



BANK OF FINLAND ANNUAL REPORT 2018



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Governor's speech

The Bank of Finland's most important function is to build stability into the economy.

2018 marked 20 years since the Bank of Finland together with other euro area national central banks began to build an economically more stable Europe. The euro, our common currency, was born.

In summer 2018 the President of the Republic appointed me Governor of the Bank of Finland. I accepted the position with both strong motivation and a strong sense of responsibility. As Governor, I am a member of the Governing Council of the European Central Bank. The Governing Council is the highest decision-making body in the Eurosystem; we decide on monetary policy and promote stability and growth in the euro area.

* * *

The Finnish economy has recovered and last year reached the crest of the wave. Particularly positive has been the rapid growth in the number of jobs and contraction in unemployment.

Participation and expertise will secure prosperity over a longer time horizon and guarantee the wellbeing of both coming generations and senior citizens.

Growth also continued in the euro area. In the ECB Governing Council we began a gradual unwinding of non-standard monetary policy measures. The EU's strength in trade policy was also very important for Finland in 2018. The international arrangements supporting free trade have formed the cornerstone of Finnish growth. It is to Finland's advantage that we are actively involved in international fora and participate in decision-making that affects us.

Climate change is one example of a threat that Finland cannot prevent solely by unilateral decision-making. An effective response requires countries to agree on the way forward and commit to the decisions taken.

* * *

Finland and the Bank of Finland have throughout the euro era punched above our weight within the Eurosystem.

The key has been our expert and highly motivated personnel. I would like to thank my colleagues who have worked hard and creatively for the success of the Bank of Finland.

The payments revolution and digitalisation underline the importance of financial literacy and national readiness. We also ensure the availability of cash.

By continuing on this path and renewing itself, the Bank of Finland will be able in the future, too, to best serve the whole of Finnish society.



Annual Report

26.4.2019

The Bank of Finland is the national monetary authority and central bank of Finland. At the same time, it is also a part of the Eurosystem, which is responsible for monetary policy and other central bank tasks in the euro area and administers use of the world's second largest currency – the euro. The primary objective of the Eurosystem and the Bank of Finland alike is price stability, which means a moderate rise in consumer prices. The Bank of Finland has tasks relating both to Finland and to the Eurosystem. In addition to monetary policy, the Bank's core tasks are financial stability and financial statistics, banking operations and currency supply.

Bank of Finland's tasks



- prepares and implements monetary policy in Finland
- oversees the stability of the financial system and produces statistics
- conducts research and economic policy analysis
- attends to the settlement of interbank payments and investment of its own financial assets
- maintains the stability and efficiency of payment systems and issues banknotes.



Monetary Policy

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Monetary Policy

26.4.2019

When inflation, i.e. the annual rate of growth in consumer prices, remains below, but close to, 2% over the medium term, 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. Currently the Eurosystem has also implemented asset purchase programmes to support its pursuit of price stability.

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

In 2018, the ECB's monetary policy for the euro area remained highly accommodative. The ECB held its key interest rates unchanged throughout the year.

Accommodative monetary policy supported economic growth

In 2015, the ECB Governing Council launched its *asset purchase programme, a non-standard monetary policy measure. Its purpose is to expand the money supply and thus boost economic growth and inflation.

In 2018, the Eurosystem began to reduce the monthly pace of its asset purchases. In January 2018, monthly net purchases were cut from EUR 60 billion to EUR 30 billion. In June, the Governing Council announced that, beginning from September, it would reduce its monthly net purchases from EUR 30 billion to EUR 15 billion, before ending net purchases altogether in December.

In December, the Governing Council confirmed its decision to end its net asset purchases. At the same time, it announced that it 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.

The ECB's monetary accommodation has contributed to the favourable growth momentum in the euro area economy and has been effectively transmitted into bank lending. The average interest rates on private-sector loans remained low, and year-on-year lending growth accelerated across loan types.



The European Central Bank's monetary policy and its preparation in 2018

26.4.2019

The Governing Council of the European Central Bank has defined this objective as meaning, in practice, that the year-on-year increase in consumer prices should be below, but close to, 2% over the medium term. Monetary policy also supports the other economic policy objectives of the EU, such as sustainable growth and employment, insofar as the objective of price stability is not jeopardised. Monetary policy remained highly accommodative throughout 2018, although the first steps towards a gradual normalisation of monetary policy were taken in June.

As a member of the Governing Council of the ECB, the Governor of the Bank of Finland is directly involved in decision-making on euro area monetary policy. Experts from the Bank of Finland participate in the preparation of monetary policy decisions and other background work, all of which is based on economic and monetary policy analysis conducted at the Bank of Finland as well as on the Bank's active participation in the Eurosystem's Monetary Policy Committee and Market Operations Committee.

In 2018, the ECB's monetary policy remained highly accommodative. The Governing Council held the key ECB interest rates unchanged throughout the year. The interest rate on the ECB's main refinancing operations and the rates on the marginal lending and deposit facilities remained at 0.00%, 0.25% and -0.4% respectively. These rates have remained in place since March 2016. The Governing Council anticipated that the key ECB interest rates will remain at their present levels at least through the summer of 2019, and in any case for as long as necessary to ensure the continued sustained convergence of inflation to levels that are below, but close to, 2% over the medium term.

Net purchases under the expanded asset purchase programme (APP), which itself is part of the ECB's non-standard policy measures, were ended by the Governing Council in December 2018, having first been reduced to a monthly pace of EUR 30 billion in January and again to EUR 15 billion in October. However, the principal payments from maturing securities purchased under the APP will continue to be reinvested 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. As the period of net purchases ended, the Eurosystem's consolidated balance sheet stood at slightly below EUR 4,700 billion.

Net purchases halved in January

At the beginning of 2018, the ECB Governing Council reduced the monthly pace of its net purchases under the APP from EUR 60 billion to EUR 30 billion, in accordance with its monetary policy decision taken in October 2017.

At its monetary policy meeting in January, the Governing Council held its key policy rates unchanged and reaffirmed its forward guidance, stating that it expects the key ECB interest rates to remain at their present levels for an extended period of time, and well past the horizon of the net asset purchases.

In addition, the Governing Council confirmed its earlier monetary policy decision to extend the period of net asset purchases at least until the end of September 2018. The Governing Council reiterated that the principal payments from maturing assets will continue to be reinvested for an extended period of time after the end of its net asset purchases, and in any case for as long as necessary to ensure the continued sustained convergence of inflation towards the inflation aim.

In January, the Governing Council noted that the incoming data indicated a robust pace of economic expansion for the euro area. The Governing Council anticipated that the strong cyclical momentum, the ongoing reduction of economic slack, and increasing capacity utilisation would further strengthen confidence in inflation converging towards the objective of below, but close to, 2%. At the same time, the Governing Council noted that domestic price pressures in the euro area remained muted and stressed the continuing need for an ample degree of monetary accommodation.

Euro area growth momentum moderated in the spring, downside risks accumulated

At its monetary policy meeting in March 2018, the ECB Governing Council noted that incoming information had confirmed the strong and broad-based growth momentum in the euro area economy. In the near term, the economy was projected to expand at a somewhat faster pace than previously expected. This assessment was also broadly reflected in the ECB staff macroeconomic projections for the euro area.

In its March projections, the ECB staff projected euro area real GDP growth at 2.4% in 2018, 1.9% in 2019 and 1.7% in 2020. The inflation projection remained broadly unchanged, with HICP inflation projected to accelerate to 1.7% in 2020.

The Bank of Finland too, in its analysis of the global economy published at the end of March, assessed that the euro area's economic expansion would continue, driven by euro area domestic demand as well as cyclical tailwinds in the global economy. The Bank noted that the acceleration in HICP inflation was largely due to a higher oil price and that domestic price pressures remained rather moderate.

At its monetary policy meeting at the end of April, the Governing Council noted that the data available after its meeting in March remained consistent with a solid and broad-based expansion of the euro area economy, albeit showing signs of moderation. The Governing Council deemed that the pace of growth had converged towards a more moderate trend, reflecting a pull-back from the brief surge observed at the end of 2017. The Governing Council noted that the dip in momentum might also be explained by temporary factors.

The Governing Council assessed that the risks surrounding the euro area growth outlook remained broadly balanced. However, it stressed that risks related to global factors, including the threat of increased protectionism, had become more prominent. The Governing Council noted that the outlook for inflation had remained unchanged.

Interest rates on loans remained low in the early part of the year

Euro area financing conditions remained favourable in the early part of 2018. The pass-through of monetary policy measures continued to significantly support borrowing conditions for households and firms while bolstering credit flows across the euro area.

The private-sector loan stock continued to recover, and interest rates on loans remained relatively stable and at very low levels. Businesses reported better access to finance in a number of surveys, and credit growth was bolstered by stronger credit demand across all loan categories and increasingly relaxed borrowing conditions for households and firms.

Gradual normalisation of monetary policy begun in June

In June, the Governing Council embarked on its gradual normalisation of the ECB's monetary policy. The Governing Council announced that it would continue its net asset purchases under the APP at a monthly pace of EUR 30 billion until the end of September 2018. Following this, and subject to incoming data proving consistent with the Governing Council's medium-term inflation expectations, the monthly pace of net purchases would be reduced to EUR 15 billion until the end of December 2018, and then concluded. The Governing Council stated that it intends to maintain its policy of reinvesting the principal payments from maturing securities purchased under the APP for as long as necessary to realise its price stability mandate.

The Governing Council based its decision on the substantial progress made in the sustained convergence of inflation towards levels just below 2% over the medium term. In its assessment, the Governing Council stated there were sufficient grounds to believe that the sustained convergence of inflation towards the inflation aim will continue, and will be maintained even after a gradual winding-down of our net asset purchases. However, the Governing Council emphasised that it stands ready to adjust all of its instruments as appropriate.

In June, the Governing Council decided to hold the key ECB interest rates unchanged but reaffirmed its forward guidance, stating that it expects policy rates to remain at their present levels at least through the summer of 2019, and in any case for as long as necessary to ensure the continued sustained convergence of inflation towards levels that are below, but close to, 2% over the medium term.

Growth continued — inflation spurred by oil prices

At its meeting in June, the Governing Council noted in its economic analysis that economic indicators and survey results were weaker but still remained consistent with ongoing solid and broad-based economic growth. Risks surrounding the euro area growth outlook remained broadly balanced, but the Governing Council warned that the risk of persistent heightened financial market volatility warranted monitoring.

The Governing Council assessed that the rapid acceleration of HICP inflation in May was due to higher contributions from energy, food and services price inflation. While core inflation still remained muted, the Governing Council emphasised that domestic price pressures in the euro area were gathering strength and uncertainty around the inflation outlook was receding.

In the June 2018 Eurosystem staff macroeconomic projections, real GDP growth in the euro area was foreseen at 2.1% in 2018, 1.9% in 2019 and 1.7% in 2020. The downward revision to the growth outlook for 2018 was due to the early part of the year coming in below expectations.

Annual HICP inflation was projected at 1.7% for the entire forecast period. Compared with the ECB staff macroeconomic projections published in March, the outlook for HICP inflation was revised notably upwards for 2018 and 2019, mainly reflecting higher oil prices.

At its monetary policy meeting at the end of July, the Governing Council noted that the incoming data indicated that the euro area economy remained on a solid and broad-based growth path, although uncertainties relating especially to the global trade environment remained prominent.

The Governing Council emphasised that economic indicators and survey results had stabilised and continued to point to ongoing solid and broad-based economic growth, in line with the June 2018 Eurosystem staff macroeconomic projections for the euro area.

GDP growth forecasts revised slightly downwards in autumn

At its monetary policy meeting in September, the Governing Council noted that the incoming data had overall confirmed its assessment in June of ongoing broad-based growth of the euro area economy and gradually rising inflation. However, it observed that risks relating to rising protectionism, vulnerabilities in emerging markets and financial market volatility had gained more prominence.

This assessment was also broadly reflected in the September 2018 ECB staff macroeconomic projections for the euro area. In the projections, real GDP growth in the euro area was forecast at 2.0% in 2018, 1.8% in 2019 and 1.7% in 2020.

Compared with the Eurosystem staff macroeconomic projections published in June, the outlook for real GDP growth was revised down for 2018 and 2019, mainly due to a somewhat weaker contribution from external demand. The outlook for inflation was seen as unchanged.

At its monetary policy meeting at the end of October, the Governing Council deemed that the incoming information, while somewhat weaker than expected, remained overall consistent with its baseline scenario of an ongoing broad-based economic expansion, supported by domestic demand and continued improvements on the labour market.

However, the Governing Council noted that sector-specific developments, particularly in car manufacturing, were having an impact on the near-term growth profile. In addition, the Governing Council found the outlook for euro area exports to be more subdued than previously expected.

In its analysis of the global economy published in October, the Bank of Finland anticipated the euro area's positive growth momentum would continue. Growth was being backed not only by monetary accommodation but also by a relatively relaxed fiscal policy in relation to the economic cycle, although the pace of growth had slowed on the previous year.

The Bank of Finland noted a moderate rise in inflationary pressures, with accelerating wage growth being one contributing factor. However, this would be reflected in euro area inflation only slowly, as inflation expectations still remained rather muted. The Bank also considered that the uncertainty over the direction of economic policy in Italy was casting a shadow over the entire euro area outlook, and that the escalation in trade tensions over the summer had increased the downside risks surrounding the global economy.

Net purchases concluded in December 2018 — monetary policy remains accommodative

At its monetary policy meeting in December, the Governing Council confirmed its decision to end net purchases under the APP at the end of December 2018.

At the same time, the Governing Council clarified that it 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.

In December, the Governing Council emphasised that the underlying strength of domestic demand continued to underpin the euro area expansion and gradually rising inflation pressures. This supported the Governing Council's confidence that the sustained convergence of inflation towards the inflation aim would proceed and be maintained, even beyond the horizon of the net asset purchases.

The Governing Council noted that the latest data and survey results on the euro area economy were weaker than expected, reflecting a diminishing contribution from external demand and some country and sector-specific factors. Although the Governing Council expected some of these factors to unwind, it anticipated potentially moderating growth momentum going forward.

In the December 2018 Eurosystem staff macroeconomic projections for the euro area, the outlook for real GDP growth had been revised slightly down for 2018 and 2019, compared with the ECB staff projections published in September. Accordingly, the Eurosystem staff projected euro area GDP growth at 1.9% in 2018, 1.7% in 2019, 1.7% in 2020 and 1.5% in 2021.

Meanwhile, annual euro area HICP inflation was seen at 1.8% in 2018, 1.6% in 2019, 1.7% in 2020 and 1.8% in 2021.

The inflation outlook remained moderate at the end of the year, as core inflation persisted at levels near 1%. The Governing Council emphasised that an ample degree of monetary accommodation is still necessary for the continued sustained convergence of inflation towards levels consistent with the inflation aim.

The accommodative stance of monetary policy is being supported by the Eurosystem's sizeable stock of acquired assets, maintained through the reinvestment of maturing securities. Monetary accommodation is also being backed by exceptionally low monetary policy interest rates and by the Governing Council's forward guidance, according to which it expects the key ECB interest rates to remain at their present levels at least through the summer of 2019, and in any case for as long as necessary.

Accommodative monetary policy supports euro area growth

Overall, the ECB's accommodative monetary policy has contributed to the favourable growth momentum in the euro area economy and has been effectively transmitted into bank lending. The average interest rates on private-sector loans remained low, and year-on-year lending growth accelerated across loan types. The expansion of economic activity in the euro area continued. However, the pace of growth did moderate over the year when compared with the brisk growth observed in 2017.

The pass-through of the monetary policy measures put in place since June 2014 continues to significantly support borrowing conditions for firms and households, access to finance – in particular for small and medium-sized enterprises – and credit flows across the euro area.

In spite of the improved conditions on the labour market and gradually accelerating wage inflation, core inflationary pressures and inflation expectations remained relatively moderate. In 2018, average HICP inflation in the euro area was 1.7%. However, the rise in inflation was largely due to higher energy prices. When purged of the more volatile food and energy components, core inflation reached just 1.0% on average. Market-based inflation expectations, derived from five-year inflation swaps five years ahead, averaged 1.6% in December 2018. Meanwhile, inflation expectations five years ahead based on the ECB Survey of Professional Forecasters stood at 1.9%. Against this backdrop, an ample degree of monetary accommodation is still needed in the pursuit of price stability.

The ECB Governing Council has also consistently stressed that in order to reap the full benefits from monetary policy measures, other policy areas must contribute more decisively to raising longer-term growth potential and reducing vulnerabilities. The implementation of structural reforms in euro area countries needs to be substantially stepped up to increase resilience, reduce structural unemployment and boost euro area productivity and growth potential. Regarding fiscal policies, there is still need for rebuilding fiscal buffers. In addition to these considerations, improving the functioning of Economic and Monetary Union remains an urgent priority.



Implementation of monetary policy in the euro area and Finland

26.4.2019

In the Eurosystem, the national central banks implement the monetary policy decisions of the ECB Governing Council in a decentralised manner. Regular market operations conducted as tender procedures, standing facilities, and a minimum reserve system constitute the traditional part of the operational framework¹. The expanded asset purchase programme and a series of targeted longer-term refinancing operations have, in recent years, been key instruments for the implementation of monetary policy.

The Bank of Finland is responsible for the implementation of monetary policy in Finland. Credit institutions located in Finland hold current accounts with the Bank of Finland and may participate in monetary policy operations through the Bank. In addition, the Bank of Finland has also carried out a share of the Eurosystem's outright transactions under the asset purchase programme.

Net asset purchases carried out until the end of 2018

The Eurosystem's expanded asset purchase programme (APP) consists of the public sector purchase programme and three private sector purchase programmes, namely, the asset-backed securities purchase programme, the corporate sector purchase programme, and the third covered bond purchase programme.

In 2018, the target volume of monthly net purchases under the APP stood at approximately EUR 30 billion between January and September. This target was reduced to EUR 15 billion between October and December. In addition to its net purchases, the Eurosystem reinvested the principal payments from maturing securities purchased under the APP. These redemptions came to an average EUR 12 billion per month in 2018.

On the Eurosystem's balance sheet, holdings of assets purchased under the APP increased from EUR 2,286 billion to EUR 2,570 billion during 2018. Holdings under the public sector purchase programme increased by EUR 213 billion, while holdings under the three private sector purchase programmes increased by EUR 70 billion.

In accordance with the ECB Governing Council's decision, net purchases under the APP ended in December 2018. As of 2019, the purchase programmes transitioned into the reinvestment phase²⁾. Under the reinvestment phase, asset holdings no longer increase but are instead maintained at their current levels for an extended period. The volume of maturing assets is significant, with average monthly redemptions of about EUR 17 billion in 2019.

The Bank of Finland has made asset purchases under all of the programmes except the asset-backed securities purchase programme. In 2018, the Bank's balance sheet holdings of assets purchased under the APP increased from about EUR 38 billion to more than EUR 44 billion.

The Bank of Finland carries out a share of purchases under the corporate sector programme on behalf of the entire Eurosystem

At the end of 2018, the Bank of Finland's balance sheet holdings of sovereign bonds and bonds issued by European supranational institutions reached EUR 28 billion and over EUR 3 billion, respectively. Holdings under the private sector purchase programmes, in turn, reached almost EUR 13 billion at the end of the year.

Under the public sector purchase programme, the Bank of Finland supplemented its purchases of Finnish sovereign bonds and bonds issued by recognised agencies in Finland with bonds issued by European supranational institutions, as the sovereign bond purchases were not enough to fulfil the Bank's obligations under the ECB's capital key.³⁾ Under the third covered bond purchase programme, the Bank of Finland specialised in the markets for Finnish covered bonds.

Under the corporate sector purchase programme, the Bank of Finland operates as one of six euro area national central banks tasked with making purchases on behalf of the entire Eurosystem. In addition to buying Finnish corporate bonds, the Bank's asset purchases included bonds issued by Irish, Austrian and Baltic corporations. These bonds were purchased from the Bank's domestic and foreign securities-trading counterparties.

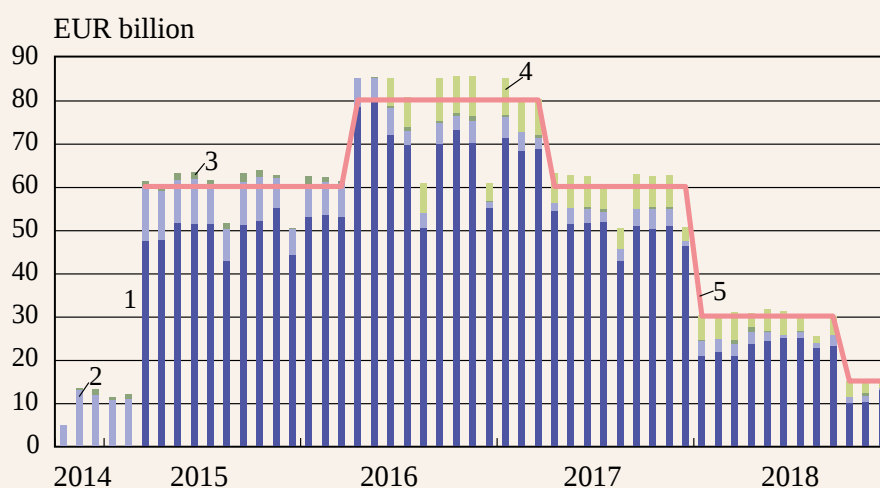
Securities lending followed as in previous years

Securities lending of assets purchased under the APP continued as in previous years. The aim of securities lending is to support bond-market liquidity in the euro area. The applicable holdings are made available for lending in a decentralised manner within the Eurosystem.

The Bank of Finland's holdings were available for lending against securities as collateral through Euroclear Bank's Securities Lending and Borrowing and GC Access services (see [for further detail](#)). In addition, the Bank of Finland also carried out bilateral securities lending of assets purchased under the public sector purchase programme, against cash collateral.

Chart 1.

Eurosystem net purchases under the APP, October 2014 – December 2018



1. Public sector asset purchase programme
2. Asset-backed securities purchase programme
3. Net purchase target
4. Third covered bond programme
5. Corporate sector purchase programme

Source: European Central Bank.

Volume of outstanding longer-term refinancing still considerable

Voluntary repayments of the Eurosystem's second series of targeted longer-term refinancing operations (TLTRO-II) began in June 2018, in accordance with the ECB's pre-announced repayment schedule.

The four-year TLTRO-II operations were part of the comprehensive stimulus measures announced by the ECB Governing Council in 2016. Under TLTRO-II, the Eurosystem, through its national central banks, offered counterparties affordable longer-term funding against collateral. In return, participating counterparties were expected to increase their lending to euro area households and firms.

In the four operations, which took place between June 2016 and March 2017, participating banks were allotted a total of EUR 740 billion. Voluntary quarterly repayments began two years from the settlement of each operation. By the end of 2018, outstanding TLTRO-II loans stood at EUR 719 billion, as banks sparingly acted on the opportunity for early repayment.

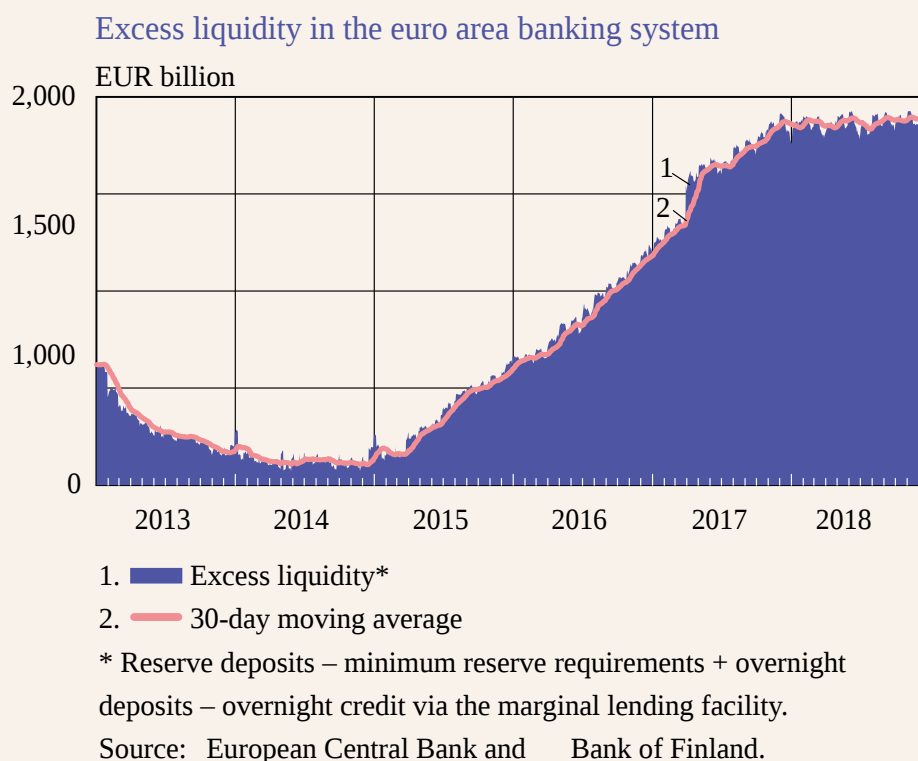
Before the start of the voluntary repayments, fixed interest rates on the refinancing operations were determined for each bank, based on the bank's success in raising its private-sector lending. At its most affordable, counterparties received funding with a four-year maturity and an interest rate fixed at the ECB's deposit facility rate, which was -0.40%. At the upper end, interest rates on TLTRO-II loans are capped by the ECB's main refinancing operation rate, at 0%.

Little demand for regular open market operations

The Eurosystem continued to conduct its regular one-week main refinancing operations and three month longer-term refinancing operations as fixed-rate tender procedures with full allotment. In October 2017, the ECB Governing Council had decided to continue to conduct its regular open market operations as such at least until the end of the last reserve maintenance period of 2019. The interest rate on the main refinancing operations remained at 0.00% in 2018.

Liquidity remained abundant in the euro area banking sector, owing to the effects of the expanded asset purchase programme, the TLTRO-II operations, and earlier monetary policy purchase programmes. Banks' displayed only a slight appetite for credit from the Eurosystem's main refinancing operations, and even less than in 2017.

Chart 3.



Progress made in preparation of the new €STR benchmark rate

The Bank of Finland has been closely involved in the meticulous design of the methodology and other technical aspects of €STR (Euro Short Term Rate), the ECB's new overnight benchmark rate.

The methodology for calculating €STR ⁴⁾ was settled upon and publicised in 2018. The benchmark rate is based on banks' statutory statistical reporting of their money-market transactions. The design process received considerable support from two public consultations, where industry representatives shared their own views.

ESTER is due for daily publication starting in October 2019. The new benchmark rate will immediately occupy an important position. In September 2018, the private-sector working group recommended ESTER as an alternative risk-free benchmark rate for the euro area and as a replacement for the EONIA rate ⁵⁾.

Strict eligibility criteria for monetary policy counterparties

The pool of the Bank of Finland's monetary policy counterparties increased by one, making for a total of 16 counterparties by the end of 2018. The Bank's counterparties include both Finnish credit institutions and Nordic banks with branches in Finland.

Credit institutions that serve as counterparties to the Eurosystem's monetary policy operations are subject to minimum reserve requirements and financial supervision and must be financially sound.⁶⁾

Monetary policy counterparties may seek funding against eligible collateral by participating in the Eurosystem's credit operations. Counterparties may also apply for overnight liquidity, through the marginal lending facility, against eligible assets. Intraday credit, to ensure smooth payment flows, is similarly available against sufficient 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.⁷⁾ In addition, the Bank of Finland has supplemented the ECB's guidelines with additional domestic requirements for its own counterparties.⁸⁾ It last updated its provisions and guidelines in April 2018.

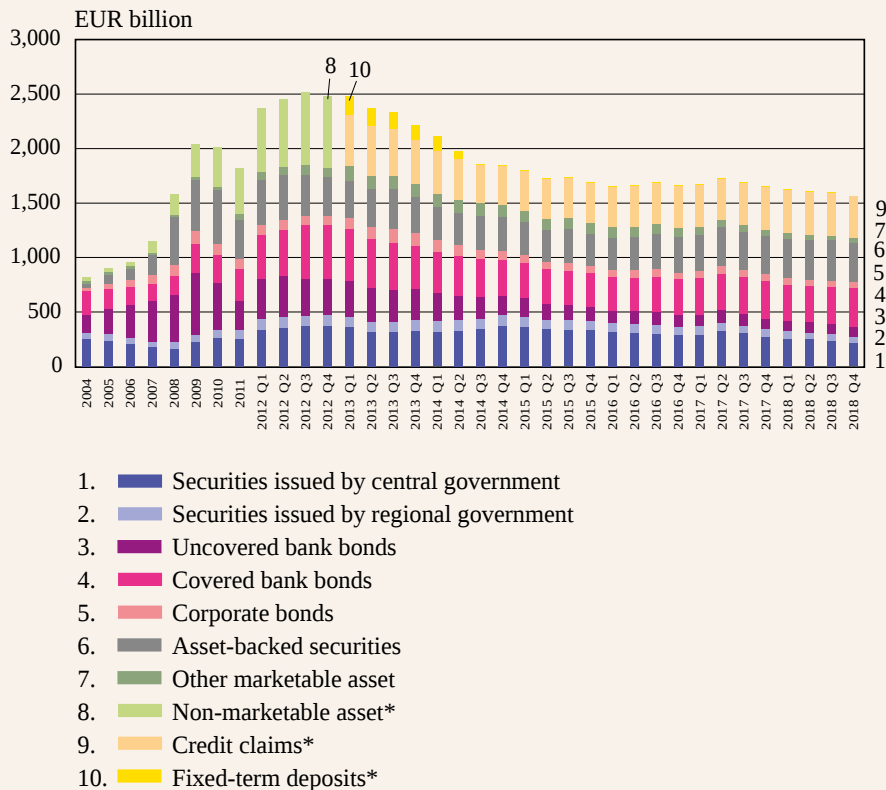
Slight reduction in collateral delivered to the Eurosystem

In order to receive credit from the Eurosystem's national central banks, counterparties must deliver collateral that satisfies the Eurosystem's eligibility criteria.⁹⁾

In 2018, the total quantity of collateral delivered to the Eurosystem declined slightly (Chart 4). Overall, the Eurosystem's national central banks held EUR 1,594 billion worth of collateral in 2018, compared with an average of EUR 1,682 billion in 2017.

Chart 4.

Collateral provided to the Eurosystem



Source: European Centralbank.

No significant change occurred in the distribution of asset classes delivered as collateral. Credit claims (non-marketable claims on loans by counterparties to their corporate and public sector customers) constituted the most popular asset class, representing 24% of collateral delivered, followed by asset-backed securities (23%) and banks' covered bonds (21%), respectively.

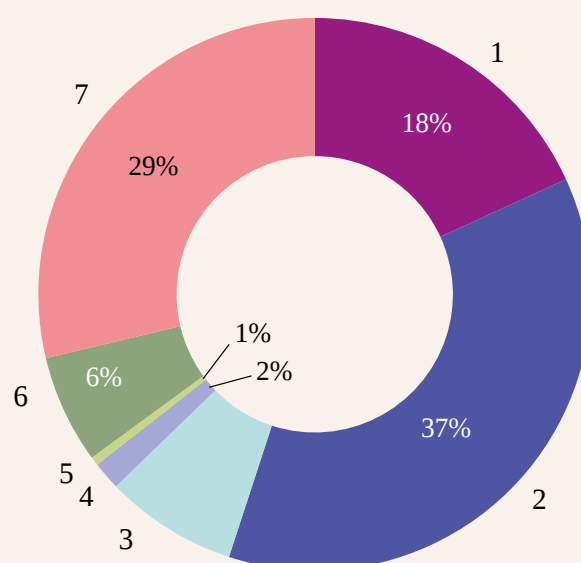
Bank of Finland counterparties' situation stable

The Bank of Finland's counterparties may participate in the Eurosystem's credit operations against sufficient collateral. In 2018, the Bank of Finland received an average of EUR 19.6 billion in collateral from its counterparties, compared with EUR 20.4 billion in 2017.

Bank of Finland counterparties continue to favour banks' covered bonds as collateral, which on average accounted for 37% of all collateral delivered (Chart 5). This was followed by credit claims (29%) and bonds issued by central and regional governments (18 %).

Chart 5.

Collateral provided to the Bank of Finland
(averages for 2018)



1. ■ Central and regional government securities
2. ■ Covered bank bonds
3. ■ Uncovered bank bonds
4. ■ Corporate bonds
5. ■ Asset-backed securities
6. ■ Other marketable assets
7. ■ Non-marketable credit claims

Source: Bank of Finland.

Overall, the Bank of Finland's counterparties reduced their financing from Eurosystem monetary policy operations. This resulted in counterparties' collateral surpluses increasing to 27% in 2018, up from 26% in 2017.

The Bank of Finland's counterparties sought exceptionally little newly issued central bank liquidity in 2018, mainly opting to use intraday credit. By the end of 2018, the Bank's counterparties held EUR 8.6 billion worth of outstanding credit received from targeted longer-term refinancing operations (TLTRO-II). A year earlier, this figure had stood at EUR 10.1 billion.

Voluntary TLTRO-II repayments began in June 2018, and the Bank of Finland's counterparties had made repayments of EUR 1.5 billion by the end of the year.

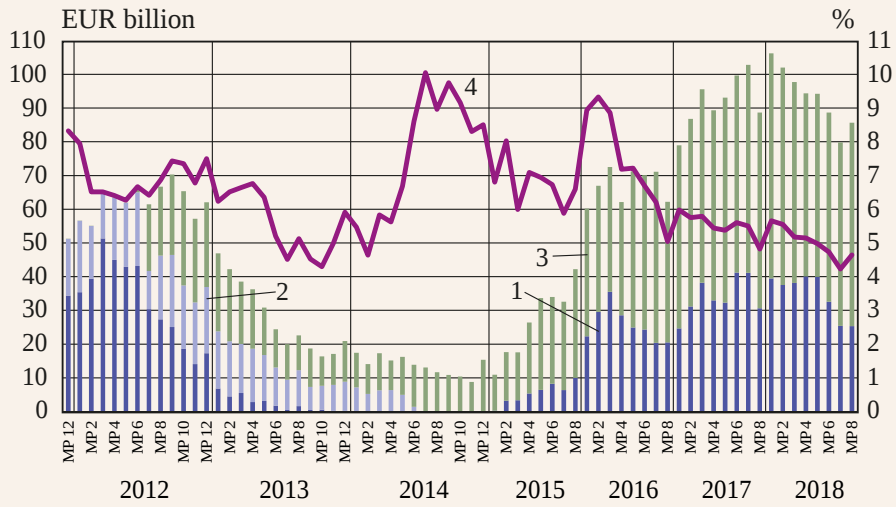
Central bank deposits grew in volume and shrank proportionally

As in previous years, the Bank of Finland's counterparties made a considerable amount of deposits with the central bank. Counterparties can either deposit funds using the actual overnight standing facility, or they can simply leave funds in excess of the minimum reserve requirement on their current accounts with the central bank. In either case, the Bank of Finland offers the same remuneration on these funds, equal to the ECB's deposit facility rate, which remained negative (-0.40%) in 2018. Remuneration is also paid on the minimum reserve requirement, corresponding with the main refinancing operations rate, which remained at 0.00% in 2018.

Excess liquidity, or the total volume of central bank deposits made with the Bank of Finland, averaged some EUR 94 billion in 2018. In 2017, this figure was EUR 92 billion (Chart 6). However, the Bank of Finland's share of central bank deposits within the entire Eurosystem shrank steadily in 2018, from almost 6% to under 5%.

Chart 6.

Liquidity deposits with the Bank of Finland



- 1. Overnight deposits
- 2. Fixed-term deposits
- 3. Current account balances exceeding reserve requirements
- 4. Share in Eurosystem deposits (right-hand scale)*

* Includes overnight deposits, fixed-term deposits and current account balances exceeding reserve requirements (average over reserve maintenance period).

Sources: European Central Bank and Bank of Finland.

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- 1) <https://www.suomenpankki.fi/en/monetary-policy/implementation-of-monetary-policy/monetary-policy-instruments/>.
 - 2) <https://www.eurojatalous.fi/fi/blogit/2018/eurojarjestelman-osto-ohjelmat-jatkuvat-uudelleensijoitusvaiheessa/>.
 - 3) Under the public sector purchase programme, 90% of purchases are sovereign bonds and bonds issued by recognised agencies as well as regional and local governments, while the remaining 10% are bonds issued by European supranational institutions. Purchase volumes of sovereign bonds and bonds issued by recognised agencies as well as regional and local governments were determined by the capital key, reflecting each country's relative size to the entire euro area. According to the capital key, Finland's share was 1.78%.
 - 4) ECB: ESTER methodology and policies.
 - 5) <https://www.eurojatalous.fi/fi/blogit/2018/ekp-n-tuleva-viitekorko-ester-on-toimialan-suositus-eonian-korvaajaksi/>.
 - 6) <https://www.suomenpankki.fi/en/monetary-policy/implementation-of-monetary-policy/counterparties/>.
 - 7) <https://www.suomenpankki.fi/en/media-and-publications/publications/instructions-and-rules/bank-of-finland-rules-for-counterparties-and-customers/>.
 - 8) https://www.suomenpankki.fi/globalassets/en/media-and-publications/publications/instructions-and-rules/counterparty/documents/implementation-of-monetary-policy-operations-and-collateral-management_en_16042018.pdf.
 - 9) <https://www.suomenpankki.fi/en/monetary-policy/implementation-of-monetary-policy/collateral-for-central-bank-credit/>.



Prudence needed on gradual path towards monetary policy normalisation

26.4.2019

The Governing Council of the European Central Bank decided to conclude its net purchases under the asset purchase programme at the end of 2018. The decision marks one of the first steps towards the normalisation of monetary policy in the euro area. Because the effects of non-standard monetary measures on the financial markets and the real economy are still uncertain, normalisation will proceed carefully and at a measured pace conditional on economic developments.

In June 2018, the Governing Council of the European Central Bank (ECB) judged that its net securities purchases under the asset purchase programme could be concluded at the end of the year. The Governing Council confirmed that it would continue to reinvest the principal payments from maturing securities even after the conclusion of net purchases.

The Governing Council also assessed that it would hold the key ECB interest rates unchanged at least through the summer of 2019. Significant monetary policy stimulus is still needed to support the further build-up of domestic price pressures and headline inflation developments over the medium term.

First steps towards normalisation measured

At its monetary policy meeting in December 2018, the Governing Council confirmed its decision to end its net purchases under the asset purchase programme at the end of 2018. At the same time, it announced it will continue reinvesting, in full, the principal payments from maturing securities purchased under the asset purchase programme for an extended period 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.

The Governing Council emphasised that it stands ready to adjust all of its instruments, as appropriate, to ensure that inflation continues to move towards its inflation aim in a sustained manner.

The first steps towards normalisation of Eurosystem monetary policy were thus exceedingly measured, and monetary policy was not tightened abruptly. This was also reflected in market expectations, which did not display any sudden movements in the latter half of 2018.

Effects of withdrawing non-standard measures difficult to assess

The withdrawal of non-standard policy measures will be a long process, as the euro area's outlook for growth and inflation is uncertain, and determining the appropriate stance for monetary policy is more difficult than usual.

There are a number of factors which make it difficult to assess the effects of policy normalisation. Firstly, monetary authorities have only spent a relatively brief time with non-standard policy measures. Secondly, the dynamic links between economic growth, inflation and interest rates may have changed. Thirdly, the equilibrium real interest rate in the euro area may have declined. The equilibrium rate is the interest rate at which economic growth is balanced and price developments are consistent with the ECB's inflation aim. Thus, a decline in the equilibrium rate could well result in lower interest rate levels over the medium term, when compared with previous growth cycles.

One sign of change in the dynamics of the macro economy and the transmission mechanisms of monetary policy is that, despite the recovery in growth and employment, inflation has failed to pick up as expected in the euro area and inflation expectations have slipped. Uncertainty over changes in the macroeconomic dynamics calls for a prudent approach to monetary policy.

The Bank of Finland supports regular review of the ECB's monetary policy strategy

In addition to raising its key policy rates, the ECB has the ability to tighten its non-standard monetary policy through other means. These options, where necessary, include the ECB reducing its extensive asset purchases (which would particularly have the effect of raising long-term interest rates in the economy), reducing the amount of liquidity in the banking system, or adjusting the forward guidance on its monetary policy. On the other hand, by maintaining these measures intact it is possible to maintain an easy monetary policy stance. In any event, the Governing Council of the ECB stands ready to adjust all of its instruments, as appropriate, to ensure that inflation continues to move towards the Governing Council's inflation aim in a sustained manner.

Therefore, many questions remain unanswered as to the scope and timing of these measures. In what order should the measures be implemented? By how much, and at what pace, should a central bank's balance sheet be reduced? How large should a central bank's balance sheet be kept, and how much liquidity should remain in the banking system under the 'new normal'? And finally: by how much, and at what pace, should interest rates be raised?

Given these changes in the instruments and operating environment of monetary policy, it is not surprising that the monetary policy strategy has found itself facing new challenges. Under the lead of its Governor, the Bank of Finland has highlighted the need for the ECB to conduct regular reviews of its monetary policy strategy, in the manner of many other central banks.

Regular strategy reviews would bolster the success of monetary policy in the transformed operating environment and contribute to the ongoing development of European Economic and Monetary Union.



Financial stability

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Financial stability

26.4.2019

The Bank of Finland plays an important role in macroprudential policy analysis, preparation and implementation.

The purpose of macroprudential policy is to safeguard the operational capacity of the financial system by identifying factors that threaten the entire system and by taking timely and appropriate action. This involves, for example, the setting of a maximum loan-to-collateral ratio (loan cap) for residential mortgage loans, and instruments like the countercyclical capital buffer.

The Bank of Finland supports confidence in the financial system by, for example, participating in the analysis and preparation of macroprudential policy and decision-making in Finland, in the euro area and the European Union and by participating actively in the development of macroprudential policy tools.

In addition, the Bank develops the necessary crisis management capabilities in cooperation with domestic and international authorities and supports the development of financial regulation and supervision.

The Bank of Finland's Statistics unit participated actively in 2018 in the Eurosystem's key development projects. It launched a machine-learning project in the quality control of statistics and published new data on peer-to-peer funding and crowdfunding, private equity funds and banks' market shares.



Bank of Finland concerned about rising household indebtedness

26.4.2019

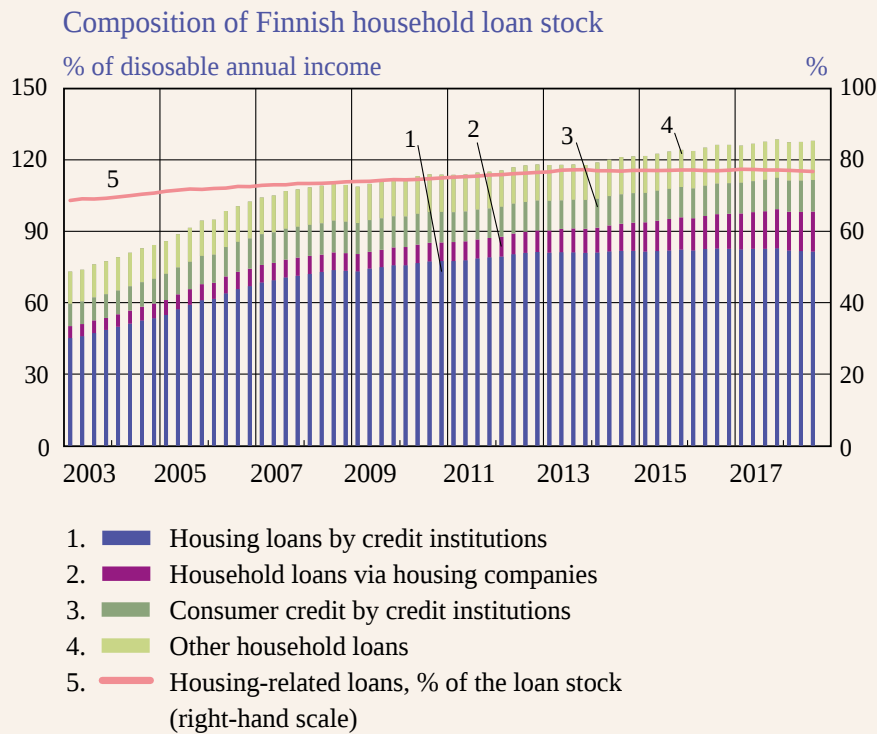
The Bank of Finland has highlighted the macroprudential risks related to higher levels of indebtedness and has analysed particularly housing company loans and the growth in consumer credit. The Finnish banking sector was reshaped in 2018 by the reorganisation of business activities at Nordic banks.

Finnish household indebtedness has already been rising for a prolonged period. Household debt relative to disposable income has doubled since the 2000, and in September 2018 it stood at 128%.

The majority of household debt is housing-related. The increase in the debt ratio in recent years is due in particular to housing company loans. Their annual growth rate has slowed, but has nevertheless remained higher than that of other household loans, at some 10% in 2016–2018.

Housing loans by credit institutions have grown at an annual rate of some 2% and other housing-related loans by some 4% per annum.

Chart 7.



The statistics do not include data on foreign credit institutions' online lending.

Sources: Statistics Finland and Bank of Finland.

Large percentage of housing company loans must be avoided

Housing company loans can cover as much as 70% of the unencumbered price of a dwelling. Such a large share of housing company loan poses risks particularly for new housing companies that do not make amortisation payments on the loan capital in the early years of the maturity period.

Housing company loans also involve joint and several liability of the housing company shareholders for the servicing of the loans. If a shareholder fails to pay the charge for financial costs, the other shareholders must bear it, in accordance with the principle of joint and several liability. This risk is heightened particularly if investors have financed a large share of the dwellings mainly via housing company loans.

The Financial Supervisory Authority issued a recommendation to credit institutions stating that they should, in the assessment of debtor repayment ability, take into account the impact of potential higher interest rates on the servicing expenses of housing loans.

In addition to financing the sales of new homes, housing company loans are traditionally used in renovations.

Indebtedness involves risks

The majority of consumer credit is granted by domestic credit institutions operating in Finland. Their stock of consumer credit has grown at an annual rate of some 5%.

Consumer credit is provided also by other entities, the largest of which are cross-border foreign entities, so called 'online lenders'. Thus far the reporting requirements for lenders other than credit institutions are not as tight as those for credit institutions.

The majority of household consumer credit is unsecured, and on average such credit causes credit institutions more problems than housing loans. The size of the consumer credit stock would require up-to-date and comprehensive data that would show the volume and allocation of debt as well as the related risks.

To prevent excessive debt accumulation, authorities are planning a positive credit register, which would provide lenders an overall picture of the customer's financial situation. The register would improve the lender's risk management, while at the same time enhancing households' ability to manage their finances.

The Bank of Finland has participated actively in a Ministry of Finance working group which was appointed in autumn 2018 with the task of assessing measures for preventing excessive debt accumulation by households and housing companies.

The significance of indebted households is highlighted in the event of a shock to the economy. In an economic downturn, indebted households cut consumption to be able to service their debt.

If the number of indebted households is substantial, this exposes the economy to large fluctuations in consumer demand. A notable decrease in consumption would impact the other sectors of the economy and would, for example, weaken the operating environment for business.

For example, during the 1990s recession, households sought first and foremost to service their housing loans by reducing consumption, which caused loan losses for domestic market companies. Companies, in turn, adjusted their operations via layoffs or redundancies.

The bankruptcies by bank customers resulted in an increase in loan losses, particularly in the corporate sector, and weakened banks' capital positions, meaning banks had to cut down on lending even more.

Reorganisations in the Finnish banking sector

The Finnish banking sector was reshaped in 2018 by the reorganisation of business activities at large Nordic banks.

Danske Bank merged with its Danish parent company at the start of 2018 and operates in Finland now as a branch and a mortgage credit bank. As a result of the merger, the Finnish banking sector's assets decreased by 10%.

A significantly larger change took place in October, as Nordea transferred its domicile to Finland, making the Finnish banking sector one of the largest in Europe relative to the size of the economy. The purpose of the re-domiciliation was to move Nordea to within the regulatory framework of the Banking Union.

The Finnish banking sector's capital ratios are higher than the EU average, based on indicators applied by the European Banking Authority (EBA). The low risk weights on loans applied by the banks that use internal ratings-based approaches have contributed to the strong capital position of the banking sector.

The leverage ratio of the Finnish banking sector is, however, close to the EU average. The difference is due to the fact that the calculation of the leverage ratio does not take into account risk weights. The banking sector's stock of loans is strong, and the share of non-performing assets is among the lowest in the EU.

Profitability in the Finnish banking sector weakened in the early part of 2018. Profitability was burdened particularly by large IT investments. In addition, net income from investment activities declined. But loan losses remained low. At the end of September, the Finnish banking sector's Common Equity Tier 1 capital (CET1) ratio was 20.4% and the total capital ratio was 22.8%.

The re-domiciliation of Nordea is expected to weaken the banking sector's fourth quarter 2018 CET1 ratio by 3 percentage points. But even then, the Finnish banking sector's capital position is expected to remain notably stronger than the EU average.

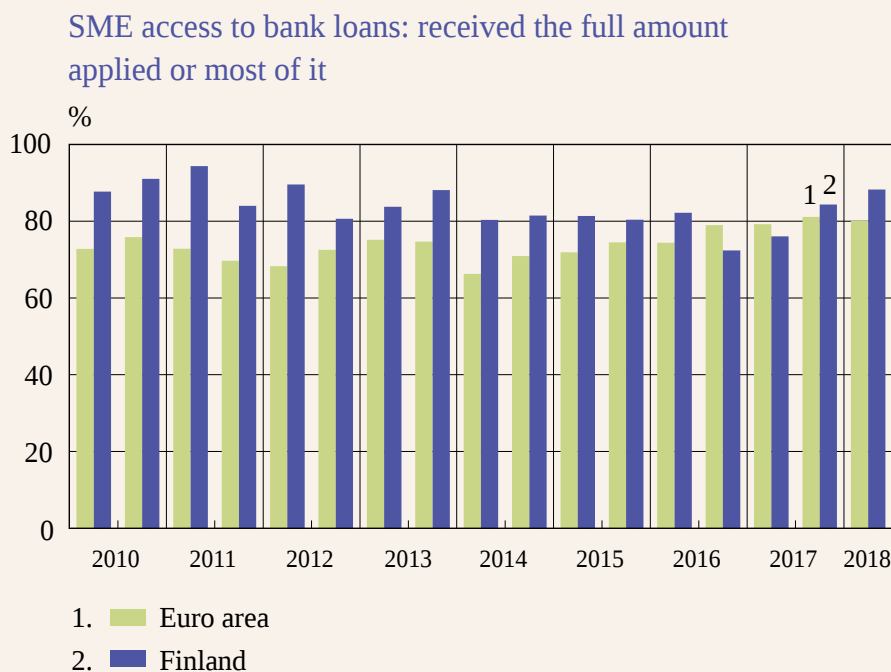
Finnish banks, including Nordea, which moved its domicile to Finland, passed the European Banking Authority's 2018 stress test successfully. The capital adequacy of the Finnish banks that participated in the test was well above the average for the other EU banks. A strong capital position contributes to maintaining banks' lending capacity.

SME access to bank finance among the best in Europe

The corporate sector debt-to-GDP ratio in Finland has since 2017 remained close to 115%. Credit institutions' lending to non-financial corporations operating in Finland began to pick up in summer 2018. The annual growth rate of the loan stock of non-financial corporations operating in Finland accelerated notably, and in December it was 5.4%. The average margin of new corporate loans has narrowed slightly.

According to a survey by the European Central Bank (ECB), Finnish SMEs do not have large difficulties in accessing bank loans. The situation has improved since 2017, and in the most recent survey, 88% of the SMEs that had applied for a bank loan reported that they were successful in obtaining the full amount requested or most of it (Chart 8).

Chart 8.



The latest observations are for April–September 2018.

Source: ECB Survey on the Access to Finance of Enterprises in the euro-area.

Higher risks on the international financial markets

For the international financial markets, 2018 was a more turbulent year than its predecessor. Share market sentiment was subdued and volatility was higher than usual for most of the year.

The key financial stability risk in the euro area was Italy, where growing concerns about the sustainability of sovereign debt triggered a rise in government bond yields in May.

The third major international financial stability risk to Finland was related to risks on the Swedish housing market. The decline in housing prices came to a halt in the early part of the year, but uncertainty remained higher than usual.



Bank of Finland participated in the preparation of tools that support financial stability

In 2018, the measures related to financial stability were the preparation of a systemic risk buffer and the development of macroprudential tools and financial regulation.

In early 2018, a systemic risk buffer requirement was incorporated into Finnish legislation to mitigate risks stemming from the structural characteristics of the banking system.

Authorities may impose on credit institutions an additional own funds requirement for mitigating long-term non-cyclical macroprudential or systemic risk in the financial system not covered by the EU's Capital Requirements Regulation and with the potential to have serious negative consequences for the financial system and the real economy in a specific Member State.

The decision on setting a systemic risk buffer and on the size of the buffer is taken by the Board of the Financial Supervisory Authority. The decision must take into account the risk factors that measure the structural vulnerability of the banking system, included in the Credit Institutions Act, as well as the related risk indicators, laid down in the Ministry of Finance Decree.

New capital requirements will enter into force in July 2019

Finland's credit institutions sector is concentrated and, following the transfer of Nordea's domicile, also extremely large relative to the size of the economy. In addition, it is strongly interconnected with the financial systems of the other Nordic countries.

Serious difficulties encountered by credit institutions could weaken financial intermediation significantly and thereby have a considerable negative impact on the real economy. In addition, Finnish credit institutions have risk concentrations in common, such as housing loans and receivables from construction and real estate sector companies.

The Board of the Financial Supervisory Authority decided on 29 June 2018 to impose on all Finnish credit institutions a systemic risk buffer requirement the size of which varies between 1% and 3%. The new capital requirements will enter into force in July 2019.

Bank of Finland provided strong support to the development of macroprudential tools

As part of the preparation of macroprudential decisions, the Bank of Finland delivered in 2018 six opinions on proposals by the Director General of the FIN-FSA for the deployment of macroprudential tools.

In its opinions, the Bank of Finland supported, for example, the decision taken by the FIN-FSA to tighten the maximum loan-to-collateral (LTC) ratio for residential mortgage loans other than first-home loans and to raise the minimum risk weight for residential mortgage loans from 10% to 15%.

The Bank of Finland also supported the decision taken by the FIN-FSA Board not to activate the countercyclical capital buffer requirement.

The Bank of Finland participated in a Ministry of Finance working group assessing measures to curb household indebtedness. The task of the working group is to assess means of mitigating excessive debt accumulation by households and its consequent adverse effects on the real economy. In addition, the working group will prepare legislative proposals for achieving the objectives.

The tools enabled by current legislation should be complemented with income-based tools that would mitigate excessive debt accumulation by households. The term of the working group expires on 30 August 2019.

The Bank of Finland participates in the development of financial regulation

The Bank of Finland has supported, for example, the development of a positive credit register. The register would include comprehensive data on household credit and would provide lenders with an up-to-date picture of the related risks.

The Bank of Finland has also contributed actively to discussions on the development of the Banking Union and Capital Markets Union. The Bank of Finland has emphasised in particular, the importance of completing the Banking Union and one of its pillars, common deposit insurance, to ensure the stability of the banking and financial system.

The Bank of Finland has also participated actively in the development of crisis management capabilities of the financial market authorities. The Bank has cooperated closely with domestic authorities to clarify the allocation of crisis management responsibilities and tasks.

The Bank of Finland has also cooperated with the Eurosystem and the Nordic authorities. The latest Nordic-Baltic Memorandum of Understanding (MoU) was issued in January 2018.



The Bank of Finland produced new statistical data and timely analyses

The Bank of Finland constructed a credit data system and launched a machine learning project to revamp the quality control of statistical data.

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

The Bank of Finland developed information systems necessary for the collection and processing of national credit data. Credit institutions reported their first granular credit data in October–November 2018. The Bank of Finland reported the data to the European Central Bank (ECB) in December 2018.

The Bank of Finland has contributed actively to the development of a pan-European Integrated Reporting Framework. Finland has long experience of combining several reporting frameworks into an integrated reporting framework. The scope of the data content to be incorporated was assessed in cooperation with banks in 2018.

The Bank of Finland launched a project for the development of payment statistics. The reform of payment statistics reflects the new Eurosystem requirements and national needs. Statistical reporting in accordance with the new framework will start in 2021, as a result of which we will obtain more detailed statistical information on the major changes taking place in the field of payments.

Machine learning enhances quality control

At present, the Bank of Finland already collects large volumes of granular securities and credit data. But we also need new methods and practices for ensuring the quality of the data and for processing the information for decision-making purposes.

The Bank of Finland launched a project that utilises machine learning. The quality control of statistical information is traditionally based on the rules defined by experts, whereas in machine learning, programs adjust themselves independently, based on the data. The purpose of using machine learning is to identify more effectively interdependencies between variables and deviations in the data. The results of the development project will be finalised in 2019.

The Statistics unit is actively analysing new areas in which to apply the experiences gained in the project.

Dynamic visualisation and data collection

The Bank of Finland launched for the users of banking statistics a new type of [dynamic visual tool](#) in November 2018. It provides new information on loans and deposits by showing more detailed information on the special features of the economy.

The Bank of Finland illustrates its statistics also with [videos and animations](#) and provides information on topical issues via an [image carousel](#).

In 2018, the Bank of Finland launched a data collection targeted at crowdfunding entities and peer-to-peer lenders and published [new data](#) on the issue. Crowdfunding and peer-to-peer lending are not yet significant in volume in Finland, but are rapidly growing phenomena.

The Bank of Finland produced also for its website new information on [private equity funds](#) and started to publish information on credit institution [market shares](#).



Influence and cooperation

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Influence and cooperation

26.4.2019

The Bank of Finland's influence is based on expertise and research. The Bank's research activities focus on the macro economy and financial markets and, in particular, on Russia and China. The Bank's analyses are objective and independent, even when they express a position on domestic and global economic issues. The Bank's communications are transparent, a key aim being to improve the financial literacy of the general public.

The Bank of Finland's analyses and forecasts for the domestic and global economies provide tools for projecting and monitoring economic developments. They are also a valuable data source for the media and members of the public interested in economic issues.

Vigorous, high-quality [research](#) at the Bank of Finland supports the Bank in monetary policy preparation and conduct of macroprudential policy tasks.

The Bank of Finland participates in the work of various international organisations and institutions and cooperates closely with the national central banks of other countries.

Finland's economy grew in 2018

The Finnish economy has now been growing for about three years, after a protracted period of weak economic developments. The Bank of Finland estimates, however, that growth will remain more moderate than prior to the financial crisis. Employment has increased at a brisk pace, but the conditions for raising the participation rate still need further improvement. It is also essential to take care of competitiveness.

The Bank of Finland communicates with all citizens

Demand for reliable financial information has increased following the financial crisis. The Bank of Finland pursues an active dialogue on key economic issues in various fora. For example, regional visits by the Bank's Board members and experts, educational cooperation and new digital communication channels are important tools in the Bank's interaction with the general public.



The Bank of Finland and domestic economic policy

26.4.2019

In 2018, the Bank of Finland emphasised the importance of fiscal sustainability, employment and the conditions for productivity growth.

In 2018, the Bank of Finland analysed developments in both the domestic and the global economy and participated in economic policy discourse in Finland. Bank of Finland analyses were widely presented on the Bank's website. Representatives of the Bank were consulted on several occasions by Parliament and also presented their assessments in other domestic fora, including seminars and the media.

The Bank of Finland's statements relating to domestic economic policy are based on the Bank's regulatory and democratically determined objectives and independence. 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's statements are based on expert knowledge and relate mainly to the identification of problems and assessment of the potential effects of the alternatives for action. In the area of economic policy, setting the ultimate goals and decision-making is the task of elected representatives.

Public finances still need strengthening

In 2018, economic policy decisions were taken in a situation in which the Finnish economy had grown for about three years, following a protracted period of weak economic developments.

The Bank of Finland pointed out that the euro area's accommodative monetary policy continued to support economic growth in Finland. Lending rates remained low and the euro area economy, important to Finland's exports, was continuing to grow

The condition of Finland's public finances has improved. The general government deficit and debt have decreased relative to GDP. This has reflected both fiscal consolidation measures and the improvement in overall economic developments.

However, population ageing is expected to weaken the fiscal balance over the next decade, and fiscal sustainability over the long-term has not been secured. According to the Bank of Finland's December 2018 assessment, the sustainability gap in Finland's public finances is about 3% relative to GDP.

The management of public debt would be less problematical if the outlook for long-term economic growth corresponded to economic developments in recent decades. According to the long-term assessment published by the Bank of Finland in June 2018, however, economic growth will remain more sluggish than prior to the global financial crisis. Statistics Finland's population projection published in November 2018 contributed to weakening the long-term growth outlook still further.

While the fiscal balance had been strengthened in previous years, in 2018 fiscal policy is assessed to have relaxed. In 2019, the fiscal stance is forecast to remain broadly unchanged.

The Bank of Finland pointed out that a more determined strengthening of the public finances would be justified, considering the sustainability gap and the favourable cyclical conditions.

Sustainable rise in employment rate important

The employment rate is very important to the long-term outlook for the public finances. As the Finnish economy has recovered in recent years, so, too, has the employment situation improved. This has partly reflected improvements in the competitiveness of Finnish labour and production in response to the Competitiveness Pact and moderate wage settlements. The Bank of Finland stressed that it is important to take a variety of measures to further improve the conditions for a sustainable rise in the employment rate.

Labour productivity is a key contributory factor to long-term economic growth. Developments in Finland's labour productivity were very weak for several years, both historically and compared with other advanced economies. With the economic recovery, labour productivity has improved, too. However, in 2018, labour productivity growth appears to have weakened again slightly.

Over the long term, productivity growth is largely driven by innovations and the adoption of new technologies. The Bank of Finland emphasised that education, research and product development are key factors for innovation. The conditions for labour productivity growth can also be strengthened with policies that improve the allocation of economic resources. Such measures include promoting competition and maintaining healthy labour markets.

Household debt grew further in 2018, and total household expenditure was still higher than income. In managing the risks associated with the accumulation of household debt, the Bank of Finland stressed the importance of macroprudential policy and housing policy.



Forecasting of the Finnish economy

26.4.2019

The Bank of Finland published two macroeconomic forecasts for the Finnish economy in 2018. The Finnish economy is booming for the first time in many years, but growth will slow noticeably in the next few years.

The Bank of Finland draws up forecasts primarily to support monetary policy preparation and decision-making. Ongoing monitoring of domestic economic trends and analysis of economic structures are also key elements of the Bank's forecasting activities.

Forecasts are essential in monetary policy preparation

The key objectives of monetary policy are euro area price stability and balanced real economic developments. The preparation of euro area monetary policy and analysis of the related effects necessitate independent, analytical assessment of economic developments in the immediate years ahead. The short-term inflation forecast for the euro area is a key indicator in assessing euro area price stability and the stance of monetary policy.

The requirements of the single monetary policy in the euro area lay the foundation for forecasting at the Bank of Finland and the forecast for the Finnish economy is produced as part of the Eurosystem's macroeconomic projections.

The Bank of Finland's Monetary Policy and Research department is responsible for the domestic forecast in cooperation with the ECB and the Eurosystem.

Finland's economy booming

In June 2018, the Bank of Finland projected that economic growth would continue and remain broadly based. At the same time, Finland was moving from an upswing to a boom. Investment and exports are fuelling growth, while higher employment and purchasing power are supporting consumption.

In its June forecast, the Bank of Finland estimated economic growth would strengthen to 2.9% in 2018. Growth was anticipated to slow to 2.2% in 2019, and further, to 1.7% in 2020, reflecting Finland's subdued long-term growth prospects.

Economic growth stemmed from strong global demand, improved cost-competitiveness, robust employment growth and an accommodative monetary policy. Brisk growth in the global economy and strong momentum in the euro area have increased investments in export markets of importance to Finland.

Growth fuelled by domestic demand

In December 2018, the Bank of Finland projected slower growth compared with the June forecast. The Bank stressed that the boom was continuing and that the fundamentals for continued economic expansion remained in place, as euro area monetary policy was underpinning growth.

According to the December forecast, economic growth had passed its peak and GDP growth would moderate to 2.7% in 2018. In 2019, GDP growth would ease to 1.9%, after which it would abate further and converge towards its long-term potential rate, i.e. to 1.4%, by 2021.

According to the December forecast, growth was fuelled by domestic demand. Private consumption was particularly strong due to robust employment growth. Export growth, in turn, would slow noticeably and fall behind growth in the export markets. The weakening of the international operating environment began to show in several short-term economic indicators during 2018. Lower residential construction was expected to markedly dampen investment growth.

The Bank of Finland produced a short-term inflation forecast as part of the euro area four times in 2018. The inflation forecast is also a key element of the macroeconomic forecast. According to the inflation forecasts, the rise in the general level of prices will remain moderate in the immediate years ahead.

In the forecasts for the Finnish economy, the key downside risks stemmed from the weakening of the global operating environment and rising protectionism. Political uncertainty increased and the outlook for the euro area economy deteriorated towards the end of the year. Overall, concerns about global economic developments increased noticeably during 2018.

The importance of model forecasts and economic analyses

The Bank of Finland draws up its forecasts for the Finnish economy using the Aino model as its main forecasting tool. The model captures interdependencies between the key Finnish macroeconomic variables.

Development of the Aino model is an ongoing process. In 2018, the Bank of Finland continued the project established in 2017 to better incorporate Finnish housing markets and banks' housing loans to households into the model. The revised Aino is scheduled for introduction in 2019.

In preparing its forecasts, the Bank of Finland also drew heavily on short-term indicator models which [nowcast short-term GDP developments](#).

The Bank of Finland also participated in the ECB's project groups and seminars, the findings of which were utilised in domestic economic forecasts and analyses. In addition, the Monetary Policy and Research department participated actively in the production of monitoring and analysis reports on the Finnish economy published on the [Bank of Finland Bulletin website](#).

The website was also used for publishing several calculations and articles assessing the effects of both domestic and global factors on the Finnish economy. These paid particular attention to the labour market and productivity developments. Analysis relating to households has also been important.

The Bank of Finland actively provided information on the Finnish economy to different media, including social media. Presentations given to the Bank's various domestic and foreign stakeholders were also important.



Bank of Finland research supports monetary policy preparation

26.4.2019

Research of high international quality supports the preparation of monetary policy at the Bank of Finland and underpins the Bank's influence in the Eurosystem.

The Bank of Finland conducts research mainly in the Research unit of the Monetary Policy and Research department and the Bank of Finland Institute for Economies in Transition (BOFIT). In addition to own researchers, both of the units have an active visiting researchers' programme and employ academically renowned external advisers.

Research at the Bank of Finland focuses on the macro economy, monetary policy, macroprudential policy, financial markets and emerging economies.

Drawing on the work of researchers and their research findings in the preparation of policy measures and development of analysis tools is an integral part of the Bank of Finland's strategy.

A new version of Aino (see [Forecasting of the Finnish economy](#)), the Bank of Finland's key macroeconomic model, is under construction. The new version will incorporate housing markets and will enable better examination of the effects of various macroprudential instruments.

Researchers at BOFIT have, among other work, participated in various research projects dealing with the implications of China's economic slowdown for the euro area and the global economy.

Research findings published in international journals

The Bank of Finland aims to have the findings of its research published in high-quality scientific journals. In 2018, the *Journal of Money, Credit and Banking*, for example, published a Bank of Finland research work on the optimal mix of monetary and macroprudential policies. Another study by the Bank published in the same journal focused on the connection between households' forecast errors and overindebtedness.

According to a research paper published in the *Journal of International Financial Markets*, bank liquidity creation varies according to business cycle fluctuations. A study published in *Quantitative Economics* extended the methods used in assessing macroeconomic models.

A research paper published in the *International Journal of Central Banking* compared the indicators measuring vulnerabilities in the financial system.

Finally, a study published in the journal *Research in International Business and Finance* finds that Nordic banks fared better than other banks during the crises of 2008 and 2009 because they had retained their lessons from the Nordic banking crises of the early 1990s.

Bank of Finland discussion papers

Research conducted at the Bank of Finland is typically published initially as discussion papers. In 2018, a total of 26 discussion papers were published in the Bank of Finland Research Discussion Paper series and 23 in the BOFIT Discussion Paper series. The topics of the discussion papers included:

- equity risk premium and the term structure of interest rates
- the link between demography and inflation
- distortions in Chinese GDP statistics
- the impact of private information on banks' credit decisions
- the impact of fiscal policy on the effectiveness of forward guidance
- the efficiency of Chinese banks
- developments in macroeconomics since the financial crisis
- comparison of macroeconomic forecasting methods
- effects of monetary policy decisions on professional forecasters' expectations.

In addition to these, the Bank of Finland had several other research projects ongoing in 2018. One of these examines the impact of economic agents' cognitive abilities on the transmission of economic policy. The project has already attracted international attention. Another project studies the impact of Western sanctions on the contraction of capital flows into Russia.

Bank of Finland research in the media and elsewhere

The attention received by the research findings in the media, at scientific conferences and at Eurosystem events is important, as this increases the relevance of the findings.

In 2018, the Bank of Finland's researchers published two blog posts in [VoxEU](#). The Financial Times examined the Bank's research work on European Banking Union and the Capital Markets Union. Three of the Bank's research works were presented in Eurosystem committees and working groups.

BOFIT participated in a joint research project of the European System of Central Banks that studied the implications of China's economic slowdown for the euro area. The project findings were published in the ECB's *Occasional Paper Series*.

International conferences and workshops

Each year, the Bank of Finland organises several international scientific meetings.

In January, the Research unit co-organised with the Research Institute of the Finnish Economy a seminar entitled *Safe Assets, Sovereign Debt and Financial Stability*. Speakers at the seminar included **Philip Lane** from the Central Bank of Ireland and **Sylvie Goulard** from Banque de France.

In June, BOFIT co-organised with the University of Strasbourg a workshop on the transmission channels between the financial system and politics (*Workshop on Finance and Politics*).

In June, the Research unit co-organised with CEPR a research conference entitled *Money in the Digital Age*. The conference was part of a wider series of events. The keynote speakers were **Bengt Holmström** (Massachusetts Institute of Technology) and **Hyun Song Shin** (Bank for International Settlements).

At the beginning of December, BOFIT co-organised with the City University of Hong Kong and Fordham University a conference on the effects of China's economic reforms during the last four decades. The keynote speakers at the conference were **Shang-Jin Wei** (Columbia University) and **Gérard Roland** (University of California – Berkeley).

In addition to conferences, the Bank of Finland organises high-quality research seminars almost every week.



Bank of Finland and international cooperation

26.4.2019

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 9.



We are an influential member of the ESCB and the Eurosystem.



We participate in the activities of EU institutions and committees.



We participate in the activities of international organisations.



We maintain contacts with Nordic central banks.

Bank of Finland as an active participant in international cooperation

[Read more on international cooperation in the dedicated blog post on the Bank of Finland Bulletin website.](#)

Bank of Finland is responsible for Finland's relations with the International Monetary Fund

The International Monetary Fund (IMF) is an organisation of 189 member countries, working to foster international cooperation, foreign trade, sustainable economic growth and financial stability. The Bank of Finland is responsible for Finland's relations with the IMF.

The Governor of the Bank of Finland, **Olli Rehn**, has been Finland's representative on the highest governing body of the IMF, the Board of Governors, since 1 November 2018.

The Bank of Finland also influences the activities of the IMF via the Nordic-Baltic constituency's joint representative on the Executive Board of the IMF. The Bank of Finland and the Finnish Ministry of Finance participate in preparation of the constituency's policy positions in matters discussed by the Executive Board.

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.

In 2018, the Bank of Finland participated in the IMF's Spring and Annual Meetings, one of the most important fora for discussions on issues of global concern. In the Annual Meetings held in October in Indonesia, Finland played a prominent role as chair of the Boards of Governors of the IMF and the World Bank Group (WBG). An opening address to the Annual Meetings was given by Finland's Minister of Finance **Petteri Orpo**. Until July, the tasks relating to Finland's chairmanship were the responsibility of Governor **Erkki Liikanen**.

The International Monetary and Financial Committee (IMFC) convened in connection with the Spring and Annual Meetings to discuss the global economic outlook, international financial stability and current economic policy challenges.

Despite strong global economic growth, the discussions were dominated by concerns about increased downward risks and political uncertainty. The IMFC also emphasised the need to strengthen policy buffers and implement measures supporting sustainable and inclusive growth. The international community encouraged the resolving of trade conflicts without recourse to protectionism.

[Read Governor Rehn's blog post on the IMF Annual Meetings.](#)

In 2018, the Bank of Finland continued the financial assistance aimed at poor countries by extending, by five years, the deposit of about EUR 7.1 million¹⁾ in an account administered by the IMF. The interest income on the deposit will be given to the IMF to support the catastrophe trust established in 2015. The trust allows the IMF to swiftly provide debt relief for poor countries hit by catastrophic natural disasters or infectious diseases.

Bank of Finland participates in the work of EU institutions and committees

The Bank of Finland is a member of the European Union'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 (ECOFIN).

In 2018, the EFC convened ten times in its full composition, i.e. with the national central banks. In its meetings, the EFC discussed, among other things, the condition of the European financial system and themes relating to the deepening of Economic and Monetary Union, such as completing of the Banking Union and the Capital Markets Union.

The EFC also prepared joint policy views for international meetings and discussed topical international issues, such as reforming of the global financial architecture.

The Bank of Finland 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.

Issues discussed by the ESRB in 2018 included the risks to financial stability in the EU, macroprudential policy in the Member States, cybersecurity in the financial system and development of monitoring of the derivatives markets.

In 2018, the Bank of Finland co-organised with the ESRB and RiskLab Finland, for the fourth time, a conference focusing on systemic risk analytics.

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 2018, the specific themes of discussion included the financial stability implications of low interest rates, macroprudential tools needed for the housing markets, and artificial intelligence and machine learning in the financial sector.

Governor Erkki Liikanen participated in the annual BIS conference entitled *Ten Years After the Great Financial Crisis: What Has Changed?* Governor Liikanen chaired the session dealing with changes in the financial system.

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 central bank issues and other relevant matters.

In 2018, the governors met in Reykjavik, Iceland and discussed monetary policy, central bank regulation, digital central bank money and the completion of the Banking Union.

There were over 50 events organised in 2018 to promote cooperation between Nordic central bank experts. These events covered a wide array of different departmental activities. Together with the other Nordic central banks, the Bank of Finland also organised in 2018 a cybersecurity-themed conference in Helsinki entitled *Cyber in Finance*.

Training cooperation with the Bank of Russia continues

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 2018, the Bank of Finland organised three training sessions with the Bank of Russia; two at the Bank of Finland and one in Russia. The training topics included early warning indicators of financial stability risks, supervision of payment systems and organisation of inspection of IT functions.

1) SDR 5.8 million (SDR = Special Drawing Rights).



Bank of Finland's communication rests on genuine dialogue

26.4.2019

In 2018, the Bank of Finland maintained close dialogue with the general public. In addition to presenting the activities of the Bank and the Eurosystem, the purpose of meetings and events was to create the conditions for genuine dialogue.

Following the financial crisis, central bank communication has become a fundamental part of the monetary policy toolkit. Monetary policy communication is, however, mainly directed at central banks' traditional audience – economic experts.

In 2018, the Bank of Finland communicated actively with a broader audience. Besides the traditional topics relating to monetary policy, financial stability and the domestic economy, in its events intended for the general public the Bank also discussed themes such as digitalisation, financial literacy, the sufficiency of cash and the payments revolution.

Bank of Finland promotes financial literacy among the young

Young people are one of the Bank of Finland's key target groups. Members of the Board and other experts from the Bank visited educational institutions across the country and arranged educational sessions for teachers together with the Bank's partners.

The Bank of Finland Museum hosted the Finnish final for the euro area-wide Generation Euro Students' Award competition. The winning team, which was awarded a trip to the ECB, was Ålands lyceum – for the second consecutive year. The Museum also attracted young people with a panel discussion in which popular blogger and author **Julia Thurén** and **Juha Panzar**, Executive Director of Guarantee Foundation, discussed financial literacy.

Board members visited regional centres

The Bank of Finland visits the Finnish regions on a regular basis. During these visits, experts from the Bank and Board members get to know people and their sources of livelihood in the various regions and hold discussions with local entrepreneurs, students and authorities.

Each visit typically has its own theme, such as digitalisation when **Olli Rehn**, the then Vice Chairman of the Bank's Board, visited Oulu. During the visit to Rauma led by Board member **Marja Nykänen**, a group of the Bank's experts examined the prospects for the energy sector. In 2018, Board members visited Oulu, Rauma, Lappeenranta, Mikkeli, Pori, Turku and Joensuu.

More diverse selection of communication channels

The Bank of Finland uses seven different social media channels, of which the most recent is Facebook, which the Bank joined in 2018. Of the various social media tools, Bank of Finland experts use above all Twitter. At the end of the year, over 90 employees of the Bank of Finland and the Financial Supervisory Authority used their own Twitter accounts to participate in discussions and, for example, share links to their own articles or those of their colleagues.

There was a vast array of material to be shared: in 2018, the Bank of Finland published online five extensive issues of *Euro & talous* – and its English version, the *Bank of Finland Bulletin* – and a large number of expert articles and blog posts.

Despite the extensive use of social media, traditional media are still the primary source of information for the general public. For financial journalists and editors, the Bank of Finland organised events focusing on, for example, the outlook for the Finnish economy, cash and monetary policy. In addition, in November, Governor Rehn met representatives of the international media reporting on the Eurosystem in Frankfurt.

Bank of Finland Museum exhibits Civil War and cash

The Bank of Finland Museum, which operates as the Bank's visitor centre, attracted almost 15,000 visitors during the year. At the beginning of 2018, the Museum held an exhibition on the Bank's activities during the Finnish Civil War of 100 years ago. The exhibition presented the effects of the Civil War on the Finnish economy and on payment instruments.

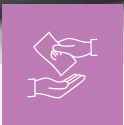
In October, the Museum opened an exhibition of the best pictures submitted for a money-themed photography contest. The exhibition, entitled *Happy Money*, presents the multitude of connotations relating to cash.

Governor Liikanen hosted Open Doors for the last time

The Bank of Finland's Open Doors event was held in May 2018 for the fifth time. The leading role was played by an art exhibition displaying works in the Bank of Finland's art collection presented by volunteers from the Bank. The visual art was complemented by musical performances given by leading young pianists. In addition, experts from the Bank of Finland and the Financial Supervisory Authority gave short presentations on the economy and the main building and history of the Bank of Finland.

As new features, Open Doors 2018 presented literature and cinematography. Governor **Erkki Liikanen** hosted a discussion event in the Museum focusing on the year 1918 in literature and research.

The Museum also screened *Peter von Bagh's* film *Suomalaiset ja raha – rakkaustarina* ('*The Finns and Money – A Love Story*'), the director's own personal perspective on the history of everyday life. The documentary was accompanied by music from the films of **Aki Kaurismäki**.



Money and payments

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Money and payments

26.4.2019

The Bank of Finland ensures the availability and issuance of cash in Finland. In addition to domestic cash supply, the Bank is also responsible for certain tasks relating to the development and security of payment systems.

In 2018, topical issues were the digital payment methods that have emerged alongside cash and payment cards. The new payment methods and channels necessitate financial literacy among the general public and an understanding of the related security risks.

In its statements, the Bank of Finland emphasised the importance of payment system security and oversight. The Bank was also engaged in various ways in preventive work against disruptions in payment systems and cyber risks. In addition, the Bank participated in many domestic and euro area development projects in the field of payment systems. The Bank also coordinates the Payments Council, which brings together users and providers of payment services.

In 2018, the Bank developed its collateral management system and the TARGET2 payment system maintained by the Eurosystem, through which banks settle payments between each other via accounts held in their respective central banks.

Availability of cash services must be ensured also in the future

Even though the amount of cash in circulation increased further in 2018, the supply of cash services has weakened steadily since the turn of the millennium. In November, the Bank of Finland published its guiding principles for the maintenance of cash services.

According to the Bank's guiding principles, bank customers must, for example, be entitled to make a reasonable number of cash withdrawals at no charge. The Bank of Finland's view is that cash must continue to be accepted as a means of payment for services of critical importance to the public.

The Bank of Finland organised a conference entitled Money in the Digital Age, which examined various innovations and monetary policy measures to further develop digital payments. The keynote speakers at the conference were Nobel Laureate Professor Bengt Holmström and Hyun Shin, Head of Research at the Bank for International Settlements. The Bank of Finland also organised, among other things, a Nordic conference on cyber security.



Cash issuance continues to increase

26.4.2019

The Bank of Finland ensures the availability and issuance of cash as part of the Eurosystem. It withdraws unfit banknotes from circulation and replaces them.

The Bank of Finland ensures the efficiency of cash supply and management in Finland together with other stakeholders. Operational cash supply and management is governed at the euro area level by common rules and at the national level by cash supply agreements concluded with relevant stakeholders.

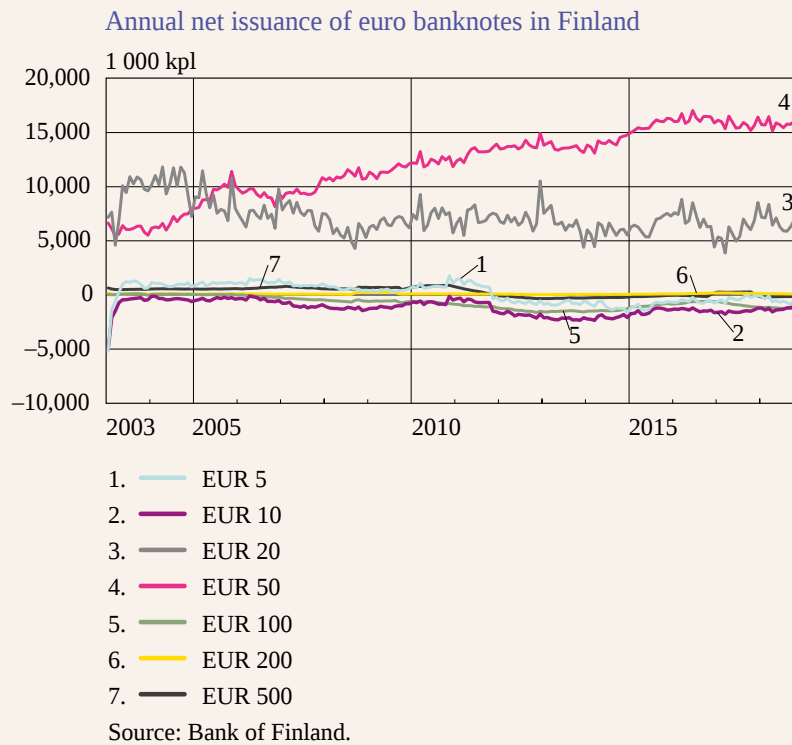
Amount of cash in circulation continued to increase steadily

Cash issuance increased further in 2018, despite media reports of a waning trend in the use of cash.

Compared with 2017, 8% more EUR 50 banknotes were issued. Greater numbers of both EUR 50 and EUR 20 banknotes are issued than returned to the Bank of Finland. As ATM denominations they are easy to withdraw, and they are also often taken abroad.

Other denominations are issued in small numbers, or the number of banknotes returned to the Bank of Finland exceeds that of new banknotes issued (Chart 10).

Chart 10.



Bank of Finland published its principles for the maintenance of cash services

There has been a steady reduction in the supply of cash services in general since 2000, a trend also reflected in the number of bank branches offering cash services.

In November, the Bank of Finland published its set of guiding principles for the maintenance of cash services. Through these [cash principles \(see Tuomas Välimäki's speech on bankoffinland.fi\)](#), the Bank of Finland influences the evolution of cash services and supports the FIN-FSA in assessing the effective provision of basic banking services.

Chart 11.



1. Bank customers have the right to make deposits to and withdrawals from their bank account.

2. Bank customers must be entitled to make a reasonable number of cash withdrawals at no charge.

3. Small businesses and associations should be viewed as private customers with regard to their use of cash services.

The Bank of Finland's guiding principles for the maintenance of cash services

4. Cashback services offered by retail stores at checkout must be equally available for all customers.



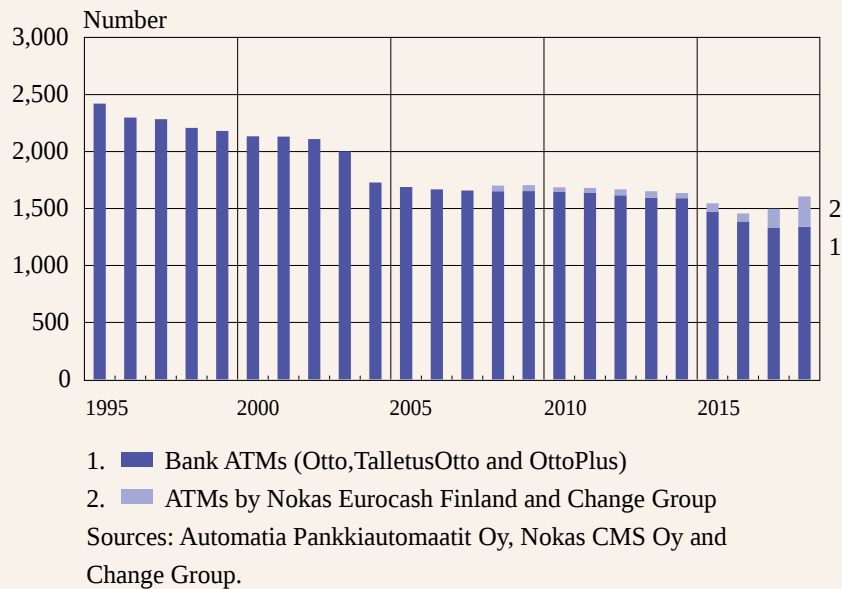
5. Cash must be accepted as means of payment for services of critical importance to the public.

In the Bank of Finland's consumer survey conducted in October 2018, 84% of respondents were satisfied with the availability of cash. The share of satisfied respondents remained unchanged from 2017.

The share of those satisfied with the number of ATMs increased by 4 percentage points, to 66%. At the end of 2018, there were 1,339 ATMs operated by Automatia and 267 ATMs operated by other service providers, which meant a slight increase in the ATM network compared with the previous year.

Chart 12.

Banks' joint ATM network and other ATMs



Eurosystem unveiled new EUR 100 and 200 notes that complete the second series of banknotes

The European Central Bank (ECB) unveiled the new EUR 100 and 200 banknotes in September. The architectural styles depicted in the EUR 100 banknote are baroque and rococo, while the EUR 200 banknotes feature 19th century iron and glass architecture.

The new banknotes are slightly narrower than the old, but their length remains unchanged. This makes the banknotes of the second series fit more easily in the wallet, yet allowing them to be recognised on the basis of their length. The Bank of Finland will start issuing the new banknotes on 28 May 2019.

Only a small percentage of the EUR 5, 10 and 20 banknotes that are returned to the Bank of Finland are from the first series. In September, the Bank of Finland stopped the recirculation of old EUR 50 banknotes via its sorting machines.

At the end of the year, nearly 70% of the EUR 50 banknotes that came in for sorting were from the new series.

The Bank of Finland sold surplus coins to the Ministry of Finance

Banknotes are the responsibility of the ECB, whereas [euro coins \(link to bankoffinland.fi\)](#) remain under national competence.

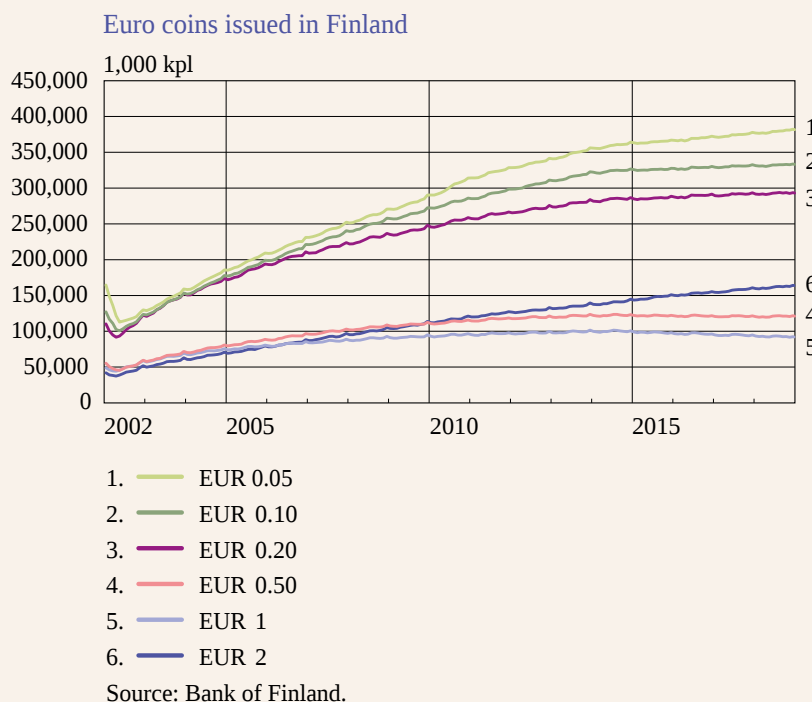
In Finland, the Ministry of Finance mints coins based on the needs calculated by the Bank of Finland and then sells them to the central bank at their nominal value for issuance. In the same manner, the Bank of Finland may sell its surplus coins to the Ministry of Finance. The Bank of Finland has made use of this possibility a few times during the euro era.

In 2018, the Bank of Finland sold to the Ministry of Finance EUR 1 and 0.50 coins, as they were returned to the central bank in greater numbers than they were issued. The same phenomenon can also be observed for the other denominations, with the exception of EUR 2 and 0.05 coins.

Surplus coins can also be shipped to other euro area countries that have a shortage of coins. Only as a last resort are surplus coins melted down and their material recycled.

For instance, the Bank of Finland accumulates EUR 0.01 and 0.02 coins, as these small denominations are valid for payments in Finland, despite the practice of rounding up and down of cash prices. Instead of being destroyed, these coins have been exchanged with Estonia and Latvia for other denominations.

Chart 13.



Oulu regional office will close in March 2019

The Bank of Finland monitors the cash flows of its offices and regularly assesses their operations.

In June, the Board of the Bank decided to close the regional office in Oulu on 31 March 2019. With regard to the personnel, the closure was implemented by means of retirement arrangements and transfers to the Vantaa office.

The cash flows of the Oulu office have steadily decreased, and no reversal of the trend could be seen on the horizon. However, the Bank of Finland will not withdraw from Oulu completely and will seek to continue providing stakeholders in northern Finland with the tools to secure cash supply.

After the closure decision, a project was launched with the aim of purchasing the requisite cash supply services from private sector entities. In addition, the Bank of Finland will offer the parties involved in cash supply the possibility to use the Notes Held To Order (NHTO) custodial system. The cash held in the NHTO system can be transferred to the Bank of Finland's ownership in a separately agreed manner, and no physical cash needs to be placed in the custody of the central bank.

These solutions are aimed at further enhancing the local circulation of cash. In the future, the Bank of Finland will concentrate its operational cash supply and management activities at its Vantaa office.

Number of counterfeits slightly up

There was a slight increase in the number of [euro counterfeits \(link to bankoffinland.fi\)](#) detected in circulation. In Finland, a total of 833 counterfeit euro banknotes and 847 counterfeit euro coins were found.

On the European scale, the number of counterfeits detected in Finland is very low, and the public can continue to trust their banknotes.



New payment methods: opportunities and risks

26.4.2019

One of the Bank of Finland's statutory tasks is to help maintain the reliability and efficiency of the financial and payment systems and to take part in their development. Changing payment methods highlight the importance of cyber security and necessitate financial literacy among the general public.

New digital technologies, payment methods, payment systems and service providers – such as smartphone applications for payments and instant payment systems – are changing the way people pay.

The new solutions may involve splitting payments into a broader set of services than before, merging them into another service or making them real-time. The changes highlight the importance of good financial literacy among the general public.

Payments Council brings together actors in the field of payment services

The Bank of Finland coordinates the Payments Council, which brings together associations representing the users and providers of payment services, the largest banks and the authorities in charge of payment services.

In 2018, the Payments Council published an e-booklet on financial literacy in the 2020s ([Talouselämä 2020-luvulla, pdf](#)) and established a task force on progress towards real-time payments in Finland. The twelfth Payments Forum, organised in May, also dealt with changes in the field of payments.

Preventive work against disruptions and cyber risks

The financial system must work reliably also in the event of serious disruptions. The Bank of Finland has actively participated in discussions on the development of national contingency measures.

Ensuring cyber security is an important element of the reliability of electronic payments. The Bank of Finland organised a [Nordic conference on cyber security \(bankoffinland.fi\)](https://www.bankoffinland.fi/en/press-releases/2018/11/20181101_nordic_conference_on_cyber_security) in November 2018.

The Bank of Finland oversees securities settlement systems in cooperation with other authorities and market actors. In 2018, for instance, the Bank of Finland monitored closely the implementation and launch of a new settlement system operated by the Finnish Central Securities Depository.

The Bank of Finland is developing a payment and settlement system simulator. This software is used by the Eurosystem and several countries for assessing and monitoring the efficient functioning of payment and settlement systems and related risks and ideas for improvement.

In 2018, the Bank of Finland organised its 16th international seminar for experts in the field of analysis and simulation of payment and settlement systems.



New developments in payment systems

26.4.2019

The Bank of Finland provides payment system services for its clients and participates actively in the Eurosystem's development projects in the field of payment and settlement systems.

TARGET2 is a payment system operated by the Eurosystem through which banks settle payments between each other via accounts they hold with their respective central banks. The Bank of Finland provides payment system services through its TARGET2 component, TARGET2-Suomen Pankki, in which a total of 25 financial institutions held an account at the end of 2018.

TARGET2-Suomen Pankki marked its 10th anniversary in February 2018. The average daily number of payments settled via the system was 1,660, with an average aggregate value of EUR 48 billion per day. The number and value of transactions were similar to the previous year's figures.

Finland's share of the payments settled via TARGET2 was 0.5% in terms of transaction numbers and 2.5% in terms of aggregate value. In addition to TARGET2 services, the Bank of Finland provides payment system services through TARGET2-Securities with regard to current accounts needed in securities settlement.

Reform projects in Finland and in the Eurosystem

The Bank of Finland administers the collateral securing loans granted to banks through its own collateral management systems. At the beginning of 2018, it launched a project to enhance its collateral management systems by means of increased automation in the processing of credit claims used as collateral. The project is expected to be completed in summer 2019.

In 2018 the Bank of Finland was involved in three Eurosystem-wide projects in the field of payment and settlement systems. The end of November saw the launch of the TARGET Instant Payment Settlement (TIPS) service, which enables the necessary interbank settlement underlying real-time instant payments between end customers. At the initial stage, the system only has a few participant banks, but new participants will connect to the service in the course of 2019.

The reform of TARGET2 progressed according to plan as part of the project to consolidate the TARGET2 and TARGET2-Securities systems. The project will unify the two systems both functionally and technically. Consequently, the reform will have a significant impact on all TARGET2 participants and central banks. All participants will migrate to the new system simultaneously in November 2021.

Also the Eurosystem Collateral Management System (ECMS) project, which aims to harmonise the management of collateral securing central banks' lending to banks, progressed as planned, and the new system will be launched in 2022.

MONEY IN THE DIGITAL AGE

#DigitalMoney2018



Conference ‘Money in the Digital Age’ considered the future of money

26.4.2019

Digitalisation is reshaping the financial sector and the structures of the economy. Central banks must understand the change and the way it affects their own work.

In June 2018, the Bank of Finland organised a conference series entitled *Money in the Digital Age*, which spread over three days and consisted of three parts.

The first part of the series focused on academic research, the second on central bank-issued digital cash and the third on broader changes in financial structures and new operating models.

The target groups of the three sections ranged from researchers to central bankers and more broadly to all private and public actors in the financial sector.

Policy measures in support of technology and innovation

The [academic conference \(bankoffinland.fi\)](http://bankoffinland.fi) was organised in cooperation with the CEPR network. The conference discussed whether policy measures are needed in the financial sector to bring out the social benefits of new technologies and innovations. Also, new studies combining monetary theory and information technologies were presented at the conference.

The keynote speakers were Professor **Bengt Holmström** and **Mr Hyun Song Shin**, Head of Research at the Bank of International Settlements. Professor Holmström talked about the nature of the money market and of private and public money, while Mr Shin discussed the challenges of crypto assets from the perspective of economics.

Other research topics presented included the changes to finance and monetary policy transmission resulting from digitalisation. The conference also aired studies on how new forms of finance – such as crowdfunding and the issuance of virtual tokens (*Initial Coin Offering*, ICO) – affect the functioning of the financial market and the incentives for businesses.

Should the general public also have access to central bank-issued digital cash?

The [second part of the conference series \(bankoffinland.fi\)](https://bankoffinland.fi) was aimed at central banks. The main question was whether central banks should start making digital cash available to the general public.

The topics under discussion were the mandate, possibilities and objectives of central banks regarding the issuance of digital cash.

Morten Bech, Chair of the Committee on Payments and Market Infrastructures at the Bank of International Settlements (BIS), gave a world-wide overview of ongoing projects to develop central bank-issued digital cash. The event followed up on previous workshops on the same topic organised by the Swedish and Norwegian central banks, whence the prominence of the Nordic electronic payments perspective in the presentations.

Innovations reforming the financial sector

The topic of the final conference day was *Banking in the Digital Age* (bankoffinland.fi). Around 130 participants gathered in the Finlandia Hall to attend this public conference which was aimed at a broader audience.

In the keynote sessions, leading financial industry reformers such as BBVA, AliPay, Klarna and ClearBank presented their views. The event brought together entities performing traditional tasks in a novel way, companies running completely new business models, as well as initiatives launched by large technology firms.

Combining the experience and stability of traditional actors with the innovative and agile culture of newcomers represents a major challenge for the future.

The conference also offered examples of completely new technologies that can be used in the financial sector, including facial recognition in payments and banks' cloud-based back-office systems.

In addition to the presentations by industry representatives, a panel discussion was also organised on these topics, featuring directors from the three largest commercial banks in Finland (OP, Nordea and Danske Bank). Commercial banks are ready to adopt new technologies and new business models provided these take a more customer-oriented and responsible course in their business.

The conference series was part of the Bank of Finland's work stream on the digitalisation process, and it was organised as a joint effort between a number of departments. In this context the Bank also published a series of three blog posts on the impact of digitalisation on the financial markets and their participants. The blog posts deal with the [role of the central bank in a digitalising world \(bofbulletin.fi\)](#), [crypto-assets \(bofbulletin.fi\)](#) and [money in the digital era \(bofbulletin.fi\)](#).



Financial asset management and social responsibility

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Financial asset management and social responsibility

26.4.2019

The objective of the Bank of Finland's financial asset management is to meet the liquidity, security and return requirements placed upon the central bank in respect of the assets managed. In pursuit of these requirements, the Bank takes into account the risks and social responsibility aspects of its investment activities.

In managing its financial assets, the Bank of Finland secures the value of the assets and its ability to support the liquidity of the banking system, whenever necessary. The Bank of Finland's capital adequacy is sufficient to cover the risks arising from the performance of its tasks.

At the end of 2018, the Bank of Finland's financial assets amounted to around EUR 11.5 billion. They comprised direct foreign currency-denominated and euro-denominated fixed-income investments, investments in equity and real estate, and gold holdings and items denominated in IMF Special Drawing Rights (SDRs).

Environmental issues and social responsibility reflected in activities

In its investment activities, the Bank of Finland takes into account environmental and social responsibility issues. In 2018, the Bank adopted an updated responsible investment strategy for its financial asset investments. It also participates actively in public debate on responsible investment.

In the operations of the Bank of Finland, the largest environmental burden derives from real estate, cash supply and travel. The Bank has successfully reduced emission levels by changing operating practices and introducing new technologies in the workplace. The Bank of Finland also entered into environmental cooperation with other European central banks.

Risks caused by climate change must be acknowledged and identified

Climate change creates two types of financial stability risks: material losses resulting from extreme weather conditions and transition risks caused by exit from high-carbon business models. In 2018, the Bank of Finland joined a network for central banks and supervisors aimed at identifying risks related to climate change and enhancing the role of sustainable finance.



Bank of Finland financial asset management

26.4.2019

The Bank of Finland invests and manages its financial assets in accordance with the central bank's objectives, and taking into account the risks and responsibility aspects related to investment activities.

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 in respect of the assets managed.

In managing its financial assets, the Bank of Finland secures the value of its financial assets and its ability to support the liquidity of the banking system, whenever necessary. The liquidity of financial assets is ensured by minimum amounts of the most liquid government bonds, ensuring the Bank of Finland's ability to offer liquidity in case of sudden monetary policy needs under all conditions.

The Bank of Finland manages its financial assets in a responsible manner and participates actively in social debate on responsibility in the financial markets and central banks' investment activities (see for example [Governor Olli Rehn's speech in June 2018 on climate change](#) and [Bank of Finland Bulletin blog post on Bank of Finland's investment activities](#)).

In addition, the Bank of Finland is a member of a [network of central banks and supervisors which analyses topics related to green finance](#).



Responsible investment at the Bank of Finland

In its responsibility strategy for direct fixed-income investments, the Bank of Finland takes into account, by applying the method of exclusion, the [principles of the UN Global Compact](#) on corporate responsibility that is sustainable, anti-corruption and respects the protection of human rights.

In the execution and management of investment activities, the Bank of Finland utilises analyses by an external service provider on investment instruments that do not fulfil the responsibility criteria. Following the service provider's analysis, the Bank of Finland takes the final decision on the instruments in which it will not invest. In addition to a company-level responsibility analysis, the Bank of Finland's strategy for responsible investment is reflected in investment in green, social and sustainability bonds and bonds issued by development banks.

In accordance with the responsibility strategy for fund investments, the Bank of Finland invests only in funds that are managed by companies strongly and transparently committed to responsibility and to promoting responsibility. In addition, the Bank of Finland expects management companies to exert influence on the companies they invest in, so that the companies take into account the issue of responsibility.

The Bank of Finland manages financial assets totalling EUR 11,553 million. These assets consist of direct foreign currency-denominated and euro-denominated fixed-income investments, investments in equity and real estate funds and of gold holdings and items denominated in IMF Special Drawing Rights (SDRs).

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

Table 1.

The Bank of Finland's financial assets 31 Dec 2018	31.12.2018 EUR m	31.12.2017 EUR m
Gold	1,767	1,706
Foreign reserves	5,942	5,567
SDR	460	331
US dollar denominated fixed-income investments	4,271	4,053
Pound sterling-denominated fixed-income investments	729	733
Japanese yen denominated fixed-income investments	482	449
Euro-denominated fixed-income investments	3,011	6,232
Equity investments	727	670
Real estate investments	106	10
Total	11,553	14,184

Source: Bank of Finland.

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

ANFA sets rules for such holdings of national central banks as are related to the discharge of their national tasks. Currently, ANFA does not impose a quantitative limit on the Bank of Finland's assets; the amount depends on aspects related to central bank duties and investment policy considerations. The Bank of Finland reduced its financial assets by a total of EUR 3 billion in 2018. This was due to investment policy considerations and was done in two stages.

The Bank of Finland's financial asset risks consist of market, credit and liquidity risks as well as operational risks involved in investment activity.

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

Fixed-income investments

The Bank of Finland's fixed-income investment portfolios are held in government debt instruments (45%), government-related debt instruments (26%), covered bonds (9%), corporate bonds (9%) and cash (10%).

Of the fixed-income investments, 67% were in debt instruments with a rating of AAA- and AA+, and the lowest credit rating was BBB+ (0.7%). The modified duration of all the Bank's fixed-income investments at the end of 2018 was 1.8 years.

In the fixed-income market, 2018 was mixed. In the early part of the year, the growth prospects for the economy were good, both for Europe and the United States. Volatility grew, however, and the economic outlook weakened towards the end of the year, as economic policy risks, the protectionist trade policy of the United States and difficulties in the United Kingdom's Brexit negotiations added to uncertainty and pushed up risk premia in the fixed-income markets.

The increase in uncertainty and the accommodative monetary policy of the ECB kept euro area interest rates at low levels, and the interest rate on government bonds with a high rating remained negative. This was reflected in the return on the Bank of Finland's euro-denominated fixed-income investments, which totalled EUR -17.3 million in 2018.

In the United States, inflation picked up and the unemployment rate fell below 4% in 2018, driven by strong economic growth. The Federal Reserve continued to raise interest rates gradually, but the general level of interest rates started to decline towards the end of the year as market participants became worried about the prospects for economic growth.

Changes in the interest rate in late 2018 reflected positively in the return on the Bank of Finland's US dollar-denominated investments. In 2018, it totalled EUR 70.6 million. Interest income from pound sterling-denominated investments totalled EUR 2.5 million and that from Japanese yen-denominated was EUR 0.0 million.

The exchange rate of the euro appreciated in early 2018 particularly against the US dollar. The trend turned in the spring, however, as euro area growth showed signs of weakening and the US Federal Reserve changed its monetary policy communication towards tightening.

The most significant impact of the depreciation of the euro against the US dollar was witnessed in the revaluation of the Bank of Finland's foreign reserves, which was positive in the amount of EUR 215 million.

Of the other currencies in the foreign reserves, the euro depreciated against the Japanese yen and appreciated marginally against the pound sterling in 2018.

Exchange rate risk is the most significant risk related to the Bank of Finland's foreign currency-denominated fixed income investment portfolio, and the amount of the Bank's foreign reserves has been dimensioned to a level required by central bank tasks. Valuation changes in the foreign reserves reflect the open currency position, which supports the successful discharge of central bank task. The targeted size and currency composition of the foreign reserve portfolio is, as a rule, assessed by the Bank of Finland at three-year intervals.

Fund investments

The Bank of Finland applies to financial asset investments an *Asset Liability Management* (ALM) framework, which recognises the different types of assets and liabilities on the Bank's balance sheet.

The Bank of Finland's fund investments are part of long-term investment activity, where investments are expected to yield a higher return and have a lower liquidity requirement than other financial assets.

The fund investments are in an advanced economies stock index fund, European real estate funds and ETF real estate funds. The Bank of Finland increased the allocation of equity and real estate investments as planned in 2018.

In the equity markets, the protectionist trade policy of the United States and the Federal Reserve's tighter monetary policy were reflected as subdued developments in global stock indices particularly in the latter part of 2018. The rise in share prices in the early 2018 was reversed in Europe in the second half of the year, and share prices also declined in the United States towards the end of the year.

In 2018, the return on the Bank of Finland's equity fund investments was EUR –43 million. The decline in share prices and the uncertain economic outlook were reflected also in the Bank of Finland's real estate investments, which generated a return of EUR –3 million in 2018.

The total return on and risks of financial assets

In 2018, the return on the Bank of Finland's financial assets totalled 2.9%, or EUR 224 million. Fixed-income investment portfolios are subject to strategic allocation and currency-specific target durations. The Bank's Investment division is allowed to deviate from these by making active investment decisions within pre-set bounds for permitted leeway and strict risk limits.

The returns on the fixed-income investment portfolios are benchmarked against indices that are in line with central bank objectives. In 2018, the investments generated a return of 0.08%, i.e. EUR 5.7 million above the benchmark indices.

Table 2.

Return on the Bank of Finland's own financial assets* in 2018 and 2017	2018		2017	
	%	EUR m	%	EUR m
Interest rate return	0.8	56	0.2	24
Currency revaluation	3.0	215	-5.3	-633
Equity return	-5.3	-43	8.7	38
Return on real estate investments	-0.2	-3	-0.1	0
Total	2.9	224	-4.6	-572

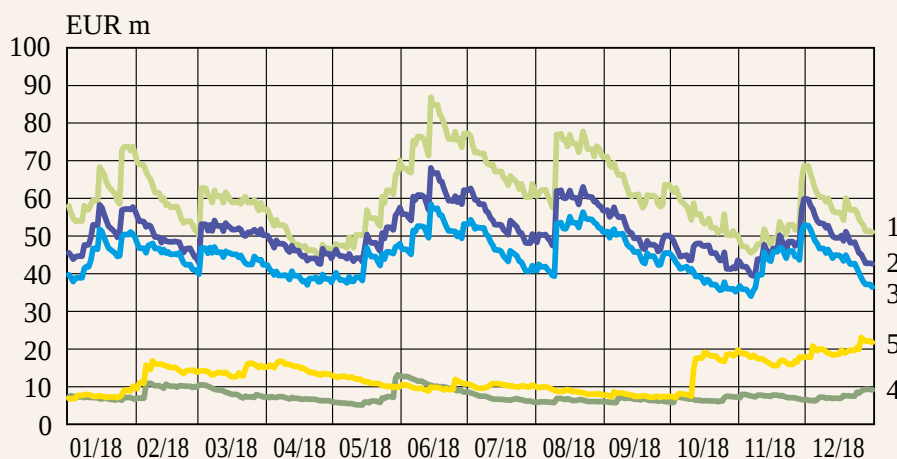
* Excluding gold and SDR.

Source: Bank of Finland.

The total market risk related to financial assets (VaR 99%, 1 day) varied between EUR 47 million and EUR 87 million in 2018.

Chart 14.

VaR figures for market risk in Bank of Finland's financial assets in 2018*



1. — Total market risk
 2. — Total market risk (excl. gold)
 3. — Exchange rate risk
 4. — Interest rate risk
 5. — Equity risk
- * One-day horizon, 99% confidence level.

Source: Bank of Finland.

Share of the ECB's foreign reserves managed by the Bank of Finland

The Bank of Finland manages part of the ECB's foreign reserves together with the Estonian central bank. Management of the foreign reserves of the ECB has been distributed among the Eurosystem national central banks according to their respective capital keys.

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 potential foreign exchange interventions.

The value of Finland's and Estonia's pooled portfolio in US dollars of the ECB's foreign reserves was EUR 1,036 million at the end of 2018. (For additional information on the management of the ECB's foreign reserves, see the ECB's Annual Report).



Management of financial risks

26.4.2019

Implementation of monetary policy and safeguarding the stability and functioning 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. The Bank of Finland's capital adequacy is sufficient to cover the risks arising from the performance of its tasks.

In 2018, the Bank of Finland reduced the amount of fixed income investments. Long-term investment assets were increased in accordance with the Bank's plan. Monetary policy purchase programmes increased the structural interest rate risk on the Bank's balance sheet. Exchange rate risk maintained its position as the Bank of Finland's most significant financial risk.

Investment activities and monetary policy implementation involve risks

At the end of 2018, the Bank of Finland's financial assets amounted to about EUR 11 billion. They consist of gold holdings, foreign reserves, euro-denominated fixed income investments and investments in equity 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.

The Bank of Finland reduced euro-denominated fixed-income investments by EUR 3 billion in 2018. Scaling-up of investment in equity and real estate was continued in accordance with the Bank's long-term investment plan.

The risk relating to claims on monetary policy operations equals, as a rule, each national central bank's [capital key](#) share in the aggregate claims of national central banks. In 2018, the Bank of Finland's share was 1.785%. The risks relating to government debt instruments purchased under the public sector purchase programme (PSPP) are borne individually by each national central bank involved.

The volume of the Eurosystem's monetary policy operations grew in 2018 by about EUR 235 billion, reflecting the implementation of the expanded asset purchase programme (APP). The Bank of Finland's share of claims on monetary policy operations grew by about EUR 4 billion.

Table 3.

Bank of Finland's assets and share of claims on monetary policy operations	31.12.2018 EUR billion	31.12.2017 EUR billion
Financial assets	11,553	14,184
Gold	1,767	1,706
Foreign reserves	5,942	5,567
Euro-denominated fixed-income investments	3,011	6,232
Equity investments	727	670
Real estate investments	106	10
Share of claims on monetary policy operations	54,201	50,311
Refinancing operations	13,108	13,642
Targeted longer-term refinancing operations ¹	12,830	13,438
Other refinancing operations ¹	277	204
Debt instruments under the expanded asset purchase programme	39,789	35,100
Finnish government bonds and government-related bonds	28,308	25,168
Bonds of supranational institutions ¹	4,007	3,640
Covered bonds ¹	4,295	3,944
Corporate bonds ¹	3,178	2,349

Table 3.

Bank of Finland's assets and share of claims on monetary policy operations	31.12.2018 EUR billion	31.12.2017 EUR billion
Financial assets	11,553	14,184
Terminated programmes	1,305	1,569
Securities markets programme ¹	1,208	1,472
Covered bond purchase programme	97	97
Total	65,754	64,496

1) Capital key share (1.785%) in aggregate claims by national central banks.

At the end of 2018, the Bank of Finland's total assets amounted to EUR 112 billion. A significant portion of this, EUR 45 billion, consisted of [intra-Eurosystem claims](#) ([see an article in the bofbulletin.fi](#)).

Diversification as a risk management tool

The Bank of Finland's financial risks comprise market risks, credit risks and liquidity risks. Market risks are, for example, adverse movements in exchange rates, interest rates and stock prices.

Exchange rate risk is the source of the most significant volatility in the value of [financial assets](#). The Bank of Finland diversifies the risk by investing in the pound sterling and the Japanese yen, in addition to the US dollar. Through the Bank of Finland's receivables from the IMF, exchange rate risk is also diversified into the Chinese yuan.

In taking on interest rate and credit risks, the Bank of Finland is guided by a strategic benchmark index and a highly detailed limits framework. 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 of high credit ratings.

In accordance with its balance sheet management framework, the Bank of Finland invests part of its own funds in a variety of instruments in the international stock and real estate markets. The investments are made in the form of indirect investments, and they diversify the other risks on the Bank's balance sheet.

In implementing monetary policy purchase programmes, central banks adhere to the common eligibility criteria and other risk management rules pertaining to the whole Eurosystem.

Responsible, reliable and financially sound counterparties

The Bank of Finland manages its financial assets in a [responsible](#) manner. Counterparties accepted in direct fixed-income investments are limited using specific responsibility criteria. Assessments of service providers' responsibility and reliability are essential also in the Bank's indirect investment activities.

The Eurosystem conducts monetary policy operations with financially sound counterparties and against adequate collateral.

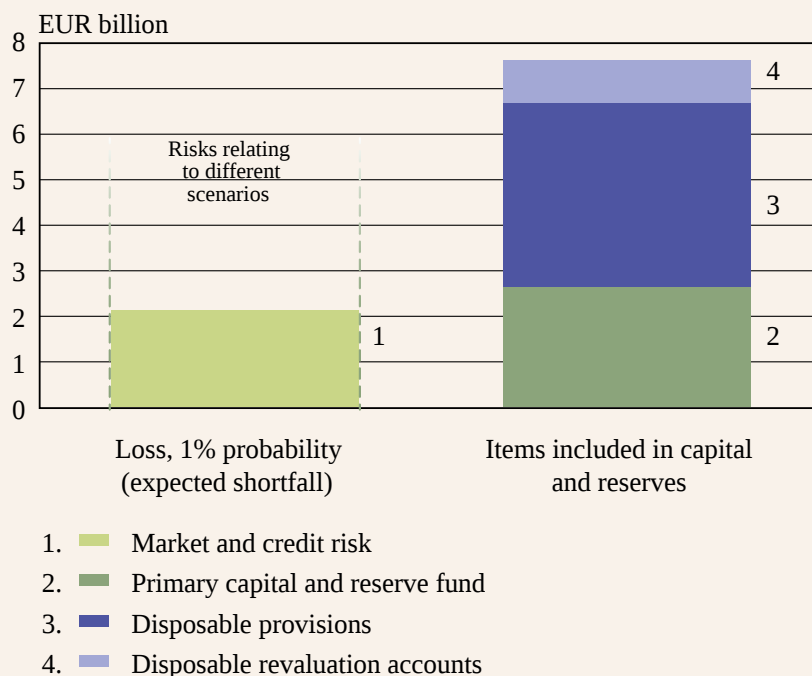
Estimated total risks slightly up

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.

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 2018, the total risk estimate was EUR 2.1 billion. ¹⁾

Chart 15.

Bank of Finland's total risk exposure, capital and reserves, excl. gold price risk and gold revaluation accounts



Source: Bank of Finland.

The risk estimate rose slightly from the previous year due to model calibrations. In 2018, the Bank of Finland began to use distribution assumptions which produce higher forecasts for losses than the ones employed previously in risk calculations.

In estimating credit risk resulting from monetary policy operations, 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.

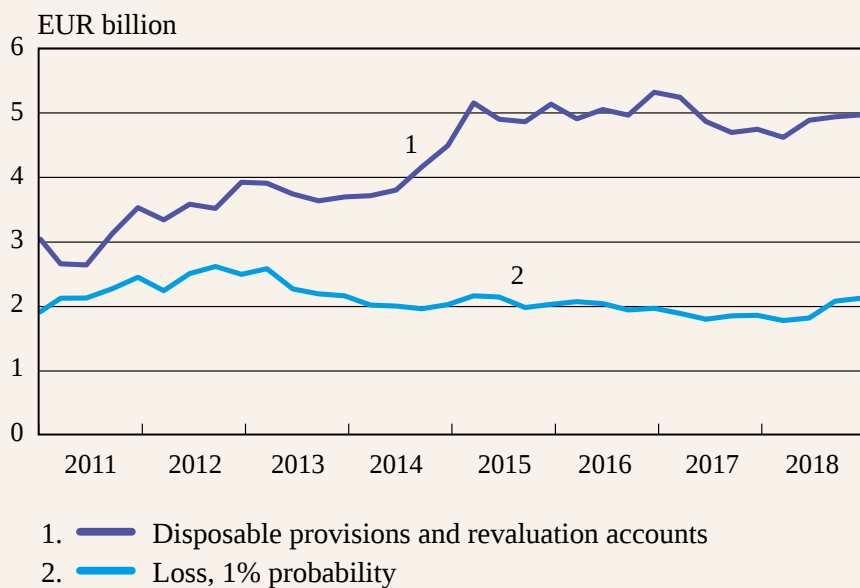
Balance sheet risk buffers cover the risks

At the end of 2018, the Bank of Finland had revaluation accounts totalling EUR 0.9 billion and provisions totalling EUR 4.0 billion available for losses. The primary capital and reserve fund amounted to EUR 2.7 billion.

The risk buffers strengthened in 2018 as a result of increases in provisions and a rise in the value of foreign reserves. The Bank of Finland's capital adequacy is sufficient to cover the risks arising from the performance of its tasks.

Chart 16.

Risks and risk buffers excl. gold and gold revaluation accounts



Source: Bank of Finland.

Non-standard monetary policy operations increased interest rate risk

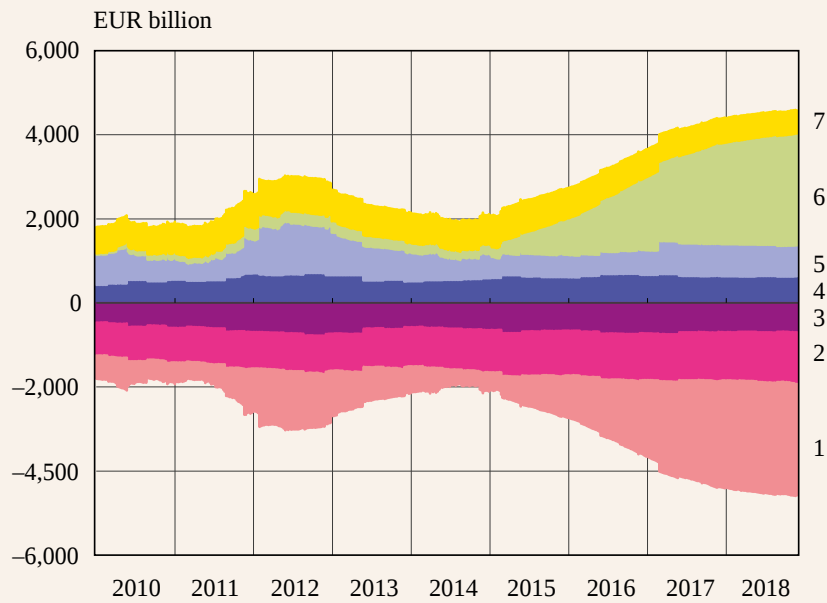
The Eurosystem's non-standard monetary policy operations have created a structural interest rate risk on the Bank of Finland's balance sheet. Liquidity created via the [expanded asset purchase programme \(APP\)](#) and the [targeted longer-term refinancing operations \(TLTROs\)](#) is reflected on the liabilities side of the balance sheet as growth in central bank deposits.

The Eurosystem sets the interest payable on the deposits as a matter of policy. The interest rate decision has an immediate effect on the Bank of Finland's interest expenses. Claims on monetary policy operations, in turn, mainly carry a fixed interest rate. An increase in the deposit rate therefore weakens the Bank's net interest income.

The structural interest rate risk position unwinds with the maturity of fixed-rate monetary policy investments. Reinvestment of principal payments from maturing bonds, however, maintains the risk position.

Chart 17.

Developments in Eurosystem balance sheet items



1. Euro-denominated deposits
2. Banknotes
3. Items included in capital and reserves
4. Net claims on foreign reserves and gold
5. Refinancing operations
6. Monetary policy purchase programmes
7. Other assets, net

Source: European Central Bank and ECB.

1) The total risk estimate does not include gold price risk because the revaluation account for gold covers a significant fall in gold prices. Including gold price risk, the Bank of Finland's total risk estimate is EUR 2.4 billion.



New strategy focused on stability and influence

26.4.2019

Stable prices, secure payment systems and a reliable financial system foster economic growth, employment and the general wellbeing of people in Finland.

The Bank of Finland's vision is to be known as a forward-looking and effective central bank and a constructive and influential member of the Eurosystem.

Near-term challenges

The 2018 round of strategy discussions identified four groups of key challenges for the Bank of Finland in the immediate years ahead:

- *Monetary policy normalisation* following the financial crisis presents a challenge for the entire Eurosystem. Monetary policy strategy and tools must be developed in a situation where the operating environment challenges existing monetary policy models and macroeconomic theories.
- *Ensuring financial stability* is increasingly important. Finland's financial markets have strong international linkages and the level of household debt has risen. There was considerable growth in the size of the Finnish banking sector in 2018. The role of financial market actors outside the banking sector presents a challenge to the adequacy of the macroprudential framework.
- *The digital revolution in payments and banking operations* will test the competence of the authorities and their ability to steer and supervise developments in payment systems. Rapid technological change is transforming the field of fintech and banks' business models. In addition, the use of cash as a means of payment is declining and cyber risks are growing.
- *Influencing economic policy* by introducing facts and research results into the domestic policy debate to support political decision-making.

Areas of strategic focus in the immediate future

The Board selected six key strategic projects for the Bank of Finland.

- Evaluating alternative monetary policy scenarios, and research cooperation
- Identifying policy solutions needed to ensure financial stability
- Developing Finland's payment systems
- Implementation of national contingency planning for payments traffic during disturbances under normal conditions and during states of emergency
- Contributing to domestic economic policy
- Fostering financial literacy in Finland

In its contributions to domestic economic policy the Bank of Finland emphasises fiscal sustainability, labour market functionality, productivity development in the economy and the objectives for further development of EMU.

Board overhauls organisation

The Bank of Finland Board updated the organisational structure of the Bank in line with the areas of strategic focus.

Policy functions relating to payments and development of payment systems were placed in a department of their own. Data management and IT functions were also brought together in a single department. This will help take forward the process of digitalisation and aid exploitation of different forms of data resources.

The new departmental structure came into effect on 1 January 2019.

>> [Organisation \(bankoffinland.fi\)](#)

>> [Bank of Finland objectives and results framework 2016–2018 \(bankoffinland.fi\)](#)

>> [Activities, values and strategy \(bankoffinland.fi\)](#)



Division of responsibilities between members of the Board

26.4.2019



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.



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.



A happy, professional personnel ready to shape the economy of the future

26.4.2019

The professional expertise and wellbeing of our staff are important to the Bank of Finland. The Bank also wishes to foster young people's contact with working life by providing responsible summer jobs for as many students as possible. For new graduates, the Bank of Finland offers the opportunity to develop into top-ranking financial-sector experts in our Young Professionals programme.

Ongoing professional development is an important aspect of work at the Bank of Finland. Our experts can broaden their expertise through, for example, challenging tasks, internal job-rotation and participation in international working groups. Relative to staff numbers, we provide an average of x days of training annually.

To ensure the wellbeing of our staff, we seek at the Bank of Finland to enable the flexible integration of working life and private life. In 2018, an increasing number of staff members took the opportunity for distance work, tailored flexitime and our compressed working hours scheme.

- >> [The Bank of Finland as an employer \(link to bankoffinland.fi website\)](#)
- >> [Personal accounts 2018 \(pdf, in Finnish\)](#)

From graduates learning on the job to the economic policy-shapers of the future

Young Professionals (YP) is a joint programme of the Bank of Finland and the Financial Supervisory Authority aimed at providing young, newly graduated university students and professionals with some years of work experience under their belt with an opportunity to develop into top-rank financial experts while working at the heart of the Eurosystem and familiarising themselves with the core functions of central banking and the financial and insurance supervisory authorities.

At its launch in autumn 2018, nine trainees were selected for the YP programme through an open application process. During a period of a year and a half they will spend spells of around six months at a time in different departments and divisions of the Bank of Finland and the Financial Supervisory Authority.

>> [YPs present themselves \(video, the Bank's YouTube channel\)](#)

Quality summer work experience

The Bank of Finland supports the employment of young people by providing a summer job for around 40 students annually. These youngsters have enjoyed their time at the Bank and many have also continued at the Bank after the end of the summer.

The 'Responsible summer job' campaign challenges employers to offer young people more and better-quality summer jobs. The Bank of Finland will be participating in the campaign again in 2019 and is committed to the six principles of a good summer job.

The Bank of Finland is the favourite employer among business students in Finland.

>> [Read about the 'Responsible summer job' campaign](#)

>> [Read more on summer job experiences in the summer job blog \(bankoffinland.fi/in Finnish\)](#)



Budget and operating expenses

26.4.2019

The Bank of Finland aims to be one of the most efficient central banks in the EU. This requires determined economic governance and HR planning. The bank evaluates investments based on their costs, qualitative benefits and operative risks.

In 2018, the Bank of Finland's operating expenses totalled EUR 91.3 million. The total expenses of the previous year amounted to EUR 81.8 million.

The Bank's expenses for 2018 include a donation of EUR 2.5 million to a separate new fund established in connection to the University of Helsinki's Helsinki Graduate School of Economics Fund. The GSE sub-fund will fund a macroeconomics professorship.

Budgeted operating income amounted to EUR 13.8 million. The Bank's net operating expenses totalled EUR 77.5 million (for more information on operating expenses and the budget, see Table). Investments in 2018 totalled EUR 8.9 million.

In autumn 2018, the Bank's budgets for the period 2019–2021 were drawn up and, of these, the Board ratified the budget for 2019. The budgets for 2020–2021 will be ratified by the Board at a later date.

Operating expenses and related objectives included in the budgets are monitored on a quarterly basis. The Board evaluates operations and cost-efficiency on the basis of the budgetary monitoring.

Pension fund budget

The pension fund's operating expenses for 2018 totalled EUR 29.6 million. In 2017, the total expenses amounted to EUR 29.0 million. Pensions paid constituted the largest cost item, amounting to EUR 27.6 million.

The pension fund received an additional contribution of EUR 10.0 million. The fund's operating income amounted to EUR 22.0 million (see Table). The pension fund's operations are presented in its own annual report.

Budget for the Financial Supervisory Authority

The Board of the Bank of Finland ratifies the budget for the Financial Supervisory Authority (FIN-FSA). In 2018, the FIN-FSA's operating expenses totalled EUR 29.9 million. The total expenses for 2017 amounted to EUR 25.6 million.

Total income amounted to EUR 29.9 million, of which supervision and processing fees accounted for EUR 27.7 million, while the Bank of Finland's contribution to funding was EUR 1.5 million. The surplus for the financial year was EUR 2.1 million. This will be taken into account in the following accounting period when setting supervision and processing fees (see Table).

Investments for 2018 totalled EUR 1.7 million. The Financial Supervisory Authority's operations are presented in its own annual report.

Table 1.

Bank of Finland	Outturn 2018 Eur m	Budgeted 2019 Eur m
1. Operating expenses and income		
EXPENSES		
Staff expenses	39.4	33.7
Staff-related expenses	2.6	3.4
Other expenses	30.0	30.5

Table 1.

Bank of Finland	Outturn 2018 Eur m	Budgeted 2019 Eur m
DEPRECIATION	10.6	8.6
Total	82.6	76.2
Banknote acquisition costs	2.1	5.7
Banking service expenses	6.6	7.1
Total operating expenses	91.3	89.0
INCOME		
Banking service income	2.6	2.6
Real estate	5.6	5.6
Other income	0.5	0.5
Services to FIN-FSA	5.1	5.9
Total income	13.8	14.6
Net	77.5	74.4
2. Investment		
Real estate investment	5.7	6.0
Head office premises	0.6	1.3
Vantaa premises	5.1	4.7
Other premises	0.0	0.0
IT-equipment and software	2.6	4.2
Cash handling machines	0.1	0.0
Security equipment	0.5	1.3
Other	0.0	0.0

Table 1.

Bank of Finland	Outturn 2018 Eur m	Budgeted 2019 Eur m
Total investment	8.9	11.6

Due to rounding, totals/sub-totals may not add up.

Table 2.

Pension fund	Outturn 2018 EUR m	Budgeted 2019 EUR m
1. Operating expenses and income		
EXPENSES		
Staff expenses	0.0	0.1
Expenses for pension fund activities	0.5	0.5
Pension fund real estate expenses	0.5	0.5
DEPRECIATION	0.9	0.9
PENSIONS		
Pensions paid	27.6	27.6
Total expenses	29.6	29.6
INCOME		
Employment pension contributions	20.4	11.9
Internal rents	1.6	1.7
Total income	22.0	13.6

Table 2.

Pension fund	Outturn 2018 EUR m	Budgeted 2019 EUR m
Net	7.5	16.0

Due to rounding, totals/sub-totals may not add up.

Table 3.

Financial Supervisory Authority	Outturn 2018 EUR m	Budgeted 2019 EUR m
1. Operating expenses and income		
EXPENSES		
Staff expenses	18.6	21.4
Staff-related expenses	1.0	1.7
Other expenses	4.1	5.2
DEPRECIATION	1	1.1
SERVICES FROM THE BANK OF FINLAND	5.1	5.9
Total operating expenses	29.9	35.2
FUNDING OF OPERATIONS		
Supervision fees	26.3	29.3
Processing fees	1.4	1.5
Bank of Finland contribution to funding	1.5	1.8
Surplus/deficit transferred from previous year	2.7	2.7

Table 3.

Financial Supervisory Authority	Outturn 2018 EUR m	Budgeted 2019 EUR m
Total income	32.0	35.2
Surplus transferred to next year	2.1	0
Due to rounding, totals/sub-totals may not add up.		



Emission reduction and environmental cooperation

26.4.2019

In the operations of the Bank of Finland and the Financial Supervisory Authority, the largest environmental burden is caused by properties, cash supply and travelling. The Bank has successfully reduced emission levels by changing operating practices and introducing new technologies in the workplace. The Bank of Finland also entered into environmental cooperation with the other European central banks.

The most effective method for the Bank of Finland and the Financial Supervisory Authority to decrease the environmental burden is to improve energy efficiency by taking joint action. As a result, CO₂ emissions have declined by 40% in the past ten years.

As in previous years, the largest source of emissions is the heating of properties, followed by electricity consumption. At the same time, the related emissions have declined the most, as there is less need for properties and energy consumption by properties has consequently fallen.

In contrast, business travel is still considerable and the volume of CO₂ emissions has remained unchanged; business travel is still the third largest source of CO₂ emissions.

First steps in environmental cooperation between central banks

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. In 2018, the Bank created 59.37 kilograms of CO₂ emissions for every EUR 1,000 of operating expenses. At the end of 2017, the corresponding figure was 61.17 kilograms of CO₂. The Bank has not offset its emissions by purchasing emission reduction units.

The Bank of Finland continued to cooperate with the other European central banks in environmental issues. In total, eleven central banks took part in a programme coordinated by the ECB, where two meetings were held to discuss the environmental challenges faced by central banks and to assess best practices. The first central banks are considering carbon offsetting via the purchase of emission reduction units.

Lower environmental impact in currency supply

The Bank of Finland has streamlined the logistics of cash supply since the introduction of the euro, by centralising banknote sorting and increasing banknote recycling at the regional level, with the help of cash processing companies. The increasing popularity of electronic payment has in turn reduced the need to transport and process cash.

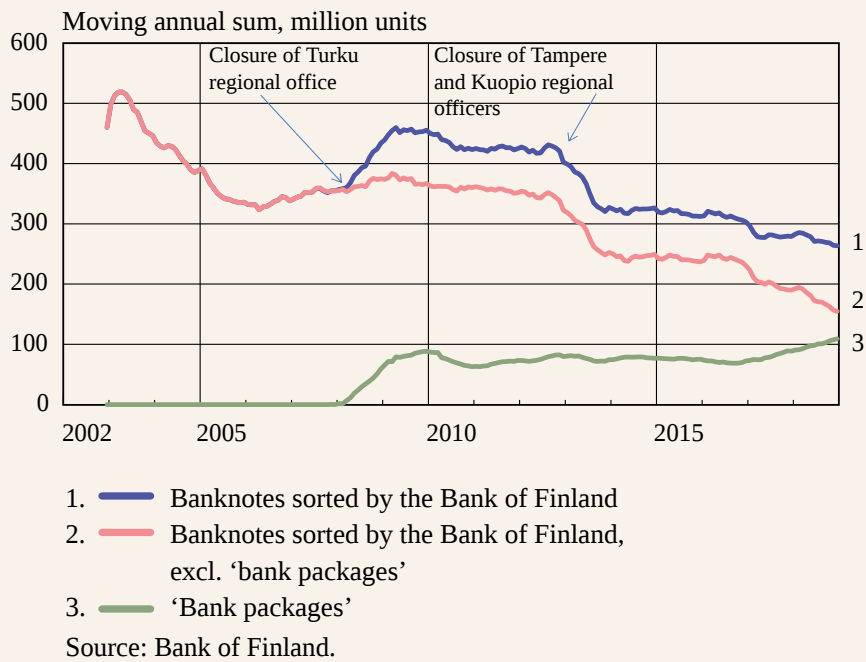
Currency supply is operationally physical activity, and therefore changes in practices and habits are reflected as lower environmental impact.

In 2018, the Bank of Finland renewed its banknote storing practices, resulting in a decrease in cash transport to the central bank.

The storing of 'bank packages' has reduced double sorting: we do not sort the packages, we simply return them to the customer the following day.

Chart 18.

Annual sum of banknotes sorted by the Bank of Finland



Decrease in the euro banknote elimination rate

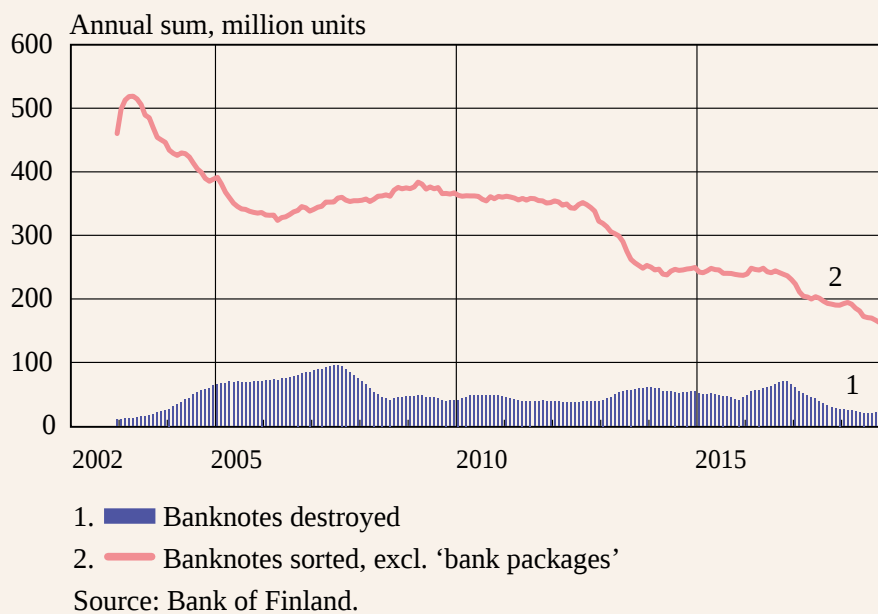
The increasing use of 'bank packages' has reduced the volume of fit banknotes returned to the Bank of Finland and hence also sorting. The phasing out of the first series of euro banknotes in recent years has gradually pushed up the unfit rate, but the overall elimination rate has decreased slightly.

The lower unfit rate is due to the new sorting machines, which were introduced in 2018. They provide greater accuracy in detecting fit banknotes, and consequently, the number of banknotes incorrectly sorted to unfit has decreased (Chart 19).

The parallel circulation of old and new banknotes has cut the cost of banknote procurement, as fit banknotes remain in circulation for a longer period. The quality of banknotes in circulation in Finland is still excellent.

Chart 19.

Euro banknotes sorted and destroyed by the Bank of Finland





Climate change is a financial stability risk

26.4.2019

Climate change creates two types of financial stability risks: physical risks resulting from extreme weather conditions and transition risks caused by exit from carbon-intensive business models.

Climate change will affect our environment and the economy in the decades to come. As a result of climate change, companies have to change and adjust their business models.

Changes in the economy and markets are also reflected in financial stability, making it a topic closely linked to the roles and responsibilities of central banks.¹⁾

Carbon-intensive business models create transition risk

The financial stability risks caused by climate change can be significant, due to the potential growth in financial losses arising from, for example, increasingly common and more severe extreme weather events. Insurance companies, banks and investors will bear their share of these losses.

On the other hand, if climate policy, technological innovations or changes in consumer preferences make carbon-intensive business models financially unprofitable, investors may have to write down their assets. This is referred to as ‘transition risk’. Transition risk is significant for the entire financial sector, as not all entities will be able to divest their carbon-intensive investments without incurring losses.

Bank of Finland is an active participant in the discussion on climate risks

In recent years, the Bank of Finland has paid increasing attention to climate change both in its activities and in the assessment of the longer-term risks to the financial sector.

In 2018, the Bank of Finland adopted an updated responsible investment strategy for its financial asset investments.²⁾ In addition, the Bank of Finland joined the Central Banks and Supervisors Network for Greening the Financial System (NGFS) whose purpose is to identify risks related to climate change and enhance the role of sustainable finance.³⁾

Climate change is, indeed, only one of the financial stability risks, but the problem is complex. Authorities and the financial sector must therefore actively and in cooperation seek solutions to identify and minimise the risks.

1) For more information, see the blog <https://www.eurojatalous.fi/fi/blogit/2019/ilmastonmuutos-on-riski-myos-rahoitusmarkkinoiden-vakaudelle> (in Finnish only)/

2) For more information, see the blog <https://www.eurojatalous.fi/fi/blogit/2017/blogi-keskuspankki-sijoittaa-vastuullisesti/> (in Finnish only).

3) For more information, see the blog <https://www.eurojatalous.fi/fi/blogit/2018/ilmastonmuutos-on-kaikkien-aikojen-suurin-markkinahairio/> (‘Climate change is the greatest and widest-ranging market failure ever seen’, in Finnish only) and the NGFS website <https://www.banque-france.fr/en/financial-stability/international-role/network-greening-financial-system>

Financial Statements

The Bank of Finland's audited profit for the financial year 2018 totals EUR 230 million. According to the Act on the Bank of Finland, half of the Bank's profit should be transferred to the reserve fund and the remaining profit made available for the use by the State. However, the law allows for an exceptional profit distribution if justified by the Bank's financial condition or the size of the reserve fund.

The Bank of Finland's income consists primarily of interest income on banknotes and the Eurosystem's monetary policy items as well as investment income on foreign reserves and other financial assets of the Bank. In 2018, net interest income amounted to EUR 697 million (2017: EUR 567 million). Net purchases under the monetary policy asset purchase programmes continued until the end of 2018, and liquidity in the banking system increased. Net interest income was mainly boosted by commercial banks' deposits with the Bank of Finland, for which the banks are charged a negative interest rate. Foreign currency-denominated interest income pushed up interest income on financial assets, while euro-denominated interest income was down on the previous year.

The Bank of Finland's income covers its operating expenses and provisions. Operating expenses net of banknote production services and an additional pension fund contribution amounted to EUR 97 million (2017: EUR 90 million).

— [Bank of Finland's press release n:o 4 \(15 Mar 2019\)](#)

Balance sheet

EUR million		31 Dec 2018	31 Dec 2017
ASSETS			
1	Gold and gold receivables	1,767	1,706
2	Claims on non-euro area residents denominated in foreign currency	7,116	6,850
	Receivables from the International Monetary Fund (IMF)	1,905	1,744
	Balances with banks and security investments, external loans and other external assets	5,211	5,106
3	Claims on euro area residents denominated in foreign currency	478	478
4	Claims on non-euro area residents denominated in euro	777	1,231
5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	8,648	10,148
6	Other claims on euro area credit institutions denominated in euro	4	209
7	Securities of euro area residents denominated in euro	48,182	44,995
	Securities held for monetary policy purposes	45,496	39,588
	Other securities	2,687	5,407

EUR million		31 Dec 2018	31 Dec 2017
ASSETS			
8	Intra-Eurosystem claims	44,513	44,750
	Participating interest in ECB	144	144
	Claims equivalent to the transfer of foreign reserves	728	728
	Net claims related to the allocation of euro banknotes within the Eurosystem	4,035	3,751
	Other claims within the Eurosystem (net)	39,606	40,127
9	Other assets	760	697
	Coins of euro area	27	31
	Tangible and intangible fixed assets	118	126
	Other current assets	112	50
	Sundry	503	490
	Total assets	112,246	111,065

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

EUR million		31 Dec 2018	31 Dec 2017
LIABILITIES			
1	Banknotes in circulation	20,215	19,223
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	76,933	76,762
	Current accounts (covering the minimum reserve system)	61,719	53,421
	Deposit facility	15,214	23,341
3	Other liabilities to euro area credit institutions denominated in euro	–	409

EUR million		31 Dec 2018	31 Dec 2017
LIABILITIES			
4	Liabilities to other euro area residents denominated in euro	600	1,000
5	Liabilities to non-euro area residents denominated in euro	2,989	2,601
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	1,446	1,413
9	Intra-Eurosystem liabilities	–	–
10	Other liabilities	72	65
11	Revaluation accounts	2,470	2,256
12	Provisions	4,636	4,579
13	Capital and reserves	2,654	2,602
	Primary capital	841	841
	Reserve fund	1,813	1,761
14	Profit for the financial year	230	156
	Total liabilities	112,246	111,065

The image shows a handwritten ledger page with columns for 'Debet' (Debit) and 'Credit' (Credit). The entries are in Swedish and include various financial items such as 'Skatt', 'Kostnader', 'Inkomst', and 'Resultat'. The page is filled with numbers and text, representing a detailed financial record.

Profit and loss account

EUR million		1 Jan–31 Dec 2018	1 Jan–31 Dec 2017
1	Interest income	724	617
2	Interest expenses	-27	-50
3	NET INTEREST INCOME	697	567
4	Foreign exchange rate differences	11	41
5	Securities price differences	-90	19
6	Valuation losses related to currencies and securities	-31	-44
7	Change in foreign exchange rate and price difference provision	41	-16
	NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND RISK PROVISIONS	628	567
8	Income and expenses on fees and commissions	-4	-3
9	Net result of pooling of monetary income	-242	-264
10	Provision against losses in monetary policy operations	-2	-1
11	Share in ECB profit	5	4
12	Income from other equity shares and participating interests	25	22
	CENTRAL BANKING PROFIT	410	325

EUR million		1 Jan–31 Dec 2018	1 Jan–31 Dec 2017
13	Other income	35	30
	Operating expenses	-109	-97
14	Staff costs	-48	-47
15	Pension fund contribution	-10	–
16	Administrative expenses	-38	-32
17	Depreciation of fixed assets	-12	-11
18	Banknote production services	-2	-6
19	Other expenses	-0	-0
	OPERATING PROFIT	335	258
	Profit for the pension fund	–	–
20	Income of the pension fund	30	31
21	Expenses of the pension fund	-30	-31
22	Changes in provisions	-105	-102
23	PROFIT FOR THE FINANCIAL YEAR	230	156

Accounting conventions

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	2018	2017
US dollar	1.1450	1.1993
Japanese yen	125.8500	135.0100
Swedish krona	10.2548	9.8438
Swiss franc	1.1269	1.1702
Pound sterling	0.8945	0.8872
Canadian dollar	1.5605	1.5039
Special Drawing Rights (SDR)	0.8228	0.8420
Gold	1,120.9610	1,081.8810

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 securities is entered as income or expense over the maturity of the security. Gains and losses related to securities price movements 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

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 2018, mid-market prices on 31 December 2018 were used.

Real estate funds are valued on the basis of the last available price. The prices are reviewed in January, when 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 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 TARGET2¹¹ 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), 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'.

Intra-Eurosystem claims arising from the transfer of foreign reserve assets to the ECB by 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'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.²⁾ 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.³⁾ 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 the banknote allocation key. The share of banknotes allocated to each NCB is disclosed in the balance sheet under liability item 'Banknotes in circulation'. The difference between the value of the euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of euro banknotes that it actually puts into circulation also gives rise to remunerated⁴⁾ 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 asset side.

The seigniorage income on euro banknotes is allocated in proportion to the NCBs' paid-up shares in the ECB's capital. The interest income and expense on these balances is cleared through the accounts of the ECB and is disclosed under 'Net interest income'. The ECB's capital key is adjusted every five years and whenever a new Member State joins the European Union.

The income accruing to the ECB on the share of 8% of the total value of euro banknotes in circulation is primarily distributed to the NCBs.⁵⁾

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) and d) the public sector purchase programme (PSPP) 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 decision by the Governing Council to make transfers to the provision for foreign exchange rate, interest rate, credit and gold price 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 other equity shares and participating interests'.

Key for subscription of the ECB's capital from 1 January 2015	ESCB, capital key, %	Eurosystem, capital key, %
Nationale Bank van België/Banque Nationale de Belgique	2.4778	3.5200
Deutsche Bundesbank	17.9974	25.5674
Eesti Pank	0.1928	0.2739
Bank Ceannais na hÉireann/Central Bank of Ireland	1.1607	1.6489
Bank of Greece	2.0332	2.8884
Banco de España	8.8409	12.5596
Banque de France	14.1793	20.1433
Banca d'Italia	12.3108	17.4890
Central Bank of Cyprus	0.1513	0.2149
Latvijas Banka	0.2821	0.4008
Lietuvos bankas	0.4132	0.5870
Banque centrale du Luxembourg	0.2030	0.2884
Bank Ċentrali ta' Malta/Central Bank of Malta	0.0648	0.0921
De Nederlandsche Bank	4.0035	5.6875
Oesterreichische Nationalbank	1.9631	2.7888
Banco de Portugal	1.7434	2.4767
Banka Slovenije	0.3455	0.4908
Národná banka Slovenska	0.7725	1.0974
Suomen Pankki – <i>Finlands Bank</i>	1.2564	1.7849

Key for subscription of the ECB's capital from 1 January 2015	ESCB, capital key, %	Eurosystem, capital key, %
Subtotal Eurosystem	70.3916	100.0000
Bulgarian National Bank	0.8590	
Česká národní banka	1.6075	
Danmarks Nationalbank	1.4873	
Hrvatska narodna banka	0.6023	
Magyar Nemzeti Bank	1.3798	
Narodowy Bank Polski	5.1230	
Banca Națională a României	2.6024	
Sveriges riksbank	2.2729	
Bank of England	13.6743	
Subtotal for non-euro area NCBs	29.6084	
Total	100.0000	

8. Pension fund

In 2001 the decision was made to create a pension fund in the Bank of Finland's balance sheet for the management of the Bank's pension liability. The purpose of this measure, which came into force at the beginning of 2002, was to ensure that the funds related to the coverage of the pension liability are invested in a lucrative manner. In 2017, the Board of the Bank of Finland decided to transfer the pension fund's investment assets to be managed as part of the Bank's financial assets. The balance sheet arrangements did not change the Bank's position as a pension institution. A separate annual report is prepared on the Bank's pension fund. The assets of the pension fund are included in the Bank of Finland's balance sheet.

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 profit and loss account.

9. Recording of provisions

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

10. Off-balance sheet commitments

Profits and losses arising from off-balance sheet instruments are treated in a similar manner to on-balance sheet instruments. Foreign exchange forward transactions are taken into account in calculating the net average cost of the currency position.

11. Changes in accounting conventions

There were no changes in accounting conventions in the financial year 2018.

-
- 1) Trans-European Automated Real-time Gross settlement Express Transfer system.
 - 2) Decision of the European Central Bank of 13 December 2010 on the issue of euro banknotes (ECB/2010/29), OJ L 35, 9.2.2011, p. 26.
 - 3) 'Banknote allocation key' means the percentages that result from taking into account the ECB's share in the total euro banknote issue and applying the subscribed capital key to the NCBs' share in that total.
 - 4) Decision (EU) 2016/2248 of the European Central Bank of 3 November 2016 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (ECB/2016/36) (recast).
 - 5) Decision (EU) 2015/298 of the European Central Bank of 15 December 2014 on the interim distribution of the income of the European Central Bank (ECB/2014/57) (recast), OJ L 53, 25.2.2015, p. 24.
 - 6) Decision (EU) 2015/298 of the European Central Bank of 15 December 2014 on the interim distribution of the income of the European Central Bank (ECB/2014/57) (recast), OJ L 53, 25.2.2015, p. 24.

Notes on the balance sheet

Assets

1. Gold and gold receivables

The Bank'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 NCBs participating in the Eurosystem – transferred about 20% of its gold holdings to the ECB.

Gold	31 Dec 2018	31 Dec 2017
Holdings (troy ounces, million)	1.6	1.6
Price: EUR per troy ounce	1,121.0	1,081.9
Market price (EUR m)	1,767.2	1,705.6
Change in market value (EUR m)	61.6	-25.5

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 holdings of special drawing rights (SDRs) allocated by the International Monetary Fund (IMF).

2.1 Receivables from the International Monetary Fund (IMF)

Breakdown of receivables from the IMF	31 Dec 2018		31 Dec 2017	
	EUR m	SDR m	EUR m	SDR m
Reserve tranche in the IMF	417.9	343.8	256.5	216.0
Special Drawing Rights (SDRs)	1,363.4	1,121.8	1,331.3	1,121.0
Other receivables from the IMF	124.0	102.0	156.0	131.3
Total	1,905.3	1,567.6	1,743.9	1,468.4

EUR/SDR exchange rate in financial years 2017 and 2018	2018	2017
End-March	0.8474	0.7874
End-June	0.8282	0.8199
End-September	0.8297	0.8355
End-December	0.8228	0.8420

Finland's quota in the IMF is 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 SDR allocation amounts to EUR 1,363.4 million. The SDRs 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 1,905.3 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 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Deposits	108.3	41.0	67.3
Coupon papers	4,408.0	4,172.3	235.7
Discount papers	–	136.4	-136.4
Other	694.4	756.1	-61.6
Total	5,210.8	5,105.8	105.0

Currency breakdown of securities of non-euro area residents denominated in foreign currency

Currency	31 Dec 2018		31 Dec 2017	
	EUR m	%	EUR m	%
Pound sterling	463.4	10.5	408.1	9.5
US dollar	3,773.0	85.6	3,648.7	84.7
Japanese Yen	171.6	3.9	252.0	5.8
Total	4,408.0	100.0	4,308.7	100.0

Remaining maturity of securities of non-euro area residents denominated in foreign currency

Maturity	31 Dec 2018		31 Dec 2017	
	EUR m	%	EUR m	%
Up to 1 year	657.0	14.9	646.7	15.0
Over 1 year	3,751.0	85.1	3,662.0	85.0
Total	4,408.0	100.0	4,308.7	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 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Coupon papers	538.0	504.1	34.0
Other	-59.7	-25.7	-34.0
Total	478.3	478.4	0.0

Currency breakdown of securities of euro area residents denominated in foreign currency

Currency	31 Dec 2018		31 Dec 2017	
	EUR m	%	EUR m	%
Pound sterling	146.5	27.2	161.3	32.0
US dollar	391.5	72.8	342.8	68.0
Total	538.0	100.0	504.1	100.0

Remaining maturity of securities of euro area residents denominated in foreign currency

Maturity	31 Dec 2018		31 Dec 2017	
	EUR m	%	EUR m	%
Up to 1 year	322.0	59.8	222.0	44.1
Over 1 year	216.0	40.2	282.0	55.9
Total	538.0	100.0	504.1	100.0

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

This item includes euro-denominated deposits with non-euro area counterparties, securities issued outside the euro area and other euro-denominated claims.

Claims on non-euro area residents denominated in euro	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Deposits	19.1	279.2	-260.1
Coupon papers	753.9	952.2	-198.3
Other	4.4	0.1	4.3
Total	777.3	1,231.4	-454.1

Remaining maturity of securities of non-euro area residents denominated in euro

Maturity	31 Dec 2018		31 Dec 2017	
	EUR m	%	EUR m	%
Up to 1 year	282.4	37.5	129.8	13.6
Over 1 year	471.4	62.5	822.4	86.4
Total	753.9	100.0	952.2	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 holdings of monetary policy assets amounts to EUR 734,382 million, of which the Bank of Finland holds EUR 8,648.3 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.

5.1 Main refinancing operations

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

5.2 Longer-term refinancing operations

These operations (LTROs) aim to provide counterparties with additional longer-term refinancing. In 2018 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.

Additionally, 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. According to the decisions taken by the Governing Council, the final interest rate applicable to each TLTRO-II operation depended on the lending behaviour of the counterparties for the period between 1 February 2016 and 31 January 2018 and would be between the MRO rate and the deposit facility rate at the time of the allotment. Given that the actual rate could only be known in 2018 and a reliable estimate was not possible until this time, the deposit facility rate was used for calculating the TLTRO II interest up to the end of 2017, as this was deemed a prudent approach. Interest income for that period resulting from the difference between the deposit facility rate and the actual rate was recorded in the profit and loss account under 'Interest expenses' in 2018.

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.

Lending to euro area credit institutions related to monetary policy operations denominated in euro	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Main refinancing operations	–	–	–
Longer-term refinancing operations	8,648.3	10,148.3	-1,500.0
Fine-tuning reverse operations	–	–	–
Structural reverse operations	–	–	–
Marginal lending facility	–	–	–
Credits related to margin calls	–	–	–
Total	8,648.3	10,148.3	-1,500.0

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.

	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Current accounts	0.0	0.0	0.0
Reverse repurchase agreements	–	209.1	-209.1
Emergency Liquidity Assistance (ELA)	–	–	–
Other	3.8	–	3.8
Total	3.8	209.1	-205.3

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

In order to report securities held for monetary policy purpose separately, the item 'Securities of euro area residents denominated in euro' has been divided into two sub-positions: 'Securities held for monetary policy purposes' and 'Other securities'.

7.1 Securities held for monetary policy purposes

As at 31 December 2018, this item consisted of securities acquired by the Bank of Finland within the scope of the three covered bond purchase programmes ¹⁾, the securities markets programme (SMP) ²⁾, the public sector purchase programme (PSPP) ³⁾ and the corporate sector purchase programme (CSPP) ⁴⁾.

Purchases under the first covered bond purchase programme (CBPP1) were completed on 30 June 2010, while the second covered bond purchase programme (CBPP2) ended on 31 October 2012. The SMP was terminated on 6 September 2012.

In 2018 the Eurosystem continued its securities purchases under the expanded asset purchase programme (APP) ⁵⁾, which includes the third covered bond purchase programme (CBPP3), the asset-backed securities purchase programme (ABSPP), the public sector purchase programme (PSPP) and the corporate sector purchase programme (CSPP). The monthly pace of combined net APP purchases by the NCBs and the ECB was EUR 30 billion on average until September 2018 and EUR 15 billion from October 2018 until the end of the year when the net purchases ended. 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.

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, as well as their market value ⁶⁾ (which is not recorded on the balance sheet or in the profit and loss account but is provided for comparison purposes only), are as follows:

Securities held for monetary policy purposes	31 Dec 2018		31 Dec 2017		Change	
	EUR m	EUR m	EUR m	EUR m	EUR m	EUR m
	Balance sheet value	Market value	Balance sheet value	Market value	Balance sheet value	Market value
First covered bond purchase programme (CBPP1)	–	–	–	–	–	–
Second covered bond purchase programme (CBPP2)	97.0	99.0	97.0	101.4	0.1	-2.3
Third covered bond purchase programme (CBPP3)	6,697.3	6,760.2	5,335.1	5,381.1	1,362.1	1,379.1
Securities markets programme (SMP)	1,079.9	1,159.3	1,341.9	1,485.4	-262.0	-326.1
Public sector asset purchase programme (PSPP sovereign)	28,308.3	28,673.0	25,167.7	25,242.5	3,140.6	3,430.5
Public sector asset purchase programme (PSPP supra)	3,175.8	3,194.1	3,067.3	3,089.8	108.6	104.4
Corporate sector purchase programme (CSPP)	6,137.3	6,080.9	4,579.0	4,539.4	1,558.3	1,541.5
Total	45,495.6	45,966.5	39,588.0	39,839.5	5,907.6	6,127.0

The Governing Council assesses on a regular basis the financial risks associated with the securities held under these programmes. Annual impairment tests are conducted on the basis of the estimated recoverable amounts as at the year-end and are approved by the Governing Council.

In accordance with Article 32.4 of the ESCB Statute, losses from holdings of securities purchased under the SMP, CBPP3 and CSPP as well as securities of supranational organisations (supra) purchased under the PSPP, if they were to materialise, are shared in full by the Eurosystem NCBs, in proportion to the prevailing ECB capital key shares. As a result of an impairment test conducted on the CSPP portfolio, the Governing Council has deemed it appropriate to establish a buffer against credit risks in monetary policy operations during 2018 (see 'Provisions' in the notes on the balance sheet).

In the context of the impairment test conducted as at the end of 2018 on securities purchased under the CBPP3 programme, the Governing Council identified one impairment indicator in particular, relating to the holdings of a security issued by a credit institution which encountered significant financial difficulties in the course of 2018. The Governing Council considered that the identified impairment indicators had not affected the estimated future cash flows. No impairment losses were therefore recorded at the year-end on the Bank of Finland's holdings of the security under the CBPP3 programme. Furthermore, no impairment losses were recorded in respect of the other securities purchased under the CBPP3 programme.

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

	Held by NCBs		On the Bank of Finland's balance sheet	
	31 Dec 2018	31 Dec 2017	31 Dec 2018	31 Dec 2017
	EUR m	EUR m	EUR m	EUR m
Securities markets programme (SMP)	67,654.0	82,490.0	1,079.9	1,341.9
Third covered bond purchase programme (CBPP3)	240,655.9	220,954.6	6,697.3	5,335.1
Public sector asset purchase programme (PSPP supra)	224,506.5	203,932.0	3,175.8	3,067.3
Corporate sector purchase programme (CSPP)	178,050.3	131,593.1	6,137.3	4,579.0
Total	710,866.7	638,969.7	17,090.3	14,323.3

7.2 Other securities

This item includes coupon bonds and discount paper issued in the euro area as well as fund shares.

Breakdown of other securities of euro area residents denominated in euro	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Coupon papers	1,554.1	3,158.5	-1,604.4

Breakdown of other securities of euro area residents denominated in euro	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Discount papers	377.1	1,578.7	-1,201.6
Fund investments	755.4	670.1	85.3
Total	2,686.6	5,407.3	-2,720.7

Remaining maturity of other securities of euro area residents denominated in euro	31 Dec 2018		31 Dec 2017	
	EUR m	%	EUR m	%
Up to 1 year	1,210.3	62.7	2,922.4	61.7
Over 1 year	720.9	37.3	1,814.8	38.3
Total	1,931.2	100.0	4,737.2	100.0

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.

The share in the ECB's capital of each NCB participating in the Eurosystem is determined on the basis of a so-called capital key. The capital key is calculated relative to the population and gross domestic product of each country. It is adjusted every five years and whenever new members join the EU. The Bank of Finland's percentage share in the ECB's capital has been 1.2564%, i.e. EUR 144.3 million, since 1 January 2015.

8.2 Claims equivalent to the transfer of foreign reserves

This item represents the Bank of Finland's claims arising from the transfer of foreign reserve assets, EUR 728.1 million, to the ECB when the Bank of Finland joined the Eurosystem. These claims are denominated in euro at a value fixed at the time of their transfer.

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.

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

This item consists of a so-called CSM item (Capital Share Mechanism) relating to the subscription of the ECB's capital, less the so-called ECB issue figure. The amount of euro banknotes in circulation under the CSM is adjusted in the balance sheet to correspond to the ECB's capital key. The ECB issue figure represents the ECB's share (8%) of euro banknotes in circulation. For both figures, the counter entry is recorded under the balance sheet liability item 'Banknotes in circulation'.⁷⁾

At the end of 2018, the balance sheet item totalled EUR 4,034.6 million (EUR 3,750.9 million in 2017). The increase in comparison to 2017 was due to the increase of 4.6% in banknotes put into circulation by the Bank of Finland, while banknotes in circulation in the Eurosystem as a whole increased by 5.2% from 2017. 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 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Due to/from ECB in respect of TARGET2 (including balances held with Eurosystem banks through correspondent accounts)	39,826.7	40,373.2	-546.5
Due to/from ECB in respect of monetary income	-242.1	-264.0	21.9
Due from ECB in respect of the ECB's interim profit distribution	21.3	17.6	3.6
Other claims/liabilities within the Eurosystem (net)	39,605.9	40,126.8	-520.9

The balance of EUR 39,605.9 million as at 31 December 2018 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 the ECB's interim profit distribution and any amounts receivable or refundable.

Regarding the first component, the year-end net transfers via TARGET2 had a credit balance of EUR 39,826.7 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 –242.1 million at year-end (see ‘Net result of pooling of monetary income’ in the notes on the profit and loss account).

Concerning 2018, 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 1,191 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 2018 was EUR 21.3 million (see ‘Income from equity shares and participating interest’ 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. Investment assets earmarked by the Bank for the pension fund were transferred to the Bank’s financial assets in March 2017 and are henceforth managed as part of these assets. The investment instruments are recorded on the assets side of the balance sheet, under items ‘Other securities’ and ‘Other assets’ (sub-item ‘Shares and other equity’).

Tangible fixed assets	31 Dec 2018	31 Dec 2017	Change
Book value	EUR m	EUR m	EUR m
Land	8.5	8.5	–
Buildings	89.8	96.3	-6.5
Machinery and equipment	11.2	12.4	-1.3
Art and numismatic collection	0.6	0.5	0.0
Total	110.0	117.8	-7.8

Intangible fixed assets	31 Dec 2018	31 Dec 2017	Change
Book value	EUR m	EUR m	EUR m
IT systems	7.6	8.5	-0.9
Total	7.6	8.5	-0.9

Other holdings and sundry assets	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Coins of euro area	26.6	31.3	-4.7
Shares and other equity	98.5	34.9	63.6
Pension fund's real estate	14.0	15.1	-1.2
Accruals	432.3	404.0	28.3
Items relating to valuation of off-balance sheet items	67.9	83.9	-16.0
Sundry assets	2.6	1.8	0.8
Total	641.9	571.0	70.9

The increase in "Shares and other equity" is due to growth in investment in real estate funds.

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 2018, the total value of euro banknotes in circulation increased by 5.2%. According to the allocation key, the Bank of Finland had euro banknotes in circulation worth EUR 20,215.2 million at the end of the year, compared with EUR 19,223.2 million at the end of 2017. The value of the euro banknotes actually issued by the Bank of Finland in 2018 increased by 4.6% from EUR 15,472.3 million to EUR 16,180.7 million. As this was less than the allocated amount, the difference of EUR 4,034.6 million (EUR 3,750.9 million in 2017) is shown under asset sub-item 'Net claims related to the allocation of euro banknotes within the Eurosystem'.

Banknotes in circulation	31 Dec 2018	31 Dec 2017
	EUR m	EUR m
EUR 5	82.4	85.9
EUR 10	-81.0	-68.8
EUR 20	3,196.8	3,071.5
EUR 50	10,868.3	10,071.6
EUR 100	-997.1	-862.9
EUR 200	505.8	490.3
EUR 500	2,605.5	2,684.6
Total	16,180.7	15,472.3
ECB issue figure	-1,757.9	-1,671.7
CSM figure	5,792.5	5,422.5
Banknotes in circulation in accordance with the ECB's capital key	20,215.2	19,223.2

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 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Current accounts (covering the minimum reserve system)	61,719.2	53,420.8	8,298.4

Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Deposit facility	15,213.6	23,341.2	-8,127.6
Fixed-term deposits	–	–	–
Fine-tuning reverse operations	–	–	–
Deposits related to margin calls	–	–	–
Total	76,932.8	76,762.0	170.8

2.1 Current accounts (covering the minimum reserve system)

Current accounts contain the credit balances of the transaction accounts of credit institutions that are required to hold minimum reserves. 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, banks' reserve holdings exceeding the required minimum reserves are remunerated at zero per cent or the deposit facility rate, whichever is lower.

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 2018, 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 600 million) and credit institutions other than those subject to the reserve requirement (EUR 0.1 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 and repo agreements with non-euro area counterparties.

6. Liabilities to euro area residents denominated in foreign currency

As at 31 December 2018, 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 2018, 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 SDRs (cf. item on the asset side). Originally the amount of SDRs and their counteritem were equal. As a result of transactions, the Bank of Finland's claims related to SDRs were smaller at the end of 2018 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 2018 (EUR 1,445.7 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'. At the end of financial year 2018, the Bank of Finland had no intra-Eurosystem liabilities.

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 credit under repo 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	31 Dec 2018	31 Dec 2017	Change
	EUR m	EUR m	EUR m
Accruals	73.2	66.4	6.8
Accounts payable	0.5	0.1	0.4
Sundry	-1.9	-1.4	-0.5
Total	71.8	65.1	6.7

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.

	31 Dec 2018	31 Dec 2017	Change
Revaluation accounts	EUR m	EUR m	EUR m
Gold	1,378.2	1,316.6	61.6
Foreign currencies:			
USD	783.7	601.7	182.0
GBP	22.3	28.4	-6.1
JPY	102.3	69.7	32.6
SDR	7.5	–	7.5
Other currencies	0.1	0.2	0.0
Securities	15.0	16.1	-1.2
Fund investments	1.3	55.8	-54.5
Other revaluations	159.9	167.5	-7.6
Total	2,470.2	2,255.8	214.4

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 2018, these provisions totalled EUR 4,636.4 million. Provisions consist of a general provision, provision against real value loss, pension provision, foreign exchange rate and price difference provision and a provision against losses in monetary policy operations.

The pension provision is made to cover the Bank of Finland's pension liabilities. These liabilities total EUR 554.8 million: 107.5% of this amount is covered by the pension provision, i.e. EUR 596.4 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 –7.5 million for the pension fund which was covered by reducing the pension provision. At the end of 2018, real estate in the value of EUR 14.0 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 582.4 million) of the pension provision. Instead, these assets are managed as part of the Bank's financial assets.

In 2017, a provision totalling EUR 69 million against losses in monetary policy operations was established in relation to a security held by the Bank of Finland. In accordance with Article 32.4 of the ESCB Statute, this provision was funded by all the national central banks of participating Member States (NCBs) in proportion to their subscribed capital key shares in the ECB prevailing in 2017. As a result, a provision for EUR 1.2 million equivalent to 1.78487% of the total provision was created. The size of the provision in the financial statements 2017 was calculated taking into account the information regarding the sale of the security in January 2018 and therefore the loss realised in 2018 was fully covered by usage of the provision.

Furthermore, as a result of an impairment test conducted on the CSPP portfolio, the Governing Council has deemed it appropriate to establish a buffer totalling EUR 161 million against credit risks in monetary policy operations during 2018. In accordance with Article 32.4 of the ESCB Statute, this buffer is funded by all the NCBs in proportion to their subscribed capital key shares in the ECB prevailing in 2018. As a result, a provision for EUR 2.9 million equivalent to 1.78487% of the total provision was created.

Provisions (EUR m)	Total provisions	Change in provisions	Total provisions	Change in provisions	Total provisions
	31 Dec 2016	2017	31 Dec 2017	2018	31 Dec 2018
Foreign exchange rate and price difference provision	834	16	850	-41	809
General provision	1,695	50	1,745	50	1,795
Provision against real value loss	1,326	52	1,378	55	1,433
Pension provision	613	-9	604	-8	596
Provision against losses in monetary policy operations	–	1	1	2	3

Provisions (EUR m)	Total provisions	Change in provisions	Total provisions	Change in provisions	Total provisions
	31 Dec 2016	2017	31 Dec 2017	2018	31 Dec 2018
Total	4,468	110	4,579	58	4,636

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 2018	31 Dec 2017	Change
Primary capital	840.9	840.9	–
Reserve fund	1,812.7	1,760.6	52.1
Total	2,653.7	2,601.5	52.1

14. Profit for the financial year

The profit for the financial year 2018 totalled EUR 230.3 million.

Profit for the financial year (EUR m)	31 Dec 2018	31 Dec 2017	Change
To be transferred for the needs of the State	143.0	104.0	39.0
Bank of Finland's share of profit (to be transferred to the reserve fund)	87.3	52.1	35.2
Total	230.3	156.1	74.2

Off-balance sheet commitments

	31 Dec 2018	31 Dec 2017
Off-balance sheet commitments	EUR m	EUR m
Futures contracts		
Nominal value of purchase agreements	1,692.0	1,668.0
Nominal value of sales agreements	-211.1	-163.7
Market value of FX-swap agreements	-8.7	11.9
Investment commitments related to real estate funds	–	64.4

1) 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, 22.11.2014, p. 22).

2) Decision ECB/2010/5 of 14 May 2010 establishing a securities markets programme (OJ L 124, 20.5.2010, p. 8).

3) Decision ECB/2015/10 of 4 March 2015 on a secondary markets public sector asset purchase programme (OJ L 121, 14.5.2015, p. 20), as amended.

4) Decision ECB/2016/16 of 1 June 2016 establishing a corporate sector purchase programme (OJ L 157, 15.6.2016, p. 28).

5) Further details for the APP can be found on the ECB's website: <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>.

6) Market values are indicative and are derived on the basis of market quotes. When market quotes are not available, market prices are estimated using internal Eurosystem models.

7) 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'.



Notes on the profit and loss account

1. Interest income

Interest income from and outside the euro area totalled EUR 723.7 million. Of this, EUR 117.6 million consisted of foreign currency-denominated interest income and EUR 606.1 million of euro-denominated interest income.

The interest rate on overnight deposits was negative throughout the year, which means that interest has been charged on central bank deposits. This negative interest accrues on both overnight deposits and 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 2018, no interest income was earned from ESCB items.

Foreign currency-denominated interest income received outside the euro area (EUR m)	2018	2017	Change
Non-euro area coupon bonds	89.3	69.5	19.8
Non-euro area discount papers	0.7	1.0	-0.4
Non-euro area deposits	1.8	0.8	1.0
Other	16.1	8.6	7.5
Total	107.9	80.0	27.9

Euro-denominated interest income received outside the euro area (EUR m)	2018	2017	Change
Non-euro area coupon bonds	0.8	1.1	-0.3
Non-euro area discount papers	–	–	–
Non-euro area deposits	0.5	3.0	-2.5
Other	8.3	5.8	2.5
Total	9.5	9.9	-0.4

Foreign currency-denominated interest income received from the euro area (EUR m)	2018	2017	Change
Euro area coupon bonds	9.6	9.0	0.6
Euro area discount papers	–	–	–
Euro area deposits	0.1	0.1	0.0
Total	9.7	9.1	0.6

Euro-denominated interest income received from the euro area (EUR m)	2018	2017	Change
Euro area coupon bonds	-2.9	-6.3	3.3
Euro area discount papers	-3.7	-9.1	5.3
Euro area deposits	0.7	1.9	-1.2
Dividends on euro-denominated investments	15.2	8.2	6.9
ESCB items	–	–	–
Interest income from monetary policy lending	–	0.0	0.0
Interest income from monetary policy securities	200.9	154.2	46.7
Interest income from negative interest rates on credit institutions' deposits	380.0	364.2	15.8
Other	6.5	5.0	1.5

Euro-denominated interest income received from the euro area (EUR m)	2018	2017	Change
Total	596.6	518.2	78.4

Total interest income (EUR m)	2018	2017	Change
Foreign currency-denominated interest income received outside the euro area	107.9	80.0	27.9
Euro-denominated interest income received outside the euro area	9.5	9.9	-0.4
Foreign currency-denominated interest income received from the euro area	9.7	9.1	0.6
Euro-denominated interest income received from the euro area	596.6	518.2	78.4
Total	723.7	617.3	106.5

2. Interest expenses

Foreign currency-denominated interest expenses paid outside the euro area (EUR m)	2018	2017	Change
Non-euro area deposits	-0,0	-0,1	0.1
Other	-13.4	-7.2	-6.2
Total	-13.4	-7.2	-6.1

Euro-denominated interest expenses paid outside the euro area (EUR m)	2018	2017	Change
Non-euro area deposits	-0.4	-2.7	2.3
Other	-0.3	-0.4	0.1
Total	-0.7	-3.1	2.4

Euro-denominated interest expenses paid in the euro area (EUR m)	2018	2017	Change
Monetary policy items	-11.6	-37.8	26.2
Other	-1.3	-2.0	0.7
Total	-13.0	-39.8	26.9

Total interest expenses (EUR m)	2018	2017	Change
Foreign currency-denominated interest expenses paid outside the euro area	-13.4	-7.2	-6.1
Euro-denominated interest expenses paid outside the euro area	-0.7	-3.1	2.4
Euro-denominated interest expenses paid in the euro area	-13.0	-39.8	26.9
Total	-27.0	-50.2	23.1

3. Net interest income

	31 Dec 2018	31 Dec 2017
Net interest income	EUR m	EUR m
Interest income		
Financial assets	142.8	98.8
Monetary policy items	580.9	518.4
ESCB claims	–	–
Total	723.7	617.3
Interest expenses		
Financial assets	-15.4	-12.4
Monetary policy items	-11.6	-37.8
ESCB liabilities	–	–

	31 Dec 2018	31 Dec 2017
Net interest income	EUR m	EUR m
Total	-27.0	-50.2
NET INTEREST INCOME	696.7	567.1

4. Foreign exchange rate differences

This item includes realised exchange rate gains and losses arising from the sale of currency positions. In 2018, gains related to exchange rate movements amounted to EUR 11.3 million.

5. Securities price differences

This item includes realised gains and losses arising from the sale of securities. In 2018, the realised losses related to securities price movements totalled EUR –90.3 million, of which EUR –68.9 million was due to a sale of a security in the CSPP portfolio. A provision against the related sales loss was established in connection with the financial statements 2017. In accordance with Article 32.4 of the ESCB statute, the loss is shared by the NCBs of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in 2017. The Bank of Finland's share of the loss is EUR 1.2 million (see 'Provisions' in the notes on the balance sheet and 'Provision against losses in monetary policy operations' in the notes on the profit and loss account).

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. There were no valuation losses related to currencies in 2018. Valuation losses related to securities amounted to EUR 30.9 million.

7. Change in foreign exchange rate and price difference provision

Realised net losses arising from foreign exchange rate and price differences, totalling EUR 41.1 million, were covered by reducing 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	31 Dec 2018	31 Dec 2017
	EUR m	EUR m
Net monetary income pooled by the Bank of Finland	450.9	-456.5
Net monetary income allocated to the Bank of Finland	217.9	192.6
Net monetary income according to the capital allocation key	-233.0	-263.9
Corrections to monetary income reallocation of previous years	-9.0	-0.1
Total	-242.1	-264.0

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 NCB's 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/2015/10 of 4 March 2015 on the implementation of a secondary markets public sector asset 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 the NCBs according to the subscribed ECB capital key. The difference between the monetary income pooled by the Bank of Finland amounting to EUR 450.9 million and reallocated to the Bank of Finland amounting to EUR 217.9 million is the net result arising from the calculation of monetary income.

10. Provision against losses in monetary policy operations

This item contains the Bank of Finland's share in the provision against losses in monetary policy operations, which was established in relation to a security held by an NCB of the Eurosystem in its CSPP portfolio. This item also contains the Bank of Finland's share in the realised loss in relation to the sale in 2018 of a security held by the Bank of Finland in its CSPP portfolio, as well as the dissolving of the provision established in 2017 against losses in monetary policy operations (see 'Provisions' in the notes on the balance sheet and 'Securities price differences' in the notes on the profit and loss account).

11. Share in ECB profit

The ECB distributed EUR 287 million profit for the financial year 2017, of which the Bank of Finland's share recorded for the financial year 2018 totalled EUR 5.1 million.

12. Income from other equity shares and participating interests

This item includes the Bank of Finland's share, EUR 21.3 million, in income on the SMP- and APP-related portfolios distributed by the ECB in the form of interim profit distribution for the financial year 2018. The item also includes dividends received on shares in the BIS, EUR 3.0 million, and income on real estate funds, EUR 0.4 million.

13. Other income

This item consists of the Financial Supervisory Authority's supervision and processing fees, EUR 27.8 million. The item also includes income from real estate, EUR 5.6 million, and commissions and fees.

14. Staff costs

Staff costs	31 Dec 2018	31 Dec 2017
	EUR m	EUR m
Salaries and fees	39.4	36.7
Employer's contributions to the pension fund	7.6	7.4
Other staff-related costs	1.0	2.9
Total	48.0	47.0

Average staff size	2018	2017
	Number of staff	Number of staff
Bank of Finland	356	365
Financial Supervisory Authority	194	181
Total	550	546

	2018
Basic salaries paid to the members of the Board	EUR
Erkki Liikanen (until 11 July 2018)	241,734
Marja Nykänen	210,139
Olli Rehn	245,655
Tuomas Välimäki (from 2 July 2018)	92,171
Total	789,699

Fringe benefits (meal benefits, company-paid telephone and company car) paid to the members of the Board totalled EUR 26,877.

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 State Employees' Pension Scheme. 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.

15. 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 2018 to cover the pension fund's deficit for the financial year.

16. Administrative expenses

Administrative expenses	2018	2017
	EUR m	EUR m
Supplies and purchases	0.5	0.5
Machinery and equipment	6.8	6.8
Real estate	9.5	9.0
Staff-related expenses	3.6	3.8
Purchase of services	12.6	10.2
Other	4.6	2.0
Total	37.6	32.2

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.

17. Depreciation of fixed assets

Depreciation of tangible fixed assets	31 Dec 2018	31 Dec 2017
	EUR m	EUR m
Buildings	4.4	2.8
Machinery and equipment	3.0	3.1
Total	7.4	6.0

Depreciation of intangible fixed assets	31 Dec 2018	31 Dec 2017
	EUR m	EUR m
IT systems	4.3	4.8
Total	4.3	4.8

18. Banknote production services

Costs related to banknote production services totalled EUR 2.1 million.

19. Other expenses

The bulk of other expenses is related to the use and maintenance of property.

20. Income of the pension fund

This item includes the Bank of Finland's and Financial Supervisory Authority's employer contributions and employee's share of premium income, EUR 10.4 million, as well as a contribution of EUR 10 million paid by the Bank to cover the pension fund's deficit for the financial year. Income from the pension fund's real estate, EUR 1.6 million, is also recorded under this item.

21. Expenses of the pension fund

This item includes pensions paid, EUR 27.8 million, the Bank of Finland pension fund's management costs and depreciation of the pension fund's fixed assets.

22. Changes in provisions

This item includes the increase of the provision against real value loss, EUR 55 million, and the increase of the general provision, EUR 50 million. All provisions have been specified in the notes on the balance sheet under liabilities.

23. Profit for the financial year

The profit for the financial year 2018 totalled EUR 230.3 million. The Board proposes to the Parliamentary Supervisory Council that EUR 143.0 million of the profit be made available for the needs of the State.

The image shows a handwritten financial ledger with multiple columns. The left side is labeled 'Debet' and the right side is labeled 'Credit'. The entries are in Swedish and include various financial items and amounts. A red square icon with a white line graph is overlaid on the bottom left of the image.

Appendices to the financial statements

EUR m	31 Dec 2018	31 Dec 2017
Shares and other interests, nominal value		
Bank of International Settlements (BIS) ¹	22.4 (1.96%)	22.4 (1.96%)
Shares in housing companies	2.5	2.5
Other shares and interests	0.1	0.1
Total	25.0	25.0
Bank of Finland's liability share in the APK fund	0.3	0.3
Liability arising from pension commitments		
Bank of Finland's pension liability ²	554.8	553.3
– of which covered by provisions	596.4	604.3
Customer service office		
Deposits	21.4	22.6
Loans	3.0	3.0
1 In parentheses, the Bank of Finland's relative holdings of the BIS shares in circulation.		
2 Pension liability for 2018 includes indexation of pensions and paid-up policies entering into force on 1 January		

EUR m**31 Dec 2018****31 Dec 2017**

2019.

The Bank of Finland's real estate

Building	Address	Year of completion	Volume m³ (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

Risk management and control of 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 Banking 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 quarterly 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. An extensive 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 investment activities objectives, investment policy and risk management 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, the strategic allocation of the investment portfolio by investment category, the leeway permitted in 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 Banking Operations department and as coordinator of matters common to the investment and risk control functions. The Head of Banking 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 risks 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

Risk measures and breakdowns

Breakdown of debt instruments and deposits in the Bank of Finland's financial assets, by credit rating¹

	31 Dec 2018	29 Dec 2017
Credit rating	EUR m	EUR m
AAA	2,783	4,171
AA+	2,846	2,981
AA	942	2,249
AA-	169	223
A+	1,265	1,351
A	224	206
A-	135	195
BBB+	59	23
BBB	-	-
BBB-	-	-
Below BBB-	-	-
No credit rating	-	3
Total	8,424	11,402

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.

Source: Bank of Finland.

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

	31 Dec 2018	31 Dec 2017
Country or region	EUR m	EUR m
Euro area	2,400	5,076
Germany	1,026	1,918
France	617	1,509
Netherlands	357	693
Austria	214	390
Finland	134	228
Belgium	52	312
Ireland	–	26
Rest of Europe	1,103	1,210
Sweden	454	396
United Kingdom	336	462
Norway	196	224
Denmark	80	91
Switzerland	37	37
America	3,497	3,448
United States	2,704	2,717
Canada	793	731
Asia and Oceania	1,199	1,294
Japan	975	1,090
Australia	190	159
Singapore	33	33
New Zealand	–	7
South Korea	–	5

	31 Dec 2018	31 Dec 2017
Country or region	EUR m	EUR m
Euro area	2,400	5,076
International institutions	224	375
Total	8,424	11,402

Totals and subtotals may not add up due to rounding.

Source: Bank of Finland

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

EUR m	2018	2017
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	-1,006	-949
Change in the value of the Bank of Finland's financial assets after an interest rate rise of 1% as at 31 Dec	-151	-206
Change in the value of the Bank of Finland's equity funds after a decrease in the value of equity funds by 25%	-183	-167

Source: Bank of Finland.

Allocation of the Bank of Finland's fixed-income investment portfolios at the end of 2018

Fixed-income investment portfolios	Allocation at year-end (%)
Government debt instruments	45.3
Government-related debt instruments	26.4
Covered bonds	9.1
Corporate bonds	9.4

Fixed-income investment portfolios	Allocation at year-end (%)
Cast holdings	9.8
Total	100.0

Source: Bank of Finland.

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** refer to risk of extra costs or losses resulting from inadequate or failed internal processes, personnel, systems or external events.
- **Investment portfolio** 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 changes 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.

Auditor's report

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 2018 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, 8 March 2019

Eero Lehti

Esko Kiviranta

Toimi Kankaanniemi

Lotta Kauppila, Authorised Public Accountant

Markku Koskela, Authorised Public Accountant

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 a 'Summa' row at the bottom. The text is written in a cursive script, and the numbers are in a clear, legible hand. The page is aged and shows some wear and tear.

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

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.

Object of the audit

We have audited the financial statements of the Bank of Finland (business identity code 0202248-1) for the year ended 31 December 2018. The financial statements comprise the balance sheet, the profit and loss account and notes.

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

Independence

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.

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 2019
PricewaterhouseCoopers Oy
Authorised Public Accountants
Jukka Paunonen
Authorised Public Accountant



Organisation

1.1.2019

Parliamentary supervisory council

Chairperson

Matti Vanhanen

Vice Chairperson

Pentti Oinonen

Kalle Jokinen

Antti Kaikkonen

Seppo Kääriäinen

Jutta Urpilainen

Pia Viitanen

Ville Vähämäki

Ben Zyskowicz

Board

Governor

Olli Rehn

Deputy Governor

Marja Nykänen

Member of the Board

Tuomas Välimäki

Secretary to the Board

Mika Pösö

Departments

Monetary Policy and Research

Juha Kilponen

Forecasting

Meri Obstbaum

Monetary Policy and International Economy

Hanna Freystätter

Institute for Economies in Transition (BOFIT)

Iikka Korhonen

Research

Esa Jokivuolle

Financial Stability and Statistics

Katja Taipalus

Macroprudential Analysis

Paavo Miettinen

Macroprudential Policy

Mervi Toivanen

Financial Statistics

Elisabeth Flittner

Statistical Analysis and Information Services

Harri Kuussaari

Market Operations

Harri Lahdenperä

Monetary Policy Implementation

Niko Herrala

Asset Management

Jarno Ilves

Banking Services

Jussi Terho

Counterparties and Collateral

Marjaana Hohti

General Secretariat

Mika Pösö

Communications

Elisa Newby

International Affairs

Satu Kivinen

Legal Affairs

Maritta Nieminen

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

Tero Reponen

ICT and Information Management

Petteri Vuolasto

BoF IT-Customer Support and IT-Platform

Sami Kirjonen

FIN-FSA IT-Customer Support

Kirsti Ikonen

BoF IT-Customer Support and Shared Services

Miika Syrjänen

Information Management

Mia Ristimäki

- Registry and Archive
 - Library
 - Content Management
-

Internal Audit

Pertti Ukkonen

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