



BANK OF FINLAND ANNUAL REPORT 2020



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Operations and strategy

The Bank of Finland is Finland's monetary authority and national central bank. At the same time it is part of the Eurosystem. The Bank of Finland builds a sustainable economy and stability.

In 2020 the Bank of Finland renewed its strategy. The aim of the new strategy is to ensure that the Bank can in the future continue to be a stable and effective operator in a constantly changing operating environment.

The new strategy is based on comprehensive scenario work

We began the renewal of our strategy with a careful analysis of the operating environment. This scenario work helps us anticipate how the Bank of Finland's operating environment will change in the 2020s.

The three scenarios developed through this work were applied in the strategy work by considering what the Bank of Finland's opportunities, risks and strategic alternatives would be in the three operating environments outlined in the scenarios.

The Bank of Finland implements its vision systematically

According to the Bank of Finland's vision: 'The Bank of Finland is an effective and respected central bank that maintains price and financial stability under all circumstances in order to foster the wellbeing of all Finland's citizens.'

The vision can be broken down into nine principles that guide the work of the Bank and indicate how we can achieve the objective set out in the vision.

According to these principles, among other things, the Bank of Finland uses its expertise to generate added value, provides reliable and progressive central bank services, secures the continuity of its operations under all circumstances, develops its working methods with a view to the long term and maintains a stable distribution of profits to the State.

Strategic focal points complement the new strategy

The Bank of Finland's new strategy is complemented by the strategic focal points selected by the Board. These will guide implementation of the strategy during the operational period 2021–23.

According to the strategic focal points, The Bank of Finland will, for example, assess the impacts of the COVID-19 pandemic, participate actively in the updating of the European Central Bank's monetary policy strategy and contribute to preparations for a European central bank digital currency.

Teleworking the new normal – COVID-19 pandemic affected how we work

2020 was a challenging year for all employers and employees on account of the COVID-19 pandemic. During the prolonged pandemic the Bank of Finland supported our staff's crisis durability in many different ways.

A Central Bank's responsibility derives from its core functions

Key points in the Bank of Finland's [Sustainability programme](#) are promoting sustainable growth and wellbeing, influencing through information and cooperation, and management of climate risks.



Bank of Finland in a nutshell

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 as well as 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 a very moderate rise in consumer prices.

The Bank of Finland has both domestic objectives and objectives relating to the Eurosystem.

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.

[Read more on the Bank of Finland's functions.](#)



Bank of Finland strategy updated in 2020

The Bank of Finland updated its strategy in 2020. This was part of the broader Vision 2030 project. The new strategy will ensure that the Bank of Finland is able to achieve its objectives despite changes in the operating environment.

The Bank of Finland updated its strategy in 2020. In connection with the update, the Board defined the focal points guiding implementation of the new strategy.

The Bank of Finland’s mission statement: to build a sustainable economy and stability

The Bank of Finland’s mission statement encapsulates the purpose of our work and answers the question: ‘What does the Bank of Finland do?’

Our new mission statement is ‘The Bank of Finland builds a sustainable economy and financial stability’. This is rooted in the Act on the Bank of Finland and on the Bank’s position as a national central bank and member of the Eurosystem.

The mission statement is complemented by the following summary of the bank’s core functions. These are:

- to maintain price stability
- to foster the stability of the financial system
- to provide for the efficiency and security of the payments system
- to support sustainable growth and high employment in Finland and the EU.

Scenario work was used to construct alternative vistas of the future

The update of the Bank of Finland strategy began with a careful analysis of the operating environment. The purpose of this scenario work was to anticipate how the Bank's operating environment would change during the 2020s.

The result was three alternative comprehensive depictions of the operating environment in 2030. These are influenced by a number of different trends and factors of uncertainty, the potential effects of which were considered during the project.

We did not calculate probabilities for the various scenarios, as they were done simply to illustrate alternative development trends for the operating environment and the causal relationships between events. The scenario work involved input from a large number of experts from different fields within the Bank.

The first scenario is 'A strengthening currency union'. In this scenario, the pandemic shakes the EU, but at the same time it strengthens the will for cooperation in, for example, trade policy and environmental issues. From a central bank perspective, this scenario means, among other things, an intensification of macroprudential policy.

The second scenario is 'Self-sufficient islets'. The point of departure for this is a global depression that erodes international cooperation and causes countries to turn in on themselves. Heavy debt accumulation and increased uncertainty lead to a weakening in the effectiveness of central bank policies and other economic policies.

The third scenario is 'Breakthrough of the digital economy'. Here, the economy recovers swiftly from the pandemic with the help of digitalisation. Price pressures grow, payment methods fragment and supervision of the financial markets becomes increasingly challenging for central banks and other regulatory authorities.

These scenarios were drawn on in the Bank of Finland's strategy work by considering what the Bank's opportunities, risks and strategic alternatives would be in the operational environment of each scenario.

Principles show the way to the goal described in the vision

The vision serves as a compass that indicates the long-term goal. According to the Bank of Finland's vision, 'the Bank of Finland is an efficient and respected central bank that maintains price and financial stability under all circumstances to achieve the wellbeing of all citizens'.

The vision has been broken down into nine operational principles, which indicate how we can achieve the goal described in the vision. These will stand the test of time and are important for all the activities of the Bank of Finland.

The first part of the vision, the Bank of Finland's efficiency and position as a respected central bank, is supported by the first three guiding principles:

1. We generate added value by our expertise, insightful solutions and confidence-building cooperation.
2. We base our positions and decisions on knowledge, research and high-quality analysis.
3. We participate in social debate, reach our stakeholders and engage in constructive dialogue both domestically and within the Eurosystem.

Maintaining price and financial stability under all circumstances demands of a central bank efficiently produced central banking services for the surrounding society, readiness for unexpected eventualities and the ability to anticipate. These factors are to the fore in the next three principles:

4. We provide progressive and reliable central banking services to meet the changing requirements of Finnish society.
5. We ensure the continuity of operations by preparing for situations of change, disruption and crisis.
6. We develop our expertise and working practices with a view to the long term and anticipating the needs of the future.

The final part of the vision emphasises the Bank of Finland's role as a national institution that carries out work of importance for the whole of society. In addition to basic functions, the aim is to enhance public awareness of economic issues and engage in constructive social debate.

7. We operate responsibly and in accordance with the principles of sustainable development.
8. We carry out our tasks efficiently and economically, maintaining a stable distribution of profits to the State without endangering our capital adequacy.

9. We foster public awareness of the economy, the Bank of Finland and the Eurosystem by distributing comprehensible information.

The Bank of Finland's values emerged collectively

The Bank of Finland's values serve as guiding principles in the overall strategy and indicate how Bank staff work together and the foundational principles our choices are based on.

The Bank of Finland's values emerged from a collective effort, as the value journey organised to develop them involved the entire staff of the Bank.

'We Bank of Finland staff
are **constantly learning** individually and from each other,
we **value** the expertise of each of us,
we **work together** and as equals,
we **bear responsibility** for the construction of a sustainable economy and stability.'

The strategic foci for the operational planning period 2021-23 guide our everyday work

The Bank of Finland's new strategy is complemented by the strategic foci selected by the Board. These will guide daily implementation of the strategy for the entire operational planning period 2021-23.

1. Assessment and solutions for the impacts of the COVID-19 crisis.
The Bank of Finland assesses the impacts of the COVID-19 crisis on the economy, monetary policy and its implementation, financial stability and payments. Additionally, the Bank provides extensive support for our staff's capacity to work during the prolonged pandemic.
2. Contribution to re-evaluating and updating the ECB's monetary policy strategy.
The Bank of Finland participates actively and extensively in preparation of the monetary policy strategy update and supports our Governor's opportunities to exert influence on the process.
3. Preparation of the Eurosystem's central bank digital currency.
Bank of Finland experts participate in settlement work on the common Eurosystem central bank digital currency.

4. Managing and influencing through knowledge.
At the Bank of Finland we are updating our management system by, for instance, developing processes and tools and expanding the data base used in management.

5. Influencing domestic economic policy and promoting financial literacy.
The Bank of Finland participates in domestic debate at those stages of preparation and decision-making where we have expertise, based for example on research or international experience. Moreover, the Bank of Finland coordinates activities relating to households' financial literacy and is also planning a longer-term national model for this work.

Links

[Bank of Finland's mission and vision](#)

[Bank of Finland objectives and results framework 2018–2020](#)

[Organisation of the Bank of Finland](#)

[Sustainability programme](#)

[Sustainability at the Bank of Finland](#)



Division of responsibilities between members of the Board



GOVERNOR
Olli Rehn

Olli Rehn is the Governor of the Bank of Finland. He has been in post since 12 July 2018. Governor Rehn is responsible for 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 and represents Finland on the Board of Governors of the International Monetary Fund.



DEPUTY GOVERNOR

Marja Nykänen

Marja Nykänen has been a member of the Bank of Finland Board since 1 February 2017. She is responsible for financial stability issues, macroprudential policy, statistics, legal affairs, financial and personnel administration, and security and real estate issues. She also bears responsibility for the risk control of investment activities and monetary policy, the financial stability process and the activities of the Management Group of the Bank of Finland's pension fund. Ms Nykänen is also Chairman of the Board of the Financial Supervisory Authority.

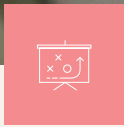


MEMBER OF THE BOARD

Tuomas Välimäki

Tuomas Välimäki has been a member of the Bank of Finland Board since 12 July 2018. He is responsible for investment of the Bank's financial assets, monetary policy implementation, market operations, academic economic research and research on transition economies. His area of responsibility also includes cash supply and payments as well as digitalisation and IT matters.

[Read more on the Bank of Finland Board](#)



Strong expertise is the currency of stability

The COVID-19 pandemic meant that 2020 was a challenging year for all employers and employees. During the prolonged pandemic, the Bank of Finland helped our staff through the crisis in many different ways. During 2020, the Bank of Finland also reviewed our employer image and drafted an employee value proposition.

The Bank of Finland is a stable, responsible employer that employs 359 staff in a versatile range of tasks. Staff wellbeing is important at the Bank of Finland.

The constant development of staff competences, good management, a positive atmosphere at work and a healthy balance between work and leisure are all important priorities in this area.

Management are expected to show professionalism, leadership and a commitment to the continuous development of management skills.

Each year the Bank of Finland monitors the quality of management by means of management surveys and uses the results to improve leadership, supervision, corporate culture and internal processes.

In 2020, the leadership index rose slightly compared with the previous year, reaching 72.6 on a scale from 0 to 100. As we had hoped, the result exceeded the index for comparable organisations, which is 71.7.

Teleworking is the new normal – the COVID-19 pandemic’s impact on working practices

On account of the COVID-19 pandemic, and in order to guarantee a safe and healthy work environment, in mid-March staff of the Bank of Finland began as a rule to work from home. Only work that could not be undertaken at home has been done on site. When working with others, everyone has had to follow the rules on social distancing, washing hands, cough hygiene and wearing a mask.

Early in the year the Bank set up an internal coordination group, among whose tasks was monitoring COVID-19 developments and providing instructions for the workplace in response to official guidelines.

The Bank has helped staff cope with the crisis by providing snapshots of the pandemic and instructions to staff on a regular basis, meanwhile showing a flexible approach to adopting new working practices, organising training sessions, supplying the tools and equipment needed for teleworking and making improvements to teleworking ergonomics.

The experiences the staff had gained prior to the pandemic of teleworking and learning how to use the technology for virtual meetings made it easier to adapt.

A survey was also conducted on general staff wellbeing.

The Bank of Finland as an employer is #SoundButNotSerious

We have reviewed our employer profile and the way we advertise vacancies, and we have drawn up an employee value proposition.

Our new employer brand emphasises people and working at the central bank. On our website and our job vacancy advertisements, the Bank clearly states what a central bank actually does, the sort of employer we are, and the sort of career opportunities we offer.

Employee advocates from the Bank of Finland’s various departments and representing a variety of positions also tell in their career stories about themselves, the work they do, their opportunities for enhancing their skills and knowledge, the work’s global dimension, club activities, and opportunities for combining work and leisure.

Our employer value proposition is an element in the Bank of Finland’s transparency as a responsible employer. The commitment crystallises what sort of employer the Bank of Finland is and what we as an employer offer our staff.

‘The Bank of Finland is a stable and responsible employer, offering socially significant, varied and challenging positions. We invest in developing the competence of our staff and in good management. International cooperation is part of our everyday work. For us, the wellbeing of our staff and the balance between work and leisure are important. We value each other and have a good atmosphere at work.’



We took care of the wellbeing of our staff and the continuity of our operations during the pandemic by communicating actively and flexibly introducing new operational and working methods.

We drew up an employee value proposition to encapsulate what sort of employer the Bank of Finland is and what it offers to its employees as an employer.

The Bank of Finland’s values emerged from a shared value journey

In the autumn, the Bank of Finland initiated a values debate, to which all staff members were invited.

The aim was to update the organisation’s values to reflect what everyone thought the workplace community at the Bank of Finland should be like.

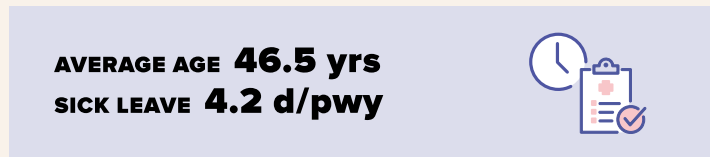
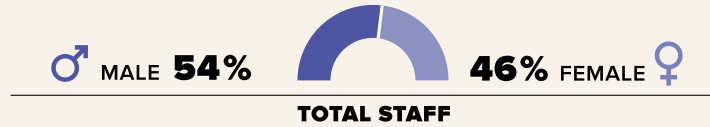
The values journey that the staff of the Bank embarked upon took the form of virtual coffee mornings, questionnaires and team discussions. Staff were actively involved in the values debate and the Bank’s values eventually emerged as below.

‘At the Bank of Finland
we learn continuously both individually and from each other,
we value the expertise of each of our colleagues,
we work together as equals,
we bear responsibility for building a sustainable economy and stability.’

Chart 1.

At year-end 2020 the Bank of Finland staff totalled 359

GENDER DISTRIBUTION



HIGHER EDUCATION INDEX



LEADERSHIP



(national norm for expert staff 71.7%)

Source: Bank of Finland

Young Professionals programme for future finance professionals

The Young Professionals programme organised jointly between the Bank of Finland and the Financial Supervisory Authority (FIN-FSA) ended in February 2020.

The programme was launched in autumn 2018. Nine trainees were selected on the basis of an open application process. For 18 months they worked for periods of around six months in different departments and offices at the Bank of Finland and the FIN-FSA.

The Young Professionals programme was designed for young university students who had recently graduated or for specialists who had been in working life for a few years already.

The programme offered an opportunity to become a finance professional, work at the heart of the Eurosystem and learn about the core functions of the central bank and the financial and insurance supervisory authority, the work of the European Central Bank and European cooperation in matters of financial supervision.

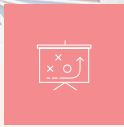
Both participants and their supervisors had positive experiences of the programme. The trainees quickly found employment after the programme ended and some even continued in their new posts at the Bank of Finland and the FIN-FSA.

Responsible summer jobs

The Bank of Finland is one of the favourite employers for students of business studies and the most popular employer in the public sector. For the Bank of Finland, the employment of young people is an important part of the Bank's work in the area of social responsibility and our function as a responsible employer.

The Bank of Finland is involved in the nationwide Responsible Summer Jobs campaign to help young people find responsible summertime employment. Even in the midst of the COVID-19 pandemic, the Bank provided around 40 students with a summer job in 2020.

The summer jobs and the training for them were also a success for those working remotely. The summer employees gave the Bank of Finland a general score of 3.7 (on a scale from 1 to 4) for their summer job. What they thought was best about the work were the responsible and interesting tasks involved, their friendly colleagues and the working atmosphere.



The Bank of Finland's budget for 2021 and operating expenses

The Bank of Finland aims to be one of the most efficient central banks in the EU. This requires continuous determined economic governance, HR planning and investment assessment.

Operating expenses and related objectives are monitored closely in order, among other things, to achieve the Bank's efficiency and sustainability targets. The Board evaluates implementation of the objectives on a quarterly basis.

In 2020, the Bank of Finland's operating expenses totalled EUR 94.4 million (2019: EUR 92.0 million). Total income was EUR 20.5 million. Owing to the COVID-19 pandemic, the total for staff-related expenses, in particular, fell, as business trips in practice ceased completely.

Income was also increased by the sale of Turvalaakson Parkki Oy for EUR 4.1 million. The Bank of Finland also had other major sources of income, such as interest received, which do not result in any decrease in operating expenses in the budget, and so are not included in Table 1.

The Bank's net operating expenses totalled EUR 73.9 million. More detailed information on expenses and the budget can be found in Table 1 and Table 2.

Investment expenditure totalled EUR 6.9 million.

In autumn 2020, the Bank's budgets for the period 2021–2023 were drawn up and, of these, the Board ratified the budget for 2021.

The Bank has focused increased attention on the medium-term planning of investments. Investments are evaluated based on their costs, qualitative benefits and operative risks.

Pension fund

The pension fund's operating expenses for 2020 totalled EUR 30.5 million (2019: EUR 30.2 million). Pensions paid constituted the largest cost item, amounting to EUR 28.4 million. Operating income (employment pension contributions and income from rent) amounted to EUR 14.1 million during the year.

The pension fund also received an additional contribution of EUR 10.0 million from the Bank.

For a more detailed breakdown of the outturn for 2020 and the budget for 2021, see Table 3.

The pension fund's operations are published in its own annual report.

Financial Supervisory Authority

The Board of the Bank of Finland ratifies the budget for the Financial Supervisory Authority (FIN-FSA). The Financial Supervisory Authority's operating expenses for 2020 totalled EUR 37.1 million (2019: EUR 34.8 million). Total income amounted to EUR 39.0 million, of which supervision and processing fees accounted for EUR 34.8 million, while the Bank of Finland's contribution to funding was EUR 1.9 million.

The surplus for the financial year was EUR 1.9 million. The surplus will be taken into account in the following accounting period, when setting the supervisory and processing fees. Investment expenditure totalled EUR 0.5 million.

For a more detailed breakdown of the outturn for 2020 and the budget for 2021, see Table 4.

The Financial Supervisory Authority's operations are presented in the authority's own annual report.

Table 1.

Bank of Finland	Outturn 2020 EUR m	Budgeted 2021 EUR m
1. Operating expenses and income		
<i>EXPENSES</i>		
Staff expenses	33.9	36.1
Staff-related expenses	1.0	3.6
Other expenses	26.8	33.2
Banking service expenses	7.7	7.9
Depreciation	7.7	8.5
Total	77.1	89.3
Banknote acquisition costs	9.0	8.2
Pension fund contribution	8.3	8.3
Total operating expenses	94.4	105.8
<i>INCOME</i>		
Banking service income	3.2	3.8
Real estate	5.4	5.4
Other income	5.7	0.1
Services to FIN-FSA	6.2	6.7
Total income	20.5	17.0
Net	73.9	88.8

Due to rounding, the totals do not necessarily tally.

Table 2.

Bank of Finland	Outturn 2020 EUR m	Budgeted 2021 EUR m
Investment		
Real estate investment	2.7	5.5
Head office premises	1.1	2.0
Vantaa premises	1.5	3.2
Other premises	0.0	0.3
IT-equipment and software	3.4	5.3
Cash handling machines	0.0	0.0
Security equipment	0.7	1.6
Other	0.1	0.0
Total investment	6.9	12.4

Due to rounding, the totals do not necessarily tally.

Table 3.

Pension fund	Outturn 2020 EUR m	Budgeted 2021 EUR m
1. Operating expenses and income		
<i>EXPENSES</i>		
<i>Staff expenses</i>	0.0	0.0
<i>Expenses for pension fund activities</i>	0.6	0.9
<i>Pension fund real estate expenses</i>	0.5	0.5
<i>Depreciation</i>	0.9	1.0
<i>Pensions paid</i>	28.4	29.0
Total expenses	30.5	31.4
<i>INCOME</i>		
<i>Employment pension contributions</i>	12.4	13.4
<i>Internal rents</i>	1.7	1.7
<i>Pension fund contribution</i>	10.0	10.0
Total income	24.1	25.1
Net	6.4	6.3

Due to rounding, the totals do not necessarily tally.

Table 4.

Financial Supervisory Authority	Outturn 2020 EUR m	Budgeted 2021 EUR m
1. Operating expenses and income		
EXPENSES		
Staff expenses	22.7	24.6
Staff-related expenses	0.4	1.0
Other expenses	4.9	6.3
Depreciation	1.2	1.0
Services from the Bank of Finland	6.2	6.7
Pension fund contribution	1.7	1.7
Total operating expenses	37.1	41.2
FUNDING OF OPERATIONS		
Supervision fees	33.3	35.5
Processing fees	1.5	1.7
Bank of Finland contribution to funding	1.9	2.0
Surplus/deficit transferred from previous year	2.3	2.0
Total income	39.0	41.2
Surplus transferred to next year	1.9	

Due to rounding, the totals do not necessarily tally.



Managing environmental impacts: COVID-19 has cut the Bank of Finland's emissions

In 2020 the Bank of Finland's emissions were reduced mainly by the changes in working practices and travel habits as a result of the COVID-19 pandemic. The Bank has also cut emissions with changes in its general approach and with the introduction of new technologies in the workplace. The Bank cooperates widely in the fight against climate change.

The direct environmental impacts of the Bank of Finland and the Financial Supervisory Authority are limited. They are mainly due to activities related to real estate, cash supply and travel.

The most effective method for the Bank of Finland and the Financial Supervisory Authority to decrease their environmental impact is to improve energy efficiency. As a result, CO₂ emissions have declined by 40% in just over ten years.

As in previous years, real estate was the largest source of emissions in 2020: most energy is consumed in the heating and cooling of buildings and the use of electricity in them. Nevertheless, the emissions from real estate have declined the most, as there has been less need for workspace, and energy consumption has dropped as a result.

The effect of the coronavirus pandemic on travel habits might be permanent

The work of public authorities and expert organisations such as the Bank of Finland and the Financial Supervisory Authority involves a large number of international meetings. Consequently, business travel was common in previous years, and the emissions from this were actually increasing slightly.

However, the coronavirus pandemic in 2020 prevented personal attendance at international meetings almost completely.

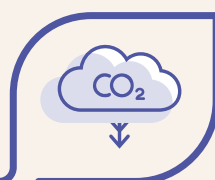
Because of the travel restrictions due to the pandemic, the emissions from air travel plummeted. Aviation emissions are calculated on a per passenger per kilometre basis.

The experience of the pandemic may also have a permanent effect on business travel habits.

At the start of the year remote access solutions were updated to respond to the growing need to work from home. By the end of the year, the Bank of Finland and the Financial Supervisory Authority had also introduced the use of electronic signatures to make it easier to work remotely.

The staff of the Bank of Finland and the Financial Supervisory Authority increased their use of workstation video conference systems for external contacts.

With the opportunities offered by new technology, more critical consideration is being given to which international meetings it is necessary and possible to attend in person.



Our objective is to reduce our carbon footprint. With COVID-19 our emissions fell to 31 kilos of CO₂ / 1,000 euro of operating expenses. ²

² This measurement relative to operating expenses takes account of the greenhouse gas emissions of energy consumption, personal transport, purchases and waste. We follow a total of 80 different indicators.

Environmental challenges can be addressed through cooperation

The Bank of Finland and the Financial Supervisory Authority monitor the environmental impact of their operations using an environmental performance indicator that is proportionate to operating expenses and takes into account the greenhouse gas emissions from energy consumption, passenger transport, procurement and waste.

The Bank has deployed 80 indicators to measure efficiency. Environmental impact is measured with reference to these indicators.

In 2020, the Bank produced 31.35 kilograms of CO₂ emissions for every EUR 1,000 of operating expenses. In 2019, the corresponding figure was 50.64 kilograms.

The Bank has not offset its emissions by purchasing emission reduction units.

In 2020 the Bank of Finland continued to cooperate with the other European central banks on environmental issues. The networks of the national central banks share best practices and together address the environmental challenges that all central banks face.

A good working environment encourages creativity

The aim of the working environment development project, which began in 2019, is to evolve the working environment so that it reflects modern working methods, and to improve sustainability.

The planning of the user-oriented working environment continued in 2020. This will support workplace needs in a variety of ways: it will create well-being at work, boost productivity, encourage creativity, enable spontaneous interaction, aid concentration and provide spaces for relaxation.

When an employee has authority over and responsibility for the workplace, this has a positive effect on their experience as an employee. In the sustainable workplace, outbound materials are recycled and there are sufficient space and adequate facilities for the different tasks.

The staff of the Bank of Finland and the Financial Supervisory Authority are developing our working environment together. Having a say helps everyone to adopt new working methods and to prosper.



Annual report

The Bank of Finland is Finland's monetary authority and national central bank. It is also a member of the Eurosystem.

The Eurosystem is responsible for the monetary policy and other central banking activities of countries in the euro area and administers the use of the world's second largest currency, the euro. The primary objective of the Eurosystem and the Bank of Finland is price stability.

The main objective of the Eurosystem's monetary policy is to maintain stable prices in the euro area. Price stability is defined as an annual rate of increase in consumer prices below, but close to 2% over the medium term. Here, the value of money is held more or less unchanged and strong purchasing power is preserved.

The Bank of Finland safeguards financial stability. It assesses risks to the financial system, participates in macroprudential policy and compiles financial statistics.

The Bank of Finland is responsible for the availability and issuance of cash in Finland. In addition to domestic cash supply, the Bank of Finland's duties include tasks related to the development and security of payment systems.

The objective of the Bank of Finland's financial asset management is to meet the liquidity, security and return requirements placed on the central bank while taking into account the risks and social responsibility aspects inherent in investment activities.

The Bank of Finland's influence is based on expertise and research. The Bank takes a position on domestic and global economic issues as an independent institution.

The Bank of Finland's sustainability programme focuses on the promotion of sustainable growth, exercise of influence via information and management of climate risks.



Monetary policy

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- 64** **The Eurosystem broadened its asset purchase programmes in 2020**

Monetary policy

The Eurosystem is responsible for the single monetary policy of the euro area. The main objective of monetary policy is to keep prices stable in the euro area, so that the value of money is held more or less unchanged and strong purchasing power is preserved. Monetary policy decisions are guided by the monetary policy strategy of the European Central Bank, and a review of this strategy was initiated in 2020.

The Eurosystem comprises the European Central Bank (ECB) and the national central banks of the euro area. As a member of the Eurosystem, the Bank of Finland participates in preparation, decision-making and implementation of the euro area's single monetary policy.

The Bank of Finland is responsible for implementing the Eurosystem's monetary policy in Finland.

The Governing Council maintains price stability using monetary policy tools

The main objective of monetary policy is to maintain price stability. This is important, as here the value of money is held more or less unchanged and strong purchasing power is preserved.

The ECB currently defines price stability as meaning a rate of annual inflation below, but close to 2% over the medium term. Price stability is the foundation for sustainable economic growth.

The Eurosystem's most important tools for implementing monetary policy are setting the key ECB interest rates, longer-term refinancing operations for banks, and asset purchases. Since the key ECB interest rates are already very low, asset purchases have played a more prominent role in the implementation of monetary policy.

Monetary accommodation has helped businesses and households through the worst of the crisis

In 2020, euro area output growth contracted and inflation expectations and actual inflation declined sharply due to the COVID-19 pandemic.

The Governing Council acted on the weak outlook by easing its monetary policy multiple times, using several tools to implement its policy stance. The goal of monetary policy has been to help households and businesses through the worst of the crisis and lay a foundation for recovery after the crisis.

Among other measures taken during the year, the ECB held its deposit facility rate at -0.5% , eased the collateral requirements for central bank loans increased its asset purchases and conducted its longer-term refinancing operations on more favourable terms.

Targeted longer-term refinancing operations (TLTROs) constituted an important part of the Eurosystem's response to the economic crisis caused by the COVID-19 pandemic in 2020. These longer-term loans saw a particularly high take-up from banks.

In addition to the Eurosystem's joint collateral policy decisions, the Bank of Finland implemented a number of domestic measures in 2020 to support the availability of collateral for its own counterparties and to facilitate the flow of finance to businesses and households.

In its forward guidance, the Governing Council emphasised the need for a sustained period of accommodative monetary policy. An accommodative monetary policy stance helps preserve favourable financing conditions for all sectors of the euro area economy.

European Central Bank began to revise its monetary policy strategy

The Governing Council of the European Central Bank launched a review of its monetary policy strategy in January 2020.

The strategy review has been prompted by changes in the economic environment. The historically low level of interest rates has hampered the ability of central banks to respond to negative surprises in the economy. The economic environment is also being reshaped by population ageing, weak productivity, digitalisation and climate change.

The strategy review will encompass the formulation of price stability, the monetary policy toolkit and its effectiveness, economic and monetary analyses and the ECB's communication practices.

Other considerations, such as financial stability, globalisation, employment and environmental sustainability, will also be part of the review.

There are thirteen work streams focusing on specific areas of the strategy review. Each work stream has a representative from the Bank of Finland. Research by the Bank of Finland has contributed significantly to the assessment work underpinning the strategy review.

The review will be based on thorough analysis and open minds, engaging with all stakeholders.

The Bank of Finland held three listening events in 2020, fully open to the public, to better understand what the public feels is important in renewing the monetary policy strategy.

The strategy review is due to be completed by the middle of 2021.



The European Central Bank launched a review of monetary policy strategy in 2020

The Bank of Finland is participating in the reform work underpinning the European Central Bank's monetary policy strategy review. The comprehensive review will examine the definition of price stability and the monetary policy toolkit as well as changes in the economic environment which have impacted on monetary policy.

On 23 January 2020, the Governing Council of the European Central Bank (ECB) launched a review of its monetary policy strategy. At the time, the process was expected to be concluded by the end of 2020.

However, due to the crisis caused by the COVID-19 pandemic, the timetable for the strategy review has been extended by six months. It is now expected to be completed by the middle of 2021.

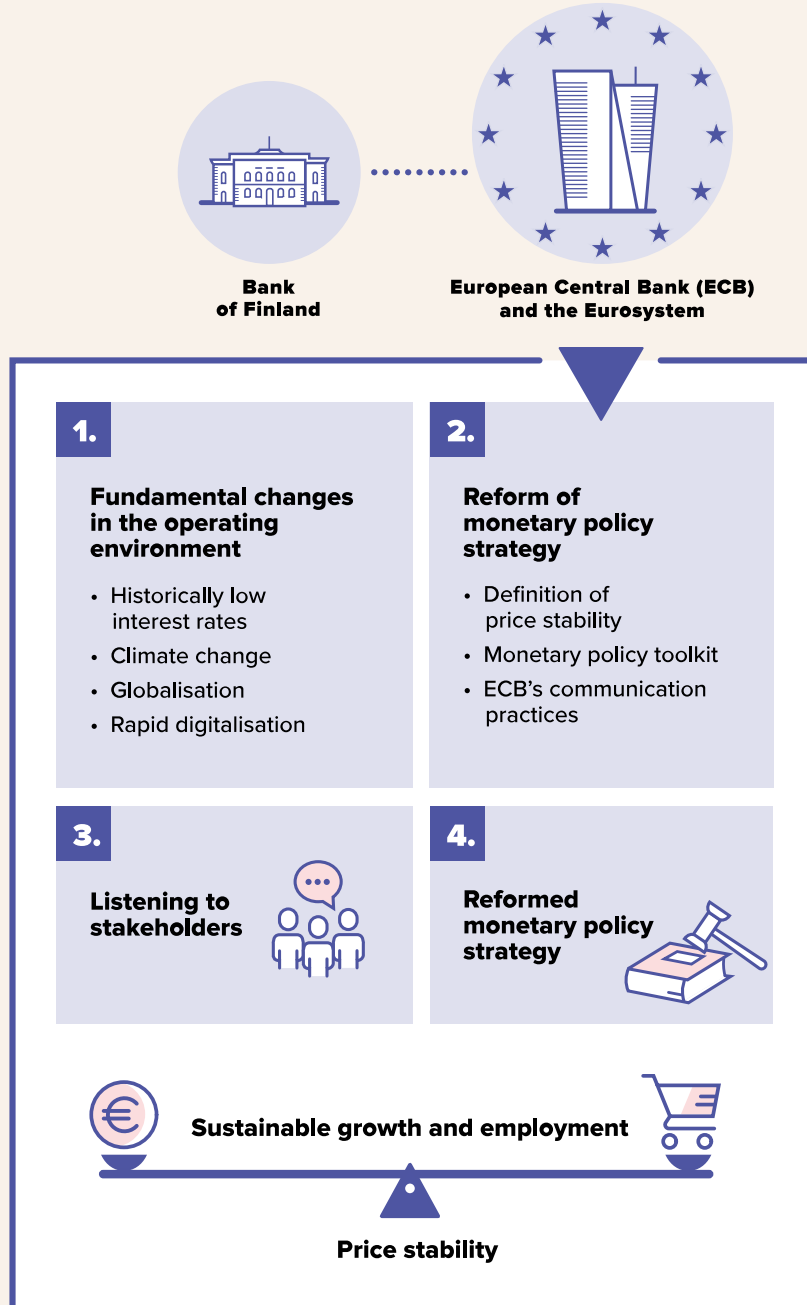
The strategy review is being conducted on the principles of thorough analysis and open minds. It will look at the quantitative formulation of price stability and the inflation target, the monetary policy toolkit, the effects and side-effects of monetary policy, and communication practices.

It will also assess what digitalisation, financial stability, globalisation, and climate change mean for the conduct for monetary policy going forward.

The work is being carried out across a number of committees and working groups belonging to the European System of Central Banks. There are ten workstreams focusing on specific areas of the strategy review, each with at least one representative from the Bank of Finland.

Chart 2.

European Central Bank's strategy review Why, what and how?



The tools of monetary policy have changed

The economic environment has changed significantly since the ECB last revised its monetary policy strategy, in 2003.

Declining productivity growth, an ageing population and the legacy of the financial crisis have led to a secular decline in real interest rates.

This is hampering the ability of central banks to respond to negative surprises in the economy. When interest rates are near zero, there are limited options for lowering them further.

The monetary policy toolkit has also changed significantly as new instruments have been added. The COVID-19 pandemic has created new tensions for monetary policy, especially as economies have rapidly increased their levels of national debt.



We listened to the views of stakeholders about the environmental impacts of monetary policy.

The Eurosystem is listening to the views of the public in its strategy review

Listening to the views of the public and stakeholders is a central element of the monetary policy strategy review.

The ECB and the euro area national central banks have been holding dialogues with, among others, the European Parliament and national parliaments, the academic community, researchers and analysts, civil society organisations, local communities and citizens.

The Bank of Finland, for its part, held three domestic listening events in relation to the strategy review and held a [webinar on international monetary policy \(Finnish\)](#) in November 2020.

The listening events were aimed at climate and environmental leaders, students, and representatives from different sectors of the economy, including finance, labour unions and interest groups representing business and trade.

The webinar on international monetary policy was aimed at researchers and monetary policy professionals. Bank of Finland Governor **Olli Rehn** chaired the events.

The listening events thoroughly explored how changes in the operating environment for central banks have impacted on monetary policy. Participants expected central banks to take an active role in preventing both climate change and increasing inequality.

Other topics of interest in the discussion events were household and general government debt, the low interest rate environment and the limitations encountered by monetary policy, and the decline in economic growth caused by the pandemic and its aftermath.

Should the inflation target be changed?

Price stability was defined as the primary objective of the European Central Bank already in the Maastricht Treaty.

In addition to price stability, the ECB is tasked with supporting the other economic policy objectives of the EU, as long as price stability is not jeopardised. This mandate is not subject to change under the strategy review. Instead, the goal is to discover how changes in the economic environment have impacted on monetary policy.

The ECB's strategy review in 2003 led to the current formulation of price stability, which is defined as a rate of inflation below, but close to 2% over the medium term.

The ECB's two-step definition is ambiguous and leaves room for varying interpretations, both inside and outside the Governing Council.

The definition is also asymmetric. It can be interpreted as meaning that inflation can, temporarily at least, slow towards zero but has a strict upper bound of 2%.

The ECB's inflation target can be viewed as being tighter than the respective targets of other central banks, as they often simply define an inflation rate of 2% as their target.

A clearly asymmetric definition of price stability does well in situations where the central bank must grapple with the risk of inflation overshooting its target.

However, in an environment of downward price pressures, an asymmetric definition can lead to a risk of undershooting inflation, falling far short of a 2% average.

What sort of definition of price stability, then, is most appropriate for an environment of low inflation and [a low natural rate of interest](#)? One viable alternative would be a symmetric and unambiguous inflation target. This would do away with any of the aforementioned problems.

Structural changes in the economy are contributing to low inflation

The ECB's strategy review is needed more than ever due to the prolonged period of low inflation and the damage to the economy wrought by the COVID-19 pandemic.

Yet the strategy review has also been prompted by changes in the structures of the economy. These include a suspected change in the relationship between inflation and employment, i.e. a change in the Phillips curve, and a decline in the general level of interest rates or, more technically speaking, a lower equilibrium real interest rate (or natural rate) where savings and investment are balanced in the economy.

First, even if the economy had very low levels of unemployment, it has been estimated that this would not generate as much inflationary pressure as before. That is, the Phillips curve might be significantly flatter than in the past, lowering the risk of high inflation.

Second, monetary policy has been constrained by the long-standing decline in interest rates. There is little available space for interest rate cuts if interest rates are already at zero or even in negative territory, even though this constraint has been mitigated with non-standard measures of monetary policy.

Third, the underlying fundamentals of the economy have changed since the global financial crisis. Inflation is being depressed by a number of long-term trends, including population ageing, increased aggregate saving, and slower productivity growth.

Fourth, climate change, ongoing globalisation, rapid digitalisation and the structural transformation of the financial sector following the global financial crisis are phenomena being observed all over the world. These might hold unpredictable consequences for the dynamics of the economy and for monetary policy. All of the aforementioned changes in the structures of the economy and their respective impacts on monetary policy are being assessed in the ECB's strategy review.

The strategy review is also drawing on the experiences of other major central banks

The Federal Reserve System (the Fed, the US central bank) and the Bank of Canada have also reviewed their monetary policy strategies recently by taking stock of the changes in the economic environment.

At the core of the Fed's new strategy is 'a flexible form of average inflation targeting'. This means that the central bank may allow inflation to overshoot its target if it has long persisted below target.

The goal here is to influence inflation expectations that have long remained too low. The employment rate will similarly be allowed to rise above normal levels for long periods of time without the central bank expecting it to lead to higher inflation.

The strategies of other central banks will inevitably have an impact on the operating environment of the European Central Bank — the ECB does not operate in a vacuum.

It is also notable that the Federal Reserve System announced its intention to undertake a comprehensive public review of its monetary policy strategy, tools, and communication practices roughly every 5 years, and to make adjustments as appropriate.

Support from other policy areas is also needed

The strategy review will draw on the research and expert work conducted daily at the ECB and the national central banks of the Eurosystem.

By holding the aforementioned listening events, the Eurosystem also wishes to leverage the views of euro area residents and different types of stakeholders.

The Bank of Finland wishes to better understand people's expectations and concerns so that it may find the best way to fulfil its mandate of price stability and support economic policy more generally.

However, monetary policy will not be able to provide a solution for every problem, even once the ECB concludes its strategy review. Economic growth needs to be supported by other policy areas and cannot rest on an accommodative monetary policy alone.



The European Central Bank's monetary policy and its preparation in 2020

The main task of the Eurosystem's monetary policy is to keep prices stable in the euro area. Price stability is defined as maintaining an inflation rate of below, but close to 2%, over the medium term. Here, the value of money is held more or less unchanged and strong purchasing power is preserved.

Price stability is the foundation for sustainable economic growth. The Eurosystem has traditionally maintained price stability by adjusting its key interest rates, which determine the costs banks face when borrowing money from or making deposits with the central bank.

In recent times, the Eurosystem has complemented its interest rate policy with non-standard measures of monetary policy to achieve its inflation target and maintain favourable financing conditions in the euro area. These non-standard measures include the [Eurosystem's asset purchase programmes](#).

The Eurosystem comprises the European Central Bank (ECB) and the national central banks of the euro area. As a member of the Eurosystem, the Bank of Finland participates in the preparation, decision-making and implementation of the euro area's single monetary policy. The Governor of the Bank of Finland, **Olli Rehn** sits on the Eurosystem's highest decision-making body, the Governing Council of the ECB.

The Governing Council further eased its monetary policy in 2020 due to the pandemic

In 2020, euro area output growth contracted and inflation expectations and actual inflation declined sharply due to the COVID-19 pandemic. The Governing Council acted on the weak outlook by easing its monetary policy multiple times, using several tools to implement its policy stance.

The accommodative stance of monetary policy helps preserve favourable financing conditions for all sectors of the euro area economy.

The Governing Council relaxed its already accommodative monetary policy stance over the course of 2020. The Governing Council held the ECB deposit facility rate at -0.5% and similarly held the other ECB key interest rates unchanged. The conditions on the ECB's targeted longer-term refinancing operations (TLTROs) were further eased, and a new series of non-targeted pandemic emergency longer-term refinancing operations was launched.

The Eurosystem continued its net purchases under the asset purchase programme (APP) at a monthly pace of EUR 20 billion. The Governing Council also announced a temporary envelope of EUR 120 billion for additional net asset purchases on top of the existing programmes. Finally, the Governing Council launched a new pandemic emergency purchase programme (PEPP), with a maximum envelope eventually revised up to EUR 1,850 billion.

In its forward guidance, the Governing Council stressed the need for a sustained period of monetary accommodation to preserve favourable financing conditions and support output growth. Here, core inflation, which excludes energy and food prices, will be allowed to strengthen and support the convergence of headline inflation towards the inflation target over the medium term.

The European Central Bank and the European System of Central Banks (ESCB) continued to work on their [monetary policy strategy review all the way through 2020](#).

The goal of the strategy review is to ensure that the ECB is adequately equipped to achieve its mandate and, by extension, is best positioned to serve the interests of the citizens of the euro area. The strategy review is due to be completed in mid-2021.

Monetary policy will remain highly accommodative in the coming years

In 2020, the ECB's monetary policy stance remained highly accommodative. The accommodative monetary policy contributes to maintaining very favourable bank lending conditions and supports access to financing across all economic sectors.

The aim of the ECB's monetary policy is to support the robust convergence of inflation to levels below, but close to 2% over the medium term.

At the end of 2020, real output growth in the euro area remained muted and inflation low. Nevertheless, the Eurosystem staff projections published in December forecast inflation as picking up and moving closer towards target in the coming years.

The Governing Council stressed that an ample degree of monetary accommodation will remain necessary for an extended period of time.

The European Central Bank's monetary policy and its preparation in 2020

The main objective of the European Central Bank's monetary policy is to maintain price stability in the euro area. The Governing Council has interpreted this as keeping the annual growth of consumer prices below, but close to 2% over the medium term.

Monetary policy can also support the other economic policy objectives of the EU, as long as the objective of price stability is not jeopardised.

The Act on the Bank of Finland stipulates that the primary mission of the Bank of Finland is to maintain price stability as defined in the Treaty on European Union. The Bank of Finland and the Eurosystem also have other objectives, but price stability is always the primary objective.

The Governor of the Bank of Finland is a member of the ECB Governing Council and, as such, participates in the formulation of monetary policy.

Experts from the Bank of Finland contribute widely to the preparation of monetary policy decisions and other background work. They participate in economic analyses and monetary policy decisions and are active members on the Eurosystem's Monetary Policy Committee and Market Operations Committee.

Monetary policy decisively eased in response to COVID-19 pandemic and the deteriorating outlook

Persistent uncertainties related to geopolitical factors and protectionism marred economic sentiment in early 2020.

Significant sources of uncertainty included the United States' continued trade dispute with China and, for Europe in particular, the United Kingdom's withdrawal from the European Union and the protracted divorce process.

These factors have long been a drag on output growth in the euro area and have also contributed to keeping inflation expectations muted.

A novel COVID-19 (COVID-19) outbreak in the Chinese city of Wuhan escalated into a pandemic during the first quarter of 2020.

Uncertainty over the effects of the virus, including its infectiousness and deadliness, swiftly led to lockdowns being imposed in the euro area and elsewhere in the world.

The lockdown measures and mounting uncertainty quickly eroded the outlook for economic activity in all of the major economies.

The ECB Governing Council responded to the deteriorating outlook by easing its monetary policy stance multiple times during 2020.

The Governing Council stressed that monetary policy will have to remain highly accommodative for a prolonged period to support underlying inflation pressures and headline inflation developments over the medium term.

The Governing Council continues to closely monitor inflation developments and the impact of unfolding monetary policy measures on the economy. The accommodative stance of monetary policy will help to safeguard highly favourable financing conditions across the euro area.

The Governing Council stressed at each of its monetary policy meetings in 2020, as well as in connection with other communication events, that it would continue to stand ready to adjust all of its instruments, as appropriate, to ensure that inflation moves towards its aim in a sustained manner.

Monetary policy remained highly accommodative in early 2020

At its first monetary policy meeting of 2020, on **23 January**, the Governing Council noted that euro area growth had continued at a moderate pace.

The Governing Council assessed that ongoing, albeit decelerating, employment growth and increasing wages would continue to support the resilience of the euro area economy.

While inflation developments remained subdued overall, there were some signs of a moderate increase in underlying inflation.

In light of its economic and monetary analyses, the Governing Council decided not to change its monetary policy stance. It held the key ECB interest rates unchanged, with the deposit facility rate held at -0.5%, the main refinancing operations rate at 0.0%, and the marginal lending facility rate at 0.25%.

The Governing Council stated that it expected the key ECB interest rates to remain at their present or lower levels until it had seen the inflation outlook robustly converge to a level sufficiently close to, but below 2% within its projection horizon, and such convergence had been consistently reflected in underlying inflation dynamics.

Net purchases under the Eurosystem's asset purchase programme (APP), a non-standard measure of monetary policy, would continue at a monthly pace of EUR 20 billion. The Governing Council continued to expect monthly net asset purchases under the APP to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it started raising the key ECB interest rates.

The Governing Council also intended to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP. It would continue to do so for an extended period of time past the date when it started raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

Finally, the Governing Council marked its first meeting of 2020 by formally launching [a review of the ECB's monetary policy framework](#).

Outlook dashed by COVID-19 pandemic in spring — Governing Council substantially eases monetary policy stance

Over the course of the spring the new and startling pandemic spread irrevocably across Europe. It became clear that the effects of the pandemic would take a heavy toll on the euro area economy, even if the pandemic itself remained short-lived.

The economic outlook deteriorated quickly, and financial markets experienced significant bouts of volatility. The pandemic was seen to be disrupting important supply chains, weakening economic output.

The measures put in place to mitigate the spread of the virus, such as restrictions on movement, weakened domestic and foreign demand. Moreover, the rise in general uncertainty was seen to be impeding economic planning and financing.

The March 2020 ECB staff macroeconomic projections foresaw euro area real gross domestic product (real GDP) as increasing by 0.8% in 2020, 1.3% in 2021 and 1.4% in 2022.

Compared with the December 2019 Eurosystem staff projections, the outlook for real output growth had been substantially revised down for 2020, and slightly for 2021.

Harmonised Index of Consumer Prices (HICP) inflation was projected at 1.1% in 2020, 1.4% in 2021 and 1.6% in 2022 by the ECB staff projections. Compared with the December 2019 projections, the outlook for HICP inflation remained unchanged.

At its meeting on **23 March**, the Governing Council decided to further ease its monetary policy to support households, businesses and banks through the environment of uncertainty and through the economic shock caused by the pandemic.

First, the Governing Council decided to conduct, temporarily, additional longer-term refinancing operations (LTROs) to provide immediate liquidity support to the euro area financial system.

The LTROs provided liquidity at favourable terms to bridge the period until the TLTRO III operation in June 2020.

Second, the Governing Council decided to apply considerably more favourable terms during the period June 2020 to June 2021 to all TLTRO III operations outstanding during that time.

These operations would support bank lending to those affected most by the pandemic, in particular small and medium-sized enterprises. In addition, the Governing Council mandated the Eurosystem committees to investigate collateral easing measures to ensure that counterparties would continue to be able to make full use of its funding support.

Third, the Governing Council decided to add a temporary envelope of additional net asset purchases of EUR 120 billion until the end of the year, ensuring a strong contribution from the private sector purchase programmes. The Governing Council continued to expect net asset purchases to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it started raising the key ECB interest rates.

Lastly, the Governing Council decided to keep the key ECB interest rates unchanged, expecting them to remain at their present or lower levels until it had seen the inflation outlook robustly converge to a level sufficiently close to, but below 2% within its projection horizon, and such convergence had been consistently reflected in underlying inflation dynamics.

By the time of the Governing Council's monetary policy meeting on **30 April**, it was clear that the economic contraction was poised to be significantly sharper than previously estimated.

The lockdown measures put in place to thwart the virus had sapped aggregate demand in the euro area and elsewhere in the world. Indicators of consumer and business confidence plummeted, reflecting the massive deterioration of the economy and labour markets.

The soaring rise in uncertainty was also reflected in growth scenarios estimated by the ECB staff, which suggested that euro area real GDP could fall by between 5% and 12% in 2020. Headline inflation was projected to decline on the back of crude oil.

The assumptions underpinning the growth scenarios were subject to a high degree of uncertainty, seeing as it was difficult on one hand to estimate the extent of the shock, and on the other hand to estimate the success of monetary and fiscal policy in mitigating the adverse impact on incomes and employment.

At its April meeting, the Governing Council announced that it had decided to keep the key ECB interest rates unchanged but would extend its quantitative easing measures. It announced that it had decided to further ease the conditions on its targeted longer-term refinancing operations.

It also decided on a new series of non-targeted pandemic emergency longer-term refinancing operations (PELTROs) to support liquidity conditions in the euro area financial system and contribute to preserving the smooth functioning of money markets by providing an effective liquidity backstop.

The Governing Council noted that together with the substantial monetary policy stimulus already in place, these measures would support liquidity and funding conditions and help preserve the smooth provision of credit to the real economy.

The Governing Council added that the Eurosystem had since the end of March been conducting purchases under the new pandemic emergency purchase programme (PEPP), which at the time had an overall envelope of EUR 750 billion. The purchase programme had contributed to easing the overall monetary policy stance and strengthened the transmission of monetary policy in the euro area.

Its purchases are conducted in a flexible manner over time, across asset classes and among jurisdictions. The Governing Council announced that it would conduct net asset purchases under the PEPP until it judged that the COVID-19 crisis phase was over, but in any case at least until the end of 2020.

The pandemic waned over the summer, priming expectations of a return to growth in the second half of 2020

The euro area economy appeared to experience an unprecedented contraction during the second quarter of 2020. The enormous uncertainty caused by the pandemic cast a shadow over the future, and consumption and investment contracted in the euro area.

One silver lining was that a number of surveys and forward-looking indicators suggested that the contraction was beginning to stabilise as restrictions were gradually lifted.

Economic growth was expected to pick up in the second half of the year, backed especially by fiscal and monetary stimulus.

The outlook for inflation was seen as having broadly declined. On the one hand, this was in part due to the fall in energy prices caused by the pandemic. On the other hand, the significant contraction in output suggested a marked increase in economic slack, which was likely to keep cost pressures in check.

In the baseline scenario of the June 2020 Eurosystem staff macroeconomic projections, real GDP was expected to fall by 8.7% in 2020 but projected to grow by 5.2% in 2021 and by 3.3% in 2022.

Compared with the March 2020 ECB staff macroeconomic projections, the outlook for real GDP growth had been revised downwards by 9.5 percentage points for 2020 but revised upwards by 3.9 percentage points for 2021 and 1.9 percentage points for 2022.

Annual HICP inflation was projected at 0.3% in 2020, 0.8% in 2021 and 1.3% in 2022. Compared with the March projections, the outlook for HICP inflation had been revised downwards by 0.8 percentage points for 2020, 0.6 percentage points for 2021 and 0.3 percentage points for 2022.

In light of these data, the Governing Council decided to hold the key ECB interest rates unchanged at its meeting on **4 June**, but increased the envelope for the pandemic emergency purchase programme (PEPP) by EUR 600 billion, to a new total of EUR 1,350 billion. The Governing Council also decided to extend the horizon for net purchases under the PEPP to at least the end of June 2021.

The Governing Council estimated that the PEPP expansion would further ease the general monetary policy stance and support funding conditions in the real economy, especially for businesses and households. The overall outlook for inflation in the immediate years ahead was revised downwards as a result of the pandemic.

Finally, the Governing Council decided it would continue to reinvest the maturing principal payments from securities purchased under the PEPP until at least the end of 2022. The future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary policy stance.

At its meeting on **16 July**, the Governing Council confirmed that euro area real GDP had decreased in the first quarter of 2020 by 3.6%, quarter on quarter, and that GDP was expected to contract even further in the second quarter.

It expected euro area activity to rebound in the third quarter as containment measures were gradually lifted, supported by favourable financing conditions, an expansionary fiscal stance and a resumption in global activity.

The Governing Council decided to hold its very accommodative monetary policy stance unchanged.

Monetary policy stance held unchanged in the autumn

At its meeting on **10 September**, the Governing Council confirmed that incoming data suggested a strong rebound in activity broadly in line with previous expectations, although the level of activity remained well below the levels prevailing before the COVID-19 pandemic.

The strength of the recovery remained shrouded in significant uncertainty, as it continued to be highly dependent on the future evolution of the pandemic and the impact of containment policies on different sectors of the economy.

Headline inflation was seen as being dampened by low energy prices and weak price pressures in the context of subdued demand and significant labour market slack.

This assessment was broadly reflected in the September 2020 ECB staff macroeconomic projections for the euro area. The projections anticipated annual real GDP growth of -8.0% in 2020, 5.0% in 2021 and 3.2% in 2022.

Compared with the June 2020 Eurosystem staff macroeconomic projections, the outlook for real GDP growth was revised up for 2020 and was largely unchanged for 2021 and 2022.

Annual HICP inflation was projected at 0.3% in 2020, 1.0% in 2021 and 1.3% in 2022. Compared with the June 2020 Eurosystem staff macroeconomic projections, the outlook for inflation remained unchanged for 2020, but was revised up for 2021. The outlook for inflation in 2022 remained unchanged from the June projections.

The Governing Council agreed that ample monetary stimulus remained necessary to support the economic recovery and to safeguard medium-term price stability. Therefore, the Governing Council decided to reconfirm its accommodative monetary policy stance.

In October there were signs of a resurgence of COVID-19 infections in Europe.

As the second wave of the pandemic gathered pace, governments imposed a new series of lockdown measures to contain the virus. The recovery of euro area activity that began during the summer started to fade more quickly than anticipated.

Mounting uncertainty weighed on economic activity. Headline inflation was being dampened by low energy prices and muted underlying price pressures in the context of weak demand and significant slack on labour and product markets.

At its monetary policy meeting of **29 October**, the Governing Council decided that it would for the meantime reconfirm its accommodative monetary policy stance. The Governing Council noted that the risks surrounding the euro area growth outlook were clearly tilted on the downside.

As the second wave of the pandemic caused growth to slow, monetary policy was further relaxed towards the end of the year

In December, earlier estimates of the rebound in euro area activity during the third quarter were revised upwards; however, general uncertainty only intensified as the second wave of the pandemic spread farther and wider.

The Governing Council noted that the resurgence in COVID-19 cases and the associated containment measures were significantly restricting euro area economic activity, which was expected to have contracted in the fourth quarter of 2020.

The December 2020 Eurosystem staff macroeconomic projections for the euro area forecast annual real GDP growth at -7.3% in 2020, 3.9% in 2021, 4.2% in 2022 and 2.1% in 2023.

Compared with the September 2020 ECB staff projections, the outlook for economic activity was revised down in the short term, but was seen to broadly recover to the level projected in the September baseline scenario over the medium term.

Annual HICP inflation was forecast at 0.2% in 2020, 1.0% in 2021, 1.1% in 2022 and 1.4% in 2023. Compared with the September 2020 ECB staff projections, the outlook for inflation was revised down for 2020 and 2022.

At its monetary policy meeting of **10 December**, the Governing Council decided to increase the envelope of the pandemic emergency purchase programme (PEPP) by EUR 500 billion, to a total of EUR 1,850 billion. It also extended the horizon for net purchases under the PEPP to at least the end of March 2022. The Governing Council added that, in any case, it would conduct net purchases until it judged that the COVID-19 crisis phase was over.

The extension of the PEPP reflected the Governing Council's assessment of a prolonged fallout from the pandemic for the economy and inflation.

Purchases under the PEPP are conducted to preserve favourable financing conditions in the euro area. If favourable financing conditions can be maintained with asset purchase flows that do not exhaust the envelope over the net purchase horizon of the PEPP, the envelope need not be used in full. The PEPP is also a measure that eases the overall stance of monetary policy.

The flexibility of PEPP purchases over time, across asset classes and among jurisdictions contributes to the smooth transmission of monetary policy. This has reduced the risks on different markets and created a stabilising market mechanism, thus also mitigating a tightening of financing conditions.

The Governing Council also decided to extend the reinvestment of principal payments from maturing securities purchased under the PEPP until at least the end of 2023. The future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary policy stance.

The Governing Council also decided to further recalibrate the conditions of [the third series of targeted longer-term refinancing operations \(TLTRO III\)](#). Specifically, it decided to extend by twelve months the period over which considerably more favourable terms were applied, to June 2022.

The TLTRO III operations preserve very attractive funding conditions for banks. This will help to ensure that they can continue to offer favourable lending conditions and have ample liquidity to extend loans to households and firms.

Growth requires support from other policy areas, not monetary accommodation alone

In sum, the ECB's monetary policy stance has been highly accommodative. The purpose of a light monetary policy is to ensure that financing conditions remain favourable for all sectors of the economy.

An accommodative monetary policy contributes to maintaining very favourable bank lending conditions and supports access to financing across all economic sectors.

In particular, easier borrowing conditions for firms and households help support consumer spending and business investment. This will sustain the euro area expansion, the build-up of domestic price pressures and, thus, the robust convergence of inflation towards the medium-term aim.

Raising the economy's growth potential and supporting aggregate demand will also require contributions from policy areas other than monetary policy.

The ECB Governing Council has consistently and publicly called for more decisive action towards implementing the structural policies outlined in the European Commission's country-specific recommendations.

An ambitious and coordinated fiscal stance remains critical, in view of the sharp contraction in the euro area economy.

Fiscal measures taken in response to the pandemic emergency should, as much as possible, be targeted and temporary in nature.

The Governing Council stresses that the transparent and consistent implementation of the European Union's fiscal and economic governance framework over time and across countries remains essential to bolster the resilience of the euro area economy. Improving the functioning of Economic and Monetary Union remains a priority.

The Governing Council welcomes the ongoing work and urges further specific and decisive steps to complete the Banking Union and the Capital Markets Union.



Monetary policy implemented with tools old and new in 2020

In 2020, the Eurosystem safeguarded favourable financing conditions and the availability of major currencies in the euro area as the COVID-19 pandemic devastated the economic outlook. It conducted its longer-term refinancing operations with more favourable terms and conditions; it eased the collateral requirements on its liquidity operations; it stepped up its monetary policy asset purchases; and it established swap lines with central banks. In addition, the Bank of Finland implemented certain domestic measures to support the availability of collateral for its monetary policy counterparties.

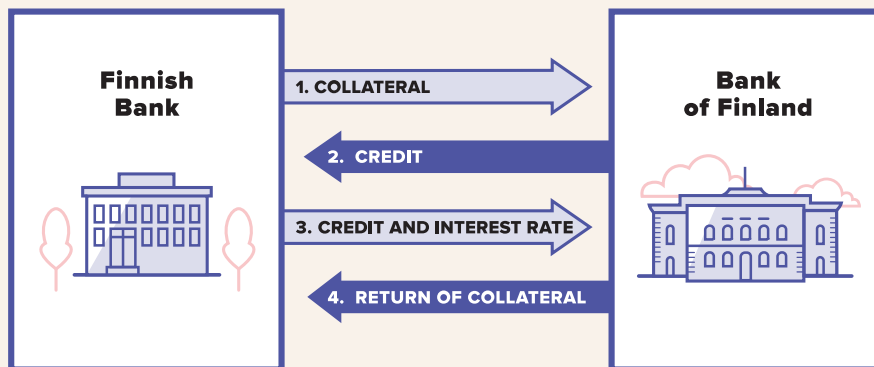
The Bank of Finland is responsible for [implementing the Eurosystem's monetary policy](#) in Finland. The Eurosystem implements its monetary policy with an assortment of tools that can be classified as standard and non-standard measures.

The Eurosystem's standard measures are its regular open market operations that it conducts as tender procedures against collateral; its standing facilities; and its minimum reserve system. Standard monetary policy measures primarily influence short-term market rates.

The Eurosystem's non-standard measures include, among others, its asset purchase programmes; its targeted longer-term refinancing operations; and its collateral policy. Non-standard measures have been at the centre of monetary policy since the global financial crisis and were all-important in the Eurosystem's response to the challenges posed by the COVID-19 crisis in 2020.

Chart 3.

Granting credit to banks



Interest rates remained historically low in 2020

The Eurosystem's deposit facility rate, main refinancing operations rate, and marginal lending facility rate were held at their historical lows in 2020, at -0.50% , 0.00% and 0.25% , respectively (Chart 4).

The Governing Council reiterated throughout the year that it expects the key interest rates to remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below 2% over the medium term.

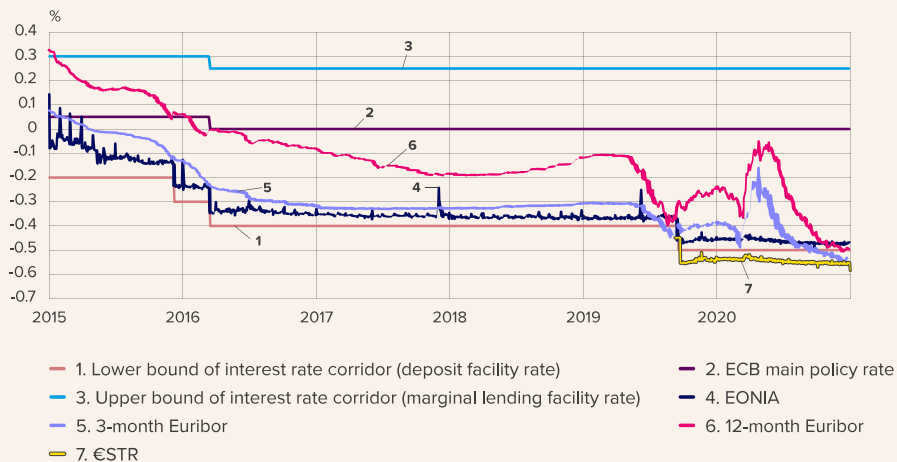
In the current environment of ample excess liquidity, the deposit facility rate functions as the Eurosystem's main policy rate, as it influences the level of very short-term market interest rates.

The overnight reference rate €STR , as well as its predecessor the EONIA, which has since been fixed to the €STR , closely tracked the deposit facility rate throughout 2020. In spring, the emerging COVID-19 pandemic led to a spell of market panic, causing longer-term reference rates, such as the three-month and twelve-month Euribors, to momentarily rise by 0.3 percentage points, to about 0.0% .

However, following the Eurosystem's comprehensive stimulus measures, the Euribors eventually fell to levels below -0.50% over the course of the year, reaching even lower levels than before the crisis.

Chart 4.

Key ECB interest rates and money market rates



EONIA fixed to €STR as from 2 October 2019 (EONIA = €STR + 8.5 basis points).
Sources: European Central Bank, European Money Markets Institute and Bank of Finland.

Longer-term refinancing operations had their conditions eased, allowing for high take-up

Non-standard longer-term refinancing operations played a key role in the Eurosystem's response to the COVID-19 crisis in 2020.

In December 2020, the Governing Council announced three additional operations to be conducted in 2021 under its third series of targeted longer-term refinancing operations (TLTRO III).

The interest rate applied on TLTROs is lower for banks that increase their net lending to households and non-financial corporations over a specified reference period.

The Governing Council eased the conditions of its three-year TLTROs multiple times in 2020. The maximum amount that counterparties are allowed to borrow under TLTRO III operations was raised twice: first, in March, to 50% of a counterparty's eligible loan stock, and again, in December, to 55% of the eligible loan stock.

The eligible loan stock is based on a counterparty's loans to non-financial corporations and households as at February 2019, excluding loans to households for house purchase.

The minimum interest rate on TLTRO III operations was also lowered for the next few years. In March 2020, the Governing Council decided that between June 2020 and June 2021 the interest rate applied on TLTRO III operations can be as low as 0.25 percentage points below the average interest rate on the deposit facility for banks that increase their net lending. In April, the Governing Council further reduced this to 0.5 percentage points below the average deposit facility rate, and in December it decided to apply the reduced interest rate on all operations outstanding between June 2021 and June 2022.

The Eurosystem has never previously granted central bank credit at an interest rate lower than the ECB's deposit facility rate.

In the early stages of the pandemic, the Eurosystem also conducted a series of additional longer-term refinancing operations to bridge the gap between TLTRO III operations, and it announced a new series of [pandemic emergency longer-term refinancing operations \(PELTROs\)](#). These operations were all conducted as fixed-rate tender procedures with full allotment.

The bridging operations were conducted on a weekly basis between 16 March and 8 June 2020, with all loans maturing on 24 June 2020 and issued at a fixed interest rate equalling the average of the deposit facility rate (-0.50%).

In May 2020, the Eurosystem launched its new series of monthly PELTROs. The PELTROs initially comprised seven additional refinancing operations maturing in 2021 and carried out as fixed rate tender procedures with full allotment, with an interest rate 25 basis points below the average rate on the main refinancing operations prevailing over the life of each PELTRO.

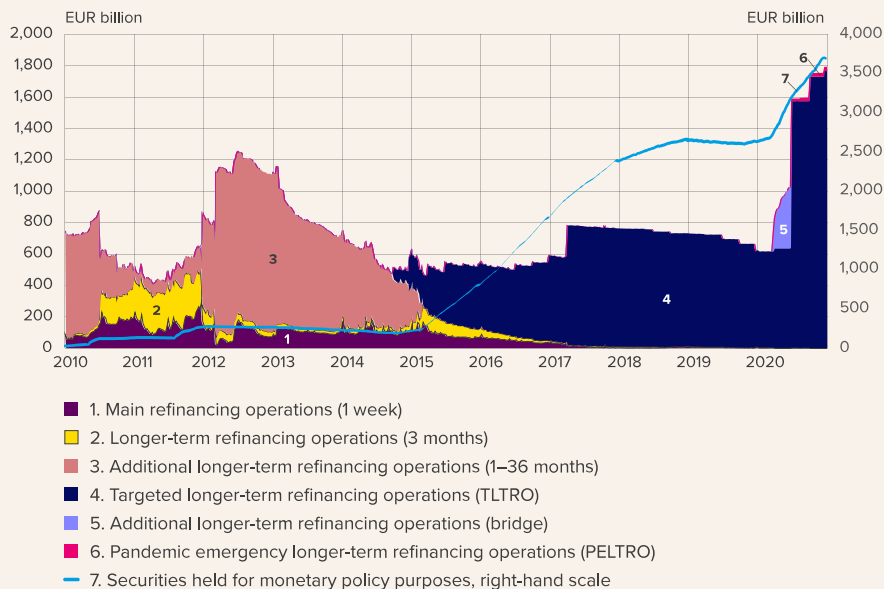
In December, the Governing Council announced four additional PELTROs to be conducted on a quarterly basis in 2021.

Banks have been especially active in participating in TLTROs. In 2020, the amount of outstanding Eurosystem liquidity-providing operations increased from about EUR 500 billion to over EUR 1,750 billion (Chart 5). This figure consists almost solely of TLTROs.

Similarly, the outstanding amount of bridging operations conducted in the spring peaked at almost EUR 400 billion. The number of participants in the Eurosystem's operations has remained relatively high. For example, a total of 742 banks participated in the June TLTRO.

Chart 5.

The Eurosystem's liquidity-providing operations (tender operations and asset purchase programmes)



Sources: European Central Bank and Bank of Finland.

Availability of major currencies secured

Financial markets experienced a shortage of US dollar liquidity during the most tumultuous phase of the COVID-19 crisis in 2020. In March, the central banks of the United States, the euro area, Japan, Canada, Switzerland and the United Kingdom took action to coordinate a solution.

The ECB Governing Council decided to lower the pricing on its US dollar-denominated liquidity operations and began conducting these operations on a more frequent – and even daily – basis. It also began conducting US dollar-denominated operations with maturities of over 3 months, in addition to its one-week operations.

The Eurosystem procured the dollars needed for these operations through its swap lines with the Federal Reserve System, the US central bank.

The amount of US dollar-denominated refinancing held by Eurosystem counterparties peaked at over USD 140 billion during the spring. However, as the year progressed, the outstanding amount fell towards zero.

The Eurosystem also ensured that euro-denominated liquidity remained available outside the euro area during the crisis situation. It established swap lines with the central banks of Denmark, Croatia and Bulgaria.

In addition, the Eurosystem established a backstop repo facility for non-euro area central banks (EUREP) and established bilateral repo lines with a number of other central banks.

Little to no demand for regular refinancing operations

The Eurosystem continued to conduct its weekly [main refinancing operations \(MROs\)](#) and regular three-month longer-term refinancing operations as fixed-rate tender procedures with full allotment. These operations are part of the Eurosystem's standard monetary policy measures.

On 10 December 2020 the Governing Council confirmed that it would continue to conduct its regular lending operations as fixed rate tender procedures with full allotment, at the prevailing conditions, for as long as necessary.

In 2020, banks largely satisfied their liquidity needs by borrowing under the Eurosystem's longer-term liquidity operations and participated in its regular refinancing operations only sparingly.

The average outstanding amounts of MROs and three-month longer-term refinancing operations fell to about EUR 1 billion and EUR 2 billion, respectively.

The number of participants in the Eurosystem's regular liquidity-providing operations only declined over the course of 2020.

The liquidity surplus in the banking system grew even larger

The [liquidity surplus](#) in the euro area banking system, i.e. the amount of central bank reserves held by banks in excess of their minimum reserve requirements, increased by about EUR 1,700 billion in 2020, totalling about EUR 3,500 billion (Chart 6).

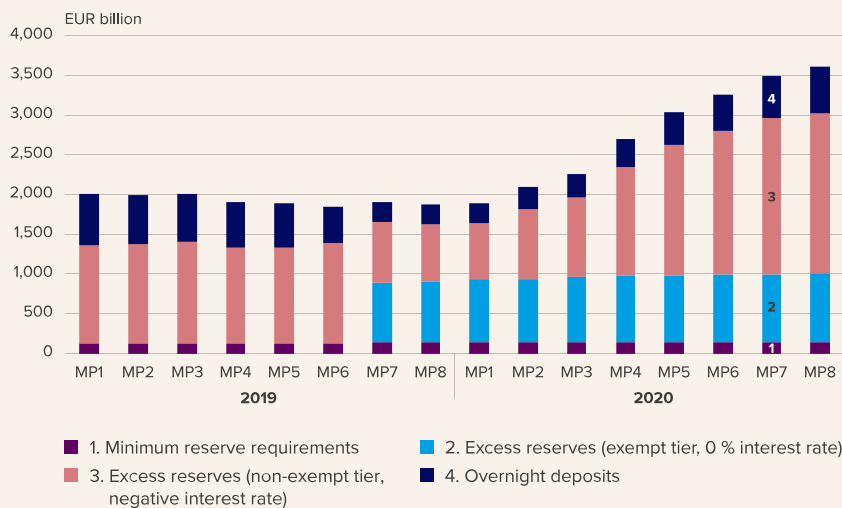
The rise in liquidity is explained, in particular, by the Eurosystem's increased pace of asset purchases due to the COVID-19 crisis and the higher take-up of TLTRO loans by banks.

The majority of the excess liquidity is remunerated at the ECB's (negative) deposit facility rate, but the [two-tier system for remunerating excess liquidity](#) introduced in October 2019 allows for an exempt tier to be remunerated at 0.00%.

The size of the exempt tier remained unchanged in 2020, at 6 times the volume of a bank's minimum reserve requirement.

Chart 6.

Current account holdings with the Eurosystem: averages per maintenance period



Source: European Central Bank.

Collateral easing in response to pandemic

The Governing Council made several adjustments to its [collateral policy](#) in 2020 to ensure that banks retain access to its refinancing facilities even in times of severe economic distress.

In April 2020, the Governing Council decided on a temporary expansion of the Eurosystem's [collateral framework](#). Among other measures, it reduced collateral valuation haircuts by a fixed factor of 20%, enabling banks to take more credit against the same collateral.

The Governing Council decided to relax the concentration limit for unsecured bank bonds as collateral, and it decided that marketable assets that met the eligibility criteria for collateral on 7 April 2020 would continue to be eligible in case of rating downgrades, as long as their rating remained at or above a specified threshold.

In addition, the Governing Council decided on an expansion of the [additional credit claim \(ACC\) frameworks](#) available to euro area national central banks.

On 10 December 2020, the Governing Council decided to extend the duration of its collateral easing measures to June 2022.

The Bank of Finland's domestic measures for ensuring the availability of adequate collateral

In addition to the Eurosystem's common collateral policy decisions, the Bank of Finland also implemented domestic measures to support the availability of collateral for its own counterparty banks and the flow of funding to firms and households.

On 1 September 2020, the Bank of Finland adopted an additional credit claim [framework](#). This allows euro area national central banks to temporarily accept as collateral credit claims that do not fully satisfy the Eurosystem's common collateral criteria.

Under its ACC framework, the Bank of Finland accepts corporate credit claims as collateral that otherwise satisfy the Eurosystem's general collateral framework but fall slightly short in credit quality.

The minimum credit quality requirement under the Bank of Finland's ACC framework is set at credit quality step 4 (BB+) in the Eurosystem's harmonised rating scale, whereas the threshold under the general collateral framework is set at step 3 (BBB-).

Furthermore, the Bank of Finland's ACC framework covers corporate loans that have been guaranteed by Finnvera Plc. The Bank of Finland has limited the guarantees accepted under the ACC framework according to, for example, their purpose and date of issue. This ensures that the eligible guarantees will be concentrated on corporate loans sought in response to the COVID-19 pandemic.

In addition, the Bank of Finland had already, on 1 April 2020, lowered the minimum threshold for credit claims for domestic use as collateral, from EUR 500,000 previously to EUR 25,000.

Substantial rise in collateral delivered to the Eurosystem

The overall volume of collateral delivered to the Eurosystem increased significantly (+47%) in 2020 due to the COVID-19 crisis (Chart 7).

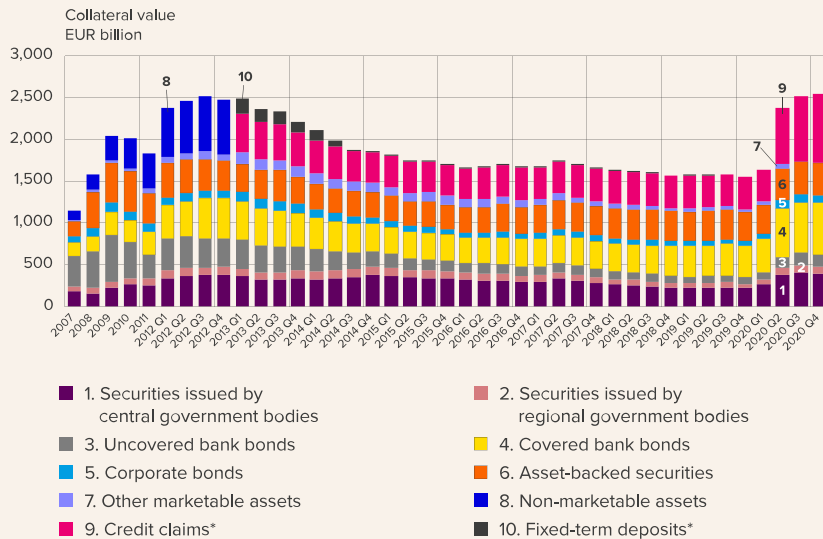
The total amount of collateral deposited with the Eurosystem national central banks averaged EUR 2,294 billion in 2020, compared with EUR 1,562 billion on average in 2019.

There were some slight changes in the composition of collateral delivered to the Eurosystem in terms of asset classes. The volume of credit claims delivered as collateral increased, especially as national central banks implemented ACC frameworks and the haircuts on credit claims were reduced, consequently raising their collateral value.

Indeed, credit claims accounted for the largest share of collateral at 29%, with covered bank bonds and asset-backed securities coming in second and third, at 24% and 16%, respectively.

Chart 7.

Collateral provided to the Eurosystem



*Breakdown available from 2013 onwards.
Source: European Central Bank.

The Bank of Finland’s monetary policy counterparties remained unchanged

Credit institutions that are counterparties to Eurosystem monetary policy operations are subject to [minimum reserve requirements](#) and financial supervision and must be financially sound.

The Bank of Finland’s circle of monetary policy counterparties remained unchanged in 2020. At the end of the year, the Bank of Finland had a total of 16 counterparties. These consisted of both Finnish credit institutions and branches of Nordic banks operating in Finland.

Monetary policy counterparties may seek funding against eligible collateral by participating in the Eurosystem's credit operations.

Counterparties may also apply for overnight liquidity due for repayment the next bank day through the ECB's marginal lending facility, against eligible assets. Intraday credit, to ensure smooth payment flows, is similarly available against collateral.

The Eurosystem has specified eligibility criteria for assets that can be used as collateral in central bank credit operations. These criteria are outlined in the ECB's guidelines and are applied everywhere in the euro area.

In addition, the Bank of Finland has supplemented the ECB's guidelines with additional domestic requirements for its own counterparties. The Bank of Finland updated its [provisions and guidelines](#) twice in 2020. The latest provisions entered into force on 1 January 2021.

Bank of Finland counterparties held a record amount of central bank credit against a record amount of collateral

The amount of [credit granted to Bank of Finland counterparties](#) through the Eurosystem's liquidity-providing operations increased several-fold in 2020.

At the end of 2020, Bank of Finland counterparties held a total of EUR 21.8 billion in outstanding targeted longer-term refinancing operations (TLTROs), compared with EUR 4.6 billion at the end of 2019.

In addition to the Eurosystem's euro-denominated operations, Finnish banks participated in a number of US dollar-denominated operations in the spring. The outstanding amount of these operations peaked at slightly over USD 4 billion.

Counterparties also made use of intra-day credit.

The amount of collateral deposited by counterparties with the Bank of Finland reached a record high. The total amount of collateral deposited with the Bank of Finland stood at about EUR 27.4 billion, on average, in 2020, compared with EUR 17.2 billion in 2019.

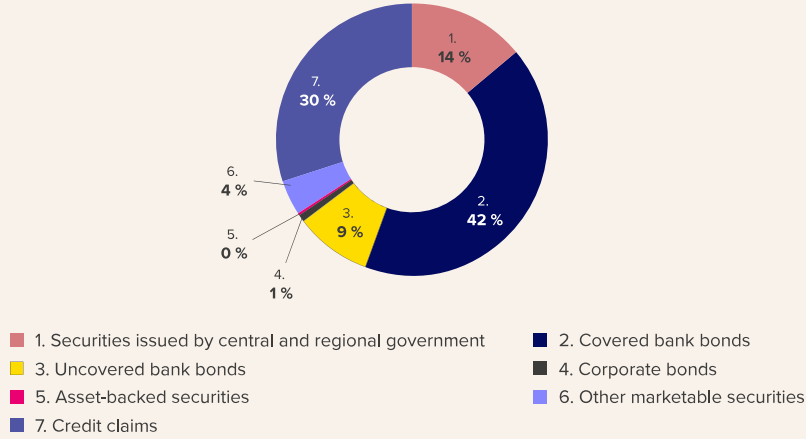
The Bank of Finland's counterparties especially favoured covered bank bonds as collateral; their share of all collateral deposits increased to 42% (Chart 8).

The second largest share of collateral was accounted for by credit claims (30%), and the third largest by securities issued by central and regional government (14%).

The average amount of excess collateral from counterparties, i.e. the difference between the value of the collateral delivered to the Bank of Finland and the value of the credit provided, was about 51%.

Chart 8.

Collateral put forward to the Bank of Finland (average shares in 2020)



Source: Bank of Finland.

The volume of deposits with the Bank of Finland grew in 2020

As in previous years, the Bank of Finland's counterparties held a significant amount of deposits with the Bank of Finland. The volume of deposits grew larger still in 2020 (Chart 9).

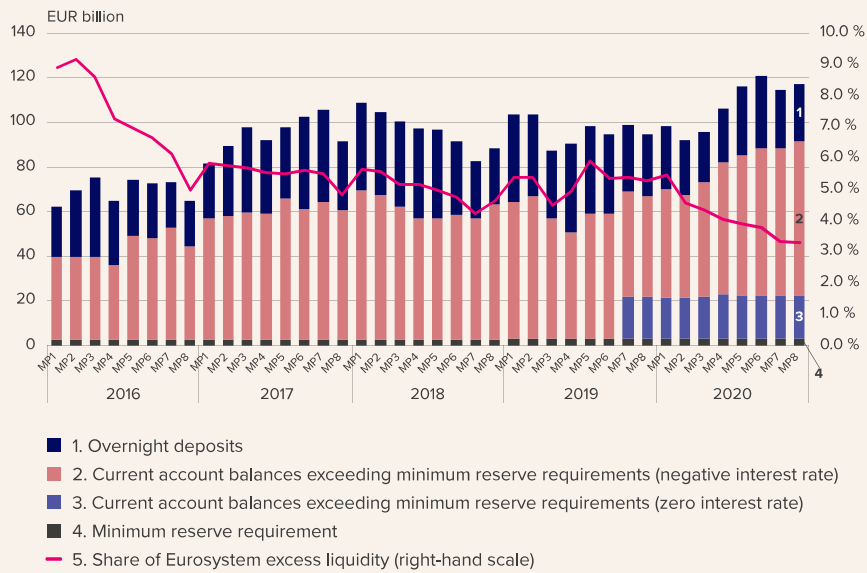
The volume of deposits stood at EUR 107 billion, on average, in 2020, compared with EUR 96.4 billion in 2019. Of this, only EUR 3 billion consisted of [minimum reserves](#).

The Bank of Finland's overall share of excess reserves (deposits exceeding minimum reserve requirements) declined slightly in 2020, to about 4.1% of the Eurosystem's total excess reserves, on average.

Finnish banks made almost full use of their exempt tiers under the new [two-tier system for reserve remuneration](#).

Chart 9.

Liquidity deposits with the Bank of Finland



Sources: European Central Bank and Bank of Finland.



The Eurosystem broadened its asset purchase programmes in 2020

The European Central Bank responded to the coronavirus pandemic by broadening its existing asset purchase programme and launching a new pandemic emergency purchase programme in March 2020. The Bank of Finland participates in the implementation of the public sector, corporate sector and covered bond purchase programmes. The amount of securities purchased under these programmes on the Bank of Finland's balance sheet increased to EUR 66 billion.

In March 2015, the ECB launched its [asset purchase programme \(APP\)](#). As part of its non-standard monetary policy measures, [the Eurosystem purchases bonds from banks](#), thereby increasing the [supply of money in the economy \(Finnish\)](#).

The aim of the Eurosystem's asset purchases is to support economic growth in the euro area and facilitate price stability. Asset purchase programmes have become an important tool for implementing monetary policy.

The APP consists of the following purchase programmes: the public sector purchase programme (PSPP), the corporate sector purchase programme (CSPP), the third covered bond purchase programme (CBPP3) and the asset-backed securities purchase programme (ABSPP).

In November 2019 the Governing Council decided to restart its net purchases under the APP at an average monthly pace of EUR 20 billion.

In response to the emerging coronavirus crisis, the Governing Council decided on 12 March 2020 to add a temporary envelope of additional net asset purchases of EUR 120 billion until the end of the year.

The Governing Council continues to expect net asset purchases to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it starts raising the key ECB interest rates.

The Governing Council intends to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time past the date when it starts raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

On 18 March 2020 the Governing Council announced a new and temporary EUR 750 billion [pandemic emergency purchase programme \(PEPP\)](#), to tackle [the serious risks caused by the COVID-19 pandemic](#) to the transmission mechanism of monetary policy as well as to the euro area outlook.

The Governing Council decided to increase the envelope of the pandemic emergency purchase programme on 4 June 2020 by EUR 600 billion, and again on 10 December 2020 by EUR 500 billion, for a new total of EUR 1,850 billion.

The Governing Council will terminate net asset purchases under the PEPP once it judges that the COVID-19 crisis phase is over, but in any case not before the end of March 2022. The maturing principal payments from securities purchased under the PEPP will be reinvested until at least the end of 2023.

Asset categories eligible under the PEPP are the same as under the APP. On 18 March 2020 the Governing Council also decided to expand the eligibility of non-financial commercial paper to securities with a remaining maturity of at least 28 days. In addition, securities issued by the Greek government and shorter-term public sector securities with a residual maturity of at least 70 days were made eligible for purchase under the PEPP.

The Eurosystem's holdings of assets purchased under the APP increased from EUR 2,580 billion to EUR 2,909 billion in 2020. The ECB publishes the Eurosystem's PEPP holdings every two months, and at the end of November 2020 PEPP holdings amounted to around EUR 698 billion. Time series of the Eurosystem's [APP](#) and [PEPP](#) holdings are available on the ECB's website.

Implementation of the asset purchase programmes at the Bank of Finland

[The Bank of Finland conducts asset purchases](#) under all of the purchase programmes except for the asset-backed securities purchase programme. The amount of monetary policy-related securities on the receivables side of [the Bank of Finland's balance sheet](#) increased from EUR 46 billion to EUR 66 billion in 2020.

The Bank of Finland's purchases of public sector securities consisted of debt instruments issued by the Finnish government, Finnvera, Municipality Finance and the Employment Fund.

At the end of 2020 the Bank of Finland balance sheet contained EUR 30.3 billion of government bonds and government-related bonds purchased under the APP, including EUR 0.4 billion of assets purchased under the Securities Markets Programme (SMP). The balance sheet also included EUR 2.7 billion in bonds issued by European supranational institutions.

The Bank of Finland acts as one of six national central banks carrying out corporate sector purchases on behalf of the Eurosystem as a whole.

The Bank of Finland is responsible for purchasing corporate sector debt instruments issued by Austrian, Estonian, Finnish, Irish, Latvian and Lithuanian companies.

The Bank of Finland has concentrated its covered bond purchases on the Finnish covered bond market. Overall, the Bank of Finland's holdings under the private sector purchase programmes of the APP amounted to EUR 19.9 billion at the end of 2020, comprising EUR 9.7 billion in covered bonds and EUR 10.2 billion in corporate bonds.

The Bank of Finland's PEPP holdings amounted to EUR 12.8 billion at the end of 2020.

Pricing of securities lending programme adjusted

[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 the euro area bond market. Securities are made available for lending in a decentralised manner.

The Bank of Finland's holdings are available for securities lending through its securities depository, Euroclear Bank, against securities collateral. The Bank of Finland also engages in bilateral securities lending with its holdings under the public sector purchase programme, against cash collateral.

[A list of holdings under the corporate sector and public sector purchase programmes available for lending is published on a weekly basis on the Bank of Finland website.](#)

In November 2020, the Eurosystem adjusted the pricing of its securities lending programme to ensure that the Eurosystem securities lending facilities remain an effective alternative to market-based lending.



Financial stability

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Financial stability

The Bank of Finland maintains financial stability in Finland. It assesses risks to the financial system, compiles financial statistics and participates in the framing of macroprudential policy. Macroprudential policy instruments are used for preventing financial crises and strengthening the resilience of the financial system.

Financial stability is a prerequisite for a stable society. Efficient financial intermediation supports sustainable growth, employment and wellbeing in the long term.

The Bank of Finland participates in maintaining the reliability and efficiency of the Finnish financial system. It identifies and assesses risks that, if they were to materialise, could threaten the stability of the financial system.

The stability threats identified in the Finnish financial system are high household indebtedness and structural vulnerabilities in the banking sector.

Financial stability risks can be mitigated by addressing the problems in time through macroprudential policy measures.

Of the macroprudential instruments applied in Finland, some address credit institutions' capital positions and some residential mortgage lending.

The Bank of Finland has a key role in maintaining financial stability

In Finland, decisions on macroprudential measures are taken by the Board of the Financial Supervisory Authority. The purpose is to strengthen credit institutions' and households' financial buffers against risk.

The Bank of Finland participates actively in macroprudential policy preparations, impact assessments and the development of macroprudential tools.

The Bank also cooperates closely with other financial stability authorities and institutions, both domestically and internationally.

The Bank of Finland is responsible for key financial market statistics. Reliable statistics afford a detailed and up-to-date overview of the operation of the financial system.

Companies' ability to cope with the COVID-19 pandemic is important for financial stability

In 2020, the COVID-19 pandemic pushed the global and Finnish economy into a crisis.

The Finnish banking sector faced the pandemic with much stronger capital buffers than the financial crisis over ten years ago.

One of the largest threats to banks is the increase in credit losses as businesses face liquidity problems. At the same time, businesses need loans to cope with the temporary loss of income.

The Bank of Finland thus focused in 2020 on monitoring lending to companies and on the modelling and forecasting of banks' future credit losses.

Statistical compilation and analysis that address information needs are the cornerstones of financial stability

The COVID-19 pandemic created in 2020 a specific need for rapid and reliable statistical reporting and analysis. The Bank of Finland's statistics function responded to this need rapidly and extensively.

The importance of digital services was highlighted in 2020, as they enabled financial intermediation during the exceptional times.

The increasing role of entities other than credit institutions created the need for analysing non-banks. The monitoring of new business models is important for safeguarding financial stability.

The Bank of Finland prepared a new data collection on financial intermediation by entities other than credit institutions (i.e. other financial intermediaries, OFIs). The scope of the extended statistical data collection that will commence in 2021 will cover finance companies and entities providing consumer credit, among others.

In 2020, the Bank of Finland continued to participate actively in the preparation of European legislation, i.e. in the definition of new requirements for payment statistics. We were actively involved in developing the statistics related to the regulation.

The Eurosystem's largest ongoing statistics project in recent years is the establishment of a common granular analytical credit database.

Once the database is completed, the Bank of Finland will be able to provide even more detailed and up-to-date analysis based on new information.

The Bank of Finland analysed financial stability risks caused by climate change

Climate change causes two types of stability risks for the financial sector.

Physical risk refers to material damage caused by climate change and extreme weather events. Transition risk refers to the decline of asset value in carbon-intensive sectors in connection with transition to a low-carbon economy.

In 2020, the Bank of Finland developed the analysis of climate risks, examined the data deficiencies related to climate change statistics and sought to resolve these problems.

The Bank of Finland is a member of the NGFS climate network. In summer 2020, the network published climate scenario models that enable assessment of the impacts of various climate measures on the economy and financial stability. This work will continue in 2021.



Companies' ability to cope with the COVID-19 pandemic is important for financial stability

The Bank of Finland assesses risks and vulnerabilities that threaten the stability of the financial system. During the COVID-19 pandemic, the focus has particularly been on companies' indebtedness and access to finance, and on future developments in banks' credit losses.

The Finnish banking sector faced the COVID-19 pandemic with much stronger capital buffers than the financial crisis over ten years ago. In addition, the non-performing loans of Finnish banks have been at a very low level by European comparison for years (Chart 10).

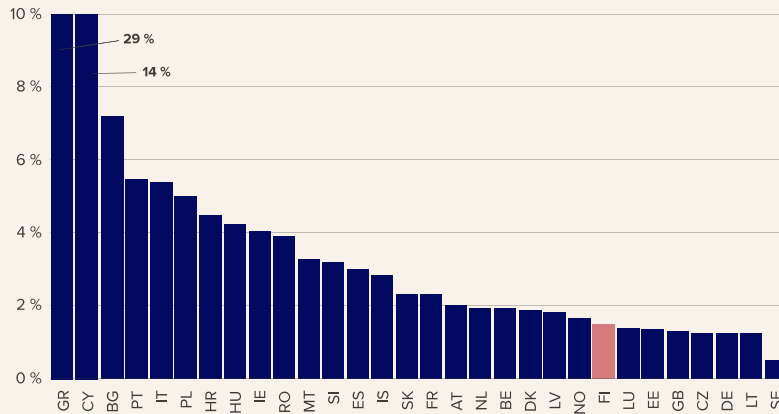
However, one of the largest threats posed to banks by the pandemic is the increase in non-performing loans and credit losses as businesses face liquidity problems.

On the other hand, companies needed credit to cope with the loss of income, albeit in part temporary, caused by the pandemic.

In 2020, the Bank of Finland thus focused on monitoring corporate lending and on modelling and forecasting banks' future credit losses.

Chart 10.

Share of non-performing loans by country, Q3/2020



Source: EBA.

Authorities cooperated in surveying companies' access to finance

During the pandemic, the Bank of Finland enhanced cooperation with other authorities – particularly the FIN-FSA, the Ministry of Finance and the Financial Stability Authority – in monitoring the financial position of banks.

In March, the FIN-FSA, the Bank of Finland and the Ministry of Finance launched a regular survey of banks, which provided more information on the supply of finance to businesses.

The survey provided valuable information, particularly during the first months of the pandemic, on the funding needs of non-financial corporations and on the banks' ability to respond to the need. The survey also quickly provided data on interest-only periods granted to non-financial corporations.

In 2020, the Bank of Finland analysed the indebtedness of domestic non-financial corporations and their debt-servicing capacity. The effects of the pandemic were distributed unevenly between sectors.

A sectoral analysis enables a more comprehensive assessment of indebtedness in the sectors that were hit most in the first phase of the pandemic.

The sectoral analysis also provides a more detailed picture of the financial position of the companies that are vulnerable in the structural changes accelerated by the pandemic, with for example teleworking and online shopping increasing.

As part of this analysis, the Bank of Finland also examined the sector breakdown of banks' lending and how indebted the borrowers are.

Credit losses caused by the COVID-19 pandemic gradually accumulating

In spring 2020, the Bank of Finland prepared scenarios on probable developments in credit losses.

The credit loss model utilised two scenarios of possible trajectories of economic growth, prepared by the Bank of Finland's Monetary Policy and Research department.

These scenarios were based on the assumption that Finland's GDP would contract sharply in 2020 due to the pandemic, but that economic growth would recover in 2021 and 2022.

The weak outlook for the economy was reflected in the assumptions also as a decrease in the value of securities and real estate. Even though the virus hit the economy hardest in 2020, credit losses would accumulate further in 2021 and 2022, as companies' liquidity problems will be reflected in credit losses only with a lag.

As the pandemic progressed, the Bank of Finland also closely monitored the liquidity and funding positions of domestic banks. Despite the difficult market situation, particularly in the spring, the banks' funding position eased already before the summer.

Work on borrower-based macroprudential measures continues

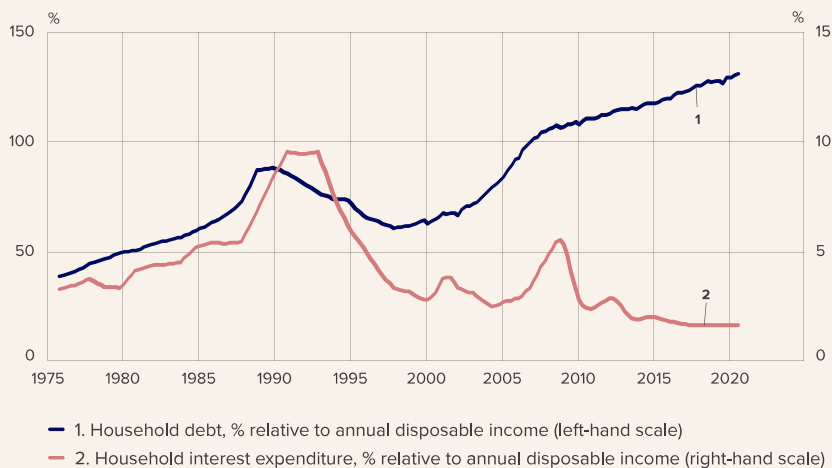
The Bank of Finland has for a long time expressed concerns about the increase in household debt (Chart 11). In 2018 and 2019, the Bank participated actively in [the Ministry of Finance working group on new borrower-based macroprudential measures \(Finnish\)](#).

In 2020, the Bank of Finland continued the analysis by, for example, monitoring the debt-to-income ratios of new housing loan borrowers.

The focus was also on estimating the appropriate maximum loan amount relative to the borrower's annual income (maximum debt-to-income ratio) in Finland.

Chart 11.

Finnish household indebtedness and interest expenses



Sources: Statistics Finland and calculations by the Bank of Finland.

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The Bank also modelled the effects of borrower-based macroprudential measures on economic growth.

If households have high debt-to-income ratios, a weakening of economic growth and rise in unemployment could force households to cut their spending.

If, on the other hand, the debt-to-income ratio is lower, the impact on spending could be smaller, which in turn would support economic growth.

In 2020, the Bank of Finland participated in the preparations for a positive credit register. The initiative is part of the government's measures to curb excessive debt and, from the perspective of financial stability, the register will enable a more comprehensive and reliable monitoring of the credit market.

The Bank of Finland has emphasised that it is important that the credit register include also households' exposures to housing company loans. [The importance of these loans has increased in recent years, particularly in new-build construction \(Finnish\).](#)

International macroprudential analysis focused on the housing market and banks

The Nordic banking sectors are interconnected, and the Bank of Finland has recognised the vulnerabilities related to this interconnectedness for a long time.

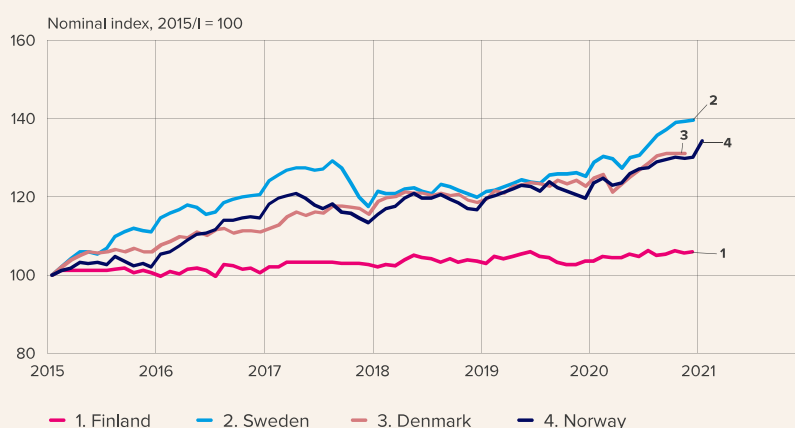
In all the Nordic countries, banks typically have large volumes of housing loans in their portfolios, and therefore a steep decline in housing prices could increase their credit losses.

The Bank of Finland has monitored developments on both the domestic and the Nordic housing markets during the crisis.

Despite the notable dip in the number of housing transactions in spring, the markets recovered rapidly. Towards the end of the year, housing prices rose in the other Nordic countries (Chart 12).

Chart 12.

Monthly housing prices in the Nordic countries



Finland: Old owner-occupied flats. Sweden, Denmark and Norway: all housing.

Sources: Statistics Finland, Valueguard, Statistics Denmark, Eiendom Norge, Macrobond and calculations by the Bank of Finland.

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The Finnish banking system is also interconnected with the financial system of the entire euro area. The Bank of Finland has closely monitored the position of banks in the other euro area countries during the pandemic.

An additional focus was on the global financial markets – particularly on the United States, where non-financial corporations' demand for debt was very strong in 2020.

The Bank of Finland also monitored and analysed growth in sovereign debt and the effects the growth could have. Most countries had to increase borrowing in 2020 in order to finance their economic support measures that were introduced in response to the pandemic.

[The European Central Bank is currently carrying out a strategic review, and the Bank of Finland has participated actively in this process.](#)

The Bank of Finland's Financial Stability and Statistics department mainly participated in the work streams that assessed the interaction between macroprudential policies and monetary policy, as well as the impact of low interest rates on the transmission of policy decisions.



COVID-19 pandemic required exceptional measures to maintain financial stability

During the COVID-19 year 2020, the Bank of Finland was involved in active cooperation with the other authorities responsible for financial stability. The objective was to prevent adverse economic impacts from the pandemic and to enhance the provision of credit. The Bank continues its work to strengthen the financial system and develop the macroprudential toolkit.

In 2020, authorities globally sought to mitigate the negative impacts of the COVID-19 pandemic on the economy by several measures in the area of central banking, macroprudential policy, banking supervision and regulation. The objective was to maintain the stability of the financial system and lending to businesses and households, thereby helping them cope with the sudden loss in income.

The aim was also to enhance the effectiveness of monetary and fiscal policy measures and to prevent the adverse longer-term effects of the pandemic on the economy. The Bank of Finland participated in both domestic and international cooperation.

The pandemic required rapid action and tighter cooperation

On the back of the regulatory changes introduced after the financial crisis, the ability of banks to cope with difficulties was considerably better on the outbreak of the COVID-19 pandemic than at the onset of the financial crisis.

In 2020, banks' capital and liquidity positions were stronger than before.

The larger capital buffers and the possibility to use them improved banks' ability to absorb losses and continue lending to businesses and households despite the sudden weakening in the economic outlook.

European banking and macroprudential supervisors acted rapidly in the spring. The SSM, the ECB's banking supervision framework, allowed its directly supervised banks temporary flexibility in meeting certain additional capital and liquidity requirements. Banks were also allowed, for example, to use flexibilities in loan loss provisioning.

National supervisors granted similar flexibilities to smaller banks under their supervision. European banks followed widely the recommendations by supervisors to temporarily refrain from dividend distributions.

In addition, implementation of the global capital and liquidity requirements for banks (the finalisation of Basel III) was deferred for a year.

The pandemic further tightened domestic and international cooperation between authorities. The Bank of Finland participated actively in, for example, the COVID-19 working groups of the European Systemic Risk Board (ESRB) and the ECB. The European Systemic Risk Board is responsible for macroprudential oversight of the financial system.

Macroprudential policy supported lending

The macroprudential policies introduced in the wake of the global financial crisis faced their first test as a result of the outbreak of the COVID-19 pandemic.

In Europe, many national macroprudential authorities eased banks' capital buffer requirements or reversed earlier tightening.

Measures by banking and macroprudential authorities freed up banks' capital for maintaining provision of credit and absorbing losses.

In Finland, decisions on macroprudential measures are taken by the Board of the Financial Supervisory Authority (FIN-FSA). The Bank of Finland participates actively in macroprudential policy preparations, impact assessments and the development of macroprudential tools.

In 2020, the Board of the FIN-FSA took decisions to ease macroprudential policy.

In April, the [capital buffer requirements determined on the basis of structural characteristics of the financial system were eased](#) by one percentage point for all credit institutions. Structural macroprudential buffers are set primarily to limit serious financial sector-related problems in the banking sector in a crisis.

The purpose of the measure was to mitigate the negative impact of the COVID-19 pandemic on financial market stability and to promote credit institutions' ability to provide credit.

This, together with the decisions of the macroprudential supervisors of other countries, was estimated to increase the lending capacity of credit institutions to Finnish businesses and households by some EUR 30 billion.

In June, the FIN-FSA Board [restored the maximum loan-to-collateral ratio](#), i.e. the loan cap, to its statutory base level.

On the base level, the maximum loan-to-collateral ratio for residential mortgage loans other than first-home loans is 90% and for first-home purchases, 95%.

The decision supported the proper functioning of the housing market in an economic environment altered by the pandemic.

Without these policy measures, the financial sector may have reinforced the weakening of the real economy, as the slowing of lending activity would have pushed the real economy into an even deeper recession.

In September 2020, the FIN-FSA Board decided not to extend the validity of the risk weight floor for residential mortgage loans ¹⁾, which entered into force in 2018. The macroprudential significance of the risk weight floor has declined and will continue to decline as a result of supervisory measures and regulatory changes.

The FIN-FSA Board also urged lenders to exercise restraint in granting loans that are very large in relation to the applicant's income and have longer maturities than usual.

In addition, the FIN-FSA Board decided each quarter on the level of the countercyclical capital buffer (CCyB) and kept the rate at 0%.

Supported by the extensive policy measures, the financial system withstood the test caused by the outbreak of the pandemic in 2020, but in the long term the weakening of the economic outlook is likely to increase credit losses.

Unemployment benefits, business subsidies and public guarantees are, however, expected to dampen the growth in losses somewhat.

The Bank of Finland participates in the development of macroprudential instruments

The COVID-19 pandemic demonstrated the need to ensure that macroprudential policy can be conducted in accordance with the economic cycle.

The objective of the design and stance of macroprudential policy in the immediate years ahead is to support the sustainable recovery of the economy and the financial system.

The reform of banking regulation will introduce more clarity and flexibility to the use of macroprudential buffers in 2021. The regulatory reform, i.e. the Banking Package, will also implement within the EU some of the post-financial crisis reforms of banking and financial regulation agreed on a global level.

The Bank of Finland participated actively in the work to incorporate the Banking Package in Finnish legislation.

In its stated opinion, the Bank of Finland highlighted the importance of the reforms included in the Banking Package for safeguarding financial stability and supported, in particular, the proposals related to the maximum level and principles for setting of the macroprudential capital buffer requirements.

Bank of Finland experts also issued opinions to, for example, Parliamentary Committees on other issues related to financial regulation, such as securitisation and the common backstop of the Single Resolution Fund.

Bank of Finland experts have also promoted the macroprudential measures proposed by the Ministry of Finance working group on household indebtedness.

The legislative proposals being prepared based on the working group's recommendations will be presented in 2021.

The positive credit register, once finalised, will facilitate the use of borrower-based macroprudential instruments.

The Bank of Finland participates in the work to extend the macroprudential toolkit outside the banking sector, particularly to funds and the insurance sector.

Digitalisation will change and increase the provision of financial services. The European Commission adopted in 2020 a digital finance strategy, the objective of which is, among other things, to ensure a level playing field for financial market participants.

The Bank of Finland contributed to the assessment of financial market digitalisation also from the perspective of financial stability.

Strengthening the banking system and development of the Capital Markets Union increasingly important

The COVID-19 crisis has highlighted the need to further develop and strengthen the European banking system. Key to this work is the completion of the European [Banking Union](#).

As regards finalisation of the Single Resolution Mechanism, which is part of the Banking Union, the euro area ministers of finance agreed in 2020 to advance introduction of a common backstop to the Single Resolution Fund (SRF).

The backstop will facilitate the restructuring of distressed large banks without threatening financial stability.

For the diversification of the bank-centred European financial system, it is also important to continue development of the capital markets.

The European Commission adopted in autumn 2020 a new action plan for the Capital Markets Union.

Development of the capital markets would improve in particular companies' access to finance and diversify risks. Development of the markets for Green Finance would also promote achievement of the EU's climate objectives.

1) Banks' capital requirements are expressed as a percentage of a bank's risk-weighted assets. The total amount of risk-weighted assets is calculated by multiplying the individual exposures, for example loans, by their risk weights before totalling up the overall exposures. The smaller the risk weight of an item, the smaller the amount of capital the bank must set aside for that asset. The risk weight floor set a minimum average risk weight of 15% for residential mortgage loans.



Analysis of financial sector climate risks progresses

Climate change creates risks for the financial sector, too. The location and size of the risks and their significance to the functioning of the financial system are not yet fully understood. The Bank of Finland participates in various international working groups for the development of risk analysis methods and monitoring.

Climate change causes two types of stability risks to the financial sector. Physical risk refers to material damage to, for example, property caused by climate change and extreme weather events. Transition risk refers to the decline of asset values in carbon-intensive sectors in connection with transition to a low-carbon economy.

The COVID-19 pandemic affects the treatment of climate change in the financial sector

By early 2020, the financial stability risks related to climate change had become part of the work streams of several working groups at, for example, the Bank of Finland, the European Central Bank (ECB) and in the NGFS climate network of central banks and financial supervisors (Network for Greening the Financial System).

As the pandemic spread, resources had to be re-allocated to analysing the impacts of the pandemic and the containment measures.

In mid-2020, it became clear that the impacts and transmission channels of the COVID-19 pandemic and climate change are partly similar, and their solutions are closely linked.

The COVID-19 pandemic has plenty of negative social and economic impacts. To minimise these impacts and to promote economic recovery, several public support measures have been introduced, some of which target investment.

Allocating investments to environmentally sustainable projects [enables the resolving of problems caused by the COVID-19 pandemic and the mitigation of climate change \(Finnish\)](#).

The weakening of economic activity caused by the COVID-19 pandemic has been reflected as a global reduction in emissions. Achieving the goals of the Paris Agreement on Climate Change requires that the 2020 level of emission reductions is maintained each year in the coming decades. The challenge is to achieve this goal without adverse economic and social effects.



We investigated and clarified the financial stability impacts of climate risks. We participated in the work of the NGSF¹.

¹ Network for Greening the Financial System (NGFS).

The Bank of Finland is actively developing analysis of climate risks

In 2020, the Bank of Finland examined as part of our financial stability analysis, the banking sector's exposure to physical risks.

The focus was particularly on analysing the share of banks' credit claims and collateral that is located in [areas where sea floods may in future pose a large threat to property](#).

As to transition risks, the Bank published an overview of [the companies' value chains and their risks \(Finnish\)](#).

The Bank of Finland has also examined the statistical data gaps and problems related to climate change and the related impacts and has sought to resolve these problems.

The Bank of Finland participated in the working group of the European System of Central Banks (ESCB), which examined data and research projects on climate change.

The working group prepared in 2020 a proposal on how the ESCB's statistical function could support a wider discussion on climate change, the economy and the financial system.

The Bank of Finland is an active participant in the NGFS climate network

The Bank of Finland participated in bridging the data gaps also as a member of the NGFS climate network. This work was launched in 2020 and will continue in 2021.

The NGFS climate network's work on scenarios continued throughout the year, [and one of the most significant outcomes was the publication of climate scenario models in summer 2020](#).

These scenarios by the NGFS can be used for assessing the impacts of climate policy in various situations. The climate scenario models are available to everyone, and the Bank of Finland wants to promote their use in Finland.

To promote the use of scenario models, the Bank of Finland published two articles, the first of which [describes scenario modelling and the NGFS scenarios more generally \(Finnish\)](#) and the second describes [the models used in the calculation of the scenarios \(Finnish\)](#).



Bank of Finland's statistics service responds to the heightened need for information due to the COVID-19 pandemic

The Bank of Finland is responsible for producing key financial market statistics. The COVID-19 crisis changed the operating environment and made it necessary to rapidly access reliable information and analyses of the situation. The fast-changing operating environment of the financial markets highlighted the need for up-to-date analysis and a comprehensive picture of market activity.

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.

The COVID-19 pandemic has changed the nature of the Bank of Finland's statistics and information services

Statistical data lie at the heart of information-based decisions. During the crisis, decision-makers have needed information faster and over a wider range than normal.

The Bank of Finland's statistics service responded to this need by starting to collect monthly data on card payments after the crisis broke in March. This data has been used to assess the financial and economic impacts of the COVID-19 pandemic.

Data on card payments has made it possible to analyse consumer behaviour in a way that was not possible previously.

The Bank of Finland statistics service sent detailed secure credit institution data every month to the Helsinki Graduate School of Economics Situation Room to be analysed for the purposes of controlling the crisis and drafting decisions.

This new material quickly provided information on how the COVID-19 crisis was affecting private consumption and different sectors of the economy.

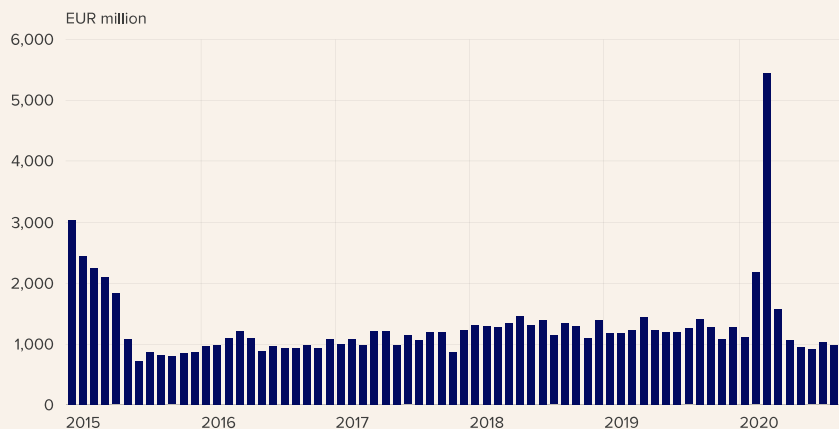
Due to the crisis, there was a rapid increase in the demand for credit flexibility from businesses and households.

Credit institutions offered their customers payment holidays in large numbers in the period March–April 2020. These appear in the statistics as renegotiations of loans. The Bank of Finland added the information to its external statistics dashboard.

Towards the end of 2020 it became normal to take payment holidays.

Chart 13.

Renegotiated mortgages



Source: Bank of Finland.

Bank of Finland statistics service produced new data on indebtedness

The Bank of Finland has a statutory right to obtain from credit and financial institutions and other financial market participants the data necessary for carrying out its statutory duties.

In 2020, the Bank drew up plans for data collection in respect of other financial institutions. The aim is to acquire a comprehensive picture of indebtedness in Finland and broaden the analysis of changes to financial channels.

Experts at the Bank of Finland carried out the survey and analysis of indebtedness and financial channels using existing sources, such as the Trade Register and the data that companies had themselves published.

The Bank of Finland also endeavoured to obtain a broader overall picture of financial intermediation by means, inter alia, of an analysis of debt collection agencies. Debt collection agencies are not included in the new data collection exercise. They are nevertheless networked with financial institutions in many ways.

Bank of Finland actively developed compilation of statistics to meet European guidelines

Payments have changed in many ways in recent years. This change is also reflected in statistical requirements.

The Bank of Finland has continued to participate actively in the drafting of European legislation defining new requirements for payment statistics.

The Governing Council of the European Central Bank adopted the amendment to the relevant Regulation in December 2020. The compilation of statistics under the Regulation is to commence in 2022.

The amendment allows for wider and more frequent access to information on phenomena related to retail payments, which will make it easier for the Bank of Finland and the European Central Bank (ECB) to discharge their functions.

In the compilation of statistics on pension funds, the Bank of Finland employs the results of the Financial Supervisory Authority's data collection, which is undertaken in accordance with European regulations. The data collection exercise extends to pension funds providing individual voluntary pension insurance.

Unlike in many European countries, the sector has not grown very substantially in Finland and the pension institutions still amass most pension funds. Finland provides the data as part of its contribution to the compilation of European Statistics.

February 2020 saw the start of the provision of data on pension funds to the ECB. The first batch of data related to the third quarter of 2019. The information on Finland can also be examined using the [ECB's Statistical Data Warehouse](#).

Finland has long experience of combining several reporting data collection exercises into an integrated reporting framework. The Bank of Finland has been actively involved in developing the Eurosystem's Integrated Reporting Framework.

It is expected that the framework will be deployed for the period 2024–2027. A cost-benefit analysis of it is currently being undertaken by the banks and other stakeholders.

The Analytical Credit Database permits broader analyses

The largest statistical project under way in the Eurosystem in recent years has been the establishment of a common analytical credit database.

Now that the database is ready, the Bank of Finland is able to produce more precise and timely analyses using new information.

Unlike before, the analyses conducted can focus on credit by region and a company's size, its other debtors and its credit characteristics.

The publication of the data began as analyses based on it. The first published analysis concerned loans to housing companies.

In future the material will be used as an essential component in internal and external assessments and analyses of both the Finnish and European loan markets.

Furthermore, the Bank of Finland released on its dashboard new data on securities issued by Finnish residents. The material can be used to undertake a sectoral breakdown of securities issuance by country of ownership, sector and instrument.



Bank of Finland monitoring digitalisation of financial intermediation

COVID-19 has sped up developments in digitalisation, which was already under way on the financial markets. The models and structures of financial intermediation are changing, and the industry is seeing the presence of new digital actors. Meanwhile, the old operators are also investing heavily in technological development.

Digital actors are taking on growing importance in financial intermediation.

For example, digital banks with no network of branches now account for a continually growing share of the aggregate stock of Finnish household consumer credit. At the same time, the importance of operators outside the banking sector is increasing in the area of financial intermediation.

The Bank of Finland actively monitors the effects that the new operators and their approaches are having on financial intermediation, the changing roles and the risks involved.

To analyse these effects, the Bank of Finland has begun to deploy a monitoring process that covers the entire financial sector, with categories being established for different groups according to their characteristics and business models.

It is important to monitor new business models to preserve financial stability

Digitalisation makes possible a broad range of business models for financial intermediation. Crowdfunding, peer-to-peer lending and digital banking, for example, all have their very own special features.

The Bank of Finland continually aims to keep abreast of changes in financial intermediation and therefore actively monitors the extent of the influence of the various business models and their changes.

In addition, the Bank analyses the risks associated with these business models and produces data to aid, for example, decision-making connected with financial stability.

Digitalisation allowed financial intermediation to continue also during a time of crisis

In 2020, COVID-19 sped up the development of a digitalisation process that was already under way. As the virus spread, the customer service lines of banks became congested, as customers applied for loan repayment holidays.

The banks quickly developed technological solutions to deal with the congestion problem and advised their customers to start using digital channels.

The Bank of Finland started to keep track of the number of loans granted by banks that were being taken out via digital channels.

From the angle of financial stability, the services and channels made possible by digitalisation played a major role in the continuation of financial intermediation during the coronavirus pandemic.

Analyses conducted by Bank of Finland extend beyond banking sector and across borders

With the growing role of actors outside the banking sector, any analysis of financial intermediation must also be extended more robustly to the non-banking sector.

Back in March 2019, the Board of the Bank of Finland in fact decided to extend data collection to other financial institutions.

In 2020, the Bank created a new data collection process regarding financial intermediation outside the credit institutions. [The collection of statistical data as from the start of 2021 will extend, for example, to credit institutions' finance companies and companies providing consumer credit.](#)

Digitalisation also promotes the internationalisation of financial intermediation. More attention must be paid in the monitoring process to financial institutions that grant loans to other countries.

Studies conducted by the Bank of Finland suggest that in Finland, too, there is a substantial amount of consumer borrowing from the other Nordic countries.

The monitoring of this cross-border lending is a key part of the Bank of Finland's analysis of approaches to digitalisation, and relies very much on cooperation between the Nordic countries.



Cash and payments

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Cash and payments

26.3.2021

The Bank of Finland is responsible for the availability and issuance of cash in Finland. In addition to domestic cash supply, the Bank of Finland's duties include tasks related to the provision, development and security of payment systems and collateral management services.

The payments landscape was in transition in 2020, particularly in response to the COVID-19 pandemic.

The use of cash continued to decline at an increasingly rapid pace as card payment gained in popularity. Contactless payment and mobile payment (i.e. payment without a PIN) increased.

The number of interbank payments transferred via the TARGET2-Suomen Pankki system also increased in 2020.

The Eurosystem examined the possibilities of a digital euro

Electronic payment is a key part of everyday life, and its share in payments will continue to grow. If the objective is to ensure that in the future, too, payments will be executed in central bank money, the Eurosystem must be part of the change. As the use of cash has decreased, the Eurosystem has considered whether the central bank should also start issuing a digital means of payment. The Eurosystem launched in 2020 work on a euro area digital central bank currency, i.e. a digital euro. A digital euro would complement euro banknotes and coins.

As a result of the growth in electronic payments, an increasing share of retail payment services are provided by commercial entities. The task of the Eurosystem is to ensure the smooth operation of payment systems also in exceptional circumstances.

Development of financial sector cyber security

The possibilities created by digitalisation are made use of extensively in financial sector services.

This also exposes the entities to cyber risks. An attack on a bank or a payment system could, in addition to the direct impacts, cause a major loss of confidence in the financial system.

To improve their protection capabilities, financial sector entities try to identify vulnerabilities in their systems by testing them with methods used by real-life attackers. In such penetration testing exercises, an attacker commissioned by the entity tries to, in a controlled manner, gain access to the entity's production systems.

The TIBER-EU framework adopted by the European Central Bank in May 2018 provides guidance on penetration testing. In 2020, the Bank of Finland published a TIBER-FI Implementation Guideline that supports testing and enhances the resilience of the Finnish financial sector.

The Eurosystem enhances the sustainability of cash supply

Cash supply is one of the most operative tasks of central banks, and therefore it also creates environmental impacts. The impacts on the economy are, however, very small.

The environmental impacts of cash supply are created in production, transport, processing, counting and sorting, and storage. The largest environmental impacts of cash supply are created outside the central banks.

The Eurosystem has taken a decision that, as of 2022, banknotes will be destroyed by incineration and no longer taken to landfills.

The Eurosystem is also examining the possibilities of replacing the raw material of banknotes in the next series.



A digital euro would be the third form of the currency

The idea of a digital central bank currency has been brought up by researchers and central bankers in recent years. The Bank of Finland is participating in the Eurosystem work on a digital central bank currency that started in early 2020.

Electronic payments and digital money were a topical issue already over 30 years ago as the use of the Internet became widespread.

A variety of services related to electronic payments and digital money have been launched on the market, and the industry has grown rapidly. However, the bulk of services have been from commercial providers.

Thus far, no central bank in the world has provided a digital means of payment available to all, except for some short-lived experiments.

One of these experiments is the Avant money card developed by the Bank of Finland in the 1990s.

As the use of cash is decreasing, the Eurosystem has considered whether the central bank should also start issuing a digital means of payment, i.e. a central bank digital currency (CBDC).

Despite the term ‘central bank digital currency’, a digital euro would not be a new currency but a digital form of the euro.

A digital euro would complement euro banknotes and coins

Central bank money is money that is issued by the central bank and recorded under liabilities on the central bank's balance sheet. For example, a banknote is central bank money, whereas a customer deposit with a commercial bank is not.

The proposed digital central bank currency for the euro area is referred to as the digital euro. A digital euro would complement euro banknotes and coins.

Central bank deposits have already for a long time been a form of digital central bank currency, as they exist only as bookkeeping entries in IT systems.

A digital euro has nothing to do with virtual currencies – neither technically nor otherwise.

[The Eurosystem published in October 2020 a report on a digital euro.](#)

What would be the benefits of a digital euro?

Finland is one of the leading countries in the changing payments landscape as nowadays cash payments are quite rare here. As a result of this trend, i.e. the decline in the use of cash as a means of payment, an increasing share of retail payment services throughout Europe are provided by commercial entities. This is not necessarily a problem – at least not during normal times.

The Eurosystem must, however, ensure the smooth operation of payment systems also in exceptional circumstances.

If the central bank were to provide a retail payment system alongside current systems, it would increase the resilience of the financial system.

If one system were to fail, there would be a backup system to provide operational continuity.

A digital euro would be provided by the central bank. Electronic payments would therefore not be dependent only on commercial providers.

One of the benefits of a digital euro is that central bank money could be used for making not only interbank payments but also other electronic payments. Thus far the Eurosystem has provided central bank money in two forms: in cash to the general public and as a deposit facility to banks.

A digital euro would be, alongside banknotes and coins, a third form of the euro that would combine the features of the current forms. It would resemble central bank deposits as it would be an intangible asset. On the other hand, it would be similar to cash as it would be available to everyone.

Many open questions on a digital euro

Thus far the digital euro exists only as an idea.

In the years to come, the Eurosystem, and the Bank of Finland as one of its members, will explore the key open issues concerning the initiative. As part of this work, the Eurosystem will also launch practical experimentations on a digital euro.

The issue will be examined thoroughly before considering any decisions on the issuance of a digital euro. This is very broad issue and there are still many open questions.

The key questions relate to financial stability, the impact of a digital euro on the balance sheet of the banks and the central bank, as well as on the transmission of monetary policy.

There are also open legal issues. It is still unclear how a digital euro would fit into the current legal framework or what legislative changes the issuance of a digital euro would require.

Questions concerning protection of privacy must also be considered carefully. A digital euro should not facilitate money laundering. At the same time, citizens' privacy must be protected.

The Eurosystem wants to lead the change

The examples above show that a digital euro is first and foremost not a technological issue. This even despite the fact technological advances and digitalisation are the reasons why we are discussing a digital euro.

The design of a digital euro would be based on the latest technical solutions and best practices. They could well be the same as are already widely used in commercial payment applications.

Electronic payment is a key part of everyday life, and its share in payments will continue to grow. If the objective is to ensure that in future, too, payments are executed in central bank money, the Eurosystem must be part of the change, if not actually the creator of the change.

The preparations made in 2020 have laid the foundations for a significantly shorter transition period for the possible introduction of a digital euro. The objective is to ensure that the Eurosystem is ready for the change when the time comes.



Banknotes and cash supply: COVID-19 led to reduced banknote orders

As a euro area central bank, the Bank of Finland is responsible for the issuance and fitness of cash in circulation in Finland. As a wholesaler, the Bank also seeks to ensure the distribution of cash and the acceptance of cash for retail payments and other uses.

The Bank of Finland monitors actively the use of cash and contributes to ensuring the competitiveness of cash as a method of payment.

Cash ATM network remained unchanged

The COVID-19 pandemic began in March 2020, and authorities at the time urged consumers to avoid cash payments and use contactless payments instead. Cash withdrawals from ATMs and the use of cash in retail payments decreased rapidly in late spring.

The cash ATM network, however, remained virtually unchanged in 2020. The operators did not want to make big changes in the network, reflecting the high uncertainty as to the duration of the crisis.

Following the introduction of strict restrictions on movement in March as a result of the pandemic, consumers initially withdrew extra amounts of cash just in case. The subsequent request by e.g. retailers to avoid cash payments also reduced banknote and coin orders from the Bank of Finland in late spring.

The decrease in COVID-19 cases and the easing of restrictions during the holiday season in July–August increased the use of cash slightly, and cash orders.

Banknote returns are generally a good reflection of the use of cash. They increased only slightly in 2020. In late 2020, they were actually notably smaller than in previous years (Chart 14).

The strong increase in the use of cash before Christmas is usually reflected in banknote orders. The pandemic re-escalated in November and December and, as a result, this seasonal fluctuation was in 2020 much more subdued than in previous years.

In October 2020, the Bank of Finland conducted a consumer survey on the use of cash. The results show, for example, that consumers who usually use cash and cards equally for payment purposes began to prefer card payments during the COVID-19 crisis. In contrast, consumers who tend to use mainly cash continued to favour cash payments (Chart 15).

Chart 14.

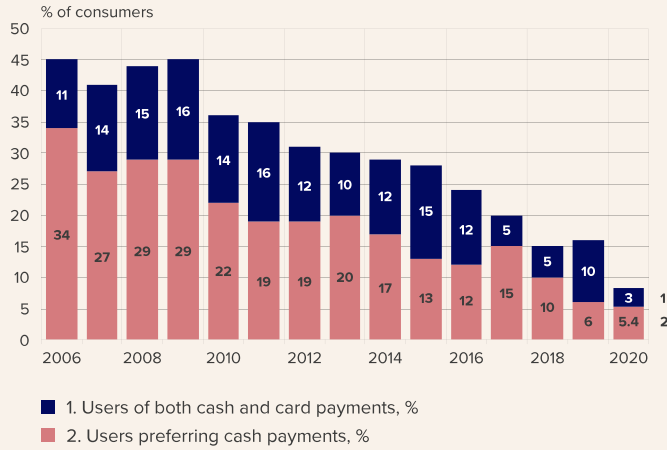
Banknote orders from and returns to the Bank of Finland in 2019 and 2020



Source: Bank of Finland.

Chart 15.

Users of cash payments in the Bank of Finland consumer survey



Source: Bank of Finland consumer surveys.

According to consumers, cash availability has remained good

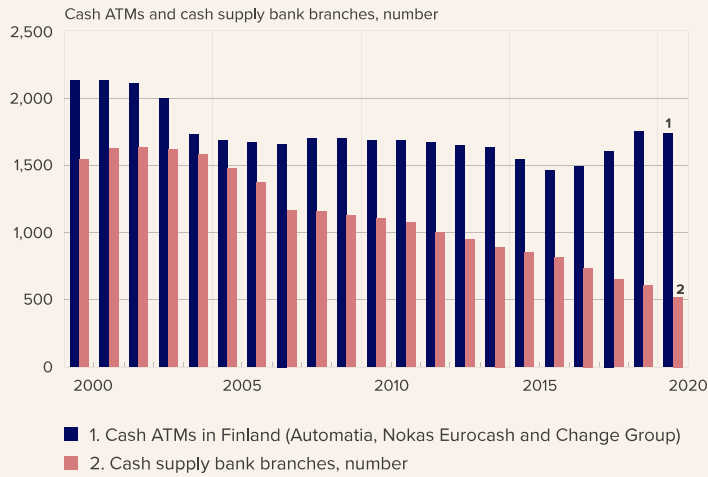
According to consumers, the availability of cash remained good in 2020.

Orders of cash from the Bank of Finland, distribution of cash to the public via various distribution channels and the use of cash in payments decreased particularly during the pandemic's community transmission phases in spring and late autumn.

The number of bank branches providing cash services continued to decrease steadily, and in addition during the COVID-19 community transmission phases, banks reduced the daily hours during which cash was available from their branches (Chart 16).

Chart 16.

Cash ATMs and banks' cash supply branches



Sources: Automatia, Nokas CMS and Change Group.

The COVID-19 pandemic decreased sharply the demand for EUR 50 banknotes for travel purposes

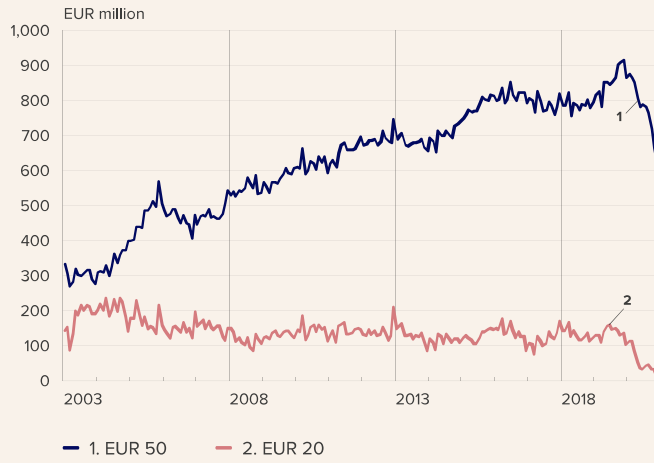
Growth in the issuance of cash remained positive in 2020, i.e. cash orders exceeded the level of returns, even though withdrawals of cash for travel abroad decreased significantly due to the travel restrictions imposed in response to the pandemic.

There was a particularly marked decrease in the issuance of EUR 50 banknotes (Chart 17).

Orders from and returns to the Bank of Finland of other banknote denominations have also decreased during the pandemic, as the distribution and use of cash decreased more rapidly than in previous years (Chart 18).

Chart 17.

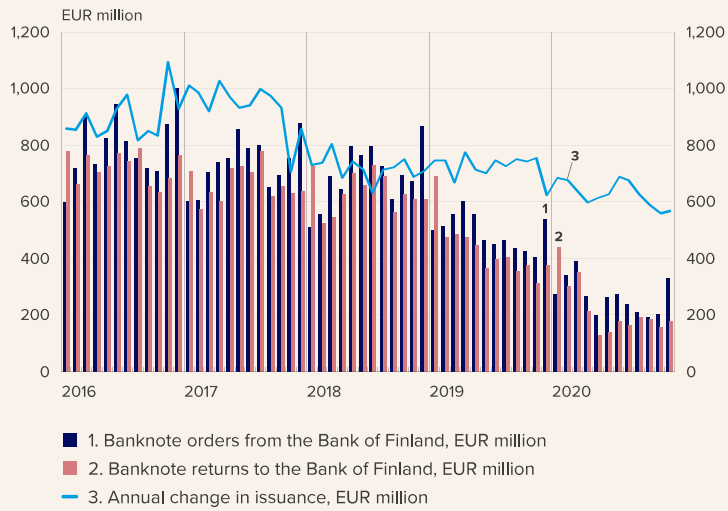
Annual change in issuance of EUR 20 and EUR 50 banknotes



Source: Bank of Finland.

Chart 18.

Banknote orders from and returns to the Bank of Finland



Source: Bank of Finland.

Banknote custody services provided by the Bank of Finland reduced transportation by cash supply companies

Following the closure of the Oulu regional office, the last regional office outside the Vantaa office, the Bank of Finland has provided private cash supply companies with interest-free cash custody services.

The Notes Held To Order (NHTO) custodial system for cash was launched almost in full volume at the beginning of May 2019. The maximum volume of the custodial system was assessed in spring 2020.

The possibility to place cash into custody at local distribution centres effectively reduces unnecessary transportation of cash to the central bank only to avoid interest charges.

Counterfeit euro cash in Finland

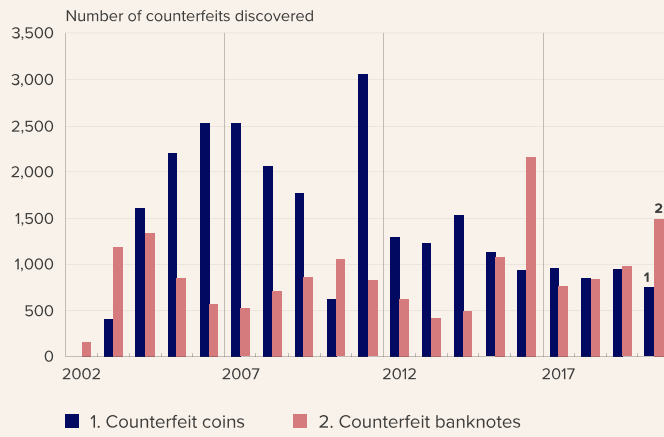
The number of euro counterfeits detected in circulation in Finland increased slightly in 2020. In Finland, a total of 1,496 counterfeit euro banknotes and 750 counterfeit euro coins were found (Chart 19).

The increase in the number of detected counterfeits in the past couple of years reflects in particular the prop banknotes for movies sold online.

Of the different denominations of banknotes in circulation, the EUR 20 was the most frequently discovered counterfeit note in 2020.

Chart 19.

Counterfeit euro banknotes and coins in Finland in 2002–2020



Source: National Bureau of Investigation.



Environmental impacts of cash supply in 2020: less transport kilometres

Cash supply is one of the most operative tasks of central banks, and therefore it also creates emissions. With the escalation of environmental problems and the climate crisis, central banks, too, have examined the impacts of their operations more closely. On the level of the economy as a whole, cash supply is not a very significant source of CO₂ emissions.

The largest environmental impacts of cash supply are generated outside the central banks

The environmental impacts of cash supply are created in production, transport, processing, counting and sorting, and also in storage.

The environmental impacts of banknotes and coins start in the production of the raw material, followed by the production of banknotes and coins, and end in their destruction at the end of their life cycle.

Euro banknote paper is produced from cotton, which consumes natural resources. The Eurosystem is therefore examining the possibilities of replacing the raw material of banknotes in the next series.

The Eurosystem has taken a decision that as of 2022, destroyed banknotes will no longer be taken to landfills but be destroyed by incineration.

The European Central Bank (ECB) will conduct by July 2021 a preliminary study of the total environmental impact of euro banknotes, in accordance with standards approved by the European Commission.

Studies by central banks show that the production and printing of coins and banknote paper account for slightly less than one third of the environmental impact of cash supply.

About half of the environmental impacts related to cash supply by central banks is created in energy consumption in connection with the processing, sorting and storing of banknotes.

The environmental impacts of cash supply are small on the level of the economy as a whole

The largest environmental impacts in cash supply are created in energy consumption outside the central bank: in the production of coins, in private retail transport between stores and the sorting centres of cash management companies, as well as in the electricity consumption of the cash ATM network.

The environmental impact of energy consumption in connection with cash supply is, however, very small in relation to the economy as a whole.

A study conducted in the Netherlands shows that the CO₂ emission levels in cash and card payments are similar.

The greenhouse gas emissions of the Finnish economy totalled in 2019 some 52.8 million tonnes of CO₂ equivalent. The emissions from cash supply account for approximately 0.03% of the greenhouse gas emissions of the Finnish economy.



The overall volume of cash transports and emissions declined further on 2020. We were constantly seeking solutions to prolong the life of our banknotes.

Total kilometres in cash transports decreasing

The emissions related to cash transports in Finland are estimated separately. The kilometres travelled in cash supply in Finland annually amount to over 9 million, which is 0.02% of the total road transport kilometres covered in Finland.

Total kilometres have been on a downward trend in 2017–2020, most recently due to the COVID-19 pandemic. Over 4/5 of cash transports are local, and their volume has declined in recent years.

The launch of the Notes Held To Order (NHTO) custodial system for cash, together with active measures taken by the parties involved in cash supply, have further reinforced the economical nature of cash processing and reduced the transport kilometres in the entire cash supply chain.

Environmental responsibility is an essential part of the cash supply governance process. The objective is to make more efficient use of energy and extend the lifespan of banknotes.



Payment and settlement systems must operate reliably and securely

The payments landscape was in transition in 2020, particularly in response to the COVID-19 pandemic. The payment and settlement systems subject to Bank of Finland oversight have operated reliably and securely during the crisis.

COVID-19 pandemic changed payment behaviour

The COVID-19 pandemic shaped consumer behaviour and the popularity of various payment methods quite strongly. The use of cash continued to decrease at an increasingly rapid pace as card payment gained in popularity.

Contactless card payments (i.e. payments without a PIN) and mobile payments increased. The changes in payment methods also reflected the growing popularity of online shopping.

Payment and settlement systems have operated without significant disruptions during the COVID-19 crisis.

Following the onset of the crisis, authorities have tightened cooperation in the monitoring of systems and have updated regularly their assessment of the current situation, in cooperation with the various financial market participants.

Oversight conducted in cooperation with domestic and international authorities

[Oversight](#) refers to the monitoring of payment and settlement systems by central banks, with the purpose of ensuring their reliable and efficient operation both during normal times and in times of crisis.

The Bank of Finland conducted its oversight duties mainly in cooperation with the Eurosystem. As to central counterparties the Bank of Finland participated in international oversight cooperation.

In 2020, the Bank of Finland conducted for the first time an oversight assessment of the central securities depository Euroclear Finland, in accordance with the Central Securities Depositories Regulation (CSDR).

The Bank of Finland's simulator supports oversight

The [payment and settlement system simulator](#) developed by the Bank of Finland has long been in use within the Eurosystem and several other countries.

The software is used as an oversight tool for risk analysis, for identifying systemically important counterparties and for assessing ideas for improving systems.

In 2020, the Bank of Finland organised its 18th [international seminar for experts in the field of analysis and simulation of payment and settlement systems](#).

Due to the COVID-19 pandemic, the seminar took place online, but it still attracted a large number of international participants, as usual.

It is essential to prepare for disruptions and crisis situations

Reliable and secure payment and settlement systems are essential for ensuring financial stability and the smooth functioning of society both during normal times and in times of crisis.

Digitalisation has increased [the importance of contingency measures for addressing cyber threats](#).

Authorities contribute to ensuring the reliability of payment systems by cooperating with financial sector entities. The development of functioning contingency measures is an important part of this work. In 2020, the Bank of Finland continued to cooperate closely with other financial sector entities in the planning of contingency measures for payment and settlement systems.

The Payments Council discussed future payment solutions

[The Payments Council](#) is a national cooperation body for the development of retail payments. It brings together users and providers of payment services and the relevant authorities.

In 2020, the Payments Council discussed, among other issues, the impacts of the pandemic on payments, the availability of cash services, the promotion of instant payments in Finland as well as studies on the costs of various payment methods.

The Council also discussed the retail payment strategies of the European Central Bank and the European Commission and ongoing European and Nordic initiatives, such as the European Payments Initiative and the P27 initiative.

The Payments Forum, which presents the work of the Payments Council to the general public, had to be cancelled in 2020 due to the pandemic.



A common penetration testing framework improves financial sector cyber security

The possibilities created by digitalisation are made use of extensively in financial sector services. This does, however, also expose the entities to cyber risks. An attack on a bank or a payment system could, in addition to direct impacts, cause a major loss of confidence in the financial system.

To improve their protection capabilities, financial sector entities strive to identify vulnerabilities in their systems by testing them with the techniques and procedures used by real-life attackers.

In 2020, the Bank of Finland introduced a Finnish implementation of the pan-European model that supports testing and improves the cyber resilience of the financial sector.

Payment and securities systems attract criminals

Financial sector services are based on a huge number of systems that create a network, for example via payment and settlement systems or trading in financial instruments.

Systems that process money and other assets attract also criminals.

Entities can test their protection capabilities by mimicking the tactics, techniques and procedures of real-life threat actors. Entities can use the observations produced during testing for developing their protection capabilities. In what are called penetration testing exercises, an attacker commissioned by the entity tries to, in a controlled manner, gain access to the entity's production systems.

The European Central Bank adopted in May 2018 the [TIBER-EU framework](#) that provides guidance on penetration testing. The framework is created for financial market infrastructures as well as banks and other entities. TIBER stands for Threat Intelligence-based Ethical Red Teaming.

A common model helps to build an overall picture

The purpose of penetration testing is to identify vulnerabilities in the systems and processes of individual entities or in the behaviour of people. The objective is also to test the detection, response and recovery capabilities of entities.

The enhancement of financial sector resilience requires cooperation and exchange of information. Better protection capabilities at individual entities and infrastructures improve the protection of the entire sector.

The interconnectedness of entities in the sector and the importance of the networks between them for the functioning of society underline the fact that cyber security is not a competition factor but a common interest.

The TIBER-EU framework also supports collaboration between authorities in the testing of financial entities that operate in several countries.

What is the scope of the national implementation guide?

The pan-European TIBER-EU framework provides guidance on penetration testing. The use of the framework in actual testing activities is, however, based on the national implementation guide introduced in various participating countries.

The implementation guide defines the nationally significant elements of testing, for example the threat data used in the planning of testing, the legal framework to be considered and the test support services available.

The national implementation guide under the TIBER framework defines the planning and execution phases of testing and the documents that the entities must produce at the various stages.

The Bank of Finland published the [TIBER-FI Implementation Guide](#) in April 2020. In the preparation of the Implementation Guide, the Bank of Finland took into account the feedback from financial entities, where possible. The Implementation Guide will be developed further based on feedback and practical experience.

Use of TIBER-FI is voluntary for financial sector entities.

In addition to Finland, there are national implementations of the TIBER-EU framework in, for example, Belgium, the Netherlands, Sweden, Germany and Denmark.

What are the elements of TIBER-FI?

The threat landscape used in testing in accordance with the TIBER-FI Implementation Guide is created on the basis of the generic threat landscape report, which is updated annually.

The report is provided by Nordic Financial CERT. As of December 2020, the report has covered all the Nordic countries.

The entities conducting TIBER-FI testing are also provided with the Finnish legal framework documentation applied in penetration testing.

For the planning and coordination of testing, the Bank of Finland provides the organisations with Test Manager support services.

For information exchange and cooperation purposes, the Bank of Finland launched in 2020 a TIBER-FI collaboration network for cyber security experts from financial sector organisations.



An active year in TARGET services

The Bank of Finland provides to banks and other financial market entities the Eurosystem's common TARGET payment and settlement system services. The year 2020 was busy both in the daily operation of services and in development work.

The number of payments in TARGET2-Suomen Pankki continues to increase

[The TARGET2 payment system](#) is a real-time gross settlement (RTGS) system jointly owned and operated by the Bank of Finland and the other Eurosystem central banks.

At the end of 2020, a total of 24 credit institutions operating in Finland and the Nordic countries as well as ancillary systems used the Bank of Finland's TARGET2 component.

The average daily number of payments settled via the TARGET2-Suomen Pankki system in 2020 was 2,570, with an average aggregate value of EUR 44 billion per day.

The daily number of transactions has increased in recent years. This was also the case in 2020, with an increase of 25% year-on-year. The value of transactions remained unchanged compared with 2019.

Securities settlement in Finland will migrate to T2S in 2023

In addition to TARGET2, the Bank of Finland provides to banks central bank money accounts in [TARGET2-Securities \(T2S\)](#) for securities settlement purposes.

T2S is a securities settlement platform built by the Eurosystem where the settlement of transactions takes place in central bank money.

The number of transactions settled in T2S increased significantly in spring 2020, due to the market turbulence caused by the COVID-19 pandemic.

As many as 21 European central securities depositories have already joined T2S. On the Finnish market, the importance of T2S will grow further when Euroclear Finland joins the platform in autumn 2023.

The number of TIPS participants will increase significantly in 2021

The [TARGET Instant Payment Settlement \(TIPS\)](#) system provided by the Eurosystem enables the transfer of instant payments in central bank money around the clock, every day of the year.

TIPS was launched a couple of years ago, but thus far Finnish banks have not joined the system. The situation is, however, changing, as a result of the European Commission's retail payment strategy and the [decisions taken by the ECB in July 2020](#). In line with these, all banks that are reachable in TARGET2 and provide instant payments as well as Automated Clearing Houses (ACHs) offering instant payment services must be reachable via TIPS by the end of 2021.

Together with its payment system participants, the Bank of Finland has launched measures for achievement of the objective.

The initiative will ensure the full reachability of instant payments across the euro area.

Disruptions in payment and settlement systems in 2020

The pandemic year 2020 was challenging in terms of system operations and required from the Bank of Finland the reorganisation of functions to ensure business continuity.

Despite the challenges caused by the pandemic, the Eurosystem's payment and settlement systems operated almost normally throughout the year.

The systems did, however, also experience some disruptions. The most significant was in October 2020 when a technical problem in TARGET2 caused an outage for almost ten hours.

The ECB launched an internal review into the incident within the Eurosystem, as well as an [independent review](#). The latter's findings will be made public in spring 2021.

The COVID-19 pandemic affected the schedule of system initiatives

The Bank of Finland and its participants are involved in the Eurosystem's [T2-T2S consolidation project](#), in which the TARGET2 and T2S systems are being consolidated technically into a single platform. The objective is to provide operational and financial efficiency in system maintenance.

The current TARGET2 system will be replaced with a new real-time gross settlement (RTGS) system, to meet growing market demands and enhance banks' liquidity management. In payment messages, the system will use the new messaging standard [ISO 20022](#).

In July 2020, in response to the wishes of the markets, the Governing Council of the ECB decided to delay the go-live date of the new system by one year.

The rationale for these decisions was the challenges posed to the financial sector by the pandemic and the decision taken by [SWIFT](#) to delay the global migration of cross-border payments to ISO 20022 by one year.

The new T2 system will go live in November 2022.

The Governing Council also decided to delay by one year the go-live date for another significant Eurosystem project, the [Eurosystem Collateral Management System](#) (ECMS). The new date is November 2023.

This ensures that the central banks, T2S central securities depositories and banks will have adequate time for the necessary testing and other preparations after the completion of the consolidation project.

The new ECMS will eventually replace the Bank of Finland's own collateral management system.

Despite the rescheduling, in 2020, the Bank of Finland promoted the projects actively, both within the Eurosystem and with its market participants.



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Management of financial assets

26.3.2021

The objectives of the Bank of Finland's investment activities are security, liquidity and return. Responsibility is an important element in portfolio management: investment decisions rely very much on factors connected with the environment, social responsibility, management practices and risks.

Holding and managing foreign reserves are among the statutory tasks of the Bank of Finland. The Bank also has euro-denominated investments.

In managing its financial assets, the Bank of Finland safeguards the value of the assets and its ability to support the liquidity of the banking system whenever necessary.

The limits set for investment risk ensure prudent management of the Bank's financial assets.

The Bank of Finland's capital adequacy is sufficient to cover the risks arising from the performance of its tasks.

The Bank of Finland's financial assets consist of a wide range of investments

At the end of 2020, the Bank of Finland's financial assets amounted to around EUR 10 billion. They comprised gold holdings and foreign reserves, euro-denominated fixed income investments and investments in equity and real estate.

As a result of the measures taken due to the COVID-19 pandemic and changes in exchange rates and share prices, the value of the Bank's financial assets fell by approximately EUR 1 billion during the year.

The Bank of Finland's fixed-income portfolios are managed in accordance with the investment policy decided by the Bank of Finland Board each year. More than half the Bank of Finland's fixed-income portfolios comprise sovereign bonds and central bank deposits.

In addition to its fixed income investments, the Bank of Finland manages a long-term investment portfolio, which has lower liquidity requirements and a higher expected return than its other portfolios.

The total return on the Bank's fixed-income portfolios in 2020 was 0.5%, i.e. EUR 76 million.

The Bank of Finland is actively involved in developing responsible asset management

Responsibility is an inseparable part of asset management at the Bank of Finland.

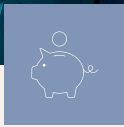
Put simply, responsible investment means recognising the relevant ESG (Environmental, Social, Governance) factors when taking decisions on investment. Responsibility also plays a part in risk management with investment activities.

The Bank of Finland has signed the UN-backed Principles for Responsible Investment (PRI).

The Bank of Finland's investments in equity and property are held in funds managed by external fund managers. In 2020, the Bank stepped up the way we monitor factors associated with the responsibility of fund managers using a specially tailored questionnaire.

The Bank of Finland has also carried out its first portfolio carbon footprint calculations and scenario analyses to examine the current situation in the monitoring of responsibility, identify the risks and opportunities associated with climate change and establish new climate targets.

The purpose is to integrate the new climate targets with the Principles for Responsible Investment in 2021.



Management of financial assets

The Bank of Finland implements the Eurosystem's common monetary policy in Finland. Being part of the Eurosystem means that the balance sheet has special features. The Bank of Finland has financial assets as matching entries to its balance sheet assets and liabilities. The Bank manages and invests these assets in accordance with central bank objectives, taking into account the risks and aspects of social responsibility associated with investment.

It is among the statutory tasks of the Bank of Finland to hold and manage foreign reserves. As a national central bank in the Eurosystem, this function is reflected in the concrete objectives of the Bank's investment activities. These are security, liquidity and return.

When taking decisions on its investment assets and foreign reserves, the Bank of Finland takes account of the Anfa Agreement on Net Financial Assets between the Eurosystem central banks.

The volume of Bank of Finland foreign reserves is a policy decision

The volume of Bank of Finland foreign reserves is a policy decision based on considerations of preparedness.

If necessary, the national central banks in the Eurosystem must transfer their foreign reserves to the European Central Bank (ECB).

Furthermore, the Bank of Finland makes provision for events such as crises that can weaken Finland's external solvency.

The management and investment of foreign reserves have a key role to play in the Bank of Finland's endeavours to ensure that it is financially equipped to deal with future uncertainties and risks.

It is possible to identify some of the risks to the economy and financial system in advance, but, as history has shown, the risks that materialise are often completely unexpected and hard to anticipate.

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 target for steady profit distribution to the State.

Composition of financial assets

The Board of the Bank of Finland takes decisions on the volume of the Bank's financial assets in accordance with the Agreement on Net Financial Assets (ANFA) between the Eurosystem central banks.

At the end of 2020, the Bank of Finland's financial assets amounted to around EUR 10 billion (Table 5). These assets comprised direct investments in foreign-currency and euro-denominated fixed income investments, investments in equity and real estate, gold holdings and items denominated in IMF Special Drawing Rights (SDRs).

The volume of financial assets was reduced by approximately EUR 1.0 billion during the year, for investment policy reasons. After the COVID-19 pandemic broke out, in March the Bank of Finland began reinvesting in Finnish commercial papers, which increased its financial assets by the amount purchased.

As a result of these measures and changes to exchange rates and share prices, the value of the Bank's financial assets fell by around EUR 1,045 million during the year.

The foreign currency-denominated fixed-income investments consist of US dollars (USD), sterling (GBP) and Japanese yen (JPY). These, together with the items denominated in SDR rights, make up the Bank's foreign reserves.

The Bank of Finland Board takes a decision every three years on the volume of the Bank's foreign reserves. The current targets for these reserves are set at USD 5 billion, GBP 650 million and JPY 95 billion, respectively.

Table 5.

The Bank of Finland's financial assets, EUR million	31 Dec 2020	31 Dec 2019
Gold	2,434	2,135
Foreign reserves	6,261	6,694
SDR	574	494
US dollar-denominated fixed-income	4,200	4,641
Sterling-denominated fixed-income	732	777
Yen-denominated fixed-income	754	782
Euro-denominated fixed-income	61	1,017
Equity investments	1,135	1,082
Real estate investments	119	127
Total	10,010	11,055

Source: Bank of Finland.

Fixed-income portfolios

The Bank of Finland's fixed-income portfolios are managed in accordance with the investment policy decided by the Bank of Finland Board each year. The policy sets a strategic allocation for the Bank's investments and determines an appropriate level of interest rate risk for the various currencies. The investment policy sets out a strategic market-based index that serves as a benchmark for the Bank's investment activities.

In its investment activities, the Bank of Finland may deviate from the strategic index within a pre-set range and in accordance with the investment policy's risk limits.

The Bank of Finland's fixed-income portfolios comprise sovereign bonds and central bank deposits (56.67%), supranational or government-related bonds (25.93%), covered bonds (7.09%), corporate bonds (9.75%) and cash instruments (0.57%). Finnish commercial papers are not included here.

The lowest approved credit rating for the Bank's investments was BBB, except for the unrated Finnish commercial papers, whose credit rating is assessed by the Bank with reference to financial indicators.

As a measure of interest rate risk, the average duration of the fixed-income portfolios at the end of 2020 was 2.13 years.

As a result of the COVID-19 pandemic, the economic outlook was bleak and interest rates fell to an all-time low on all the main markets.

The drop in interest rates yielded capital gains on fixed-income investments. Consequently, these investments generated positive returns in 2020 in spite of the low and partly negative interest rate environment.

The most income from interest came from US dollar-denominated bonds. These also earned significant capital gains as a result of the interest rate cuts.

The return on the fixed-income portfolios amounted to EUR 213.3 million in 2020. By denomination, the return on US dollar investments stood at EUR 199.1 million, euro-denominated at EUR 1.7 million, sterling-denominated at EUR 13 million and yen-denominated at EUR -0.4 million.

The strengthening of the euro against other currencies resulted in a negative revaluation of the foreign reserves.

Overall, the value of the foreign currency-denominated fixed-income portfolios fell by EUR 455.9 million. The change in US dollar-denominated assets was EUR -367.3 million, sterling-denominated, EUR -43.3 million and yen-denominated, EUR -45.3 million.

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

Valuation changes in the foreign reserves reflect the open currency position, which supports the successful discharge of central bank tasks.

Resumption of investment on the commercial paper market

In any normal situation, the issue of commercial papers for Finnish companies is a reliable way to manage their cash requirements. However, the COVID-19 pandemic resulted in a partial withdrawal from the Finnish commercial paper market on the part of traditional investors in the spring.

On 15 March 2020, the Board of the Bank of Finland responded to the gloomy market situation by deciding to recommence investment in commercial papers to the tune of EUR 500 million.

This was not a monetary policy measure in an attempt to affect inflation: the goal was to take a reasonable additional risk to generate some additional return on investment and, at the same time, support the Finnish commercial paper market.

In response to an increase in market supply, on 19 March 2020 the Board decided to raise the value of the portfolio to a maximum of EUR 1 billion.

Within the context of the Bank of Finland's risk management framework, companies are assessed on the basis of their public credit rating and financial indicators linked to their credit risk.

The credit risk indicators reflect, for example, an issuer's indebtedness, debt management capability and modelled probability of bankruptcy.

During the year, the Bank of Finland purchased a considerable number of Finnish commercial papers from creditworthy issuers that met the investment criteria under its risk management framework. The largest number of purchases took place during the weeks following the start of the process, after which the numbers steadily fell.

The Bank of Finland is subject to a regulatory constraint regarding purchase of the debts of public issuers. This has had an impact on the Bank's overall potential for purchasing generally.

Long-term investment activities

In addition to its fixed income investments, the Bank of Finland manages a long-term investment portfolio that has lower liquidity requirements and a higher expected return than its other portfolios.

This portfolio has been devised so that the Bank's own long-term financial assets might be invested in asset classes with a better return than traditional central bank fixed-income investments. Moreover, the risk associated with the investments diminishes if the portfolio of investments is diversified.

In 2020, these long-term investment activities consisted of equity and real-estate investments, handled indirectly through mutual funds.

The Bank of Finland has diversified its equities portfolio cost-effectively by investing in passive Exchange Traded Funds mirroring the global index for advanced economies.

Its real-estate investments are diversified across a number of European funds. Each of the funds owns real estate in desirable locations, which makes the properties easy to rent out. This ensures a steady return from letting property.

The equity market performed favourably in 2020, despite the substantial drop in share prices caused by the COVID-19 pandemic in the spring.

The performance of real estate funds was less consistent, as certain sectors, such as the retail and the office sectors, experienced difficulties on account of the pandemic.

Financial asset returns and risks

The Bank of Finland's financial assets yielded an overall return of 0.5% or EUR 76 million in 2020 (Table 6). The Bank's fixed income returns are regularly checked against strategic benchmark indices that are based on the completion of central bank tasks. In 2020, the Bank of Finland's fixed income investments yielded 0.11%, or EUR 6.4 million more than these benchmarks.

The return on equity investments was 17.4% or EUR 177 million, and that on real estate investments was -1.6%, or EUR -2 million.

Table 6.

Return on the Bank of Finland's own financial assets	2020		2019	
	%	EUR m	%	EUR m
Fixed-income investments	3.3	213	2.9	211
Currency revaluation	-7,3	-587	1.9	142
Equity	17.4	177	29	227
Real estate	-1,6	-2	11	12
Excluding gold and SDR	-2,8	-198	7.3	592
Gold	14.0	299	21	368
SDR	-4,3	-25	2.4	11
Total	0.5	76	9.3	971

Source: Bank of Finland.

The total market risk associated with the Bank's financial assets (Value-at-Risk 99%, 1 day) varied between EUR 52 million and EUR 176 million in 2020 (Chart 20).

Chart 20.

VaR figures for market risk in the Bank of Finland's financial assets in 2020*



*One-day horizon, 99% confidence level.

Source: Bank of Finland.

Share of the European Central Bank's foreign reserves

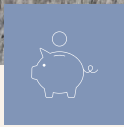
[The European Central Bank \(ECB\) has foreign reserves of its own.](#) Management of the foreign reserves of the ECB is distributed among the Eurosystem national central banks [according to their respective capital keys.](#)

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 the ECB's foreign reserves at the end of 2020 stood at EUR 1,044 million.

For additional information on the management of the ECB's foreign reserves, see the [ECB Annual Report](#).



Responsible investment: building innovation on a solid foundation

Responsible investment is a key element in the approach the Bank of Finland takes in the management of its financial assets. In December, the Board of the Bank adopted the Principles for Responsible Investment underlying its investment activities. In 2020, the Bank reformed its responsible investment practices.



The Bank of Finland's investment activities in a nutshell

The objective of the Bank of Finland's approach to asset management is to meet the liquidity, security and return requirements placed on the central bank in respect of the assets managed.

In its investment activities, the Bank of Finland secures the value of its financial assets and its ability to support the liquidity of the banking system, whenever necessary, by means of its foreign reserves, for example.

The Bank of Finland invests and manages its financial assets in accordance with central bank objectives and taking into account the risks and sustainability aspects related to investment activities.

The sustainability aspects considered by the Bank of Finland in its investment activities are based, on one hand, on the objective to meet the sustainability requirements for investment activities and, on the other hand, on the objective to improve the management of various risks.

Sustainability is a component in the Bank of Finland's portfolio management

In December, the Board of the Bank of Finland adopted the Principles for Responsible Investment that underlie its investment activities. Put simply, responsible investment means recognising the relevant ESG (Environmental, Social, Governance) factors when taking decisions on investment.

Different asset classes are associated with various characteristics. Every investor must choose the approaches and tools that best suit their investment strategy and portfolio.

The financial assets held by the Bank of Finland mainly consist of investments in government and government-related debt instruments as well as covered and corporate bonds.

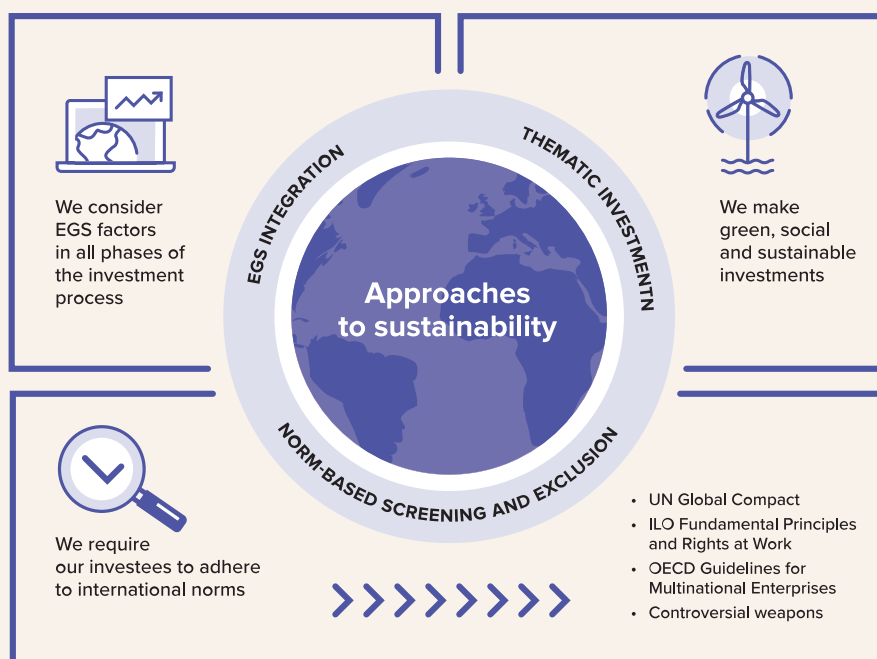
The Bank also has equity investments and investments in real estate, managed by external fund managers.

The Bank of Finland's approaches to responsible investment

The main approaches to responsible investment are ESG integration, thematic investment and norm-based screening.

Chart 21.

Bank of Finland's approaches to sustainability



The Bank of Finland's portfolio managers **integrate** ESG factors with portfolio management and investment decision-making. Responsibility is therefore not something that is delegated to external specialists or service providers.

The Bank also requires external managers to take into account responsible investment aspects. We pay attention to responsibility in our monitoring of fund managers and funds throughout the duration of an investment.

Thematic investment is another of the Bank of Finland's approaches to responsible investment. For an investment to be included in the thematic investment category, it must be certified by an external party.

The Bank of Finland requires its direct investees to comply with **international norms**. It does not invest in securities issued by organisations that do not adhere, for example, to the responsible business principles of the United Nations Global Compact.

Nor does the Bank make direct investments in companies that manufacture weapons prohibited under international treaties.

Decisions on issuer exclusion are taken by the Bank's internal working group on responsible investment. The group reports regularly to the Board on such matters as investment portfolio responsibility and issuers that have been excluded.

2020 brought improvements in how the responsibility of external fund managers is monitored

The Bank of Finland's investments in equities and real estate are held in funds managed by external fund managers.

Consequently, it is very important that these fund managers are properly monitored in terms of responsible investments, for example in the way they pursue an active ownership strategy, produce environmental reports and perform in international comparisons.

In 2020, the Bank of Finland stepped up the way it monitors factors associated with the responsibility of fund managers, using a special questionnaire for the purpose.

It also broadened the scope of the data obtained from norm-based screening to apply to its external asset management companies and counterparties for security transactions undertaken as part of its investment activities.

Climate targets are crucial

The Bank of Finland has carried out its first portfolio carbon footprint calculations and scenario analyses to examine the current situation and identify the risks associated with climate change, as well as the opportunities it provides, and to establish new climate objectives.

The calculations it has made have enabled the Bank of Finland to identify the largest sources of carbon emissions in its direct investments.

The purpose is to integrate climate objectives with the Principles for Responsible Investment sometime in 2021.



We follow the principles of responsible investment (PRI) in our investment activities. We renewed our own principles of responsible investment.

Cooperation both in the international context and on the home front will aid the establishment of responsible working methods

The Bank of Finland has signed the UN-backed Principles for Responsible Investment (PRI).

The PRI signatories commit to reporting on their responsible investment activities within a common reporting framework. The Bank of Finland relies on its reporting experience to raise awareness of sustainability/responsibility in the management of its assets.

The Bank is furthermore a member of the NGFS (Network of Central Banks and Supervisors for Greening the Financial System) and the Finnish organisation Finsif ry (Sustainable Investment Forum).

The NGFS is an international network of cooperation for central banks and financial supervisors. Finsif is a Finnish association concerned with sustainable investment. The goal of both organisations is to promote responsible investment and take account of the themes of sustainability.

In addition, in 2020 the Bank of Finland took an active role in Finnish and foreign responsible investment work groups, was involved in the debate on the subject and published articles in various publications.

The Bank of Finland has examined the reporting recommendations made by the [TCFD \(Taskforce on Climate-related Financial Disclosure\)](#), which is a reporting framework to help organisations produce comparable information on the risks and opportunities associated with climate change.

Questions regarding compliance with the TCFD recommendations are also asked in the annual [UN PRI reporting framework](#).

Not all the TCFD recommendations have not yet become an established part of the Bank of Finland's activities and reporting, but they will be taken into account in future developments.

[You can read more on the subject on the Bank of Finland Bulletin.](#)



Bank of Finland's management of financial risks

Implementation of monetary policy and safeguarding the stability and viability of the financial system are core central bank tasks. These tasks involve financial risks, for which the Bank of Finland prepares by ensuring the strength of its balance sheet. In 2020, the risks associated with monetary policy increased.

Investment activities and monetary policy implementation involve risks

At the end of 2020, [the Bank of Finland's financial assets amounted to around EUR 10 billion](#). These consisted of gold holdings, foreign reserves, euro-denominated fixed income investments and investments in equities and real estate.

The amount of foreign reserves has been set to a level required in order for the Bank of Finland to perform its central banking tasks.

In January 2020, the Bank of Finland sold off the euro-denominated fixed-income investments portion of its financial assets. In order to mitigate the negative economic impacts of the COVID-19 pandemic, the Bank bought Finnish commercial papers, which again increased the value of its euro-denominated fixed income portfolio from March onwards.

A significant number 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, and, to a large extent, the risks and returns are shared among the national central banks.

The risk relating to monetary policy assets corresponds, in principle, to each national central bank's [capital key](#) share in the aggregate monetary policy assets of the national central banks. At the end of 2020, the Bank of Finland's share was 1.837%. However, the risks associated with government 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.

The volume of the Eurosystem's monetary policy assets grew in 2020 by around EUR 2,200 billion, reaching approximately EUR 5,500 billion by the end of the year. The increase was mainly due to the purchases of debt instruments under the PEPP and the loans granted under TLTROs (targeted longer-term refinancing operations). Furthermore, net purchases under the asset purchase programme (APP), recommenced in 2019, continued in 2020, pushing up the volume of Eurosystem monetary policy assets.

The Bank of Finland's share of monetary policy assets grew by around EUR 37 billion, reaching approximately EUR 90 billion by the end of the year. As a result of the increase in assets, the risks associated with them also increased during the year.

Table 7.

Bank of Finland's financial assets and share of monetary policy assets	31 Dec 2020 EUR million	31 Dec 2019 EUR million
Financial assets	10,010	11,055
Gold	2,434	2,135
Foreign reserves	6,261	6,694
Euro-denominated fixed-income investments	61	1,017
Equity investments	1,135	1,082
Real estate investments	119	127
Share of monetary policy assets	90,022	52,741
Refinancing operations	32,939	11,395
Targeted longer-term refinancing operations ¹	32,423	11,169
Other refinancing operations ¹	515	225
Debt instruments under the asset purchase programme	43,842	40,524
Finnish government bonds and government-related bonds	29,822	28,630
Bonds of supranational institutions ¹	4,580	4,110
Covered bonds ¹	4,841	4,416
Corporate bonds ¹	4,600	3,368
Debt instruments under the pandemic emergency purchase programme ²	12,747	-
Terminated programmes	494	822
Securities markets programme ¹	484	807
Covered bond purchase programme	10	15
Total	100,032	63,796

1) Capital key share (1.837% as of 1 Feb 2020) of aggregate claims by national central banks.

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

In addition to the claims listed in Table 7, the Bank of Finland's assets included EUR 57 billion in intra-Eurosystem claims, consisting mainly of [the Target2 balance](#). [At the end of 2020, the Bank of Finland's total assets \(balance sheet total\) was EUR 156 billion.](#)

Diversification as a risk management tool

The Bank of Finland's financial risks consist of market, credit and liquidity risks. Market risks include adverse movements in exchange rates, interest rates and stock prices ([see Notes on risk management](#)).

Exchange rate risk is the source of the most significant 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. Through the Bank of Finland's receivables from the IMF, exchange rate risk is also diversified into the Chinese yuan.

A neutral allocation of investments is determined by means of a strategic benchmark index. This, 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 invests part of its own funds in a variety of instruments on the international stock and real estate markets. The investments are made through funds and diversify the other risks on the Bank's balance sheet.

In implementing monetary policy purchase programmes, central banks adhere to the eligibility criteria for collateral and counterparties and other risk management rules pertaining to the Eurosystem as a whole.

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

Structural interest rate risk

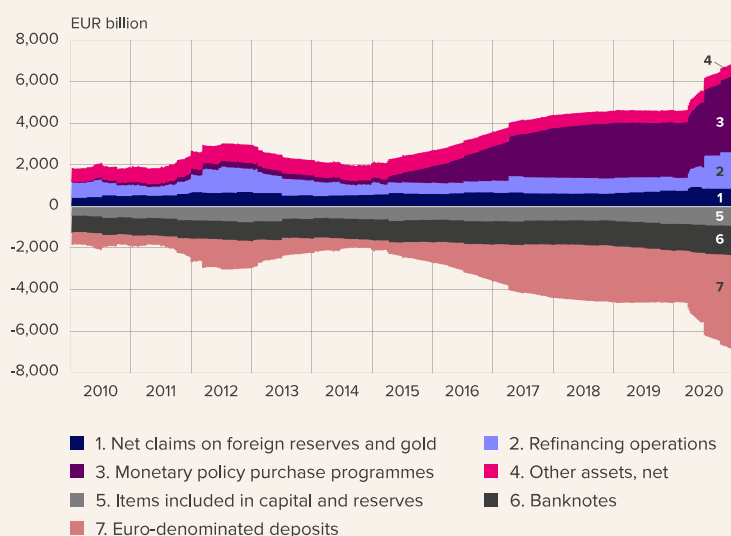
The Eurosystem sets the interest payable on deposits as a matter of policy. The interest rate decision has an immediate effect on the Bank of Finland's interest expenses. Monetary policy assets, however, mainly carry a fixed interest rate. Thus, an increase in the deposit rate weakens the Bank's net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

Liquidity created via the purchase programmes and refinancing operations is reflected on the liabilities side of the balance sheet as growth in central bank deposits. The structural interest rate risk position decreases as the fixed-rate monetary policy investments mature.

As net purchases under the purchase programmes continue, the structural interest rate risk position increases. Furthermore, the reinvestment of principal payments from maturing bonds serve to maintain the structural risk position.

Chart 22.

Developments in Eurosystem balance sheet items



Source: European Central Bank.

Quarterly updates on financial risk figures are available at suomenpankki.fi, [under the section Risk management and control](#).

Total risk: increase in risk associated with monetary policy

There has been an increase in the risk associated with monetary policy over the past year, mainly as a result of the greater amount of monetary policy assets and the greater risks they involve. Much of this is due to monetary stimulus measures and general economic decline. At the same time, the risks associated with the Bank's financial assets decreased slightly.

The Bank of Finland measures total risk exposure on the balance sheet using well-established statistical methods. The risk estimate is supplemented with stress tests which assess losses that could be incurred under possible, but improbable scenarios.

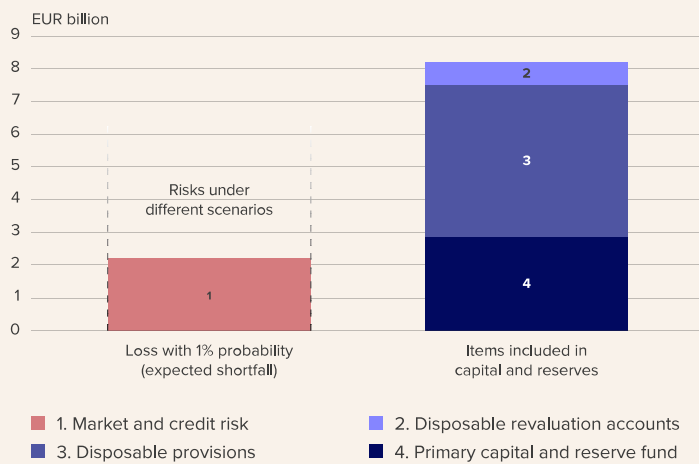
In estimating credit risk resulting from monetary policy assets, the Bank of Finland uses internal risk reporting produced by the ECB, which is subject to ongoing development by the Eurosystem's Risk Management Committee.

As the total risk estimate, the Bank of Finland uses a loss that would occur in the following year with a probability of 1% (expected shortfall).

At the end of 2020, the total risk estimate was EUR 2.2 billion. This figure does not include gold price risk, as the gold revaluation accounts cover a significant decline in value. Including gold price risk, the total risk estimate is EUR 2.6 billion.

Chart 23.

The Bank of Finland's total risk exposure, capital and reserves, excl. gold price risk and gold revaluation accounts



Source: Bank of Finland.

At the end of 2020, the Bank of Finland had revaluation accounts totalling EUR 0.7 billion and provisions totalling EUR 4.7 billion available to cover losses. The primary capital and reserve fund amounted to EUR 2.9 billion (Chart 23).

The risk buffers weakened in 2020, largely as a result of currency fluctuations.

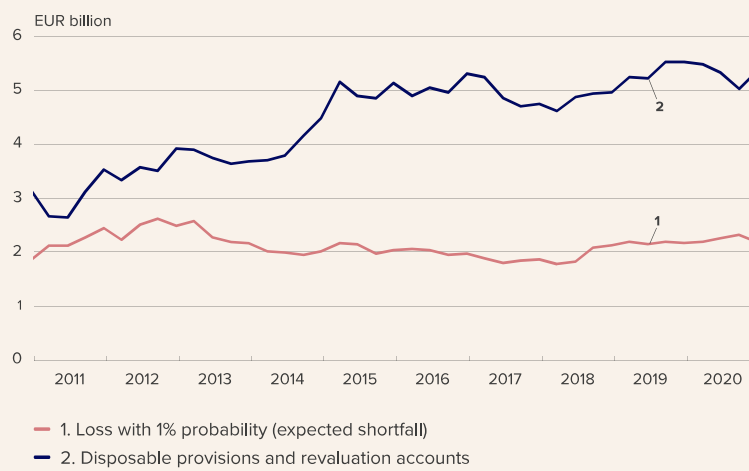
The Bank of Finland's capital adequacy is sufficient to cover the risks arising from the performance of its tasks (Chart 24).



We took care of our strong balance sheet and transferred EUR 100 million euro of our profits to the Finnish State.

Chart 24.

Risks and risk buffers excl. gold and gold revaluation accounts



Source: Bank of Finland.



Engagement and cooperation

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Engagement and cooperation

26.3.2021

The Bank of Finland's influence is based on expertise and research. The Bank participates in social debate and promotes financial literacy in Finland.

The ultimate objectives of the Bank of Finland's statements relating to economic policy are price stability, balanced economic growth and financial stability.

In 2020, our statements on domestic economic policy were largely related to the economic impacts of the COVID-19 pandemic.

The statements emphasised the need both to react strongly and rapidly to the acute crisis and to strengthen the longer-term outlook for the economy and the public finances.

The COVID-19 pandemic increased the need for reforms

When the pandemic broke out, the Bank of Finland emphasised that the role of economic policy was to assist households and businesses through the worst of the crisis.

The ECB's monetary policy was strongly accommodative, and the financial system was able to operate without major problems.

In addition to measures within the single monetary policy in the euro area, the Bank of Finland strengthened the functioning of the Finnish financial market through national measures.

Without swift and extensive economic policy measures, the economic damage caused by the pandemic would have been considerably greater.

The COVID-19 pandemic serves as a reminder that healthy public finances provide an irreplaceable shield when we hit hard times.

The pandemic made forecasting more difficult

The Finnish economy contracted exceptionally sharply in 2020. Economic forecasts were dominated by the COVID-19 pandemic and the related remarkably high degree of uncertainty.

In April, the Bank of Finland exceptionally published two alternative scenarios for the Finnish economy for the immediate years ahead. The economic ramifications of the pandemic would depend on how rapidly the virus can be contained and restrictions be lifted in Finland and other countries.

The December forecast suggested that the Finnish economy would recover, albeit slowly. While the recession caused by the pandemic had remained milder than feared, it would weaken the conditions for economic growth.

In 2020, in addition to macroeconomic forecasts, the Bank of Finland began publishing interim forecasts twice a year. The interim forecasts present the outlook for GDP, inflation and employment rates.

Bank of Finland research supports the ECB's monetary policy strategy review

International cooperation is an important part of the Bank of Finland's work.

We participate in the work of international and European institutions and committees and cooperate closely with the national central banks of other countries.

In 2020, the ECB launched a review of its strategy. Research conducted at the Bank of Finland has significantly contributed to the analysis underlying the strategy review.

The Bank's research topics were also influenced by the COVID-19 pandemic. Economic policy issues raised by the pandemic were discussed in literature reviews and analyses.

The Bank of Finland's key research areas in 2020 were monetary policy, macroprudential policy, the macro economy and emerging economies.



The Bank of Finland and domestic economic policy in 2020

In 2020, the Bank of Finland's statements on domestic economic policy were largely related to the economic impacts of the COVID-19 pandemic. The Bank emphasised the need both to react strongly and rapidly to the acute crisis and to strengthen the longer-term outlook for the economy and the public finances.

In 2020, as in previous years, the Bank of Finland analysed developments in both the domestic and the global economy and participated in economic policy debate in Finland.

Statements focus on the identification of problems and assessment of alternatives for action

The Bank of Finland's statements relating to domestic economic policy are based on the objectives set for the Bank by law and in the EU Treaty and also on its independent status.

The primary objective is price stability, while secondary objectives include balanced economic growth and the stability of the financial system. The sustainability of the public finances and stable evolution of domestic costs are key to the attainment of the Bank's objectives.

The Bank of Finland's statements are based on expert knowledge. They focus on the identification of problems and assessment of the potential effects of alternatives for action.

However, setting the ultimate economic policy goals and decision-making in this area is the task of elected representatives.

In 2020, the Bank of Finland set up a macro-economy crisis group

In March 2020, the Board of the Bank of Finland set up an internal working group in the Bank to organise preparatory work on the macroeconomic impacts of the COVID-19 crisis and related economic policy measures.

The working group was established to operate within the framework of the Bank of Finland's domestic economic policy process.

The macro-economy crisis group was tasked with ensuring that the Bank of Finland Board has up-to-date information on the macroeconomic situation and outlook during the pandemic, particularly with respect to the Finnish economy.

In addition, the crisis group was given responsibility to prepare assessments of the necessary economic policy measures to deal with the pandemic crisis, with particular emphasis on domestic policy measures.

Households and businesses need assisted through worst of the crisis

When the COVID-19 pandemic spread in Europe in spring 2020, the Bank of Finland stressed that protecting the health of the public must take precedence. Measures to combat the pandemic are also pivotal for the economy.

The role of economic policy is to assist households and businesses through the worst of the crisis. This is the way to mitigate both immediate problems and longer-term consequences.

A wave of corporate bankruptcies and mass unemployment would be particularly detrimental to the longer-term economic outlook.

As the COVID-19 pandemic spread, public authorities supported companies and households in many ways in different countries, including Finland. Central banks and banking and macroprudential supervisors ensured the availability of finance. The ECB's strongly accommodative monetary policy supported the Finnish economy, too, and the financial system was able to operate without major problems.

In addition to measures within the single monetary policy in the euro area, the Bank of Finland strengthened the functioning of the Finnish financial market through national measures. The Bank purchased domestic commercial papers as part of its own investment activities and relaxed collateral requirements for access to central bank funding.

During 2020, many Finns lost their jobs either temporarily or permanently, and many companies faced major difficulties.

Without swift and extensive economic policy measures, the economic damage caused by the pandemic would have been considerably greater.

In spring 2020, the Bank of Finland pointed out that government support and the management of the public finances should be tailored according to the different phases of the COVID-19 crisis.

During the acute phase of the crisis, growth in public debt was a consequence of necessary expenditure. The Bank of Finland noted that fiscal support for the economy would also be needed after the acute phase of the crisis.

Strong public finances advantageous during a crisis

The Bank of Finland highlighted that, as normality returns, it will be more important than ever to build up general government buffers.

The pandemic serves as a reminder that healthy public finances provide an irreplaceable shield when we hit hard times.

The crisis should not be used to introduce permanent increases in public expenditure that will further exacerbate an already substantial sustainability gap.

Although the Finnish economy is likely to survive the COVID-19 crisis better than most of the other advanced economies, after the crisis Finland's longer-term problems will still be the same as before, if even more difficult.

In December 2020, the Bank of Finland further raised its [estimate of the long-term fiscal sustainability gap](#). According to the new assessment, the sustainability gap was 5½% relative to GDP.

The COVID-19 pandemic increased the need for reforms

The Bank of Finland stressed that the coronavirus crisis further increased the need for structural reforms that improve employment, the outlook for the public finances and conditions for labour productivity growth.

Regarding productivity growth, there is a major role for research and development expenditure and other non-residential investments. Government can enhance the environment in which innovation can take place, and in which innovations made elsewhere can be adopted for use. In the overall picture of innovation policy, the development of competences is of major significance.

The Bank of Finland emphasised the importance of common European solutions to address the COVID-19 crisis and to strengthen Europe's future prospects.

From a Finnish perspective it is of paramount importance that the economy of Finland's most important export customers, i.e. the European Union, is on a stable foundation.

The EU recovery instrument and other common solutions enhance the opportunities to support economic growth and the longer-term outlook in Europe.

Achievement of climate goals and acceleration of the digital economy will require substantial investments and reforms; their implementation can be fostered through common solutions.

Functioning of the labour market is of key importance during the crisis

The Bank of Finland highlighted the role of the labour market in the economic ramifications of the coronavirus crisis.

In the early stages of the crisis, the social partners embraced responsibility in an important way by supporting expedient furlough schemes. A large number of bankruptcies and many redundancies were likely avoided as a result.

The Bank of Finland underlined the need to monitor changes in labour costs relative to other countries and in relation to labour productivity. The related forecasts and assessments were subject to a high degree of uncertainty during the coronavirus crisis.

From the perspective of post-crisis employment developments, it is important that cost-competitiveness does not materially deteriorate.



The COVID-19 crisis drove the Finnish economy into a deep recession in 2020

The Finnish economy contracted exceptionally sharply in 2020. Economic forecasts were dominated by the COVID-19 pandemic and the related remarkably high degree of uncertainty. Forecasting is particularly challenging because the recession and economic recovery are dependent on the evolution of the epidemic. To demonstrate this uncertainty, the Bank of Finland published several alternative economic scenarios in addition to the actual forecast.

The COVID-19 pandemic has caused great uncertainty about economic developments and has dominated the preparation of forecasts for both the Finnish economy and the Eurosystem as a whole. The coronavirus crisis has further highlighted the importance of economic forecasts.

Monetary policy preparation necessitates economic forecasts

Monetary policy measures often affect inflation and other macroeconomic phenomena with a time lag. For this reason, monetary policy decision-makers need an informed view of the economic situation prevailing in months' or even years' time, which will be impacted by the decisions taken now.

Therefore, the preparation of euro area monetary policy and assessment of the related effects necessitate independent analysis of economic developments in the immediate years ahead.

The Bank of Finland draws up forecasts primarily to support preparation of the single monetary policy and related decision-making. The forecast for the Finnish economy is produced as part of the Eurosystem's projections in cooperation with the ECB and the rest of the Eurosystem.

The macroeconomic forecast is also closely linked to the forecast for the public finances and the short-term inflation forecast.

The Bank of Finland began to produce interim forecasts

In 2020, in addition to macroeconomic forecasts, the Bank of Finland began publishing interim forecasts for the Finnish economy twice a year, in March and September. The interim forecasts are more limited than the forecasts prepared as part of the Eurosystem's projections.

The interim forecast contains the outlook for GDP, inflation and the employment rate. The assessments are based on the ECB's assumptions on, for example, Finnish export market developments and interest rates.

The March interim forecast was coloured by COVID-19

According to the interim forecast published in March, the Finnish economy was expected to contract by 1.5–4% in 2020. The pandemic was assumed to remain short-lived, and the Finnish economy was anticipated to begin recovery in the latter part of 2020.

The Bank of Finland emphasised in the interim forecast that the economic impacts of the pandemic depended essentially on the extent and speed of the policy measures implemented. The Bank also pointed out that unemployment and bankruptcies could begin to rise, should the pandemic and its containment measures drag on.

Opting for the strategy of suppression or mitigation of the virus?

As the COVID-19 crisis worsened during the spring, the Bank of Finland published exceptionally two alternative scenarios for the Finnish economy for the immediate years ahead. The names of the scenarios – the suppression strategy and the mitigation strategy – refer to alternative ways of treating the coronavirus epidemic.

In the suppression strategy, strict restrictions were assumed to be in force for two months. The economy would contract sharply, but recovery would be faster than in the mitigation strategy.

Overall, economic output losses, such as bankruptcies and rising unemployment, would remain smaller in this scenario, and there would be no permanent scars on the economy. GDP would decline by 5% in 2020 and would fully recover already in 2021, when it would be growing at a rate of 7%.

In the mitigation strategy, containment measures would be less stringent but would remain in place much longer. Output losses would be significantly greater than in the suppression strategy.

In the mitigation strategy, the COVID-19 crisis would also leave permanent scars on the economy, and output would remain permanently below pre-crisis levels. GDP would shrink by as much as 13% in 2020. Recovery would be slow and unemployment would be high, should the number of bankruptcies increase. In 2021, GDP would only grow at a rate of 4%.

The Bank of Finland stressed that the scenarios were subject to uncertainty. The economic ramifications of the pandemic would depend on how rapidly the virus could be contained and restrictions could be lifted in Finland and other countries.

The Bank of Finland's calculations suggested that the suppression strategy would be significantly less harmful to the economy than the mitigation strategy.

According to the calculations, a swift economic recovery would still be possible if restrictions did not remain in place for very long and if corporate bankruptcies and mass unemployment could be avoided through economic policy measures.

The impacts of COVID-19 were reflected in economic statistics with a time lag

The impacts of the coronavirus crisis were genuinely reflected in the various Finnish indicators only at the end of the spring; in export market figures they were reflected slightly earlier, however.

The pandemic highlighted the slow pace of producing economic statistics. For its own part, the Bank of Finland began to closely monitor certain high-frequency indicators, such as consumer card payments and road transport data.

In spring 2020, almost all indicators signalled a very deep contraction in the economy.

The June Eurosystem forecast increasingly pointed to a slow recovery

In the June macroeconomic forecast, the Bank of Finland stated that Finland would gradually recover from the sudden shutdown. The economy was projected to shrink by 7% in 2020. Recovery from the COVID-19 crisis would be relatively slow and the economy would grow by 3% per annum in 2021 and 2022.

The June forecast assumed that the acute phase of the crisis would pass in 2021, when a viable treatment would be found for the virus. The economy would begin to recover slowly, led by private consumption, once households were willing to spend again and unemployment eased.

Finnish exports were expected to grow slowly, since corporate investment would be very low in an environment of exceptionally high uncertainty.

The COVID-19 pandemic was forecast to cause lasting damage to the Finnish economy, as not all companies were expected to survive the deep recession. Some job losses would also be permanent.

Due to the exceptionally high degree of uncertainty surrounding the June forecast, the Bank of Finland also published two alternative scenarios for the Finnish economy.

According to the alternative scenarios, the economy would contract by just 5% or by as much as 11%, depending on how the epidemic progresses in Finland and how successfully it could be contained. The Bank of Finland underlined that the economic contraction and recovery would depend largely on containment of the epidemic.

The September interim forecast indicated a slow economic recovery

The worst recession fears did not materialise in 2020, but recovery was expected to be slow. In its September forecast, the Bank of Finland expected GDP to decline by 4.7% in 2020.

In 2021 and 2022, GDP would grow at an annual rate of 2–3%. Even though it appeared in September that the recession would be milder than feared in the spring, it would still be deep, and recovery would be slow.

The interim forecast stressed that employment threatened to weaken for a protracted period and that the global recession was overshadowing the outlook for exports. Uncertainty stemming from the pandemic would remain high, both in Finland and in the global economy.

The Bank of Finland also pointed out that the risk of weaker-than-expected developments was still considerable and related, in particular, to failure in preventing the spread of the virus. The longer the concerns prevailed, the more fragile economic growth would be.

The December forecast suggested that the Finnish economy would recover, albeit slowly

The December forecast was revised up and the economy was projected to shrink by 3.8% in 2020. The Bank of Finland stated that the 2020 economic recession looked set to be milder in Finland than elsewhere in the euro area, but with the rapid spread of the second wave of the virus, the coming winter would be difficult.

Economic growth was forecast to pick up to 2.2% in 2021, as the pandemic would gradually be left behind due to the vaccines. In 2022, economic growth would strengthen to 2.5%.

At the end of the forecast period in 2023, the economy would return to a slow 1.5% growth rate. This reflected the subdued conditions for long-term growth which, in turn, mirrored population ageing and low productivity growth.

According to the December forecast, economic growth in the forecast years will largely hinge on private consumption. Household income will continue to grow steadily and consumer confidence will strengthen as the threat from the pandemic recedes.

The recovery of Finland's external operating environment will take time, and investments in Finland's export markets, in particular, will remain well below pre-pandemic forecasts.

Finnish exports will begin to gradually recover from the collapse in 2020, once the export markets take a turn for the better. The growth contribution of net exports, i.e. the difference between exports and imports, will be negligible during the forecast years.

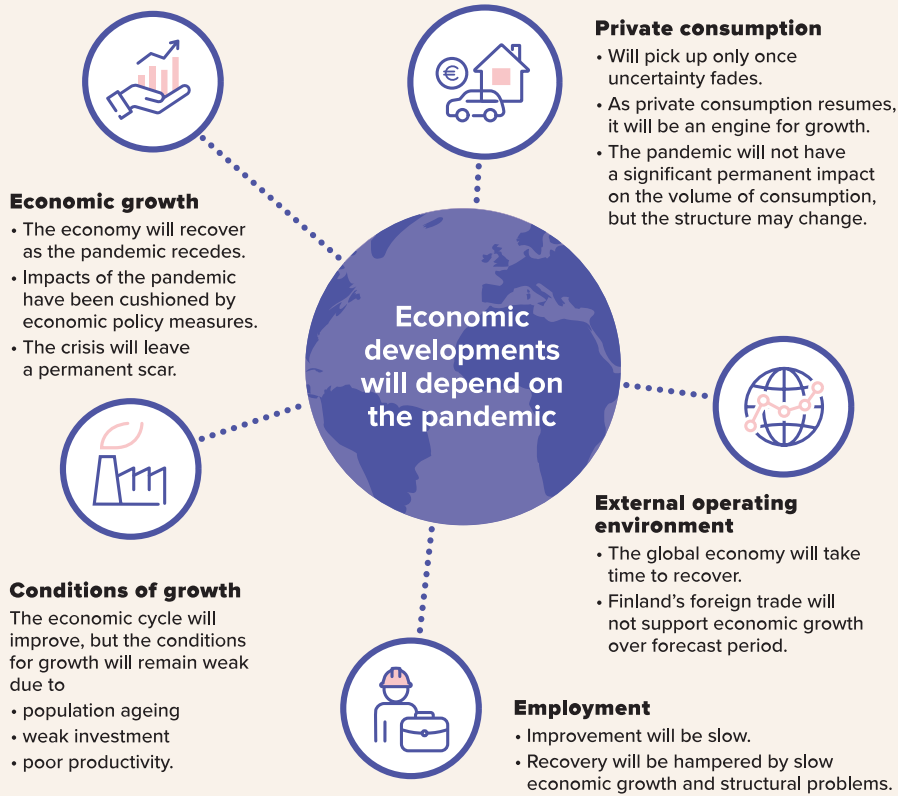
Private investment will also remain weak in the next few years, as uncertainty over economic developments has led companies in Finland to postpone or cancel fixed investments.

While the recession caused by the COVID-19 pandemic has remained milder than feared, it has weakened the conditions for economic growth. In the December forecast, the labour market was expected to recover slowly from the pandemic and related containment measures. Inflation was also anticipated to remain low.

The key messages of the December forecast are crystallised in Chart 25, which was also published in connection with the forecast. The chart summarises the factors contributing to the economic recovery.

Chart 25.

The economy will take time to recover



Uncertainty about economic developments was still high in December, and the forecast highlighted both upside and downside risks.

The risks were particularly related to how the pandemic will be brought under control. Uncertainty associated with the forecast was assessed in two alternative scenarios.

A positive scenario was that a medical solution, i.e. vaccine, would be available and efficiently distributed among the population already in the first half of 2021. In this case, economic growth would pick up notably more than forecast.

A negative scenario was the possibility that the epidemic would spread in winter 2020–2021 and the public would have to be protected by a wide-ranging shutdown of the economy.

Should the epidemic drag on, the economy would contract further in 2021.

Analyses to support forecasting and monitoring of the Finnish economy

In support of the forecast, the Bank of Finland regularly publishes a report on recent developments in the Finnish economy.

In 2020, the Bank also published topical articles supporting forecasting and economic monitoring. The articles were largely related to the analysis of the impacts of the COVID-19 pandemic.

In addition to the forecasts, during 2020, the Bank of Finland actively provided information on the Finnish economy to different media, including social media.

There was great interest in the Bank of Finland's forecasts. During the year, the forecasts were widely discussed in both the national media and social media.

The several presentations on the Finnish economy given to the various domestic and foreign stakeholders in 2020 were also important in sharing information on the economy and increasing the Bank of Finland's media visibility.

The Bank of Finland draws up its macroeconomic forecasts using the dynamic general equilibrium model [Aino](#).

Aino is a stochastic general equilibrium model that simulates the Finnish economy. It is built on economic theory and is estimated based on Finland's national accounts data. The model consists of a group of mathematical equations that are implemented in a computer code. The equations illustrate interdependencies between the key Finnish economic variables.

The Bank of Finland also uses several short-term indicator models for nowcasting GDP developments in the current and next quarter.



Research at the Bank of Finland in 2020

In 2020, the ECB launched a review of its strategy. Research conducted at the Bank of Finland has significantly contributed to the analysis underlying the strategy review. The Bank's research topics were also influenced by the pandemic that broke out in 2020.

In 2020, the Bank of Finland's research contributions were published in recognised academic journals. The Bank also organised several online events for the international academic community.

Key research areas in 2020 were monetary policy, macroprudential policy, the macro economy, emerging economies and the pandemic

The Bank of Finland's Monetary Policy and Research department actively participated in the ECB's strategy review, which was launched in 2020.

Through the Eurosystem's committees and working groups, the department provided research for the strategy review and produced analyses with various monetary policy models. Literature reviews and analyses were published on economic policy issues raised by the pandemic.

The Bank of Finland Institute for Economies in Transition (BOFIT) continued its analysis of, for example, the increasing risks to the Chinese financial system. In addition, the consequences of the trade war and the pandemic were studied from various perspectives. From the beginning of 2021, the Institute's name is the Bank of Finland Institute for Emerging Economies, which better reflects the nature of the economies monitored by BOFIT.

Selected Bank of Finland discussion papers in 2020

BOFIT and the Bank of Finland's Research unit published a total of 45 discussion papers.

Many of the Research unit's discussion papers dealt with issues related to the monetary policy strategy review. Below are three examples.

1. **Maritta Paloviita, Markus Haavio, Pirkka Jalasjoki, Juha Kilponen and Ilona Vänni** examined the tone in the ECB's monetary policy statements by means of text analysis and used the information obtained for assessing the ECB's monetary policy objectives. The research was entitled '[Reading between the lines – Using text analysis to estimate the loss function of the ECB](#)'.
2. **Francesco D'Acunto, Daniel Hoang, Maritta Paloviita and Michael Weber** carried out a survey in spring 2020 which, combined with data from Finnish registers, provided internationally significant new information on the effectiveness of central banks' monetary policy communication. The research was entitled '[Effective Policy Communication: Targets versus Instruments](#)'.
3. In an environment of low interest rates, many are concerned about the regeneration capacity of the business sector. **Satu Nurmi, Juuso Vanhala and Matti Virén** provided new information in this area with their research '[The life and death of zombies – evidence from government subsidies to firms](#)'.

'[The Aino 3.0 model](#)' by **Aino Silvo and Fabio Verona** presented the newest vintage of the Aino macroeconomic model for the Finnish economy. It allows for the study of interlinkages between the housing market, the financial markets and the macroeconomy, enabling a diversified analysis of macroprudential and monetary policy measures.

Many of the research projects of BOFIT focused on the structural changes in China and the country's influence on the global economy. Some of the projects were related to the Bank of Finland's international economic policy process.

In his research entitled '[The vanishing interest income of Chinese banks](#)', **Karlo Kauko** assessed that Chinese banks likely have more non-performing loans than officially reported.

Risto Herrala and Fabrice Orlandi found in their research entitled '[Win-Win? Assessing the global impact of the Chinese economy](#)' that economic growth in China has had a negative impact on many other economies. For example, China's rapid economic growth raises commodity prices, which in turn slows growth in many other countries.

Zuzana Fungáčová, Koen Schoors, Laura Solanko and Laurent Weill found in their research '[Political cycles and bank lending in Russia](#)' that both private and state-owned banks in Russia tend to increase lending before presidential elections.

A total of 14 studies were published in the BOFIT Policy Brief series.

Publications in the BoF Economics Review series in 2020

Eight studies were published in the BoF Economics Review series, which focuses on topical issues related to economic policy and the economy.

Gene Ambrocio and Mikael Juselius conducted a study entitled [‘Dealing with the costs of the COVID-19 pandemic – what are the fiscal options?’](#), and Juha Kilponen a study entitled ‘Koronaviruskriisi leikkaa syvän loven Suomen talouteen’ (‘The COVID-19 crisis will make a big dent in the Finnish economy’). Both of these analysed the economic impacts of the pandemic and policy options to mitigate them.

Gene Ambrocio examined in his study entitled [‘European household and business expectations during COVID-19: Towards a v-shaped recovery in confidence?’](#) how the pandemic has affected economic sentiment among households and businesses across Europe.

Bank of Finland’s research articles in international journals

One of the key objectives of the Bank of Finland’s research activities is to publish the Bank’s research articles in recognised academic journals that apply the peer review method.

Below is a sample of the research published in 2020.

Nigel McClung examined the conditions for stable and low inflation when interest rates are close to their zero lower bound. The article, entitled ‘E-Stability vis-a-vis Determinacy in Regime-Switching Models’, was published in the *Journal of Economic Dynamics and Control*.

Eero Tölö’s study ‘Predicting systemic financial crises with recurrent neural networks’ was published in the *Journal of Financial Stability*.

Zuzana Fungáčová, Paul-Olivier Klein and Laurent Weill analysed the inefficiency of the Chinese banking sector in the article ‘Persistent and transient inefficiency: Explaining the low efficiency of Chinese big banks’, which was published in *China Economic Review*.

Presentation of the Bank of Finland's research outside the Bank

In 2020, the Bank of Finland's research findings were presented in the Eurosystem working groups on modelling and forecasting, the Eurosystem research network, a working group led by the BIS, at the meeting of the Heads of Research of Nordic central banks and at several other events in Finland and abroad.

In 2020, researchers from the Bank of Finland published six blog posts in [VoxEU](#), one of the key fora for economic policy discussion.

Domestic and international meetings

In 2020, the Bank organised or co-organised the following academic events on topical policy issues:

In August, a research workshop entitled '[Workshop on Finance and Politics](#)' was co-organised with the University of Strasbourg and Fordham University.

As part of the annual meeting of the European Finance Association (EFA), a special session entitled 'Banking, Safe Assets, and Monetary Policy' was held in August.

As part of the annual meeting of the Central Bank Research Association (CEBRA), a special session entitled 'Future of EMU: Developing Institutions and Reviewing Macroeconomic Policies' was held in September.

The joint annual research workshop with the Centre for Economic Policy Research (CEPR) was held in September, this time with the theme '[Monetary Policy Tools and Their Impact on the Macroeconomy](#)'.

The webinar entitled '[The Bank of Finland Monetary Policy webinar: New Challenges to Monetary Policy Strategies](#)', which was hosted by Governor **Olli Rehn**, was organised on 24 November.

The meeting of the Heads of Research of the Nordic central banks, which was held in December, focused mainly on themes related to the economic impacts of the COVID-19 pandemic.

A conference entitled '[China and World Economy Under the Cloud of Trade Disputes: New Challenges](#)' was co-organised with the City University of Hong Kong and Fordham University at the turn of November and December.

In 2020, the Bank of Finland also organised a number of other shorter seminars at which the Bank's own and visiting researchers presented their research. After the outbreak of the pandemic, the seminars took place online.



The Bank of Finland and international cooperation in 2020

International cooperation is an important part of the Bank of Finland’s work. The Bank participates in the work of international and European institutions and committees and cooperates closely with the national central banks of other countries.

Chart 26.



The Bank of Finland is a respected international influencer and partner.

Source: Bank of Finland.

The Bank of Finland is represented in a number of ECB bodies and other international fora. [All representatives are listed on the Bank of Finland website.](#)

The Bank of Finland is responsible for Finland's relations with the International Monetary Fund

The International Monetary Fund (IMF) is an organisation of 190 member countries, working to foster international cooperation, open and rules-based foreign trade, sustainable economic growth and financial stability.

The Governor of the Bank of Finland, **Olli Rehn**, is Finland's representative on the highest governing body of the IMF, the Board of Governors.

The Bank of Finland also influences the activities of the IMF via the Nordic-Baltic constituency, which has a joint representative on the Executive Board of the IMF. In 2020, this post was taken up by **Mika Pösö** for a three-year term ending in 2022.

Policy positions on topics discussed by the IMF Executive Board are agreed between the countries of the constituency.

In 2020–2022, the lead role in preparing the policy positions is taken by Finland. This preparatory work is carried out in collaboration between the Bank of Finland and the Finnish Ministry of Finance.

The activities of the constituency are guided by the Nordic-Baltic Monetary and Financial Committee (NBMFC). The Deputy Governor of the Bank of Finland, **Marja Nykänen**, is a member of the Committee.

IMF meetings were held virtually in 2020

Due to the COVID-19 pandemic, the meetings of the International Monetary and Financial Committee (IMFC), organised in connection with the IMF Spring and Annual Meetings, were held virtually.

In the spring, the Nordic and Baltic countries were represented on the IMFC by Finland's Minister of Finance **Katri Kulmuni**, in the autumn by Norway's Minister of Finance **Jan Tore Sanner**.

The discussions at the IMF Spring and Annual Meetings focused on the global economic crisis caused by the pandemic and on the international community's measures to mitigate the impacts of the crisis.

In her contributions, **Kristalina Georgieva**, Managing Director of the IMF, stressed the role of swift and supportive policy action in restoring confidence, called for support for the poorest countries and stressed the risks associated with deepening sovereign debt problems.

Bank of Finland participation in the work of EU institutions and committees

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

In 2020, the EFC convened 16 times in its full composition, i.e. with the national central banks.

At its meetings, the EFC discussed, among other things, the impacts of the COVID-19 pandemic on the economy and the financial markets, the condition of the European financial system, development of the Banking and Capital Markets Union, prevention of money laundering, financial market innovations and the modernisation of the global financial architecture. The EFC also prepared joint policy views for international meetings.

In 2020, the Bank of Finland also participated in the work of many EU committees and institutions promoting the stability of the banking and financial system. An important example of these is the European Systemic Risk Board (ESRB). The Governor of the Bank of Finland is a member of the General Board of the ESRB.

In 2020, the ESRB discussed the increased risks and vulnerabilities to financial stability in the EU stemming from the COVID-19 crisis and urgent macroprudential measures in the exceptional circumstances of the crisis.

Due to the pandemic, the Conference on Systemic Risk Analytics, which was to be co-organised by the Bank of Finland, the ESRB and the RiskLab Finland research group at Arcada and Hanken School of Economics, had to be rescheduled for 2021.

The Bank for International Settlements promotes central bank cooperation and dialogue

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

These meetings discuss developments and current issues relating to the global economy and the financial markets, and matters of interest to central banks.

In 2020, the meetings were held in virtual format. While the topics largely focused on the economic consequences of the COVID-19 crisis, the Governors also discussed the use of big data in forecasting and cyber security risks on the financial markets.

Bank of Finland cooperation with other Nordic central banks

The Bank of Finland maintains close contacts with the central banks of the other Nordic countries. Nordic central bank governors convene annually to discuss current issues.

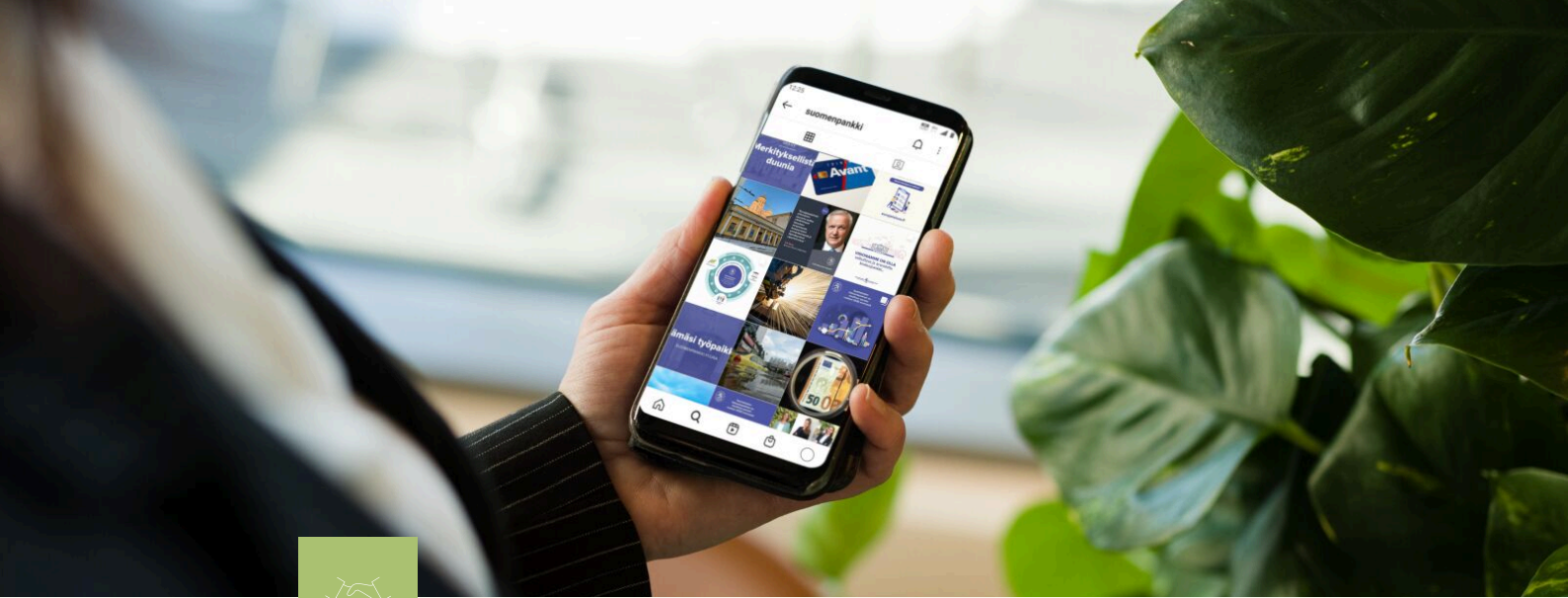
Instead of traditional face-to-face meetings, the governors and deputy governors convened virtually in 2020. The topics of the meetings included payment systems and money laundering, digital central bank money, the ECB's strategy review, responsible investment and the impact of low interest rates.

Cooperation between Nordic central bank experts was furthered in 2020 in virtual meetings covering a wide array of different departmental activities.

Training cooperation with the Bank of Russia

The Bank of Finland has long been engaged in training cooperation with the Central Bank of the Russian Federation (Bank of Russia).

This cooperation has taken the form of, for example, training sessions for Bank of Russia personnel at the Bank of Finland and, in some cases, lectures given by Bank of Finland experts in Russia. In 2020, there were no such events on account of the COVID-19 pandemic.



COVID-19 increased communication needs and moved activities online in 2020

In 2020, the Bank of Finland moved its communication activities, such as press events and meetings with stakeholders and citizens, online. The pandemic highlighted the vital role of social media in the provision of information. The project to promote financial literacy, launched in early 2020, progressed well despite the exceptional circumstances and resulted in a proposal for a national financial literacy strategy.

The outbreak of the COVID-19 pandemic in early 2020 had a major impact on the Bank of Finland's communication activities.

The safety and wellbeing of staff and the continuity of operations during disruptions and exceptional circumstances are of prime importance to the Bank. In securing these, communication played a key role. Information on our measures relating to the pandemic was provided in, for example, extraordinary press events and publications.

In our internal communications, we utilised channels such as the Bank of Finland and Financial Supervisory Authority's joint intranet, email and text messages. The Bank of Finland Board and a specially assigned crisis coordination group regularly organised information sessions for staff.

A staff survey conducted in the summer revealed that the Bank of Finland's internal communications during the COVID-19 crisis had been perceived as open and adequate.

Public events and seminars cancelled or held online – special focus on impacts of the pandemic

The Bank of Finland has actively monitored and analysed the economic impacts of the COVID-19 crisis from the outset. We have regularly communicated our findings in the form of events, interviews, speeches and various online publications.

In 2020, the Bank was particularly active in providing information on national and Eurosystem policy measures relating to COVID-19.

[A new section was launched on the Bank of Finland website \(Finnish\)](#), giving easy access to publications dealing with the pandemic, such as press releases, speeches, news and blog posts.

The number of visitors on the Bank of Finland's main websites – [suomenpankki.fi](#) and [eurojatalous.fi](#) – tripled during the year.

[We published six online issues of the journal Euro & talous in 2020](#) in connection with their dedicated press events. Besides the pre-planned issues, we also published issues focusing on COVID-19 measures and market operations.

Our staff members were also active bloggers. In 2020, a total of 68 blog posts were published on the Bank's website [eurojatalous.fi](#).

Online events made it possible for anyone to follow our topical issues regardless of time and location. National media supported our communication by participating interactively in information events organised by the Bank. In 2020, some events were also broadcast with sign language interpretation.

The Bank of Finland listens and discusses

In January 2020, the ECB launched a review of its strategy. The aim is to ensure that the ECB's monetary policy strategy is fit for purpose, both today and in the future.

As part of the strategy review, euro area central banks organised listening events to hear opinions from civil society organisations and central banks' other stakeholders.

[The Bank of Finland organised three listening events \(Finnish\)](#) at the Bank of Finland Museum in autumn 2020. Everyone could participate in them by following the events live or watching the recordings later. The live broadcasts attracted almost 900 viewers.

Review of the Bank of Finland's social media strategy

The Bank of Finland wants to be an active content creator and conversationalist on social media. Our main purpose on social media is to share information and be present.

[The Bank of Finland is present on a variety of social media platforms](#). In the course of 2020, we sent over 800 tweets on our main social media channel, Twitter.

In addition, the [Bank of Finland's robot economist](#), which nowcasts Finnish GDP growth, sent almost a hundred tweets relating to its forecasts.

The Bank of Finland reviewed our social media strategy in 2020. Most importantly, new up-to-date objectives were drawn up for each of the Bank's social media platforms. Going forward, we intend to be more active in creating content targeted at specific audiences.

We also revised our employer image. This is reflected on our website and social media platforms in the form of an updated employer profile and career stories, for example.

Bank of Finland staff members are also encouraged to communicate and be visible in their professional role on social media. For example, a third of the Bank's staff are already using Twitter in this capacity.



We drew up Finland's first national financial literacy strategy.

Finland's first financial literacy strategy

In 2020, the Bank of Finland initiated the coordination of activities related to the promotion of financial literacy in Finland.

At the same time, we began to prepare a national strategy for financial literacy. This was agreed in January 2020 by the Bank of Finland, the Ministry of Justice and other key authorities.

Despite the exceptional circumstances, the [financial literacy project](#) progressed as planned. Project work was carried out on the basis of researched data and in cooperation with a wide range of actors.

Information on the progress of the project was communicated openly and regularly, including through blog posts, online events and social media.

[A proposal for Finland's first national strategy for financial literacy](#) was drawn up at the end of 2020. Work to implement the strategy will continue in 2021.

Bank of Finland Museum

Guided tours at the Bank of Finland Museum were cancelled in 2020 and the COVID-19 pandemic led to the Museum being closed for six months. Public events in the spring were cancelled completely, and from the end of summer onwards the Museum held events online.

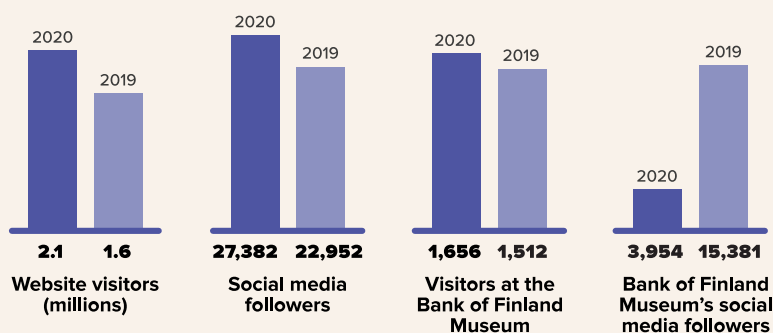
The autumn programme period began with a hybrid event featuring the official publication of **Antti Heinonen's** book on banknotes – already the fifth of its kind.

Otherwise, the themes of the Museum's autumn programme were closely related to the pandemic and its effects.

The Bank of Finland Museum was reopened to the public in September, but had to be closed again in December, as the COVID-19 situation deteriorated. Nevertheless, the public have readily found their way to the Museum's online events.

Chart 27.

In 2020 a good 2 million people made use of the Bank of Finland's information supply



Source: Bank of Finland



Sustainability at the Bank of Finland

A central bank's sustainability starts with its core functions. Our mission is rooted in the building of sustainable economic stability, thereby fostering the wellbeing of the general public.

The Bank of Finland's role is to help ensure the level of prices remains stable, payment systems are secure and accessible, and the financial system is reliable. The Bank also has a role in the construction of a socially and ecologically sustainable society.

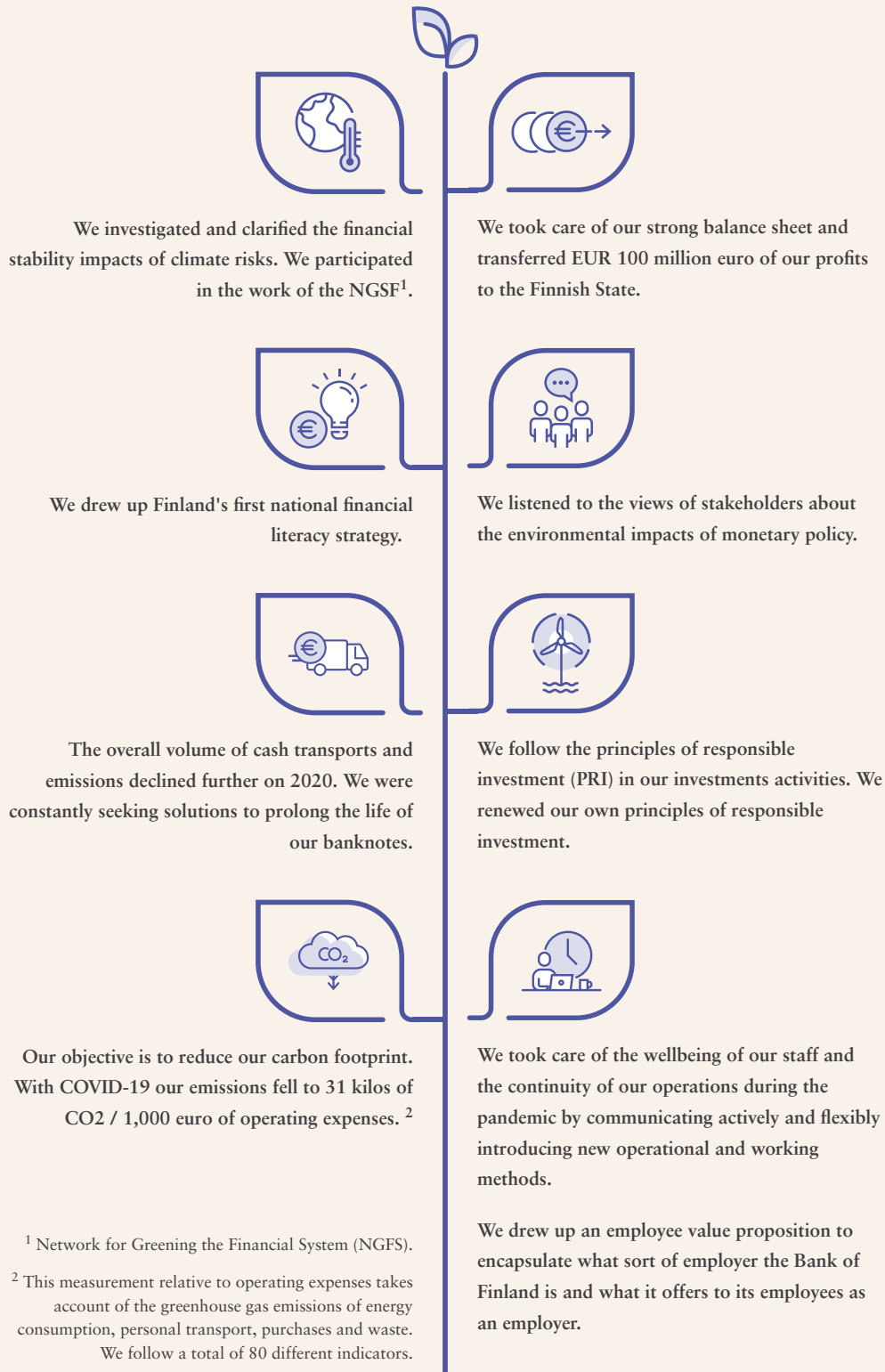
By carrying out our tasks in accordance with our objectives we contribute in the best possible way to the benefit of Finnish society. The Bank of Finland is also committed in its core activities to furthering the United Nations' sustainable development goals.

The Bank's [Sustainability programme](#) is focused on sustainable growth and the promotion of wellbeing, exercise of influence via information and cooperation, and management of climate risks.

The Bank reports on implementation of the goals set in the Sustainability programme in its Annual Report and Personnel Audit.

Implementation of the Sustainability programme is guided by the joint sustainability network of the Bank of Finland and the Financial Supervisory Authority. This met in an online seminar on a quarterly basis in 2020. The network has a good 40 members and its steering group is led by the Bank's Deputy Governor, Marja Nykänen. Themes dealt with in the seminars included: 1) The Bank of Finland's and Financial Supervisory Authority's climate work, 2) working methods in accordance with the principles of sustainable development, and 3) financial inclusion and promotion of financial literacy.

The Bank of Finland's social responsibility in facts



Responsible investment is rooted in the sustainability goals and management of risks

Responsible investment is a key component of the Bank of Finland's asset management. In December, the Bank of Finland Board approved the public responsible investment principles guiding the Bank's asset management. During the course of 2020, the Bank updated its responsible investment practices.

[Read more on responsible investment.](#)

Work to survey financial sector climate risks progresses

Climate change also poses risks for the financial sector. The Bank of Finland takes part in a number of international cooperation working groups that are developing analytical methods and monitoring for the assessment of these risks.

[Read more on preparations for climate risks.](#)

Management of Bank of Finland's financial risks

Monetary policy implementation and ensuring the stability and efficiency of the financial system are a central bank's key responsibilities. Carrying out these tasks involves financial risks, for which the Bank of Finland prepares by ensuring the strength of its balance sheet. In 2020, there was an increase in monetary policy risks.

[Read more on the management of financial risks.](#)

COVID-19 pandemic cut the Bank of Finland's emissions

In 2020, the Bank of Finland's emissions were cut particularly by the changes in ways of working and travel caused by the COVID-19 pandemic. Emissions were also cut by changes in operating practices on and updating of technology. The Bank of Finland engages in extensive cooperation to counter climate change.

[Read more on environmental responsibility in the Bank of Finland's own operations.](#)

Environmental impacts of cash supply in 2020: a reduction in transport kilometres

Cash supply is one of the most operative tasks of central banks, and therefore it also creates emissions. However, at the level of the economy as a whole, cash supply is not a significant source of carbon dioxide emissions.

[Read more on the environmental impacts of cash supply.](#)

Personnel: strong expertise is the currency of stability

2020 was a challenging year for all employers and employees on account of the COVID-19 pandemic. During the prolonged pandemic the Bank of Finland supported its staff in many different ways. During the course of the year, the Bank also renewed its employer profile and drew up an employee value proposition.

[Read more on the Bank of Finland's social responsibility.](#)

Finland gets its first financial literacy strategy

The project launched at the beginning of the year to foster financial literacy in Finland progressed well despite the exceptional circumstances. The result was a proposal for a national financial literacy strategy.

The proposal aims at Finns being the most financially literate people in the world in 2030. The concrete objective is that as many people as possible understand the importance of financial literacy in their own lives and can make good decisions in managing their own finances.

[Read more on the Bank of Finland's work to promote financial literacy.](#)

The image shows a historical handwritten ledger from the Bank of Finland. The ledger is divided into two main sections: 'Debet' (debit) on the left and 'Credit' (credit) on the right. Each section has multiple columns for recording transactions, with numerical values written in ink. The entries are in Swedish and include various financial items and dates. A red rectangular box is overlaid on the bottom left corner of the ledger image.

Financial Statements

The Bank of Finland's audited profit for the financial year 2020 totals EUR 142 million. According to the Act on the Bank of Finland, half of the Bank's profit is to be transferred to the reserve fund and the remaining profit made available for use by the State. However, the Act allows for an exceptional profit distribution if justified by the Bank's financial condition or the size of the reserve fund.

The Parliamentary Supervisory Council has confirmed the Bank of Finland's financial statements and has, upon proposal by the Bank's Board, decided that EUR 100 million will be transferred to the State.

The Bank of Finland's income consists primarily of interest income on banknotes and the Eurosystem's monetary policy items, investment income on foreign reserves and other financial assets of the Bank as well as the Bank's share in the ECB's profit that is distributed to the euro area national central banks. In 2020, the Bank of Finland's net interest income amounted to EUR 731 million (2019: EUR 755 million). The reduction in net interest income mainly resulted from costs from targeted monetary policy operations (TLTRO III) conducted to preserve favourable financing conditions during the COVID-19 pandemic. The interest rate on TLTROs is lower than the ECB's deposit facility rate. Due to interest paid to banks in TLTROs, the Bank of Finland's share in the Eurosystem's monetary income fell to EUR 79 million (2019: EUR 206 million). This weakened the Bank's financial result for 2020.

The Bank of Finland's income covers its operating expenses and provisions. Operating expenses net of banknote production services and the pension fund contribution amounted to EUR 99 million in 2020 (2019: EUR 99 million).

The image shows a handwritten ledger page with columns for 'Debet' and 'Credit' and various entries in Swedish. A red box with a white line graph icon is overlaid on the bottom left of the image.

Balance sheet

EUR million	31 Dec 2020	31 Dec 2019	
ASSETS			
1	Gold and gold receivables	2,434	2,135
2	Claims on non-euro area residents denominated in foreign currency	8,461	7,932
	Receivables from the International Monetary Fund (IMF)	1,973	1,961
	Balances with banks and security investments, external loans and other external assets	6,488	5,971
3	Claims on euro area residents denominated in foreign currency	295	325
4	Claims on non-euro area residents denominated in euro	–	227
5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	21,779	4,648
6	Other claims on euro area credit institutions denominated in euro	0	1
7	Securities of euro area residents denominated in euro	65,657	47,789
	Securities held for monetary policy purposes	65,477	45,946
	Other securities	180	1,843

EUR million		31 Dec 2020	31 Dec 2019
ASSETS			
8	Intra-Eurosystem claims	56,871	62,604
	Participating interest in ECB	165	159
	Claims equivalent to the transfer of foreign reserves	741	736
	Net claims related to the allocation of euro banknotes within the Eurosystem	6,872	4,908
	Other claims within the Eurosystem (net)	49,093	56,800
9	Other assets	625	591
	Coins of euro area	45	33
	Tangible and intangible fixed assets	101	111
	Other current assets	35	36
	Sundry	445	411
Total assets		156,121	126,250

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

EUR million		31 Dec 2020	31 Dec 2019
LIABILITIES			
1	Banknotes in circulation	24,243	21,712
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	110,864	90,403
	Current accounts (covering the minimum reserve system)	89,190	65,127
	Deposit facility	21,674	25,276
3	Other liabilities to euro area credit institutions denominated in euro	–	1
4	Liabilities to other euro area residents denominated in euro	5,608	158

EUR million		31 Dec 2020	31 Dec 2019
LIABILITIES			
5	Liabilities to non-euro area residents denominated in euro	2,743	1,376
6	Liabilities to euro area residents denominated in foreign currency	–	–
7	Liabilities to non-euro area residents denominated in foreign currency	–	–
8	Counterpart of special drawing rights allocated by the IMF	1,402	1,468
9	Intra-Eurosystem liabilities	–	–
10	Other liabilities	133	47
11	Revaluation accounts	2,876	3,268
12	Provisions	5,237	4,757
13	Capital and reserves	2,873	2,741
	Primary capital	841	841
	Reserve fund	2,032	1,900
14	Profit for the financial year	142	320
Total liabilities		156,121	126,250



Profit and loss account

31.12.2020

EUR million		1 Jan–31 Dec 2020	1 Jan–31 Dec 2019
1	Interest income	857	797
2	Interest expenses	-126	-41
3	NET INTEREST INCOME	731	755
4	Foreign exchange rate differences	36	3
5	Securities price differences	311	26
6	Valuation losses related to currencies and securities	-16	-3
7	Change in foreign exchange rate and price difference provision	-331	-24
	NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND RISK PROVISIONS	731	757
8	Income and expenses on fees and commissions	-4	-4
9	Net result of pooling of monetary income	-397	-292
10	Share in ECB profit	17	7
11	Income from other equity shares and participating interests	23	29
	CENTRAL BANKING PROFIT	371	497

EUR million		1 Jan–31 Dec 2020	1 Jan–31 Dec 2019
12	Other income	46	42
	Operating expenses	-118	-114
13	Staff costs	-57	-54
14	Pension fund contribution	-10	-10
15	Administrative expenses	-33	-35
16	Depreciation of fixed assets	-9	-9
17	Banknote production services	-9	-6
18	Other expenses	-0	-0
	OPERATING PROFIT	299	425
	Profit for the pension fund	–	–
19	Income of the pension fund	31	30
20	Expenses of the pension fund	-31	-30
21	Changes in provisions	-157	-105
22	PROFIT FOR THE FINANCIAL YEAR	142	320

Debet		Swedish	Swedish	Swedish	Swedish	Swedish	Swedish	Swedish	Swedish	Swedish	Swedish	Swedish
28	Ullmann, Kasper, Secretar, och Bistanden Hans	2572	20	50	337	10	143	125	10	250	541	175
29	H. Myrskens Skattans Guld	"	"	"	"	"	"	"	"	"	"	"
30	H. Myrskens Skattans Guld	"	"	"	"	"	"	"	"	"	"	"
31	H. Myrskens Skattans Guld	"	"	"	"	"	"	"	"	"	"	"
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59	H. Myrskens Skattans Guld	"	"	"	"	"	"	"	"	"	"	"
60	H. Myrskens Skattans Guld	"	"	"	"	"	"	"	"	"	"	"

The Board's proposal on the distribution of profit

22.2.2021

The Board proposes to the Parliamentary Supervisory Council that EUR 42,022,505.45 of the profit of EUR 142,022,505.45 be transferred to the reserve fund in accordance with section 21, subsection 2 of the Act on the Bank of Finland and that the remaining EUR 100,000,000.00 be made available for the needs of the State.

Helsinki, 22 February 2021

THE BOARD OF THE BANK OF FINLAND

Olli Rehn, Chairperson

Marja Nykänen, Vice Chairperson

Tuomas Välimäki, Member of the Board

Debet		Credit	
28. Utom. Koper, Secretar. och Biddaren New	99 37 5.	2572 30 50.	337 10 14 31 25 10.
29. Utom. Koper, Secretar. och Biddaren New	"	"	"
30. Utom. Koper, Secretar. och Biddaren New	"	"	"
31. Utom. Koper, Secretar. och Biddaren New	"	"	"
Summa	99 37 5.	2572 30 50.	337 10 14 31 25 10.

Accounting conventions

31.12.2020

1. General accounting conventions

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. Foreign currency-denominated items have been 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. Foreign exchange rates used in the financial statements are presented in the table below.

Currency	31 Dec 2020	31 Dec 2019
US dollar	1.2271	1.1234
Japanese yen	126.4900	121.9400
Swedish krona	10.0343	10.4468
Swiss franc	1.0802	1.0854
Pound sterling	0.8990	0.8508
Canadian dollar	1.5633	1.4598
Special Drawing Rights (SDR)	0.8485	0.8104
Gold	1,543.8840	1,354.1040

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 euro-denominated 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.

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.

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 2020, mid-market prices on 31 December 2020 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.

4. Accounting conventions relating to intra-ESCB balances

Intra-Eurosystem balances result primarily from cross-border payments in the European Union (EU) that are settled in central bank money in euro. These transactions are for the most part initiated by private entities. They are settled in TARGET2¹ and give rise to bilateral balances in the TARGET2 accounts of EU central banks. These bilateral balances are netted and then assigned to the ECB on a daily basis, leaving each national central bank (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 TARGET2, as well as other intra-Eurosystem balances denominated in euro (e.g. interim ECB profit distributions to NCBs, 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 TARGET2 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 value² 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 the notes on accounting conventions).

5. Valuation of fixed assets

Fixed assets are valued at initial cost less depreciation. Depreciation is calculated on a straight-line basis over the expected economic lifetime of an asset, beginning 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.³⁾ 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.⁴⁾ The ECB has been allocated a share of 8% of the total value of euro banknotes in circulation, whereas the remaining 92% has been allocated to NCBs according to their weightings in the capital key of the ECB. 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 remunerated⁵⁾ intra-Eurosystem balances. These claims or liabilities are disclosed under the sub-item 'Intra-Eurosystem claims/liabilities: Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem'. 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.⁶⁾ It is distributed in full unless it is higher than the ECB's net profit for the year and subject to any decisions by the Governing Council to make transfers to the provision for financial risks.

The Governing Council may also 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. If the balance sheet value of real estate has been covered by revaluation, the corresponding depreciation is recorded by reversing the revaluation so that 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 the 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 instruments are recognised and treated in a similar manner to on-balance sheet instruments. Foreign exchange forward transactions are included in the net foreign currency positions when calculating average costs.

11. Changes in accounting conventions

There were no changes in accounting conventions in the financial year 2020.

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- 1) Trans-European Automated Real-time Gross settlement Express Transfer system.
 - 2) 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.
 - 3) Decision ECB/2010/29 of 13 December 2010 on the issue of euro banknotes (recast), OJ L 35, 9.2.2011, p. 26, as amended.
 - 4) 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.
 - 5) Decision ECB/2016/36 of 3 November 2016 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (recast), OJ L 347, 20.12.2016, p. 26.
 - 6) Decision ECB/2014/57 of 15 December 2014 on the interim distribution of the income of the European Central Bank (recast), OJ L 53, 25.2.2015, p. 24, as amended.

The image shows a handwritten balance sheet from 1800, divided into 'Debet' (Assets) and 'Credit' (Liabilities) sections. The entries are in Swedish and include various categories like 'Kassa', 'Sparbank', and 'Guld'. The numbers are written in a cursive script, and the document is aged and yellowed.

Notes on the balance sheet

31.12.2020

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 2020	31 Dec 2019
Holdings (troy ounces, million)	1.6	1.6
Price: EUR per troy ounce	1,543.9	1,354.1
Market price (EUR m)	2,433.9	2,134.7
Change in market value (EUR m)	299.2	367.5

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's foreign reserves, and receivables from the International Monetary Fund (IMF).

2.1 Receivables from the International Monetary Fund (IMF)

Breakdown of receivables from the IMF	31 Dec 2020		31 Dec 2019	
	EUR m	SDR m	EUR m	SDR m
Reserve tranche in the IMF	576.0	488.7	494.5	400.7
Special drawing rights	1,326.5	1,125.5	1,387.5	1,124.5
Other receivables from the IMF	70.7	60.0	79.0	64.3
Total	1,973.3	1,674.2	1,961.0	1,589.5

EUR/SDR exchange rate in financial years 2019 and 2020	2020	2019
End-March	0.8025	0.8092
End-June	0.8143	0.8186
End-September	0.8318	0.7996
End-December	0.8485	0.8104

Finland's quota in the IMF amounts to SDR 2,410.6 million. The reserve tranche is the part of the Bank'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 special drawing rights allocation amounts to EUR 1,326.5 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 value of the sub-item changes on the basis of foreign exchange transactions between the member countries. It is also affected by interests earned and paid as well as remuneration on the Bank's claims in the IMF.

The Bank of Finland's receivables from the IMF total EUR 1,973.3 million.

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

This item includes foreign currency-denominated deposits and security investments as well as external loans and other external assets.

Breakdown of claims on non-euro area residents denominated in foreign currency	31 Dec 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Deposits	41.8	101.5	-59.7
Coupon papers	4,579.4	4,954.4	-375.0
Discount papers	–	2.9	-2.9
Fund investments	1,134.6	–	1,134.6
Other	732.0	911.8	-179.8
Total	6,487.9	5,970.6	517.3

Currency breakdown of securities of non-euro area residents denominated in foreign currency				
Currency	31 Dec 2020		31 Dec 2019	
	EUR m	%	EUR m	%
Pound sterling	432.5	9.4	490.1	9.9
US dollar	3,896.0	85.1	4,279.9	86.3
Japanese yen	250.9	5.5	187.2	3.8
Total	4,579.4	100.0	4,957.3	100.0

Remaining maturity of securities of non-euro area residents denominated in foreign currency				
Maturity	31 Dec 2020		31 Dec 2019	
	EUR m	%	EUR m	%
Up to 1 year	889.9	19.4	759.0	15.3
Over 1 year	3,689.5	80.6	4,198.3	84.7
Total	4,579.4	100.0	4,957.3	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.

Breakdown of claims on euro area residents denominated in foreign currency	31 Dec 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Deposits	32.2	–	32.2
Coupon papers	270.9	332.8	-62.0
Other	-8.4	-8.1	-0.3
Total	294.7	324.7	-30.0

Currency breakdown of securities of euro area residents denominated in foreign currency

Currency	31 Dec 2020		31 Dec 2019	
	EUR m	%	EUR m	%
Pound sterling	182.4	67.3	185.8	55.8
US dollar	88.5	32.7	147.0	44.2
Total	270.9	100.0	332.8	100.0

Remaining maturity of securities of euro area residents denominated in foreign currency

Maturity	31 Dec 2020		31 Dec 2019	
	EUR m	%	EUR m	%
Up to 1 year	96.9	35.8	124.6	37.4
Over 1 year	174.0	64.2	208.2	62.6
Total	270.9	100.0	332.8	100.0

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

As at 31 December 2020, the Bank of Finland had no claims on non-euro area residents denominated in euro. In 2019, this item included securities issued outside the euro area.

Claims on non-euro area residents denominated in euro	31 Dec 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Deposits	–	–	–
Coupon papers	–	226.8	-226.8
Other	–	–	–
Total	–	226.8	-226.8

Remaining maturity of securities of non-euro area residents denominated in euro				
Maturity	31 Dec 2020		31 Dec 2019	
	EUR m	%	EUR m	%
Up to 1 year	–	–	47.0	20.7
Over 1 year	–	–	179.8	79.3
Total	–	–	226.8	100.0

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

This item includes monetary policy instruments used by the Bank of Finland to implement monetary policy as part of the Eurosystem. The item 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 1,793,194 million, of which the Bank of Finland holds EUR 21,779.0 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 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Main refinancing operations	–	–	–
Longer-term refinancing operations	21,779.0	4,648.3	17,130.7
Fine-tuning reverse operations	–	–	–
Structural reverse operations	–	–	–
Marginal lending facility	–	–	–
Credits related to margin calls	–	–	–
Total	21,779.0	4,648.3	17,130.7

5.1 Main refinancing operations

Main refinancing operations (MROs) are executed through liquidity providing reverse transactions with a frequency and a maturity of normally one week, on the basis of standard tenders. These operations play a key role in achieving the aims of steering interest rate, 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. In 2020 operations were conducted with maturities equal to the reserve maintenance period and with maturities between 3 and 48 months. These operations were conducted at fixed rate with allotment of the total amount bid.

In 2016 the Governing Council introduced a new series of four targeted longer-term refinancing operations (TLTRO II). These operations have a four-year maturity, with a possibility of repayment after two years. Additionally, in 2019 the Governing Council introduced a new series of seven ¹⁾ quarterly targeted longer-term refinancing operations (TLTRO III). These operations have a three-year maturity, with a possibility of repayment after two years, and from September 2021 repayment is possible one year after the settlement of each operation. According to the initial decisions taken by the Governing Council, the final interest rate applicable to each TLTRO-III operation could be as low as the average interest rate on the deposit facility prevailing over the life of the operation. Furthermore, in response to the COVID-19 shock, in 2020 ²⁾ the Governing Council decided that for the period between 24 June 2020 and 23 June 2022 – referred to as the *special interest rate period* – the interest rate applicable can be as low as 50 basis points below the average interest rate on the deposit facility prevailing over the same period, but in any case may not become less negative than -1%. Given that the actual interest rates will only be known at the maturity of each operation and that a reliable estimate is not possible until that time, the deposit facility rate minus 50 basis points, with a ceiling of -1% is used for calculating the TLTRO III interest over the special interest period, and, the deposit facility rate is used for calculating the TLTRO III interest over the rest of the life of an operation, as this was deemed a prudent approach.

Additionally, on 30 April 2020 the Governing Council decided to conduct a new series of seven additional longer-term refinancing operations which mature in the third quarter of 2021, called pandemic emergency longer-term refinancing operations (PELTROs). These operations provide liquidity support to the euro area financial system and contribute to preserving the smooth functioning of money markets by providing an effective backstop after the expiry of the bridge longer-term refinancing operations (LTROs) that have been conducted since March 2020. The PELTROs are conducted as fixed rate tender procedures with full allotment. The interest rate is 25 basis points below the average rate applied in the Eurosystem's main refinancing operations over the life of the respective PELTRO. ³⁾

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 ad-hoc 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 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Current accounts	0.0	0.6	-0.5
Reverse repurchase agreements	–	–	–
Emergency Liquidity Assistance (ELA)	–	–	–
Other	–	–	–
Total	0.0	0.6	-0.5

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 purposes

As at 31 December 2020 this item consisted of securities acquired by the Bank of Finland within the scope of the three covered bond purchase programmes (CBPPs) ⁴⁾, the Securities Markets Programme (SMP) ⁵⁾, the public sector purchase programme (PSPP) ⁶⁾, the corporate sector purchase programme (CSPP) ⁷⁾ and the pandemic emergency purchase programme (PEPP).

	Start date	End date	Decision	Universe of eligible securities ¹
Completed / Terminated programmes				
First covered bond purchase programme (CBPP1)	July 2009	June 2010	ECB/2009/16	Covered bonds of euro area residents
Second covered bond purchase programme (CBPP2)	November 2011	October 2012	ECB/2011/17	Covered bonds of euro area residents
Securities Markets Programme (SMP)	May 2010	September 2012	ECB/2010/5	Private and public debt securities issued in the euro area

1) Further eligibility criteria for the specific programmes can be found in the Governing Council's decisions.

	Start date	End date	Decision	Universe of eligible securities ¹
Asset purchase programme (APP)				
Third covered bond purchase programme (CBPP3)	October 2014	active	ECB/2020/8 (recast)	Covered bonds of euro area residents
Asset-backed securities purchase programme (ABSPP)	November 2014	active	ECB/2014/45, as amended	Senior and guaranteed mezzanine tranches of asset-backed securities of euro area residents
Public sector purchase programme (CSPP)	March 2015	active	ECB/2020/9 (recast)	Bond issued by euro-area central, regional or local government or recognised agencies as well as issued by international organisations and multilateral development banks located in the euro area
Corporate sector purchase programme (CSPP)	June 2016	active	ECB/2016/16, as amended	Bonds issued by non-bank corporations established in the euro area
Pandemic emergency purchase programme (PEPP)				
Pandemic emergency purchase programme (PEPP)	March 2020	active	ECB/2020/17	All asset categories eligible under the APP ²

1) Further eligibility criteria for the specific programmes can be found in the Governing Council's decisions.

2) A waiver of the eligibility requirements was granted for securities issued by the Greek Government.

In 2020 the Eurosystem continued its net purchases under the asset purchase programme (APP) ⁸⁾ at a monthly pace of EUR 20 billion on average. In March 2020 a temporary envelope of additional net asset purchases of EUR 120 billion was added until the end of the year. The Governing Council expects net purchases to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it starts raising the key ECB interest rates. The Governing Council also intends to continue the reinvestments for an extended period of time past the date when the Governing Council starts raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

Additionally, in March 2020 the Eurosystem launched a temporary pandemic emergency purchase programme (PEPP)⁹⁾, with an envelope of EUR 750 billion, to ease the overall monetary policy stance and to counter the severe risks to the monetary policy transmission mechanism and the outlook for the euro area posed by the coronavirus pandemic. Purchases include all the asset categories eligible under the APP and were initially foreseen until the end of 2020. In June 2020 the Governing Council increased the envelope for the PEPP by EUR 600 billion, and in December 2020 by an additional EUR 500 billion, bringing it to a total of EUR 1,850 billion. The horizon for net purchases was also extended to at least the end of March 2022 and in any case, until the Governing Council judges that the coronavirus crisis phase is over. Furthermore, the Governing Council intends to reinvest the principal payments from maturing securities purchased under the PEPP until at least the end of 2023. The future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary policy stance.

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 the notes on accounting conventions). The amortised cost of the securities held by the Bank of Finland, and their market value¹⁰⁾ (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 m)						
	31 Dec 2020		31 Dec 2019		Change	
	Balance sheet value	Market value	Balance sheet value	Market value	Balance sheet value	Market value
CBPP2	10.0	10.4	15.0	16.2	-5.0	-5.8
SMP	413.2	438.4	617.4	668.5	-204.2	-230.1
CBPP3	9,668.7	9,915.2	7,409.2	7,563.2	2,259.6	2,352.0
PSPP - public sector securities	29,822.5	31,793.8	28,629.7	30,038.8	1,192.8	1,755.0
PSPP - supranational securities	2,664.1	2,917.4	3,017.0	3,176.6	-352.9	-259.2
CSPP	10,151.4	10,587.4	6,257.9	6,491.5	3,893.5	4,095.9
PEPP - covered bonds	95.3	96.9	–	–	95.3	96.9
PEPP - public sector securities	10,784.7	10,926.4	–	–	10,784.7	10,926.4
PEPP - corporate sector securities	1,866.8	1,991.0	–	–	1,866.8	1,991.0
Total	65,476.7	68,676.8	45,946.2	47,954.8	19,530.5	20,722.0

The Governing Council assesses on a regular basis the financial risks associated with the securities held under these programmes. 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 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 as well as from holdings of covered bonds and corporate sector securities 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 impairment tests conducted as at 31 December 2020 on securities purchased under the aforementioned programmes, the Governing Council decided that all future cash flows on these securities are expected to be received. 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 m)	Held by Eurosystem NCBs		On the Bank of Finland's balance sheet	
	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019
SMP	26,334.6	44,215.8	413.2	617.4
CBPP3	263,535.9	241,933.8	9,668.7	7,409.2
PSPP - supranational securities	249,316.6	225,169.2	2,664.1	3,017.0
CSPP	250,403.2	184,505.4	10,151.4	6,257.9
PEPP - covered bonds	2,814.7	–	95.3	–
PEPP - supranational securities	47,796.1	–	–	–
PEPP - corporate sector securities	43,153.6	–	1,866.8	–
Total	883,354.6	695,824.2	24,859.6	17,301.5

7.2 Other securities

This item includes fund shares from the euro area. It also includes domestic commercial papers purchased by the Bank of Finland to mitigate the negative economic impacts of the COVID-19 pandemic. In 2019, the item also included coupon and discount papers issued in the euro area.

Breakdown of other securities of euro area residents denominated in euro (EUR m)	31 Dec 2020	31 Dec 2019	Change
Coupon papers	–	528.7	-528.7
Discount papers	60.9	110.0	-49.1
Fund investments	119.5	1,204.0	-1,084.5
Total	180.4	1,842.7	-1,662.3

Remaining maturity of other securities of euro area residents denominated in euro	31 Dec 2020		31 Dec 2019	
	EUR m	%	EUR m	%
Up to 1 year	60.9	100.0	233.2	36.5
Over 1 year	–	–	405.4	63.5
Total	60.9	100.0	638.7	100.0

In 2020, the Bank of Finland sold its euro-denominated investment assets, leading to a significant reduction in this balance sheet item during the financial year.

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.

Changes to the ECB capital key

As a result of the departure of the United Kingdom from the European Union on 31 January 2020 and consequent withdrawal of the Bank of England from the ESCB, the weightings assigned to the remaining NCBs in the key for subscription to the ECB's capital were adjusted as per the table below with effect from 1 February 2020. As a result, the Bank of Finland's share in the key for subscription to the ECB's capital was increased from 1.2708% to 1.4939% and asset item 8.1 'Participating interest in ECB' increased by EUR 159.1 million to EUR 165.3 million.

Key for subscription of the ECB's capital	Until 31 January 2020, %	From 1 February 2020, %
Nationale Bank van België/Banque Nationale de Belgique	2.5280	2.9630
Deutsche Bundesbank	18.3670	21.4394
Eesti Pank	0.1968	0.2291
Central Bank of Ireland	1.1754	1.3772
Bank of Greece	1.7292	2.0117
Banco de España	8.3391	9.6981
Banque de France	14.2061	16.6108
Banca d'Italia	11.8023	13.8165
Central Bank of Cyprus	0.1503	0.1750
Latvijas Banka	0.2731	0.3169
Lietuvos bankas	0.4059	0.4707
Banque centrale du Luxembourg	0.2270	0.2679
Central Bank of Malta	0.0732	0.0853
De Nederlandsche Bank	4.0677	4.7662
Oesterreichische Nationalbank	2.0325	2.3804
Banco de Portugal	1.6367	1.9035
Banka Slovenije	0.3361	0.3916
Národná banka Slovenska	0.8004	0.9314
Suomen Pankki – Finlands Bank	1.2708	1.4939
Subtotal for euro area NCBs	69.6176	81.3286
Bulgarian National Bank	0.8511	0.9832
Česká národní banka	1.6172	1.8794
Danmarks Nationalbank	1.4986	1.7591
Hrvatska narodna banka	0.5673	0.6595

Key for subscription of the ECB's capital	Until 31 January 2020, %	From 1 February 2020, %
Magyar Nemzeti Bank	1.3348	1.5488
Narodowy Bank Polski	5.2068	6.0335
Banca Națională a României	2.4470	2.8289
Sveriges Riksbank	2.5222	2.9790
Bank of England	14.3374	–
Subtotal for non-euro area NCBs	30.3824	18.6714
Total	100.0000	100.0000

Capital of the ECB

The subscribed capital of the ECB is EUR 10,825 million. The ECB kept its subscribed capital unchanged after Bank of England's withdrawal from the ESCB. The share of the Bank of England in the ECB's subscribed capital, which stood at 14.3%, 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 were required to cover the withdrawn Bank of England's paid-up capital of EUR 58 million. As a result, the Bank of Finland paid EUR 1.7 million to the ECB on 3 February 2020. Euro area NCBs will then be required to pay up in full their increased subscriptions to the ECB capital in two annual instalments.⁽¹⁾ As a result, the Bank of Finland will be required to pay up EUR 11.2 million in both 2020 and 2021.

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. Pursuant to Article 30.2 of the Statute of the ESCB, these contributions are fixed in proportion to NCBs' share in the subscribed capital of the ECB. The remuneration of these claims is calculated daily at the latest available marginal interest rate used by the Eurosystem in its tenders for main refinancing operations, adjusted to reflect a zero return on the gold component.

Following (a) the increase in the weighting of the euro area NCBs (which have transferred foreign reserve assets to the ECB) in the ECB's subscribed capital resulting from Bank of England's withdrawal from the ESCB and (b) a decision of the Governing Council to reduce the proportion of the euro area NCBs' contributions, so that the total amount of foreign reserve assets already transferred by the euro area NCBs will remain at the current level, the Bank of Finland's claim equivalent to this transfer was marginally adjusted. As a result, the Bank of Finland's claim increased slightly, from EUR 736.4 million to EUR 741.1 million, and the difference was paid to the ECB on 3 February 2020.

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'.¹²⁾

At the end of 2020, the balance sheet item totalled EUR 6,871.6 million (EUR 4,908.0 million in 2019). The increase in comparison to 2019 was due to the increase of 3.4% in banknotes put into circulation by the Bank of Finland in 2020 as well as the rise of 11.7% in banknotes in circulation in the Eurosystem as a whole. The remuneration of these claims is calculated daily at the latest available marginal 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 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Due to/from ECB in respect of TARGET2 (including balances held with Eurosystem banks through correspondent accounts)	49,467.7	57,067.1	-7,599.4
Due to/from ECB in respect of monetary income	-398.3	-292.9	-105.4
Due from ECB in respect of the ECB's interim profit distribution	23.1	26.1	-3.0
Other claims/liabilities within the Eurosystem (net)	49,092.6	56,800.3	-7,707.7

The balance of EUR 49,092.6 million as at 31 December 2020 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 TARGET2 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 in respect of the ECB's interim profit distribution.

Regarding the first component, the year-end net transfers via TARGET2 had a credit balance of EUR 49,467.7 million. The remuneration of this position is calculated daily at the latest available marginal interest rate used by the Eurosystem in its tenders for main refinancing operations.

The second component, i.e. the position vis-à-vis the ECB in respect of the annual pooling and allocation of monetary income within the Eurosystem NCBs, had a debit balance of EUR -398.3 million at year-end (see 'Net result of pooling of monetary income' in the notes on the profit and loss account).

Concerning 2020, following a decision by the Governing Council, the amount due to euro area NCBs with respect to the ECB's interim profit distribution was EUR 1,260 million (see 'Interim profit distribution by the ECB' in the notes on accounting conventions). The related amount due to the Bank of Finland as at 31 December 2020 was EUR 23.1 million (see 'Income from other equity shares and participating interests' in the profit and loss account).

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 which consist entirely of real estates.

Tangible fixed assets			
Book value	31 Dec 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Land	7.2	8.5	-1.3
Buildings	75.2	83.9	-8.7
Machinery and equipment	10.9	11.1	-0.3
Art and numismatic collection	0.6	0.6	–
Total	93.8	104.0	-10.2

Intangible fixed assets			
Book value	31 Dec 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
IT systems	6.8	7.0	-0.2
Total	6.8	7.0	-0.2

Other holdings and sundry assets (EUR m)	31 Dec 2020	31 Dec 2019	Change
Coins of euro area	44.5	33.4	11.1
Shares and other equity	22.6	22.7	-0.0
Pension fund's real estate	12.1	12.8	-0.8
Accruals	425.6	379.6	46.0
Items relating to valuation of off-balance sheet items	18.0	28.9	-10.9
Sundry assets	1.1	2.3	-1.1
Total	524.0	479.7	44.3

Liabilities

1. Banknotes in circulation

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

During 2020, the total value of banknotes in circulation within the Eurosystem increased by 11.7%. According to the allocation key, the Bank of Finland had euro banknotes in circulation worth EUR 24,243.3 million at the end of the year, compared with EUR 21,711.6 at the end of 2019. The value of euro banknotes actually issued by the Bank of Finland in 2020 increased by 3.4% from EUR 16,803.6 million to EUR 17,371.6 million. As this was less than the allocated amount, the difference of EUR 6,871.6 million (compared to EUR 4,908.0 million in 2019) is shown under asset sub-item 'Net claims related to the allocation of euro banknotes within the Eurosystem'.

Banknotes in circulation (EUR m)	31 Dec 2020	31 Dec 2019
EUR 5	74.9	77.9
EUR 10	-101.9	-94.1
EUR 20	3,281.1	3,263.6
EUR 50	12,285.6	11,661.3
EUR 100	-1,163.0	-1,117.2
EUR 200	738.3	654.5
EUR 500	2,256.6	2,357.5
Total	17,371.6	16,803.6
ECB issue figure	-2,108.0	-1,887.8
CSM figure	8,979.6	6,795.9
Banknotes in circulation in accordance with the ECB capital key	24,243.3	21,711.6

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 2020 EUR m	31 Dec 2019 EUR m	Change EUR m
Current accounts (covering the minimum reserve system)	89,190.3	65,126.6	24,063.7
Deposit facility	21,673.8	25,276.1	-3,602.3
Fixed-term deposits	–	–	–
Fine-tuning reverse operations	–	–	–
Deposits related to margin calls	–	–	–
Total	110,864.1	90,402.7	20,461.4

2.1 Current accounts (covering the minimum reserve system)

Current accounts contain the credit balances on the transaction accounts of credit institutions that are required to hold minimum reserves. Banks' minimum reserve balances have been remunerated since 1 January 1999 at the latest available marginal interest rate used by the Eurosystem in its tenders for main refinancing operations. Since June 2014, the reserve holdings exceeding the required minimum reserves are remunerated at zero per cent or the deposit facility rate, whichever is lower.

Starting on 30 October 2019, the Governing Council introduced a two-tier system for reserve remuneration, which exempts part of credit institutions' excess liquidity holdings (i.e. reserve holdings in excess of minimum reserve requirements) from negative remuneration at the rate applicable on the deposit facility. This part is remunerated at the annual rate of 0%. The volume of reserve holdings in excess of minimum reserve requirements that was exempt at year-end from the deposit facility rate – the exempt tier – was determined as a multiple of 6 on an institution's minimum reserve requirements.¹³⁾ The non-exempt tier of excess liquidity holdings continues to be remunerated at the lower of either zero per cent or the deposit facility rate.

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 2020, the Bank of Finland had no other liabilities to euro area credit institutions denominated in euro.

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 credit institutions other than those subject to the reserve requirement (EUR 8.0 million).

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

This item consists of balances of international organisations and non-euro area banks with the Bank of Finland (EUR 2,523.4 million) and repurchase agreements (EUR 219.9 million).

6. Liabilities to euro area residents denominated in foreign currency

As at 31 December 2020, the Bank of Finland had no liabilities to euro area residents denominated in foreign currency.

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

As at 31 December 2020, the Bank of Finland had no liabilities to non-euro area residents denominated in foreign currency.

8. Counterpart of special drawing rights allocated by the IMF

This item is the counteritem of special drawing rights (cf. item on the asset side). Originally the amount of special drawing rights and their counteritem were equal. As a result of transactions, the Bank of Finland's claims related to special drawing rights were smaller at the end of 2020 than their counteritem on the liabilities side of the balance sheet. On the liabilities side, the counteritem is a fixed amount totalling SDR 1,189.5 million. In the balance sheet, the item is presented in euro, valued at the rate prevailing on 31 December 2020 (EUR 1,402.0 million).

9. Intra-Eurosystem liabilities (net)

Intra-Eurosystem liabilities and claims have been elaborated on in more detail in the notes on the balance sheet under assets item 'Intra-Eurosystem claims'.

10. Other liabilities

This item consists of accruals, accounts payable and other liabilities. Accruals include e.g. transferable items recorded in connection with the financial accounts and interest payable on repurchase agreements and long-term refinancing operations. Sub-item 'Sundry' includes e.g. liabilities related to value-added and withholding tax payments as well as salaries and pensions to be paid.

Other liabilities (EUR m)	31 Dec 2020	31 Dec 2019	Change
Accruals	132.7	47.6	85.1
Accounts payable	0.0	1.3	-1.3
Sundry	0.3	-1.8	2.1
Total	133.0	47.1	85.9

11. Revaluation accounts

The item includes 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 practice in 1999.

Revaluation accounts (EUR m)	31 Dec 2020	31 Dec 2019	Change
Gold	2,044.9	1,745.7	299.2
Foreign currencies:			
USD	335.9	865.7	-529.7
GBP	17.9	59.9	-42.0
JPY	95.5	123.6	-28.2
SDR	–	12.4	-12.4
Other currencies	0.2	0.2	0.0
Securities	130.9	81.1	49.8
Fund investments	109.6	229.2	-119.6
Other revaluations	141.2	150.1	-8.8
Total	2,876.1	3,267.9	-391.7

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 2020, these provisions totalled EUR 5,236.5 million. Provisions consist of a general provision, provision against real value loss, pension provision and foreign exchange rate and price difference provision.

With respect to the provisions initially established in 2018 and adjusted in 2019 by all the NCBs of participating Member States with regard to credit risks in monetary policy operations, an amount of EUR 64 million was used to cover the loss realised after the sale in 2020 of the impaired securities held by one of the Eurosystem NCBs under the CSPP. Out of this amount, EUR 1.1 million were covered by the provision established in 2019 by the Bank of Finland.

The residual amount of the provisions established by the NCBs of participating Member States after the coverage of the realised loss resulted in a cumulative unused balance of EUR 26 million which is reflected in the profit and loss accounts of the NCBs of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in 2018 (the year when the initial impairment occurred). For the Bank of Finland, this amount was EUR 0.5 million.

The pension provision is made to cover Bank of Finland's pension liabilities. These liabilities total EUR 556.0 million: 104.7% of this amount is covered by the pension provision, i.e. EUR 582.4 million. The change in the pension provision consists of a reduction of EUR –0.4 million in the revaluation account and a loss of EUR –6.4 million for the pension fund which was covered by reducing the pension provision. At the end of 2020, real estate in the value of EUR 12.1 million was earmarked for covering the pension provision (see 'Other assets' in the notes on the balance sheet). No specified assets have been earmarked for covering the remaining portion (EUR 570.3 million) of the pension provision. Instead, these assets are managed as part of the Bank's financial assets.

Provisions (EUR m)	Total provisions 31 Dec 2018	Change in provisions 2019	Total provisions 31 Dec 2019	Change in provisions 2020	Total provisions 31 Dec 2020
Foreign exchange rate and price difference provision	809	24	833	331	1,164
General provision	1,795	50	1,845	100	1,945
Provision against real value loss	1,433	55	1,488	57	1,545
Pension provision	596	-7	589	-7	582
Provision against losses in monetary policy operations	3	-1	2	-2	–
Total	4,636	120	4,757	480	5,237

13. Capital and reserves

This item consists of the Bank'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 m)	31 Dec 2020	31 Dec 2019	Change
Primary capital	840.9	840.9	–
Reserve fund	2,031.8	1,900.0	131.8
Total	2,872.7	2,741.0	131.8

14. Profit for the financial year

The profit for the financial year 2020 totalled EUR 142.0 million.

Profit for the financial year (EUR m)	31 Dec 2020	31 Dec 2019	Change
To be transferred for the needs of the State	100.0	188.0	-88.0
Bank of Finland's share of profit (to be transferred to the reserve fund)	42.0	131.8	-89.7
Total	142.0	319.8	-177.7

Off-balance sheet commitments

Off-balance sheet commitments (EUR m)	31 Dec 2020	31 Dec 2019
Futures contracts		
Nominal value of purchase agreements	–	69.4
Nominal value of sales agreements	–	–
Market value of FX swap agreements	-0.0	3.8
Investment commitments related to real estate funds	50.0	50.0
Securities lending	744.6	37.0

In accordance with the Governing Council's decisions, the Bank of Finland has made available for lending its holdings of securities purchased under the CBPPs, the CSPP and the PSPP. The Bank of Finland has also made available for lending securities belonging to its own investment assets. Securities lending operations conducted against collateral other than cash collateral are recorded in off-balance-sheet accounts at the end of the year.¹⁴⁾ Such lending operations with a value of EUR 745 million (2019: EUR 37 million) were outstanding as at 31 December 2020.

1) On 10 December 2020 the Governing Council added three further operations to this series, which will be conducted between June and December 2021.

2) On 30 April 2020 the Governing Council decided that the special interest period would be between 24 June 2020 and 23 June 2021. On 10 December 2020, the Governing Council decided to extend this period by twelve months, to 23 June 2022.

3) On 10 December 2020 the Governing Council also decided to offer four additional pandemic emergency longer-term refinancing operations in 2021.

4) Decision ECB/2009/16 of 2 July 2009 on the implementation of the covered bond purchase programme, OJ L 175, 4.7.2009, p. 18, Decision ECB/2011/17 of 3 November 2011 on the implementation of the second covered bond purchase programme, OJ L 297, 16.11.2011, p. 70 and Decision ECB/2014/40 of 15 October 2014 on the implementation of the third covered bond purchase programme, OJ L 335, 22.10.2014, p. 22, as amended.

5) Decision ECB/2010/5 of 14 May 2010 establishing a securities markets programme, OJ L 124, 20.5.2010, p. 8.

6) Decision ECB/2015/10 of 4 March 2015 establishing a public sector purchase programme, OJ L 121, 14.5.2015, p. 20, as amended.

7) Decision ECB/2016/16 of 1 June 2016 establishing a corporate sector purchase programme, OJ L 157, 15.6.2016, p. 28, as amended.

8) The APP programme consists of the third covered bond purchase programme (CBPP3), the asset-backed securities purchase programme (ABSPP), the PSPP and the CSPP. Further details on the APP can be found on the ECB's website (<https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>).

9) Further details on the PEPP can be found on the ECB's website (<https://www.ecb.europa.eu/mopo/implement/pepp/html/index.en.html>).

10) Market values are indicative and were derived on the basis of market quotes. When market quotes were not available, market prices were estimated using internal Eurosystem models.

11) This will lead to an increase in the ECB's paid-up capital from EUR 7,659 million in 2020 to EUR 8,270 in 2021 and EUR 8,880 million in 2022.

12) 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 'Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem'.

13) The multiplier may be adjusted by the Governing Council over time in line with changing levels of excess liquidity holdings.

14) 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 liability item 5. 'Liabilities to non-euro area residents denominated in euro' in the notes on the balance sheet). There were no such loans as at 31 December 2020.



Notes on the profit and loss account

31.12.2020

1. Interest income

Interest income from and outside the euro area totalled EUR 856.8 million. Of this, EUR 124.2 million consisted of foreign currency-denominated interest income and EUR 732.6 million of euro-denominated interest income.

The interest rate on overnight deposits was negative throughout the year, meaning interest was charged on central bank deposits. In addition to overnight deposits, such negative interest was also earned on minimum reserve deposits in excess of the minimum reserve requirements.

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 TARGET2 balances – are remunerated at the interest rate on the main refinancing operations (MRO). Since the MRO rate was 0% throughout 2020, no interest income was earned from ESCB items.

Foreign currency-denominated interest income received outside the euro area (EUR m)	2020	2019	Change
Non-euro area coupon bonds	91.2	114.2	-23.0
Non-euro area discount papers	0.1	0.2	-0.1
Non-euro area deposits	0.3	2.2	-1.9
Dividends	20.5	–	20.5
Other	4.3	19.9	-15.6
Total	116.3	136.5	-20.2

Euro-denominated interest income received outside the euro area (EUR m)	2020	2019	Change
Non-euro area coupon bonds	0.0	0.5	-0.5
Non-euro area deposits	0.0	0.0	0.0
Other	6.4	7.4	-1.0
Total	6.4	7.9	-1.5

Foreign currency-denominated interest income received from the euro area (EUR m)	2020	2019	Change
Euro area coupon bonds	4.7	7.8	-3.1
Euro area deposits	3.2	0.3	2.9
Total	7.9	8.1	-0.2

Euro-denominated interest income received from the euro area (EUR m)	2020	2019	Change
Euro area coupon bonds	-0.1	-1.9	1.8
Euro area discount papers	2.0	-0.4	2.5
Euro area deposits	–	0.0	-0.0
Dividends on euro-denominated investments	8.8	21.8	-13.0
ESCB items	–	–	–
Interest income from monetary policy lending	–	–	–
Interest income from monetary policy securities	233.3	226.1	7.3
Interest income from negative interest rates on credit institutions' deposits	428.3	387.5	40.7
Other	53.9	11.1	42.8
Total	726.2	644.1	82.0

Total interest income (EUR m)	2020	2019	Change
Foreign currency-denominated interest income received outside the euro area	116.3	136.5	-20.2
Euro-denominated interest income received outside the euro area	6.4	7.9	-1.5
Foreign currency-denominated interest income received from the euro area	7.9	8.1	-0.2
Euro-denominated interest income received from the euro area	726.2	644.1	82.0
Total	856.8	796.7	60.1

2. Interest expenses

Foreign currency-denominated interest expenses paid outside the euro area (EUR m)	2020	2019	Change
Non-euro area deposits	-0.0	-0.2	0.2
Other	-3.0	-15.6	12.6
Total	-3.1	-15.8	12.7

Euro-denominated interest expenses paid outside the euro area (EUR m)	2020	2019	Change
Non-euro area deposits	–	-0.0	0.0
Other	-0.0	-0.0	-0.0
Total	-0.0	-0.0	-0.0

Foreign currency-denominated interest expenses paid in the euro area (EUR m)	2020	2019	Change
Other	-0.0	–	-0.0
Total	-0.0	–	-0.0

Euro-denominated interest expenses paid in the euro area (EUR m)	2020	2019	Change
Monetary policy lending	-119.4	-24.9	-94.5
Other	-3.2	-0.7	-2.5
Total	-122.6	-25.6	-97.0

Total interest expenses (EUR m)	2020	2019	Change
Foreign currency-denominated interest expenses paid outside the euro area	-3.1	-15.8	12.7
Euro-denominated interest expenses paid outside the euro area	-0.0	-0.0	-0.0
Foreign currency-denominated interest expenses paid in the euro area	-0.0	–	-0.0
Euro-denominated interest expenses paid in the euro area	-122.6	-25.6	-97.0
Total	-125.7	-41.4	-84.3

3. Net interest income

Net interest income (EUR m)	31 Dec 2020	31 Dec 2019	Change
Interest income			
Financial assets	195.2	183.1	12.1
Monetary policy items	661.6	613.6	48.0
ESCB claims	–	–	–
Total	856.8	796.7	60.1
Interest expenses			
Financial assets	-6.3	-16.5	10.2
Monetary policy items	-119.4	-24.9	-94.5
ESCB liabilities	–	–	–
Total	-125.7	-41.4	-84.3
NET INTEREST INCOME	731.1	755.3	-24.2

4. Foreign exchange rate differences

This item includes realised exchange rate gains and losses arising from the sale of currency positions. In 2020, gains related to exchange rate movements amounted to EUR 36.5 million.

5. Securities price differences

This item includes realised gains and losses arising from the sale of securities. In 2020, realised gains from the sale of securities amounted to EUR 310.7 million.

6. Valuation losses related to currencies and securities

This item consists of valuation losses related to currencies and securities. Each security type and currency is treated separately. In 2020, valuation losses related to currencies amounted to EUR 14.9 million. Valuation losses related to securities totalled EUR 1.1 million.

7. Change in foreign exchange rate and price difference provision

Realised net gains arising from foreign exchange rate and price differences, totalling EUR 331.2 million, were used to increase the foreign exchange rate and price difference provision in accordance with the accounting conventions. All provisions have been specified in the notes on the balance sheet under liabilities.

8. Income and expenses on fees and commissions

The item includes fees and commissions related to investment activities.

9. Net result of pooling of monetary income

Monetary income (EUR m)	31 Dec 2020	31 Dec 2019
Net monetary income pooled by the Bank of Finland	476.5	513.4
Net monetary income allocated to the Bank of Finland	79.3	206.3
Net monetary income according to the capital allocation key	-397.2	-307.1
Corrections to monetary income reallocation of previous years	-1.1	14.2
Share of provision against counterparty risks	1.6	1.3
Total	-396.7	-291.6

This item contains the net result of pooling of monetary income for 2020, amounting to an expense of EUR 397.2 million in comparison to an expense of EUR 307.1 million in the previous year. This item also contains the Bank of Finland's share in the realised loss in relation to the sale in 2020 of the securities held by an NCB of the Eurosystem in its CSSP portfolio as well as the release of the provision established in 2019 against losses in monetary policy operations portfolio (see note 12 'Provisions' in the notes on the balance sheet).

The amount of each Eurosystem NCB's monetary income is determined by measuring the annual income that derives from the earmarkable assets held against its liability base. The liability base consists mainly of the following items: banknotes in circulation; liabilities to euro area credit institutions related to monetary policy operations denominated in euro; intra-Eurosystem liabilities of the NCBs arising from the issuance of ECB debt certificates; net intra-Eurosystem liabilities resulting from TARGET2 transactions; net intra-Eurosystem liabilities related to the allocation of euro banknotes within the Eurosystem; accrued interest recorded at quarter-end by each NCB on monetary policy liabilities the maturity of which is one year or longer; liabilities vis-à-vis the ECB backing the claim in relation to swap agreements that earn net income for the Eurosystem. Any interest paid on liabilities included within the liability base is to be deducted from the monetary income to be pooled.

The earmarkable assets consist mainly of the following items: lending to euro area credit institutions related to monetary policy operations denominated in euro; securities held for monetary policy purposes; intra-Eurosystem claims equivalent to the transfer of foreign reserve assets to the ECB; net intra-Eurosystem claims resulting from TARGET2 transactions; net intra-Eurosystem claims related to the allocation of euro banknotes within the Eurosystem; claims on euro area counterparties related to swap agreements between the ECB and non-Eurosystem central banks that earn net income for the Eurosystem; accrued interest recorded at quarter-end by each NCB on monetary policy assets the maturity of which is one year or longer; a limited amount of each NCBs' gold holdings in proportion to each NCB's capital key share.

The amount of each NCB's monetary income shall be determined by measuring the actual income that derives from the earmarkable assets recorded in its books. As an exception to this, gold is considered to generate no income and the following are considered to generate income at the latest available marginal interest rate used by the Eurosystem in its tenders for main refinancing operations: (i) securities held for monetary policy purposes under Decision ECB/2009/16 of 2 July 2009 on the implementation of the covered bond purchase programme, (ii) securities held for monetary policy purposes under Decision ECB/2011/17 of 3 November 2011 on the implementation of the second covered bond purchase programme and (iii) debt instruments issued by central, regional and local governments and recognised agencies and substitute debt instruments issued by public non-financial corporations under Decision ECB/2020/9 of 3 February 2020 on the implementation of a secondary markets public sector asset purchase programme or Decision ECB/2020/17 of 24 March 2020 on a temporary pandemic emergency purchase programme. 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 marginal rate for the Eurosystem's main refinancing operations.

The monetary income pooled by the Eurosystem is to be 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 476.5 million and reallocated to the Bank of Finland amounting to EUR 79.3 million is the net result arising from the calculation of monetary income.

10. Share in ECB profit

The ECB distributed EUR 935 million profit for the financial year 2019, of which the Bank of Finland's share recorded for the financial year 2020 totalled EUR 17.1 million.

11. Income from other equity shares and participating interests

This item includes the Bank of Finland's share, EUR 23.1 million, in income on the Securities Markets Programme (SMP) portfolio, the expanded asset purchase programme (APP) portfolio and the pandemic emergency purchase programme (PEPP) portfolio distributed by the ECB in the form of interim profit distribution for the financial year 2020.

12. Other income

This item consists of income of the Financial Supervisory Authority (FIN-FSA), EUR 34.8 million. The item also includes income from real estate, EUR 3.8 million, capital gains from the sale of real estate, EUR 4.1 million, and commissions and fees.

13. Staff costs

Staff costs (EUR m)	31 Dec 2020	31 Dec 2019
Salaries and fees	45.8	43.9
Employer's contributions to the pension fund	8.9	8.5
Other staff-related costs	1.9	1.5
Total	56.6	53.9

Average staff size	2020	2019
	Number of staff	Number of staff
Bank of Finland	355	362
Financial Supervisory Authority	231	226
Total	586	588

Basic salaries paid to the members of the Board (EUR)	2020
Olli Rehn	274,550
Marja Nykänen	247,460
Tuomas Välimäki	204,290
Total	726,300

Fringe benefits (meal benefits, company-paid telephone and company car) paid to the members of the Board totalled EUR 41,522.88.

Pension benefits of the members of the Board are determined according to the Bank of Finland's Pension Rule, without special terms and under same terms and conditions as confirmed in the Rule for other personnel. As applicable, the Bank of Finland's Pension Rule is in line with the Public Sector Pension Act. A former board member may be paid compensation for income loss if the person may not, because of qualifying period provisions, 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 2020 to cover the pension fund's deficit for the financial year.

15. Administrative expenses

Administrative expenses (EUR m)	2020	2019
Supplies and purchases	0.4	0.5
Machinery and equipment	7.0	7.1
Real estate	8.5	8.9
Staff-related expenses	1.3	4.0
Purchase of services	13.7	12.8
Other	2.1	2.1
Total	32.9	35.4

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

16. Depreciation of fixed assets

Depreciation of tangible fixed assets (EUR m)	31 Dec 2020	31 Dec 2019
Buildings	3.6	3.4
Machinery and equipment	2.5	2.7
Total	6.1	6.1

Depreciation of intangible fixed assets (EUR m)	31 Dec 2020	31 Dec 2019
IT systems	2.8	3.2
Total	2.8	3.2

17. Banknote production services

Costs related to banknote production services totalled EUR 9.0 million.

18. Other expenses

The bulk of other expenses is related to the use and maintenance of property.

19. Income of the pension fund

This item includes the Bank of Finland's and the FIN-FSA's employer contributions and employee's share of premium income, totalling EUR 12.4 million, as well as a contribution of EUR 10 million paid by the Bank to the pension fund. Income from the pension fund's real estate, EUR 1.7 million, is also recorded under this item.

20. Expenses of the pension fund

This item includes pensions paid, EUR 28.8 million, the pension fund's management costs and depreciation of the pension fund's fixed assets.

21. Changes in provisions

This item includes the increase of the provision against real value loss, EUR 57 million and the increase of the general provision, EUR 100 million. All provisions have been specified in the notes on the balance sheet under liabilities.

22. Profit for the financial year

Profit for the financial year 2020 totalled EUR 142.0 million. The Board proposes to the Parliamentary Supervisory Council that EUR 100.0 million of the profit be made available for the needs of the State.



Appendices to the financial statements

31.12.2020

EUR million	31 Dec 2020	31 Dec 2019
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	0.1
Total	22.6	22.7
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	556.0	554.9
– of which covered by provisions	582.4	589.2
Customer service office		
Deposits	–	0.2
Loans	–	0.1

1) In parentheses, the Bank of Finland's relative holdings of the BIS shares in circulation.

2) Pension liability for 2020 includes indexation of pensions and paid-up policies entering into force on 1 January 2021.

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
Oulu	Kajaaninkatu 8	1973	17,230
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

31.12.2020

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 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 Bank of Finland Board. Developments in investment returns are reported monthly to the persons involved in investment activities and the Board member responsible for investment activities. Returns are considered every quarter in the Markets Committee, chaired by the Board member responsible for investment activities. The Board discusses risks and returns twice a year. Cases of non-compliance with the limits imposed 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 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, investment policy as well as risk management and responsible investment principles. Such decisions relate, among other things, to the size of the Bank's own financial assets and foreign reserves, currency distribution of foreign reserves, long-term investment activity, the strategic allocation of the fixed-income investment portfolio by investment category, the leeway permitted in fixed-income investment activities by investment category and the level of interest rate and credit risks. The Board also decides on maximum credit risk limits.

Within the limits imposed by the Board, the Markets Committee makes detailed decisions on 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.

The Bank of Finland has a Financial Risks Committee which, independently of the management of financial assets is 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 submits matters to the Board for information or decision, as necessary. The Financial Risks Committee is chaired by the Board member responsible for risk control.

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

Risk measures and breakdowns

Breakdown of debt instruments and deposits in the Bank of Finland's financial assets, by credit rating¹

Credit rating	31 Dec 2020 EUR m	31 Dec 2019 EUR m
AAA	1,342	1,952
AA+	2,376	2,930
AA	212	453
AA-	111	94
A+	1,296	1,410
A	191	204
A-	67	76
BBB+	60	54
BBB	–	–
BBB-	5	–
Below BBB-	–	–
No credit rating	56	–
Total	5,716	7,173

¹ Covered bonds have been classified according to their own credit rating and not the credit rating of the issuer. The Bank of Japan has been rated according to the credit rating of the government.

Totals may not add up due to rounding.

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

Country or region (EUR m)	31 Dec 2020	31 Dec 2019
Euro area	266	917
Netherlands	67	100
Finland	61	26
Austria	60	74
Germany	56	501
France	22	215
Rest of Europe	832	1,047
Sweden	320	466
United Kingdom	244	293
Norway	151	155
Denmark	102	111
Switzerland	16	22
America	3,102	3,701
United States	2,491	2,920
Canada	612	781
Asia and Oceania	1,153	1,322
Japan	1,087	1,184
Australia	52	130
South Korea	13	9
International institutions	362	186
Total	5,716	7,173

Totals and subtotals may not add up due to rounding.

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

EUR m	2020	2019
Change in the value of the Bank of Finland's financial assets after appreciation of the euro exchange rate by 15% relative to foreign reserve currencies and gold as at 31 Dec	-1,134	-1,150
Change in the value of the Bank of Finland's financial assets after an interest rate rise of 1% as at 31 Dec	-123	-148
Change in the value of the Bank of Finland's equity funds after a decrease in the value of equity funds by 25%	-284	-270

Allocation of the Bank of Finland's fixed-income investment portfolios at the end of 2020

Fixed-income investment portfolios	Allocation at year-end (%)
Government debt instruments and central bank deposits	56.1
Government-related debt instruments	25.7
Covered bonds	7.0
Corporate bonds	10.7
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 changes 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 or 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 risk of extra costs or losses resulting from inadequate or failed internal processes, personnel, systems or external events.
- **Investment portfolio**: this consists of foreign currency-denominated and euro-denominated fixed-income investment portfolios and long-term investments. Its objective is to safeguard the value of financial assets and the Bank of Finland's ongoing ability to meet with its central bank commitments.
- **Foreign reserves** consist of unhedged foreign-currency investments and claims. These include the foreign-currency fixed-income investment portfolio and net receivables from the IMF.
- **Cash** refers to covered and uncovered short-term bank deposits.
- **Modified duration** is a measure of interest rate risk, indicating how much the value of a fixed-income investment or investments change in response to a small change in 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%.
- **VaR figure** at a certain confidence level means a loss in excess of which a loss occurs with a probability corresponding to the confidence level in question, over a target horizon. For example, if VaR 99% on a one-day horizon is EUR 3 million, this means there is a 1% probability the current day's result will be worse than a loss of EUR 3 million (and a 99% probability the result will be better).
- **Expected Shortfall (ES)** at a certain confidence level indicates the size of the expected loss in the event that the loss exceeds the VaR-level loss for that confidence level. For example, with an ES of 99%, this is an average loss of 1% on risk realisation.

The image shows a page from an old ledger with handwritten entries in Swedish. The page is divided into columns by red lines. At the top left, the word "Debet" is written in a large, decorative script. Below it, there are several lines of text, including "Behållning från" and "Nöjdhets-Cassans Debet för 11/12/20". The entries are organized into columns, with some numbers and names visible. The bottom of the page has a "Total" row. The handwriting is in a cursive style typical of the 18th or 19th century.

Auditor's report

12.3.2021

In our capacity as the auditors elected by Parliament, we have audited the accounting records, financial statements and administration of the Bank of Finland for the financial year 2020 in accordance with generally accepted auditing standards.

During the financial year the Bank's Internal Audit audited the Bank's accounting records and activities. We have examined the internal audit reports.

We have read the Bank's annual report and received representations from the Board concerning the Bank's activities.

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 regulations. The financial statements give a true and fair view of the Bank's financial position and results.

We propose that the profit and loss account and balance sheet for the financial year audited by us be approved. We recommend that the profit for the financial year be disposed of as proposed by the Board.

Helsinki, 12 March 2021

Mika Kari

Katri Kulmuni

Jukka Kopra

Lotta Kauppila,
Authorised Public Accountant

Timo Tuokko,
Authorised Public Accountant

Markku Koskela,
Authorised Public Accountant, Secretary

The image shows a historical ledger page with handwritten entries in Swedish. The page is divided into two main sections: 'Debet' (Debit) at the top and 'Credit' at the bottom. The entries are organized into columns, with some columns containing numbers and others containing text. A small red logo is visible in the bottom left corner of the page.

Statement regarding the audit

28.2.2021

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 2020. 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, 28 February 2021
KPMG OY AB
Juha-Pekka Mylén
Authorised Public Accountant



Organisation

1.3.2021

Parliamentary Supervisory Council

Chairman

Antti Lindtman

Vice Chairman

Toimi Kankaanniemi

Mari Holopainen

Kalle Jokinen

Esko Kiviranta

Markus Lohi

Markus Mustajärvi

Petteri Orpo

Pia Viitanen

Ville Vähämäki

Secretaries to the Parliamentary Supervisory Council

Anne Hedman

Lauri Kajanoja

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

Institute for Economies in Transition (BOFIT)

Iikka Korhonen

Monetary Policy and International Economy

Hanna Freystätter

Research

Esa Jokivuolle

Financial Stability and Statistics

Katja Taipalus

Macprudential Analysis

Paavo Miettinen

Financial Statistics

Elisabeth Flittner

Macprudential Policy

Mervi Toivanen

Statistical Analysis and Information Services

Harri Kuussaari

Market Operations

Juha Niemelä

Monetary Policy Implementation

Niko Herrala

Asset Management

Jarno Ilves

Banking Services

Teemu Peltoniemi

Counterparties and Collateral

Marjaana Hohti

Payment Systems

Päivi Heikkinen

Cash Division

Heli Snellman

Oversight of Market Infrastructure

Jussi Terho

General Secretariat

Elisa Newby

International Affairs

Satu Kivinen

Communications

Jenni Hellström

Legal Affairs

Jutta Koivisto

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

Property Management

Paavo Perttu

Security

Marko Lavikkala

ICT and Information Management

Petteri Vuolasto

Bank of Finland IT Services

Petri Salminen

Shared IT Services

Sami Kirjonen

Financial Supervision IT services

Kirsti Ikonen

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 Anneli Tuominen, operates in association with the Bank of Finland.