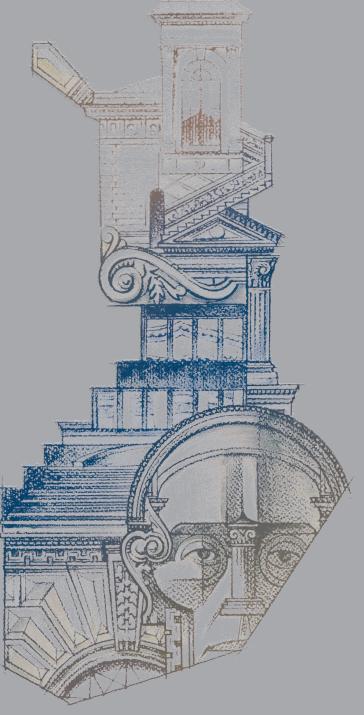
## Bank of Finland Annual Report 2013







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### Foreword

The European financial markets were calmer in 2013 than in the previous year. However, the problems are not yet over. Euro area economic growth has been disappointing, despite the signs of recovery observed since the latter half of 2013. Deleveraging of debt that has been accumulating in the area will take time and will weigh on growth in demand and weaken employment developments. However, to ensure the smooth functioning of the monetary union, it is essential that public finances are brought to a sound footing, in a credible manner, in all euro area countries.

In this environment, inflationary pressures have remained low, enabling the ECB to pursue an accommodative monetary policy. The ECB steering rate was reduced to a record low level in 2013. At the same time, monetary policy has been enhanced by stepping up forward guidance regarding future policy intentions.

Since the economic situation remains challenging, central banks need to continue with high-quality research and careful analysis of the economic outlook, while putting forward solutions based on these efforts. The Bank of Finland seeks to act as a constructive member of the Eurosystem and participates in the preparation of the single monetary policy on the basis of its expertise.

Over the past year, the emphasis in the Finnish economic policy debate has shifted from problems prevailing in the euro area to Finland's own economic problems. Indeed, decisive action is also required in this respect.

When the world economy was rattled by the severe financial crisis, Finland's gross domestic product contracted by as much as 8% in 2009. The decline was unprecedented. However, decisive interest rate cuts and fiscal consolidation softened the fall markedly. Private consumption and employment were among the factors that

developed favourably for a long period relative to the growth losses experienced in total output. This is why long-term problems in the Finnish economy received too little attention at first.

It was not until last year when it became widely recognized that, in addition to the international and the European crisis, the Finnish economy is simultaneously undergoing its own deep structural crisis. The industrial base has narrowed significantly due to the contraction of the electronics industry, but also due to a weaker demand for paper. The Finnish mechanical engineering industry is specialised in capital goods, and global demand for these has also been weak. The fact that Finland's competitiveness has weakened for several years makes the situation more difficult.

Through its own activities, the Bank of Finland has endeavored to ensure that the nature and seriousness of the situation would be fully understood in Finland. The Bank's efforts have partly been successful. Some alleviating measures have also been taken – the moderate pay settlement agreed in October, to name but one. However, considerable efforts are still required. The balance of public finances must be restored in a sustainable manner. At the same time, significant structural reforms are also needed to increase, for example, effective competition and labour supply in the Finnish economy.

The contraction in the industrial base and the ongoing population ageing are facts that will dominate the policy agenda for a long time. When solutions to these problems are sought, the Bank of Finland aims to maintain its status as a reliable expert, into the future.

Erkki Liikanen 27 February 2014

### Bank of Finland

The Bank of Finland is Finland's national central bank. It is a member of the Eurosystem which comprises the European Central Bank (ECB) and the national central banks of the EU Member States that have adopted the euro as their single currency. The primary objective of the Eurosystem is to maintain price stability.

The Bank of Finland's status is defined in the Finnish constitution. The Bank of Finland is an independent institution governed by public law, which operates under the guarantee and care of the Parliament. Supervision of the Bank's activities is undertaken by the nine-member Parliamentary Supervisory Council, appointed by the Finnish Parliament.

The Bank of Finland's activities are regulated by the Act on the Bank of Finland and the Statute of the European System of Central Banks (ESCB). In handling the duties of a central bank as part of the ESCB, the Bank of Finland abides by the policies and guidelines of the ECB.

The core functions of the Bank of Finland include participation in the preparation of the single monetary policy, operative central bank tasks, monitoring of financial market stability and the maintenance of the currency supply.

The monetary policy decisions are centralised in the Governing Council of the ECB, and the national central banks are responsible for their implementation in their respective countries. The Governor of the Bank of Finland is a member of the ECB's Governing Council. Experts from the Bank of Finland support the Governor's activity in the Governing Council and participate in the preparation of the single monetary policy in the various committees of the ESCB.

The Bank of Finland implements the Eurosystem's monetary policy in Finland by conducting monetary policy operations with Finnish counterparties, mainly banks. Other operative central bank tasks include central bank services provided to banks. For example, the Bank of Finland transmits interbank payments and provides banks with

overnight liquidity against eligible collateral assets, as necessary. The Bank of Finland's banking tasks also include productive and prudent investment of its own financial assets, such as the foreign reserve portfolio.

In its function of oversight of the financial markets, the Bank of Finland is responsible for the macroeconomic perspective. In this context, the Bank also monitors the reliability and efficiency of payment systems.

The supervision of individual operators in the financial and insurance markets is the responsibility of the Financial Supervisory Authority (FIN-FSA), functioning as an independent authority in connection with the Bank of Finland.

Banking supervision in the euro area is undergoing rapid change. In the course of 2014, supervision of banks in the euro area will be conferred on the ECB. The practical supervision will be given over to the Single Supervisory Mechanism (SSM) composed of national banking supervisors and the ECB. In 2013, board members and experts from the Bank of Finland and the FIN-FSA participated in the reform at the various levels of its preparation.

As part of the currency supply function, the Bank of Finland is responsible for the issuance of cash in Finland and for its quality and availability. The Bank has two regional offices for the management of currency supply: one in Oulu and the other in Vantaa.

In 2013, the Board of the Bank of Finland was composed of the Governor Erkki Liikanen, Deputy Governor Pentti Hakkarainen and Member of the Board Seppo Honkapohja. The FIN-FSA has its own Board. In 2013, the FIN-FSA Board was chaired by the Deputy Governor of the Bank of Finland, Pentti Hakkarainen.

At the end of 2013, a total of 391 staff were employed in the Bank's head office and the regional offices in Vantaa and Oulu, while the FIN-FSA employed a total of 208 staff. The FIN-FSA produces its own annual report on its activities.



The Board of the Bank of Finland. Left: Pentti Hakkarainen, Deputy Governor, bottom right: Erkki Liikanen, Governor, and bottom left: Seppo Honkapohja, Member of the Board.





Photo: Peter Mickelsson.



### Bank of Finland activities 2013

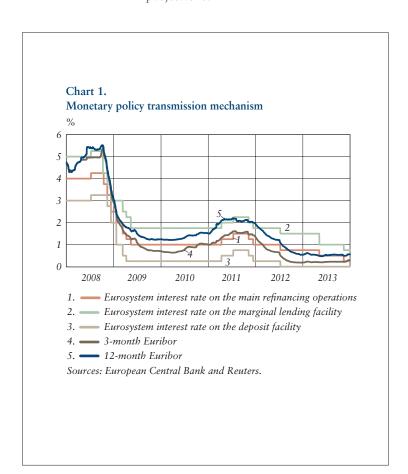
### **Monetary Policy**

#### The ECB's monetary policy and its preparation

The main objective of the Eurosystem's monetary policy is to maintain price stability in the euro area. The Governing Council of the ECB 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 can also support other economic policy objectives of the EU, as long as the objective of price stability is not jeopardised.

As a member of the ECB Governing Council, the Governor of the Bank of Finland participates in monetary policy decision-making. Experts from the Bank of Finland contribute to the preparation of monetary policy decisions and carry out other background work. They contribute to the preparation of the Governing Council's meetings in the context of the Eurosystem's Monetary Policy Committee and the Market Operations Committee.

In 2013 the emphasis of monetary policy preparation was on developing forward guidance, analysing alternative non-standard monetary policy measures and assessing the operating environment characterised by low interest rates. In addition to these, the Bank of Finland experts have emphasised the transparency and clarity of practices for publishing projections.



## ECB Governing Council strengthened accommodative monetary policy through forward guidance

The ECB Governing Council eased the stance of monetary policy during 2013 by lowering its key policy rate – the interest rate on the main refinancing operations, ie the MRO rate - twice, by 0.25 percentage point on both occasions. In May the Governing Council lowered the key policy rate from 0.75% to 0.50% (Chart 1). At the same time, the interest rate on the marginal lending facility was reduced from 1.50% to 1%, while the interest rate on the deposit facility was kept unchanged at 0%, the level maintained since July 2012. In November the MRO rate was lowered to very close to zero, namely to 0.25%. The marginal lending facility rate was set at 0.75% and the deposit facility rate was kept unchanged at 0%. The key ECB interest rates remained exceptionally low for the fifth consecutive year and the Governing Council repeatedly stressed during the year that the monetary policy stance would remain accommodative for as long as was necessary.

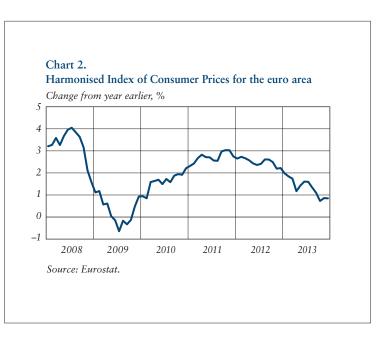
The Governing Council took a major monetary policy decision in July with the

introduction of forward guidance (see Box 1). The Bank of Finland has been active in developing this policy tool. Through forward guidance, the Governing Council communicates the interest rate policy it expects to conduct. Since July, and also since the interest rate cut in November, the forward guidance of the Governing Council has been that it expects the key ECB interest rates to remain at present or lower levels for an extended period of time. The path for interest rates is conditional on inflation expectations and outlook remaining in line with price stability. Forward guidance makes accommodative monetary policy more effective by alleviating uncertainty surrounding future developments in monetary policy interest rates.

Monetary policy was eased and enhanced during 2013, since the recovery from the financial and debt crisis continued to keep the outlook for economic growth and prices subdued in the euro area. As measured by the Harmonised Index of Consumer Prices (HICP), inflation fell from 2% in early 2013 to about 0.8% at the end of the year (Chart 2). The average inflation rate was 1.4% in 2013, compared with 2.5% in 2012. However, inflation expectations remained firmly anchored throughout 2013. Even though real economic developments stabilised over the year and GDP began to grow at a slow pace, the underlying growth continued to be dampened by the process of balance sheet adjustment in the financial and non-financial sectors and by high unemployment. The ECB Governing Council considered economic growth to be subject to downside risks, throughout the year. However, financial market tensions eased and confidence improved over the year.

## Stabilisation of financial markets seen since end-summer 2012 continued in early 2013

At the beginning of 2013, the ECB Governing Council stressed that it would keep the monetary policy stance accommodative and continue the full allotment policy



in the Eurosystem's refinancing operations. The Eurosystem's policy rate was kept at 0.75% in the first half of the year, at the level maintained since July 2012. The Governing Council's September 2012 announcement concerning the introduction of Outright Monetary Transactions (OMTs) had, by the beginning of 2013, contributed to reducing the possibilities for the materialisation of destructive scenarios in the euro area. In the early part of the year, several indicators pointed to further easing of financial market tensions. For example, the interest rates on Spanish and Italian sovereign bonds declined further from the elevated levels recorded in summer 2012.

In January 2013, banks had the first opportunity to repay amounts received in the three-year longer-term refinancing operations (LTROs) settled in December 2011 and February 2012. The brisk pace of early repayments in the early part of 2013 confirmed the view that confidence had strengthened and banks' funding situation had improved. In addition to the Governing Council's monetary policy decisions, the stabilisation of financial markets was backed by the summer 2012 decisions on a

#### Box 1.

#### Monetary policy and forward guidance

Over the course of 2013, several major central banks, including the Eurosystem, intensified their monetary policy by adopting a new communication tool known as 'forward guidance'. Through forward guidance, central banks clarify their views regarding their future monetary policy orientation and interest rate policy, in particular.

The Governing Council of the ECB began to provide regular guidance on its future interest rate policy in July 2013. From the July policy-setting meeting onwards, the Governing Council's message was that it expected the key ECB interest rates to remain at present or lower levels for an extended period of time.

Forward guidance is conditional: the path for policy interest rates depends on the medium-term outlook for inflation, with strict adherence to the price stability objective. In 2013 the Governing Council's expectations and forward guidance that the key ECB interest rates would remain low for an extended time period were based on persistent slow economic growth and a subdued medium-term outlook for inflation.

The purpose of forward guidance is to guide expectations concerning the future evolution of central bank rates. When uncertainty about future levels of policy interest rates decreases, money market rates remain more stable and in line with the accommodative stance of monetary policy. This way accommodative monetary policy is more strongly transmitted to the economy.

Expectations about interest rates affect macroeconomic developments through a number of channels. Interest rate expectations have an impact on, for example, the behaviour of businesses and households. Expectations that the interest rate level remains low for a long time encourages firms and households to invest and purchase durable goods which, in turn, boosts economic recovery and job creation.

The introduction of forward guidance had a distinct impact on interest rate expectations prevailing in the financial markets. Since May, euro area money market rates had been subject to upward pressures, as the Federal Reserve had provided first indications that it was considering scaling down its bond-buying programme. Even though the Governing Council kept the key ECB interest rates unchanged in July, forward guidance, with its indication of possible further interest rate cuts, clearly eased upward pressures on money market rates. Uncertainty about the future level of interest rates measured in the money markets eased and, until the end of the year, interest rate expectations remained better aligned with the outlook for economic developments in the euro area, which was more moderate than the outlook for the United States.

Used correctly, forward guidance is an active policy tool that intensifies the impact of monetary policy in a situation where interest rates are very close to zero and it is challenging to assess the state of the economy. The Eurosystem's forward guidance contributes to aligning short-term interest rates more firmly with the monetary policy stance guided by the medium-term outlook for inflation. At the same time, it provides greater transparency regarding the rationale behind Eurosystem decision making.

The new communication method proved to be valuable; in October the inflation outlook was assessed as having moderated. Given the possibility for further reductions in interest rates entailed in forward guidance, the Governing Council's decision to lower the key ECB interest rates in November was taken in full consistency and continuity with the ECB's monetary policy aimed at maintaining price stability and supporting economic activity. Looking forward, monetary policy communication will continue to play a significant role, since it will take a long time for the euro area economy to recover.

banking union and preparations for the Single Supervisory Mechanism (SSM); commencement of the capitalisation of Spanish banks at the end of 2012; entry into force of the fiscal compact in January 2013 and commencement of activities of the European Stability Mechanism (ESM) in October 2012.

Despite financial market stabilisation, in January the Governing Council considered that euro area GDP would contract further in the first half of 2013 and that HIPC inflation would fall below 2% in 2013. Inflation expectations in the early part of the year continued to be firmly anchored in line with the ECB's aim of maintaining inflation rates below, but close to, 2% over the medium term. In January-February, markets perceived that the Eurosystem's monetary policy was somewhat tighter than, for instance, the monetary policies of the Federal Reserve or the Bank of Japan. This was one of the reasons for the slight increase in money market rates at the very beginning of 2013. Money market rates declined, however, as the Governing Council emphasised in its February and March meetings that monetary policy would remain accommodative.

In March, the ranges for growth projections for 2013-2014 were revised slightly downwards, due to economic weakness in the fourth quarter of the previous year. Broadly in line with previous projections, recovery was expected to continue in the second half of the year, subject to downside risks. Underlying price pressures were expected to remain contained, given the environment of weak economic activity. In the Governing Council's assessment, risks to the outlook for price developments continued to be broadly balanced over the medium term, with upside risks relating to stronger than expected increases in administered prices and indirect taxes, as well as higher oil prices, and downside risks stemming from weaker economic activity.

#### The Governing Council stressed that the monetary policy stance would remain accommodative for as long as needed

Against the background of a weak overall outlook for the euro area, the ECB Governing Council boosted its communications in April, emphasizing that the ECB's monetary policy stance would remain accommodative and that the ECB would continue the full allotment policy in its refinancing operations for as long as necessary. In May the Governing Council decided to lower the MRO rate by 0.25 percentage point to 0.50% and the marginal lending facility rate by 0.50 percentage point to 1%. The deposit facility rate remained unchanged at 0%. The Governing Council stated that the decisions were consistent with low underlying price pressures over the medium term.

In May, the Governing Council also decided to extend the previously announced period, during which it conducts its main refinancing operations as fixed rate tenders with full allotment. The full allotment procedure would continue for as long as necessary, and at least until July 2014.

The Governing Council stated that the cut in interest rates would contribute to supporting prospects for a recovery later in the year. In addition, improvement in confidence, stabilisation of financial market developments and the easing of banks' funding constraints supported financing conditions for the private sector. However, the financing conditions of non-financial corporations and households had tightened markedly in the previous years and remained tight in the first half of 2013. Financing conditions for small and mediumsized enterprises (SMEs) were still tight, especially in the GIIPS countries (Greece, Ireland, Italy, Portugal and Spain). In May the Governing Council decided to start consultations with other European institutions on initiatives to promote a functioning market for asset-backed securities collateralised by loans to non-financial corporations. The purpose of these consultations

was to examine the possibilities for ensuring that accommodative monetary policy would also be transmitted to SMEs, which are in a key position in terms of employment developments in several euro area countries.

In June the Eurosystem changed the method for presenting growth and inflation projections. In addition to ranges which were used previously, GDP growth and inflation projections were also to be presented in the form of midpoints, ie single figures. The change does not affect the content of projections. Rather, instead of a range, the use of a single annual percentage figure provides a clearer way of presenting the key projection results. In the June assessment, the growth and inflation projections for 2013 were revised marginally downwards, while the inflation projection for 2014 remained unchanged and the growth projection for 2014 was revised marginally upwards.

#### Forward guidance strengthens the Eurosystem's accommodative monetary policy

In July, the ECB Governing Council altered its communication approach regarding the key ECB interest rates with the introduction of forward guidance (see Box 1). The Governing Council announced that it expected the key policy rates to remain at present or lower levels for an extended period of time. In addition to the Eurosystem, a number of other major central banks also augmented their monetary policy through forward guidance in 2013. By using forward guidance, the Governing Council aims to clarify its intentions on future policy action, thereby alleviating uncertainty about developments in monetary policy rates. This way accommodative monetary policy is more strongly transmitted to the economy.

Starting from July, the Governing Council's forward guidance included the possibility for further cuts in the key ECB interest rates. The Governing Council's assessment of the future path of the key

policy rates is conditional on inflation projections: in July–October the inflation outlook extending into the medium term was assessed as remaining subdued, given the broad-based weakness in the real economy and subdued monetary dynamics (eg development of monetary and credit volumes).

In early autumn, the view gained ground that the euro area economy would not contract further, despite the continued fragile situation and the Governing Council's assessment that the risks to growth continued to be tilted to the downside. The projection published by the Eurosystem in September foresaw euro area inflation at 1.5% in 2013 and at 1.3% in 2014. GDP growth was projected at -0.4% in 2013 and at 1.0% in 2014. Compared with the June projections, the growth and inflation projections for 2013 had been revised slightly upwards. The growth projection for 2014 had been revised slightly downwards and the inflation projection had remained unchanged. Indeed, the fact that growth projections for 2013 were no longer revised downwards but instead revised slightly upwards was one of the indications that economic developments were stabilising.

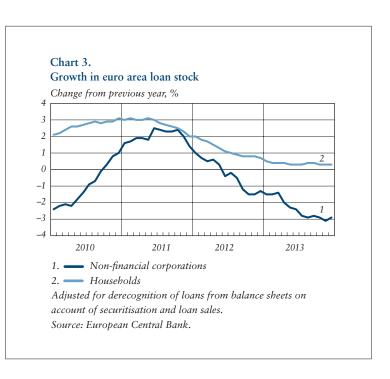
In August–October the Governing Council kept the key policy rates unchanged and confirmed the July forward guidance; the Governing Council expected the key ECB interest rates to remain at present or lower levels for an extended period of time. The Governing Council stressed that the ECB's monetary policy stance continued to be geared towards maintaining the degree of monetary accommodation warranted by the outlook for price stability and promoting stable money market conditions. The monetary policy stance thereby provides support for a gradual recovery in economic activity.

## Progress towards banking union contributes to more even transmission of monetary policy

Although several indicators suggested that financial market tensions had eased markedly in the euro area since summer 2012 and that banks' financing situation had improved, financing conditions in the corporate and household sectors eased only slightly in 2013. Reductions in the key policy rate and other Eurosystem measures did not lead to a comparable fall in the average interest rates on new corporate and housing loans in the euro area. Interest rates on corporate loans, in particular, continued at high levels, on average, relative to money market rates. For example, the SME loan margin relative to the 3-month Euribor remained exceptionally high, at about 3.6%. In addition, availability of SME loans, loan terms and conditions and the lending costs in the stressed countries deviated markedly from those in countries with high credit ratings.

The Governing Council stressed repeatedly that a smoother transmission of monetary policy requires decisive action to reduce the fragmentation of financial markets. In this context, steps towards a banking union are of particular importance. In October, it was confirmed that the single supervisory mechanism (SSM) to be established in connection with the ECB would be launched in November 2014. The SSM regulation requires the ECB to carry out a comprehensive assessment of, at least, the banks that will be subject to the ECB's direct supervision and of the balance sheets of such banks. The main features of the comprehensive assessment were announced in October. The exercise is due to be completed before the ECB adopts its supervisory role under the SSM. The comprehensive assesment will enhance the quality of information available on the condition of banks and result in the identification and implementation of necessary corrective actions (see Box 5).

Consolidation of the banking sector

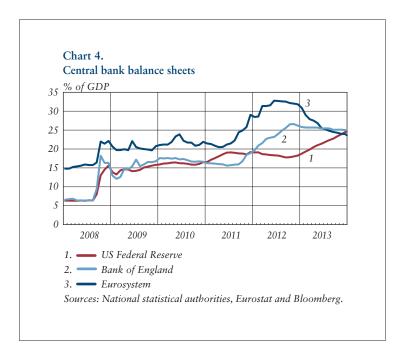


and further steps towards a banking union will reduce financial market fragmentation in the euro area. In order for the effective transmission of monetary policy, it is important to strengthen the resilience of banks' balance sheets and remove uncertainties concerning the condition of banks. The soundness of banks' balance sheets is a key factor in facilitating both an appropriate provision of credit to the economy and the normalisation of all funding channels. This is important since the stock of credit to non-financial corporations, in particular, contracted strongly in 2013 and the stock of credit granted to households grew at a very subdued pace (Chart 3).

#### In line with forward guidance, the Governing Council cut the key policy rate to an historically low level in November

The Governing Council has repeatedly emphasised that it monitors all incoming information on economic, credit and monetary developments and assesses any impact on the medium-term outlook for price stability. Although the expected gradual improvement in activity from low levels continued in October, the view gained ground during October that medium-term inflation developments were weaker than expected.

In November the Governing Council took several decisions regarding the key ECB interest rates and liquidity provision, in line with its forward guidance. It decided to lower the interest rate on the main refinancing operations by 0.25 percentage point to 0.25% and the interest rate on the marginal lending facility by 0.25 percentage point to 0.75%. The rate on the deposit facility remained unchanged at 0%. The Governing Council stressed that the decisions were in line with its forward guidance of July 2013, given the latest indications of further diminishing underlying price pressures in the euro area over the medium term, starting from the low annual inflation rates of below 1% at that time. In November, the Governing Council considered that the euro area might experience a prolonged period of low



inflation, to be followed by a gradual upward movement towards inflation rates below, but close to, 2% later on.

In addition to lowering the key policy rates, the Governing Council reviewed the forward guidance commenced in July and confirmed that it continued to expect the key ECB interest rates to remain at present or lower levels for an extended period of time. This expectation continued to be based on an unchanged overall subdued outlook for inflation extending into the medium term, given the broad-based weakness of the economy and subdued monetary and credit dynamics. The Governing Council reiterated that the monetary policy stance would remain accommodative for as long as necessary, thereby also continuing to assist gradual economic recovery.

Also in December, the Governing Council confirmed its previous forward guidance, projecting low interest rates for an extended period of time, coinciding with the publication of the Eurosystem staff macroeconomic projections for the euro area. The Governing Council decided to publish more detailed information on the staff macroeconomic projections, as of December. The projections foresaw inflation at 1.4% in 2013 and at 1.1% in 2014, both slightly down from previous projections. The growth projection remained broadly unchanged and the Governing Council considered that the risks surrounding economic growth continued to be on the downside. However, growth and inflation were estimated as strengthening in 2015, to 1.3% and 1.5%, respectively.

In order to increase confidence in the availability of liquidity, the Governing Council again decided in November to extend the period of the fixed rate full allotment policy in the Eurosystem's credit operations from July 2014 to July 2015. However, over the course of 2013 banks' recourse to central bank credit moderated. Excess liquidity contracted gradually during the year, as banks used the early repayment

opportunity of the three-year LTROs (allotted in December 2011 and February 2012). Consequently, the balance sheet of the Eurosystem declined by about 7 percentage points relative to GDP in 2013 (Chart 4). At the end of the year, the Eurosystem's balance sheet total was about 24% of GDP

In the latter half of the year, the Governing Council emphasised that it was closely monitoring money market conditions and their potential impact on the monetary policy stance and that it was ready to consider all available instruments.

The reduction of the key ECB interest rate to 0.25% in November as well as the decisions that secured the availability of liquidity and the Governing Council's forward guidance, contributed to keeping money market rates at low levels at the end of the year and to keeping them in line with the accommodative monetary policy stance. The slight increase in money market rates, close to the turn of the year, was primarily due to the forthcoming comprehensive assessment of banking sector balance sheets, due to be carried out for balance sheet positions as at the turn of the year.

Bank of Finland experts prepare for a Eurosystem monetary policy meeting. Governor Erkki Liikanen is a member of the ECB Governing Council where the decisions are made.



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#### Implementation of monetary policy in the euro area and Finland

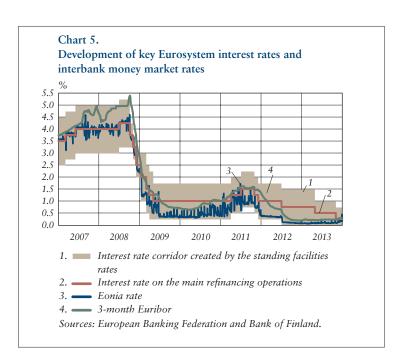
The Eurosystem implements the monetary policy decisions of the ECB's Governing Council with the help of an operational framework. The operational framework consists of open market operations, standing facilities and a minimum reserve system. Open market operations are conducted as credit operations, for which counterparties must submit adequate collateral to the central bank. Besides the features presented above, the operational framework also includes outright transactions.

The Bank of Finland is responsible for the national implementation of the Eurosystem's single monetary policy. Credit institutions located in Finland hold current accounts with the Bank of Finland and participate in monetary policy operations through the Bank of Finland.

Representatives of the Bank of Finland participate in the analysis of monetary policy implementation, conducted at the Eurosystem's Market Operations Committee, in order to support decision making by the ECB Governing Council. In many cases, the committee has been the forum where non-standard monetary policy measures (see Box 2) have been prepared during the financial crisis. For example, when the Eurosystem decided to adopt the full allotment approach in credit operations, the Bank of Finland's previous experience of such policy was valuable.

## Further easing of monetary policy seen in 2013 but no need for new special refinancing operations

In the course of 2013, the Eurosystem continued to ease monetary policy through interest rate cuts. The key policy rate – the interest rate on the main refinancing



operations – was lowered twice, first from 0.75% to 0.50% in May and then from 0.50% to 0.25% in November. At the same time, the so-called interest rate corridor narrowed and became asymmetric, as the interest rate on the deposit facility remained at 0% throughout the year, but the interest rate on the marginal lending facility declined from 1.5% to 0.75% (Chart 5).

Throughout the financial crisis, the various refinancing operations conducted by the Eurosystem have been at the centre of monetary policy implementation. In 2011 and 2012 the Eurosystem had taken significant measures to alleviate uncertainty about liquidity among banks: it conducted two three-year longer-term refinancing operations (LTROs), through which it injected EUR 1,019 billion into the banking system (Chart 6). The amount allotted exceeded banks' liquidity needs many times over.

The impact of these measures was still visible in 2013. The amount of excess liquidity in the banking system remained considerable, and unlike previous years, the Eurosystem had no need to steer banks' liquidity positions with further non-standard monetary policy measures. (For detailed

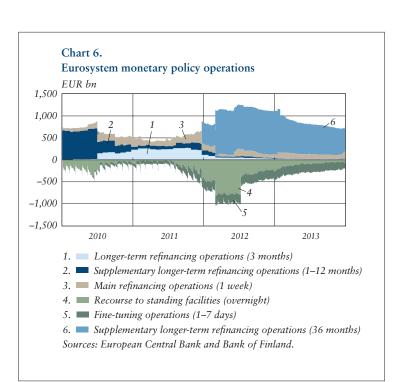
information on monetary policy operations conducted by the Eurosystem in 2013, see Appendix p. 123.)

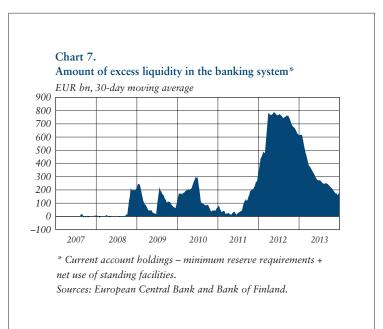
## Banks' liquidity situation remained ample despite commencement of early repayments in LTROs

The liquidity situation of the banking sector depends on the volume of monetary policy operations, the amount of liquidity held by banks as minimum reserves with the central bank and so-called autonomous factors (such as banknotes in circulation or government deposits with the central bank). The volume of autonomous factors is not dependent on central bank operations and they can either decrease or increase liquidity. In 2013, the most notable influence on banks' liquidity situations came from early repayments associated with LTROs.

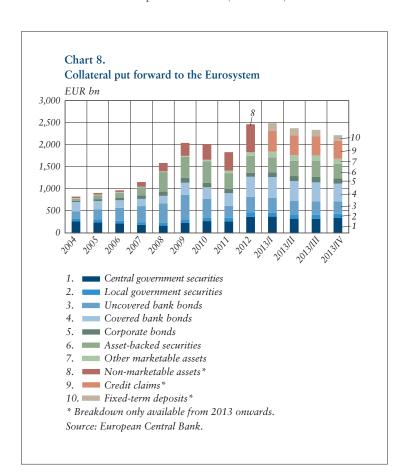
A special feature of the three-year LTROs was that counterparties had the option of an early repayment of funds borrowed in these operations as of end-January 2013, after which repayment was possible on a weekly basis. Banks used the early repayment option to an amount averaging EUR 5.3 billion (excluding the first exceptionally high repayments in each of the two LTROs), but the weekly sums varied considerably. As a result of early repayments, outstanding LTROs contracted during 2013 by EUR 446 billion, which is 44% of the total initial amount allotted in these operations. Excess liquidity decreased by almost the same proportion (Chart 7).

The amount of liquidity in the banking system remained substantial, however, which was shown by counterparties' subdued participation in the Eurosystem's regular shorter-term refinancing operations. The Eurosystem conducts one-week refinancing operations on a weekly basis and, once a month, one one-month and one three-month refinancing operation. However, during most of 2013, the three-year LTROs accounted for over 80% of the liquidity provided to the banking system.





Despite the contraction in excess liquidity, throughout the year, the shortest money market rates remained very close to the lower bound of the interest rate corridor, where they have stayed since the suspension of restrictions on liquidity volumes in the Eurosystem's credit operations during the financial crisis (Chart 5). Besides the liquidity situation, interest rate developments and expectations were also affected by other factors. These included the Eurosystem's commitment to continuing the fixed rate full allotment approach in credit operations until July 2015 and the introduction of forward guidance in July 2013, ie the announcement that the ECB Governing Council expects to keep the key ECB interest rates at their prevailing or lower levels for an extended period of time (see Box 1).



## Liquidity deposited with central banks contracted substantially

When liquidity in the banking system exceeds banks' liquidity needs, excess liquidity returns back to the central bank through deposits. Previously, counterparties deposited their excess liquidity at the Eurosystem deposit facility, since such deposits are paid a deposit rate determined by the ECB Governing Council. Following the decline of the deposit rate to 0% in July 2012, it has been economically irrelevant for counterparties whether they leave their excess liquidity unremunerated in their current accounts with the central bank, as excess reserves, or transfer the excess to the deposit facility. Consequently, overnight deposits have contracted significantly, totalling only slightly over EUR 50 billion at the end of 2013 (Chart 6). Due to the contraction of excess liquidity, the total amount of overnight and unremunerated excess reserves decreased in 2013 to around EUR 200 billion. Total deposits had peaked at over EUR 800 billion after the allotment of the three-year LTROs.

Banks also have the possibility to make interest-bearing one-week fixed-term deposits with the central bank in the Eurosystem's liquidity-absorbing operations. The purpose of these operations is to neutralise the liquidity impact of purchases made under the Securities Markets Programme (SMP). Therefore, the Eurosystem seeks to collect in liquidity-absorbing operations an amount of deposits that corresponds to the cumulative outstanding amount of SMP purchases. In 2013 this amount contracted from EUR 208.5 billion to 178.5 billion, due to maturing securities.

## LTRO repayments reduced banks' collateral needs

Early repayments associated with the three-year LTROs resulted in a reduction of banks' collateral needs, as outstanding monetary policy operations contracted from over EUR 1,125 billion to about EUR 750 billion in 2013. The total amount of

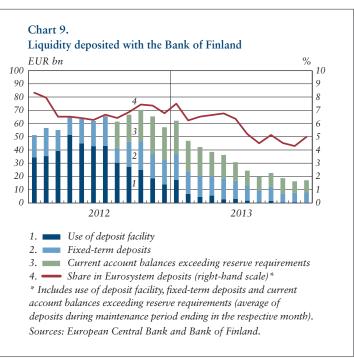
collateral submitted to the Eurosystem, in turn, declined from slightly less than EUR 2,500 billion to about EUR 2,200 billion (Chart 8). Counterparties usually deliver a substantially higher amount of collateral to the central bank than they are actually required to. During the financial crisis the amount of excess collateral remained substantial at the level of the overall banking system. At the end of 2013, the amount of collateral put forward was three times higher than credit granted via monetary policy operations. Banks also need collateral for purposes of intraday credit.

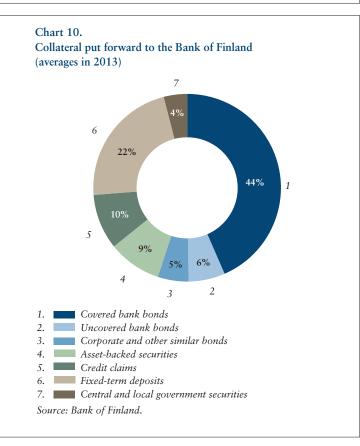
At the end of 2013, issuances by the public sector, ie central and local government, were the largest component of collateral put forward to the Eurosystem (19% of all collateral submitted). The second largest collateral components were covered bank bonds as well as credit claims, which comprise bank loans granted by counterparty banks to their corporate and public sector customers. These collateral components both accounted for 18% of all collateral submitted.

The key changes made to collateral eligibility criteria and risk control measures in 2013 were related to the biennial review of the Eurosystem's risk control framework. Based on the review conducted in 2013, the valuation haircuts applicable to collateral were updated and additional valuation haircuts were introduced for certain covered bonds issued by the bank using them as collateral, or by entities closely linked to that bank. (For detailed information on the Eurosystem's collateral-related decisions in 2013, see Appendix p. 123.)

## Liquidity situation of the Bank of Finland counterparties remained good

Throughout the financial crisis, the Bank of Finland counterparties' needs for central bank refinancing have been low relative to the entire Eurosystem. Because the three-year LTROs fulfilled counterparties' liquidity needs extensively, participation in





short-term refinancing operations by banks operating in Finland was marginal in 2013. Banks used the early repayment option possible in the LTROs and repaid about a third of the amount initially obtained, which is somewhat less than in the euro area on average. At the end of 2013, counterparties' outstanding central bank credit totalled EUR 2.5 billion, which is only about 0.3% of total outstanding credit in the euro area.

On the other hand, the Bank of Finland counterparties have deposited substantial amounts of liquidity with the central bank during the crisis: relative to total deposits in the Eurosystem, deposits made by the Bank's counterparties have exceeded Finland's share according to the capital key (1.8%) many times over. Largely on account of counterparties' central bank deposits, the balance sheet total of the Bank of Finland increased to over EUR 100 billion during the financial crisis. The counteritem of deposits on the other side of the balance sheet is intra-Eurosystem claims.

Even though liquidity amounts deposited contracted in 2013 due to the general contraction in liquidity, counterparties were still active in making deposits. The Bank of Finland's balance sheet total decreased by almost a half, but is still considerable by historical standards. The Finnish contribution to total Eurosystem

deposits declined slightly in all deposit types, but was still high (Chart 9).

Liquidity-absorbing operations had participants from Finland every week. The average number of participants was four banks and the average volume of a fixed-term deposit was EUR 11.6 billion. In contrast, the use of deposit facility decreased markedly (daily average at EUR 2.3 billion) and dried up almost entirely towards the end of the year, since counterparties increasingly left their excess liquidity as excess reserves in current accounts (daily averages at EUR 14 billion).

The total volume of collateral submitted to the Bank of Finland declined slightly, from EUR 28.2 billion in 2012 to EUR 26.1 billion, on average, in 2013. As in previous years, however, excess collateral volumes were still very high, about EUR 10 billion on average, accounting for 37% of the total amount of collateral put forward. Only 12% of collateral was used to cover refinancing operations and 51% was used to cover intraday credit limits under the TARGET2 system. The breakdown of collateral submitted to the Bank of Finland changed slightly (Chart 10). Covered bank bonds continued to constitute the largest collateral component (44%), followed by fixed-term deposits placed via liquidityabsorbing operations (22%). Credit claims were the third largest collateral component in 2013 (10%).

#### Box 2.

#### The financial crisis has had an impact on the implementation of monetary policy

Financial markets have been undergoing crises and turbulences of varying degrees since 2007. In an environment of uncertain market conditions, banks have had to resort to the central bank more than before, and from time to time central bank funding has almost completely replaced market-based funding. Banks' demand for excess liquidity has also increased. As with other central banks, the European Central Bank (ECB) has responded to the challenges in the operating environment by adjusting its monetary policy measures under its flexible operational framework. In addition to several cuts in the key policy rate (the interest rate on the main refinancing operations has been lowered from 4.25% to 0.25%), the ECB has taken various measures regarding liquidity provided to banks and the related collateral. Some of the non-standard measures, which were intended to be temporary in nature, were still in force at the end of 2013.

The most essential changes in monetary policy implementation, made in response to the financial crisis, concern adjustments to the maturity, pricing and volume of central bank refinancing to banks. Open market operations are the Eurosystem's key instrument in steering the amount of liquidity in the banking system and the level of short-term interest rates. Prior to the onset of the crisis, the Eurosystem sought to provide liquidity in the open market operations to the extent that the liquidity needs were met at the level of the overall banking system. The price of central bank refinancing to an individual counterparty was determined on the basis of the interest rate bid submitted by the counterparty. The level of the key policy rate decided by the ECB Governing Council set the minimum level for bids in the one-week main refinancing operations (MROs) that were the most important

source of central bank refinancing. The longest maturities in the refinancing operations were three months.

The maturities of central bank refinancing have lengthened during the crisis. The Eurosystem has granted credit with maturities of 6 and 12 months, and lastly, of 3 years. Restrictions on liquidity volumes have been suspended, meaning that banks have been able to obtain central bank refinancing as much as they wish and have been able to borrow, as long as they have provided adequate collateral. The interest rate on the credit has been fixed to the interest rate on the MROs. This fixed rate full allotment procedure has led to a surge in the amount of central bank liquidity (Chart 6). By increasing central bank refinancing, the Eurosystem has sought to secure the liquidity of banks, alleviate money market tensions and ensure the financial stability of the euro area banking sector. The Eurosystem has announced that the fixed rate full allotment procedure will be continued at least until July 2015.

Besides euro funding, during the financial crisis, the Eurosystem has also secured counterparties' access to US dollar funding in cooperation with the Federal Reserve. Similar arrangements to address liquidity needs in other currencies have also been established with other central banks.

The ECB has also made modifications to the other elements of the operational framework. The purpose of the minimum reserve system is to create a structural liquidity need for the banking system and contribute to the stability of short-term money market rates. Banks' minimum reserve requirements have been halved during the financial crisis. As a result of this measure, the amount of liquidity held as compulsory deposits in minimum reserve accounts contracted, easing the overall liquidity situation of the banking sector.

The two standing facilities – the deposit facility and the marginal lending facility - provide banks with the possibility to level off short-term fluctuations in liquidity. In addition, the interest rates applied to the standing facilities create a corridor within which short-term money market rates fluctuate. The price of using the standing facilities has changed together with changes to the ECB's key policy rate. Previously, the interest rates applied to the standing facilities created a symmetric interest rate corridor around the MRO rate (+/-1 percentage point). During the financial crisis, there have been fluctuations in the width and symmetry of the interest rate corridor and the level of interest rates alike. As a result of the MRO rate cuts, the lower boundary of the interest rate corridor, ie the floor for short-term money market rates, has fallen to an historically low level of 0% (Chart 5).

The Eurosystem requires banks to provide adequate collateral against central bank refinancing. Collateral submitted by banks is subject to certain eligibility criteria and risk control measures. Banks' growing recourse to central bank refinancing during the financial crisis has led to a substantial increase in banks' collateral needs. At the same time, the amount of collateral fulfilling the eligibility criteria has decreased due to falling security prices and credit ratings. The Eurosystem has responded to these developments by broadening the range of collateral accepted under the collateral framework, which has ensured the sufficiency of eligible collateral for banks. On the other hand, it has fine-tuned the risk management framework for collateral, which has, in turn, contributed to safeguarding the Eurosystem against the

risks associated with central bank refinancing.

The range of eligible collateral has been broadened by easing certain eligibility criteria (for example, the credit rating threshold has been lowered from A- to BBB-) and accepting new collateral types. For example, additional credit claims, fixed-term deposits placed with the central bank via liquidity-absorbing monetary policy operations and currency-denominated collateral have become eligible during the financial crisis. However, the main principles of the risk control framework daily market pricing and the use of valuation haircuts in determining collateral value - have remained unchanged. Additionally, the Eurosystem has adjusted the levels of valuation haircuts, introduced new restrictions on the use of collateral and tightened banks' reporting requirements.

Furthermore, the Eurosystem has started to use outright purchases of securities more actively during the crisis. These purchases have been primarily aimed at alleviating tensions in market segments that have become dysfunctional, thereby underpinning monetary policy transmission. For example, the Eurosystem has conducted two Covered Bond Purchase Programmes (CBPP1 and CBPP2) aimed at stimulating activity in the markets for covered bank bonds. In addition, in 2010-2012, the Eurosystem had at its disposal a Securities Markets Programme (SMP), which was replaced in autumn 2012 by Outright Monetary Transactions (OMTs). These transactions are to be carried out in secondary sovereign bond markets and are subject to strict conditionality. So far, the Eurosystem has not conducted any purchases under the OMT programme.

## The Bank of Finland and economic policy in Finland

In 2013, the Bank of Finland participated in a variety of ways in analysis and economic policy discussions relating to global and domestic economic developments. For example, it published two forecasts on Finnish macroeconomic developments: the first in June and the second in December. In addition, the Governor and experts of the Bank of Finland were consulted on several occasions by the Parliament and other domestic institutions.

In previous years, the economic debate in Finland had largely concentrated on the financial crisis and the European sovereign debt crisis. In 2013, the Bank of Finland emphasised the importance of domestic economic developments and strong structural changes. Finland's economic problems would not be resolved simply by improvements in the international economy.

The Bank of Finland stressed in June 2013 that, in order to solve its economic problems, Finland needed structural reforms that would boost potential output permanently, and improve cost competitiveness. This would strengthen economic growth and the outlook for public finances in a sustainable manner.

The Bank of Finland pointed out that potential output of the economy could, for instance, be boosted by structural reforms that would enhance labour market institutions, strengthen labour productivity in publicly-funded services, raise competition in services and construction sectors, increase supply of building land and housing and improve the tax system (see Box 3).

In 2013, the Bank of Finland emphasized that economic problems which had largely been thought to be temporary and cyclical had been shown to be more permanent and structural in nature. The contraction in exports stemmed mainly from problems in the electronics and paper industries and weaker cost competitiveness. Economic growth potential was also

hampered by population developments, since the size of the working-age population had begun to contract in 2010 as a result of post-war baby boomers reaching retirement age.

Population ageing was assessed as increasingly overshadowing the outlook for public finances starting from the second half of the 2010s. The Bank of Finland perceived that there was a risk that Finland would drift onto a path of fading economic growth, persistently high unemployment and deteriorating public finances.

#### Economic developments remained weak

Macroeconomic developments in Finland remained weak in 2013. This held true for exports and domestic demand alike. GDP volumes remained at a substantially lower level than prior to the escalation of the global financial crisis in 2008.

The contraction in GDP in 2008–2013 stemmed particularly from a decline in exports. Industrial output contracted with declining exports. Besides global economic developments, exports were also curbed by problems in Finnish electronics and paper industries. In addition, exports suffered from weakening cost competitiveness, particularly as a consequence of an exceptionally rapid rise in wages in 2008 and 2009. In 1999–2013 unit labour costs grew by a total of about 10% relative to the average of Finland's trading partners.

Domestic demand developed largely more positively as a whole than exports in 2008–2011, supported by the low level of interest rates and a deficit in public finances. Stable domestic demand underpinned the economy, but with a simultaneous contraction in exports, the current account entered into deficit. Total expenditure in the economy exceeded the respective income.

Domestic demand, too, began to deteriorate in 2012 and the trend remained unchanged in 2013. Weaker dynamics in household real income and a gloomier overall economic outlook curbed private

consumption and investment in 2012 and 2013. The current account remained in deficit in 2013, but the deficit contracted from the previous year.

Finland's employment situation weakened in 2013. The contraction in the number of persons employed, which started in the latter half of 2012, continued and the employment rate remained noticeably below the level of 2008.

The short-term outlook for the Finnish economy deteriorated further in the first half of 2013, but did not change substantially in the latter half of the year. In the Bank of Finland forecast published in June 2013, the GDP estimate for 2013 was revised downwards so that GDP was forecast to contract by about 1% from the previous year. The economy was expected to grow again in 2014, albeit at a relatively sluggish pace. These assessments remained broadly unchanged in the Bank of Finland forecast published in December 2013.

Consumer price inflation accelerated in Finland in 2013. Measured by the harmonised index of consumer prices (HICP), inflation was 2.2% in 2013, compared with 3.2% in the previous year. The rise in prices of energy products and processed food, in particular, decelerated in 2013. These developments were largely driven by world market price dynamics and

the strengthening of the external value of the euro. Domestic inflation pressures also waned slightly on the back of the slower pace of wage increases.

Despite moderating, inflation remained higher in Finland in 2013 than in the euro area where it averaged at 1.4%. In the Bank of Finland forecast published in December 2013, inflation was expected to decelerate further in Finland, to 1.6% in 2014, as measured by the annual change in HICP.

As a result of weak economic developments, Finland's public finances deteriorated in 2012 and 2013. The general government deficit grew despite adjustment measures, since GDP contracted in both years.

At the same time, the outlook for future developments in public finances became gloomier. According to the Bank of Finland forecast published in December 2013, without additional measures the general government deficit would not decline markedly in the immediate years ahead. The central government budgetary debt relative to GDP would not begin to contract and gross general government debt would exceed the threshold of 60% in 2014. In the Bank of Finland's December 2013 forecast, the long-term sustainability gap in Finland's public finances was estimated at 4.6% of GDP.

#### Box 3.

## What does economic research tell about the effects of structural reform measures?

In the course of 2013, the Bank of Finland presented assessments of the types of structural reform measures that could be used to permanently strengthen the potential output of the economy. A number of Bank of Finland experts analysed the effects of potential structural reform measures in the light of economic research results. These reviews were published in full in the Bank of Finland's BoF Online series in November 2013.

The reviews concentrated on effects that have been largely similar according to research outcomes. The focus was on

measures to improve employment, increase housing supply, strengthen competition and develop the tax system.

Enhancing labour market institutions is one possible area for economic reform measures. Although demand for labour largely explains short-term fluctuations in employment, research results show that employment in the long term is determined by labour supply dynamics.

Employment can be improved in a sustainable manner by increasing the labour supply, particularly in population groups for which employment rates have remained Governor Erkki Liikanen (left), Mervyn King, Governor of the Bank of England (centre), and Prime Minister Jyrki Katainen (right) discussed 'What have we learnt from the crisis?' at the Bank of Finland Museum, in May.



Photo: Laabbo Vochantola

low in relative terms in Finland over a prolonged period of time. The key step is to extend working careers at the beginning and the end of working life. Research outcomes show that financial incentives strongly affect, for example, the decisions of those reaching retirement age as to whether or not to continue working. Such financial incentives can be influenced by reforming the retirement system.

The employment rate can also be raised by preventing unemployment due to recession or changes in the structure of the economy from leading to long-term unemployment. The factors affecting here are the characteristics of the unemployment benefit system and active labour market policies.

The potential output of the economy can also be boosted by increasing the supply of housing. This would curb rises in housing prices and rents, thereby strengthening household real income. In addition, an increased supply of housing, especially in growth centres, would support labour mobility and hence employment. According to research outcomes, housing supply could be bolstered substantially by reforms that would affect land-use planning and zoning so that these would be less restrictive on housing construction.

The potential output of the economy could also be boosted by structural reform measures that increase competition.

Research outcomes indicate that increased competition strengthens labour productivity and reduces price levels. Competition could be raised particularly in services and construction, and the key step to achieving this would be improved or reduced regulation.

The tax system is also one potential area for reform. Besides government measures enabled by taxes, taxation always involves costs which consist both of direct expenses for taxpayers and an excess burden, also known as deadweight loss of taxation. Deadweight loss occurs because taxes change individuals' behaviour. For example, taxes on labour income make working less attractive and hence reduce output relative to a situation where there would be no labour income tax. According to research results, well-being losses stemming from taxation can in many cases be reduced by shifting the emphasis of taxation from work to real estate and especially land. A similar effect could be expected from designing the tax system so that the tax base would be broad and tax rates low and uniform.

#### Financial system

The Bank of Finland promotes the stability of the financial system by identifying and assessing systemic risks to financial stability and by supporting measures that prevent such risks. The Governor of the Bank of Finland participates as a decision-maker in the work of the European Systemic Risk Board, which analyses risks to the financial system in the EU and issues recommendations to national authorities for stability-enhancing measures. The Governing Council of the ECB also deals with questions related to financial stability. Bank of Finland experts prepare for the relevant meetings and participate in other background work performed within committees, both internationally and in Finland. This work is performed in close cooperation with the Financial Supervisory Authority.

The main emphasis in the development of EU financial regulation in 2013 was on the build-up of a banking union. The Bank of Finland took part in the preparations for the introduction of the Single Supervisory Mechanism and in the development of bank resolution methods. At home, the Bank of Finland actively supported the implementation of EU financial regulation and the design of a national macroprudential policy for the prevention of systemic risks, as well as worked towards creating an analytical basis, as an aid for decision-making designed to back up macroprudential tools.

#### Financial stability

## Stability of the euro area financial system improved towards the end of 2013

In 2013, the functioning of the euro area financial markets improved and market confidence increased. At the same time, investors' risk appetite rebounded and bond market risk premia declined.

In order to stabilise the Cypriot banking sector that had headed into difficulties, the country was granted an IMF/EU support package of EUR 10 billion in spring 2013, with the aim of safeguarding the operation of the country's banking system. At the end of 2013, Ireland was the first IMF/EU programme country to be able to complete its programme, and subsequently returned successfully to the international financial markets.

Despite better market conditions, the euro area economy remained fragile. Structural problems revealed by the economic and debt crisis as well as failures in the financial markets take time to be remedied.

Problems related to euro area bank funding eased, as several banks saw their

funding costs decline and access to finance improve. Even so, the low level of interest rates, increased impairment losses and the weakness of the euro area economy maintained an environment of poor profitability in the banking sector. The situation in the banking sectors of distressed countries barely improved, with many banks remaining dependent on longer-term refinancing provided by the Eurosystem. Banks' difficulties and balance sheet adjustments were specifically reflected in their ability to provide credit to their smaller corporate customers with higher risk profiles, in particular. As part of their balance sheet repair, several banks shed their inter-bank deposits, holdings of debt securities and cross-border investments.

The low level of interest rates posed challenges to banking profitability, as interest rate margins contracted. Banks sought to improve their profitability by raising margins on new loans. As a consequence, the relative costs for new loans granted, notably to smaller higher-risk non-financial corporations, went up. The links between sovereigns and banks barely eased during the year. In a few euro area

crisis countries, banks even increased purchases of debt securities issued by their respective home states.

Regulatory reforms also pose new challenges to banking, amid changing financial market structures. In order to boost confidence towards banks, the balance sheets of the largest euro area banks will be reviewed in an ECB-led exercise in 2014. The banks will be simultaneously stress-tested, in order to ensure consistency in asset valuations and to analyse the adequacy of bank capital (see Box 5).

Divergence in the financial markets across euro area countries continued and, owing to the difficulties of the banking sector, new channels of financial intermediation are emerging and forcing banks to revise their operating models. This may shift financial intermediation out of the reach of regulation and supervision, giving rise to new unforeseen risks in the financial markets.

## Finnish banking sector remained profitable and sound

The main risks faced by the Finnish banking sector continued to stem from European economic and debt developments, according to the financial stability reviews published by the Bank of Finland in 2013. The domestic banking sector remained profitable and financially sound, despite subdued economic growth and low interest rates. Profitability did weaken in 2013 but despite that the return on equity was 8.1%, for the first half of the year. The contraction of net interest income came to a halt in the spring, but net interest income for the year as a whole remained smaller than the previous year's. Banks increased margins on new loans, and net interest income from derivatives improved aggregate net interest income for some banks. Financial results were underpinned by improved profitability in insurance business and reduced loan losses. Banks' basic business was strained, and there were fairly large differences in profitability among banks.

The banking sector's non-performing assets and impairment losses remained modest relative to the loan stock. Payment default entries and instituted bankruptcies increased, anticipating future impairments, and this required close monitoring of credit risks. Based on projected economic activity, however, credit risks are not expected to grow to an alarming extent.

The capital adequacy of the Finnish banking sector remained strong: the average capital ratio was 15.6% at the end of September 2013 and the closely monitored core Tier I capital ratio 14.4%. The banking sector thus met the future Basel III capital requirements. The ratio of capital to total assets, that roughly illustrates non-risk-weighted solvency, began to grow in 2013, as the sector's total assets contracted, mainly because of lower book values for derivatives. Nevertheless, the Finnish banking sector's equity to total assets was still among the smallest within the EU.

The volume of deposits remained broadly unchanged, but there was a shift within the types of deposit from fixed-term deposits to transaction accounts. Banks could readily access market-based funding at low cost. The average funding maturity lengthened, as long-term bonds issued by banks increased. This was due, in part, to banks' preparations for regulatory changes requiring more stable funding. The stock of covered bonds continued to increase, albeit more slowly.

The banking sector's key risks stemmed from the challenging operating environment. The stress test conducted jointly by the Financial Supervisory Authority and the Bank of Finland in spring 2013 showed that the banking sector's capital adequacy would withstand the impact of a very weak operating environment. However, the implications of the stress scenario on individual actors would vary significantly.

The banking sector underwent several structural reforms in 2013. S-Bank, the bank of the S-Group, a Finnish retailing

cooperative organisation, bought FIM, a fund management company, and announced that it would merge with Tapiola Bank to form a restructured S-Bank in 2014. Aktia Bank announced that it would discontinue providing central credit institution services to local banks in 2015. Additionally, savings banks and POP Banks (local cooperative banks) began to prepare the establishment of their own central credit institutions. Savings banks also prepared a change of their group structure into an amalgamation, and there were mergers within the savings bank group and the OP-Pohjola Group.

#### Slow growth in private sector debt

In 2013, Finnish non-financial corporations suffered from the weakness and uncertainty of the global and the domestic economies. Firms adjusted their operations, refraining from investments in expansion and adapting their workforce to match muted demand. Subdued demand eroded corporate profitability. The corporate sector's need for external financing barely increased, as the sector remained in financial surplus, viewed at the level of the economy as a whole.

Finnish non-financial corporations' access to finance continued to remain better than in the euro area, on average, in 2013. However, a tightening of the availability of finance could be observed as loan margins widened and collateral requirements became more stringent.

Upcoming regulatory changes for banks were reflected in the pricing of corporate finance, as banks took capital requirements for corporate loans into account in their pricing. In particular, interest rate margins on loans to small and medium-sized enterprises (SMEs) with higher risk profiles widened by more than those on large firms' loans during the year.

Finnish non-financial corporations' financing structures diversified. Large firms increased issues of bonds. SMEs, in turn, sought to expand their financing channels in order to also include providers of finance other than banks. The rate of growth in

corporate loans granted by monetary financial institutions (MFIs) remained subdued. Growth in corporate loans was almost entirely accounted for by a brisk increase in the loan stock of housing corporations, which, statistically, are included in the corporate sector.

The annual growth rate of households' housing loan stock slowed markedly in 2013. Annual growth in November remained at 2.6%, while it was 5.9% only a year earlier. This deceleration was also reflected in the household debt ratio, as about 70% of household debt was composed of housing loans granted by MFIs. The Finnish households' debt ratio remained unchanged at about 117.5%, as loan stock and disposable incomes grew in parallel. Before this, the debt ratio had increased for 15 years. A levelling off in the protracted growth of household indebtedness can be regarded as a favourable trend.

#### Financial system policy

In 2013, the Bank of Finland took part in efforts to build EU-wide solutions for financial regulation, primarily through the European System of Central Banks and the European Systemic Risk Board. The Bank was also involved in preparatory work supporting relevant national implementation, together with the Ministry of Finance and the Financial Supervisory Authority (FIN-FSA).

Work, that was started in 2012 to create a banking union, continued in the year under review. The Bank of Finland, liaising with the FIN-FSA, participated in preparations for the Single Supervisory Mechanism via a high-level ECB working group, thereby promoting separation between monetary policy and supervisory matters and the application of other best practices in single supervision, among other things (see Box 4). In October 2013, in advance of assuming its supervisory role, the European Central Bank launched a comprehensive assessment of the condition of large banks. The exercise

includes three components: a supervisory risk assessment, an asset quality review and a stress test to be conducted in cooperation with the European Banking Authority (EBA) (see Box 5).

The Bank of Finland supported the development of resolution procedures within the EU, emphasising in its statements the responsibility of bank owners and creditors in crisis resolution. The Bank considered it important that the Single Resolution Mechanism be established as part of the banking union, in order to ensure effective resolution of banks with cross-border activities (see Box 4).

At home, the Bank of Finland was a member of a working group set up by the Ministry of Finance in February 2013 to prepare reform of national legislation concerning the management and resolution of financial market crises and the deposit guarantee scheme, on the basis of pending EU legislative initiatives. The European Parliament and Commission and the EU Council reached agreement in December 2013 on a proposal for a directive establishing a framework for the recovery and resolution of credit institutions and investment firms. National legislation, to be drawn up according to the directive, will include the enabling of an orderly winding-up of banks, without the destabilisation of the financial markets and allow for the implementation of bail-in procedures.

In the course of 2013, the Bank of Finland was actively involved in preparatory work for the introduction of macroprudential instruments in Finland. In its stability reviews, the Bank of Finland stressed the need to ensure that the authorities have a sufficient toolkit in place to prevent harmful developments in the financial system. Macroprudential tools enable improved loss absorbency by the banking sector and the ability to curb the build-up of risks threatening the stability of the financial system as a whole. In particular, the Bank of Finland pointed out

that Finland should ensure that means of preventing risks, related to the housing market and lending for house purchases, are available whenever necessary, and also consider additional regulation of systemically important banks, in line with the approach taken in other Nordic countries.

Moreover, the Bank of Finland paid attention to the recommendation issued in April 2013 by the European Systemic Risk Board on intermediate objectives and instruments of macroprudential policy that contribute to the safeguard of the stability of the financial system. In 2013, Bank of Finland experts took part in development work aimed at constructing macroprudential policy and the necessary analytical framework, both within the EU and at national level.

#### Financial market infrastructure

In its capacity as Finland's monetary authority, the Bank of Finland has the statutory task of contributing to the maintenance of the reliability and efficiency of the payment system and overall financial system, and of participating in their development. In fulfilling its mandate, the Bank of Finland seeks to anticipate threats to the stability of the financial system and take action for their prevention. A smoothly functioning infrastructure – payment systems as well as securities trading, clearing and settlement systems - provide the basis for the stability of the financial markets and for an effective operation of the economy as a whole. The objective of the Bank of Finland is to safeguard the efficiency and reliability of the financial system infrastructure for society at large.

Given their critical importance, payment and settlement systems are subject to oversight and many requirements are placed on their operation. In 2013, preparations were started within the European System of Central Banks (ESCB) for the application of global oversight principles for the financial market infrastructure

#### Box 4.

#### Progress in single banking supervision and resolution

#### Single banking supervision

In June 2012, the European Council decided to confer the responsibility for banking supervision on the European Central Bank (ECB). The regulation concerning the Single Supervisory Mechanism (SSM), which gives the relevant mandate to the ECB, came into force in November 2013. The ECB will take over euro area banking supervision after a one-year transitional period in November 2014. Member States outside the euro area may also participate in the Single Supervisory Mechanism.

The SSM is composed of the European Central Bank and competent national authorities. The ECB will be responsible for the overall functioning of the Single Supervisory Mechanism and supervise euro area banks in close cooperation with national authorities. The ECB will conduct direct supervision of euro area banks of significant relevance, totalling about 130. Measured in terms of euro area bank assets, the ECB's supervision covers about 85% of all euro area banks. As regards Finland, Nordea Bank Finland, OP-Pohjola Group and Danske Bank will come under direct ECB supervision.

Preparatory work commenced at the ECB as early as summer 2012. The preparations have been led by a high-level working group, with Mario Draghi, the President of the ECB, as chairman. The group included members from euro area central banks and supervisors. The Finnish participants in the high-level working group were Pentti Hakkarainen, Deputy Governor of the Bank of Finland, and Jukka Vesala, Deputy Director General of the Financial Supervisory Authority. The preparatory work was broken down into five work streams, including 1) a closer mapping of banks subject to direct supervision and the applicable criteria, 2) preparation of legal

issues and ECB regulations, 3) preparation of a supervisory model and a supervisory manual, 4) preparation of a supervisory reporting framework for collection of required data from banks and 5) planning of a comprehensive assessment.

Prior to commencing actual supervision, the ECB, in cooperation with national banking supervisors, will conduct a comprehensive assessment of all banks coming under direct ECB supervision (Box 5).

#### Bank resolution

The European Union is in the process of preparing two significant projects for developing bank resolution procedures. The first step was the European Commission's proposal in June 2012 for a directive establishing a framework for the recovery and resolution of credit institutions and investment firms. The European Parliament and Commission and the EU Council reached agreement on the contents of the directive in December 2013. These arrangements will harmonise and revise Member States' resolution laws, while also enabling an orderly winding-up of even the largest banks, for the first time in many Member States, without destabilising the financial markets. This means a step forward in the current practice of addressing bank problems merely by adjudication of banks in bankruptcy or bailing them out using government funds.

The key point of the bank resolution procedures is that the necessary funds will be primarily provided by the shareholders and creditors, as in the case of normal bankruptcy proceedings. A bail-in entails a procedure where bank losses are first covered by equity (and subordinated debt) and then a sufficient amount of creditor claims is converted into (new) equity. This ensures that the reorganised bank will

become financially sound again. Resolution funds, sourced from banks, will also participate in financing the resolution, if necessary. The directive is due to come into force for the most part at the beginning of 2015, but in respect of the bail-in at the beginning of 2016.

In summer 2013, as part of setting up a banking union, the European Commission submitted a proposal for a regulation on a Single Resolution Mechanism. According to the proposal, banks participating in the banking union would be subject to a new, uniform and centralised resolution procedure. A centralised body would make key resolution decisions and prepare a resolution scheme for a failing bank, specifying the necessary measures.

A uniform centralised procedure will enable a markedly more effective winding-up of banks with cross-border operations than do national regimes. Moreover, it will ensure an equal treatment of banking activities conducted across the Member States.

The EU Council reached agreement on the Single Resolution Mechanism in December 2013. The Committee on Economic and Monetary Affairs of the European Parliament also formed its negotiating position on the proposal. This was followed by legislative negotiations between the Council and the European Parliament and Commission. The aim is to have the regulation on the Single Resolution Mechanism adopted prior to the spring 2014 European Parliament elections.

Joint European banking supervision will further increase close cooperation between the Financial Supervisory Authority (left) and the Bank of Finland.



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#### Box 5.

#### Assessment of the condition of European banks

The European Central Bank launched a comprehensive assessment of large European banks in November 2013. It is an essential element of the preparations for the Single Supervisory Mechanism (SSM), by providing the necessary clarity on the banks that will be subject to direct ECB supervision. The assessment will include some 130 credit institutions, with a coverage of approximately 85% of euro area bank assets, from a total of 18 Member States. The 12-month assessment is due for completion by October 2014, in advance of the ECB taking over its new supervisory functions in November 2014.

The purpose of the assessment is to remove uncertainty towards banks. Although European banks have strengthened their balance sheets by raising new capital, revised their business models and reduced their risk-weighted assets, the weak economic growth seen in recent years and financial market tensions have impaired the quality of European bank balance sheets. Growth in non-performing loans, in particular, has continued concerns about the adequacy of bank capital.

To restore confidence, the balance sheets of significant European banks will be thoroughly reviewed and the banks will be stress-tested in an ECB-led exercise. The aim is to ensure the consistency of valuation practices applied to bank balance sheets and to analyse the adequacy of bank capital. The assessment will be conducted in cooperation with the ECB and the national supervisory authorities. The national authorities will execute the exercise at national level, on the basis of the jointly-developed data requirements and methodology, harnessing local knowledge

and expertise. The assessment will also be supported by independent third parties.

The comprehensive assessment is composed of three pillars. The banks will first undergo a supervisory risk assessment, addressing key risks in the banks' balance sheets, including liquidity, leverage and funding. Secondly, an asset quality review will be conducted, examining the asset side of bank balance sheets and comprising banks' credit and market exposures. Hardto-value assets will also be reviewed. These are assets whose value cannot be determined directly on the basis of market prices but require the use of models. The risk weights applied by banks can be adjusted, if necessary, on the basis of the outcome of the exercise. The third component of the comprehensive assessment is a stress test to be performed jointly by the ECB and the European Banking Authority (EBA).

If the results of the comprehensive assessment require strengthening of capital positions, the ex ante availability of backstops will be critical for the implementation of corrective measures. In accordance with the ECOFIN Council statement (November 2013), banks should first tap private sources for raising additional capital, if necessary. If banks' own actions are insufficient, public backstops might need to be drawn upon. In such a case, however, the primary provider of funds for recapitalisation is the home state of the bank concerned, in full respect of the new state aid rules. If the home state is unable to provide such funds alone without jeopardising debt sustainability, banks may be recapitalised in compliance with harmonised European rules, as a last resort.

(known as the CPSS-IOSCO principles). The principles impose requirements not only on infrastructures but also on central banks, market regulators and other relevant authorities for the purpose of ensuring the transparency of their operations and international cooperation, among other things. In October 2013, the Bank of Finland decided on the outlines of its oversight policy concerning the financial system infrastructure and approved their disclosure.

In August 2013, the Bank of Finland approved the oversight assessment concerning the Finnish Central Securities Depository, Euroclear Finland. The assessment was positive, which enables Euroclear Finland's migration to the TARGET2-Securities platform (T2S), provided by the euro area central banks, for securities settlement. From the viewpoint of the Finnish securities markets, participation in the joint platform at the beginning of 2017, European regulation regarding CSD activities and the introduction of international, harmonised standards all constitute major changes.

Going international continued to be a strong trend for payment and settlement systems in Finland in 2013, as was the increasing use of economies of scale. This is reflected, above all, in the outsourcing of many operations to international partners. In its stability review released in May 2013, the Bank of Finland pointed out that structural change to the financial system infrastructure should not be made, nor operations streamlined, at the expense of operational reliability and service level.

Migration to the Single Euro Payments Area (SEPA) has progressed in an orderly manner and on schedule in Finland. SEPA credit transfers were introduced in Finland in early 2011, and former domestic transfer services will be replaced by those of the SEPA era by the end of January 2014. The domestic direct debit will then be substituted for by e-invoicing and direct payment. The harmonisation of the

European payment methods will bring greater efficiency to the internal market and especially to the operations of the European corporate sector.

The recommendations to improve the security of internet payments - issued by a new cooperation body, the European Forum on the Security of Retail Payments (SecuRe Pay) – were integrated into the assessment and inspection work of the Bank of Finland and the Financial Supervisory Authority (FIN-FSA) during the year under review. The Bank's findings and recommendations concerning continuity of operations and contingency planning for payment and settlement systems were also incorporated into the work performed by the national emergency supply organisation. The Bank participates in updating the contingency planning guideline based on the Government's decision in principle.

Preparations for setting up a Payments Council were continued at the Bank, in concert with the key parties involved, during the year under review. The Payments Council is a national cooperation body that brings together different interest groups for open discussion and exchange of ideas on payments. It supports the use of advanced, internationally compatible payment methods that are efficient for society as a whole, while promoting competition. The plans for establishing the Payments Council and the Bank of Finland's policy principles for the objectives of payment system development (see Box 6) were published in connection with the annual Payments Forum in May 2013 and in the Bank's financial stability review of May 2013, concerning the domestic financial system.

The TARGET2 simulator, developed on the basis of the Bank of Finland Payment and Settlement System Simulator, became an established oversight tool for the European System of Central Banks in 2013. The tool is applied, for example, to analyses of liquidity adequacy and stress testing. The international community of users of the simulator came together for the eleventh

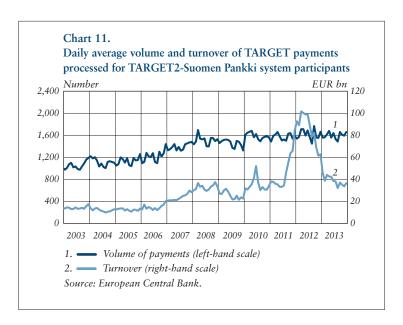
Bank of Finland seminar in Helsinki in August 2013.

#### Payment system services

The TARGET2 system (Trans-European Automated Real-time Gross settlement Express Transfer system) is the cornerstone of payment system services. It is a payment system owned and operated by the Eurosystem for the processing of large payments in real time and on a gross basis. TARGET2 is also used for executing Eurosystem's monetary policy operations, and key payment and settlement systems use TARGET2 for settlement purposes.

The TARGET2 system has functioned reliably since it went live in 2007. In 2013, TARGET2 again met the availability requirements set for it. During the course of 2013, TARGET2 processed, on average, about 364,000 payments per day, with an aggregate value of approximately EUR 1,900 billion. Compared with the previous year, the volume of payments in the system as a whole increased, while their value decreased to some extent. The volume of payments executed by the TARGET2 component of the Bank of Finland, TARGET2-Suomen Pankki, remained unchanged, with an average of 1,600 payments per day. The aggregate value of these payments, in turn, declined to EUR 39 billion (Chart 11). In December 2013, TARGET2 had some 1,000 direct participants connected to the system through 24 central banks' components. At the end of 2013, the TARGET2-Suomen Pankki component had 24 participants, of which three were ancillary systems.

The Bank of Finland's operative role in the transfer of funds for the interbank retail payment system (PMJ) ended in November



2013. The volume and value of payments processed in the PMJ had already contracted substantially over a few years, due to increasing migration of payments to STEP2, a pan-European system managed by EBA Clearing. These developments brought one step in the evolution of the Single Euro Payments Area (SEPA) to an end.

Large ongoing operative projects at the Bank of Finland made good headway in 2013. Construction of a new enhanced collateral management system (BoF-CMS-Cola) reached a testing phase during the year so that the system can go into operation in autumn 2014. The Bank of Finland's own BoF-T2S project, keeping track of the Eurosystem's TARGET2-Securities project (T2S), continued to prepare for central banks' liquidity management requirements brought about by T2S.

#### Box 6.

#### Features of an efficient payment system

Cooperation between the various parties to the payment chain is crucial to ensuring the security and efficiency of payment systems. A payment system that is efficient for society as a whole needs to fulfil five criteria.

The first criterion is **technical efficiency**. By taking advantage of technology, the payment process can be made cheaper, faster and safer for both users and providers of payment services.

Another important criterion is accessibility and non-discrimination with regard to services provided by payment systems. Various groups of clients must be able to use appropriate payment instruments and payment services, without incurring unreasonable inconvenience or cost.

The third criterion relates to pricing. In order for the economy to reap full benefits from a sophisticated payment system, the **pricing** of payments **needs to be effective and cost-based**. Payment services have largely been priced indirectly, and as these

services are bundled together with clients' other services, users may fail to see the real costs of the services.

The fourth criterion concerns continuity of operations and contingency planning. A payment system is the economy's neural network, whose uninterrupted and efficient functioning is indispensable for the operation of the markets and a smooth running of the public's everyday life. It must therefore be sufficiently immune to technical failures and have adequate continuity and contingency arrangements in place.

The fifth criterion relates to international compatibility. Common standards and rules governing payment systems promote the functioning of the single market and support the internationally operating corporate sector, in particular. Realisation of the Single Euro Payments Area (SEPA) is the first milestone in achieving this goal.

# Financial asset management

The Bank of Finland manages a total of approximately EUR 15,616 million of financial assets. These assets are comprised of the Bank's own foreign-currency and euro-denominated financial assets, the share of foreign reserve assets transferred to the ECB and the Bank of Finland's pension fund assets. At the end of 2013, the value of the Bank's foreign-currency and euro-denominated financial assets, the foreign reserve assets transferred to the ECB and the Bank's pension fund assets, amounted to EUR 14,149 million, EUR 851 million and EUR 616 million, respectively.

## Bank of Finland financial assets and financial asset management

The Bank of Finland's foreign reserves are composed of US dollars, pounds sterling, Japanese yen, gold and items in IMF Special Drawing Rights (SDRs). The financial assets denominated in US dollars are divided into investment and liquidity portfolios (Table 1). A foreign reserves adjustment, as determined by the Bank of Finland's Board, took place in autumn 2013, leading to an increase in US dollars. There was a corresponding decrease in euro-denominated assets (Table 2). In the course of 2013, the value of gold weakened against the euro, as a pick-up in economic activity reduced safe-haven demand.

### Objectives for the management of financial assets

The Bank of Finland's financial asset management means the investment of the Bank's liquidity portfolio and foreign currency- and euro-denominated investment portfolios in international financial markets. The objective of financial asset management is to align the liquidity, security and return requirements placed on the central bank. In managing its financial assets, the Bank of

Table 1.

Bank of Finland's financial assets

	31 Dec 2013 EUR m	31 Dec 2012 EUR m
Gold	1,373	1,988
Foreign reserves	5,226	4,773
SDR	625	711
Liquidity portfolio	1,151	1,200
Foreign currency-denominated investment portfolio	3,450	2,862
Euro-denominated financial assets	7,550	8,312
Total	14,149	15,073

The impact of SDR hedging transactions has been taken into account by reducing SDR component currencies in the foreign currency-denominated investment portfolio and by increasing the euro-denominated financial assets.

Source: Bank of Finland.

Table 2.

Distribution of Bank of Finland's financial assets by currency

Currency	31 Dec 2013 %	31 Dec 2012 %
Euro (EUR)	53.4	55.1
US dollar (USD)	24.3	18.5
Pound sterling (GBP)	5.5	5.2
Japanese yen (JPY)	2.7	3.3
Gold (XAU)	9.7	13.2
SDR	4.4	4.7
Total financial assets	100	100

The impact of SDR hedging transactions has been taken into account by reducing SDR component currencies (USD, GBP, JPY) and by increasing the euro amount.

Source: Bank of Finland.

Table 3.

Return\* on Bank of Finland's own financial assets in 2012 and 2013

	2013 %	2013 EUR m	2012 %	2012 EUR m
Interest rate return	0.26	31.3	2.59	380.3
Exchange rate return	-2.06	-255.4	-0.84	-100.4
Total return	-1.81	-224.1	1.73	279.8

\* Excluding gold and SDR. Source: Bank of Finland.

Finland secures the value of its financial assets and its ability to support the liquidity of the banking system and the economy, whenever necessary.

In order to meet the liquidity and policy requirements set for the central bank, the Bank of Finland has designated part of its financial assets as a specific liquidity portfolio. The aim of financial assets other than the liquidity portfolio, in turn, is to maintain the value of the financial assets and to safeguard the performance of the Bank of Finland's forthcoming central bank obligations. Strategic allocations for investments and strict limits for credit risk help to ensure that the Bank of Finland's financial assets are managed prudently.

Total return on the Bank of Finland's financial assets excluding gold and Special Drawing Rights in 2013 was -1.81%, equalling approximately EUR -224.1 million. Total return breaks down into interest rate return and exchange rate return (Table 3). Exchange rate return on the liquidity portfolio was -4.33%, about EUR -52 million, while interest rate return was 0.21%, about EUR 2.5 million. Exchange rate return on other financial assets was -1.82% (EUR -203.5 million), and interest rate return was 0.26% (EUR 28.8 million). In 2013, exchange rate return was negative, as the euro appreciated against all currencies in the Bank of Finland's foreign reserves. The presence of low central bank interest rates and unconventional stimulus measures continued to determine interest rate developments in 2013. Interest rate return remained low, as the general interest rate level was also at an historic low. Owing to exceptional circumstances, the markets were particularly keen to monitor central bank comments and economic data releases. (For more information on market developments, see page 12.)

In managing its reserves, the Bank of Finland seeks to prepare for potential central bank needs. The Bank of Finland's reserves are assessed from three points of view: the investments' security, liquidity and return.

A safety and liquidity measure has been set to evaluate overall financial assets, and this gauge must be maintained at a high level.

The third objective for the Bank of Finland's reserves concerns financial returns, always subject to limits based on liquidity and safety needs. The target set for the return on the Bank of Finland's financial assets is the central bank interest rate for each investment currency. In 2013, the financial assets generated an average return of 0.16% below the central bank interest rate. The five-year return, in terms of the moving average, was 1.73% above the central bank interest rate.

Individual portfolios are constructed within the constraints of permitted investments and set risk limits. The Bank's financial asset management adheres to strategic allocations (Table 4), around which the portfolios are constructed. Portfolio returns are benchmarked against public indices that are customised for central bank needs. The evaluation is based on a relative return target, calculated in terms of a moving average from the last three years' returns. In 2013, investments generated positive returns in the amount of approximately EUR 16.2 million above the benchmark indices (0.15%). The extra return according to the three-year moving average was 0.15%.

#### Investments

The Bank of Finland's foreign reserves and euro-denominated assets are invested in government and government-related securities, covered bonds and corporate bonds (Table 4). A small amount of eurodenominated government bond investments are in bonds of euro area countries that have ended up in financial difficulties. The liquidity portfolio is exclusively invested in US dollar-denominated government securities, which ensure the Bank of Finland's ability to provide emergency liquidity assistance in foreign currencies, if necessary. The strategic duration for the financial assets is about 2, with the exception of investments in Japanese yen, for which the strategic

duration is 1.5. Gold and SDR items are excluded. Of the Bank of Finland's gold reserves, 51% is stored in the United Kingdom (Bank of England), 20% in Sweden (Sveriges Riksbank), 18% in the United States (Federal Reserve Bank of New York), 7% in Switzerland (Schweizerische Nationalbank) and 4% in Finland (Bank of Finland).

The strategic allocation for the investment portfolio (Table 4) includes assets from all permitted asset classes. The Bank of Finland's investments are spread to improve the risk/return relationship, and an effective diversification geographically, between sectors and rating categories is defined as one of the most important guiding principles. In addition, issuers are required to meet minimum credit rating thresholds. (More detailed information on the distribution of investments geographically and by rating category is provided in the Appendices to the financial statements.)

## Reform of financial asset management and its implementation

At the end of 2012, the Bank of Finland completed its work on reforming financial asset management. The bulk of the reform work consisted of changing the benchmark for the Bank's financial asset management into a set of customised public indices that take account of central bank needs. 2013 was the first entire year when the Bank's financial asset management was benchmarked against public indices. No monetary policy purchase programmes were conducted within the framework of financial asset management in 2013, but the Bank of Finland maintained its readiness for the activation of Outright Monetary Transactions (OMT).

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

Management of the foreign reserves of the European Central Bank has been distributed among the Eurosystem national central banks according to their respective capital keys. The foreign reserves managed on

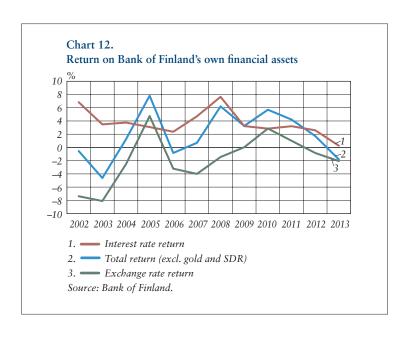
Table 4.

Strategic and year-end allocation of Bank of Finland's liquidity and investment portfolios in 2013

Liquidity portfolio	Strategic allocation (%)	Allocation at year-end (%)
Central government debt instruments	100	100
Investment portfolio	Strategic allocation (%)	Allocation at year-end (%)
Central government debt instruments	68	60
Government-related debt instruments	20	24
Covered bonds	6	7
Corporate bonds	6	7
Cash holdings	0	2
Total	100	100

Source: Bank of Finland.

behalf of the ECB comprise assets denominated in US dollars and Japanese yen as well as gold and items in IMF SDRs. In the investment of the ECB's foreign reserves, the emphasis is on security and liquidity, as the purpose of the reserves is to ensure the availability of sufficient resources



for the Eurosystem's potential foreign exchange interventions. The value of the net foreign reserve assets of the European Central Bank was EUR 54.9 billion at the end of 2013. The Bank of Finland manages part of the ECB's reserves denominated in US dollars, together with the Estonian central bank. The jointly managed portfolio is composed of the combined shares according to Finland's and Estonia's capital keys, with a value of EUR 851 million at the end of 2013. The ECB's Annual Report provides additional information on the management of its foreign reserves.

#### Bank of Finland's pension fund assets

The objective of the Bank of Finland's pension fund is to develop the management of assets held to cover the Bank's pension liability, in accordance with the generally accepted principles for the management of pension assets. These may deviate from the principles applied to the management of the central bank's financial assets. The value of the pension fund's assets was EUR 616 million on 31 December 2013, with the Bank's pension liability amounting to EUR 582 million. The total return on assets in 2013 amounted to 9.0%. More information on the pension fund's asset management is available from the fund's own annual report.

#### Investment risks and risk management

The risks to which the Bank of Finland's investment activities are exposed are market, credit, liquidity and operational risks (for definitions of the risks, see p. 120). Market risk is divided into exchange rate, interest rate and gold price risks. From the point of view of risks related to the Bank of Finland's investment activities, the size of the liquidity portfolio and of the investment portfolio, the asset classes applied as well as their shares in the investment of financial assets are of key importance. As a rule, the Board decides the strategic allocation by asset class and the leeway permitted for the shares of asset classes, annually.

In order to cover foreign-currency liabilities deriving from central bank functions, the Bank holds the entire liquidity portfolio and part of the investment portfolio in foreign currencies. Unhedged foreign-currency investments and claims (the foreign reserves) expose the Bank of Finland to exchange rate risk. The targeted size and currency composition of the foreign reserve portfolio is assessed by the Bank of Finland at three-year intervals. The decision was last made by the Bank of Finland's Board in 2013, to the effect that the amount of US dollars was increased in the financial assets. This increase took place in the latter half of 2013, resulting in a larger US dollar share and a smaller euro share. Although foreign-currency investments and claims are not generally hedged against exchange rate risk, partial hedging against SDR exchange rate risk was continued in 2013, as in previous years. This was implemented by selling other SDR component currencies (US dollar, pound sterling and Japanese yen) against the euro.

The asset classes used for the Bank of Finland's investments in 2013 were government and government-related securities, covered bonds, private-sector bonds and cash. These are all fixed-income investments, involving interest rate risks. In managing interest rate risks, the Bank of Finland mainly relies on 'modified duration', which is a measure of changes in the value of investments when the level of market interest rates changes. The modified duration of the Bank of Finland's investments at the end of the year was about 2 years, as in the previous year. The Board sets a target level on the duration of the liquidity portfolio and a currency-specific target level on the duration of the investment portfolio. In the course of 2013, the modified duration of the investment portfolio in Japanese yen was shortened to 1.5 from the earlier duration of 2. Interest rate risk related to the Bank of Finland's financial assets is also managed by spreading the investments among several debt instruments with differing maturities. In

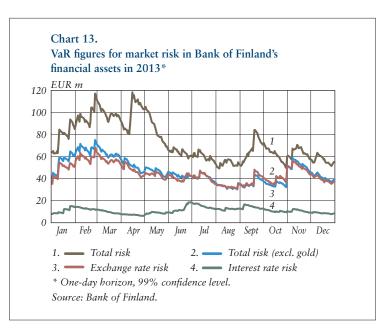
addition to the foreign reserves and eurodenominated fixed-income investments, the Bank of Finland's financial assets include about 49 tonnes of gold (see Box 7). This exposes the Bank of Finland to risks caused by fluctuations in the price of gold.

The daily levels of total market risk, exchange rate risk and interest rate risk are measured in terms of the VaR (Value-at-Risk) figure (Chart 13). A limit based on the VaR figure is also in place to restrict interest rate risk in the investment portfolio relative to the benchmark index.

Credit risk related to portfolio investments and deposits is managed by requiring sufficiently good creditworthiness from securities issuers and Bank of Finland counterparties. To ensure this, issuers and counterparties are expected to have a public credit rating that exceeds a certain minimum threshold. In addition to the public credit rating requirement, issuers and counterparties are also subject to other criteria. These other criteria are of major significance for those issuers and counterparties, in particular, who have no public rating. This is the case, for example, in respect of certain domestic issuers. Domestic investments in securities with no public credit rating have been restricted, and they only account for a small proportion of total financial assets.

Moreover, issuers and counterparties are monitored by market-based indicators. Credit risk is managed by diversifying investments, within established limits, among several issuers and counterparties. The size of the allocated limit is affected by the instrument's asset class, credit rating, currency and maturity, among other factors. The credit risk arising from investments is gauged and limited daily, in terms of a separate credit risk VaR method, at three different confidence levels. In 2013, the calculation of the credit risk VaR method was developed and changes were made to the earlier calculation procedure.

The Bank of Finland manages liquidity risk by defining a component in its financial



assets that must be highly liquid and saleable within a short period of time and at low cost. The Board of the Bank of Finland determines the amount of this liquidity portfolio. In addition to the liquidity portfolio, liquidity features of investments are also taken into account in connection with the investment portfolio. Additionally, limits are established for the maturity of investment instruments, among other things, and for the Bank of Finland's participation in issues or share in issuers' total debt. Securities lending and short selling have also been restricted.

Management of operational risks includes management of risks related to staff and information systems. These risks are managed, for example, by regularly tested and sufficient backup arrangements and by reliable and well-documented workflows and instructions.

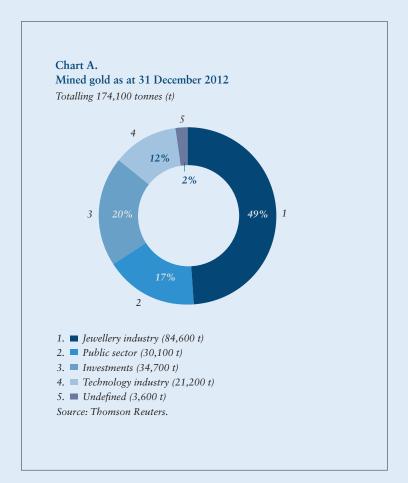
For more information on risk management tasks, organisation and the decision-making framework in connection with financial asset management, see the Financial statements section (p. 116). The same section also includes breakdowns and risk measures concerning the Bank of Finland's investments.

#### Box 7.

### Gold as part of central bank assets

Viewed globally, gold is the third largest asset item after the US dollar and the euro in public-sector foreign reserves. In the Bank of Finland's reserves, gold is the second largest reserve component after the US dollar. Gold accounted for 10% of the Bank's financial assets at the end of 2013.

Central banks and other general government entities hold 17% of the world's gold reserves (Chart A). When central banks' gold holdings peaked in the 1960s, they covered 50% of global gold reserves at that time.



### Gold safeguards central bank reserves under all circumstances

Gold has remained a key component of central bank reserves for its security characteristics, among other things. These characteristics are based on the fact that gold has no native country or government, and gold is thus nobody's debt. Consequently, the price of gold is not subject to political manipulation either. In addition, gold retains its value well under extreme political and economic circumstances. The usability of gold in risk diversification is also significant, as its price often moves in the opposite direction relative to the prices of other main investment targets, such as bonds.

During the financial and sovereign debt crises, the emphasis within reserves management has been on value retention rather than accumulation of interest income. Gold's reserve status strengthened in the uncertain conditions triggered by the financial and debt crises in 2008–2009. Deviating from many other market segments, the gold market remained fairly liquid throughout the crises. Even in times of crisis, the gold market has been able to provide liquidity to investors.

### History of central bank gold reserves

Central banks embarked on a large-scale accumulation of gold reserves in the 1870s during the period of a monetary system based on the gold standard, when the value of currency in circulation in the countries participating in the system was pegged to the country's gold reserves and paper money could be exchanged for gold at a fixed rate.

Prior to World War I, the gold standard was the prevailing monetary regime, with gold figuring as its key currency. In the period between the two World Wars, central banks' gold reserves grew rapidly. The

devaluation of the US dollar relative to gold, conducted during President Roosevelt's term of office in 1934, raised the dollar price of gold from USD 20.67 to USD 35 per ounce, which caused an influx of gold into the United States.

From World War II until 1971, the prevailing monetary regime was the Bretton Woods system. In this 'diluted' form of the gold standard, the US dollar was the reserve currency, with convertibility to gold.

The 1960s, in particular, was a powerful era for public-sector gold reserves. The reserves expanded to reach a record 38,000 tonnes, equalling half of the world's gold reserves. Gold was still the primary reserve and anchor currency, to which the currencies belonging to the system were directly or indirectly pegged.

Current account imbalances and growth in public expenditure, due in part to the Vietnam war, weakened the US dollar in the 1960s and early 1970s, among other things. In August 1971, President Nixon closed the gold window, which dissolved the Bretton Woods system. A period of floating currencies ensued, when gold became only one reserve asset among other currencies.

Central banks reassessed their reserve policies in the 1980s and 1990s. From the end of the 1980s onwards, central banks were net sellers of gold for nearly two decades. These developments led to a decrease of 10 percentage points in gold volumes in central bank reserves.

A new reversal of the trend in central banks' accumulation of gold reserves was seen at the end of 2010, when central banks became net buyers of gold rather than net sellers. The central banks of emerging economies were among the largest buyers.

## Central Bank Gold Agreement increased transparency

An important chapter in central banks' gold policy began on 26 September 1999, when a group of European central banks signed the first Central Bank Gold Agreement (CBGA). The purpose was to increase trans-

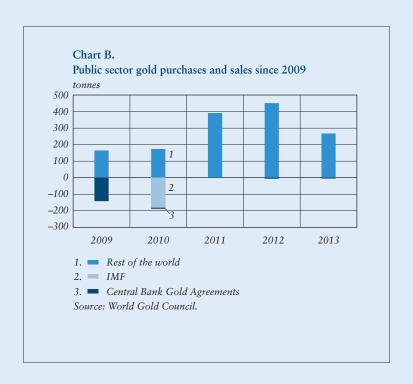
parency in central banks' measures relating to gold and to stabilise the gold market. The Bank of Finland is one of the original signatories to the Agreement.

The Gold Agreement has subsequently been renewed twice. The current, third Agreement is valid until 26 September 2014. The gold holdings of central banks under the Agreement are still significant, about 12,000 tonnes.

The annual sales quotas under the Gold Agreements have varied from 400 tonnes in the first and third Agreement to 500 tonnes in the second Agreement. The first two Agreements also included stipulations restricting gold investments.

Gold sales based on the Gold Agreement have been at a near standstill during the third Agreement. By contrast, gold sales by the International Monetary Fund (IMF) were executed according to the Agreement, although the IMF is not a signatory to the Agreement (Chart B).

In the first half of 2013, the Deutsche Bundesbank was the only central bank participating in the Gold Agreement to sell



some of its gold reserves, in order to meet its coin programme requirements.

#### Gold within the Eurosystem

There are major differences in gold reserves between countries and central banks. About 80% of public-sector gold is held by ten central banks. In currency terms, these central banks hold more than 70% of global gold reserves.

Central banks' gold reserves account for an average of 10% of their foreign reserves, but the proportion of gold of the reserves is much higher at euro area central banks for historical reasons (Table).

*Table.*Eurosystem central banks' gold reserves and gold's relative share of reserves, central bank balance sheets and countries' GDP at the beginning of 2013

	Gold reserves (t)	Gold/foreign reserves (%)	Gold/balance sheet (%)	Gold/GDP (%)
Germany	3,391	67	13	4
Italy	2,452	66	14	5
France	2,435	66	14	4
Netherlands	613	56	11	3
European Central Bank	502	26	9	0.2
Portugal	382	80	10	7
Spain	282	36	2	1
Austria	280	54	9	3
Belgium	227	34	9	2
Greece	112	77	4	3
Finland	49	18	3	1
Slovakia	33	63	4	1
Cyprus	14	45	3	3
Ireland	6	10.4	0.18	0.12
Slovenia	3	11.3	0.85	0.3
Luxembourg	2	10.8	0.06	0.02
Estonia	0.02		0.22	0.04
Malta	0.00		0.35	0.2

Sources: IMF, European Central Bank, European Commission and calculations by the Bank of Finland.



Photo: Peter Mickelsson.

### Banknotes and coins

One of the tasks of the Bank of Finland is to maintain the domestic currency supply and issue euro banknotes in Finland. Together with other stakeholders responsible for currency supply, the Bank of Finland ensures that the availability of banknotes is proportionate to the demand throughout the country and that banknotes remain in good condition. The Bank also aims to promote the high quality and cost efficiency of the currency supply in the economy. The Bank provides a level playing field for all private parties involved in the currency supply. The Bank of Finland's role in operative currency management is based on the service level objectives set by the Eurosystem and currency supply contracts agreed with currency supply stakeholders.

#### Advantages of the use of cash

Cash has a long history as a payment method. Although card payments have become more widespread, they have replaced the use of cash relatively slowly even in countries where the progress towards electronic payments is already well under way.

From the perspective of consumers, cash has several features that the new payment methods have not fully replaced. The use of cash is simple and does not require logging into electronic systems. Older people, in particular, find that cash is often the easiest payment method. The use of cash is anonymous and can be perceived as more secure than card payments, since cash is typically used for making small payments. Cash carried in wallets also helps some consumers to keep their personal budgets in better balance. In addition, cash has maintained its popularity among consumers because cash usage is often considered as being free of any additional charges.

## Decline in the use of cash in paying for daily consumables

Despite the advantages of paying in cash, the use of cash as a payment method has declined considerably in Finland over the past 10 years or so. According to a Bank of Finland survey, the share of consumers paying mostly in cash contracted in 2006–2013 from 34% to 19%. The survey

also measured the share of consumers using cash and card payments almost equally. The share of these consumers was 12% in 2013.

According to consumer surveys by the Federation of Finnish Financial Services, the share of those paying mainly in cash for daily consumables has contracted from 65% to 26% in 2001–2013. The survey showed that in 2013 about 72% of Finns most frequently paid for their purchases with a payment card.

Both surveys produced similar results and demonstrate that the use of cash has declined considerably in domestic retail payments (Chart 14). The resilience of cash issuance is based on the fact that Finns still take large amounts of cash on trips abroad.

## Changes in the availability of cash and cash payment limits

The decline in the use of cash in domestic retail transactions is also reflected in fewer visits to ATMs and in the smaller total value of cash withdrawals. Of these, the number of ATM visits fell faster than average withdrawal values. Hence, average withdrawal values are already approaching EUR 100 per withdrawal.

The contraction in the network of banks' ATMs decelerated slightly over the course of 2013. The number of 'Otto' ATMs, operated by Automatia and shared by all banks in Finland, declined by about 22 units. In order to enhance local circulation of cash, Automatia introduced

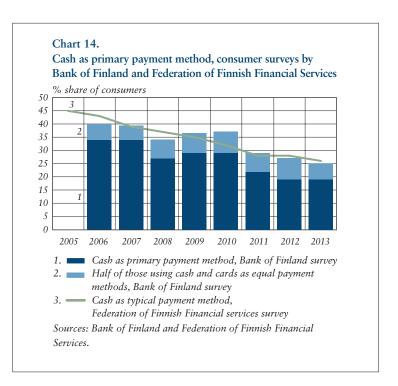
18 new 'TalletusOtto' cash recycling machines (CRMs) in October–November 2013. TalletusOtto CRMs recycle banknotes, as customers can withdraw banknotes deposited into them. This way they need not be filled as often as before and money transports can be reduced. TalletusOtto CRMs also replace business overnight deposits.

The number of bank branches providing cash services contracted by 54 in 2013, and the total number of offices amounted to 951 at the end of the year. The largest banking groups concentrated their cash services in fewer offices, especially in the bigger towns and cities. The network of offices has also been cut by transferring more banking services to the Internet.

As part of the measures introduced to combat the grey economy and money laundering, many euro area countries have begun to restrict the use of cash in large payments. Of all euro area countries, Italy and Portugal have imposed the strictest maximum limits - EUR 1,000 - on cash payments. Spain, Greece, France and Belgium have also imposed maximum limits on cash payments. The purpose of these restrictions is to boost the reduced tax revenues resulting from the financial crisis, by migrating from cash to electronic payments. This reduces sales that bypass bookkeeping, which are possible in cash transactions. The matter has also been considered in Finland, but the working group assessing restrictions on cash use in business activities did not deem it appropriate to prohibit large cash payments in Finland.

## The impact of tourism increasingly reflected in cash issuance

While the use of cash by Finnish consumers is decreasing evenly in Finland, it appears to be increasing in foreign tourism. Finns take considerable amounts of EUR 50 banknotes withdrawn from ATMs on their trips abroad. Foreign tourists, in turn, mostly bring EUR 100 and EUR 500 banknotes to

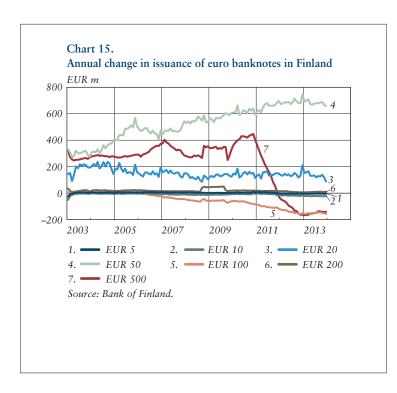


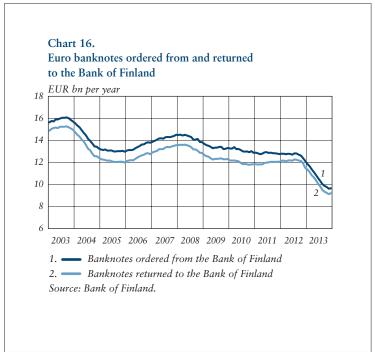
Finland. Of the largest denominations of euro banknotes, more returns are made to the Bank of Finland than the Bank puts into circulation. This is primarily due to the large number of Russian tourists. In Russia over 90% of retail payments are made in cash, and Russian tourists take considerable amounts of euro banknotes on trips abroad.

In 2013, the annual change in the issuance of euro banknotes in Finland turned negative also for EUR 10 banknotes, following EUR 100 and EUR 500 banknotes (Chart 15). More EUR 10 banknotes were returned to the Bank of Finland than had been issued by the Bank.

## Replacement of the EUR 5 banknote by the new series banknote sluggish

The introduction of the new series of euro banknotes commenced in May 2013 with the issuance of the EUR 5 banknote. During the first month, the Bank of Finland distributed only the EUR 5 banknotes of the new Europa series, so that the public





would become familiar with them. Since then, the issuance of the old and the new banknotes has been fairly even. At the end of 2013, the new EUR 5 banknotes had replaced about a fifth of the volume of the old EUR 5 banknotes.

## Closing down of two regional offices increased local recycling of cash

The objective behind closing down two of the Bank of Finland's regional offices was to increase the efficiency of the currency supply and reduce overlapping banknote sorting procedures between private sorting providers and the Bank. Part of the cash transfers formerly handled by the Tampere and Kuopio offices were shifted to the Vantaa and Oulu offices. At the same time, internal recycling of cash in private cash centres increased markedly during 2013. The pick-up in local recycling is not only reflected in cash centres' recycling statistics, but also in the contraction of banknotes ordered from and returned to the Bank of Finland. Orders from and returns to the Bank of Finland's offices contracted by over EUR 2 billion in annual terms, to below EUR 10 billion (Chart 16). Growth in the issuance of euro coins has slowed steadily since the introduction of the euro: in 2013 the annual growth rate was about EUR 20 million in value terms. Of this, over half stemmed from growth in the issuance of EUR 2 coins.

#### Creation of a new and larger Cash Department

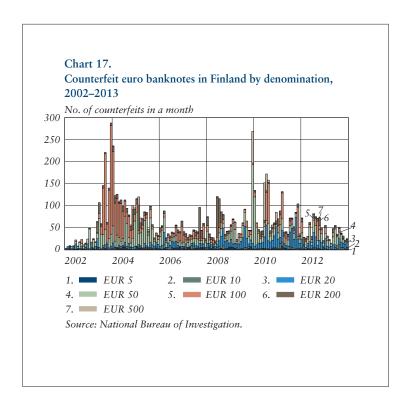
As a result of an organisational change, the Bank of Finland's Currency Department responsible for operative currency management and the Security and Property Management Unit, which had formerly operated separately, were merged at the beginning of 2013. The new department was named Cash Department. At the end of 2013, the Cash Department employed 67 staff. The integration of the Security and Property Management Unit into the Cash Department was natural, since the majority

of security tasks at the Bank of Finland are directly connected with ensuring the security of the currency supply.

## Number of counterfeits distributed in Finland contracted further

The number of counterfeit banknotes found in Finland dropped for the third consecutive year, even though in the euro area the number of counterfeits began to increase again, after a few years of contraction. The majority of high-quality counterfeit banknotes discovered in Finland were similar to those found in other euro area countries.

In 2013, a total of 427 counterfeit banknotes were discovered in Finland. The most commonly found counterfeit banknotes in Finland were EUR 50 banknotes, followed by EUR 20 banknotes. The number of counterfeits in Finland is fairly small relative to almost all other European countries (Chart 17).



#### Introduction of the new series of euro banknotes

The new EUR 5 banknote was put into circulation in Finland and the other euro area countries in May 2013. The EUR 5 banknote was the first in the new banknote series to be issued. Its design was unveiled in January 2013.

The most important reason for the renewal of the banknote series is to make counterfeiting more difficult in future. Banknote security features are renewed about every ten years. The new euro banknote series makes no exception in this respect, even though no significant increase in counterfeiting has been detected in the euro area.

The planning of the new euro banknote series began several years ago. Since the new series is to be renewed gradually, the latest technical enhancements in security features can be introduced in the banknotes to be launched at a later date. For example, improvements in the resolution and general quality of colour copiers have increased the pressures to enhance the visible security features of euro banknotes. From the perspective of cash users and their ability to recognise counterfeit banknotes, the visible security features are the key factors in combating counterfeiting. Counterfeits produced in Finland are mostly made with copiers and printers, meaning they are generally poor in quality and easy to recognise.

The most important visible security feature in the new EUR 5 banknote is the colour-changing emerald green number of the denomination, which offers better protection against counterfeiting. The most commonly known security feature, the watermark, has been changed into a portrait watermark of Europa – a figure from Greek mythology. The portrait watermark improves authenticity checking, since it is typically easy for the eye to identify facial features. The broad hologram stripe also shows the same portrait of Europa.

Besides the visible security features, the features that are incorporated for the purpose of mechanical sorting and authenticity checking by central banks will also be renewed and updated for each individual denomination. The euro banknotes include various security features that are technically sophisticated and extremely difficult to reproduce and copy. For instance, the euro banknotes are produced by using several printing techniques, which makes the printing process difficult and enhances anticounterfeiting.

The new banknote series features the same 'ages and styles of Europe' theme as the first series. The purpose is also to keep the visual appearance of the new series sufficiently similar to the first one, so that the new banknotes can easily be recognised as euro banknotes.

According to a common agreement, a significant number of the new EUR 5 banknotes were put into circulation in the first months of issue, so that consumers would quickly become familiar with the new banknote. Accordingly, only the new EUR 5 banknotes were put into circulation in Finland at first. Since then the Bank of Finland has also issued good-quality banknotes of the old series in stock, and these will be put into circulation until withdrawn as unfit.

The Eurosystem has tentatively agreed that the issuance of the EUR 5 banknote of the old series will cease by no later than the introduction of the second denomination in the new series, the EUR 10 banknote. The old banknotes will eventually cease to be legal tender. The date when this occurs will be announced well in advance. However, the banknotes of the first series will always retain their value and can be exchanged into new banknotes for an unlimited period of time at the Bank of Finland and other euro area national central banks.

### Other operations

#### Research

Economic research at the Bank of Finland supports the Bank's policy preparation, operational development and external influence. The aim of the Research unit is to produce internationally top-ranking research in areas of key importance to the Bank's activities. This allows the Bank to make a strong contribution to the debate on monetary policy and financial market development, both in Finland and internationally. The input provided by the Research unit to the Bank's policy development grew substantially in 2013 compared with the previous years. Policy-related activities, notably promoting awareness of the report by Governor Liikanen's High-level Expert Group on reforming the structure of the EU banking sector, increased the profile of the Bank's research economists as public intellectuals.

#### Monetary research

Financial crises, international economic recessions, non-standard monetary policy measures and the sovereign debt crisis were important themes on our economic research agenda in 2013. In addition to these, particularly forward guidance in a monetary policy context, as well as macroprudential oversight of financial markets and their macroeconomic implications, kept the international research community busy. Researchers have also actively continued the discussion on the challenges of macroeconomic research and alternative research approaches. The international modelling work performed in 2013, which aims at integrating research on the functioning of the financial system into macroeconomic analysis, was still characterised by experimentation with alternative modelling solutions.

The Bank's research policy guidelines emphasise stability and the interaction between the financial markets and the real

economy. In 2013, the Bank's research projects and publications focused on numerous topical themes, such as nonstandard central bank purchases of long-term public debt, the shadow banking system and long periods of low interest rates, changing inflation dynamics in the euro area and the United States, spillover of contagion risks on interbank money markets, as well as on innovation, reallocation of resources and economic growth. The significance of political uncertainty for corporate investment and the effects of information costs on the economy's investment dynamics were also addressed. Research projects gave rise to 35 discussion papers.

According to the results of research projects the effectiveness of monetary policy guidance will increase if the central bank is able to appropriately combine its interest rate policy with purchases of public debt in maturities preferred by investors. On the other hand, extended periods of low interest rates, investors' over-optimism and economic agents' inability to anticipate the extent of unusually propitious economic activity account for long periods of economic upswing and the ensuing deep recessions.

According to empirical evidence, the importance of inflation expectations for euro area and US inflation dynamics has increased over time. The results emphasise the role of a credible monetary policy from the perspective of inflation dynamics.

As regards contagion risks caused by payment difficulties of an individual bank, research results suggest that clusters of banks, large loans raised from interbank markets and banks' status as intermediaries in the bank network explain contagion risk better than do bank size or indebtedness.

For supporting business innovations, it is important to identify those growth companies that make effective use of innovation subsidies. The welfare effects of successful financial backing may be considerable. Election year political uncertainty

has a material impact on institutional investors' willingness to invest in the United States. On account of information costs, firms optimally choose to refrain from collecting and processing information for most of the time, meaning that they invest infrequently and in large tranches.

#### Scientific meetings

In the year under review, the Bank of Finland organised several international scientific meetings on issues touching on its research activities. In June, the Bank cooperated with SUERF, the European Money and Finance Forum, in organising a meeting in Helsinki under the title 'Banking after regulatory reforms - business as usual?'. In addition to Erkki Liikanen, Governor of the Bank of Finland, the keynote speakers of the meeting were Paul Tucker, the then-Deputy Governor of the Bank of England, and Alan Blinder, Professor of Princeton University. Academia was represented by the addresses of Professor Jean-Charlet Rochet (Universität Zürich) and Professor Steven Ongena (Universität Zürich). Financial market regulation and proposals for reorganising banks' business operations were prominently present among the subjects addressed in the meeting.

In September, the Bank took part in arrangements for an international meeting in Bali, organised by Universitas Sebelas Maret and the Journal of Financial Stability round the theme 'Risk, Banking and Financial Stability'. As well as the financial market situation in Indonesia and its regulatory and supervisory system, the dimensions of banking were debated in a lively manner at the meeting. In November, the Bank organised a two-day workshop on Agent Based Modelling (ABM) with the University of Bordeaux. The Centre of Economic Policy Research (CEPR) assisted in the meeting arrangements. The ABM provides tools, among other things, for explaining complex dynamics frequently attached to crises.

## Bank of Finland Institute for Economies in Transition

The research efforts of the Bank of Finland Institute for Economies in Transition (BOFIT) concentrate mainly on applied research with a focus on monetary and exchange rate policy issues and the functioning of financial systems. The primary target countries are Russia and China, although individual research topics often require the use of more extensive comparative data. Collaboration between research, monitoring and forecasting forms the foundation for the work of BOFIT's experts.

In 2013, BOFIT continued to publish (in both Finnish and English) its popular weekly digest of economic news items from Russia and China. These go out to around 2,000 subscribers all over the world. Another aspect of BOFIT's work was the presentation of topical information releases on the Russian and Chinese economies and the publication of reports based thereon.

Academic studies are published initially in BOFIT's own Discussion Papers series, of which 31 were published in 2013. In addition, 11 shorter reports were published in the BOFIT Online series. BOFIT published forecasts for the economic outlook in Russia and China in the immediate years ahead in connection with the Bank of Finland's March and September forecasts for the international economy. As well as the articles of the in-house researchers, the Discussion Papers series also include articles by visiting scholars and studies presented at BOFIT's seminars and workshops. A total of 20 visiting scholars from 11 countries worked with BOFIT in 2013.

The research priority in 2013 was the functioning of financial systems in various countries. Other objects of research included monetary policy and changes in monetary policy in emerging economies.

In May 2013, BOFIT contributed to the arrangements of a conference entitled 'Renminbi and the Global Economy' dealing



Photo: Peter Mickelsson.

with the internationalisation of the Chinese currency and liberalisation of the country's capital movements. The other organiser of the conference was the City University of Hong Kong. The use of the Chinese currency outside the country's borders and in international trade is increasing at a rapid pace, and new decisions on freeing up capital movements mean a further acceleration of this trend. The keynote speaker of the conference was Charles Engel (University of Wisconsin), who emphasised that exchange rates often remain far from their equilibrium exchange rate over extended periods of time, which may require joint action by central banks of various countries.

In November, a workshop was organised in Moscow under the title

'Banking in Emerging Markets: Challenges and Opportunities'. The other organiser of the meeting was the Higher School of Economics, Moscow. The meeting discussed, in particular, the challenges facing the Russian banking system.

### Statistics

The Bank of Finland was responsible for producing the Finnish data for euro area statistics on monetary financial institutions (MFIs) and other financial and balance of payments statistics, together with corresponding national data, in 2013. In June 2013, the Bank of Finland and Statistics Finland signed an agreement on transferring the production of balance of payments

statistics from the Bank of Finland to Statistics Finland. The main responsibility for compiling balance of payments statistics and the related tasks has been taken over by Statistics Finland from the beginning of 2014. This transfer enables a closer integration of balance of payments statistics into the national accounts framework. Concentrating statistical functions in Statistics Finland is one of the initiatives included in the Government's Effectiveness and Performance Programme.

Going forward, Statistics Finland will be responsible for collecting, processing and disseminating balance of payments data. The Bank of Finland continues to collect data on MFIs, investment funds and portfolio investments for other statistical requirements of the European System of Central Banks (ESCB) and will submit the necessary data in this respect to Statistics Finland for compilation of balance of payments statistics. Balance of payments and national accounts data that meet with revised international standards will be published on the webpages of Statistics Finland from mid-2014 onwards.

The European Statistical System (ESS), formed by Eurostat and the EU Member States' national statistical institutes, and the European System of Central Banks intensified their statistical cooperation in 2013. A new structure for developing strategic cooperation, the European Statistical Forum (ESF), was established. Heads of national statistical institutes and central banks' statistical functions were invited to join as Forum members. Convening once a year, the Forum held its first meeting in November. Operational cooperation between statistical systems will be concentrated on the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB).

The focus of statistical development and expansion in the year under review was on a new approach to securities holdings data production that contains data on securities holdings and changes therein, broken down

by sector. A centralised information system designed by the German central bank and the ECB for processing securities holdings data reached its first phase in the euro area in summer 2013. The Bank of Finland set up national-level statistical information systems and prepared, in particular, for expansions of financial sector data collection. Compilation of securities holdings statistics commenced at the beginning of 2014.

As part of the preparations for banking union, Bank of Finland experts participated in the activities of smaller working groups, operating under the aegis of the ESCB Statistics Committee, to plan supervisory and statistical data collection. In these groups, the Bank has placed particular emphasis on the importance of effective information sharing and active cooperation between authorities.

### International operations and activities

Financial market integration and growing mutual interdependencies between sovereign states have increasingly served to emphasise the importance of cross-border cooperation. As a full member of the Eurosystem, the Bank of Finland actively participates in the work and decisionmaking of the European System of Central Banks (ESCB). Moreover, the Bank is responsible for Finland's contacts with the International Monetary Fund (IMF) and is a shareholder of the Bank for International Settlements (BIS). In addition to cooperation with these organisations, the Bank of Finland exerts influence on many Nordic, European and international fora.

## Effective action within the European System of Central Banks

The Eurosystem's supreme decision-making body is the Governing Council of the European Central Bank (ECB), which comprises the members of the Executive Board of the ECB and the governors of the national central banks of the countries that have adopted the euro. Bank of Finland

Governor Erkki Liikanen is a member of the Governing Council, and his personal alternate member is Deputy Governor Pentti Hakkarainen. The Governor of the Bank of Finland is also a member of the ECB's General Council, which includes the governors of all the national central banks of EU Member States plus the President and Vice-President of the ECB.

The Governing Council of the ECB generally convenes twice a month in Frankfurt. At the first meeting of the month the Governing Council conducts a thorough evaluation of developments in the monetary and real economies and takes monetary policy decisions. In the second meeting of the month, the focus of the discussions is on other tasks and responsibilities of the ECB and the Eurosystem. In addition, the Governing Council also held teleconferences and made decisions using a written decision-making procedure.

Board members and experts from the Bank of Finland participated in the work of the European System of Central Banks at all stages of preparation. The ECB has an Audit Committee, whose task is to improve ECB and Eurosystem governance and control. The Chairman of the Committee is Erkki Liikanen, Governor of the Bank of Finland. The Committee on Controlling is chaired by Deputy Governor Pentti Hakkarainen. Board Member Seppo Honkapohja was a member of the Eurosystem IT Steering Committee (EISC). The Bank of Finland also had at least one representative on each of the committees and was represented in nearly all working groups (altogether approximately 60) operating under the various committees. In 2013, a total of 14 Bank of Finland employees were seconded to the ECB on fixed-term contracts of varying length.

Furthermore, the Eurosystem has a number of temporary, high-level committees. Members of the Bank of Finland Board or experts at the Bank attended the meetings of these committees in accordance with their own areas of responsibility. In the year under review, the Bank, together with the Financial Supervisory Authority (FIN-FSA), took active part in preparations concerning the Single Supervisory Mechanism (SSM), an integral step for the European banking union, and in outlining policies for the Single Resolution Mechanism (SRM).

#### **International Monetary Fund**

The Bank of Finland has a statutory responsibility for Finland's contacts with the International Monetary Fund (IMF). Finland's representative on the highest governing body of the IMF, the Board of Governors, was Bank of Finland Governor Erkki Liikanen, with Deputy Governor Pentti Hakkarainen as his alternate member. The Board of Governors held its annual meeting in Washington in October.

The IMF's advisory International Monetary and Financial Committee (IMFC) met in April and October. The day-to-day operations of the IMF are the responsibility of an Executive Board of 24 Directors and the Managing Director, who also serves as Chairman.

Finland belongs to the Nordic-Baltic constituency within the IMF. In the year under review, coordination of the constituency was led by Norway, with participation from the Bank of Finland and the Ministry of Finance. The purpose of coordination is to form the constituency's common position on matters to be determined by the IMF Board.

The Nordic-Baltic Monetary and Financial Committee (NBMFC) met before the spring and autumn IMFC meetings in order to prepare the constituency's policy positions. The Bank of Finland was represented on the NBMFC by Deputy Governor Pentti Hakkarainen.

Due to the large volume of loans provided by the IMF to its members, the Fund was compelled to strengthen its base funding from the quotas with the help of its New Arrangements to Borrow (NAB) facility. Finland is a party to this arrangement, which was in use throughout the review year. In February of the reporting

year, the Bank of Finland also signed a bilateral loan agreement with the IMF in the amount of EUR 3.76 billion. The agreement is part of an international initiative launched in 2012 for a temporary strengthening of the Fund's lending resources via the conclusion of bilateral loan agreements, which can be drawn on if base funding and NAB funds are falling short.

#### **Bank for International Settlements**

The Governor of the Bank of Finland took part in the regular Governors' meetings of the Bank for International Settlements. Generally, the discussions covered topical issues relating to the global economy and the financial markets and, specifically, the challenges for central banks from forward guidance and proposals for reforming the structure of the banking sector. As a BIS shareholder, the Bank of Finland was represented at the Annual General Meeting of the BIS in June.

#### Nordic cooperation

Cooperation between the Nordic central banks has a long tradition, with the central bank governors working closely together. During the year under review, the Nordic central bank governors met at their annual gathering, this time held in Iceland. The main theme of the meeting was the ECB's forthcoming role as a European banking supervisor, and experts from each central bank were also in attendance. Moreover, the governors of the central banks met each other on several occasions at Nordic meetings as well as in other international contexts. The Nordic and Baltic central banks and supervisors also have a cooperation forum of their own (Nordic-Baltic Macroprudential Forum) to deal with questions concerning the financial markets.

Close cooperation between the central banks also takes place at the level of experts. Each functional unit of the Bank of Finland usually has one annual meeting with its counterparts at the other Nordic central banks. The meetings address topical

issues and development trends. The central banks are responsible for meeting arrangements, in rotation.

#### Cooperation within the European Union

The European Systemic Risk Board (ESRB) is part of the European System of Financial Supervision (ESFS). The ESRB concentrates on macroprudential oversight of the financial markets, and its task is to identify risks to the financial system as a whole and to prevent them by issuing warnings and recommendations. The decisions of the ESRB are taken by the General Board, on which Bank of Finland Governor Erkki Liikanen is a voting member. The ESRB meets an average of four times a year. The Bank of Finland also has a representative on the Advisory Technical Committee of the ESRB.

The key responsibility of the European Union's Economic and Financial Committee (EFC) is to prepare the meetings of the ECOFIN Council of economic and finance ministers of the EU Member States. In 2013, the work of the EFC focused particularly on management of the European debt crisis, close monitoring of the economic situation in EU countries and the increased need for coordinating economic policy. Each EU Member State can appoint a maximum of two members to the Committee, one from their finance ministry and one from their national central bank. The Bank of Finland's representative on the EFC was Deputy Governor Pentti Hakkarainen. He participated in the meetings when the Committee convened in its extended composition and in the role of the Financial Stability Table. The Financial Stability Table is also attended by representatives from EU supervisors to report on the state of the Union's financial markets.

The Bank of Finland participates in cooperation within the EU's Economic Policy Committee (EPC), the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) and Eurostat's Balance of Payments Committee. The work of the EPC is focused on preparation of the EU's economic policy guidelines and

#### Box 9.

### Bank of Finland representatives at the ECB, EU and other international bodies in 2013

#### Bank of Finland representatives on the Governing Council of the ECB

Erkki Liikanen, member Pentti Hakkarainen, alternate member

Tuomas Saarenheimo, assistant (until 1 Sep) Jarmo Kontulainen, assistant (from 1 Sep)

Mika Pösö, assistant Hanna Westman, assistant

#### Bank of Finland representatives on ESCB committees, the Budget Committee, the Eurosystem IT Steering Committee and at the Human Resources Conference

**International Relations Committee** 

Pentti Hakkarainen (until 19 Aug) Olli-Pekka Lehmussaari Kristiina Karjanlahti (from 19 Aug)

Accounting and Monetary Income Committee

Tuula Colliander

Legal Committee Maritta Nieminen

Eija Brusila **Payment and Settlement Systems** 

Committee Marianne Palva (until 1 Sep) Päivi Heikkinen (from 1 Sep) Kirsi Ripatti

**Market Operations Committee** 

Harri Lahdenperä Tuomas Välimäki (until 1 Oct) Marjaana Hohti (from 10 Oct) Organisational Development Committee

Mika Pösö Kristina Rantalainen

**Monetary Policy Committee** Tuomas Saarenheimo (until 1 Sep) Tuomas Välimäki (from 1 Oct)

Iarmo Kontulainen Samu Kurri

**Financial Stability Committee** 

Kimmo Virolainen Jouni Timonen

Risk Management Committee

Antti Nurminen Kaarina Huumo

**Banknote Committee** 

Mauri Lehtinen Kari Takala

**Internal Auditors Committee** 

Pertti Ukkonen Jarno Talvitie (from 22 Jan) Information Technology Committee

Petteri Vuolasto

Raimo Parviainen (until 31 Oct)

**Statistics Committee** 

Laura Vajanne Harri Kuussaari

Committee on Controlling Pentti Hakkarainen, chair

Tuula Colliander Marko Ala-Pöntiö

**External Communications Committee** 

Jenni Hellström Richard Brander

**Budget Committee** Pirkko Pohjoisaho-Aarti

**Eurosystem IT Steering Committee** 

Seppo Honkapohja

Human Resources Conference

Antti Vuorinen

### Bank of Finland representatives on EU committees

European Systemic Risk Board, General Board

Erkki Liikanen

**Economic and Financial Committee** Pentti Hakkarainen

Olli-Pekka Lehmussaari, alternate member

**Economic Policy Committee** Lauri Kajanoja

European Banking Authority's Board

of Supervisors Kimmo Virolainen Committee on Monetary, Financial and **Balance of Payments Statistics** 

Laura Vajanne

**Balance of Payments Committee** 

Harri Kuussaari

### Bank of Finland representatives at the Bank for International Settlements (BIS), the IMF and the OECD

BIS meetings of central bank governors

Erkki Liikanen

**IMF Board of Governors** 

Erkki Liikanen

Pentti Hakkarainen, deputy member

**OECD Economic Policy Committee** 

Tuomas Saarenheimo (until 1 Sep) Tuomas Välimäki (from 1 Sep) Samu Kurri

**OECD Financial Markets Committee** 

Ivrki Haajanen

structural policy issues, while the CMFB's remit is to foster better statistical cooperation between the ECB and Eurostat and to issue statements on statistical matters. The purpose of the Balance of Payments Committee is to assist Eurostat in implementation of the Regulation of the European Parliament and of the Council on Community statistics concerning balance of payments. The Bank of Finland is also involved in the work of the Organisation for Economic Cooperation and Development (OECD).

The Bank of Finland is represented on the Board of Supervisors of the European Banking Authority (EBA). The task of the EBA is to ensure effective and consistent supervision and regulation of banks in the EU and strengthen international supervisory coordination, for instance by issuing regulatory and supervisory standards as well as mediating and settling disagreements between competent national supervisory authorities.

#### Communications

The Bank of Finland's strategic guidelines are geared to keeping the general public well informed of the role and activities of the Bank and the Eurosystem via effective and specifically targeted communication. Monetary policy, financial stability and payment instruments are key areas of focus, with special interest directed at the activities of the Bank of Finland and the Eurosystem in these areas. Board members and managers, as well as experts at the Bank, dealt with these themes in their numerous speeches, writings and interviews during the year.

In its discourses in 2013, the Bank of Finland focused, in particular, on forward guidance in a monetary policy context, constructing the banking union and structural challenges faced by the domestic economy. Another sphere of emphasis was the ECB's monetary policy measures amid the ongoing financial crisis and the Bank of Finland's preparation for financial risks.

According to the approach adopted by the Bank of Finland, Eurosystem decision-making was made increasingly transparent. Also, for the first time, the Bank of Finland published the countries where its gold reserves are stored after having received the agreement of the key central banks involved.

The revised banknote series that was launched by the introduction of a new EUR 5 banknote was widely communicated in Finland. The Bank of Finland organised many public events, and information packages on the new banknote series were distributed to key retail outlets. It is easy to distinguish the new euro banknotes from those of the first series, and the new notes incorporate more advanced security features.

The Bank's webpages provide topical information on the economy and the financial markets as well as the work of the Bank of Finland and the Eurosystem. Participation in social media channels promotes network communication. The Bank seeks to reach new audiences and report openly on its activities via multichannel network communication. The Bank of Finland also provides services to the general public by telephone and email.

Twitter enables the Bank of Finland to provide information on its events and new publications and to communicate exchange rates and market interest rates, among other things. Both the Bank of Finland Museum and the Bank's Library also have their own Facebook pages. The Bank of Finland website features a blog where the Bank's experts write on topical central banking issues.

In October, Governor Liikanen participated in an online debate organised by the European Commission together with other European institutions, where members of the public posed questions relating to the activities of the ECB, the reform of bank structures and banking union.

## The Bank of Finland's research supported crisis awareness in the economy

The Bank of Finland's most important publication is the bulletin Euro & talous

[also published in English as the Bank of Finland Bulletin, with occasional minor differences in content]. It came out five times in 2013. Two issues of the Bulletin discussed the outlook for the Finnish economy with a forecast for the domestic economy. Two of the issues focused on monetary policy and the global economy and one issue looked at financial stability. Each edition of Euro & talous was launched with a press briefing.

The June issue, with a forecast for the domestic economy, presented an analysis of structural changes faced by the Finnish economy as well as the cyclical downturn brought about by the financial crisis.

The online publication series BoF Online saw 14 articles published during the course of the year under review. Bank of Finland publications are available on the Bank's website. Information on the main publications in 2013 is provided in the appendix on page 130.

## Central bank decision-makers visited the Bank of Finland

In May 2013, the Bank of Finland Museum was the venue of an event hosted by Governor Liikanen where Mervyn King, the Governor of the Bank of England, and Jyrki Katainen, the Finnish Prime Minister, discussed the theme 'What have we learned from the crisis?' Those invited to the meeting included students in economics, bank economists and other persons in positions of influence within the economy.

Benoît Cœuré, Member of the Executive Board of the European Central Bank, visited Finland in September. In connection with the visit, Mr Cœuré met not only representatives from the Bank of Finland but also market participants and members of the media. The press meeting provided an arena to review the ECB's monetary policy and the Governing Council's assessments of the economic outlook.

During the spring, public events were organised in the Museum, of which five

took place in the Studia Monetaria lecture series and two were Talouskirja Nyt discussions on topical books in the field of economics and finance. The Museum, which is the Bank of Finland's hub for visits, celebrated its tenth year during 2013. The autumn saw the start of refurbishment work aimed at revising exhibition content and structure. The Museum was closed for the remaining months of 2013. Several dozen groups visited the Bank of Finland in 2013 to familiarise themselves with the Bank's Museum and to obtain information on the economic outlook.

In March, the Bank of Finland launched Eurokampus, a programme designed to foster young people's financial knowledge with webpages accessible via www.euro.fi. For example, the website publishes a blog on economic issues written by the young.

Cooperation with teachers is an important element of Eurokampus. In 2013, the Bank of Finland had the main responsibility for the training roadshow Talous tutuksi ('Familiar with economic issues') intended for teachers. The roadshow was organised in cooperation with the Association for Teachers of History and Social Studies in Finland, the Federation of Finnish Financial Services, the Finnish National Board of Education, the Finnish Foundation for Share Promotion and the Economic Information Office.

In association with the Federation of Finnish Financial Services and the Association for Teachers of History and Social Studies in Finland, the Bank of Finland organised the annual 'Economic Guru' competition for upper secondary students. The Bank also arranged the Finnish event for the 'Generation €uro' competition for teams of secondary students held in different countries of the euro area. In 2013, Economic Guru was won by Antti Luukkanen from the Helsingin normaalilyseon lukio upper secondary school and Generation €uro was won by a team from the Etelä-Tapiolan lukio upper secondary school.

Each year, dozens of student groups visit the Bank of Finland Museum to learn about money and central banking functions.



## Management and personnel

### Review of the strategy

The Bank of Finland's updated strategic guidelines and revised performance indicators directing the Bank's activities were introduced at the beginning of 2013. The updated strategy is based on developing competence-based influence and on efficient and qualitatively competitive production of operative central banking services. The key current changes in the operating environment relate to the banking union, namely the creation of a common stability policy and banking supervision for the euro area, and the associated enhancement of macroprudential supervision in Finland. The domestic economic policy debate has highlighted the effects of potential structural reforms, cost competitiveness and the state of public finances.

The Bank of Finland is committed to increasing its contribution to financial market policy. Consequently, the emphasis of expertise is on combining macroeconomic and financial market perspectives. The Bank acts as an innovative think tank both in domestic economic policy dialogue and at the Eurosystem level.

In 2013, the Bank's strategy work paid particular attention to the perspective of external stakeholders in a broad sense. The Bank of Finland's activities are to be developed and assessed according to how society trusts the Bank and how the Bank is considered as performing its activities. In addition to the external perspective, the strategy also emphasised ongoing improvement of productivity and efficiency.

The objectives and results framework, which controls the implementation of the strategy, consists of strategic guidelines and revised performance indicators monitoring the implementation of the guidelines. The set of Bank-level indicators enables an assessment of the Bank's social role and its accountability towards society. In addition to Bank-level indicators, specific indicators were determined for departments and core processes. The indicators were derived from the strategy and they steer the activities of each department and core process. Objectives were set, for example, for initiatives in international fora and effective participation in the Eurosystem's joint projects. These are described in more detail in Box 11.

#### Box 10.

### Bank of Finland's mission, vision, strategy and values

#### Mission

The Bank of Finland works towards economic stability. Price stability, secure payment systems and reliable financial systems are prerequisites for sustainable growth, employment and the wellbeing of Finnish society.

#### Vision

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

The vision underlines the Bank of Finland's objective of being a forward-looking authority, whose activities and statements are constructive in promoting the long-term robustness and stability of the Finnish economy. The Bank itself aims to operate in the spirit of its own statements fostering effectiveness.

A constructive role within the Eurosystem requires the Bank of Finland to be actively involved in developing solutions to common problems, while being influential imposes high expectations on the competence and communication skills of the Bank's personnel.

#### Summary of the strategy

- The Bank of Finland's influence is based on expertise, reliability and research.
- We ensure the availability of competitive central bank services in Finland.
- We participate in maintaining the service level of the financial markets and related infrastructure.
- We maintain such capital adequacy and liquidity as is required by our operations, and we honour our financial accountability to Finnish society.
- Our working processes are of high quality, technically advanced and environmentally sustainable.
- We build our expertise and professional competitiveness with an eye to the future, while simultaneously caring for the long-term wellbeing of our staff.

#### Values

#### Competence – Appreciation – Responsibility

The values reflect our attitude towards our own work, our colleagues and the rest of the society. Common values drive the staff's day-to-day activities and underpin the organisation's working culture. The entire organisation was involved in defining the Bank's values.

#### Competence

Our work builds on excellence and professional ethics. We keep our knowledge and skills at the forefront.

#### Appreciation

We strive towards common objectives with mutual respect. We encourage open discussion and fresh ideas.

#### Responsibility

We act responsibly and we are independent. We are a reliable and cooperative partner.

### Management system

In addition to the Bank's strategy, the key elements of the Bank of Finland's management system are the objectives and results framework, the action planning framework, staffing and budgetary ceilings and overall risk assessment (Chart 18). Overall risk assessment and analysis is integrated with action planning at department, unit and process levels. Performance appraisal and pay discussions with staff are part of the Bank's management system.

### Action planning

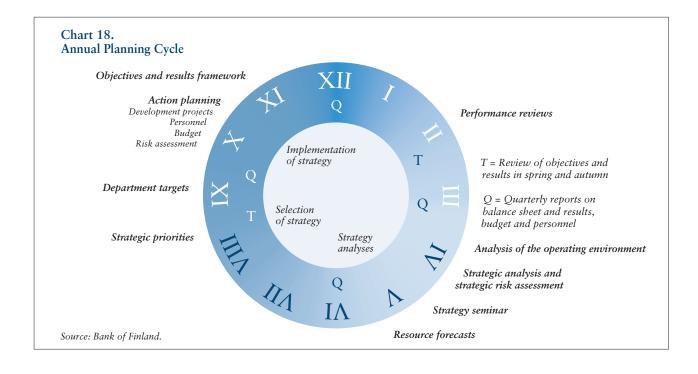
Action planning at department and process levels is conducted with a three year timeline. The objectives of the action plan are written up as the Bank's objectives and results framework, which is reviewed and

signed by all the heads of department each year. The framework outlines the relevant indicators and major projects for the individual departments.

### Objectives and results framework

The objectives and results framework is used as a corporate governance tool, in line with the Bank's strategy. This provides something that can be shown to the Bank's external stakeholders to illustrate how the Bank has set its service objectives with respect to society and how achievement of these objectives is measured. At Bank level each department and process has also been provided with its own objectives derived from the framework.

In reference to the objectives and results framework for 2013, on average the objectives were comfortably achieved in the review year (see Box 11).



### Personnel and budget frameworks

Resource planning in the departments is guided by three-year personnel and operating costs frameworks, which are updated annually in connection with confirmation of the action plan and expenditure budgets. The framework system facilitates medium-term resource planning at departmental level. The procedure is of help in achieving the Bank's strategic objective of being one of the most efficient EU central banks.

## Risk management within corporate governance

Risk management is part of the Bank of Finland's governance framework. Annual reporting on objectives and results incorporates an evaluation of the likelihood of the risks being realised over the period under review. The Bank's risks are divided into strategic, financial and operational risks. Overall responsibility for the provision and governance of risk management and the definition of the level of risk exposure rests with the Bank's Board, but each member of staff is responsible for the management of risks falling within his or her own job remit.

#### Strategic risks

The Bank of Finland's strategic risks are related to strategic choices and the underlying

assumptions regarding the domestic and international operating environment and changes therein. Assessment and monitoring of strategic risks has been adopted as part of the action planning process.

#### Total risk exposure

Within the Bank's organisation, the monitoring and reporting of total financial risks in the balance sheet has been entrusted to the Risk Control division of the Administration department, which is responsible for assessment, analysis and management of portfolio risks. For a more detailed discussion of the total financial risks in the balance sheet, see page 77.

#### Operational risks

The risks of the Bank's core operative functions have mainly been assessed against set objectives and their achievement. However, in the assessment of risks related to systems and security, damage, loss and reputational aspects could be applied. In managing the Bank's operational risks, attention has also been devoted to 'compliance risk', which relates to the requirement that activities should be conducted in compliance with Acts and Decrees, respecting valid internal guidelines and regulations as well as sound governance. Reputational risk and incorruptibility are areas of utmost importance to central banks.

 $_{\rm Box\,11.}$  Bank of Finland objectives and results framework for 2013–2015

	Strategic guideline	Indicator	Objective		Situation	
				12/2011	12/2012	12/2013
	1. The Bank of Finland's influence is built on high-level expertise and research that combines	Assessment of Bank of Finland's influence	4	4.1	4.1	Indicator under revision
ty	both macroeconomic and financial market perspectives.	Quality-weighted publication index; articles as basic category equivalents	> 32	New indicator	New indicator	52
e capaci	2. The Bank of Finland participates in preserving the service levels of the financial markets and related infrastructure and offers competitive central bank services to its customers.	Quality of central bank services from service users' perspective	95% of respondents satisfied	4.6	4.4	95%
and servic		Consumer satisfaction survey on the quality and availability of cash	4	4.1	4.1	4.3
I Influence and service capacity	3. Public confidence in the Bank of Finland and awareness of the Bank's and the Eurosystem's activities are promoted through effective, well-targeted communication.	Results of the VIP image survey carried out by Taloustutkimus, a market research company	Upper quartile of the benchmark	7/31	4/33	7/32
		Results of the Omnibus survey carried out by Taloustutkimus, a market research company	Upper quartile of the benchmark group	3/12	3/12	3/12
		Visits (clicks) on the Bank's website compared with a year earlier	Rising trend	-	1,704,944 visits	1,662,999 visits
luacy	4. The Bank of Finland's financial assets are invested in a secure and productive manner in accordance with international commitments and crisis management requirements.	Proportion of highly safe and liquid investments of financial assets	High	-	High	High
II Efficient use of resources and capital adequacy		Return on financial assets exceeding the central bank rate on investment currencies (5-year average)	> 0 5-year moving av.	2.25%	2.58%	1.73%
	5. The aim is to enable stable profit distribution to the State without jeopardising the Bank's capital adequacy.	Reserve fund + provisions relative to balance sheet risks	Provisions are increased with the aim of ensuring a sufficiently strong balance sheet under all curcumstances	EUR 2,471 million	EUR 3,120 million	EUR 4,924 million*
		Distributed earnings	Stable profit distribution	EUR 185 million	EUR 227 million	EUR 180 million
	6. The Bank of Finland is one of the most efficient EU central banks.	Total annual full-time- equivalent jobs for permanent and fixed-term staff	2013: 410 annual full-time equivalent; 2014: 395 annual full-time equivalent		413	394
II E		Total departmental operating expenses	2013 budget: EUR 55 million	EUR 52.7 million	EUR 52.8 million	EUR 52.3 million
		operating expenses	33 mmon	muuon	THE TENTE OF THE T	muuon

<sup>\*</sup> Indicator revised; reserve fund also taken into account since 2013.

	Strategic guideline	Indicator	Objective		Situation	
				12/2011	12/2012	12/2013
	7. The quality of the Bank of Finland's analytic and operational processes is actively enhanced.	Average of fulfilled criteria as set out in department- specific agreements on objectives and outcomes	93% satisfied	New indicator	New indicator	93%
ses	8. The Bank of Finland's ICT solutions enable	Feedback on IT equipment and services	93% satisfied	3.7	3.7	91%
roces	top-quality, influential work by our experts.	Number of serious disruptions	Objective 0	New indicator	New indicator	0
III Efficiency of internal processes		IT innovations that have increased productivity from the departments' perspective: share of departments reporting improved productivity	> 3	3.7	3.7	3.7
	9. The activities of the Bank of Finland are envi- ronmentally sustainable.	Total emissions / operating expenses (energy use)	Falling trend	85 kg CO, emissions 7 energy use	82.80 kg CO <sub>2</sub> emissions / energy use	77.5 kg CO <sub>2</sub> emissions / energy use
		Waste kg / operating expenses	Falling trend	Volume of waste 1.96 kg / EUR 1,000 operating costs	Volume of waste 2.06 kg / EUR 1,000 operating costs	Volume of waste 2.00 kg / EUR 1,000 operating costs
	10. The Bank of Finland raises the expertise and professional competence of its staff.	Annual implementation of personal development plans	Over 80% of plans turn out well	New indicator	New indicator	86%
e e		Education level index	> 5.8	5.8	5.9	6.0
IV Building the future	11. The Bank of Finland cares for the long-term wellbeing of its staff.	Proportion of the gender in the minority, relative to the total number of supervisory staff	Rising trend	22%	30%	31%
1din		Sick leave absence	< 3.5%	2.9	3.0	2.6%
IV Bui		Employee satisfaction index exceeds external benchmark group result	> 3.5	3.4	-	3.6
		Leadership index exceeds external benchmark group result	> 3.7	3.6	3.9	3.9

### Personnel

The Bank of Finland pursues the long-term goal of fostering well-being at work. Progress in job satisfaction and well-being at work are monitored by a staff survey measuring the functioning of the work community, work atmosphere, supervisory work by managers and the staff's well-being. The results for 2013 were better than the Finnish average in the comparison provided by the Finnish Institute of Occupational Health.

In the year under review, the overall picture of the state of well-being at work was supplemented by a health survey, which enabled the Bank to obtain information on the staff's occupational health and resources. The overall outcome of the survey carried out at the Bank of Finland was above the level in an extensive Finnish comparison. The results of the health survey will be used in the management of occupational well-being at both organisational and individual level. In the autumn season, the health survey resulted in the setting up of groups of staff members with neck, back and weight concerns, respectively.

The Bank of Finland puts effort into developing management and leadership skills. The Bank's leadership vision is based on professional leadership, results achievement and cooperation skills. The

quality of management is regularly monitored using a leadership index survey. The 2013 leadership index survey results exceeded the average of comparable organisations, in line with targets set by the Bank. Management training focused on coaching leadership. In addition, use was made of common ESCB human resources management training programmes.

The Bank of Finland's objective is to be one of the most efficient EU central banks. At the end of 2013, the Bank of Finland had 391 employees (Table 5). Of the total staff, 73% held expert positions. The number of staff declined over the year by 3.7%. Overall, since joining the EMU, the Bank's headcount has been reduced by 48%. The downsizing of staff reflects greater operational efficiency, retirements and a tight recruitment policy.

The Bank's two-year collective civil service agreement is valid from 7 March 2012 to 31 March 2014. The general pay rise was 1.4% in 2013, and there was a sectoral allowance of 0.5%. As agreed in negotiations on the collective civil service agreement of 2012, clarifications were undertaken in 2013 in respect of the functionality of the pay scheme, the experiment into more flexible working hours (the 'compressed working hours' scheme) and the extension of the 'mutual trust' working hours scheme.

Table 5. Human resource management highlights<sup>1</sup>

	2012	2013
Staff size		
Head count	406	391
Man years	439	422
Turnover rate for those leaving the Bank's service	11%	10%
Turnover rate for those entering the Bank's service	6%	7%
Internal mobility	11%	9%
Number of newly retired employees	21	20
Average effective retirement age	59.6 yrs	59.4 yrs
Staff structure		
Average staff age	46.6 yrs	46.1 yrs
Proportion of experts and superiors	69%	73%
Proportion of women	48%	47%
Salaries and bonuses		
Salaries in relation to market salaries at the Bank of Finland <sup>2</sup>	101%	100%
Negotiated increases	2.9%	1.9%
Bonuses as a proportion of payroll	0.25%	0.25%
Average pay for women / average pay for men	99%	100%
Competence		
Training costs / payroll	3.5%	3.3%
Training days / man-year	4.7	4.6
Education level index <sup>3</sup>	5.9	6.0
Wellness at work		
Absence rate	3.0	2.6
Employee satisfaction index	_	3.6

<sup>&</sup>lt;sup>1</sup> Figures refer to the Bank of Finland, unless otherwise mentioned. Figures referring to the Financial Supervisory Authority are published in the FIN-FSA Annual Report.

<sup>2</sup> The reference group in the HAY market salary survey is made up of organisations representing the banking and financial sectors, public sector, and industrial and service sectors. The Bank of Finland's remuneration policy is targeted at the median level of the HAY market salary survey for all organisations (basic salary + benefits). The survey also includes FIN-FSA's staff salaries.

<sup>3</sup> Education level index is calculated from the basic level of education of staff. The index varies between 1 and 8.

# Budget and operative costs

The cost efficiency of the Bank of Finland's operations is promoted by the objectivesdriven Budgetary and Staffing Framework, efficient acquisition procedures for goods and services and effective monitoring procedures. The Bank's budgets for the period 2014-2016 were drawn up in autumn 2013 and, of these, the Board of the Bank of Finland has ratified the budget for 2014. The budgets for 2015-2016 are to be ratified at a later date. Efficient tender procedures and framework agreements enable the Bank to manage its operating costs and meet the operating cost objectives set in the budgetary frameworks. The Board evaluates budget outcomes every quarter, while senior management monitor their budgetary situation on a real-time basis, through the Bank's reporting system. The Bank of Finland Board also ratifies the budget drawn up for the Financial Supervisory Authority.

# Bank of Finland's budget

In 2013, the Bank of Finland's operating expenses totalled EUR 75.2 million (EUR 74.2 million in 2012). Budgeted operating income amounted to EUR 13.7 million. The Bank of Finland's net operating expenses totalled EUR 61.5 million (Table 6).

Investment expenses totalled EUR 9.4 million in 2013. Investment in IT systems and infrastructure amounted to EUR 6.7 million. Investment expenditure on renovations totalled EUR 2.0 million. Other long-term acquisitions totalled EUR 0.7 million.

Table 6.

Budget for the Bank of Finland

	Outturn 2013 EUR m	Budgeted 2014 EUR m
1. Operating expenses and income		
EXPENSES Staff expenses Staff-related expenses Other expenses	33.7 2.8 22.1	34.4 4.0 24.4
DEPRECIATION	7.4	8.0
Total	66.0	70.8
Banknote acquisition costs Cash depot system	5.0 4.2	8.9 4.2
Total operating expenses	75.2	83.9
INCOME Banking service income Real estate Other income Services to FIN-FSA Capital gains on disposal of fixed assets	2.9 7.3 0.1 3.4 0.0	2.9 5.9 0.1 4.5
Total income	13.7	13.4
Net	61.5	70.5
2. Investment		
Real estate investment Head office premises Vantaa premises Other premises	2.0 0.6 1.2 0.2	4.2 1.2 2.7 0.3
IT-equipment and software Money handling machines Security equipment Other	6.7 0.0 0.4 0.2	8.5 0.2 0.8 0.1
Total investment	9.4	13.8

Totals/sub-totals may not add up because of rounding.

Table 7.

Budget for the Bank of Finland's pension fund

	Outturn 2013 EUR m	Budgeted 2014 EUR m
1. Operating expenses and income		
EXPENSES Staff expenses Pension fund activities expenses Pension fund real estate expenses	0.1 0.7 0.5	0.2 0.8 0.4
DEPRECIATION	0.9	0.9
PENSIONS Pensions paid	25.4	26.4
Total expenses	27.6	28.7
INCOME Employment pension contribution Rents Internal rents	10.4 0.0 1.6	10.8 0.0 1.6
Total income	12.0	12.4
Net	-15.6	-16.3
2. Investment		
Real estate of the pension fund	0.1	0.0
Total investment	0.1	0.0

Totals/sub-totals may not add up because of rounding.

Budgeted operating expenses for 2014 amount to EUR 70.5 million. Staff expenses are affected, among other things, by costs arising from the transfer of 15 IT and administrative tasks from the Financial Supervisory Authority to the Bank of Finland. As for other expenses, notable items are expenses related to IT systems, real estate and acquisition of purchased services. Banknote procurement carried out in the budgetary period is also a notable cost item. Investment expenditure in 2014 is estimated at EUR 13.8 million. Of this, EUR 8.5 million relates to the development of IT systems and infrastructure and EUR 4.2 million to premises.

# Pension fund's budget

The pension fund's operating expenses for 2013 totalled EUR 27.6 million. Pensions paid (EUR 25.4 million) was the largest cost item. Operating income amounted to EUR 12.0 million (Table 7).

The pension fund's expenses are estimated to increase slightly in the three coming years, which is largely due to growth in pensions payable.

The pension fund's activities are presented in the fund's own annual report.

# Financial Supervisory Authority's budget

The Financial Supervisory Authority's operating expenses totalled EUR 26.3 million in 2013 (EUR 24.8 million in 2012). No additional pension fund contribution was paid in 2013. Total income amounted to EUR 29.4 million. Of this, supervision and processing fees accounted for EUR 23.7 million and the Bank of Finland's contribution to funding was EUR 1.3 million. The surplus for the financial year was EUR 3.1 million. The surplus will be taken into account in the following accounting period, when setting the supervision and processing fees. Investment in IT systems totalled EUR 0.6 million (Table 8).

Operating expenses for 2014 are estimated at EUR 28.2 million. Total income is estimated at EUR 29.6 million, of which the Bank of Finland's contribution to funding accounts for EUR 1.4 million. Investment expenditure is estimated at EUR 1.1 million.

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

*Table 8.*Budget for the Financial Supervisory Authority

	Outturn 2013 EUR m	Budgeted 2014 EUR m
1. Operating expenses and income		
EXPENSES Staff expenses Staff-related expenses Other expenses	18.0 0.9 3.6	17.8 1.1 4.4
DEPRECIATION	0.3	0.3
SERVICES FROM THE BANK OF FINLAND	3.4	4.5
Total operating expenses	26.3	28.2
FUNDING OF OPERATIONS Supervision fees Processing fees Bank of Finland contribution to funding Surplus/deficit transferred from last year	22.6 1.1 1.3 4.4	24.3 1.0 1.4 2.9
Total income	29.4	29.6
Surplus transferred to next year	3.1	1.4

Totals/sub-totals may not add up because of rounding.

# **Environment**

In 2013, the Bank of Finland ensured that it meets its environmental responsibilities by improving energy efficiency and other efficient uses of materials. The number of the Bank's premises declined at the end of the previous year, leading to improved energy efficiency. Work to reform the collection and sorting of material to be disposed of was commenced. In future, the bulk of waste going to a landfill site will be delivered to an incineration plant to be built in the Helsinki area.

The Bank monitors the environmental impact of its operations using two environmental performance indicators that are proportionate to operating expenses. In 2013, for every thousand euro of operating expenses, the Bank created 2.0 kg of waste and 77.5 kg of CO<sub>2</sub> emissions. In 2012, the equivalent volumes were 2.06 kg of waste and 82.80 kg of CO<sub>2</sub> emissions.

The challenge for central banks relating to currency supply is to reduce the

ecological footprint. This can be achieved by improving the recycling of banknotes to be destroyed. Packing material can be reduced by developing and automating the packing techniques. An example is a reduction in the use of plastic in shrink wrapping banknote bundles.

Only the Bank of Finland has the right to destroy poor-quality banknotes unfit for circulation. Sorting machines automatically detect unfit banknotes, after which the shredder units destroy the banknotes. The shredded notes are then disposed of by burning.

Burning of shredded banknotes produces heat and electricity. The process also generates ordinary gases, such as nitrogen, carbon dioxide and oxygen, as well as water and ash. Small amounts of hazardous gases, such as carbon monoxide, sulphur dioxide and nitrogen oxides, can also be generated, but these can be destroyed at a sufficiently high firing temperature. The residual ash also contains some quantity of heavy metals originating from banknote holograms.

Table 9.
Bank of Finland's environmental impact

	Volume		
	2011	2012	2013
Electrical energy consumption (MWh)	11,537	10,875	9,471
Heating energy consumption (MWh)	11,510	11,864	10,482
Waste (tonnes)	157	169	162
Consumption of office and publication paper (tonnes)	40	45	53
CO <sub>2</sub> emission from business travel (tonnes)	1,912	1,925	1,930
CO <sub>2</sub> emission balance (tonnes)	6,829	6,780	6,289

Source: Bank of Finland.

Because two regional offices were closed down and local recycling of banknotes increased, banknote sorting at the Bank of Finland declined in 2013 by 20% from 2012. As a result, banknotes returned to the Bank were in a poorer condition than banknotes returned in the previous year, which in turn increased the share of banknotes to be destroyed. The share of banknotes to be destroyed also increased on account of the frontloaded replacement of the old EUR 5 banknotes with the EUR 5 banknotes of the new series.

The majority of banknotes that needed to be destroyed were the old 5 EUR denomination banknotes and EUR 20, the latter being the most commonly used banknote (Chart 19). Due to its more durable coating, the new EUR 5-denomination banknote is expected to remain longer in circulation than the old one.

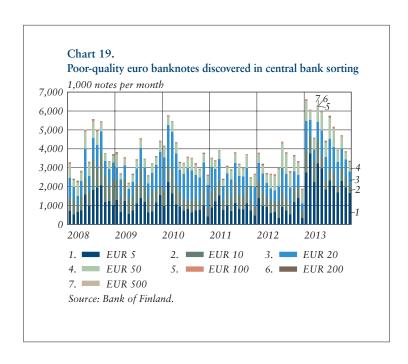




Photo: Peter Mickelsson

# Total risk exposure

The Bank of Finland incurs risks arising from financial asset management, monetary policy operations and operational activities. The financial crisis has increased financial risks in the Bank of Finland's balance sheet. The risks are managed and prepared for by accumulation of risk buffers in order that the performance of central bank functions is not jeopardised under any circumstances. Operational risks are identified in connection with operations planning and managed as part of the Bank's daily work, on a decentralised basis.

#### Financial assets

The Bank of Finland has approximately EUR 14 billion worth of financial assets, consisting of gold reserves, foreign reserves and assets denominated in euro. The financial assets are exposed to exchange rate, interest rate and credit risks.

Exchange rate risk is the source of the most significant volatility in the value of the financial assets. The Bank of Finland diversifies its exchange rate risk by investing in the pound sterling and the Japanese yen, in addition to the US dollar. In the course of 2013, the Bank of Finland increased its foreign reserves in US dollars up to USD 5 billion. The gold reserves of the Bank of Finland remained unchanged in 2013, but the decreasing price of gold reduced their euro-denominated value. As the revaluation account providing a buffer against gold price changes is very large, assessment of gold price risk is separated from other risk assessment.1

The bulk of the Bank's financial assets comprise fixed-income debt instruments, whose value is affected by changes in the interest rate level. The interest rate sensitivity of the financial assets was reduced by a slight shortening of their duration in 2013. Credit risk related to the investments of the financial assets is managed by requirements regarding creditworthiness and by limits restricting total risk exposure and the number of individual issuers.

# Monetary policy operations

The Eurosystem's monetary policy operations are implemented on a decentralised basis. As a rule, the risks and returns of monetary policy operations are shared jointly, with each country's share of the risks and returns determined by its capital key. Accordingly, in order to obtain an overview of monetary policy risks to the Bank of Finland, one needs to examine the balance sheet of the Eurosystem as a whole.

The Eurosystem's refinancing operations are conducted with financially sound counterparties and against adequate collateral. Risks involved in these operations are managed by haircuts and daily valuation applied to collateral assets. During the financial crisis, the range of eligible collateral for refinancing operations has been broadened and the average maturity of the operations extended. In the course of 2013, however, banks repaid part of the funds raised through longer-term refinancing operations and the total volume of refinancing to banks shrank from EUR 1,126 billion to EUR 752 billion.

The Bank of Finland's holdings of debt instruments under the Covered Bond Purchase Programmes (CBPP1 and CBPP2) are mortgage-backed securities and government-guaranteed agency bonds with a short average maturity. A total of 81% of the debt instruments belong to the best rating category.

Purchases under the Securities Markets Programme (SMP) included bonds issued by the Spanish, Irish, Italian, Greek and

<sup>&</sup>lt;sup>1</sup> In the Financial Statements section 'Notes on risk management' (p. 116), risks related to gold are included in the overall assessment.

Portuguese governments. The purchase programme was terminated in September 2012, and its size declined during the year under review, as securities matured. At the end of 2013, the Bank of Finland's SMP share according to the capital key by country were, in terms of book value, as follows: Spain EUR 633 million, Ireland EUR 152 million, Italy EUR 1,431 million, Greece EUR 420 million and Portugal 313 million. The Outright Monetary Transactions programme announced in 2012 was not activated in 2013. (For the Eurosystem's monetary policy operations and the Bank of Finland's contribution at the end of 2013, See Table 10.)

# Development of Eurosystem and Bank of Finland balance sheets

The balance sheet of the Eurosystem declined by nearly a quarter in 2013. This was due, above all, to repayments of refinancing operations, but also to maturing securities acquired under the purchase programmes. The size of monetary policy operations decreased by 30% (Chart 20).

The size of the Bank of Finland's balance sheet fell to about one half of its level at the beginning of 2013, contracting by more than the Eurosystem's balance sheet. Bank of Finland counterparty banks reduced their central bank deposits from EUR 74 billion to EUR 24 billion. This led to a corresponding decline in the Bank of Finland's Target2 claims on the ECB. The reduction of deposits reflects gradual calming of the market situation in the euro area (Chart 21).

# Total risk exposure in the balance sheet

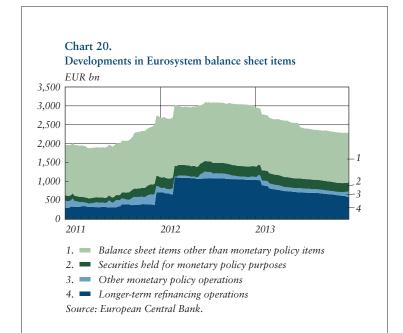
The Bank of Finland's total risk exposure is measured using well-established methods. In assessing market and credit risks to which the balance sheet is exposed, use is made of models based on the Value-at-Risk method, with emphasis on the worst

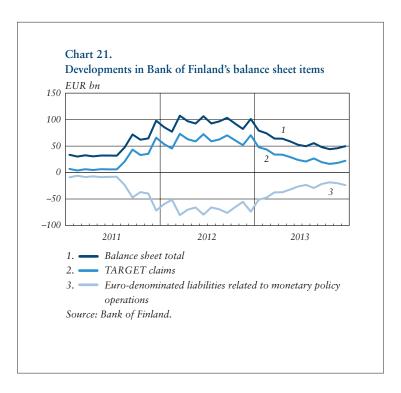
Table 10.

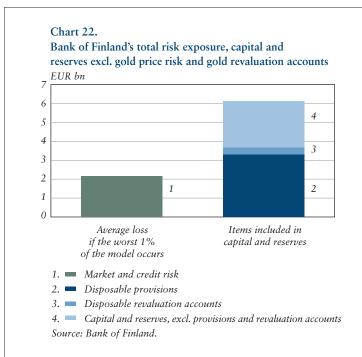
Monetary policy operations at the end of 2013

EUR m	Monetary policy refinancing operations	Covered bond purchase programmes	Securities Markets Programme
Eurosystem	752,288	57,093	178,836
Bank of Finland's calculated contribution (1.6–1.8%)	13,471	941	2,946

Source: Bank of Finland.







percentage of the model outcomes. As statistical risk figures fail to provide a full picture of the risks involved, the risk assessment is supplemented with a range of various scenario analyses and stress tests, in order to estimate the types of loss that the Bank could incur under unlikely, but plausible scenarios.

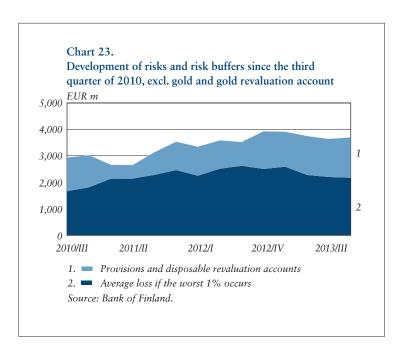
Combined annual risk exposure in the total balance sheet, including financial assets and monetary policy operations, amounted to EUR 2.2 billion (excl. gold price risk, Chart 22) at the end of the year. The Bank of Finland's risks declined compared with the previous year. This is due, in particular, to the lower level of monetary policy risks (Chart 23). As the revaluation account for gold covers more than half of the gold value, its risk is calculated separately. Gold price risk was EUR 0.7 billion, and the revaluation account for gold EUR 1.0 billion.

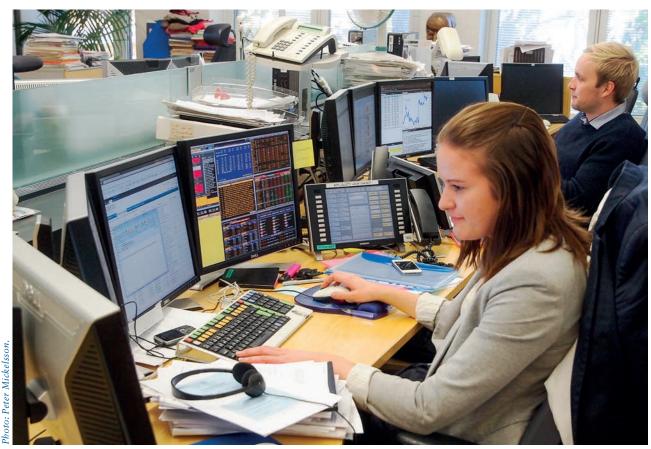
At the end of 2013, the Bank of Finland's capital and reserves totalled EUR 7.3 billion. Of this, the primary capital and reserve fund accounted for EUR 2.4 billion, provisions (excl. pension provision) accounted for EUR 3.3 billion and revaluation accounts EUR 1.6 billion.

Risks related to the Bank of Finland's balance sheet can be measured using either an economic or an accounting approach. Total risk exposure presented in this Annual Report is based on the economic measurement approach, meaning that the adequacy of risk buffers is compared with the real economic impacts of asset items. Calculated on this basis, market risk involved in the Bank of Finland's own financial assets accounts for almost two thirds of total risk exposure. The outcome based on an accounting approach can deviate substantially from that of an economic approach, because of the treatment of revaluation accounts, among other things.

Safeguarding financial intermediation and the stability and functioning of the financial system is one of the core tasks of

the euro area's central bank, but these may also entail losses. Preparation for risks means ensuring balance sheet strength, that entails reducing risks to financial assets, whenever necessary, and accumulating provisions and capital resources. Risk buffers in the Bank of Finland's balance sheet cover identified risks in the Bank's own investments and monetary policy operations. The Bank of Finland has increased its own capital resources and provisions in an effort to ensure the adequacy of its risk buffers, also in the event of the materialisation of unforeseen risks.





# Financial statements



# Balance sheet

EUR	million	31 Dec 2013	31 Dec 2012
ASS	ETS		
1	Gold and gold receivables	1,373	1,988
2	Claims on non-euro area residents denominated in foreign currency	6,585	6,171
	Receivables from the International Monetary Fund	1,955	2,097
	Balances with banks and security investments, external loans and other external assets	4,630	4,074
3	Claims on euro area residents denominated in foreign currency	297	404
4	Claims on non-euro area residents denominated in euro	1,347	1,970
5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	2,475	3,681
	Main refinancing operations	-	-
	Longer-term refinancing operations	2,475	3,681
6	Other claims on euro area credit institutions denominated in euro	0	0
7	Securities of euro area residents denominated in euro	10,063	11,471
	Securities held for monetary policy purposes	3,717	4,555
	Other securities	6,346	6,915
8	Intra-Eurosystem claims	26,539	74,382
	Participating interest in ECB	141	141
	Claims equivalent to the transfer of foreign reserves	722	722
	Net claims related to the allocation of euro banknotes within the Eurosystem	3,522	3,248
	Other claims within the Eurosystem (net)	22,154	70,270
9	Other assets	1,052	1,115
	Coins of euro area	23	27
	Tangible and intangible fixed assets	149	155
	Other current assets	641	607
	Other	238	326
	Total assets	49,731	101,182

Totals/sub-totals may not add up because of rounding.

EUR	million	31 Dec 2013	31 Dec 2012
LIA	BILITIES		
1	Banknotes in circulation	15,753	15,044
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	23,803	73,799
	Current accounts (covering the minimum reserve system)	14,303	31,698
	Deposit facility	_	37,101
	Fixed-term deposits (liquidity-absorbing fine-tuning operations)	9,500	5,000
3	Liabilities to other euro area residents denominated in euro	55	801
4	Liabilities to non-euro area residents denominated in euro	527	1,004
5	Liabilities to euro area residents denominated in foreign currency	0	0
6	Liabilities to non-euro area residents denominated in foreign currency	66	139
7	Counterpart of special drawing rights allocated by the IMF	1,330	1,387
8	Intra-Eurosystem liabilities	-	-
9	Other liabilities	21	24
10	Revaluation accounts	1,556	2,609
11	Provisions	3,939	3,708
12	Capital and reserves	2,442	2,332
	Primary capital	841	841
	Reserve fund	1,601	1,491
13	Profit for the financial year	239	337
	Total liabilities	49,731	101,182

# Profit and loss account

EUR	million	1 Jan-31 Dec 2013	1 Jan-31 Dec 2012
1	Interest income	565	1,110
2	Interest expense	-23	-113
3	NET INTEREST INCOME	542	998
4	Foreign exchange rate differences	-6	14
5	Securities price differences	56	221
	Valuation losses related to currencies and securities	-19	-3
6	Change in foreign exchange rate and price difference provision	-31	-232
	NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND RISK PROVISIONS	542	998
7	Fees and commissions income and expense	-1	-1
8	Net result of pooling of monetary income	-111	-343
9	Share in ECB profit	8	1
10	Provision in respect of counterparty risk in monetary policy operations	6	11
11	Other central banking income	28	133
	CENTRAL BANKING PROFIT	472	800
12	Other income	33	47
	Operating expenses	-94	-92
13	Staff costs	-52	-52
14	Pension fund contribution	-	-
15	Administrative expenses	-29	-29
16	Depreciation of fixed assets	-8	-8
17	Banknote procurement costs	-5	-3
18	Other expenses	-0	-1
	OPERATING PROFIT	411	754
	Profit for the pension fund	34	47
19	Income of the pension fund	64	78
20	Expenses of the pension fund	-29	-31
21	Changes in provisions	-206	-464
22	PROFIT FOR THE FINANCIAL YEAR	239	337

# The Board's proposal on the distribution of profit

The Board proposes to the Parliamentary Supervisory Council that EUR 58,807,495.60 of the profit of EUR 238,807,495.60 be transferred to the reserve fund according to section 21, subsection 2 of the Act on the Bank of Finland and that the remaining EUR 180,000,000.00 be made available for the needs of the State.

Helsinki, 26 February 2014

THE BOARD OF THE BANK OF FINLAND

Erkki Liikanen, Chairman

Pentti Hakkarainen

Seppo Honkapohja

./. Mika Pösö

# 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 incomes and expenses of the Bank's pension fund and of the Financial Supervisory Authority. The pension fund's investment portfolio is valued monthly at the market price of the last day of the month.

## 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. In the case of gold, no distinction is made between price and exchange rate differences; rather, a single revaluation 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	2013	2012
US dollar	1.3791	1.3194
Japanese yen	144.7200	113.6100
Australian dollar	1.5423	1.2712
Norwegian krone	8.3630	7.3483
Danish krone	7.4593	7.4610
Swedish krona	8.8591	8.5820
Swiss franc	1.2276	1.2072
Pound sterling	0.8837	0.8161
Canadian dollar	1.4671	1.3137
Special Drawing Rights (SDR)	0.8942	0.8578
Gold	871.2200	1,261.1790

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

The pension fund's investment portfolio is valued monthly at the market price of the last day of the month, reported by external portfolio managers.

Marketable securities (other than those classified as held-to-maturity) 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 2013, mid-market prices on 31 December 2013 were used.

Marketable securities classified as held-to-maturity, non-marketable securities and illiquid equity shares are all valued at amortised cost subject to impairment.

# 4. Accounting conventions relating to intra-ESCB balances

Intra-Eurosystem balances result from cross-border payments in the EU that are settled in central bank money in euro. These transactions are for the most part initiated by private entities. They are primarily settled in TARGET2 – the Trans-European Automated Real-time Gross settlement Express Transfer system. These transactions give rise to bilateral balances in the TARGET2 accounts of EU central banks. These bilateral balances are 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 (eg interim profit distributions to NCBs, monetary income results), are presented on the balance sheet of the Bank of Finland as a single net asset or liability position and disclosed under 'Other claims within the Eurosystem (net)'. 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 balances arising from the Bank of Finland's participating interest in the ECB are reported under 'Participating interest in ECB'.

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.

Intra-Eurosystem balances arising from the transfer of foreign reserve assets to the ECB by NCBs joining the Eurosystem are denominated in euro and reported under 'Claims equivalent to the transfer of foreign reserves'.

#### 5. Valuation of fixed assets

As from the beginning of the financial year 1999, fixed assets have been valued at acquisition price less depreciation. Depreciation is calculated on a straight-line basis over the expected economic lifetime of an asset, starting from the second 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 and land has been entered by adjusting the revaluation account downwards so that depreciation does not affect the Bank's income or expense.

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 17 euro area NCBs, which together comprise the Eurosystem, issue euro banknotes.¹ The total value of euro banknotes in circulation is allocated to the NCBs on the last banking day of each month in accordance with the banknote allocation key.² 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. This is disclosed under the balance sheet liability item 'Banknotes in circulation'. The difference between the value of 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 remunerated intra-Eurosystem balances. These claims or liabilities, which incur interest,³ are disclosed under the sub- item 'Intra-Eurosystem claims/liabilities: Net claim/liability 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 monetary income on euro banknotes is allocated in proportion to the NCBs' paid-up shares in the capital of the ECB. 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 generally distributed to the NCBs.<sup>4</sup>

## 7. Changes in accounting conventions

There were no changes in accounting conventions in the financial year 2013.

# 8. Monetary income

Monetary income accruing to NCBs in the performance of monetary policy functions in the ESCB is calculated and allocated to NCBs in accordance with the ESCB Statute and any decisions by the ECB's Governing Council.

# Interim profit distribution

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, and the ECB's (net) income arising from securities purchased under the Securities Markets Programme (SMP) and Outright Monetary Transactions (OMTs) shall be due in full to the NCBs in the same financial year it accrues. Unless otherwise decided by the Governing Council, the ECB distributes this income in

<sup>&</sup>lt;sup>1</sup> ECB decision of 13 December 2010 on the issue of euro banknotes (ECB/2010/29), OJ L 35, 9.2.2011, p. 26.

<sup>&</sup>lt;sup>2</sup> '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.

<sup>&</sup>lt;sup>3</sup> ECB decision on the allocation of monetary income of the national central banks of Member States whose currency is the euro (ECB/2010/23).

<sup>&</sup>lt;sup>4</sup> ECB decision of 6 November 2005 on the issue of euro banknotes (ECB/2005/11).

January of the following year in the form of an interim distribution of profit.<sup>5</sup> The amount of the ECB's income on euro banknotes in circulation may be reduced in accordance with any decision by the Governing Council in respect of expenses incurred by the ECB in connection with the issue and handling of euro banknotes. Before the end of the year the Governing Council decides whether all or part of the ECB's income arising from SMP and OMT securities and, if necessary, all or part of the ECB's income on euro banknotes in circulation should be retained to the extent necessary to ensure that the amount of the distributed income does not exceed the ECB's net profit for that year.

The Governing Council may also decide to transfer all or part of the ECB's income arising from SMP and OMT securities and, if necessary, all or part of the ECB's income on euro banknotes in circulation to a provision for foreign exchange rate, interest rate, credit and gold price risks.

	Key for subscription of the ECB's capital from 1 January 2011			tion of the ECB's 1 July 2013
	ESCB, capital key, %	Eurosystem, capital key, %	ESCB, capital key, %	Eurosystem, capital key, %
Nationale Bank van België/ Banque Nationale de Belgique	2.4256	3.46660	2.4176	3.47566
Deutsche Bundesbank	18.9373	27.06469	18.7603	26.97069
Eesti Pank	0.1790	0.25582	0.1780	0.25590
Banc Ceannais na hÉireann/ Central Bank of Ireland	1.1107	1.58738	1.1111	1.59737
Bank of Greece	1.9649	2.80818	1.9483	2.80097
Banco de España	8.3040	11.86786	8.2533	11.86533
Banque de France	14.2212	20.32457	14.1342	20.31999
Banca d'Italia	12.4966	17.85981	12.4570	17.90877
Central Bank of Cyprus	0.1369	0.19565	0.1333	0.19164
Banque centrale du Luxembourg	0.1747	0.24968	0.1739	0.25001
Bank Ċentrali ta' Malta/				
Central Bank of Malta	0.0632	0.09032	0.0635	0.09129
De Nederlandsche Bank	3.9882	5.69983	3.9663	5.70214
Oesterreichische Nationalbank	1.9417	2.77503	1.9370	2.78472
Banco de Portugal	1.7504	2.50163	1.7636	2.53543
Banka Slovenije	0.3288	0.46991	0.3270	0.47011
Národná banka Slovenska	0.6934	0.99099	0.6881	0.98924
Suomen Pankki – Finlands Bank	1.2539	1.79204	1.2456	1.79073
Subtotal Eurosystem	69.9705	100.0000	69.5581	100.0000
Българска народна банкаа (Bulgarian National Bank)	0.8686		0.8644	
Česká národní banka	1.4472		1.4539	
Danmarks Nationalbank	1.4835		1.4754	
Hrvatska narodna banka	- 2027		0.5945	
Latvijas Banka	0.2837		0.2742	
Lietuvos bankas	0.4256		0.4093	
Magyar Nemzeti Bank	1.3856		1.3740	
Narodowy Bank Polski	4.8954		4.8581	
Banca Națională a României	2.4645		2.4449	
Sveriges riksbank	2.2582		2.2612	
Bank of England	14.5172		14.4320	
Subtotal for non-euro area NCBs	30.0295		30.4419	
Total	100.0000		100.0000	

<sup>&</sup>lt;sup>5</sup> ECB decision of 25 November 2010 on the interim distribution of the income of the European Central Bank on euro banknotes in circulation and arising from securities purchased under the Securities Markets Programme (ECB/2010/24), OJ L 6, 11.1.2011, p. 35.

#### 9. 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 from the beginning of 2002, is to ensure that the funds related to the coverage of the pension liability are invested in a lucrative manner. A separate annual report will be prepared on the pension fund of the Bank of Finland. The assets of the pension fund are recorded in the Bank of Finland's balance sheet item 'Other assets'.

The ECB guideline on accounting and financial reporting does not regulate accounting for the pension fund. The pension fund's investments are valued at market price, and revaluations are recognised in profit or loss. The fund's financial statements are drafted using market prices prevailing in the last day of the year. 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 pension fund's income or expense.

# 10. 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 be made, as necessary, to cover the Bank's pension liabilities.

#### 11. Off-balance sheet commitments

Gains and losses arising from off-balance sheet items are treated in the same manner as gains and losses arising from on-balance sheet items. Forward foreign exchange transactions are taken into account when the net average cost of a currency position is calculated.

# Notes on the balance sheet

#### Assets

#### 1. Gold and gold receivables

The Bank's holdings of gold total 1,576,474 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 – along with the other national central banks (NCBs) participating in the Eurosystem – transferred about 20% of its gold holdings to the ECB.

Gold

	31 Dec 2013	31 Dec 2012
Holdings (troy ounces, million)	1.6	1.6
Price: EUR per troy ounce	871.2	1,261.2
Market price (EUR m)	1,373.5	1,988.2
Change in market value (EUR m)	-614.8	69.8

# 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 IMF

Breakdown of receivables from the IMF denominated in foreign currency

		31 Dec 2013		31 Dec 2012
	EUR m	SDR m	EUR m	SDR m
Reserve tranche in the IMF	365.0	326.4	471.6	404.6
SDRs	1,258.8	1,125.7	1,311.8	1,125.3
Other receivables from the IMF	331.3	296.3	313.8	269.2
Total	1,955.1	1,748.3	2,097.3	1,799.1

# EUR/SDR exchange rate in financial years 2012 and 2013

	2013	2012
End-March	0.85	0.86
End-June	0.87	0.83
End-September	0.88	0.84
End-December	0.89	0.86

Finland's quota in the IMF amounts to SDR 1,263.8 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 1,258.82 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 'Receivables from the IMF'

changes on the basis of foreign exchange transactions between the member countries. In addition, its value is 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 1,955.1 million.

In summer 2010, the Accounting and Monetary Income Committee (AMICO) of the ESCB made a decision on the treatment of SDR hedging trades which differs from the general currency-specific valuation principle. Sales of SDR component currencies made for hedging against the SDR exchange rate risk are regarded as reductive items in calculating the amount and market valuation of SDR items. Hence, such sales do not decrease the amount of component currencies and do not have an effect on the market valuation of the respective currencies.

#### 2.2 Other claims on non-euro area residents denominated in foreign currency

This item includes balances with banks and security investments, as well as external loans and other external assets, denominated in foreign currency.

#### Breakdown of claims on non-euro area residents denominated in foreign currency

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Deposits	251.6	320.1	-68.5
Coupon papers	4,189.4	3,726.2	463.2
Discount papers	183.9	15.2	168.8
Other	4.8	12.2	-7.4
Total	4,629.7	4,073.6	556.1

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

		31 Dec 2013		31 Dec 2012
Currency	EUR m	%	EUR m	%
Pound sterling	713.5	16.3	657.4	17.6
US dollar	3,247.2	74.3	2,557.2	68.3
Japanese yen	412.7	9.4	526.8	14.1
Total	4,373.4	100.0	3,741.5	100.0

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

		31 Dec 2013		31 Dec 2012
Maturity	EUR m	%	EUR m	%
Up to 1 year	1,088.4	24.9	762.5	20.4
Over 1 year	3,285.0	75.1	2,978.9	79.6
Total	4,373.4	100.0	3,741.5	100.0

# 3. Claims on euro area residents denominated in foreign currency

This item consists of balances with banks, security investments and other claims on euro area residents denominated in foreign currency.

Breakdown of claims on euro area residents denominated in foreign currency

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Deposits	_	37.9	-37.9
Coupon papers	301.2	376.6	-75.4
Discount papers	_	-	-
Other	-3.8	-11.0	7.2
Total	297.4	403.5	-106.1

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

		31 Dec 2013		31 Dec 2012
Currency	EUR m	%	EUR m	%
Pound sterling	51.6	17.1	115.1	30.6
US dollar	249.6	82.9	261.5	69.4
Japanese yen	-	_	_	_
Total	301.2	100.0	376.6	100.0

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

		31 Dec 2013		31 Dec 2012
Maturity	EUR m	%	EUR m	%
Up to 1 year	28.2	9.4	191.5	50.8
Over 1 year	273.0	90.6	185.1	49.2
Total	301.2	100.0	376.6	100.0

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

This item includes balances with non-euro area banks, denominated in euro, coupon bonds and discount papers issued outside the euro area as well as euro-denominated receivables from the Bank for International Settlements (BIS).

Claims on non-euro area residents denominated in euro

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Deposits	644.6	983.9	-339.4
Coupon papers	677.4	956.1	-278.6
Discount papers	25.0	30.0	-5.0
Other	0.3	0.1	0.2
Total	1,347.3	1,970.1	-622.8

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

		31 Dec 2013		31 Dec 2012
Maturity	EUR m	%	EUR m	%
Up to 1 year	290.8	41.4	280.0	28.4
Over 1 year	411.6	58.6	706.0	71.6
Total	702.4	100.0	986.1	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 credit (+ interest) to Finnish credit institutions, and the amount recorded is determined by the credit institutions' liquidity needs.

The Eurosystem's total claims on monetary policy operations amount to EUR 752,288.2 million, of which the Bank of Finland holds EUR 2,475.0 million on its balance sheet. In accordance with Article 32.4 of the ESCB Statute, any risks from monetary policy operations, if they were to materialise, should eventually be 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. It should be noted that 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 are liquidity providing reverse transactions which are executed with a weekly frequency and a maturity of one week. Main refinancing operations are normally carried out by means of standard tenders. Since October 2008, these operations have been conducted as fixed rate tender procedures. Main refinancing operations play a key role in achieving the aims of steering interest rate, managing market liquidity and signalling the monetary policy stance.

#### 5.2 Longer-term refinancing operations

These operations aim to provide counterparties with additional longer-term refinancing. In 2013 operations were conducted with maturities equal to reserve maintenance period and with maturities of three, six, twelve and thirty-six months. The operations were conducted at fixed rate with allotment of the total amount bid.

# 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

The Eurosystem conducts structural reverse operations as standard tenders whenever it wishes to adjust its liquidity position vis-à-vis the financial sector.

# 5.5 Marginal lending facility

Counterparties may use the marginal lending facility to obtain overnight liquidity from NCBs 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 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Main refinancing operations	-	-	_
Longer-term refinancing operations	2,475.0	3,681.0	-1,206.0
Fine-tuning reverse operations	-	-	-
Structural reverse operations	-	-	-
Marginal lending facility	-	-	-
Credits related to margin calls	-	_	_
Total	2,475.0	3,681.0	-1,206.0

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

This item consists of euro-denominated deposits and balances with euro area credit institutions. The balance sheet total for this item was EUR 0.1 million in the financial year 2013, compared with EUR 0.2 million in the previous year.

#### 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 2013 this item consisted of securities acquired by the Bank of Finland within the scope of the covered bond purchase programmes (CBPP and CBPP2) and the Securities Markets Programme (SMP) as well as outright transactions in secondary sovereign bond markets (known as outright monetary transactions, OMTs).

# Securities held for monetary policy purposes

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
First covered bond purchase programme	623.7	806.8	-183.2
Second covered bond purchase programme	285.3	301.6	-16.3
Securities Markets Programme	2,808.1	3,447.0	-638.9
Outright Monetary Transactions	_	_	_
Total	3,717.0	4,555.4	-838.4

The purchases under the first covered bond purchase programme were fully implemented by the end of June 2010. The redemptions and accounting amortisation of premium/discounts in 2013 resulted in a net decrease of the reported balance. The purchases under the second covered bond purchase programme were fully implemented by the end of October 2012.

Under the Securities Markets Programme (SMP) established in May 2010 the ECB and the NCBs purchased euro area public and private debt securities in order to address the malfunctioning of certain segments of the euro area debt securities markets and to restore the

proper functioning of the monetary policy transmission mechanism. The programme was finalised at the beginning of September 2012. The redemptions and accounting amortisation of premium/discounts in 2013 resulted in a net decrease of the reported balance.

Securities purchased under the Securities Markets Programme and the covered bond purchase programmes are classified as held-to-maturity and reported on an amortised cost basis subject to impairment (see 'Valuation and amortisation of securities' in accounting conventions). Annual impairment tests are conducted on the basis of the information available and recoverable amounts estimated as at the reporting date.

The total Eurosystem NCBs' holding of SMP securities amounts to EUR 165,845.5 million, of which the Bank of Finland holds EUR 2,808.1 million on its balance sheet. In accordance with Article 32.4 of the ESCB Statute, any risks from holdings of SMP securities, if they were to materialise, should eventually be shared in full by the Eurosystem NCBs, in proportion to the prevailing ECB capital key shares.

The Governing Council assesses on a regular basis the financial risks associated with the securities held under the SMP and the two covered bond purchase programmes.

As a result of an impairment test conducted as at 31 December 2013, the Governing Council decided that all future cash flows on these securities are expected to be received.

#### 7.2 Other securities

This item includes coupon bonds and discount papers issued in the euro area.

# Breakdown of other securities of euro area residents denominated in euro

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Coupon papers	6,177.3	6,756.6	-579.3
Discount papers	168.4	158.8	9.5
Total	6,345.7	6,915.5	-569.8

#### Remaining maturity of other securities of euro area residents denominated in euro

		31 Dec 2013		31 Dec 2012
Maturity	EUR m	%	EUR m	%
Up to 1 year	1,149.1	18.1	1,851.7	26.8
Over 1 year	5,196.6	81.9	5,063.7	73.2
Total	6,345.7	100.0	6,915.5	100.0

# 8. Intra-Eurosystem claims

## 8.1 Participating interest in ECB

Pursuant to Article 28 of the ESCB Statute, the NCBs are the sole subscribers to the capital of the ECB. Subscriptions depend on shares which are fixed in accordance with Article 29.3 of the ESCB Statute and which 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 1.2539% since 1 January 2009.

The ECB's capital key was changed on 1 July 2013 on account of Croatia joining the European Union. From 1 July 2013, the Bank of Finland's share in the ECB's paid-up capital is EUR 134.8 million.

# 8.2 Claims equivalent to the transfer of foreign reserves

Item 'Claims equivalent to the transfer of foreign reserves' includes the share of foreign reserve assets, EUR 721.8 million (EUR 722.3 million in 2012) transferred by the Bank of Finland to the ECB when Finland joined the Eurosystem. These claims are denominated in euro at a value fixed at the time of their transfer. The claims are remunerated at the latest available marginal rate for the Eurosystem's main refinancing operations, adjusted to reflect a zero return on the gold component. As Croatia joined the EU on 1 July 2013 the key for subscription to the ECB's capital was adjusted, leading to a reduction of EUR 0.5 million in the share of foreign reserve assets transferred by the Bank of Finland to the ECB.

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

Net claim related to the allocation of euro banknotes within the Eurosystem consists of a so-called CSM item (Capital Share Mechanism) relating to the subscription of 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 figure for ECB issue 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'.6

The balance sheet item totalled EUR 3,521.9 million in 2013 (EUR 3,248.1 million in 2012). The increase in comparison to 2012 was due to the increase in banknotes put into circulation by the Bank of Finland (3.7%), as well as the increase in banknotes in circulation in the Eurosystem as a whole (4.7%). The remuneration of these claims is calculated at the latest available marginal rate for the Eurosystem's main refinancing operations.

<sup>&</sup>lt;sup>6</sup> 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'.

# Subscribed and paid-up capital of NCBs:

	Subscribed capital from 1 July 2013	Paid-up capital from 1 July 2013	Subscribed capital as at 31 Dec 2012	Paid-up capital as at 31 Dec 2012
Nationale Bank van België/Banque Nationale de Belgique	261,705,371	261,705,371	261,010,385	261,010,385
Deutsche Bundesbank	2,030,803,801	2,030,803,801	2,037,777,027	2,037,777,027
Eesti Pank	19,268,513	19,268,513	19,261,568	19,261,568
Banc Ceannais na hÉireann/Central Bank of Ireland	120,276,654	120,276,654	119,518,566	119,518,566
Bank of Greece	210,903,613	210,903,613	211,436,059	211,436,059
Banco de España	893,420,308	893,420,308	893,564,576	893,564,576
Banque de France	1,530,028,149	1,530,028,149	1,530,293,899	1,530,293,899
Banca d'Italia	1,348,471,131	1,348,471,131	1,344,715,688	1,344,715,688
Central Bank of Cyprus	14,429,734	14,429,734	14,731,333	14,731,333
Banque centrale du Luxembourg	18,824,687	18,824,687	18,798,860	18,798,860
Bank Ċentrali ta' Malta/ Central Bank of Malta	6,873,879	6,873,879	6,800,732	6,800,732
De Nederlandsche Bank	429,352,255	429,352,255	429,156,339	429,156,339
Oesterreichische Nationalbank	209,680,387	209,680,387	208,939,588	208,939,588
Banco de Portugal	190,909,825	190,909,825	188,354,460	188,354,460
Banka Slovenije	35,397,773	35,397,773	35,381,025	35,381,025
Národná banka Slovenska	74,486,874	74,486,874	74,614,364	74,614,364
Suomen Pankki – Finlands Bank	134,836,288	134,836,288	134,927,820	134,927,820
Subtotal for euro area NCBs*	7,529,669,242	7,529,669,242	7,529,282,289	7,529,282,289
Българска народна банкаа (Bulgarian National Bank)	93,571,361	3,508,926	93,467,027	3,505,014
Česká národní banka	157,384,778	5,901,929	155,728,162	5,839,806
Danmarks Nationalbank	159,712,154	5,989,206	159,634,278	5,986,285
Hrvatska narodna banka	64,354,667	2,413,300	_	_
Latvijas Banka	29,682,169	1,113,081	30,527,971	1,144,799
Lietuvos bankas	44,306,754	1,661,503	45,797,337	1,717,400
Magyar Nemzeti Bank	148,735,597	5,577,585	149,099,600	5,591,235
Narodowy Bank Polski	525,889,668	19,720,863	526,776,978	19,754,137
Banca Națională a României	264,660,598	9,924,772	265,196,278	9,944,860
Sveriges riksbank	244,775,060	9,179,065	242,997,053	9,112,389
Bank of England	1,562,265,020	58,584,938	1,562,145,431	58,580,454
Subtotal for non-euro area NCBs*	3,295,337,827	123,575,169	3,231,370,113	121,176,379
Total*	10,825,007,070	7,653,244,411	10,760,652,403	7,650,458,669

 $<sup>^*</sup>$ Due to rounding, subtotals and totals may not correspond to the sum of all figures.

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

All components of the intra-Eurosystem positions 'Other claims/liabilities within the Eurosystem (net)' should be shown net in the annual accounts. This means that the balances resulting from 1) Net claims/liabilities arising from balances of TARGET2 accounts and correspondent accounts of NCBs, 2) Claim/liability due to the difference between monetary income to be pooled and redistributed and 3) Other intra-Eurosystem claims/liabilities that may arise, including the interim distribution of ECB income to NCBs should be shown net for disclosure purposes.

Other claims/liabilities within the Eurosystem (net)

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Due to/ from ECB in respect of TARGET2 (including balances held with Eurosystem banks through correspondent accounts)	22,240.2	70,603.4	-48,363.2
Net result of pooling of monetary income	-110.5	-343.3	232.8
Due from ECB in respect of the ECB's interim profit distribution	24.5	10.3	14.2
Other claims/(liabilities) within the Eurosystem (net)	-	-	-
Total	22,154.2	70,270.4	-48,116.2

The balance of EUR 22,154.2 million as at 31 December 2013 consisted 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; 3) the Bank of Finland's position vis-à-vis the ECB in respect of any amounts receivable or refundable, basically in respect of the seigniorage income relating to euro banknotes issued by the ECB and of the securities acquired by the ECB under the securities markets programme.

The year-end net transfers via TARGET2 had a credit balance of EUR 22,240.2 million. The remuneration of this position is calculated daily at the marginal interest rate of Eurosystem main refinancing operations.

The position vis-à-vis the ECB in respect of the annual pooling and allocation of monetary income within the Eurosystem national central banks had a debit balance of EUR 110.5 million at year-end (see 'Net result of pooling of monetary income' in the notes on the profit and loss account).

With respect to 2013, the Governing Council decided to distribute EUR 1,370 million from the ECB's income derived from banknotes in circulation and the ECB's income earned on securities purchased under the securities markets programme (see 'Interim profit distribution' under accounting conventions). The Bank's share amounted to EUR 24.5 million.

#### 9. Other assets

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

# Tangible fixed assets

Book value	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Land	8.5	8.5	0.0
Buildings	121.2	129.2	-8.0
Machinery and equipment	8.2	7.8	0.5
Art and numismatic collection	0.4	0.4	_
Total	138.3	145.9	-7.5

# Intangible fixed assets

Book value	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
IT systems	10.8	8.7	2.2
Total	10.8	8.7	2.2

# Other holdings and sundry assets

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Coins of euro area	23.5	27.1	-3.6
Shares and other equity	24.9	24.9	_
Pension fund's investments	616.2	582.2	34.0
Accruals	231.6	315.9	-84.3
Other sundry assets	6.8	10.5	-3.7
Total	903.0	960.7	-57.7

#### 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.

In 2013 the total value of euro banknotes in circulation increased by 4.7%. According to the allocation key, the Bank of Finland had euro banknotes in circulation worth EUR 15,753.1 million at the end of the year, compared with EUR 15,044.1 at the end of 2012. The value of the euro banknotes actually issued by the Bank of Finland in 2013 increased by 3.7% from EUR 11,796.0 million to EUR 12,231.3 million. As this was less than the allocated amount, the difference of EUR 3,521.9 million (3,248.1 million in 2012) is shown under asset sub-item 'Net claim related to the allocation of euro banknotes within the Eurosystem'.

Banknotes in circulation	31 Dec 2013 EUR m	31 Dec 2012 EUR m
EUR 5	101.4	104.4
EUR 10	-5.8	15.3
EUR 20	2,556.0	2,468.2
EUR 50	6,904.1	6,246.4
EUR 100	-477.9	-321.5
EUR 200	398.1	387.5
EUR 500	2,755.4	2,895.7
Total	12,231.3	11,796.0
ECB issue	-1,369.8	-1,308.3
CSM figure	4,891.7	4,556.4
Banknotes in circulation in accordance with the ECB's capital key	15,753.1	15,044.1

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

This item consists of interest bearing liabilities to credit institutions and includes credit institutions' minimum reserve account balances, the deposit facility and fixed-term deposits. The item results for the Bank of Finland from the performance of monetary policy functions as part of the Eurosystem. The minimum reserve system aims at stabilising money market interest rates and increasing the structural liquidity needs of the banking system. The average of credit institutions' daily minimum reserve account balances must be at least as high as the reserve requirement during a maintenance period.

# 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 prevailing marginal interest rate for the Eurosystem's main refinancing operations.

## 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.

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

	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Current accounts (covering the minimum reserve system)	14,302.7	31,697.6	-17,394.9
Deposit facility	_	37,101.0	-37,101.0
Fixed-term deposits	9,500.0	5,000.0	4,500.0
Fine-tuning reverse operations	_	-	-
Deposits related to margin calls	_	-	-
Total	23,802.7	73,798.6	-49,955.9

#### 3. Liabilities to other euro area residents denominated in euro

This item consists of euro-denominated liabilities to the public sector and credit institutions other than those subject to the reserve requirement.

# 4. 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 repurchase agreements with non-euro area counterparties.

# 5. Liabilities to euro area residents denominated in foreign currency

This item consists of assets denominated in foreign currency deposited by the State Treasury for its own payments.

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

This item includes foreign currency-denominated repurchase agreements entered into for the purpose of managing foreign reserves.

# 7. Counterpart of special drawing rights allocated by the IMF

This item is the counteritem of SDRs (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 2013 than their counteritem on the liabilities side of the balance sheet. On the liabilities side, the counteritem was SDR 1,189.5 million. In the balance sheet, the item is presented in euro, valued at the rate prevailing on the last day of the year (EUR 1,330.3 million).

# 8. Intra-Eurosystem liabilities

This item includes the net balances of other central banking accounts and the ECB account relating to TARGET2, if the Bank of Finland has a net liability against the Eurosystem in the

period under review. 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 2013, the Bank of Finland had intra-Eurosystem liabilities relating to the redistribution of monetary income in an amount of EUR 110.5 million.

#### 9. Other liabilities

Other liabilities	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Accruals	14.5	16.3	-1.8
Accounts payable	0.5	1.0	-0.4
Other	5.8	6.2	-0.4
Total	20.8	23.5	-2.8

#### 10. Revaluation accounts

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

Revaluation accounts	31 Dec 2013 EUR m	31 Dec 2012 EUR m	Change EUR m
Gold	984.5	1,599.3	-614.8
Foreign currencies:			
USD	130.6	273.3	-142.8
GBP	87.4	105.3	-17.9
JPY	39.7	153.9	-114.1
SDR	_	0.0	0.0
Other currencies	0.2	0.3	-0.1
Securities	115.7	271.1	-155.4
Other revaluations	197.8	205.4	-7.6
Total	1,556.1	2,608.6	-1,052.5

## 11. 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 2013 these provisions totalled EUR 3,938.8 million. Provisions consist of a general provision, provision against real value loss, pension liability provision as well as foreign exchange rate and price difference provision.

The pension liability provision is made to cover Bank of Finland's pension liabilities. The Bank of Finland's pension liabilities total EUR 581.5 million: 105.94% of this amount is covered by the pension provision, ie EUR 616.1 million. The change in pension provision consists of the pension fund's profit for 2013, EUR 34.3 million, and a reduction of EUR –0.4 million in the revaluation account in 2013.

In accordance with the decision of the Governing Council taken under Article 32.4 of the Statute, the provision against counterparty risks that was established in 2008 is allocated between the NCBs of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in the year when the defaults have occurred. This provision has been reviewed annually and amounted to EUR 310 million in 31 December 2012. In line

with the general accounting principle of prudence, the Governing Council has reviewed the appropriateness of the outstanding provision and decided to dissolve it at the end of 2013.

The respective adjustments are released into the NCBs' profit and loss accounts and reflected in the heading 'Net result of pooling of monetary income'. In the case of the Bank of Finland, the resulting income amounted to EUR 5.5 million in 2013 (see 'Provision in respect of counterparty risk in monetary policy operations' in the notes on the profit and loss account).

Provisions (EUR m)	Provisions as at 1 Jan 2012	Changes in provisions 2012	Total provisions 31 Dec 2012	Changes in provisions 2013	Total provisions 31 Dec 2013
Foreign exchange rate and price difference provision	41.5	232	647	31	678
General provision	1,195	300	1,495	50	1,545
Provision against real value loss	861	117	978	122	1,100
Pension provision	544	38	582	34	616
Provision in respect of counterparty risk in monetary policy operations	17	-11	6	-6	_
Total	3,032	676	3,708	231	3,939

### 12. 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 2013	31 Dec 2012
Primary capital	840.9	840.9
Reserve fund	1,601.5	1,491.0
Total	2,442.4	2,331.9

# 13. Profit for the financial year

The profit for the financial year 2013 totalled EUR 238.8 million.

Profit for the financial year (EUR m)	2013	2012
Transferred for the needs of the State	180.0	227.0
Bank of Finland's share of profit (transferred to reserve fund)	58.8	110.5
Total	238.8	337.5

# Notes on the profit and loss account

#### 1. Interest income

Interest income from and outside the euro area totalled EUR 565.3 million. Of this, EUR 43.9 million consisted of foreign currency-denominated interest income and EUR 521.4 million of euro-denominated interest income.

Interest income on ESCB items totalled EUR 198.5 million. Of this, EUR 3.4 million consisted of claims on transfers of foreign reserves to the ECB. Interest income due to the claims and liabilities pertaining to the ECB's share of euro banknotes, the application of the ECB capital key and the adjustments, EUR 18.0 million, is entered on a net basis. Interest income on TARGET2 balances totalled EUR 177.3 million.

		2013			2012	
Interest income received outside the euro area (EUR m)	Euro- denomi- nated	Foreign currency- denomi- nated	Total	Euro- denomi- nated	Foreign currency- denomi- nated	Total
Gold investments	-	0.4	0.4	-	0.8	0.8
Non-euro area coupon bonds	18.7	34.7	53.5	24.0	45.5	69.5
Non-euro area discount papers	0.0	0.2	0.2	0.1	0.1	0.2
Non-euro area deposits	-0.4	1.1	0.7	0.9	1.0	2.0
Other	-	1.2	1.2	-	1.7	1.7
Total	18.4	37.6	56.0	25.1	49.1	74.2

		2013			2012	
Interest income received from the euro area (EUR m)	Euro- denomi- nated	Foreign currency- denomi- nated	Total	Euro- denomi- nated	Foreign currency- denomi- nated	Total
Euro area coupon bonds	86.9	6.2	93.1	204.5	14.4	218.9
Euro area discount papers	1.2	0.0	1.2	3.0	_	3.0
Euro area deposits	0.0	0.0	0.0	0.0	0.0	0.0
ESCB items	198.5	_	198.5	561.4	-	561.4
Monetary policy items	216.4	_	216.4	252.7	_	252.7
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	503.0	6.3	509.2	1,021.7	14.4	1 036.1

		2013			2012	
Total interest income (EUR m)	Euro- denomi- nated	Foreign currency- denomi- nated	Total	Euro- denomi- nated	Foreign currency- denomi- nated	Total
Interest income received outside the euro area	18.4	37.6	56.0	25.1	49.1	74.2
Interest income received from the euro area	503.0	6.3	509.2	1,021.7	14.4	1,036.1
Total	521.4	43.9	565.3	1,046.8	63.6	1,110.3

# 2. Interest expense

Interest expense paid outside the euro area (EUR m)	Euro- denomi- nated	2013 Foreign currency- denomi- nated	Total	Euro- denomi- nated	2012 Foreign currency- denomi- nated	Total
Non-euro area deposits	0.3	-0.6	-0.3	-0.4	-0.4	-0.8
Other	_	-1.1	-1.1	_	-1.7	-1.7
Total	0.3	-1.7	-1.4	-0.4	-2.1	-2.5
Interest expense paid in the euro area (EUR m)	Euro- denomi- nated	2013 Foreign currency- denomi- nated	Total	Euro- denomi- nated	2012 Foreign currency- denomi- nated	Total
ESCB items	-	-	-	-	_	-
Monetary policy items	-21.7	_	-21.7	-107.6	_	-107.6
Other	-0.1	-0.2	-0.3	-1.5	-1.0	-2.5
Total	-21.8	-0.2	-22.0	-109.1	-1.0	-110.1
Total interest expense (EUR m)	Euro- denomi- nated	2013 Foreign currency- denomi- nated	Total	Euro- denomi- nated	2012 Foreign currency- denomi- nated	Total
Interest expense paid outside the euro area	0.3	-1.7	-1.4	-0.4	-2.1	-2.5
Interest expense paid in the euro area	-21.8	-0.2	-22.0	-109.1	-1.0	-110.1
Total	-21.5	-1.9	-23.4	-109.5	-3.1	-112.6

Interest expense paid in and outside the euro area totalled EUR 23.4 million. Of this, EUR 13.5 million was paid on minimum reserve deposits and EUR 8.2 million on overnight deposits. No interest was paid on fixed-term deposits.

# 3. Net interest income

Net interest income	31 Dec 2013 EUR m	31 Dec 2012 EUR m
Interest income		
Financial assets	150.4	296.2
Monetary policy items	216.4	252.7
ESCB claims	198.5	561.4
Total	565.3	1,110.3
Interest expense		
Financial assets	-1.7	-4.9
Monetary policy items	-21.7	-107.6
ESCB liabilities	-	_
Total	-23.4	-112.5
NET INTEREST INCOME	541.9	997.8

## 4. Foreign exchange rate differences

This item includes realised exchange rate gains and losses as well as valuation losses arising from the sale of currency positions. In 2013 losses related to foreign exchange rate movements amounted to EUR 6.4 million.

# 5. Securities price differences

This item includes realised gains and losses as well as valuation losses arising from the sale of securities. In the accounts, securities are treated on a security-by-security basis. In 2013 the realised gains related to securities price movements totalled EUR 37.2 million.

## 6. Change in foreign exchange rate and price difference provisions

Realised net gains arising from foreign exchange rate and price differences, EUR 30.8 million, were used to increase provisions in accordance with the financial reporting policy. All provisions have been specified in the notes on the balance sheet under liabilities.

# 7. Income and expenses on fees and commissions

The item includes fees and commissions related to investment activities.

## 8. Net result of pooling of monetary income

Monetary income	31 Dec 2013 EUR m	31 Dec 2012 EUR m
Net monetary income pooled by the Bank of Finland	409.6	764.3
Net monetary income allocated to the Bank of Finland	298.8	419.4
Net monetary income according to the capital allocation key	-110.9	-344.9
Corrections to monetary income reallocation of previous years	0.3	1.6

The amount of each Eurosystem NCB's monetary income is determined by measuring the actual 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. 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; a limited amount of each NCB's gold holdings in proportion to each NCB's capital key share.

Gold is considered to generate no income. Securities held for monetary policy purposes under Decision ECB/2009/16 of 2 July 2009 on the implementation of the covered bond purchase programme and under Decision ECB/2011/17 of 3 November 2011 on the implementation of the

second covered bond purchase programme are considered to generate income at the latest available marginal rate for the Eurosystem's main refinancing operations. 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's capital key. The difference between the monetary income pooled by the Bank of Finland amounting to EUR 410 million and reallocated to the Bank of Finland amounting to EUR 299 million is the net result arising from the calculation of monetary income.

## 9. Share in ECB profit

The ECB distributed EUR 423 million profit for the financial year 2012, of which the Bank of Finland's share recorded for the financial year 2013 totalled EUR 7.6 million.

## 10. Provision in respect of counterparty risk in monetary policy operations

In accordance with the decision of the Governing Council taken under Article 32.4 of the Statute, the provision against counterparty risks that was established in 2008 is allocated between the NCBs of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in the year when the defaults have occurred. This provision has been reviewed annually and amounted to EUR 310 million in 31 December 2012. In line with the general accounting principle of prudence, the Governing Council has reviewed the appropriateness of the outstanding provision and decided to dissolve it at the end of 2013.

The respective adjustments are released into the NCB's profit and loss accounts and reflected in the heading 'Net result of pooling of monetary income'. In the case of the Bank of Finland, the resulting income amounted to EUR 5.5 million in 2013.

## 11. Other central banking income

This item includes the Bank of Finland's share in income on euro banknotes distributed by the ECB in the form of an interim distribution of profit and income on SMP portfolio, EUR 24.5 million. The item also includes dividend income, EUR 3.9 million, consisting primarily of shares in the Bank for International Settlements.

### 12. Other income

This item consists of the Financial Supervisory Authority's supervision and processing fees, EUR 23.7 million, income from real estate, EUR 7.3 million, as well as commissions and fees.

## 13. Staff costs

Staff costs	31 Dec 2013 EUR m	31 Dec 2012 EUR m
Salaries and fees	40.8	41.5
Employer's payments to the pension fund	7.9	7.6
Other staff-related costs	2.9	2.6
Total	51.7	51.7

Average staff size	2013 Number of staff	2012 Number of staff
Bank of Finland	398	418
Financial Supervisory Authority	208	208
Total	606	626

Basic salaries paid to the members of the Board	2013 EUR
Erkki Liikanen	259 896
Pentti Hakkarainen	234 564
Seppo Honkapohja	191 220
Total	685 680

Fringe benefits (meal benefit, company-paid telephone and company car) paid to the members of the Board totalled EUR 36,303.

As of 2005, 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 provisions on the qualifying period, accept employment from elsewhere or if the pension from the Bank of Finland is less than the compensation for income loss. Full compensation for income loss amounts to 60% of salary and is paid for one year, adjusted with the pension paid by the Bank, so that the sum of full compensation and pension do not exceed 60% of salary.

## 14. Pension fund contribution

No contribution was paid to the Bank's pension fund in financial year 2013.

## 15. Administrative expenses

Administrative expenses	2013 EUR m	2012 EUR m
Supplies and purchases	0.6	0.7
Machinery and equipment	3.5	3.1
Real estate	10.5	11.0
Staff-related expenses	3.7	3.8
Purchase of services	9.2	8.9
Other	1.9	2.0
Total	29.4	29.5

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

## 16. Depreciation of fixed assets

Depreciation of tangible fixed assets	31 Dec 2013 EUR m	31 Dec 2012 EUR m
Land	-	_
Buildings	2.4	2.3
Machinery and equipment	2.6	2.3
Art and numismatic collection	-	_
Total	5.0	4.6

Depreciation of intangible fixed assets	31 Dec 2013 EUR m	31 Dec 2012 EUR m
IT systems	2.7	3.1
Total	2.7	3.1

Depreciations do not include depreciations arising from the revaluation of land and buildings.

### 17. Banknote procurement costs

Purchases of banknotes amounted to EUR 5.0 million.

## 18. Other expenses

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

## 19. Income of the pension fund

This item includes income of the Bank of Finland pension fund's investment activities, EUR 51.4 million. The item also includes the Bank of Finland's and Financial Supervisory Authority's employer contributions as well as employee's share of premium income, EUR 10.4 million.

## 20. Expenses of the pension fund

This item includes expenses of the Bank of Finland pension fund's investment activities, EUR 0.2 million, pensions paid, EUR 25.7 million, management costs and depreciations of fixed assets managed by the pension fund.

## 21. Changes in provisions

This item includes the increase of the pension liability provision, EUR 34 million, the increase of the provision against real value loss, EUR 122 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.

### 22. Profit for the financial year

Profit for the financial year 2013 totalled EUR 238.8 million. The Board proposes to the Parliamentary Supervisory Council that EUR 180.0 million of the profit be made available for the needs of the State.

## Off-balance sheet commitments

This item contains the Bank of Finland's derivative contracts. The bulk of derivative contracts have been made for hedging against exchange rate risk.

Derivative contracts	31 Dec 2013 EUR m	31 Dec 2012 EUR m
Nominal value of FX futures contracts		
Purchase agreements	-	_
Sales agreements	-	_
Market value of FX-swap contracts	3.7	7.7
Market value of GIRS contracts	0.0	0.1
Market value of IRS contracts	-	_
Market value of FX forward contracts	-	_
Total	3.7	7.8

## Appendices to the financial statements

EUR million	31 Dec 2013	31 Dec 2012
Shares and other interests, nominal value		
Bank for International Settlements (BIS) <sup>1</sup>	22.4 (1.96%)	22.4 (1.96%)
Shares in housing companies	2.5	2.5
Other shares and interests	0.0	0.0
Total	24.9	24.9
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 <sup>2</sup>	581.5	577.7
- of which covered by reserves	616.1	582.2
Customer service office		
Deposits	25.4	25.1
Loans	3.7	3.7

## The Bank of Finland's real estate

Building	Address	Year of completion	Volume $m^3$ (approx.)
Helsinki	Rauhankatu 16	1883/1961/2006	52,100
	Rauhankatu 19	1954/1981	40,500
	Snellmaninkatu 6 <sup>1</sup>	1857/1892/2001	24,600
	Snellmaninkatu 2 <sup>1</sup>	1901/2003	3,400
	Ramsinniementie 34	1920/1983/1998	4,800
Oulu	Kajaaninkatu 8	1973	17,200
Vantaa	Turvalaaksontie 1	1979	324,500
Inari	Saariseläntie 9	1968/1976/1998	6,100

 $<sup>^{\</sup>rm 1}$  Transferred to the ownership of the Bank of Finland's pension fund from the beginning of 2002.

 <sup>&</sup>lt;sup>1</sup> In parentheses, the Bank of Finland's relative holdings of the BIS shares in circulation.
 <sup>2</sup> Pension liability for 2013 includes indexation of pensions and paid-up policies entering into force on 1 January 2014.

**Five-year review**The following table presents the Bank of Finland's balance sheets and profit and loss accounts for the past five financial years.

BALANCE SHEET (EUR m)	2013	2012	2011	2010	2009
Assets					
Gold and gold receivables	1,373	1,988	1,918	1,664	1,208
Claims on non-euro area residents denominated in foreign currency	6,585	6,171	5,886	5,223	6,225
Receivables from the International Monetary Fund	1,955	2,097	1,967	1,815	1,609
Balances with banks and security investments, external loans and other external assets	4,630	4,074	3,919	3,408	4,617
Claims on euro area residents denominated in foreign currency	297	404	628	712	1,120
Claims on non-euro area residents denominated in euro	1,347	1,970	1,946	1,662	845
Lending to euro area credit institutions related to monetary policy operations denominated in euro	2,475	3,681	2,311	50	2,710
Main refinancing operations	_	_	10	0	20
Longer-term refinancing operations	2,475	3,681	2,301	50	2,690
Other claims on euro area credit institutions denominated in euro	0	0	40	1	126
Securities of euro area residents denominated in euro	10,063	11,471	13,889	11,668	8,002
Securities held for monetary policy purposes	3,717	4,555	4,637	2,203	531
Other securities	6,346	6,915	9,253	9,466	7,471
Intra-Eurosystem claims	26,539	74,382	70,271	23,888	14,280
Participating interest in ECB	141	141	120	99	78
Claims equivalent to the transfer of foreign reserves	722	722	722	722	722
Net claims related to the allocation of euro banknotes within the Eurosystem	3,522	3,248	3,485	3,414	3,910
Other claims within the Eurosystem (net)	22,154	70,270	65,944	19,653	9,570
Other assets	1,052	1,115	1,171	1,090	1,130
Coins of euro area	23	27	25	22	19
Tangible and intangible fixed assets	149	155	165	171	189
Other current assets	641	607	569	551	528
Other	238	326	413	346	393
Total assets	49,731	101,182	98,061	45,957	35,646

BALANCE SHEET (EUR m)	2013	2012	2011	2010	2009
Liabilities					
Banknotes in circulation	15,753	15,044	14,649	13,880	13,330
Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	23,803	73,799	71,697	21,696	13,543
Current accounts (covering the minimum reserve system)	14,303	31,698	1,657	9,383	8,085
Deposit facility	-	37,101	52,540	9,113	5,458
Fixed-term deposits (liquidity-absorbing fine-tuning operations)	9,500	5,000	17,500	3,200	-
Liabilities to other euro area residents denominated in euro	55	801	836	262	14
Liabilities to non-euro area residents denominated in euro	527	1,004	782	1,021	234
Liabilities to euro area residents denominated in foreign currency	0	0	0	0	248
Liabilities to non-euro area residents denominated in foreign currency	66	139	153	23	363
Counterpart of special drawing rights allocated by the IMF	1,330	1,387	1,412	1,377	1,295
Intra-Eurosystem liabilities	-	_	-	-	-
Other liabilities	21	24	178	151	155
Revaluation accounts	1,556	2,609	2,806	2,274	1,703
Provisions	3,939	3,708	3,032	2,814	2,325
Capital and reserves	2,442	2,332	2,262	2,175	2,015
Primary capital	841	841	841	841	841
Reserve fund	1,601	1,491	1,421	1,334	1,174
Profit for the financial year	239	337	254	283	420
Total liabilities	49,731	101,182	98,061	45,957	35,646

PROFIT AND LOSS ACCOUNT (EUR m)	2013	2012	2011	2010	2009
Interest income	565	1 110	763	597	590
Interest expense	-23	-113	-170	-71	-71
Net interest income	542	998	592	526	519
Foreign exchange rate differences	-6	14	5	221	15
Securities price differences	37	218	4	69	101
Change in foreign exchange rate and price difference provision	-31	-232	<b>-</b> 9	-290	-116
Net result of financial operations, write-downs and risk provisions	542	998	592	526	519
Net result of pooling of monetary income	-111	-343	-75	-33	21
Share in ECB profit	8	1	3	26	2
Provisions in respect of counterparty risk in monetary policy operations	6	11	22	32	31
Other central banking income	27	133	15	9	19
Central banking profit	472	800	557	560	590
Other income	33	47	35	34	43
Operating expenses	-94	-92	-125	-102	-112
Staff costs	-52	-52	-51	-51	-53
Pension fund contribution	-	-	-32	-10	-10
Administrative expenses	-29	-29	-29	-28	-31
Depreciation of fixed assets	-8	-8	-8	-7	-7
Banknote procurement costs	-5	-3	-4	-6	-10
Other expenses	-0	-2	-1	0	-1
Operating profit	411	754	467	491	521
Profit for the pension fund	34	47	19	24	48
Changes in provisions	-206	-464	-232	-232	-149
Profit for the financial year	239	337	254	283	420

Totals/sub-totals may not add up because of rounding.

## 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 risk control unit operating under the Administrative department and the Banking Operations department. Risk control of investment activities is the responsibility of the Administration department's risk control unit.

In addition to risk control of investment activities, the risk control unit is responsible for the monitoring of risk positions, pricing of instruments, reporting on risks and returns as well as monitoring and reporting of the Bank's balance sheet risks. The risk control unit also maintains an overall risk management framework and investment benchmark indices and develops risk management methods.

Risks to investment activities are reported daily to persons involved in operational investment activities and monthly to the Bank of Finland Board. Reports on developments in investment returns are produced at monthly intervals. Returns are considered quarterly in the markets committee which is chaired by the Board member responsible for investment activities. The Board considers the risks and returns more extensively twice a year. Cases of non-compliance with the limits imposed are reported immediately. An extensive report on total financial risk is submitted to the Board at quarterly intervals.

The Bank of Finland also has a risk committee whose mandate is to conduct independent assessments and control of investment risks and the related risk management. The risk committee does not make decisions on investment activities and risk management, but may submit matters to the Board for information or decision, as necessary. The risk committee is chaired by the Board member responsible for risk control. The risk committee convenes in two compositions. One discusses financial risks and the other operational risks.

## Decision-making framework for investment of financial assets and risk management

Decisions on investment of financial assets and the related risk management are taken by the Bank of Finland Board, the markets committee and, in the case of operational matters, also by the investment group and the risk group.

The Board is responsible for decisions on the investment activities objectives, investment policy and risk management principles. Such decisions relate, among other things, to the size of own financial assets and foreign reserves, currency distribution of foreign reserves, the size and composition of the liquidity portfolio, strategic allocation of the investment portfolio by investment category, 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 criteria for counterparties and issuers and more specific credit risk limits. The chairperson of, and decision-maker in, the markets 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 higher decision-making bodies. In addition, the investment group acts as an internal decision-maker within the Banking Operations department and as a coordinator of matters common to the investment and risk control functions. The Head of Banking Operations chairs the investment group and makes decisions within the group. The Head of risk control unit of the Administration department chairs the risk group and makes decisions within the group.

## The Bank of Finland's estimated total risk including gold

The Bank of Finland's total risks are discussed in section 'Total risk exposure' (p. 77–80). The figures presented in that section exclude gold owing to its large revaluation account. When all risks – including gold – are added together, the Bank of Finland's total risk exposure is estimated at about EUR 2.5 billion in annual terms.

## Risk measures and breakdowns

Table 1.

Breakdown of debt securities and deposits in Bank of Finland's financial assets and covered bond purchase programmes, by credit rating<sup>1</sup>

Credit rating	31 Dec 2013, %	31 Dec 2012, %
AAA	43.4	53.2
AA+	29.4	28.6
AA	13.8	1.8
AA-	5.3	6.9
A+	1.9	0.7
A	1.5	1.4
<i>A</i> –	1.6	1.1
BBB+	0.3	2.6
BBB	1.1	0.5
BBB-	0.8	2.0
Below BBB-	0.2	0.5
No credit rating	0.6	0.7

 $<sup>^{\</sup>rm 1}$  Covered bonds have been classified according to their own credit rating and not the credit rating of their issuer. The Bank of Japan and the Federal Reserve are dealt with according to the credit rating of the respective state.

Table 2. Breakdown of debt securities in Bank of Finland's financial assets and covered bond purchase programmes, by issuer's home country (according to debt security's market value)

Country or region	31 Dec 2013, %	31 Dec 2012, %	
Euro area	55.2	58.9	
Germany	22.2	22.7	
France	13.8	14.1	
Netherlands	7.9	8.6	
Finland	6.8	6.1	
Austria	1.5	1.7	
Spain	0.9	2.3	
Italy	0.6	2.0	
Belgium <sup>1</sup>	0.7	-	
Ireland	0.3	0.8	
Portugal	0.4	0.6	
Greece <sup>1</sup>	-	0.1	
Luxembourg <sup>1</sup>	0.0	0.0	
Europe excl. euro area	11.2	11.7	
United Kingdom	4.7	5.3	
Sweden	4.5	4.2	
Norway	1.3	1.1	
Denmark	0.7	0.9	
Switzerland <sup>1</sup>	0.0	0.2	
America	21.2	16.6	
United States	20.4	15.9	
Canada	0.8	0.7	
Asia and Pacific Ocean region	4.1	4.4	
Japan	3.5	4.0	
Australia	0.2	0.2	
Singapore	0.2	0.2	
New Zealand <sup>1</sup>	0.1	0.0	
International institutions	8.4	8.4	

 $<sup>^{1}</sup>$  0.0 means less than 0.05, - means zero.

Table 3.

Sensitivity of the Bank of Finland's financial assets to exchange rate and interest rate changes

EUR m	2013	2012
Change in the value of Bank of Finland's financial assets after appreciation of the euro exchange rate by 15% relative to currencies of foreign reserves and gold	962	-886
as at 31 Dec	-863	-886
Change in the value of Bank of Finland's financial assets after an interest rate rise of 1%, with the amount, composition and modified duration for the financial assets		
as at 31 Dec	-235	-239

Source: Bank of Finland.

Table 4. VaR figures for the Bank of Finland's financial assets

## VaR figures for market risk (one-day horizon, 99% confidence level)

EUR m	Average	Highest	Lowest	31 Dec
Interest rate risk	11	19	6	9
Exchange rate risk	45	68	31	37
Total risk (excl. gold)	47	75	30	39
Total risk (incl. gold)	73	118	49	55

EUR m	Average	Highest	Lowest	31 Dec
Interest rate risk	15	28	6	7
Exchange rate risk	56	80	35	35
Total risk (excl. gold)	63	92	39	39
Total risk (incl. gold)	85	112	59	63

## VaR figures<sup>1</sup> for credit risk, 31 Dec 2013 (one-year horizon, confidence levels of 95%, 99% and 99.9%)

Confidence level, %	95	99	99,9
Credit risk (EUR m)	4	17	69

 $<sup>^1</sup>$  The figures exclude debt securities issued by states in domestic currency. Due to a change in the calculation method in 2013, no comparative data is shown for the previous year.

## Definitions and concepts

- Market risk means the risk that the net value of assets declines due to changes in market prices. Market price changes refer to changes in, for example, interest rates, exchange rates or the price of gold, which in turn are referred to as interest rate risk, exchange rate risk and gold price risk.
- Credit risk means the risk of economic losses arising from changes in the creditworthiness
  of a counterparty to a financial transaction or a securities issuer and from counterparty or
  issuer default.
- Liquidity risk means the risks that assets cannot be made available when the need arises or their conversion into cash causes additional costs.
- Operational risk refers to the risk of extra costs or losses resulting from inadequate or failed internal processes, personnel, systems or external events.
- Liquidity portfolio refers to the part of the Bank of Finland's assets that aims to ensure the Bank's ability to offer liquidity for unexpected policy needs under all circumstances. The liquidity portfolio is denominated in foreign currency.
- Investment portfolio refers to the part of the Bank of Finland's assets that aims to secure
  the value of financial assets and the Bank's ongoing ability to meet with its central bank
  commitments. The Bank of Finland's investment portfolio includes both foreign currencydenominated and euro-denominated assets.
- Foreign reserves consist of unhedged foreign-currency investments and claims. They
  include the liquidity portfolio, the foreign-currency investment portfolio and net
  receivables from the IMF.
- Cash refers to covered and uncovered short-term bank deposits.

## 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 2013 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, 14 March 2014

Esko Kiviranta

Lenita Toivakka

Kauko Tuupainen

Osmo Immonen Authorised Public Accountant Eero Prepula Authorised Public Accountant, JHTT (Public Administration Accountant)

./.Markku Koskela Authorised Public Accountant

## Statement regarding the audit as defined in Article 27 of the Statute of the European System of Central Banks and the European Central Bank

We have audited the accounting records and the financial statements of the Bank of Finland for the year ended 31 December 2013 as defined in Article 27.1 of the Statute of the European System of Central Banks and the European Central Bank. The financial statements have been prepared in accordance with the Accounting Principles and Methods approved by the Governing Council of the European Central Bank as well as with the Act on the Bank of Finland. The financial statements comprise the balance sheet, the income statement and notes to the financial statements.

## The responsibility of the Board

The Board is responsible for the preparation and fair presentation of the financial statements in accordance with the laws and regulations governing the preparation of the financial statements.

## Auditor's Responsibility

Our responsibility is to perform an audit in accordance with the International Standards on Auditing and ethical guidance prepared by IFAC (International Federation of Accountants), good auditing practice in Finland as well as the Auditing Act, when applicable, and to express an opinion on these financial statements based on our audit. Good auditing practice requires that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances.

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

## Opinion

In our opinion, the financial statements give a true and fair view of the financial performance and financial position of the Bank of Finland in accordance with the Accounting Principles and Methods approved by the Governing Council of the European Central Bank.

Helsinki, 27 February 2014 PricewaterhouseCoopers Oy Ab Authorised Public Accounting Firm

Juha Tuomala Authorised Public Accountant

## **Appendices**

## Monetary policy measures of the Eurosystem in 2013

January-December In accordance with the decisions of the Governing Council of the ECB, main refinancing operations and regular and non-standard longer-term refinancing operations continued to be conducted as fixed rate tender procedures with full allotment. The interest rate on refinancing operations with a maturity of one maintenance period was the same as the interest rate on the main refinancing operations. In all other longer-term refinancing operations, the rate applied was fixed at the average of the rates in the main refinancing operations, over the life of the respective operation.

January

Reporting requirements related to loan-level data for asset-backed securities used as collateral in the Eurosystem's refinancing operations were introduced gradually during 2013. The first reporting requirements entered into force on 3 January.

On 30 January, banks had the first opportunity to make repayments of the amounts allotted in the three-year longer-term refinancing operation conducted on 21 December 2011. Thereafter, repayment was possible on a weekly basis.

February

On 27 February, banks had the first opportunity to make repayments of the amounts allotted in the three-year longer-term refinancing operation conducted on 29 February 2012. Thereafter, repayment was possible on a weekly basis.

March

On 20 March, the Governing Council decided to prohibit, as of 1 March 2015, the use as collateral of uncovered government-guaranteed bank bonds that have been issued by the counterparty itself or an entity closely linked to that counterparty. Until that date, the level of use of such collateral is subject to the maximum value specified by the Governing Council on 3 July 2012. The Governing Council also decided on certain rules to be applied to the use of such collateral until 28 February 2015.

May

On 2 May, the Governing Council decided to lower the interest rate on the main refinancing operations to 0.50% and the interest rate on the marginal lending facility to 1.00% with effect from 8 May. The interest rate on the deposit facility remained unchanged at 0.00%.

Furthermore, the Governing Council decided to continue to conduct the main refinancing operations as fixed rate tender procedures with full allotment, at least until 8 July 2014. The procedure will also be applied to the refinancing operations with a maturity of one maintenance period and the three-month refinancing operations.

The decision to suspend the application of the Eurosystem's minimum credit quality threshold to marketable debt instruments issued or guaranteed by Member States under an EU-IMF programme and fulfilling all other eligibility criteria was extended to apply to Cyprus. Debt instruments issued or guaranteed by the Cypriot government became eligible collateral for monetary policy operations on 9 May, but were subject to specific haircuts.

June

On 28 June, the Governing Council decided to temporarily suspend the eligibility of debt instruments issued or guaranteed by the Republic of Cyprus for use as collateral in monetary policy operations. The decision was taken as a result of changes in the credit rating of the Republic of Cyprus due to measures taken by the Cypriot Ministry of Finance. The eligibility of the debt instruments was restored on 5 July, on conditions agreed in May 2013.

## July

On 4 July, the Governing Council began providing forward guidance. The Governing Council communicated that it expects the key ECB interest rates to remain at present or lower levels for an extended period of time.

On 18 July, the Governing Council announced that it had agreed on adjustments to the permanent and temporary collateral framework on the basis of the biennial review of the Eurosystem's risk control framework. The adjustments were made in October–November 2013.

## September

Modifications to the loan-level reporting requirements for asset-backed securities were announced on 9 September.

Extension of the liquidity swap arrangement with the Bank of England up to 30 September 2014 was announced on 16 September.

On 19 September, the Governing Council announced that loan-level reporting requirements will become mandatory for asset-backed securities backed by credit-card receivables, when these instruments are used as collateral in the Eurosystem's monetary policy operations.

### October

Following the July adjustments to the risk control framework for collateral, measures such as new valuation haircuts applicable to eligible collateral and the requirement of an A rating for asset-backed securities subject to loan-level reporting requirements entered into force on 1 October.

On 10 October, the ECB announced of the establishment of a bilateral currency swap arrangement with the People's Bank of China. The agreement will be valid for a specific period.

The ECB's existing temporary bilateral liquidity swap arrangements with the Bank of Canada, the Bank of Japan, the Federal Reserve, the Swiss National Bank and the Bank of England were converted to standing arrangements in cooperation with the said central banks on 31 October. The arrangements are to remain in place until further notice. At the same time, the Governing Council decided to continue, until further notice, conducting US dollar liquidity-providing operations with maturities of one week and three months.

## November

Following the July adjustments to the risk control framework for collateral, additional valuation haircuts applicable to covered bank bonds that have been issued by the counterparty using them as collateral or an entity closely linked to that counterparty, and used as collateral in a percentage greater than 75% of the outstanding notional amount by that counterparty or an entity closely linked to it, entered into force on 1 October.

On 7 November, the Governing Council decided to lower the interest rate on the main refinancing operations to 0.25% and the interest rate on the marginal lending facility to 0.75% with effect from 13 November. The interest rate on the deposit facility remained unchanged at 0.00%.

The Governing Council also decided to continue to conduct the main refinancing operations as fixed rate tender procedures with full allotment at least until 7 July 2015. The procedure will also be applied to the refinancing operations with a maturity of one maintenance period and the three-month refinancing operations.

On 22 November, repayments of the three-year longer term refinancing operations were suspended temporarily for the duration of the year-end period.

## Key measures affecting the financial markets in 2013

Measures by the European System of Central Banks

**January** On 23 January, the Governing Council of the ECB approved the Eurosystem reply to the

European Commission consultation document on the report by the High Level Expert Group on reforming the structure of the EU banking sector. The Expert Group led by

Erkki Liikanen had submitted its report on 2 October 2012.

On 25 January, the Governing Council of the ECB approved Recommendations for the

security of internet payments.

**February** On 4 February, the Governing Council of the ECB approved the new Securities Settlement

System (SSS) LuxCSD as eligible for use in Eurosystem credit operations.

March On 21 March, the Governing Council of the ECB decided to maintain the current level of Emergency Liquidity Assistance (ELA) until 25 March 2013. Thereafter, ELA could only

be considered if Cyprus complied with an EU/IMF programme to ensure the solvency of the banks in need of such assistance.

On 25 March, the Governing Council of the ECB acknowledged the agreement reached by the Eurogroup with the Cypriot authorities, which outlines the key elements of the EU/IMF adjustment programme for Cyprus. In accordance with the prevailing rules, the Governing Council decided not to object to the request for provision of Emergency Liquidity Assistance

by the Central Bank of Cyprus.

May On 17 May, upon request from the Council of the European Union and the European Parliament, the Governing Council of the ECB delivered an opinion on a proposal for a directive on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing and on a proposal for a regulation on information

accompanying transfers of funds.

On 23 May, upon request from the Council of the European Union, the Governing Council of the ECB delivered an opinion on a proposal for a Council regulation on denominations

and technical specifications of euro coins intended for circulation.

On 28 May, upon request from the Council of the European Union, the European Parliament and the European Commission, the Governing Council of the ECB delivered an opinion on a proposal for a directive on the protection of the euro and other currencies against counter-

feiting by criminal law and replacing Council Framework Decision 2000/383/JHA.

On 3 June, the Governing Council of the ECB adopted the Principles for financial market structures, introduced in April 2012 by the Committee on Payment and Settlement

Systems (CPSS) of the Bank for International Settlements and the Technical Committee of the International Organization of Securities Commissions (IOSCO), for the conduct of

Eurosystem oversight.

August On 15 August, the Governing Council of the ECB approved revised criteria for assessing

SEPA compliance of retail payment infrastructures.

June

## September

On 19 September, the Governing Council of the ECB approved a new framework for the assessment of securities settlement systems and links for purposes of determining their eligibility for use in Eurosystem credit operations. The new framework replaces the framework in place since 1998.

### October

On 4 October, the Governing Council of the ECB approved the assessment of a securities settlement system, and both new direct and relayed links as being eligible for use in Eurosystem credit operations.

On 10 October, upon request from the European Parliament and the Council of the European Union, the Governing Council of the ECB delivered an opinion on a proposal for a regulation of the European Parliament and of the Council on the provision and quality of statistics for the macroeconomic imbalances procedure.

On 16 October, the Governing Council of the ECB decided to make public the procedural rules relating to the ECB's role in the provision of Emergency Liquidity Assistance (ELA) by national central banks. The purpose is to enhance the general understanding of the Governing Council's role.

On 23 October, the ECB announced more details of the comprehensive balance sheet assessment to be conducted, prior to the ECB assuming full responsibility for banking supervision, as part of the Single Supervisory Mechanism (SSM). The 12-month assessment commenced in November 2013 and will be carried out in collaboration with the national competent authorities of the EU Member States that participate in the SSM.

On 30 October, the Governing Council of the ECB approved the assessment of the implementation of the pending recommendations, addressed in 2010, to four systemically important payment systems (TARGET2, EURO1, CORE and CSS). The assessment concluded that system operators had taken the necessary actions to implement all pending recommendations.

### November

On 6 November, upon request from the Council of the European Union, the Governing Council of the ECB delivered an opinion on a proposal for a regulation of the European Parliament and of the Council establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Bank Resolution Fund and amending Regulation (EU) No 1093/2010 of the European Parliament and of the Council.

On 19 November, upon request from the Council of the European Union, the Governing Council of the ECB delivered an opinion on a proposal for a directive of the European Parliament and of the Council on the comparability of fees related to payment accounts, payment accounts witching and access to payment accounts with basic features.

## December

On 18 December, the Governing Council of the ECB approved the creation of the Euro Retail Payments Board (ERPB). The ERPB replaces the earlier SEPA Council and fosters the development of an integrated, innovative and competitive market for retail payments made in euro in the European Union.

## EU regulatory projects and their implementation in Finland

## January

The European Parliament and Commission and the EU Council reached agreement on rules governing credit rating agencies.

February

The European Commission adopted two proposals aimed at reinforcing the EU's existing rules on anti-money laundering and fund transfers.

In Finland, the Government submitted a proposal for transposition into national legislation of amendments required under the Regulation of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories (EMIR).

The Ministry of Finance set up a working group to reform national legislation concerning the management and resolution of financial market crises and the deposit guarantee scheme, on the basis of pending EU legislative initiatives. The objective of the working group consisted of achieving legislation that safeguards financial stability and minimises the costs from crises to the government and taxpayers.

March

The European Parliament and Commission and the EU Council reached agreement on a Regulation concerning the Single Supervisory Mechanism.

May

The European Commission published its proposal for a new directive that would guarantee access to a basic bank account and basic banking services to all Europeans throughout the EU. Another aim is to facilitate switching between bank accounts of various service providers.

June

The European Commission published its proposal for a new investment fund framework designed for investors who want to put money into companies and projects for the long term. Private European Long-Term Investment Funds (ELTIFs), as proposed by the Commission, would only invest in businesses that need money to be committed to them for long periods of time.

July

The European Commission adopted a legislative package including a revised Payments Services Directive and a proposal for a regulation on interchange fees for card-based payment transactions.

The revised Credit Institutions Directive and the related EU Regulation came into force. The reforms provide national authorities, responsible for macroeconomic stability, with tools that enable them to improve the banking sector's loss absorbency and to curb the build-up of risks threatening the stability of the financial system as a whole.

The European Commission published a proposal for a regulation on the Single Resolution Mechanism. According to the proposal, banks participating in the banking union would be subject to a new uniform and centralised resolution procedure. A centralised body would make key resolution decisions and prepare a resolution scheme for a failing bank, specifying the necessary measures. A uniform centralised procedure will enable a markedly more effective winding-up of banks with cross-border operations than do national regimes.

September

The European Commission published a communication on shadow banking and presented its proposal for new rules on money market funds.

The European Parliament and Commission and the EU Council reached agreement on regulation concerning market abuse.

The European Commission published a proposal for new legislation aimed at restoring confidence towards indices used as benchmarks (such as reference rates, etc). The new rules improve the accuracy and reliability of indices, facilitate the detection and prevention of manipulation and clarify the responsibility of authorities regarding the provision of indices and their supervisory role, thereof.

In Finland, the Government submitted a bill to Parliament for legislation concerning alternative investment fund managers. The bill transposes the corresponding directive of the European Parliament and of the Council into national legislation. The Government bill provides for the dissemination of international Legal Entity Identifiers (LEIs) in Finland, among other things. This identification is used in reporting derivatives transactions to trade repositories under the EU's market participant regulation. In the future, the LEIs will also be applied to reporting to authorities. The Finnish Patent and Registration Office will be the authority allocating LEIs in Finland and the Financial Supervisory Authority will be the authority coordinating international cooperation related to the allocation of LEIs.

November

Council Regulation (EU) No 1024/2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions came into force.

December

The EU Council reached an understanding on the Single Resolution Mechanism in December 2013.

The European Parliament and Commission and the EU Council reached agreement on a directive establishing a framework for the recovery and resolution of credit institutions and investment firms. The directive will harmonise and revise Member States' resolution laws, while also enabling an orderly winding-up of even large banks for the first time in many Members States, without destabilising the financial markets.

The European Parliament and Commission and the EU Council reached agreement on the Deposit Guarantee Schemes Directive.

The European Parliament and Commission and the EU Council reached agreement on the CSD Regulation concerning the operation of central securities depositories.

## Other issues

February The European Systemic Risk Board published its recommendations on funding of credit

institutions and on money market funds.

March The Eurogroup reached an understanding on the main points of an adjustment programme

for the Cypriot economy.

April The European Systemic Risk Board published its recommendation on intermediate

objectives and instruments of macroprudential policy.

**July** Upon Croatia's accession to the European Union, its central bank became a member of the

European System of Central Banks (ESCB) and the governor of the central bank a member of the General Council of the European Central Bank (ECB), as from 1 July 2013 onwards.

November The European Systemic Risk Board published a follow-up report on compliance with its

recommendation on lending in foreign currencies, issued in 2011.

**December** At the ECOFIN Council continuation meeting of 18 December, the ministers of finance of

the European Union reached an understanding on the EU's Single Resolution Mechanism.

## Main opinions issued by the Bank of Finland 2013

Opinions concerning legislation on and development of the financial markets

Opinion	Subject	Date
To the European Commission	Consultation on the Review of the European System of Financial Supervision (ESFS)	23 Jul
To the Commerce Committee of the Finnish Parliament	Proposal by the European Commission for a Regulation of the European Parliament and of the Council establishing a Single Resolution Mechanism (U 58/2013 vp)	24 Sep
	Proposal by the European Commission for a Regulation of the European Parliament and of the Council on Money Market Funds (U 70/2013 vp)	24 Oct
	Communication from the European Commission to the Council and the European Parliament on Shadow Banking – Addressing New Sources of Risk in the Financial Sector (E 125/2013 vp)	24 Oct
To the Finance Committee of the Finnish Parliament	Proposal by the European Commission for a Regulation of the European Parliament and of the Council establishing a Single Resolution Mechanism (U 58/2013 vp)	7 Oct
To the Financial Supervisory Authority	Regulations and guidelines regarding the operation of the securities markets	15 Feb
	Regulations and guidelines regarding calculation of financial sector capital requirements and large exposures	24 Oct
	Templates for financial sector balance sheet and income statement, incl. notes (FINREP template) based on the Ministry of Finance decree (1478/2011)	24 Oct
To the Ministry of Employment and the Economy	Proposal for a Government decision on the objectives of maintenance and supply security	2 Sep
To the Ministry of Finance	European Commission's regulatory technical standards to be prepared by virtue of Regulation (EU) No 648/2012	8 Jan
	Government Bill for legislation concerning alternative investment fund managers	31 Jan
	Legislation concerning alternative investment fund managers (AIFM) (second hearing)	22 Apr
	Government Bill for an Act on alternative investment fund managers (third hearing)	29 May
	Application dated 15 May 2013 by Euroclear Finland Ltd for confirmation of amendment of the company's rules	31 May
	Rules of the Investors' Compensation Fund	12 Jun
	Decrees related to legislation governing alternative investment fund managers	1 Nov
	Amendment of the rules of Euroclear Finland Ltd's registration fund	5 Nov
	Government Bill for an Act on credit institutions	21 Nov

## Bank of Finland's publications in 2013

## Periodical publications

Euro & talous Five issues (in Finnish).

Bank of Finland Bulletin Five issues.

Research Newsletter Three issues of the online research bulletin in Finland (in Finnish and English).

**Annual report** Published separately in Finnish, Swedish and English.

Research publications

Discussion Papers 35 online studies and reports in the areas of macroeconomics and financial

markets were published in English.

**Studies and reports** 14 online studies and reports were published in the *BoF Online series*.

Two issues of the Financial Market Report were published online (in Finnish

and English).

Business Finance Survey was published online (in Finnish).

**Statistical publications** Financial Markets, a monthly online publication (in Finnish, Swedish and English).

Finland's balance of payments, a monthly online publication (in Finnish, Swedish

and English).

Finland's balance of payments, annual review, published online in September

(in Finnish and English).

Finnish bond issues, published online in May (in Finnish, Swedish and English).

Monetary and banking statistics, a monthly online publication (in Finnish,

Swedish and English).

Financial statistics, annual review, published online in February (in Finnish,

Swedish and English).

International Reserves and Foreign Currency Liquidity, a monthly publication

(in English).

## Studies published by the Institute for Economies in Transition

**Research publications** 31 online studies were published in the *BOFIT Discussion Papers* series

(in English).

11 publications appeared in the BOFIT Online series (in Finnish or in English).

**Monitoring publications** BOFIT Viikkokatsaus, a weekly online publication (in Finnish).

BOFIT Weekly, a weekly online publication (in English).

BOFIT Venäjä-ennuste, a bi-annual online publication (in Finnish).

BOFIT Forecast for Russia, a bi-annual online publication (in English).

BOFIT Kiina-ennuste, a bi-annual online publication (in Finnish).

BOFIT Forecast for China, a bi-annual online publication (in English).

Orders and subscriptions A comprehensive list of publications is available on the Bank of Finland's website http://www.suomenpankki.fi/en/julkaisut/Pages/default.aspx.

The Bank of Finland website offers a service where these publications can be subscribed to free of charge.

The subscriber will be alerted by email of the release of the desired publication. Online subscriptions can be made at the Bank of Finland's website:

Bank of Finland > Publications > Order and subscribe to electronic publications and reports.

The Bank's publications Euro & talous (in Finnish) and Bank of Finland Bulletin as well as the Bank's annual report also appear in print. Online subscriptions to the printed copies can be made at the Bank of Finland's website:

Bank of Finland > Publications > Order and subscribe to printed publications.

Back copies of printed publications can also be ordered from the same website address.

# Supplementary tables

Totals/sub-totals may not add up because of rounding.

- 0 less than half the final digit shown
- . logically impossible
- .. data not available
- nil
- \_ change in contents of series

Table 1.

Monthly balance sheet of the Bank of Finland, EUR m

ASSE	TTS	Jan	Feb	Mar
1	Gold and gold receivables	1,988	1,988	1,988
2	Claims on non-euro area residents denominated in foreign currency	6,349	6,136	6,282
2.1	Receivables from the IMF	2,121	2,092	2,096
2.2	Balances with banks and security investments, external loans and other external assets	4,228	4,045	4,186
3	Claims on euro area residents denominated in foreign currency	409	450	380
4	Claims on non-euro area residents denominated in euro	2,406	1,855	1,748
4.1	Balances with bank, security investments and loans	2,406	1,855	1,748
4.2	Claims arising from the credit facility under ERM II	-	_	-
5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	3,681	3,681	3,641
5.1	Main refinancing operations	-	_	_
5.2	Longer-term refinancing operations	3,681	3,681	3,641
5.3	Fine-tuning reverse operations	-	_	_
5.4	Structural reverse operations	-	-	-
5.5	Marginal lending facility	-	-	-
5.6	Credits related to margin calls	_	-	-
6	Other claims on euro area credit institutions denominated in euro	0	0	0
7	Securities of euro area residents denominated in euro	11,413	11,330	11,263
7.1	Securities held for monetary policy purposes	4,515	4,400	4,386
7.2	Other euro-denominated securities	6,898	6,930	6,877
8	General government debt denominated in euro	-	-	-
9	Intra-Eurosystem claims	51,672	47,645	37,939
9.1	Participating interest in ECB	141	141	141
9.2	Claims equivalent to the transfer of foreign reserves	722	722	722
9.3	Claims related to the issuance of ECB debt certificates	-	-	-
9.4	Claims related to TARGET and correspondent accounts (net)	47,894	43,705	34,084
9.5	Other intra-Eurosystem claims (net)	2,915	3,077	2,992
10	Other assets	1,075	1,049	1,037
	assets	78,994	74,135	64,279

Totals/sub-totals may not add up because of rounding. Source: Bank of Finland.

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,973	1,973	1,450	1,450	1,450	1,450	1,559	1,559	1,373
6,198	6,161	5,884	6,006	5,871	5,956	6,211	6,452	6,585
2,103	2,056	2,049	2,049	2,012	2,039	2,007	1,983	1,955
4,095	4,105	3,835	3,957	3,859	3,917	4,204	4,469	4,630
559	594	420	523	516	464	381	380	297
1,466	1,367	1,480	1,510	1,797	1,802	1,550	1,231	1,347
1,466	1,367	1,480	1,510	1,797	1,802	1,550	1,231	1,347
-	-	-	-	-	-	-	-	-
3,651	3,291	3,191	3,191	3,116	2,475	2,475	2,475	2,475
10	-	-	-	-	-	-	-	-
3,641	3,291	3,191	3,191	3,116	2,475	2,475	2,475	2,475
_	_	_	_	_	-	_	_	_
_	-	-	-	-	-	-	-	-
_	_	-	_	_	-	_	-	-
-	-	-	-	-	-	-	-	-
60	0	0	0	49	140	30	144	0
11,210	11,152	11,075	11,057	10,927	10,971	10,561	10,358	10,063
4,336	4,245	4,172	4,141	4,006	3,955	3,941	3,856	3,717
6,874	6,907	6,902	6,916	6,921	7,016	6,619	6,501	6,346
-	-	-	-	-	-	-	-	-
37,863	33,245	27,829	24,961	30,813	23,799	20,391	22,358	26,539
141	141	141	141	141	141	141	141	141
722	722	722	722	722	722	722	722	722
_	_	-	_	-	-	_	-	-
33,853	29,196	23,795	20,938	26,682	19,669	16,316	18,193	22,240
3,147	3,186	3,170	3,161	3,268	3,268	3,212	3,303	3,436
1,037	1,043	1,096	1,036	1,038	1,030	994	1,016	1,052
64,017	58,827	52,425	49,735	55,577	48,088	44,152	45,973	49,731

Table 1. (cont.)

LIAB	ILITIES	Jan	Feb	Mar
1	Banknotes in circulation	14,708	14,556	14,619
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	51,334	47,266	37,431
2.1	Current accounts (covering the minimum reserve system)	27,158	23,912	16,651
2.2	Deposit facility	11,916	8,717	7,780
2.3	Fixed-term deposits	12,260	14,637	13,000
2.4	Fine-tuning reverse operations	_	_	_
2.5	Deposits related to margin calls	-	_	-
3	Other liabilities to euro area credit institutions denominated in euro	_	-	-
4	Liabilities to other euro area residents denominated in euro	828	826	801
4.1	General government	-	_	-
4.2	Other liabilities	828	826	801
5	Liabilities to non-euro area residents denominated in euro	1,401	832	651
6	Liabilities to euro area residents denominated in foreign currency	45	-2	-2
7	Liabilities to non-euro area residents denominated in foreign currency	249	162	218
7.1	Deposits, balances and other liabilities	249	162	218
7.2	Liabilities arising from the credit facility under ERM II	-	-	-
8	Counterpart of special drawing rights allocated by the IMF	1,387	1,387	1,387
9	Intra-Eurosystem liabilities	_	_	_
9.1	Liabilities related to promissory notes backing the issuance of ECB debt certificates	_	-	-
9.2	Liabilities related to TARGET and correspondent accounts (net)	-	-	-
9.3	Other intra-Eurosystem liabilities (net)	-	-	-
10	Other liabilities	1,078	1,157	1,223
11	Revaluation account	2,609	2,609	2,609
12	Capital and reserves	5,355	5,344	5,344
12.1	Primary capital	841	841	841
12.2	Reserve fund	1,491	1,491	1,491
12.3	Pension provisions	536	536	536
12.4	Other provisions	2,488	2,476	2,476
Total l	liabilities	78,994	74,135	64,279

Totals/sub-totals may not add up because of rounding. Source: Bank of Finland.

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
14,749	14,923	15,022	15,067	15,147	15,169	15,124	15,280	15,753
37,152	32,046	26,323	23,349	29,095	21,569	18,442	20,136	23,803
19,494	17,479	13,156	13,879	14,109	13,699	9,962	10,636	14,303
2,658	1,767	1,067	150	286	220	541	-	-
15,000	12,800	12,100	9,320	14,700	7,650	7,940	9,500	9,500
_	_	_	-	_	_	_	_	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	15	-	-	-
797	806	820	825	578	378	72	69	55
-	-	-	-	-	-	-	-	-
797	806	820	825	578	378	72	69	55
447	312	483	485	800	962	482	410	527
0	0	0	0	0	0	0	0	0
264	300	-	221	116	114	118	118	66
264	300	-	221	116	114	118	118	66
-	-	-	-	-	-	-	-	-
1,391	1,391	1,369	1,369	1,369	1,369	1,352	1,352	1,330
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	_	_	-	-	-	-	-	-
-	-	_	-	-	-	-	-	-
487	319	366	378	430	471	519	565	260
2,579	2,579	1,892	1,892	1,892	1,892	1,893	1,893	1,556
6,150	6,150	6,150	6,150	6,150	6,150	6,150	6,150	6,381
841	841	841	841	841	841	841	841	841
1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601	1,601
582	582	582	582	582	582	582	582	616
3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,323
64,017	58,827	52,425	49,735	55,577	48,088	44,152	45,973	49,731

Table 2.

Key interest rates of the Eurosystem

Interest rate	Fixed rate tenders on main refinancing opera	utions		Variable rate tenders Minimum bid rate		
Decision date	Effective	%	Decision date	Effective	%	
22 Dec 1998	1 Jan 1999	3.00	8 Jun 2000	28 Jun 2000	4.25	
8 Apr 1999	14 Apr 1999	2.50	31 Aug 2000	6 Sep 2000	4.50	
4 Nov 1999	10 Nov 1999	3.00	5 Oct 2000	11 Oct 2000	4.75	
3 Feb 2000	9 Feb 2000	3.25	10 May 2001	15 May 2001	4.50	
16 Mar 2000	22 Mar 2000	3.50	30 Aug 2001	5 Sep 2001	4.25	
27 Apr 2000	4 May 2000	3.75	17 Sep 2001	19 Sep 2001	3.75	
8 Jun 2000	15 Jun 2000	4.25	8 Nov 2001	14 Nov 2001	3.25	
			5 Dec 2002	11 Dec 2002	2.75	
8 Oct 2008	15 Oct 2008	3.75	6 Mar 2003	7 Mar 2003	2.50	
6 Nov 2008	12 Nov 2008	3.25	5 Jun 2003	6 Jun 2003	2.00	
4 Dec 2008	10 Dec 2008	2.50	1 Dec 2005	6 Dec 2005	2.25	
15 Jan 2009	21 Jan 2009	2.00	2 Mar 2006	8 Mar 2006	2.50	
5 Mar 2009	11 Mar 2009	1.50	8 jun 2006	15 Jun 2006	2.75	
2 Apr 2009	8 Apr 2009	1.25	3 Aug 2006	9 Aug 2006	3.00	
7 May 2009	13 May 2009	1.00	5 Oct 2006	11 Nov 2006	3.25	
7 Apr 2011	13 Apr 2011	1.25	7 Dec 2006	13 Dec 2006	3.50	
7 Jul 2011	13 Jul 2011	1.50	8 Mar 2007	14 Mar 2007	3.75	
3 Nov 2011	9 Nov 2011	1.25	7 Jun 2007	13 Jun 2007	4.00	
8 Dec 2011	14 Dec 2011	1.00	3 Jul 2008	9 Jul 2008	4.25	
5 Jul 2012	11 Jul 2012	0.75				
2 May 2013	8 May 2013	0.50				
7 Nov 2013	13 Nov 2013	0.25				

Standing facilities

		Interest rate deposit facility	Interest rate on marginal lending facility
Decision date	Effective	%	%
22 Dec 1998	1 Jan 1999	2.00	4.50
22 Dec 1998	4 Jan 1999	2.75	3.25
21 Jan 1999	22 Jan 1999	2.00	4.50
8 Apr 1999	9 Apr 1999	1.50	3.50
4 Nov 1999	5 Nov 1999	2.00	4.00
3 Feb 2000	4 Feb 2000	2.25	4.25
16 Mar 2000	17 Mar 2000	2.50	4.50
27 Apr 2000	28 Apr 2000	2.75	4.75
8 Jun 2000	9 Jun 2000	3.25	5.25
31 Aug 2000	1 Sep 2000	3.50	5.50
5 Oct 2000	6 Oct 2000	3.75	5.75
10 May 2001	11 May 2001	3.50	5.50
30 Aug 2001	31 Aug 2001	3.25	5.25
17 Sep 2001	18 Sep 2001	2.75	4.75
8 Nov 2001	9 Nov 2001	2.25	4.25
5 Dec 2002	6 Dec 2002	1.75	3.75
6 Mar 2003	7 Mar 2003	1.50	3.50
5 Jun 2003	6 Jun 2003	1.00	3.00
1 Dec 2005	6 Dec 2005	1.25	3.25
2 Mar 2006	8 Mar 2006	1.50	3.50
8 Jun 2006	15 Jun 2006	1.75	3.75
3 Aug 2006	9 Aug 2006	2.00	4.00
5 Oct 2006	11 Oct 2006	2.25	4.25
7 Dec 2006	13 Dec 2006	2.50	4.50
8 Mar 2007	14 Mar 2007	2.75	4.75
7 Jun 2007	13 Jun 2007	3.00	5.00
3 Jul 2008	9 Jul 2008	3.25	5.25
8 Oct 2008	8 Oct 2008	2.75	4.75
8 Oct 2008	9 Oct 2008	3.25	4.25
6 Nov 2008	12 Nov 2008	2.75	3.75
4 Dec 2008	10 Dec 2008	2.00	3.00
15 Jan 2009	21 Jan 2009	1.00	3.00
5 Mar 2009	11 Mar 2009	0.50	2.50
2 Apr 2009	8 Apr 2009	0.25	2.25
7 May 2009	13 May 2009	0.25	1.75
7 Apr 2011	13 Apr 2011	0.50	2.00
7 Jul 2011	13 Jul 2011	0.75	2.25
3 Nov 2011	9 Nov 2011	0.50	2.00
8 Dec 2011	14 Dec 2011	0.25	1.75
5 Jul 2012	11 Jul 2012	0,00	1.50
2 May 2013	8 May 2013	0.00	1.00
7 Nov 2013	13 Nov 2013	0.00	0.75

Table 3.

Reserve base of euro area credit institutions subject to reserve requirements, EUR bn

Reserve base as of:	Total	Liabilities to which a 1% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2012						
Dec	18,564.7	9,971.7	637.5	2,583.9	1,163.1	4,208.4
2013						
Jan	18,558.8	9,900.6	636.4	2,569.8	1,259.2	4,192.8
Feb	18,689.3	9,899.3	635.7	2,562.3	1,368.4	4,223.7
Mar	18,689.5	9,951.8	626.1	2,580.0	1,382.1	4,149.5
Apr	18,676.1	9,928.0	626.5	2,574.1	1,437.0	4,110.5
May	18,639.0	9,884.9	610.0	2,571.8	1,496.7	4,075.6
Jun	18,577.4	9,948.3	593.5	2,531.5	1,426.0	4,078.1
Jul	18,343.3	9,826.4	596.3	2,515.3	1,422.1	3,983.3
Aug	18,252.7	9,835.6	587.7	2,494.7	1,353.8	3,981.0
Sep	18,133.7	9,806.2	572.8	2,483.8	1,301.4	3,969.5
Oct	18,148.7	9,823.0	562.9	2,481.1	1,323.0	3,958.8
Nov	18,160.4	9,856.1	552.0	2,479.2	1,305.5	3,967.6
Dec	17,848.6	9,811.7	518.8	2,448.5	1,152.6	3,917.1

## Reserve base of Finnish credit institutions subject to reserve requirements, EUR m

Reserve base as of:	Total	Liabilities to which a 1% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied			
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity	
	1	2	3	4	5	6	
2012							
Dec	371,916	246,485	16,934	14,407	30,607	63,483	
2013							
Jan	359,856	228,180	17,355	14,219	36,346	63,756	
Feb	355,539	223,631	16,932	14,587	36,120	64,270	
Mar	351,526	219,429	17,673	14,548	37,916	61,960	
Apr	349,049	221,788	15,893	14,655	34,237	62,476	
May	344,526	213,034	16,881	14,514	37,503	62,594	
Jun	343,478	210,200	17,950	14,577	37,916	62,835	
Jul	343,260	208,061	18,154	14,669	39,250	63,126	
Aug	349,779	211,255	18,066	14,639	40,269	65,550	
Sep	339,684	202,069	17,194	14,983	38,953	66,484	
Oct	341,479	199,903	16,688	14,948	43,486	66,454	
Nov	351,684	205,621	17,086	14,810	48,301	65,865	
Dec	349,122	208,733	16,362	14,634	43,992	65,401	

Table 4.

Reserve maintenance of euro area credit institutions subject to reserve requirements, EUR bn

Maintenance period ending in	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
2012					
Dec	106.4	509.9	403.5	0.0	0.75
2013					
Jan	106.0	489.0	383.0	0.0	0.75
Feb	105.4	466.3	360.8	0.0	0.75
Mar	105.6	403.0	297.3	0.0	0.75
Apr	104.9	346.0	241.1	0.0	0.75
May	104.9	322.2	217.3	0.0	0.75
Jun	105.3	300.3	195.0	0.0	0.50
Jul	105.1	286.5	181.4	0.0	0.50
Aug	104.5	269.6	165.1	0.0	0.50
Sep	104.9	274.5	169.6	0.0	0.50
Oct	103.8	268.4	164.7	0.0	0.50
Nov	103.8	244.9	141.1	0.0	0.50
Dec	103.3	220.2	116.9	0.0	0.25
2014					
Jan	103.4	248.1	144.8	0.0	0.25

## Reserve maintenance of Finnish credit institutions subject to reserve requirements, EUR m

Maintenance period ending in	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
2012					
Dec	2,707.4	27,837.5	25,130.1	0.0	0.75
2013					
Jan	2,453.2	25,573.7	23,120.6	0.0	0.75
Feb	2,604.7	24,012.8	21,408.1	0.0	0.75
Mar	2,425.8	20,940.2	18,514.4	0.0	0.75
Apr	2,376.2	19,954.1	17,578.0	0.0	0.75
May	2,341.8	16,405.7	14,064.0	0.0	0.50
Jun	2,347.6	13,622.9	11,275.3	0.0	0.50
Jul	2,270.0	12,827.3	10,557.3	0.0	0.50
Aug	2,252.3	12,572.3	10,320.0	0.0	0.50
Sep	2,233.3	13,642.4	11,409.0	0.0	0.50
Oct	2,264.9	10,960.9	8,696.0	0.0	0.50
Nov	2,164.3	11,372.7	9,208.3	0.0	0.25
Dec	2,137.6	14,210.0	12,072.4	0.0	0.25
2014					
Jan	2,199.3	12,430.7	10,231.4	0.0	0.25

Table 5. Euro area monetary aggregate M3 and corresponding items of Finnish monetary financial institutions  $^{1}$ 

	Euro	area monetary aggre	egate M3		Liabilities of Finnish monetary financial instituotions included in euro area M3 <sup>2</sup>			
	Stock <sup>4</sup> , EUR bn	12-month change <sup>3,4</sup> , %	3-month mov avg of 12-month change <sup>3,4</sup> , %	Stock, EUR bn	12-month change <sup>3</sup> , %	3-month mov avg of 12-month change <sup>3</sup> , %		
	1	2	3	4	5	6		
2009	9,354.1	-0.3	-0.1	127.6	-1.9	-2.1		
2010	9,292.7	1.1	1.3	137.3	5.2	4.3		
2011	9,499.2	1.6	1.7	143.6	6.0	6.5		
2012	9,780.1	3.5	3.6	140.3	0.5	1.0		
2013	9,827.4	1.0	1.2	145.2	4.1	3.9		
2013								
Jan	9,776.5	3.4	3.3	139.7	1.5	1.4		
Feb	9,800.0	3.1	3.0	139.7	2.1	2.0		
Mar	9,804.4	2.5	2.9	141.3	2.4	1.9		
Apr	9,813.8	3.2	2.8	138.1	1.1	1.6		
May	9,833.8	2.8	2.8	139.5	1.4	2.1		
Jun	9,819.4	2.4	2.4	144.3	3.7	2.9		
Jul	9,848.9	2.1	2.3	143.3	3.6	3.8		
Aug	9,878.2	2.3	2.1	142.9	4.0	2.8		
Sep	9,861.6	2.0	1.9	142.5	0.8	2.1		
Oct	9,880.9	1.4	1.6	141.6	1.5	1.7		
Νου	9,898.8	1.5	1.3	142.0	2.8	2.8		
Dec	9,827.4	1.0	1.2	145.2	4.1	3.9		

## Key market interest rates

	Eonia rate		Euribor rates (actual /360)						n Finnish ent bonds
		1-month	2-month	3-month	6-month	9-month	12-month	5-year	10-year
	1	2	3	4	5	6	7	8	9
2009	0.71	0.888	1.057	1.218	1.429	1.529	1.610	2.701	3.735
2010	0.44	0.570	0.663	0.813	1.083	1.223	1.352	1.781	3.003
2011	0.87	1.178	1.260	1.393	1.638	1.826	2.009	2.083	2.997
2012	0.23	0.325	0.431	0.571	0.824	0.973	1.108	0.875	1.886
2013	0.09	0.130	0.177	0.221	0.337	0.441	0.536	0.815	1.863
2013									
Jan	0.07	0.112	0.162	0.204	0.343	0.461	0.574	0.607	1.745
Feb	0.07	0.120	0.175	0.223	0.362	0.481	0.594	0.672	1.808
Mar	0.07	0.118	0.166	0.206	0.329	0.439	0.545	0.488	1.610
Apr	0.08	0.118	0.169	0.209	0.324	0.427	0.528	0.410	1.513
May	0.08	0.112	0.160	0.201	0.299	0.394	0.484	0.396	1.598
Jun	0.09	0.121	0.168	0.210	0.321	0.416	0.507	0.642	1.879
Jul	0.09	0.125	0.177	0.221	0.336	0.434	0.525	1.115	1.910
Aug	0.08	0.128	0.177	0.226	0.342	0.448	0.542	1.275	2.068
Sep	0.08	0.128	0.174	0.223	0.340	0.449	0.543	1.181	2.191
Oct	0.09	0.128	0.172	0.226	0.342	0.450	0.541	1.040	2.045
Nov	0.10	0.132	0.178	0.223	0.327	0.424	0.506	0.884	1.942
Dec	0.17	0.216	0.244	0.275	0.373	0.466	0.544	0.988	2.033

Sources: European Central Bank, Reuters and Bloomberg.

Excl. negotiable instruments held by central governments and non-euro area residents.
 Excl. notes and coins held by the public.
 Calculated from monthly differences in stocks adjusted for reclassifications, other revaluations, exchange rate variations and any other change which do not arise from transactions.
 Seasonally and calendar effect adjusted.
 Sources: European Central Bank and Bank of Finland.

Table 7.

Nominal competitiveness indicators for Finland and effective exchange rate of the euro calculated by the ECB

	Narrow indicator <sup>1</sup>	Narrow euro area indicator <sup>1</sup>	Broad indicator <sup>1</sup>	Effective exchange rate of the euro, narrow group of countries <sup>1</sup>
		January–March	1999 = 100	
	1	2	3	4
2009	115.8	107.6	108.8	120.6
2010	107.6	103.6	104.3	111.9
2011	106.7	103.0	104.0	111.2
2012	100.5	100.1	100.8	105.3
2013	105.8	102.6	103.4	111.0
2013				
Jan	103.7	101.6	102.2	109.0
Feb	105.2	102.2	102.9	110.8
Mar	103.7	101.5	102.0	109.4
Apr	104.3	101.8	102.4	109.8
Мау	104.9	102.2	102.6	110.3
Jun	105.8	102.6	103.4	111.1
Jul	106.0	102.7	103.4	111.3
Aug	106.6	103.0	103.9	112.0
Sep	106.2	102.9	103.8	111.3
Oct	107.3	103.4	104.3	112.3
Νου	107.2	103.4	104.4	111.8
Dec	108.6	104.1	105.2	113.2

<sup>&</sup>lt;sup>1</sup> An upward movement of the index represents an appreciation of the euro. The narrow indicator comprises 12 countries, 1999, the narrow plus euro area indicator 23 countries, and the broad indicator 37 countries. Sources: European Central Bank and Bank of Finland.

Table 8.

Harmonised Index of Consumer Prices for euro area and Finland, annual change, %

	Euro area	Finland
	1	2
2009	0.3	1.6
2010	1.6	1.7
2011	2.7	3.3
2012	2.5	3.2
2013	1.4	2.2
2013		
Jan	2.0	2.6
Feb	1.8	2.4
Mar	1.7	2.5
Apr	1.2	2.4
May	1.4	2.5
Jun	1.6	2.3
Jul	1.6	2.5
Aug	1.3	2.0
Sep	1.1	1.8
Oct	0.7	1.7
Nov	0.9	1.8
Dec	0.8	1.9

Sources: Eurostat and Statistics Finland.

Table 9.

Key euro exchange rates, currency-value of one euro

		US dollar			Japanese yen			
	Low	Average	High	Low	Average	High		
	1	2	3	4	5	6		
2009	1.2555	1.3948	1.5120	113.65	130.34	138.09		
2010	1.1942	1.3257	1.4563	106.19	116.24	134.23		
2011	1.2889	1.3920	1.4882	100.20	110.96	122.80		
2012	1.2089	1.2848	1.3454	94.63	102.49	113.87		
2013	1.2768	1.3281	1.3814	113.93	129.66	145.02		
2013								
Jan	1.3012	1.3288	1.3550	113.93	118.34	123.55		
Feb	1.3077	1.3359	1.3644	120.06	124.40	126.88		
Mar	1.2768	1.2964	1.3090	120.30	122.99	125.56		
Apr	1.2818	1.3026	1.3129	119.79	127.54	130.39		
May	1.2853	1.2982	1.3191	128.60	131.13	133.26		
Jun	1.3008	1.3189	1.3406	125.36	128.40	131.28		
Jul	1.2813	1.3080	1.3284	128.44	130.39	132.60		
Aug	1.3203	1.3310	1.3392	128.66	130.34	132.35		
Sep	1.3117	1.3348	1.3545	130.71	132.41	134.57		
Oct	1.3493	1.3635	1.3805	131.46	133.32	135.11		
Nov	1.3365	1.3493	1.3611	131.58	134.97	139.21		
Dec	1.3536	1.3704	1.3814	138.73	141.68	145.02		

	Pound sterling			Swedish krona		
	Low	Average	High	Low	Average	High
	7	8	9	10	11	12
2009	0.84255	0.89094	0.9610	10.0778	10.6191	11.7135
2010	0.81040	0.85784	0.9114	8.9630	9.5373	10.2723
2011	0.83155	0.86788	0.9050	8.7090	9.0298	9.3127
2012	0.77835	0.81087	0.8482	8.2077	8.7041	9.1356
2013	0.81075	0.84926	0.8789	8.2931	8.6515	9.0604
2013						
Jan	0.81075	0.83271	0.85830	8.5144	8.6217	8.6936
Feb	0.84635	0.86250	0.87890	8.4297	8.5083	8.6339
Mar	0.84515	0.85996	0.87630	8.2931	8.3470	8.4361
Apr	0.84000	0.85076	0.86130	8.3110	8.4449	8.5961
May	0.84310	0.84914	0.85695	8.5287	8.5725	8.6333
Jun	0.84755	0.85191	0.85720	8.5704	8.6836	8.8884
Jul	0.84920	0.86192	0.87350	8.5521	8.6609	8.7898
Aug	0.85290	0.85904	0.87135	8.6393	8.7034	8.7714
Sep	0.83580	0.84171	0.84775	8.5702	8.6758	8.7751
Oct	0.83410	0.84720	0.85670	8.6214	8.7479	8.8217
Nov	0.83210	0.83780	0.84635	8.7110	8.8802	8.9928
Dec	0.82605	0.83639	0.84560	8.8382	8.9597	9.0604

Table 10.

Other euro exchange rates, currency-value of one euro, average

	Czech koruna	Danish krone	Hungarian forinti	Lithuanian litas	Latvian lats	Polish zloty
	1	2	3	4	5	6
2009	26.435	7.446	280.327	3.453	0.706	4.328
2010	25.284	7.447	275.480	3.453	0.709	3.995
2011	24.590	7.451	279.373	3.453	0.706	4.121
2012	25.149	7.444	289.249	3.453	0.697	4.185
2013	25.980	7.458	296.873	3.453	0.701	4.197
2013						
Jan	25.563	7.461	294.015	3.453	0.698	4.142
Feb	25.475	7.460	292.732	3.453	0.700	4.170
Mar	25.659	7.455	303.006	3.453	0.701	4.156
Apr	25.841	7.455	298.669	3.453	0.701	4.136
Мау	25.888	7.454	292.376	3.453	0.700	4.180
Jun	25.759	7.458	295.704	3.453	0.702	4.284
Jul	25.944	7.458	294.899	3.453	0.702	4.275
Aug	25.818	7.458	299.465	3.453	0.703	4.230
Sep	25.789	7.458	299.750	3.453	0.703	4.237
Oct	25.662	7.459	294.761	3.453	0.703	4.190
Nov	26.927	7.459	297.680	3.453	0.703	4.189
Dec	27.521	7.460	300.237	3.453	0.703	4.176

	Swiss franc	Norweigian krone	Bulgarian lev	Croatian kuna	Romanian leu	Russian rouble
	7	8	9	10	11	12
2009	1.510	8.728	1.956	7.340	4.240	44.138
2010	1.380	8.004	1.956	7.289	4.212	40.263
2011	1.233	7.793	1.956	7.439	4.239	40.885
2012	1.205	7.475	1.956	7.522	4.459	39.926
2013	1.231	7.807	1.956	7.579	4.419	42.337
2013						
Jan	1.229	7.382	1.956	7.575	4.383	40.185
Feb	1.230	7.423	1.956	7.587	4.384	40.334
Mar	1.227	7.486	1.956	7.591	4.392	39.933
Apr	1.220	7.544	1.956	7.608	4.378	40.799
May	1.242	7.559	1.956	7.568	4.336	40.684
Jun	1.232	7.739	1.956	7.490	4.480	42.649
Jul	1.237	7.884	1.956	7.506	4.424	42.859
Aug		7.939	1.956	7.537	4.437	43.975
Sep	1.234	7.973	1.956	7.599	4.463	43.514
Oct	1.232	8.121	1.956	7.619	4.444	43.744
Nov	1.232	8.206	1.956	7.633	4.445	44.158
Dec	1.224	8.405	1.956	7.636	4.463	45.063

Sources: European Central Bank and Bank of Finland.

Table 10. (cont.)

	Turkish lira	Australian dollar	Canadian dollar	Chinese yuan renminbi	Hong Kong dollar	Indonesian rupiah	South Korean won
	13	14	15	16	17	18	19
2009	2.163	1.773	1.585	9.528	10.811	14443.740	1772.904
2010	1.997	1.442	1.365	8.971	10.299	12041.705	1531.821
2011	2.338	1.348	1.376	8.996	10.836	12206.510	1541.234
2012	2.314	1.241	1.284	8.105	9.966	12045.733	1447.691
2013	2.534	1.378	1.368	8.165	10.302	13856.597	1453.903
2013							
Jan	2.354	1.266	1.319	8.270	10.303	12837.989	1417.687
Feb	2.374	1.295	1.348	8.328	10.361	12933.748	1452.822
Mar	2.345	1.254	1.329	8.060	10.059	12590.610	1430.309
Apr	2.341	1.254	1.327	8.056	10.111	12664.510	1460.894
May	2.374	1.313	1.326	7.972	10.077	12673.133	1444.559
Jun	2.503	1.398	1.360	8.091	10.235	13033.308	1498.334
Jul	2.527	1.428	1.362	8.023	10.145	13189.168	1473.346
Aug	2.612	1.474	1.385	8.148	10.322	14168.720	1485.926
Sep	2.695	1.438	1.382	8.169	10.350	15073.161	1446.605
Oct	2.710	1.433	1.413	8.323	10.572	15109.543	1454.731
Nov	2.732	1.447	1.414	8.222	10.460	15575.056	1434.065
Dec	2.828	1.524	1.458	8.325	10.625	16444.236	1446.876

	Malaysian ringgit	New Zealand dollar	Philippine peso	Singapore dollar	Thai baht	South African rand	IMF SDRs
	20	21	22	23	24	25	26
2009	4.908	2.212	66.338	2.024	47.804	11.674	0.904
2010	4.267	1.838	59.739	1.806	42.014	9.698	0.869
2011	4.256	1.760	60.260	1.749	42.429	10.097	0.882
2012	3.967	1.587	54.246	1.605	39.928	10.551	0.839
2013	4.186	1.621	56.427	1.662	40.830	12.833	0.874
2013							
Jan	4.041	1.588	54.105	1.633	39.924	11.696	0.865
Feb	4.140	1.593	54.355	1.655	39.839	11.880	0.875
Mar	4.031	1.566	52.813	1.616	38.264	11.917	0.862
Apr	3.969	1.535	53.649	1.612	37.857	11.859	0.866
May	3.920	1.577	53.693	1.622	38.667	12.180	0.866
Jun	4.149	1.668	56.658	1.661	40.664	13.209	0.871
Jul	4.175	1.659	56.698	1.659	40.714	12.967	0.871
Aug	4.363	1.683	58.471	1.694	42.072	13.419	0.876
Sep	4.341	1.641	58.346	1.686	42.312	13.329	0.877
Oct	4.328	1.635	58.809	1.696	42.549	13.528	0.886
Nov	4.318	1.633	58.811	1.683	42.695	13.763	0.881
Dec	4.452	1.666	60.539	1.724	44.323	14.223	0.890

Sources: European Central Bank and Bank of Finland.

Table 11.

Irrevocable euro conversion rates as from 1 Jan 1999

Country	Currency	Units of currency per euro	Euro since	Country	Currency	Units of currency per euro	Euro since
Austria	schilling	13.7603	1 Jan 1999	Netherlands	guilder	2.20371	1 Jan 1999
Belgium	franc	40.3399	1 Jan 1999	Portugal	escudo	200.482	1 Jan 1999
Germany	mark	1.95583	1 Jan 1999	Creece	drakma	340.750	1 Jan 2001
Spain	peseta	166.386	1 Jan 1999	Slovenia	tolar	239.640	1 Jan 2007
Finland	markka	5.94573	1 Jan 1999	Cyprus	pound	0.585274	1 Jan 2008
France	franc	6.55957	1 Jan 1999	Malta	lira	0.429300	1 Jan 2008
Ireland	pound	0.787564	1 Jan 1999	Slovakia	koruna	30.1260	1 Jan 2009
Italy	lira	1936.27	1 Jan 1999	Estonia	kroon	15.6466	1 Jan 2011
Luxembourg	franc	40.3399	1 Jan 1999				

Source: European Union.

Table 12.

Exchange rate mechanism ERM II

Currency	Central rate EUR 1 =	Fluctuation band,	Upper rate*	Lower rate*	Valid from
Danish krone	7.46038	± 2.25	7.62824	7.29252	4 Jan 1999
Lithuanian litas	3.45280	± 15	3.97072	2.93488	28 Jun 2004
Latvian lats	0.702804	± 15	0.808225	0.597383	2 May 2005

 $<sup>^{\</sup>circ}$  Intervention at the margin is, in principle, automatic and unlimited. Source: European Central Bank.

Table 13.

Banknotes sorted at the Bank of Finland, number in millions

Euro banknotes	2008	2009	2010	2011	2012	2013
500 euro	2.4	2.1	1.9	1.8	1.8	1.4
200 euro	1.3	1.3	1.2	1.1	1.0	0.8
100 euro	6.8	6.5	6.8	6.9	6.9	5.6
50 euro	86.6	84.5	84.3	86.9	79.4	60.3
20 euro	188.4	177.5	176.3	168.2	149.0	114.6
10 euro	40.0	42.4	40.9	39.6	37.9	32.3
5 euro	49.2	52.8	48.3	47.1	46.3	37.5
Total	374.7	366.9	359.6	351.6	322.3	252.5

## Organisation of the Bank of Finland

9 January 2014

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