In this context, impairment tests are conducted on an annual basis, using data as at the year-end and are approved by the Governing Council. In these tests, impairment indicators are assessed separately for each programme. In cases where impairment indicators are observed, further analysis is performed to confirm that the cash flows of the underlying securities have not been affected by an impairment event.

In accordance with Article 32.4 of the ESCB Statute, losses from holdings of securities purchased under the SMP, CBPP3 and CSPP programmes, from holdings of securities of supranational organisations purchased under the PSPP and from holdings of covered bonds (PEPP-COV) and corporate sector securities (PEPP-CORP) purchased under the PEPP, if they were to materialise, are shared in full by the Eurosystem NCBs, in proportion to their prevailing ECB capital key shares.

As a result of an impairment test conducted on the PEPP-CORP portfolio, the Governing Council has deemed it appropriate to establish a buffer against credit risks in monetary policy operations during 2023 (see section 12 'Provisions' in 'Notes on the balance sheet').

The following table shows, for each programme, total holdings of Eurosystem NCBs and the Bank of Finland's share held on the balance sheet.

Securities held for monetary policy purposes (EUR million)	Held by Euro	system NCBs	On the Bank of Finland's balance sheet		
	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022	
SMP	1,901.4	2,142.5	50.7	50.6	
CBPP3	262,090.2	276,856.7	10,602.3	11,730.2	
PSPP - supranational securities	255,261.2	275,228.1	1,722.9	2,140.5	
CSPP	323,921.5	344,119.2	14,889.5	16,482.8	
PEPP - covered bonds	5,197.2	5,282.8	175.4	218.1	
PEPP - supranational securities	154,332.0	145,687.1	-	_	
PEPP - corporate sector securities	45,989.2	46,073.9	4,763.9	4,894.9	
Total	1,048,692.6	1,095,390.3	32,204.8	35,517.0	

7.2 Other securities

This item consists of holdings of fund shares issued by euro area residents.

Breakdown of other securities of euro area residents denominated in euro (EUR million)	31 Dec 2023	31 Dec 2022	Change
Fund investments	171.9	155.5	16.3
Total	171.9	155.5	16.3

8. Intra-Eurosystem claims

8.1 Participating interest in ECB

Pursuant to Article 28 of the ESCB Statute, the ESCB national central banks are the sole subscribers to the capital of the ECB. Subscriptions depend on shares which are fixed in accordance with Article 29 of the ESCB Statute and are subject to adjustment every five years or whenever there is a change in composition of the ESCB national central banks.

For the Bank of Finland this balance sheet item includes (i) the paid-up share in the ECB's subscribed capital, (ii) the net amount paid by the Bank of Finland due to the increase in its share in the ECB's equity value resulting from all previous ECB capital key adjustments, and (iii) contributions in accordance with Article 48.2 of the Statute of the ESCB.

	NCBs' i	gu-biad	shares	in the	ECB's	capital
--	---------	---------	--------	--------	-------	---------

	Capital key since 1 Jan 2023, %	Subscribed capital as at 31 Dec 2023 EUR million	Paid-up capital as at 31 Dec 2023 EUR million
Nationale Bank van België/Banque Nationale de Belgique (Belgium)	2.9630	320.7	320.7
Deutsche Bundesbank (Germany)	21.4394	2,320.8	2,320.8
Eesti Pank (Estonia)	0.2291	24.8	24.8
Central Bank of Ireland (Ireland)	1.3772	149.1	149.1
Bank of Greece (Greece)	2.0117	217.8	217.8
Banco de España (Spain)	9.6981	1,049.8	1,049.8
Banque de France (France)	16.6108	1,798.1	1,798.1
Hrvatska narodna banka (Croatia)	0.6595	71.4	71.4
Banca d'Italia (Italy)	13.8165	1,495.6	1,495.6
Central Bank of Cyprus (Cyprus)	0.1750	18.9	18.9
Latvijas Banka (Latvia)	0.3169	34.3	34.3
Lietuvos bankas (Lithuania)	0.4707	51.0	51.0
Banque centrale du Luxembourg (Luxembourg)	0.2679	29.0	29.0
Central Bank of Malta (Malta)	0.0853	9.2	9.2
De Nederlandsche Bank (The Netherlands)	4.7662	515.9	515.9
Oesterreichische Nationalbank (Austria)	2.3804	257.7	257.7
Banco de Portugal (Portugal)	1.9035	206.1	206.1
Banka Slovenije (Slovenia)	0.3916	42.4	42.4
Národná banka Slovenska (Slovakia)	0.9314	100.8	100.8
Suomen Pankki – Finlands Bank (Finland)	1.4939	161.7	161.7
Subtotal for euro area NCBs	81.9881	8,875.2	8,875.2
Bulgarian National Bank (Bulgaria)	0.9832	106.4	4.0

NCBs' paid-up shares in the ECB's capital			
	Capital key since 1 Jan 2023, %	Subscribed capital as at 31 Dec 2023 EUR million	Paid-up capital as at 31 Dec 2023 EUR million
Česká národní banka (Czech Republic)	1.8794	203.4	7.6
Danmarks Nationalbank (Denmark)	1.7591	190.4	7.1
Magyar Nemzeti Bank (Hungary)	1.5488	167.7	6.3
Narodowy Bank Polski (Poland)	6.0335	653.1	24.5
Banca Națională a României (Romania)	2.8289	306.2	11.5
Sveriges Riksbank (Sweden)	2.9790	322.5	12.1
Subtotal for non-euro area NCBs	18.0119	1,949.8	73.1
Total	100.0000	10,825.0	8,948.3

Capital of the ECB

The subscribed capital of the ECB is EUR 10,825 million. After the Bank of England's withdrawal from the ESCB on 31 January 2020, the ECB kept its subscribed capital unchanged and the share of the Bank of England in the ECB's subscribed capital was reallocated among both the euro area NCBs and the remaining non-euro area NCBs.

The ECB's paid-up capital also remained unchanged at EUR 7,659 million in 2020, as the remaining NCBs covered the withdrawn Bank of England's paid-up capital of EUR 58 million. In addition, the Governing Council decided that the euro area NCBs would pay up in full their increased subscriptions in two annual instalments in 2021 and 2022. ⁸¹ The Bank of Finland paid the first instalment of EUR 11.2 million on 29 December 2021, increasing its share in the paid-up capital of the ECB from EUR 139.3 million in 2020, to EUR 150.5 million in 2021. The second instalment of EUR 11.2 million was paid on 28 December 2022, increasing the Bank of Finland's share in the paid-up capital of the ECB to EUR 161.7 million in 2022.

This item also includes net adjustments totalling EUR 26.0 million recorded in different years on account of changes to the ECB capital key.

8.2 Claims equivalent to the transfer of foreign reserves

These represent the Bank of Finland's claims arising from the transfer of foreign reserve assets to the ECB, when the Bank joined the Eurosystem. In line with Article 30.2 of the Statute of the ESCB, these contributions are fixed in proportion to the NCBs' share in the subscribed capital of the ECB. The remuneration of these claims is calculated daily at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations, adjusted to reflect a zero return on the gold component.

As at 31 December 2023, the Bank of Finland's claims equivalent to the transfer of foreign reserves totalled EUR 741.1 million.

8.3 Net claims related to the allocation of euro banknotes within the Eurosystem

This item consists of the claim arising from the adjustment of the banknotes of the Bank of Finland to correspond to the ECB capital key as well as the liability related to the share of 8% of the banknotes in circulation allocated to the ECB. For both the claim and the liability, the counter entry is recorded under the balance sheet liability item 'Banknotes in circulation'. 21

At the end of 2023 the balance sheet item totalled EUR 7,282.6 million (EUR 8,009.9 million in 2022). The change in comparison to 2022 was due to the increase of 2.3% in banknotes put into circulation by the Bank of Finland in 2023 as well as the fall of 1.1% in banknotes in circulation in the Eurosystem as a whole. The remuneration of these claims is calculated daily at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations.

8.4 Other claims within the Eurosystem (net) or liability item Other liabilities within the Eurosystem (net)

Other claims/liabilities within the Eurosystem (net)	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Due to/from ECB in respect of TARGET (including balances held with Eurosystem banks through correspondent accounts)	59,005.9	39,252.0	19,753.9
Due to/from ECB in respect of monetary income	33.3	-422.1	455.4
Due from ECB in respect of the ECB's interim profit distribution	-	_	-
Other claims/liabilities within the Eurosystem (net)	59,039.2	38,829.9	20,209.3

The balance of 59,039.2 million as at 31 December 2023 represents the sum of three components: (1) the position of the Bank of Finland vis-à-vis the ECB in respect of the transfers issued and received through TARGET by the ESCB national central banks, including the ECB, plus the balances held with Eurosystem central banks through correspondent accounts; (2) the position vis-à-vis the ECB in respect of the pooling and allocation of monetary income within the Eurosystem pending settlement; and (3) the Bank of Finland's position vis-à-vis the ECB in respect of any amounts receivable or refundable, including the amount due to the Bank of Finland from the ECB in respect of the ECB's interim profit distribution.

The year-end net transfers via TARGET had a credit balance of EUR 59,005.9 million. The remuneration of this position is calculated daily at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations.

The position vis-à-vis the ECB in respect of the annual pooling and allocation of monetary income within the Eurosystem national central banks had a credit balance of EUR 33.3 million at year-end (see 'Net result of pooling of monetary income' in 'Notes on the profit and loss account').

With respect to 2023, the Governing Council, in view of the ECB's overall financial result for the year, decided to retain the full amount of income derived from banknotes in circulation, as well as income earned on securities purchased under the SMP, APP and PEPP (see section 3.1 'Interim profit distribution by the ECB' in 'Accounting policies'). Therefore no related amounts were due at the end of 2023.

9. Other assets

This item consists of the Bank of Finland's holdings of euro coins, fixed assets and investment assets (shares and other equity). The item also includes valuation results of off-balance sheet items, accruals and other receivables as well as the pension fund's assets.

Tangible and intangible fixed assets			
Book value	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Land	6.8	6.8	_
Buildings	52.6	60.0	-7.4
Machinery and equipment	10.2	10.4	-0.2
Art and numismatic collection	0.6	0.6	_
IT systems	9.3	8.8	0.5
Total	79.4	86.5	-7.1

Other holdings and sundry assets (EUR million)	31 Dec 2023	31 Dec 2022	Change
Coins of euro area	40.7	40.6	0.1
Shares and other equity	22.6	22.6	_
Pension fund's real estate and accruals	8.6	10.2	-1.7
Accruals	840.7	626.0	214.8
Items relating to valuation of off-balance sheet items	55.5	-50.1	105.6
Sundry	1.8	0.8	1.0
Total	970.0	650.2	319.8

Liabilities

1. Banknotes in circulation

This item consists of the Bank of Finland's share, in accordance with the ECB capital key and adjusted for the share allocated to the ECB, of the total amount of euro banknotes in circulation.

During 2023, the total value of euro banknotes in circulation decreased by 1.1%. According to the allocation key, the Bank of Finland had euro banknotes in circulation worth EUR 26,274.6 million at the end of the year compared with EUR 26,567.4 million at the end of 2022. The value of the euro banknotes actually issued by the Bank of Finland in 2023 increased by 2.3% from EUR 18,557.4 million to EUR 18,992.0 million. As this was less than the allocated amount, the difference of EUR 7,282.6 million (compared to EUR 8,009.9 million in 2022) is shown under asset sub-item 'Net claims related to the allocation of euro banknotes within the Eurosystem'.

Banknotes in circulation (EUR million)	31 Dec 2023	31 Dec 2022
EUR 5	74.1	75.2
EUR 10	-89.3	-83.6
EUR 20	3,339.7	3,315.3
EUR 50	14,375.4	13,751.8
EUR 100	-1,369.1	-1,241.1
EUR 200	874.4	877.5
EUR 500	1,786.6	1,862.4
Total	18,992.0	18,557.4
ECB issue figure	-2,284.5	-2,310.1
CSM figure	9,567.1	10,320.0
Banknotes in circulation in accordance with the ECB capital key	26,274.6	26,567.4

2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro

Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	31 Dec 2023 EUR million	31 Dec 2022 EUR million	Change EUR million
Current accounts (covering the minimum reserve system)	3,650.7	4,684.5	-1,033.8
Deposit facility	120,389.2	134,012.7	-13,623.5
Fixed-term deposits	_	_	-
Fine-tuning reverse operations	_	_	-
Deposits related to margin calls	-	_	-
Total	124,039.9	138,697.2	-14,657.3

2.1 Current accounts (covering the minimum reserve system)

Current accounts contain the credit balances of the transaction accounts of credit institutions that are required to hold minimum reserves, excluding funds of credit institutions that are not freely disposable and accounts of credit institutions exempt from minimum reserve requirements, which are disclosed separately under liability item 3 'Other liabilities to euro area credit institutions denominated in euro'.

Banks' minimum reserve balances were remunerated at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations until 20 December 2022, and at the Eurosystem's deposit facility rate between 21 December 2022 and 19 September 2023. On 27 July 2023 the Governing Council decided that, starting from 20 September 2023, these balances will be remunerated at zero percent.

2.2 Deposit facility

The deposit facility refers to overnight deposits placed by banks that access the Eurosystem's liquidity absorbing standing facility at the pre-specified rate.

2.3 Fixed-term deposits

Fixed-term deposits are fine-tuning liquidity absorbing operations that take the form of deposits.

2.4 Fine-tuning reverse operations

Fine-tuning reverse operations are used to offset high liquidity imbalances.

2.5 Deposits related to margin calls

This item refers to deposits made by counterparties in those instances where the market value of the collateral pledged falls short of an established trigger point.

3. Other liabilities to euro area credit institutions denominated in euro

As at 31 December 2023, this item amounted to EUR 6.1 million (2022: EUR 354.2 million) and included collateral related to currency swap agreements. In 2022, the item consisted of repurchase agreements.

4. Liabilities to other euro area residents denominated in euro

This item consists of euro-denominated liabilities to the public sector (EUR 5,600.0 million) and to financial institutions not subject to minimum reserve requirements (EUR 8.2 million).

5. Liabilities to non-euro area residents denominated in euro

This item consists of balances of international organisations and of non-euro area banks and financial institutions with the Bank of Finland (EUR 6,543.9 million).

6. Liabilities to euro area residents denominated in foreign currency

As at 31 December 2023, the Bank of Finland did not have any liabilities to euro area residents denominated in foreign currency.

7. Liabilities to non-euro area residents denominated in foreign currency

As at 31 December 2023, the Bank of Finland did not have any liabilities to non-euro area residents denominated in foreign currency.

8. Counterpart of special drawing rights allocated by the IMF

This item is the counter-item of special drawing rights (SDRs, cf. item on the assets side). Originally, holdings of special drawing rights on the assets side of the balance sheet and their counter-item on the liabilities side matched up. As a result of SDR transactions, the Bank of Finland's claims related to special drawing rights at the year-end were greater than the counter-item on the liabilities side. On the liabilities side, the counter-item amounts to SDR 3,500.0 million. The item is presented in the balance sheet in euro, valued at the rate prevailing on 29 December 2023 (EUR 4,254.9 million).

9. Intra-Eurosystem liabilities (net)

Intra-Eurosystem liabilities and claims are elaborated on in more detail in the notes on the balance sheet under asset item 'Intra-Eurosystem claims'.

10. Other liabilities

This item consists of accruals, accounts payable and sundry liabilities. Accruals include e.g. transferable items recorded in connection with the financial accounts and accrued interest payable on repurchase agreements. Sub-item 'Sundry' includes e.g. liabilities related to value added and withholding tax payments.

Other liabilities (EUR million)	31 Dec 2023	31 Dec 2022	Change
Accruals	29.2	520.1	-490.8
Accounts payable	1.2	0.7	0.5
Sundry	1.6	1.6	0.0
Total	32.1	522.4	-490.4

11. Revaluation accounts

This item consists of unrealised valuation gains arising from the market valuation of foreign currency-denominated items and securities. The item also includes revaluations of land and buildings and other valuation differences arising from changes in accounting policies in 1999.

Revaluation accounts (EUR million)	31 Dec 2023	31 Dec 2022	Change
Gold	2,555.6	2,300.6	255.0
Foreign currencies:			
USD	703.3	1,049.2	-345.9
GBP	41.0	26.3	14.7
JPY	-	19.4	-19.4
SDR	5.5	34.4	-28.9
Other currencies	0.2	0.2	-0.0
Other currencies	0.2	0.2	-C

Revaluation accounts (EUR million)	31 Dec 2023	31 Dec 2022	Change
Securities	32.3	1.6	30.7
Fund investments	271.7	71.3	200.4
Other revaluations	118.1	125.4	-7.3
Total	3,727.7	3,628.5	99.2

12. Provisions

Under section 20 of the Act on the Bank of Finland, provisions can be made in the annual accounts, if they are necessary for safeguarding the real value of the Bank's funds or for smoothing out variations in profit and loss arising from changes in exchange rates or market values of securities. At the end of 2023, these provisions totalled EUR 4,136.7 million. Provisions consist of a general provision, provision against real value loss, pension provision, foreign exchange rate and price difference provision and a provision against credit risks in monetary policy operations.

As a result of an impairment test conducted on the PEPP-CORP portfolio, the Governing Council has deemed it appropriate to establish a buffer totalling EUR 42.9 million against credit risks in monetary policy operations during 2023. In accordance with Article 32.4 of the ESCB Statute, this buffer will be funded by all the national central banks of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in 2023. As a result, a provision for EUR 0.8 million equivalent to 1.82209% of the total provision was created.

The provision for pensions has been established to cover the Bank of Finland's pension liabilities. These liabilities total EUR 593.5 million, and 98.8% of this amount, i.e. EUR 586.6 million, is covered by the pension provision. The change in the size of the pension provision during the year consists of a reduction of EUR -0.4 million in the revaluation account and of a profit of EUR 13.9 million for the pension fund. At the end of 2023, real estate in the value of EUR 8.6 million was earmarked for covering the pension provision (see asset item 'Other assets'). No specific assets have been earmarked for covering the remaining share (EUR 578.1 million) of the pension provision. Instead, these assets are managed as part of the Bank's financial assets.

Provisions (EUR million)	Total provisions 31 Dec 2021	Change in provisions 2022	Total provisions 31 Dec 2022	Change in provisions 2023	Total provisions 31 Dec 2023
Foreign exchange rate and price difference provision	1,185	-165	1,021	140	1,161
General provision	1,945	-47	1,898	-1,112	786
Provision against real value loss	1,603	-	1,603	-	1,603
Pension provision	576	-3	573	14	587
Provision against credit risks in monetary policy operations	_	-	-	1	1
Total	5,309	-214	5,095	-958	4,136

13. Capital and reserves

This item consists of the Bank of Finland's primary capital and reserve fund. Under section 21 of the Act on the Bank of Finland, the loss shall be covered from the reserve fund, if the annual accounts of the Bank show a financial loss. If the reserve fund is insufficient to cover part of the loss, the uncovered part may be left temporarily uncovered. Any profits in subsequent years shall be used first to cover such uncovered losses.

Capital and reserves (EUR million)	31 Dec 2023	31 Dec 2022	Change
Primary capital	840.9	840.9	-
Reserve fund	2,100.0	2,100.0	-
Total	2,940.9	2,940.9	-

14. Profit for the year

Profit for the financial year 2023 totalled EUR 0.00.

Off-balance-sheet commitments

Off-balance sheet commitments (EUR million)	31 Dec 2023	31 Dec 2022
Interest rate futures		
Nominal value of purchase contracts	526.8	46.4
Nominal value of sales contracts	-1,150.2	-30.0
Market value of FX swaps	9.6	-19.4
Investment commitments related to real estate funds	30.0	69.8
Securities lending	79.2	112.2

In accordance with the Governing Council's decisions, the Bank of Finland has made available for lending, securities held for monetary policy purposes. The Bank has also made securities in its own investment portfolio available for lending. Securities lending operations conducted against collateral other than cash are recorded in off-balance-sheet accounts at year-end. 101 Such lending operations with a value of EUR 79.2 million (2021; EUR 112.2 million) were outstanding as at 31 December 2023.

- 1) On 27 October 2022 the Governing Council decided that, from 23 November 2022 until the maturity date or early repayment date of each respective outstanding TLTRO III operation, the interest rate on TLTRO III operations will be indexed to the average applicable key ECB interest rates over this period.
- 2) See the press release of 15 December 2022 of the Governing Council's decision.
- 3) Further details on the APP can be found on the ECB's website.
- 4) See the press release of 15 June 2023 of the Governing Council's decision.
- 5) Further details on the PEPP can be found on the ECB's website.
- 6) See the press release of 14 December 2023 of the Governing Council's decision.
- 7) Market values are indicative and are derived on the basis of market quotes. When market quotes are not available, market prices are estimated using internal Eurosystem models.
- 8) In particular, Decision (EU) 2020/138 of the ECB of 22 January 2020 on the paying-up of the European Central Bank's capital by the national central banks of Member States whose currency is the euro and repealing Decision (EU) 2019/44 (ECB/2020/4), Decision (EU) 2020/136 of the ECB of 22 January 2020 on the paying-up of the European Central Bank's capital by the non-euro area national central banks and repealing Decision (EU) 2019/48 (ECB/2020/2) and Decision (EU) 2020/139 of the ECB of 22 January 2020 laying down the terms and conditions for transfers of the European Central Bank's capital shares between the national central banks and for the adjustment of the paid-up capital and repealing Decision (EU) 2019/45 (ECB/2020/5).
- 9) According to the accounting regime chosen by the Eurosystem on the issue of euro banknotes, a share of 8% of the total value of the euro banknotes in circulation is allocated to the ECB on a monthly basis. The remaining 92% of the value of the euro banknotes in circulation are allocated to the NCBs also on a monthly basis, whereby each NCB shows in its balance sheet a share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to the NCB according to the aforementioned accounting regime, and the value of euro banknotes put into circulation, is recorded as a 'Net Intra-Eurosystem claim/liability related to the allocation of euro banknotes within the Eurosystem'.
- 10) Cash collateral received in securities lending operations is recorded in on-balance-sheet accounts (see liability item 3. 'Other liabilities to euro area credit institutions denominated in euro' and on liability item 5. 'Liabilities to non-euro area residents denominated in euro').



Notes on the profit and loss account

31 Dec 2023

The Governing Council of the ECB started raising the key ECB interest rates on 27 July 2022, and the policy rate hikes continued in 2023. The key ECB interest rates were raised 6 times during the year. The interest rate on the main refinancing operations rose from 2.5% to 4.5%, and the average rate in these operations was 3.80753%. The deposit facility rate rose from 2.0% to 4.0%, and the average rate was 3.30753%. Consequent to the policy rate hikes, the interest income of the Bank of Finland increased, but interest expense increased even more, resulting to a negative net interest income for the Bank of Finland in 2023.

1. Interest income

Interest income generated in and outside the euro area totalled EUR 3,880.1 million. Of this, EUR 447.0 million consisted of interest income denominated in foreign currency and EUR 3,433.0 million of interest income denominated in euro.

ESCB items – claims equivalent to the transfer of foreign reserves to the ECB, claims and liabilities relating to the ECB's share of euro banknotes and to the application and adjustment of the ECB capital key, as well as TARGET balances – are remunerated at the interest rate on the main refinancing operations. Interest income on these items amounted to EUR 2,392.0 million in 2023.

Foreign currency-denominated interest income received outside the euro area (EUR million)	2023	2022	Change
Interest income from coupon bonds	199.8	69.2	130.6
Income from discount papers	1.5	1.8	-0.3
Interest income from deposits	0.8	0.3	0.4
Dividends from fund investments	28.7	27.4	1.2
Interest income from IMF items	197.9	63.2	134.7
Other interest income	10.1	11.0	-0.9
Total	438.7	173.0	265.7
Euro-denominated interest income received outside the euro area (EUR million)	2023	2022	Change
Interest income from deposits	-	0.2	-0.2
Interest income from negative interst rates on non-monetary policy deposits	-	13.0	-13.0
Other interest income	-	0.0	-0.0
Total	-	13.2	-13.2
Foreign currency-denominated interest income received from the euro area (EUR million)	2023	2022	Change
Interest income from coupon bonds	5.0	3.1	1.9
Interest income from deposits	0.8	0.2	0.6
Other interest income	2.5	6.5	-4.0
Total	8.3	9.8	-1.5

Euro-denominated interest income received from the euro area (EUR million)	2023	2022	Change
Interest income from deposits	_	0.1	-0.1
Dividends from fund investments	4.5	4.1	0.4
Interest income from ESCB items	2,392.0	334.4	2,057.6
Interest income from monetary policy lending	416.4	0.4	416.0
Interest income from monetary policy securities	618.1	305.2	312.9
Interest income from negative interest rates on credit institutions' deposits	_	262.8	-262.8
Interest income from negative interst rates on non-monetary policy deposits	_	20.3	-20.3
Other interest income	2.1	1.6	0.5
Total	3,433.0	928.7	2,504.3
Total interest income (EUR million)	2023	2022	Change
Foreign currency-denominated interest income received outside the euro area	438.7	173.0	265.7
Euro-denominated interest income received outside the euro area	_	13.2	-13.2
Foreign currency-denominated interest income received from the euro area	8.3	9.8	-1.5
Euro-denominated interest income received from the euro area	3,433.0	928.7	2,504.3
Total	3,880.1	1,124.7	2,755.4

2. Interest expense

Interest expense paid in and outside the euro area totalled EUR 4,924.0 million. The majority of this, EUR 4,472.2 million, consisted of an interest expense arising from the remuneration of commercial banks' deposits with the Bank of Finland. Interest expense denominated in foreign currency amounted to EUR 179.4 million.

Foreign currency-denominated interest expense paid outside the euro area (EUR million)	2023	2022	Change
Interest expense on IMF items	-164.1	-53.8	-110.3
Other interest expense	-0.0	-0.0	-0.0
Total	-164.1	-53.9	-110.3
Euro-denominated interest expense paid outside the euro area (EUR million)	2023	2022	Change
Interest expense on deposits	-162.3	-23.1	-139.2
Other interest expense	-4.4	-	-4.4
Total	-166.7	-23.1	-143.6
(EUR million) Other interest expense	2023 -15.3	- 0.0	Change -15.2
Total	-15.3	-0.0	-15.2
Euro-denominated interest expense paid in the euro area (EUR million)	2023	2022	Change
Interest expense on monetary policy deposits	-4,472.2	-403.5	-4,068.7
Interest expense on monetary policy lending	_	-167.3	167.3
Interest expense on liabilities to the ESCB	-0.9	_	-0.9
Interest expense on non-monetary policy deposits	-100.8	-18.0	-82.8
Interest expense on non-monetary policy deposits Other interest expense		-18.0 -	-82.8 -4.0

Total interest expense (EUR million)	2023	2022	Change
Foreign currency-denominated interest expense paid outside the euro area	-164.1	-53.9	-110.3
Euro-denominated interest expense paid outside the euro area	-166.7	-23.1	-143.6
Foreign currency-denominated interest expense paid in the euro area	-15.3	-0.0	-15.2
Euro-denominated interest expense paid in the euro area	-4,577.9	-588.8	-3,989.1
Total	-4,924.0	-665.8	-4,258.3

3. Net interest income

Net interest income (EUR million)	31 Dec 2023	31 Dec 2022	Change
Interest income			
Financial assets	453.6	188.7	264.9
Non-monetary policy deposits	-	33.3	-33.3
Monetary policy items	1,034.5	568.3	466.2
Claims on the ESCB	2,392.0	334.4	2,057.6
Total	3,880.1	1,124.7	2,755.4
Interest expense			
Financial assets	-187.9	-53.9	-134.0
Non-monetary policy deposits	-263.1	-41.0	-222.0
Monetary policy items	-4,472.2	-570.8	-3,901.4
Liabilities to the ESCB	-0.9	_	-0.9
Total	-4,924.0	-665.8	-4,258.3
NET INTEREST INCOME	-1,044.0	458.9	-1,502.9

4. Foreign exchange rate differences

This item consists of realised exchange rate gains and losses arising from the sale of currency positions. In 2023, gains related to exchange rate movements amounted to EUR 160.8 million.

5. Securities price differences

This item consists of realised gains and losses arising from the sale of securities. In 2023, realised gains from the sale of securities amounted to EUR 35.8 million.

6. Valuation losses related to currencies and securities

This item consists of valuation losses related to currencies and securities. Securities and currencies are treated on a security-by-security and currency-by-currency basis. The market value of securities decreased further as a result of the continued increase in the corresponding yields in 2023. This resulted in unrealised price losses, particularly on fund investments and US dollar-denominated securities. At the year-end, valuation losses related to securities totalled EUR 20.3 million. In 2023, the Japanese yen depreciated, resulting in a valuation loss of EUR 49.3 million in connection with foreign currency valuation.

7. Change in foreign exchange rate and price difference provision

Owing to realised net gains arising from foreign exchange rate and price differences, totalling EUR 140.0 million, the foreign exchange rate and price difference provision was adjusted upwards by an equal amount in accordance with the accounting policies. All provisions are specified in the notes on the balance sheet under liabilities.

8. Income and expenses on fees and commissions

The item consists of fees and commissions related to investment activities.

9. Net result of pooling of monetary income

Monetary income (EUR million)	31 Dec 2023	31 Dec 2022
Net monetary income pooled by the Bank of Finland	709.2	546.8
Net monetary income allocated to the Bank of Finland	742.7	131.1
Monetary income reallocation for the year	33.5	-415.8
Corrections to monetary income reallocation of previous years	-0.2	-6.3
Share of provision against credit risks in monetary policy operations	-0.8	-
Total	32.5	-422.1

The item contains the net result of pooling of monetary income for 2023, amounting to an income of EUR 32.5 million in comparison to an expense of EUR 415.8 million in the previous year, together with the Bank of Finland's share of the net result of the provisioning against credit risks in monetary policy operations of the Eurosystem amounting to an expense of EUR 0.8 million (see section 12 'Provisions' in 'Notes on the balance sheet').

The amount of monetary income of each Eurosystem national central bank (NCB) is determined by measuring the annual income that derives from the earmarkable assets held against its liability base. Any interest paid on liabilities included within the liability base is to be deducted from the monetary income to be pooled. Where the value of a NCB's earmarkable assets exceeds or falls short of the value of its liability base, the difference shall be offset by applying to the value of the difference the latest available rate for the Eurosystem's main refinancing operations.

The items comprising the earmarkable assets and the liability base, as well as the applicable remuneration rates, are presented in the Table below.

Earmarkable assets	Remuneration rate	Liability base	Remuneration rate
Amount of gold holdings in proportion to each NCB's capital key share	0%	Banknotes in circulation	Not applicable
Claims equivalent to the transfer of foreign reserves to the ECB (except gold)	Main refinancing operations rate	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	Rate of return
Lending to euro area credit institutions related to monetary policy operations denominated in euro	Rate of return	Net liabilities arising from balances of TARGET accounts*	Main refinancing operations rate
PSPP - government/agency bonds and PEPP - government securities	Main refinancing operations rate		
SMP, CBPP3, PSPP - Supra, CSPP and PEPP (excluding PEPP - government securities)	Rate of return		
Claims on non-Eurosystem central banks that relate to liquidity-providing operations	Actual interest income (including accruals)		
Accrued coupon interest related to balances on impaired securities held for monetary policy purposes and for which full income/risk sharing applies	Not applicable		

Earmarkable assets	Remuneration rate	Liability base	Remuneration rate
Net claims related to the allocation of euro banknotes within the Eurosystem*	Main refinancing operations rate		
Accrued interest relating to regular monetary policy operations with a maturity of over 1 year	Not applicable		

 $^{^{*}}$ Depending on the NCB these components may be presented on the earmarkable asset side or liability base

The monetary income pooled by the Eurosystem is allocated among NCBs according to the subscribed ECB capital key. The difference between the monetary income pooled by the Bank of Finland amounting to EUR 709.2 million and reallocated to the Bank of Finland amounting to EUR 742.7 million is the net result arising from the calculation of monetary income.

10. Share in ECB profit

The ECB did not distribute any profit for the financial years 2022 and 2023.

11. Income from other equity shares and participating interests

The item consists of dividends received on shares in the BIS, EUR 3.7 million.

12. Other income

This item consists of income of the Financial Supervisory Authority (FIN-FSA), EUR 42.8 million. The item also includes income from real estate, EUR 5.1 million, and commissions and fees.

13. Staff costs

Staff costs (EUR million)	31 Dec 2023	31 Dec 2022
Salaries and fees	51.3	50.3
Employer's contributions to the pension fund	10.1	9.8
Other staff-related costs	4.0	2.3
Total	65.4	62.3

Average staff size	2023 Number of staff	2022 Number of staff
Bank of Finland	373	373
Financial Supervisory Authority	243	246
Total	616	619

Basic salaries paid to the members of the Board (EUR)	2023
Olli Rehn ¹	212,536
Marja Nykänen	265,088
Tuomas Välimäki	219,735
Total	697,359

¹⁾ On leave of absence from 23 September 2023 to 30 January 2024.

Fringe benefits (meal benefits, company-paid telephone and company car) paid to the members of the Board totalled EUR 40,527.22.

Pension provision for the Bank of Finland's employees is governed by the Public Sector Pensions Act (81/2016). A former board member may be paid compensation for income loss if the board member may not, due to the provisions on the waiting period, accept employment from elsewhere or if the pension from the Bank of Finland is less than the compensation for income loss. Full compensation for income loss amounts to 60% of salary and is paid for one year, adjusted with the pension paid by the Bank, so that the sum of full compensation and pension does not exceed 60% of salary.

14. Pension fund contribution

Approved by the Parliamentary Supervisory Council, the Bank of Finland paid a contribution of EUR 10 million to the Bank's pension fund in 2023 due to an increase in the Bank's pension liabilities.

15. Administrative expenses

Administrative expenses (EUR million)	31 Dec 2023	31 Dec 2022
Supplies and purchases	0.5	0.4
Machinery and equipment	8.4	7.5
Real estate	10.2	9.7
Staff-related expenses	3.3	2.4
Purchase of services	16.3	15.6
Other	3.2	2.4
Total	42.1	38.0

This item consists of rents, meeting and interest group-related costs, expenses arising from the purchase of services and cost of equipment. Expenses arising from training, travel and recruitment of staff are also recorded under this item.

16. Depreciation of fixed assets

Depreciation of tangible and intangible fixed assets (EUR million)	31 Dec 2023	31 Dec 2022
Buildings	4.0	3.8
Machinery and equipment	2.9	2.7
IT systems	3.1	3.2
Total	10.1	9.7

17. Banknote production services

Costs related to banknote production services totalled EUR 4.4 million.

18. Other expenses

The majority of other expenses relate to collection costs, exchange rate and rounding differences and other similar costs.

19. Income of the pension fund

This item consists of the Bank of Finland's and the FIN-FSA's employer contributions and employees' share of premium income, totalling EUR 14.1 million, and the contribution of EUR 10 million paid by the Bank to the pension fund. The item also includes interest income on the pension fund's investment activities, EUR 21.4 million, and income on the fund's real estate, EUR 1.8 million.

20. Expenses of the pension fund

This item consists of pensions paid, EUR 31.5 million, the pension fund's management costs and depreciation of the fund's fixed assets.

21. Changes in provisions

This item consists of a downward adjustment of the general provision, EUR 1,112.3 million. All provisions are specified in the notes on the balance sheet under liabilities.

22. Profit for the year

Profit for the financial year 2023 totalled EUR 0.00.



Appendices to the financial statements

31 Dec 2023

EUR million	31 Dec 2023	31 Dec 2022
Shares and other interests, nominal value		
Bank for International Settlements (BIS) ¹	22,4 (1,96 %)	22.4 (1.96%)
Shares in housing companies	0.2	0.2
Other shares and interests	0.0	0.0
Total	22.6	22.6
Bank of Finland's liability share in the Finnish Central Securities Depository Fund	0.3	0.3
Liability arising from pension commitments		
Bank of Finland's pension liability ²	593.5	569.5
 of which covered by provisions 	586.6	573.1

²⁾ Pension liability for 2023 includes indexation of pensions and paid-up policies entering into force on 1 January 2024.

The Bank of Finland's real estate

Building	Address	Year of completion	Volume m ³ (approx.)
Helsinki	Rauhankatu 16	1883/1961/2006	52,108
	Rauhankatu 19	1954/1981	40,487
	Snellmaninkatu 6 ¹	1857/1892/2001	23,600
	Snellmaninkatu 2 ¹	1901/2003	3,225
	Ramsinniementie 34	1920/1983/1998	4,800
Vantaa	Turvalaaksontie 1	1979	334,243
Inari	Saariseläntie 9	1968/1976/1998	6,100

¹⁾ Transferred to the ownership of the Bank of Finland's pension fund from the beginning of 2002.



Notes on risk management

31 Dec 2023

Structural interest rate risk on the balance sheet

The monetary policy assets on the assets side of the Bank of Finland's balance sheet mainly carry a fixed interest rate. The liquidity created via purchase programmes and refinancing operations, in turn, is reflected on the liabilities side of the Bank of Finland's balance sheet as variable-rate central bank deposits.

The Eurosystem sets, on monetary policy grounds, the interest payable on the central bank deposits made by commercial banks. The interest rate decision has an immediate effect on the Bank of Finland's interest expenses. Thus, an increase in the deposit rate weakens the Bank's net interest income. The difference in the interest rates applied to assets and liabilities on the Bank's balance sheet poses a structural interest rate risk for the balance sheet.

For a long time, the Bank of Finland's purchases of fixed-rate bonds in connection with monetary policy implementation were made at a low yield level. In the second half of 2022, the Eurosystem's policy interest rates were raised, and the rate increases continued during 2023. As a result, the interest rate on the refinancing operations increased, and reinvestments of maturing bonds purchased under the purchase programmes were carried out at a higher yield than before. As policy rates rose, the interest rates on central bank deposits also rose, which had a much greater negative impact on net interest income than the above-mentioned positive impacts. As a consequence of this financing cost, the Bank of Finland's operating profit was negative in 2023. Based on the interest rate expectations prevailing at the end of 2023, the operating profit will remain in negative territory in the immediate years ahead.

The structural interest rate risk position will decrease as the fixed-rate bonds acquired for monetary policy purposes mature. However, the reinvestment of principal payments from maturing bonds serves, at the same time, to maintain the structural interest rate risk position.

Risk management and control of risks in investment of financial assets

Investment activities are exposed to risks, which risk management seeks to identify, measure and limit. In managing these risks, the Bank of Finland uses widely employed risk management methods, market and credit risk models as well as sensitivity analyses.

Risk management of investment activities by the Bank of Finland has been entrusted jointly to the Administration Department's Risk Control and Financial Accounting Division and to the Market Operations Department. Risk control of investment activities and reporting on risks and returns are the responsibility of the Administration Department's Risk Control and Financial Accounting Division.

Risks to investment activities are reported daily to the persons involved in operational investment activities and monthly to the Board of the Bank of Finland. Investment returns are reported monthly to the persons involved in investment activities and to the Board member responsible for investment activities. The Markets Committee, chaired by the same Board member, discusses investment returns every quarter. The Board discusses risks and returns twice a year. Cases of non-compliance with risk limits are reported immediately. A report on total financial risks is submitted to the Board at quarterly intervals.

Decision-making framework for investment of financial assets and for risk management, and various risk committees

Decisions on investment of financial assets and related risk management are taken by the Bank of Finland Board, the Markets Committee and, in the case of operational matters, also by the Investment Group and the Risk Group.

The Board is responsible for decisions on the objectives of investment activities and on investment policy, as well as on the principles for risk management and for responsible investment. Such decisions relate, among other things, to the volume of the Bank's own financial assets and foreign reserves, the currency composition of foreign reserves, long-term investment activity, the strategic allocation of fixed-income investments in the foreign reserves portfolio by investment class, the investment class-specific variation limits permitted in fixed-income investments, and the level of interest rate and credit risks. The Board also determines the maximum credit risk limits.

Within the limits imposed by the Board, the Markets Committee decides on the details of the investment of the Bank's financial assets and risk management. Such decisions include the criteria for counterparties and issuers, and more specific credit risk limits. The chair of the Markets Committee, who is also responsible for decision-making on the Committee, is the Board member responsible for the Bank of Finland's own investments.

The emphasis of work in the Investment Group and the Risk Group is on the preparation of matters to be considered by decision-making bodies. In addition, the Investment Group acts as an internal decision-maker within the Market Operations Department and as coordinator of matters common to the investment and risk control functions. Decisions on new counterparties to investments are taken mainly by the Investment Group or in exceptional cases by the Markets Committee. The Head of Market Operations chairs the Investment Group and makes decisions therein. The Head of the Administration Department's Risk Control and Financial Accounting Division chairs the Risk Group and makes decisions therein.

In addition to the decision-making bodies specified above, the Bank of Finland has also set up an internal working group on responsible investment. The working group makes decisions on the companies to be excluded from or brought back within the scope of the Bank's investment activities. These decisions are based on responsible investment principles and are taken using analyses of an external service provider.

The Bank of Finland's Financial Risks Committee is, independently of the management of financial assets, tasked with supporting the Board by supervising and assessing financial risks that may affect the Bank's balance sheet. The committee is not a decision-making body but instead gives recommendations and may submit matters to the Board for information or decision, as necessary. The Financial Risks Committee is chaired by the Board member responsible for risk control.

In addition to the Financial Risk Committee, the Bank of Finland has also set up a Committee on Operational and Cyber Security Risks. The task of the committee is to evaluate the level of the Bank's operational and cyber security risk management and to give instructions and make recommendations on the development of risk management procedures. Similarly to the Financial Risks Committee, the Committee on Operational and Cyber Security Risks is not a decision-making body but instead gives recommendations and submits matters to the Board for information or decision, as necessary. The committee is chaired by the Board member responsible for risk control.

Risk measures and breakdowns

Bonds and deposits in the Bank of Finland's financial assets by credit rating¹

Credit rating	31 Dec 2023 EUR million	31 Dec 2022 EUR million
AAA	1,086	2,721
AA+	2,636	710
AA	34	50
AA-	442	303
A+	955	1,165
А	254	281
A-	102	89
BBB+	19	36
BBB	-	8

Credit rating	31 Dec 2023 EUR million	31 Dec 2022 EUR million
		2011
BBB-	-	-
Below BBB-	-	-
No credit rating	116	300
Total	5,646	5,662
1) Covered bonds have been classified according to their own credit rating and not that of the issuer. The Bank of Japan has been rated according to		

¹⁾ Covered bonds have been classified according to their own credit rating and not that of the issuer. The Bank of Japan has been rated according to Japan's sovereign credit rating.

Bonds and deposits in the Bank of Finland's financial assets by home country of issuer/counterparty (according to market value)

Country or region (EUR million)	31 Dec 2023	31 Dec 2022
Euro area	34	81
Netherlands	28	48
Germany	6	4
Austria	-	20
France	-	9
Rest of Europe	803	656
United Kingdom	389	256
Sweden	231	283
Norway	107	75
Denmark	77	32
Switzerland	-	9
America	3,329	3,197
United States	2,850	2,775
Canada	479	422
Asia and Oceania	954	1,096

Totals may not add up due to rounding.

Country or region (EUR million)	31 Dec 2023	31 Dec 2022
Japan	894	1,065
Australia	46	9
South Korea	13	22
International institutions	526	632
Total	5,646	5,662

Totals and subtotals may not add up due to rounding.

Sensitivity of the Bank of Finland's financial assets to market changes

EUR million	2023	2022
Change in the value of the Bank of Finland's financial assets from the situation as at 31 December if the euro exchange rate appreciates by 15% relative to other currencies and gold	-1,448	-1,403
Change in the value of the Bank of Finland's financial assets from the situation as at 31 December if interest rates rise by 1 percentage point	-169	-109
Change in the value of the Bank of Finland's equity funds from the situation as at 31 December if the value of equity funds decreases by 25%	-320	-332

Allocation of the Bank of Finland's fixed-income investments in the foreign reserves portfolio at end-2023

Fixed-income investments in the foreign reserves portfolio	Allocation at year-end (%)
Government bonds and central bank deposits	57.6
Government-related bonds	27.1
Covered bonds	4.7
Corporate bonds	10.0
Cash holdings	0.6
Total	100.0

Definitions and concepts

- Market risk means the risk that the net value of assets will decline due to changes in market prices. Market price changes refer to variation in, for example, interest rates, exchange rates, the price of gold or stock prices, which are referred to as interest rate risk, exchange rate risk, gold price risk and equity risk, respectively.
- Credit risk means the risk of financial losses arising from changes in the creditworthiness of a counterparty to a financial transaction or a securities issuer, or from default by a counterparty or issuer.
- Liquidity risk means the risk that assets cannot be made available when the need arises or their conversion into cash causes
 additional costs.
- Operational risk refers to the risk of extra costs or losses resulting from inadequate or failed internal processes, personnel, systems or external events.
- **Foreign reserves** comprise unhedged direct and indirect fixed-income investments denominated in foreign currencies and net receivables from the International Monetary Fund (IMF).
- **Modified duration** is a measure of interest rate risk, indicating how much the value of a fixed-income investment or investments changes in response to a small change in the level of interest rates. For example, if the modified duration is 2 and interest rates rise by 1%, the value of fixed-income investments falls by 2%.
- Value-at-risk (VaR) at a certain confidence level means a loss in excess of which a loss occurs with a probability corresponding to that confidence level, over a given time horizon. For example, if VaR on a one-day horizon and a confidence level of 99% is EUR 3 million, there is a 1% probability that the current day's outcome will be a loss of more than EUR 3 million (and a 99% probability that the loss is less than EUR 3 million).
- Expected shortfall (ES) at a certain confidence level indicates the amount of expected loss in case that the loss exceeds the VaR calculated at the corresponding confidence level. For example, an ES at a confidence level of 99% gives the average loss in the worst 1% of cases.



Auditor's report

08 Mar 2024

Report of the auditors of the Bank of Finland on the Bank of Finland's financial statements, accounting records and governance for 2023

To the Parliamentary Supervisory Council

We have audited the Bank of Finland's accounting records, financial statements and governance for the year ended 31 December 2023. The financial statements signed by the Board of the Bank of Finland comprise the balance sheet, the profit and loss account, notes on the accounts, and the annual report.

Responsibilities of the Board

The Board is responsible for the preparation of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of the Bank of Finland's financial statements and comply with statutory requirements. The Board is responsible for ensuring that the accounts are in compliance with the law and have been arranged in a reliable manner. The Board is also responsible for such internal control as it determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibilities

Our responsibility is to express an opinion on the financial statements based on our audit. We comply with the requirements of professional ethics. We conducted our audit in accordance with good auditing practice in Finland. Good auditing practice requires that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement, and whether the Board is guilty of an act or negligence which may result in liability in damages towards the Bank of Finland or whether the Board has violated the Act on the Bank of Finland. The governance audit covered examination of the legality of the Board's actions.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Bank of Finland's preparation of financial statements that give a true and fair view.

The auditor considers internal control in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank of Finland's internal control. An audit also includes evaluating the observance of the principles applicable to the financial statements approved by the Parliamentary Supervisory Council, the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion on the financial statements

In our opinion

- The financial statements have been drawn up in accordance with the principles of financial statements approved by the Parliamentary Supervisory Council and current rules and other regulations. The financial statements give a true and fair view of the Bank of Finland's financial position and financial performance in accordance with the laws and regulations governing the preparation of the Bank of Finland's financial statements. The information on the annual report contained in the financial statements is consistent with the information contained in the profit and loss account, balance sheet and notes on the accounts.
- The financial statements for the financial year audited by us can be adopted.
- We support that the profit for the financial year be used as proposed by the Board.

Helsinki, 8 March 2024

Veijo Niemi

Markku Eestilä Tuula Haatainen

Juha Kerimaa, Authorised Public Accountant, KHT

Tiina Lind, Authorised Public Accountant, KHT, JHT



Statement regarding the audit

29 Feb 2024

Statement regarding the audit as defined in Article 27 of the Statute of the European System of Central Banks and the European Central Bank

To the Bank of Finland

Report on the audit of financial statements

Opinion

We have audited the financial statements of the Bank of Finland (business identity code 0202248-1) for the year ended 31 December 2023. The financial statements comprise the balance sheet, the profit and loss account and notes.

In our opinion, the financial statements give a true and fair view of the Bank of Finland's financial position and results, in accordance with the Accounting Principles and Methods approved by the Governing Council of the European Central Bank and the Act on the Bank of Finland, and comply with statutory requirements.

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'.

We are independent of the Bank of Finland 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.

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

Responsibilities of the Board of the Bank of Finland for the financial statements

The Board of the Bank of Finland is responsible for the preparation of financial statements that give a true and fair view of the Bank of Finland's financial position and results, in accordance with the laws and regulations governing the preparation of the Bank's financial statements, and that comply with statutory requirements. The Bank of Finland Board is also responsible for such internal control as it determines 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 Bank of Finland Board is responsible for assessing the Bank's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the Bank or cease operations, or there is no realistic alternative but to do so.

Auditor's responsibilities for the audit of financial statements

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

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank'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 Bank of Finland Board's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the
 financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

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

Helsinki, 29 February 2024 KPMG OY AB Juha-Pekka Mylén Authorised Public Accountant, KHT