



Bank of Finland Annual Report 2008



## Bank of Finland

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### Bank of Finland

The Bank of Finland is the country's monetary authority and member of the Eurosystem. The Bank's activities are regulated by the Statute of the ESCB and the Act on the Bank of Finland.

The Bank's objectives are to promote price stability as well as stability in payment and financial systems and integration of the European financial markets. One of the tasks of the Bank of Finland is to promote the stability, reliability and efficiency of the Finnish financial system and to participate in its development. All of which create the prerequisites for economic growth and employment.

In addition to monetary policy preparation and monitoring of financial market stability, the core functions of the Bank of Finland include operational central bank tasks in connection with payments, the implementation of monetary policy and the maintenance of currency supply.

In 2008, the Bank of Finland Board was composed of Erkki Liikanen, chairman and Governor of the Bank of Finland, Pentti Hakkarainen, vicechairman and deputy governor, and members of the Board Sinikka Salo and Seppo Honkapohja, whose nomination was confirmed by the President at the beginning of the year. The nine members of the Parliamentary Supervisory Board supervise the activities of the Bank.

In the course of 2008, the Act concerning the nomination of members of the Bank of Finland Board was amended henceforth empowering the Parliamentary Supervisory Council to nominate all members of the Board, with the exception of the chairman. The new Act entered into effect at the beginning of 2009. At the same time, the Board members' eligibility criteria were reassessed. From the beginning of 2009, the eligibility criteria for the position of Board member include a higher academic degree appropriate for the position, conversance with the monetary economy or financial operations and proven management skills.

During the review year, a total of about 468 staff were employed in the 6 departments and internal audit unit of the Bank's head office and the 4 regional offices. Although independent, the Financial Supervision Authority operated administratively in connection with the Bank of Finland. In 2008 it employed about 138 people. The FIN-FSA produces its own annual report of its activities. From the beginning of 2009, the Financial Supervision Authority and the Insurance Supervisory Authority were merged to form a new Financial Supervisory Authority (FIN-FSA).

> **Board of the Bank of Finland.** From the top: Erkki Liikanen, Governor of the Bank of Finland, Pentti Hakkarainen, deputy governor, Sinikka Salo and Seppo Honkapohja.









### Foreword

In autumn 2008 the disturbances that had troubled the international financial markets deepened to become a crisis. The turning point came in September when the US investment bank Lehman Brothers sought protection from their creditors. In the September – October period the liquidity problems of several financial institutions reached a head, and became a matter of difficulties concerning capital adequacy. Meanwhile, global financial markets operations became notably more problematic. In practice, trading in some market areas ceased almost completely.

Banks were faced with the greatest challenges in terms of the acquisition of liquidity and improving their balance sheets. In the autumn of 2008 the central banks and governments of various countries set about establishing extraordinary measures in order to secure their banks' access to liquidity and their assets. These measures were directed not only at the banks that have found themselves in such difficulties but also at those banks operating viably.

Despite the measures undertaken, pressures on the banks to reduce their balance sheets, in order to absorb losses resulted in a notable reduction in the growth of bank lending within the euro area in the autumn of 2008. Business financing witnessed the most substantial change, but it also had a significant effect on housing loans. In Finland however, lending continued to grow more rapidly at the end of the year than elsewhere in the euro area due, for example, to companies taking advantage of previously-agreed credit limits. The tightening of the financial market crisis has dampened the economic outlook throughout the world. Initially the most significant effects were felt in the developed economies, but later they spread, and by the end of 2008 were being experienced by emerging and developing economies alike. A downward correction was made to the forecasts for 2008. Globally, economic growth slowed in the final quarter of the year, export volumes contracted dramatically and world trade shrank. The near term outlook for the world economy by the end of 2008 was exceptionally bleak.

Growth shocks have been experienced in various countries from various directions. Initially the markets of those countries with substantially-sized financial sectors were most affected by the disturbances. Meanwhile, there was a rapid downward correction in several countries that were already experiencing an overheated housing market due to active residential construction and an increase in household indebtedness. Finally, by the last quarter of 2008, the rapid contraction in world trade hit those economies that are particularly reliant on exports.

The intense weakening of the global economy has caused a sizeable swath to be cut through open economies such as Finland's. The Bank of Finland, in its adjusted forecast issued at the beginning of December, foresees Finland's GDP contracting by 0.5% in 2009. Since the adjustment was made, the country's economic outlook has clearly weakened still further.

The central banks of various countries reacted swiftly to the tightening financial market situation in the autumn of 2008. In the euro area, the ECB lowered its key interest rates twice in a month by 1.75 percentage points, to 2.5%. Central banks in the euro area and beyond have also taken measures to sustain banks' liquidity, in many ways, resulting in interbank money market operations beginning to show signs of improvement by the end of 2008. This was seen, for example, in terms of interbank lending and the price difference between collateralised and unsecured funds began to shrink, first in short-term then later in longterm maturities.

The financial markets crisis has placed every aspect of the Bank of Finland's operational capacity under pressure. It has required close monitoring and analysis, rapid response preparedness, seamless cooperation both in and out of the house as well as the ability to seek new solutions to newly emerging problems. The Bank's staff has risen to the challenge well and deserves considerable thanks.

In the autumn of 2008, the proposed Act on the new Financial Supervisory Authority went under parliamentary review and was adopted as legislation in December. The new Financial Supervisory Authority commenced operations at the beginning of 2009, in cooperation with the Bank of Finland. Preparation for the change in the supervisory authority demanded considerable effort from the Bank's personnel as well as cooperation with the old FIN-FSA and the Insurance Supervisory Authority. With the management of the new FIN-FSA beginning work in 2009, it is the correct time for the Bank of Finland to examine its stability processes and work flows between the Bank and FIN-FSA. This crisis has

highlighted how essential it is to ensure the timeliness of the Bank's stability analysis and the efficiency of communication between the various authorities.

In the autumn of the year under review, the Bank shifted over to a process management approach for its monetary policy analysis and preparatory procedures as well as for the administrative processes involved in the implementation of monetary policy and liquidity measures. Process management supports the division of responsibilities as ratified by the Board of the Bank of Finland, in addition to improving the flow of communication, lowering inter-departmental barriers, streamlining working procedures and giving every task the value it requires.

Promotion of a supportive working culture has been one of the key tasks this year. If we are able to do our work in a happy and innovative environment it not only improves productivity but also job satisfaction. The role of management and supervisory work plays a key role in this and therefore considerable effort has been placed in it over the year. Everybody has their own part to play, for instance in providing constructive feedback to their colleagues. These objectives are also highlighted in 2008 through the Bank of Finland's revised strategies.

12 March 2009

Em. Linka

### Bank of Finland's strategy

#### Key strategy work themes in 2008

Changes in the operating environment, such as the escalation of the global financial crisis over the year and the preparations for the new supervisor for the financial and insurance sector, have called for specification of the Bank of Finland's strategy.

One of the Bank's objectives is to increase international cooperation in the field of financial market supervision and step up cooperation between national authorities. The Bank's maintenance of the currency supply is designed to ensure the availability of cash and secure a level playing field for those involved in the currency supply.

The strategy work also aimed at improving the quality and effectiveness of the Bank's activities and enhancing the Bank's management culture and overall management. The aim is to build an inspiring management and employment culture that is more open to innovation and new ideas, as well as new policies and procedures. The Bank also encourages its employees to take an ecological approach, which it will support by preparing its own environmental programme.

The Bank of Finland will continue to participate in the division of labour between central banks as both a provider and procurer of services. This pooling of services is designed to make various central banks' prime competences available to other central banks and eventually share any associated development and maintenance costs with the pooling parties. The Bank provides expert services in the core areas of research and analysis.

The Bank of Finland's staff number target for 2011 is 440. The results of the strategy work show that this target can be achieved by improvement of processes through process management and by playing an active role in improving the division of labour within the Eurosystem.









### The Bank of Finland is an active and constructive member of the Eurosystem

The Bank of Finland promotes price stability and the stability, efficiency and European integration of the financial system. It is responsible for the country's currency supply system and foreign exchange reserves. The Bank's activities create the prerequisites for economic growth and employment.

#### SERVICE COMPETENCE AND EFFECTIVENESS

The Bank of Finland's success within the Eurosystem builds on research and analysis.

The Bank exercises influence in domestic economic policy making by combining macroeconomic and financial market expertise.

The Bank guarantees that financial market participants operating in Finland have access to internationally competitive central bank services.

It is responsible for the currency supply of Finland and improves its quality, efficiency and safety.

Public confidence in the Bank of Finland and awareness of the activities of the Bank and the Eurosystem is promoted through effective and well-targeted communications.

#### **EFFICIENT USE OF RESOURCES**

The Bank of Finland's financial assets are invested in accordance with international commitments and crisis management requirements, with a view to allowing for stable profit distribution without jeopardising the Bank's capital adequacy.

The Bank is one of the most efficient EU central banks in terms of staff size and operating costs.

#### SMOOTH FUNCTIONING OF INTERNAL PROCESSES

Process management is introduced to improve the speed and quality of the Bank of Finland's internal processes.

The Bank of Finland and the Financial Supervisory Authority improve their exchange of information and division of responsibilities.

The Bank's ICT environment enables efficient work regardless of time and location shifts.

The activities of the Bank of Finland are ecologically sustainable.

#### **COMPETENCE AND WELLNESS AT WORK**

The competence of the Bank of Finland's staff is raised.

The Bank of Finland's research meets international standards in core areas

Through cooperation we enhance pleasure in our daily work and foster innovation.

### Bank of Finland activities 2008

### Monetary policy and economic policy

# Bank of Finland – contribution to preparation of monetary policy

As a member of the Governing Council of the ECB, the Governor of the Bank of Finland participates in monetary policy decision-making. In addition, experts from the Bank of Finland contribute to the preparation of monetary policy decisions and other background work, particularly in the context of the Monetary Policy Committee and its working groups. One of the key tasks is preparation of the economic forecast for Finland as part of the common euro area forecast.

The Bank of Finland acts as an expert on Finnish economy in the Eurosystem and, conversely, as the euro area expert in Finland. Monitoring and forecasting of the Finnish and international economy was emphasised more than usual in 2008 due to the crisis in the international financial markets. During the year, many reviews were made into economic developments and the ECB's monetary policy as well as its impacts. Forecasts on the Finnish economy were published in the Bank of Finland Bulletin Economic Outlook editions, in March and September. In addition, in December the Bank of Finland published a revision to the forecast on the Finnish economy due to the rapid change in economic prospects.

#### The ECB's monetary policy in 2008

The ECB aims to accommodate its monetary policy to keeping the inflation rate below, but close to, 2% over the medium term as measured by the Harmonised Index of Consumer Prices (HICP). The Governing Council of the ECB monitors and analyses the economic prospects of the euro area and sets its policy rate at a level best supporting price stability over the medium term. The macroeconomic environment, in which the Governing Council<sup>1</sup> had to decide on the monetary policy for the euro area, experienced unprecedentedly strong and rapid changes in the course of 2008.

Euro area production continued to grow rapidly up until the first quarter of the year. The rapid growth was partly due to the construction investments made ahead of schedule due to the mild winter, and therefore it remained temporary. In the second quarter, production in the euro area contracted, partly as a counter reaction to the strong growth in the first quarter. Material increases in energy and food prices, tightening of lending criteria and weakening of housing market developments had began to dampen demand growth in many developed countries during the early part of the year, and the impacts of these factors were partly also shown in the euro area. At the same time, appreciation of the euro weakened the price competitiveness of the euro area. (Chart 1). As export and investment demand dampened, euro area total production contracted also in the third quarter. However, the euro area consumer price inflation continued to rise, peaking at 4.0% in June-July. (Chart 2).

<sup>&</sup>lt;sup>1</sup> The Governing Council of the ECB comprises the six members of the ECB's Executive Board and the Governors of the national central banks of the euro area member states.

The financial market turbulence that began in late summer 2007 quickly intensified into a crisis by September 2008, and the second-round effects of the crisis began to spread with force into the real economy in different countries in the last quarter. Global economic growth weakened rapidly and exceptionally steeply, and international forecasters revised their estimates of growth in major economies downwards. The state of the economy weakened clearly also in the euro area over the last few months of the year. Consumer and business confidence deteriorated materially over a short period, as the availability of finance tightened and new orders received by companies decreased and unemployment began to rise. In the wake of weaker economic development, the inflation expectations of companies and financial markets dampened significantly.

As the crisis reached a head, central banks around the world maintained liquidity within the banking system by easing the conditions of banks' central bank financing. Governments in turn began to support banks solvency and lending by offering capital and guarantees to banks. In addition, extensive fiscal policy measures were agreed on to support economic growth. The principles for both banking support and economic stimulus were agreed in intergovernmental negotiations at the EU level.

Up until July 2008, the Governing Council of the ECB had to make monetary policy decisions in the context of accelerating inflation and an increasingly gloomy and uncertain picture of future economic developments. As a result of increasing world market prices for food and particularly energy, euro area inflation rose considerably. By the summer, inflation had reached a higher level than ever before during the third stage of the Economic and Monetary Union. In addition, the risk reassessment that began in the US housing markets in late summer 2007 weighed on the global financial markets and contributed to the uncertainty about future economic growth.





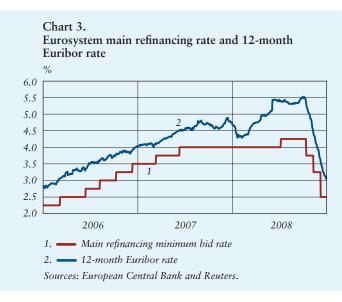
Harmonised Index of Consumer Prices for the euro area Change from year earlier, %



In early 2008, the Governing Council of the ECB repeatedly emphasised that risks to price stability in the medium term were clearly on the upside. At the same time, risks to growth were considered to be on the downside.

The main risks to price stability as considered by the Governing Council were particularly a continuation of the rise in energy and food prices, and potential second-round effects of the rises already seen on price setting and wage bargaining; in addition to an increase in companies' pricing power due to a lack of competition and higher-thanexpected increases in administered prices and indirect taxes. The Governing Council also stated that the growth of the stock of money and loans continued to be rapid and that there had so far been no significant changes in bank lending.

According to the Governing Council, risks to euro area growth prospects were predominantly related to



the fact that the negative impacts of financial market disturbances and actual and potential future rises in energy and food prices on the real economy in the euro area were stronger than expected. The Governing Council also considered increasing protectionism and an uncontrolled correction of global imbalances as risk factors slowing down growth.

During the year, the Eurosystem<sup>2</sup> and the ECB revised their forecasts on inflation and economic growth in 2008 and 2009 towards faster inflation by slower economic growth. Nevertheless, the ECB's forecast published as recently as in September expected GDP to grow only slightly below the potential growth rate in 2008 and 2009. Euro area consumer prices were expected to increase 3.4–3.6% in 2008. The increase was expected to slow down but still amount to 2.3–2.9% in 2009.

The ECB increased its policy rate by 0.25 percentage points to 4.25% in July 2008 (Chart 3). In its justifications for the rate hike, the Governing Council expected inflation to remain clearly above levels consistent with price stability and for a longer time than previously believed. The Governing Council considered a rate hike necessary to ward off the risks threatening medium-term price stability.

The picture of the development of the world economy worsened steeply in early autumn, when disturbances in the financial markets intensified rapidly into

 $<sup>^2\,</sup>$  The Europystem includes the European Central Banks and the national central banks of the euro area, including the Bank of Finland.

a crisis. Financial institutions in many countries were forced to strengthen their balance sheets, tighten their lending criteria and liquidate their investments. Demand and production indicators declined across the board. At the same time, business and household confidence deteriorated dramatically, as the second-round effects of the correction in the housing markets and the crisis in the financial markets began to spread rapidly into the real economy. The state of the economy deteriorated swiftly also in the euro area.

The slow-down in global economic growth turned the price of oil and many other commodities into a clear decline. At the same time, the risk of the previous rise in commodity prices would channel into companies' and households' inflation expectations, wages and further into consumer prices was reduced. The inflation expectations of economic agents dampened materially.

During the autumn, the Governing Council stated that the macroeconomic development of the euro area had taken a rapid turn for the worse. As tensions spread ever wider from the financial sector to the real economy, many downward risks to economic growth identified by the Governing Council were materialising in the euro area. At the same time, there were more and more risks of a significant reduction in inflation pressures as well. Due to these developments, the Governing Council expected the euro area inflation rate to decelerate rapidly and remain in line with the definition of price stability in the medium term, which is relevant for monetary policy.

The ECB Governing Council lowered its policy rate by 0.50 percentage points to 3.75% in October. Exceptionally, the decision on the cut was made at an extraordinary meeting of the Governing Council. The decision regarding monetary policy easing was coordinated with the central banks of England, Canada, Sweden, Switzerland and the United States, which also announced rate cuts. In addition, the Japanese central bank announced it would support monetary policy easing. In the same context, the Governing Council decided to change the auction procedure in the ECB's financing operations and to narrow the range between the interest rates on the marginal lending facility and deposit facility closer to the rate used in the main refinancing operations.

In their justifications of the rate decisions, the central banks stated that inflationary pressures had begun to fade due to decreasing prices of energy and other commodities. According to the justifications given, intensification of the financial crisis had increased the risk of a slowdown in economic growth, further reducing the risks of acceleration in inflation threatening price stability.

In the projections of Eurosystem's experts released by the ECB in December, estimates of growth and inflation in 2008 and 2009 were revised materially below the estimates presented in September. Euro area GDP was expected to remain unchanged or contract somewhat in 2009. According to the projection, growth would recover gradually but remain clearly below potential growth also in 2010. The rise in consumer prices in the euro area was expected to slow down to 1.1–1.7% in 2009. According to the projections, inflation would rise to 1.5–2.1% in 2010 but it would remain on average consistent with the definition of price stability.

After considering that the upside risks to price stability had waned and that the inflation rate would remain consistent with the definition of price stability over a period with relevance to monetary policy, the Governing Council cut the policy rate by 0.50 percentage points in November and 0.75 percentage points in December. Following these decisions, the ECB's policy rate stood at 2.50%. In its final meeting for the year, the Governing Council decided to restore the width of the interest rate corridor of the standing facility of 2 percentage points.



Through the information issued by the ECB, the markets were generally able to effectively anticipate the interest rate decisions made in the course of the year. However, the financial market crisis materially hindered the channelling of monetary policy into market rates. In particular, the interest rates on non-collateralised interbank loans, including the Euribor rates, fluctuated dramatically during the year. In contrast, developments in interest rates on collateralised interbank loans were more moderate. The interest rate differential between non-collateralised and collateralised interest rates rose particularly high in autumn 2008 after the culmination of the financial market crisis. Towards the end of the year, market rates declined rapidly as economic growth prospects deteriorated, the ECB's policy rate was declined and markets expected the Governing Council to cut the policy rate also in 2009. At the end of 2008, Euribor rates continued to stand above the policy rate, eg the one-year rate at 3.0 % (Chart 4).

Cyprus and Malta joined the euro area at the beginning of 2008. At the same time, the central banks of Cyprus and Malta became full members of the Eurosystem.

There were some pressures on the exchange rates of certain currencies belonging to the exchange rate mechanism ERM II as the financial market crisis intensified in autumn. However, these currencies stayed within their fluctuation bands. The currencies belonging to the ERM II throughout the year were those of Denmark, Estonia, Latvia, Lithuania and Slovakia. In July 2008, the heads of state or government and the ministers of finance of the EU member states concluded that Slovakia met the economic and legal criteria applicable to the adoption of the euro, with the effect that Slovakia joined the euro area, as of 2009. The ERM II central rate of the Slovakian koruna was accepted as the euro conversion rate.

### The Governing Council's statements on other economic policy issues

As the financial market crisis intensified, the Governing Council emphasised that all parties concerned should seek to pave the way for a sustainable economic recovery. According to the Governing Council, it was paramount to pursue disciplined macroeconomic policies focusing on the medium term. The Governing Council recommended that governments would implement the measures they had announced to support the functioning of the financial markets with determination and without delay. At the same time, banks should take governments' support measures fully into account in their activities. This would promote the restoration of confidence in the financial system and prevent the emergence of constraints into the supply of loans to companies and households.

In the course of the year, the Governing Council also regularly addressed euro area countries' fiscal policies and stressed the necessity of structural reforms. The state of public finances began to deteriorate rapidly in many euro area member states as the impacts of the financial market crisis were channelled into the real economy. The Governing Council considered it crucial that fiscal policy be disciplined, and conducted with adherence to the medium term perspective. The general public would have to be able to rely on the sustainability of public finances also during these challenging times. Furthermore, the decision-making mechanism of the EU's fiscal policy based on rules would have to be applied as a whole while maintaining its credibility. According to the view of the Governing Council, the provisions of the Treaty of Nice and the Stability and Growth Pact allow for sufficient flexibility. The Governing Council highlighted that the automatic stabilisers of public finances would provide material support for the weakening economy of the euro area. In addition, the Governing Council stated that, to the extent that member states had leeway, they could seek to support their economy with timely, targeted and temporary measures.

The Governing Council considered that the weak present state of the economy and uncertainty related to the prospects required significant adaptability and flexibility from the euro area economy. According to the Governing Council, reforms in the commodities markets might increase competition and speed up structural reform of the economy. The Governing Council found it particularly important that obstacles to competition are removed from the services sector, different sections of the food supply chain and the energy sector. Furthermore, a reform of the labour markets could promote appropriate wage formation and labour mobility across sectors and regions. In particular reforms promoting employment and investments in education and encouraging the development of professional skills, innovation and efficiency would support the growth of the economy and real income in the long term.

The Governing Council highlighted that implementation of the required reforms should be initiated in different countries in accordance with the principles of open market economy based on free competition and making use of the benefits of increasing international trade and integration of markets.

### The Bank of Finland and economic policy in Finland

Growth of the Finnish economy slowed down in 2008. In the early part of the year, as expected, growth continued more subdued than in 2007, but in autumn, the emergence of a crisis in the international financial markets and the resulting rapid deterioration of global economic prospects brought growth to a halt.

As usual, the Bank of Finland published two macroeconomic forecasts for Finland, one in spring and the other in autumn. In addition, at the end of the year an exceptional revision to the forecast was published.

Due to protraction of the financial market disturbance, it was emphasised that both the spring and autumn forecasts included an exceptionally high degree of uncertainty. At the time of

publication of the autumn forecast, a chain of events was put to motion, which seemed to realise even the gloomiest risk scenarios. The financial market disruption deepened into a widespread financial crisis, which in light of available indicator data also extended very rapidly to real economic developments. Similarly to many international forecasters, the Bank of Finland also quickly decided to revise its forecast in light of the new situation. In its forecast revision published at the beginning of December, the Bank of Finland estimated that GDP growth in 2008 would only be 2.1% and in 2009 it would contract by  $\frac{1}{2}$ %.

The dampening of growth in the course of 2008 was due to a number of factors. Residential construction investments continued on the downward path that began in 2007 and also other building activity began to dampen in the second half of the year. The worldwide halt of investments also had an impact on Finnish exports consisting to a large degree of investment goods. In the second year half, exports contracted markedly. Domestic consumption continued to grow in the first half of the year, but it slowed down, too, in the course of the year. Both household and business confidence sunk towards the end of the year to lows seen in the depression of the 1990s as the financial market crisis deepened and economic growth slowed down materially in different areas of the world economy.

The Finnish current account surplus contracted in 2008. It is also forecasted to decrease further in the next few years.

This is because goods exports grow more weakly than imports, and on the other hand, the terms of trade are still constantly deteriorating.

Extended improvement of the employment rate peaked in 2008. Even at the beginning of the year, the labour markets remained tight despite unemployment exceeding 6% of the labour force. This indicated the existence of matching problems. Towards the end of the year, employment growth and decrease of unemployment stopped due to weaker economic development. Employment is expected to decrease faster than the increase in unemployment in the next few years, particularly due to a decrease in the labour participation rate of the elderly. In the longer term, the reduction in the labour force due to aging will restrict the growth of the GDP. Therefore, the Bank of Finland continues to consider it important that taxation policy support the supply of labour. However, tax reductions should not undermine the sustainability of public finances. Therefore, mechanisms keeping public expenditures in check are still needed in the future.

Wage earners' income increased in 2008 at a rate of over 5% in accordance with the wage agreements made in the previous year. However, the increase in real income remained at the same level as in the previous years, at about 1½% due to acceleration in inflation. Nevertheless, the growth rate of real income was faster than productivity growth, which reached a modest level of about 1% in 2008. Wage increases in the public sector on average were higher than in the private sector. The Bank of Finland emphasised the need to improve the productivity of labour in public services in order that they could be guaranteed without compromising the balance of public finances.

According to the view of the Bank of Finland, local agreements adopted increasingly in collective wage agreements improve the conditions for growth in both employment and labour productivity. Particularly due to the rapid change of circumstances reflecting global developments, local agreements improve the ability of companies and the entire economy to adapt to change. However, the coordination of wage increases at the macroeconomic level continues to be important in order to ensure solid employment and price stability.

Inflation rose due to increasing world market prices for energy and food to an exceptionally high level in 2008. The Harmonized Index of Consumer Prices rose on average by 3.9% during the

The Governor of the Bank of Finland reports on the economic outlook and the state of Finland's banking system at regular press conferences.



year. Food prices increased on average by almost 8% and energy by over 13%. The increase of service prices rose to almost 4%. The price increases also reflected domestic wage developments. The rate of growth of wages and unit labour costs in Finland in 2008 was rapid in comparison to the developments in many other countries. The prices of oil and other commodities began to decline steeply as the global economic situation worsened in the second half of 2008, which was also channelled to consumer prices, particularly through the prices of transport fuels. Despite the slowdown, inflation in Finland at the end of 2008 continued to be clearly above the euro area average. The Bank of Finland emphasised that the high nominal wage increases in the previous wage bargaining round should not become the standard for future agreements, particularly in the context of deteriorating economic developments.

#### Research

The Bank of Finland's research activities serve to enhance the Bank's policy preparation, develop its own activities and improve its external influence. The aim is to meet top international standards in areas of research of key importance to the Bank. This ensures that the Bank of Finland makes a strong contribution to the debate on economic policy and financial market developments both domestically and internationally.

#### Monetary research

Economic research carried out by the Research Unit takes place within the

framework of two programmes. The first of these focuses on the modelling of monetary policy, while the second one focuses on the future of the financial services sector. The work carried out in these research programmes is initially made public in the form of discussion papers, totalling approximately 30 such reports in 2008. In 2008, discussion on economic policy was suffused by the global financial crisis, which also had an impact on the short-term focus areas in research activities. The crisis has further highlighted the importance of monetary analysis from the viewpoint of macroeconomic stability. However, research operations had no direct involvement in the monitoring and management of the crisis.

In the modelling of monetary policy, research was geared towards the influences of imperfections in the financial markets and formation of expectations on the cyclical fluctuations of the economy. The programme looked into eg bank lending in different cyclical phases and the macroeconomic impacts of the timing of oil supply shocks measured with the help of financial market information. The research findings on the one hand support the assumption on a so-called institutional memory in banks' lending policy, according to which banks loosen their lending after a crisis. On the other hand, research findings support the view that oil supply shocks have accelerated inflation in Finland in the last ten years, but the impacts of supply shocks on gross domestic product have remained unclear. Furthermore, projects within the

macro programme looked into the characteristics of regime-switching interest rate rules, when the inflation target varies over time, as well as into the impacts of population ageing on the sustainability of public finances in a small open economy.

The research project aimed at reforming the Bank's forecast and simulation model continued in 2008 and proceeded to the model estimation phase. The functionalities of the model have been studied by simulating a model version adapted to Finnish macroeconomic data. The objective of the project is to build a modern macromodel suited to the identification of shocks affecting cyclical fluctuations of the economy. The model is also used in analysing the economic impacts of imperfections within the financial markets and alternative mechanisms for the formation of expectations.

An extensive joint research project of the Eurosystem central banks aimed at exploring the interdependency of wage formation and firms' pricing behaviour was completed in 2008. The project makes use of extensive micro and macroeconomic data to find out whether the relative proportion of wages in firms' production costs has an impact on how often companies change their output prices. The Bank of Finland prepared two research reports for the network, which are published along with the network's other studies in the ECB's working paper series.

Key themes in the research programme geared to analysing the riskbearing capacity of the financial and banking sector, financial market structures, innovations and the efficiency and competitiveness of financial markets as well as an analysis of the impacts of legislation and other regulation on the financial markets.

Research projects under the programme explored, with help of simulation models, the spread of financial crises in interbank money markets in Finland, and as an individual case, the reasons behind the bankruptcy of the Northern Rock bank Great Britain. According to the findings, the statistical probability, based on data up to 2007, of a macroeconomically significant shock in the interbank markets in Finland has been fairly low in recent years. The programme also looked into a stress testing model of Basel II capital adequacy regulations. In the model, banks' credit risks on corporate loans are modelled with macroeconomic variables. Projects under the financial market programme also looked into the integration of the European retail payment system from the Single Euro Payments Area point of view, impacts of competition between banks on collateral policies applied to loans granted by them, and the combined effects of Basel II regulations on banks minimum capital requirement calculation and reporting obligations on banks' risk taking incentives in the context of imperfect competition in the banking markets.

#### Research on economies in transition

The research efforts of the Institute for Economies in Transition (BOFIT) mainly

consist of applied macroeconomics with a focus on monetary and currency policy issues. The primary target countries are Russia and China, although many research settings require the use of more extensive comparative data.

In the operations of the unit, research forms the basis for monitoring and expert activities, and these, in turn, support the research. Initially, the studies are published as the unit's own discussion papers. In 2008, 31 discussion papers were published. In addition to the effort of the unit's own researchers, the series includes articles by visiting researches and sometimes studies presented in the unit's seminars and workshops.

In 2008, efforts by the unit's own researchers and cooperation partners

were combined in a project on Russia and China's long-term growth opportunities. Another main point of interest was the Russian banking system, particularly risk taking by banks. The micro-level data used as the basis of this work was received through international cooperation and partly also with the contribution of the Russian central bank. This research branch, which generated a significant number of research papers, proved unexpectedly topical as the intensified global financial crisis also spread to Russia and, via the financial system, caused a slowdown, possibly even bringing economic growth to a total standstill there as well. In assessing the impact of the financial crisis on the Chinese economy, one has been able to partially rely on previous and also





ongoing study on the Chinese monetary economy, currency questions in particular.

Another channel for extension of the international crisis to the target countries was through the prices of primary commodities – with respect to Russia, through oil in particular. Hence, previous and ongoing research and analysis by BOFIT targeting the dependency of Russia's exports on commodities and particularly energy exports proved particularly topical.

In the review year, reporting was completed on trade between Finland and Russia, which attracted a great deal of interest and was based on unique data compiled as a cooperative effort by various authorities.

#### Scientific meetings

As in previous years, the Bank's research units organised a number of international scientific meetings relevant to their field of research. In May, an international conference was arranged in cooperation with Simon Gilchrist (Boston University) on the modelling of financial markets in dynamic macromodels. BOFIT's already traditional Emerging Markets Workshop was also held in the same month. In October, the ninth annual researcher meeting was held together with the CEPR (Centre for European Policy Research). Its topics were innovations and immaterial property rights in the financial services sector.

### **Banking Operations**

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

### The Eurosystem's monetary policy operations under pressure for change

For an effective implementation of monetary policy in the euro area, it is necessary that the policy-rate decisions by the Governing Council of the European Central Bank be reflected in market rates, and subsequently in the activities of economic agents, and thereby impact price developments. The central bank seeks to steer especially short-term money market rates by regulating the terms, ie the price, volume and timing, of central bank funds needed by banks. The banking system is in constant need of central bank refinancing, for example, for settling its mutual payments and meeting the public's demand for cash.

Market operations play a pivotal role in the operational framework for the monetary policy of the Eurosystem. These operations are supplemented by the standing facilities offered to credit institutions and the minimum reserves that credit institutions are required to hold. Credit institutions are provided with central bank refinancing via main refinancing operations (MROs) with a maturity of one week and longer-term refinancing operations (LTROs), normally with a maturity of three months. These will be supplemented by fine-tuning operations, whenever required. Market operations are based on the decisions taken by the Governing Council of the ECB and implemented by

national central banks, under the direction of the Executive Board of the ECB. The standing facilities, in turn, provide credit institutions with an opportunity to smooth the daily fluctuations in their financial needs by placing overnight deposits with the central bank or obtaining overnight liquidity. The interest rates for these marginal lending and deposit facilities provide a ceiling and a floor, 'the corridor', for the shortest money market rates. The primary purpose of the minimum reserve system is to stabilise the fluctuations of money market rates and to create demand for central bank money.

The financial market dislocations that started from the US mortgage credit market also led to turmoil in the euro area money market in August 2007. In autumn 2008, the situation transformed into an acute crisis in the global money market; unprecedented to the Eurosystem. Increased loss of confidence towards and among banks led to a marked slowdown in the interbank credit market and a clear contraction in the provision of external funding for banks. Accordingly, the transmission mechanism of the money market, which is key to effective monetary policy implementation, was facing major disruption. Under these exceptional circumstances, the European Central Bank first addressed the banks' acute liquidity shortage by increasing the volume of short-term central bank refinancing. In addition, it fostered the effectiveness of its interestrate decisions by changing the procedures applied to market operations, increasing

the provision of central bank refinancing and expanding the range of assets eligible as collateral. Consequently, amid ongoing crisis, the European Central Bank put particular emphasis on safeguarding the liquidity of the banking system over a longer term.

### Maturity of market operations was lengthened in support of markets

In spring 2008, the ECB continued and partly broadened its actions adopted in the previous autumn to alleviate money market tensions. In the main refinancing operations (MROs), the ECB continued its frontloading policy in liquidity allocation. Consequently, the amount of liquidity provided to fulfil the minimum reserve requirements was more abundant earlier in the maintenance period, while the supply of liquidity was correspondingly reduced towards the end of the maintenance period, thus allowing for the average fulfilment of the aggregate minimum reserves. In order for the average supply of liquidity to meet the required minimum reserves as closely as possible, the ECB normally conducted an overnight fine-tuning operation on the last day of the maintenance period, which enabled to achieve the objective. Adjusting the supply of liquidity also aimed at steering the shortest money market interest rates closer to the policy rate, as the market turmoil had increased volatility in these rates.

With heightening financial market tensions, the ECB adjusted the liquidity supply towards longer-term refinancing, which was in line with stronger demand from banks. In the previous year, at the onset of the financial market turmoil, supplementary three-month refinancing operations had already been carried out. The conduct of supplementary operations was continued and expanded in 2008 (Chart 5). In April, the provision of Eurosystem refinancing was increased through the launch of a six-month operation, and a special term refinancing operation with a maturity equal to the length of the maintenance period was also introduced in the autumn. The regular conduct of supplementary operations was extended into 2009.

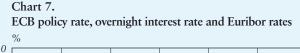
At the end of the year under review, the share of longer-term refinancing operations (LTROs) had peaked at about 75% of total refinancing, with the share of MROs with a maturity of one week contracting to some 25%. Prior to the market turbulence, the ratio between

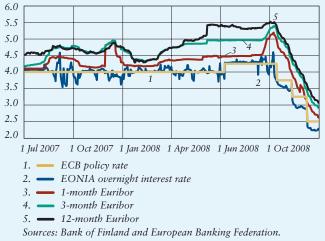


short-term and long-term refinancing had been converse, since three-month refinancing operations had been conducted only once a month to supplement MROs with a weekly frequency.



Sources: European Banking Federation and Bank of Finland calculations.





### Money market tensions heightened in September

Strong money market tensions continued, which hampered the pass-through of monetary policy decisions to the general level of interest rates. The mutual trust between market participants had been shaken since August 2007 amid banks' weaker financial results, reflecting losses and writedowns following the crash of the mortgage-backed securities market. The distrust did not fade in 2008, and bank profits continued to deteriorate both in the euro area and elsewhere. Uncertainty was particularly amplified by the British government's takeover of the mortgage bank Northern Rock in February and by the difficulties of the US Bear Sterns in March. The situation in the money market worsened in mid-September, developing into a global financial market crisis, following the failure of Lehman Brothers and a new wave of uncertainty triggered by severe problems among US mortgage lenders.

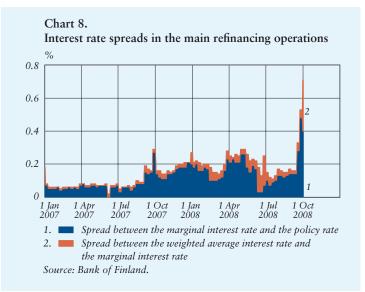
The confidence gap between market participants led to an aversion of counterparty risks. This was reflected, for instance, in exceptionally wide and protracted spreads between secured and unsecured market rates (Chart 6). The spreads between secured and unsecured interest rates for the longest maturities were at their widest more than 2 percentage points in October, when the loss of confidence caused unsecured rates to increase at the same time as expectations for a rate cut exerted downward pressure on secured rates. The Euribor reference rates, which depict developments in unsecured rates, rose accordingly, thereby diverting even more from the ECB's policy rate (Chart 7). Lower activity on the part of money market funds also contributed to constraining money market trading. In the autumn, money market activity was also hampered for the longest maturity rates, as well as for the shortest maturity rates, at which Eurosystem market operations are normally conducted. Further uncertainty was created by the approaching year-end, when the availability of financing traditionally tightens as a reflection of lower bank activity at the close of the accounting period.

The spreads between the ECB's policy rate and the short-term money market rates, which are often monitored for the transmission of monetary policy, widened appreciably at the beginning of October, when the overnight rate peaked at 0.35 percentage point above the policy rate (Chart 7). In seeking to ensure their access to central bank refinancing, the banks also raised their interest-rate bids to record highs in the main refinancing operations (MROs). In October, the lowest interest rate at which the bids submitted are accepted - the marginal interest rate - rose at its highest by almost 0.50 percentage point and the weighted average interest rate of accepted bids by more than 0.70 percentage point above the policy rate, ie the minimum bid rate on the MROs (Chart 8). In the early part of the year, the marginal interest rate was 0.15-0.25 percentage point above the policy rate, as opposed to the pre-crisis spread of less than 0.10 percentage point.

### ECB ensured access to liquidity in the money market crisis

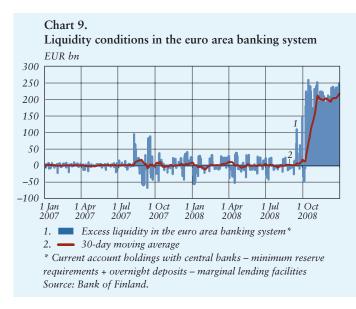
In autumn 2008, the Governing Council of the ECB eased the stance of monetary policy by lowering the policy rates by a total of 1.75 percentage points in the last quarter of the year. As part of an historic, coordinated interest rate cut by the main central banks, the Governing Council of the ECB decided on a first rate cut of 0.50 percentage point at its extraordinary meeting on 8 October.

In order to ensure the banking system's access to liquidity in the situation that had turned into a money market crisis and to strengthen monetary policy signalling, the Governing Council of the ECB decided, in connection with the October rate cut, that the MROs would be conducted as fixed-rate tenders instead of the earlier variable rate tender procedure. It was also decided that the banks' fixed-rate bids would be satisfied



with a full allotment. In the same context, the corridor formed by the marginal lending facility and the deposit facility around the policy rate was reduced from the earlier 2 percentage points to 1 percentage point, with a view to facilitating the banks' liquidity management and supporting the stability of the overnight interest rate. The wider corridor was restored by a decision taken in December and starting from the maintenance period commencing in January 2009. This was aimed at providing incentives to the banking system for a market-oriented liquidity balancing, as the situation had slightly calmed down.

With the deepening of the financial market crisis, it was decided that all longer-term refinancing operations (LTROs) would also be conducted as fixed-rate tenders with full allotment, starting from mid-October. The LTROs were carried out at the main refinancing



rate for the rest of the year. An announcement was made that the fixedrate tender procedure would continue at least in the first quarter of 2009.

The change in the tender procedure and the strong growth in liquidity demand increased substantially the volume of central bank refinancing offered to banks by the ECB. In the last quarter of the year, the volume of liquidity in excess of the banking system's minimum reserve requirement expanded to more than EUR 200 billion (Chart 9). This led to the fulfilment of banks' reserve requirements at an early stage of the maintenance period and to a corresponding increase in overnight deposits. Overnight deposits rose to a peak of almost EUR 300 billion, compared to maximum overnight deposits of only some billions of euro in previous years and an ordinary amount of some dozens of millions of euro. (Chart 5). Abundant liquidity caused the overnight interest rate to fall clearly below the policy rate, as opposed to mid-October, when the overnight interest rate had risen considerably higher than the policy rate in response to the aggravation of the financial market crisis (Chart 7).

At the time of the money market paralysis, at the end of September and the beginning of October, the ECB frequently also carried out liquidityabsorbing fine-tuning operations within the maintenance period; thereby offering banks an opportunity of disposing of their excess liquidity. Flexibility was also added by granting access to fine-tuning operations, from 6 October, to all counterparties eligible for participation in standard tenders, provided that they fulfilled certain selection criteria specified by national central banks for fine-tuning operations. Subsequently, all Bank of Finland's monetary policy counterparties also had access to fine-tuning operations. Fine-tuning operations carried out after this widening of the counterparty base did attract bids from more than 100 banks in the euro area, meaning that the number of the participants doubled from the first days of October. Previously, under normal circumstances, 10-30 banks had submitted their bids in ordinary fine-tuning operations. In Finland, this opportunity was seized by a total of seven banks during the year.

Towards the end of the year, the money markets started to show signs of a recovery, as governments also stepped up their support measures. The spreads between secured and unsecured interest rates began to narrow, albeit still remaining exceptionally wide (Chart 6). Narrower spreads, abundant liquidity and expectations of a rate cut brought money market rates to a gradual, steady decline across the entire maturity spectrum. There was also a discernible fall in Euribor rates.

### Central banks intensified their cooperation

Against the backdrop of intensified financial market disruptions, central banks increased their joint actions significantly, which also contributed to the ECB's supply of liquidity, not only in euro but also in other currencies. In December 2007, in an effort to facilitate the US dollar funding of euro area banks, the ECB had already started to carry out US dollar liquidity-providing operations with the US Federal Reserve in connection with a Term Auction Facility against euro-denominated collateral. Apart from the ECB, the US Federal Reserve launched similar operations with the Bank of England, Bank of Japan, Swiss National Bank and Bank of Canada. In mid-October, the credit operations were supplemented by US dollar-providing foreign exchange swaps. Problems encountered by euro area banks with regard to their Swiss franc funding needs were alleviated by introducing foreign exchange swaps in Swiss francs with the Swiss National Bank. In addition to these joint operations, various central banks expanded their own special measures to ensure the availability of liquidity at the same time as governments sought to contribute to ensuring banks' access to deposit and market funding by implementing guarantee and deposit insurance arrangements and launching takeovers.

## Widespread use of abundant liquidity supply

Euro area banks' participation in fixedrate market operations was very active since mid-October, as the banks sought to prepare for financing needs arising from crisis situations and end-of-year requirements. On top of this, the narrower corridor reduced the costs that excess liquidity caused to banks. As the ECB accepted all tenders with full allotment, the euro-denominated refinancing provided through Eurosystem open market operations almost doubled when it peaked in the latter part of 2008, amounting to more than EUR 800 billion at the end of the year (Chart 5). Following the switch to fixed-rate tenders, the number of banks participating in the operations increased to 600– 850 banks, compared to the maximum number of 350 banks submitting tenders in the early part of the year.

The number of refinancing operations conducted by the Eurosystem almost doubled from the previous year in the prevailing exceptional circumstances, when the supply of supplementary longer-term refinancing operations was increased and credits denominated in the US dollar and the Swiss franc were offered on a weekly basis. Almost 200 operations altogether were carried out, of which more than 100 were eurodenominated Eurosystem operations



### Chart 10. Number of operations conducted by the Eurosystem

(Chart 10). About one half of these operations were MROs with a weekly frequency and a quarter LTROs and finetuning operations.

Participation in Eurosystem refinancing operations by banks operating in Finland remained modest, as their liquidity position remained relatively good. This was also reflected in the fairly active participation in the liquidity-absorbing fine-tuning operations and in the recourse to the overnight deposit facility. In 2008, financing provided to Bank of Finland counterparties accounted for 0.3% of liquidity allocation in the MROs and for 0.4% of liquidity allocation in the LTROs. Finnish credit institutions' share represented 1.7% of the liquidityabsorbing fine-tuning operations and 0.8% of the liquidity-providing finetuning operations. Finnish banks' holdings of overnight deposits placed in the euro area were 1.1% on average, but recourse to marginal lending was only 0.01%. At the end of 2008, Finnish credit institutions' minimum reserve requirements constituted 1.7% of the total euro area minimum reserve requirement. Occasionally, participation by Bank of Finland counterparties in the operations was also more lively than usual, and during the year, a total of ten counterparties took the opportunity of submitting bids to any of the operations on offer, depending on prevailing market developments. Thirteen credit institutions in all were eligible for acting as Bank of Finland counterparties in open market operations.

# Eurosystem's operational framework functioned smoothly under stressful conditions

Despite stronger volatility in the overnight interest rate and the reduced role of this rate of interest in monetary policy implementation, the fixed-rate tender procedure with a full allotment provided a clear signal of the stance of the monetary policy. The Eurosystem's effective use of the operational framework, smooth execution of operations on a decentralised basis, as well as a wide range of counterparties and a large variety of eligible collateral enabled the implementation of monetary policy even under stressful financial market conditions.

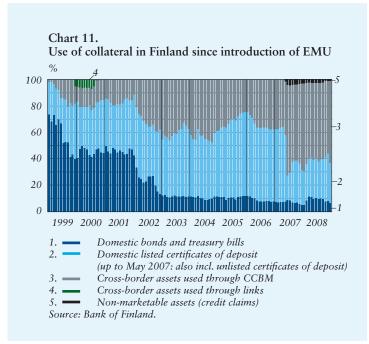
### Changes to the Eurosystem's collateral framework and use of collateral by Finnish credit institutions

In order to obtain central bank credit through monetary policy operations and as an intraday facility, credit institutions need to provide adequate collateral in cover of such credits. Securities and other asset items located in the credit institutions' own country or another Eurosystem country may be used as collateral.

Banks' increased demand for central bank credit in the euro area as a consequence of the financial market crisis was also reflected in the demand for assets eligible for collateral for central bank credit. In October 2008, with a view to ensuring the adequacy of collateral, the Governing Council of the ECB decided to expand the range of eligible assets until the end of 2009. The eligibility criteria were eased, for instance, in respect of credit rating, currency and the marketplace required from securities issued by credit institutions. Debt instruments issued by credit institutions and accepted for trading on the Short Term European Paper (STEP) market provided a significant amount of new collateral. Another new source of collateral was composed of debt instruments denominated in the US dollar, the pound sterling and the Japanese yen, as well as of BBB-rated assets. As a rule, euro-denominated debt instruments with at least a level A rating and only such debt instruments issued by credit institutions as are traded on a regulated market are accepted as collateral. Of debt instruments issued by Finnish entities, about twenty instruments issued by the government, non-financial corporations and credit institutions that met the new eligibility criteria were admitted to the extended list of collateral by the end of 2008.

The total amount of collateral assets of Bank of Finland counterparties grew considerably in 2008. There was on average EUR 15 billion worth of eligible collateral, an increase of a good EUR 5 billion on the previous year. Of all collateral, the amount actually used for collateral purposes stood at about EUR 12 billion, whereas the amount of surplus collateral reserves held by counterparties totalled EUR 3 billion. The amount of collateral grew especially towards the end of the year, when counterparties took out more central bank credit than before and also increased their surplus collateral reserves. These reserves were about EUR 1 billion up on the previous year.

In 2008, the use of cross-border collateral remained significant. Almost all Bank of Finland counterparties used crossborder collateral. As a result, cross-border collateral accounted for about 60% of the total collateral assets. Cross-border collateral assets used by Finnish counterparties were deposited in various Eurosystem countries, to which collateral assets were delivered using the Correspondent Central Banking Model (CCBM). Links between central securities depositories were not used for transferring collateral, even though it would have been possible. Finnish counterparties made only limited use of new debt instruments eligible



as collateral until the end of 2009. With regard to domestic collateral, listed certificates of deposit accounted for just under a third of the total amount of collateral assets, whereas bonds and treasury bills together represented less than 10% of the total. Non-marketable assets were also used as collateral, but their share of the total collateral value was very modest (Chart 11).

Foreign counterparties used about EUR 1.6 billion worth of debt instruments issued in Finland as collateral, which is about one half less than in the previous year. The Bank of Finland holds these collateral assets in custody for the account of other central banks on the basis of a 'correspondent central bank agreement'.

In 2008, the Governing Council of the ECB made another decision concerning the collateral framework. As a result of the Eurosystem's regular review of the risk control measures for central bank credit operations, it was decided to change the valuation haircuts applied to certain eligible assets and to impose additional limitations on the collateral use of asset-backed securities as from 1 February 2009. The valuation haircuts applied to uncovered bonds issued by credit institutions, including certificates of deposit, were increased. Asset-backed securities were assigned a fixed, partly higher than the earlier haircut, irrespective of the coupon structure and residual maturity of the security. In addition, the collateral use of asset-backed securities was restricted in respect of counterparties who entered into a currency hedge with

the issuer or guarantor of the asset-backed security or provided liquidity support of more than 20% of the remaining principal amount of the asset-backed security. For asset-backed securities to be eligible as collateral, it was further required that a public external credit assessment institution provide a comprehensive analysis of the rationale for its ratings, and an update of this data, at least quarterly.

In July 2008, the Governing Council of the ECB decided to launch the CCBM2 (Collateral Central Bank Management) project, under which the central banks of Belgium and the Netherlands, Nationale Bank van België/Banque Nationale de Belgique and De Nederlandsche Bank, were assigned to develop a single platform for Eurosystem collateral management. The CCBM2 system is set to bring greater efficiency to collateral management, as the participating central banks are to centralise the management of both domestic and cross-border collateral, in respect of all eligible assets, on a single technical platform, and to operate on the basis of a harmonised set of procedures in the future. Despite technical consolidation, national central banks will continue to provide collateral management services to their own customers.

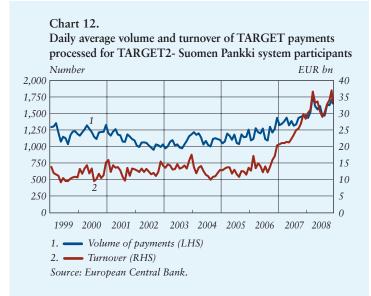
#### **Payments**

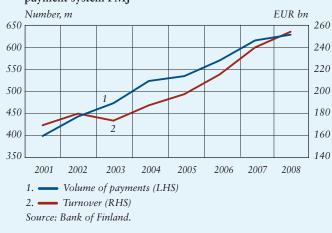
The Eurosystem conducts its monetary policy operations through the TARGET payment system (Trans-European Automated Real-time Gross settlement Express Transfer system). TARGET also plays a major role in the execution of large-value payments, and all key payment systems use TARGET for settlement purposes.

The decentralised first-generation system of TARGET was introduced in 1999. A newer, single technical infrastructure, the TARGET2 system, in turn, went live on 19 November 2007 with the migration of the first group of central banks (Germany, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria and Slovenia) and their participants. In connection with the introduction, services paid in central bank money, pricing and other terms were harmonised and banks' potential to manage liquidity improved. The Bank of Finland, with its counterparties, migrated successfully to the TARGET2 system on 18 February 2008 in the second migration group together with Belgium, Ireland, Spain, France, the Netherlands and Portugal. Meanwhile, the Bank of Finland abandoned its old BoF-RTGS system. The last group of central banks (Denmark, Estonia, Greece, Italy, Poland and the European Central Bank) changed over to TARGET2 on 19 May 2008. The TARGET2 system is subject to ongoing, collective development among its users, and the first release of a new version took place as early as 17 November 2008.

In 2008, a total of 784 direct participants joined the TARGET2 system, which is less than in the case of the earlier TARGET system (1,072). One reason for the lower number of participants is that multinational banks are able to centralise their liquidity management within TARGET2. The daily average volume of payments processed at the level of the TARGET2 system as a whole in 2008 totalled 370,000 payments, with an aggregate value of about EUR 2,667 billion.

Although TARGET2 is a technically centralised infrastructure, the TARGET payment systems of national central





Volume and turnover of payments processed in the interbank payment system PMJ

banks are legally independent. The name of the Bank of Finland's payment system is TARGET2-Suomen Pankki, and comprises 19 direct participants. In 2008, the TARGET2-Suomen Pankki system executed on average 1,590 payments per day, with an aggregate value of about EUR 33 billion. The average size of cross-border payments was around EUR 19 million, and there were on average 897 payments per day. TARGET payments in terms of volume and turnover have grown year after year.

The new TARGET2 system enabled the Bank of Finland to improve its customer service and monitoring of payment traffic, as well as to enhance its contingency planning for various disruptive incidents. The availability of the new TARGET2 system in 2008, though, was better than ever for the old TARGET system.

The payment system of banks operating in Finland (PMJ) processes wages and salaries, pension payments, credit transfers and card payments, on which the banks provide information to each other as batch transfers. Upon the Bank of Finland's migration to TARGET2, the PMJ was also connected to TARGET2. On the basis of orders received from PMJ participants, the Bank of Finland performs a simultaneous and multilateral settlement of the relevant payments on the participants' TARGET2 accounts, twice a day, once during daytime and once at night. There are 12 PMJ participants. The Single Euro Payments Area (SEPA) means that the PMJ service is approaching the end of its

Chart13.

life cycle. Some of the PMJ participants have already transferred their transactions for entry into a new service, STEP2 SEPA Credit Transfer, offered by the Euro Banking Association (EBA), a consortium of banks for euro payment transmission.

#### Bank of Finland investment activities

### Bank of Finland financial assets and financial asset management in 2008

The Bank of Finland's financial assets comprise foreign reserves (incl. gold and items in Special Drawing Rights, SDRs) and claims denominated in euro. At the end of 2008, the Bank's financial assets totalled approximately EUR 14,677 million. Euro-denominated claims accounted for slightly over half of the financial assets (Table 1). The Bank of Finland's gold reserves were kept unchanged at 49 tons.

The investment environment in 2008 was exceptional. Price fluctuations for a number of investment assets were large and secondary market liquidity was very low. Nevertheless, the good average credit ratings for the Bank of Finland's investments and a comprehensive risk management system enabled to conclude a financially successful year of operations.

The Bank's investment activities were developed, for example, on the basis of recommendations derived from external assessments undertaken in 2007 of investment activities and risk management. The Bank of Finland's Board made a decision on segregating the risk control function from the Banking Operations department and placing it under the Administration department. The aim of this change is to increase the independence of risk control vis-à-vis investment activities. A new risk control unit commenced operations on 1 January 2009. Changes were also made to the decision-making levels of investment activities and risk management. As a consequence, senior management was assigned an enhanced role in decision making concerning investment activities.

#### Objectives for investment activities

The objectives set for the Bank of Finland's investment activities are security, liquidity and return. The Bank of Finland invests in secure and liquid assets to ensure that the assets can be converted into cash quickly whenever needed and that they are available to be used as buffers in different crisis situations. At the same time, however, the Bank bears responsibility for maintaining the value of its assets, which also requires

#### Table 1.

Distribution of Bank of Finland's financial assets by currency, 31 Dec 2008

	%
US dollar	19
Pound sterling	12
Japanese yen	3
Swiss franc	3
Euro	55
Gold	7
SDR	1

Source: Bank of Finland.

Table 2a. Return on the Bank of Finland financial assets in 2008	ďs
	%
Return on financial assets (excl. gold and items in SDRs)	6.20
Interest rate return Exchange rate change	7.65 -1.45

Source: Bank of Finland.

#### Table 2b.

Interest rate return by currency

	%
US dollar	7.76
Pound sterling	9.95
Japanese yen	1.69
Swiss franc	5.68
Euro	7.55
Gold	0.32

Source: Bank of Finland.

#### Table 3.

Distribution of the Bank of Finland's credit portfolio by credit rating, as of 31 Dec 2008

	%
AAA	77.08
AA+	5.10
AA	6.86
AA-	4.50
A+	3.98
Α	2.23
A–	0.08
BBB+	0.05
BBB	0.12

Source: Bank of Finland.

that the assets generate reasonable return (Tables 2a and 2b). The Bank of Finland determines a strategic benchmark for its long-term investment portfolio, aiming at optimal return/risk ratio, within security and liquidity constraints.

#### Investments

The bulk of the Bank of Finland's financial assets is invested in debt securities issued by well-rated governments in their respective currencies (Chart 14). Approximately half of the financial assets can be invested in debt securities issued by entities operating in developed industrial countries and certain supranational organisations (credit portfolio). The aim of the credit portfolio is to generate additional return and a better return/risk ratio by broadening the range of investment types to investments exposed to credit risk. In managing credit risk, one of the most essential principles is to determine the minimum credit rating required from issuers, and to reach effective diversification. The average credit rating of issuers of debt securities in the credit portfolio is AAA (Table 3).

In investing its gold reserves, the Bank of Finland has made use of unsecured gold deposits similar to money market deposits, and gold interest rate swaps.

#### Active management

Active investment activities refer to the possibility of portfolio managers to deviate from the benchmark and thereby generate return higher than the benchmark. The Bank of Finland has defined a profit target and risk limits for active investment activities.

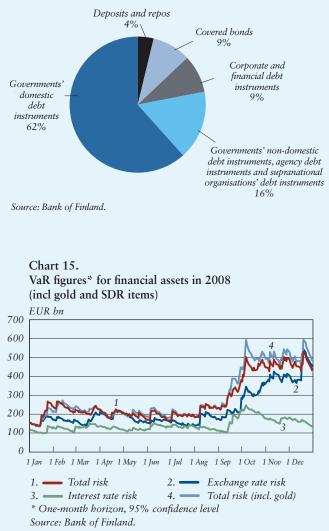
Portfolio managers seek higher return by forming a view on trends on the interest rate market, the development of interest rate spreads, and credit market developments. Turbulence in the international financial markets continued in 2008, deepening and assuming unprecedented dimensions in the course of the autumn. In such an uncertain market situation, the Bank's active investment activities focused on products and debt securities with a good liquidity profile. As well as generating additional return, active investment activities aim at maintaining contacts with the financial markets and market participants. This aspect became increasingly important in 2008. Active presence on relevant investment markets also ensures the upkeep and further development of portfolio managers' expertise and professional skills.

### Investment risks and risk management

As with all institutions engaged in investment activities, the Bank of Finland's own actions are subject to various risks. The main risks are market risk, credit risk, liquidity risk and operational risk.

The Bank of Finland's risk management is based on predefined methods used to identify, measure and limit risk. In practice, risk management is conducted with the help of a well-defined investment policy and a detailed limit system, whose compliance is subject to continuous monitoring. The Bank of Finland's Board accepts the principles for investment risk management, as well as the currency distribution of the Bank's financial assets, the levels of interest rate and credit risk and the investments permitted. The





Board member responsible for investment activities implements and gives tangible form to the Board's decisions. Responsibility for monitoring compliance with the risk limits and establishing detailed limits for the practical investment activities lies at department level. A risk control unit, separate from the portfolio management function, is responsible for the risk management of investment activities and monitoring compliance with the risk limits, the setting of benchmark portfolios and the calculation of return. Organisationally, the unit is segregated from investment activities. In addition, the Bank of Finland has a separate, regularly-convening risk committee, charged with the task of independently assessing and controlling the risks inherent in investment activities and the risk management function.

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

Management of the foreign reserves of the ECB has been distributed among the Eurosystem national central banks. The foreign reserves managed on behalf of the ECB comprise assets denominated in US dollars and Japanese yen as well as gold. Foreign reserve management is based on the premise that each national central bank may as a rule manage only one portfolio. The Bank of Finland manages part of the ECB's reserves denominated in Japanese yen. Since any foreign exchange intervention by the Eurosystem is conducted using the assets of the ECB, security and liquidity form the basic requirements for the investment of the foreign reserves. The currency distribution of invested reserves is kept fixed. The ECB sets benchmark portfolios for the currencies in the reserves. The ECB monitors continuously the risks and returns on its foreign reserves. The share of the reserves denominated in yen and managed by the Bank of Finland on behalf of the ECB amounted to about EUR 717 million. The ECB's Annual Report provides additional information on the management of its foreign reserves.

### Financial markets and statistics

## Stability and efficiency of the financial system

Unease in the markets culminated in 2008 in a global crisis, posing a threat to financial intermediation. This was clearly reflected in the operations of the Bank of Finland as the promoter of a reliable and efficient financial system. A rapid increase in the amount of payment defaults by households with weak creditworthiness in the US housing loan markets had already sparked unease in 2007. Previous factors contributing to the emergence of the crisis included a rapid growth of indebtedness, aspiration by market participants of high returns by assuming unreasonable, mispriced risks, and the increasing channelling of risks outside banks' balance sheets and the supervision by authorities.

The Bank of Finland publishes its assessment of financial stability twice a year. These are a means of informing financial market participants, other authorities and the general public of risks in the financial system and threats to stability as well as presenting recommendations to prevent problems. In its stability assessment published in May 2008, the Bank of Finland stated the financial market turmoil would continue and that there were no clear indications of the situation settling down. Stability in Finland was considered to be good relative to the international situation, but it was pointed out that turmoil in foreign markets could have unexpected ramifications.

In autumn 2008, distrust in the international financial markets rapidly worsened, leading to a swift contraction in short-term interbank lending. In a press release in October, the Bank of Finland considered that the profitability and capital adequacy of the Finnish banking system were at robust levels and banks' funding with respect to deposits functioned well. At the same time, however, attention was drawn to the tightness of the interbank markets that had made the situation difficult even for banks with a good capital position.

In its stability assessment of December 2008, the Bank of Finland stated that the global financial market crisis had proven longer and stronger than previously estimated. A particular cause for concern was the banks' need to strengthen their balance sheets due to the crisis could hinder the availability of finance to corporations and households. This type of credit crunch was feared to have a particularly negative impact on the development of the real economy. Among the near-term threats in the financial markets, concurrent protraction of the financial crisis and weakening real economic developments was seen as the worst scenario.

In its stability report, the Bank of Finland reminded the public that Finland was not isolated from the international crisis, even though the domestic financial system was considered stable and capable of withstanding the expected recession. The Finnish banking sector was assessed as having suffered less than banks on an international scale. According to the Bank of Finland, banks' market funding had become more difficult also in Finland, but the liquidity situation had been successfully kept broadly favourable.

As the operation of the financial system infrastructure has been mainly beyond reproach during the turmoil, the crisis has not hampered the operability of domestic payment and settlement systems.

In addition to a protraction of the financial market crisis, the main threats identified to the Finnish financial system in 2009 were considered to be a realisation of banks financing risks, harder-than-expected realisation of Nordic banks' risks in the Baltics, operational disruptions in payment and settlement systems and data security risks.

Integration of financial markets has continued despite the crisis. An international service<sup>1</sup> replacing the present interbank domestic payment system was launched on 12 December 2008. The Finnish central securities depositary, APK, became part of the European Euroclear Group on 30 October 2008. The Helsinki Stock Exchange operating as part of the international Nasdaq-OMX Group has announced it would gradually shift the clearing of stock exchange transaction to a foreign central counterparty in 2009. These changes will have a significant impact on the infrastructure of the financial markets and the pertinent general oversight by the Bank of Finland. It is too soon yet to make estimates about the impacts of the financial market disturbances to the

introduction of the Single Euro Payments Area (SEPA).

In its stability assessment, the Bank of Finland made several recommendations on financial system policy. The assessment highlighted the need to develop international cooperation between authorities and increase the analysis of risks related to the entire financial system through macroprudential supervision by central banks. In addition, it was pointed out that EU legislation does not provide authorities with sufficient tools to intervene in the operation of problem banks soon enough and that the EU deposit guarantee system is in urgent need of a total reform.

In addition to more intense than usual monitoring and review of the financial markets, the Bank of Finland has promoted cooperation between market participants and the establishment of an effective and modern infrastructure. To that end, the Bank arranged the second payment forum seminar on 29 May 2008. Different service models were developed for the payment and settlement systems analysis tool, the BoF-PSS2 simulator. The simulator is used by central banks and research institutions in 45 countries around the world.

#### Co-operation with authorities

Due to the global financial crisis, participation in the review year by the Bank of Finland in domestic and international cooperation with authorities focused on measures aimed at stabilising the operation of the financial system.

<sup>&</sup>lt;sup>1</sup> STEP2 is a payment traffic system providing European-wide services maintained by EBA Clearing, which many Finnish banks also intend to use in the transmission of domestic payments in the future.

As the crisis reached a head in autumn 2008 it made the authorities in many countries to take measures aimed at maintaining the operability of the financial system and at preventing the negative impacts of deleveraging in the financial sector on developments in the real economy. As part of the Eurosystem, the Bank of Finland has participated in operations by central banks to compensate for the reduction of market liquidity due to distrust between banks by targeting short-term finance to banks (see chapter Banking Operations). In addition, the Bank of Finland has contributed to the preparation of support measures by governments within the Eurosystem, as well as in discussions on measures to be taken in Finland.

In the autumn, the Ecofin Council recommended that the deposit guarantee be increased at least to EUR 50,000. In addition, euro area countries and other EU countries made a declaration on joint temporary measures to restore financial stability. The declaration recommended measures to support banks' liquidity, alleviate banks' financing problems and support banks' capital adequacy. In addition, it was emphasised that it should be ensured that banks suffering from capital adequacy problems but playing a key role in the financial system could be recapitalised and revived in different countries. According to the declaration, problem banks should be treated in such a manner as to safeguard the best interest of taxpayers and ensure that the owners and management of the banks are held accountable.

In Finland, the Ministry of Finance announced a plan based on the EU countries' declaration to support the financial system if necessary. The planned measures comprised government guarantees to new funds raised by Finnish banks and an opportunity for the government to make capital investments in operatively fit and financially sound Finnish banks. In December 2008, the Parliament approved a measure, whereby a temporary government guarantee amounting to a maximum of EUR 50 bn could be given for bonds with a maturity of up to five years issued by operatively fit and financially sound banks. In addition approval was granted for raising the deposit guarantee to EUR 50,000.

In the wake of the global crisis, the Icelandic financial sector ended up in serious problems in the autumn, and consequently, the Icelandic supervisory authority (FME) took over the country's three largest banks. These banks engaged in extensive international operations, which is why different arrangements had to be made in many European countries to secure the claims of depositors. After the FME took over the Kaupthing bank on 9 October 2008, the Finnish Financial Supervision Authority suspended the operation of the bank's Finnish branch at the FME's consent. Three Finnish banks with the contribution of the financial market authorities agreed on a financing arrangement, enabling the repayment of deposits and interests in full to the depositors of Kaupthing's Finnish branch. In contrast to many similar cases,

#### Box 1.

#### Reform of Finland's financial supervision

The structure of supervision of the Finnish financial system underwent a thorough overhaul at the beginning of 2009, as the new financial and insurance supervisor, the Financial Supervisory Authority (FIN-FSA), began its operations. Consequently, the operations of the former financial system supervisors, the Financial Supervision Authority and the Insurance Supervision Authority ended at the end of 2008.

The final decision on the establishment of the new authority was made in December 2008, when the Act on the Financial Supervisory Authority and related Acts were adopted. However, the reform of the structure of the Finnish financial supervision had already been launched earlier. In March 2007, the Bank of Finland proposed the centralisation of supervision into a single organisation. In the spring of the same year, the Finnish Government decided in its programme that the Financial Supervision Authority and Insurance Supervisory Authority be combined into a single authority.

In February 2008, a working group established by the Ministry of Finance and the Ministry of Health and Social Affairs and lead by Minister Antti Tanskanen presented its proposal on the estab-

lishment of the Financial Supervisory Authority. Based on the suggestions of the working group, the Government put forward a proposal to the Parliament in May on legislation necessitated by the establishment of the Financial Supervisory Authority. Concurrently with the drafting of legislation, a lot of practical preparations were made during 2008 to ensure that the Financial Supervisory Authority could begin its operations with full force right from the beginning of 2009.

The structures of supervision of the financial system in Europe have changed rapidly in recent years. A key characteristic among the reforms has been a decrease in the number of the supervisory organisations. In Finland, combination of the supervisors has been justified particularly by arguments that it would ensure the quality and effectiveness of supervision, since the centralisation of supervision into a single organisation makes the best foundations for ensuring staff competence, a comprehensive assessment of the risks of the supervised entities and efficient use of supervision information.

Arguments in favour of the merger also include the cost-

efficiency of combined supervision as well as its neutrality in terms of competition and uniformity with the organisation of supervision in key foreign countries for Finland (such as other Nordic countries, Great Britain and Germany). Furthermore, the combined supervisory authority has also been considered the most efficient manner of organising supervision with respect to the flow of information in the context of crisis management and the avoidance of coordination problems. This viewpoint has been emphasised in the wake of the intensification of the global financial market crisis.

The objective of the new Financial Supervisory Authority is to ensure the stable operation of credit, insurance and pension institutions and other entities supervised by virtue of law in order to safeguard financial stability, and to promote the interests of the insured as well as general trust in the operation of the financial markets. The tasks of the Financial Supervisory Authority mainly correspond to the previous tasks of the Financial Supervision Authority and the Insurance Supervision Authority.

The Financial Supervisory Authority is independent in its decision making concerning its tasks. The operations of the Authority are steered by a Board, and the Authority is headed by the Director General. One of the five members of the Board is appointed by proposal of the Ministry of Finance, one by proposal by of the Ministry of Health and Social Affairs and one by proposal of the Bank of Finland. Two independent members are appointed to the Board. The Board and the Director General are appointed by the Parliamentary Supervisory Council, which is also to supervise the overall expediency and efficiency of the activities of the Financial Supervisory Authority and to tend to other tasks related to administration and monitoring of activities.

FIN-FSA is connected administratively with the Bank of Finland with the Board of the Bank of Finland ratifying the budget of the Financial Supervisory Authority. In order to cover costs incurred in the operations of the Authority, supervised entities are charged processing and supervision fees. Contrary to previous practice, the Bank of Finland contributes a five percent share to the costs of the Financial Supervisory Authority.

the Finnish solution was implemented without public funding. Parliament approved a government guarantee for the legal risks incurred by banks participating in the solution.

In 2008, authorities promoted the solutions of financial market supervision and crisis management in various ways. EU financial supervisors, central banks and economic and financial ministries signed a memorandum of understanding (MoU) on cross-border cooperation to ensure financial stability. The MoU improved the capability of authorities to cooperate in crisis situations and in preparing for them.

The European Commission issued a proposal in the autumn on amending capital requirements directives so as to improve, among other things, cooperation between supervisors. According to the proposal, a college of supervisors should be established for each banking group and bank operating in many countries to facilitate the exchange of information and other cooperation between the supervisors. In December, the Council of Ministers reached a political agreement on the proposed amendment. In assessing the proposed amendment, the Bank of Finland underscored the right of the host country supervisor to participate in the operation of supervisory colleges for significant branches and subsidiary banks.

In Finland, progress was made in the reform of the structure of financial supervision as preparations for the merger of the Financial Supervision Authority and the Insurance Supervisory Authority into a single authority were concluded. Legislation on establishment of the new Financial Supervisory Authority was adopted and the new FIN-FSA began its operation at the beginning of 2009 (Box 1). In 2008, close cooperation between the Financial Supervision Authority, the Insurance Supervisory Authority, the Bank of Finland and other financial market authorities continued. A joint working group of authorities made many reviews of the state of the financial market as the international crisis continued. In addition, the Bank of Finland, the Financial Supervision Authority and the Insurance Supervisory Authority undertook stress tests on the tolerance of the financial sector.

The Bank of Finland organised cooperation between market participants and actively provided information on the needs of the Finnish user group to the initiative on planning a common securities clearing system of the European System of Central Banks (TARGET2-Securities). The Bank also contributed to international reviews and assessments on securities and currency trade.

#### **Statistics**

The Bank of Finland is responsible for compiling Finnish data for statistics on euro area monetary financial institutions (MFIs) and other financial and balance of payments statistics, together with corresponding national data. Community legislation assigns to the Bank of Finland a public duty to compile statistics for the needs of the ECB. This duty is partly

Collection and analysis of statistics on the financial markets supports ECB's monetary policy preparation and its implementation at national level.



carried out in cooperation with Statistics Finland.

In the year under review, preparations were under way to amend the regulation of the European System of Central Banks (ESCB) on statistics. In the presented form it will expand the ECB's right to obtain information to insurance corporations and will also enable the collection of data for the purposes of the supervision of financial market stability. The financial market crisis increased information needs, and the statistical system was required to react more quickly to market changes and produce timely information on problem areas, such as eg derivatives markets and credit risk transfer by loan securitisation. At the EU level, an agreement was made on the gradual implementation of the revised international recommendations guiding national accounts and balance of payments statistics and the regulation on the European system of accounts by 2014.

The draft ESCB regulation on statistics will give the ECB the right to collect data also on the insurance sector. For this reason the member central banks already started transmitting available insurance sector data to the ECB. In the year under review, the Bank of Finland constructed new data collection and compilation systems for the launch of statistical reporting on investment funds and more detailed, security-by-security based reporting on portfolio investment activity. A decision by the Governing Council of the ECB requires these data collections to be launched at the beginning of 2009. The systems will reduce the reporting agents' burden and increase statistical automation. The euro area statistics on MFIs will expand in 2010, and the related preparatory national work with reporting agents was commenced.

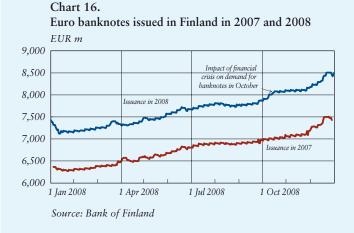
The range of statistical publications issued via the Bank's website was broadened with two new annual reviews: money and banking statistics and Finland's balance of payments. They describe, in more detail than the previous press releases, the structures and changes in the statistical phenomena. The former publication Financial Markets – Statistical Review was renewed into a collection of key statistics posted on the Bank's website.

### Maintenance of currency supply

The Bank of Finland is responsible for the issuance of banknotes in Finland and ensuring currency supply throughout the country in all circumstances. As part of the euro system and in cooperation with private currency supply operators, the Bank of Finland develops and steers currency supply management for the benefit of consumers and businesses. The Bank of Finland's role in operative currency supply management is based on the basic service obligations defined by the Eurosystem and on agreements made with currency supply operators.

# The number of banknotes in circulation continues its brisk increase

In 2008, growth in the number of banknotes issued in Finland rose to some EUR 1 billion, as in previous years, corresponding to an annual rate of growth of more than 12%. As previously, growth was dominated in the issue of EUR 50, 500 and 20 banknotes. In domestic payments, the relative use of cash has continued to decrease as card payments



have become more popular, but net outflow of cash from Finland has continued to increase particularly in EUR 500 and 50 banknotes.

The use of banknotes in higher denominations in domestic payments was surveyed among consumers in May 2008. The survey shows that highdenomination banknotes are mostly used in the purchase of home electronics, furniture and cars, in travel and for paying various unexpected expenses. More than 60% of consumers have possessed euro banknotes in the higher denominations, but only a few per cent use them regularly. Although the number of EUR 500 banknotes, the highest denomination euro banknote issued in Finland, is triple the amount of EUR 200 banknotes issued, consumers have by far more often held EUR 200 banknotes. The reason for this is that EUR 500 banknotes withdrawn in Finland are used particularly in connection with large foreign payment transactions such as the purchase of used cars and other vehicles. In the second week of October 2008, the uncertainty associated with the financial crisis and deposit protection schemes was reflected in the rapid growth of banknotes in the higher denominations also in Finland (Chart 16). Once deposit protection was raised to EUR 50,000, the situation stabilised and confidence in deposit banks operating in Finland was swiftly restored. The financial market crisis aggravated the situation severely in many EU countries including Ireland, Germany, Greece and Denmark, as a result of

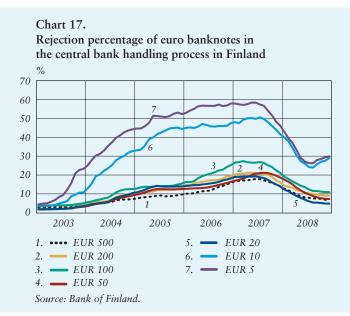
which these countries were compelled to raise their respective deposit guarantee schemes indeterminately.

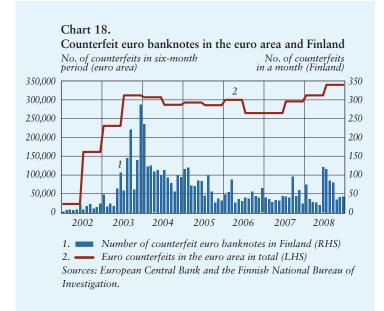
Despite the discontinuation of business at the Turku branch office, the number of banknotes sorted at the Bank of Finland has increased. This notwithstanding, following the introduction of an optical tool for the analysis of the condition and quality of banknotes, the sorting of banknotes according to their condition has improved markedly. As a result, the unnecessary destroying of good-quality banknotes has been substantially reduced, thereby saving on costs (Chart 17).

The Otto. ATM network, jointly owned by Finland's three largest banking groups, was solely responsible for cash distribution via ATMs in Finland in 2004-2007. At the end of 2008, the number of 'Otto.' ATMs totalled 1,652. In March 2008, the first non-bank owned ATM cash distributor, Eurocash Finland, started operations in Finland, with the network compassing 48 Nosto ATMs at end of 2008. In 2008, Nosto ATMs were installed only in Rautakirja kiosks, but in 2009 they will be installed in retail stores, petrol stations and shopping centres. While cash withdrawals from Nosto ATMs are typically subject to a fee, they are generally free of charge from Otto. ATMs.

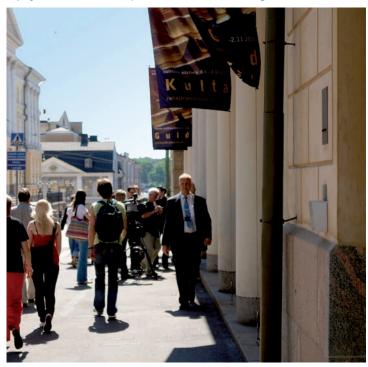
# The new IT system for currency management has proven useful

In February 2008, a revised and expanded IT system for currency management known as CashSSP was introduced at the Bank of Finland in conjunction with the introduction of TARGET2, an integrated large-value payment system maintained by Eurosystem central banks. Developed by the Belgian central bank, CashSSP is jointly owned by the central banks of the Benelux countries and Finland and comprises not only of a cash ordering and delivery function tailored for currency management customers, but also a real-time cash management and storage function for central banks. Whilst providing customers with an easy-to-use web-based user interface, CashSSP has also enhanced logistics and security through such improvements as bar codes. Thanks to the new IT system, it is increasingly easier to fulfil euro area statistical requirements for currency management. CashSSP also enables daily monitoring and automated reporting of circulation of banknotes.





The Bank of Finland Museum has aspects of the history of money on display. In 2008, the theme of the seasonal exhibition was gold.



#### Deterrence of euro banknote counterfeiting is becoming more challenging

The overall number of counterfeit banknotes revealed in both halves of 2008 was well over 300,000 counterfeits, with the number in the second half up 9% on the first half. What has made the detection of counterfeits more difficult is that EUR 20 banknotes are currently the most popular banknotes to be counterfeited, and because they are used much more often than banknotes with a higher denomination, their authenticity is not questioned as easily as that of banknotes with a higher denomination.

More than 700 counterfeits were revealed in Finland in 2008 (Chart 18). This was substantially more than in 2007, because in the summer months, as in the previous year, an active group of foreign distributors of high-quality EUR 200 counterfeited banknotes in Finland. This notwithstanding, the number of counterfeit banknotes per capita in Finland is still among the smallest in the euro area.

#### Markka coins exchanged into euro

In early 2008, currency management was heavily occupied with the exchange into euro of coins in an old markka series before the expiry of the validity of those markka coins. Old markka coins in the latest series of legal tender and markka banknotes put into circulation after the second World War are redeemed and exchanged into euro at the Bank of Finland by the end of February 2012.

### Other operations

#### International operations

# The Bank of Finland in the European System of Central Banks

Erkki Liikanen, Governor of the Bank of Finland, is member of the Governing Council of the European Central Bank (ECB). Composed of members of the Executive Board of the ECB and of the governors of the national central banks of those EU member states that have introduced the euro, the Governing Council is the highest decision-making body in the Eurosystem. Pentti Hakkarainen, Vice Chairman of the Board, was the Governor's personal alternate in the Governing Council. The ECB Governing Council held 32 official meetings in 2008, up 10 meetings on 2007. The reason for the increase in meetings was the global turmoil in the financial market that escalated in the autumn. A number of the meetings were held as telephone conferences. Following the tradition, two of the Governing Council meetings were held outside Frankfurt; one in Athens in the spring and one in the autumn in Brussels.

The Governor of the Bank of Finland is also a member of the General Council of the ECB, which includes the governors of all EU member states as well as the President and Vice-President of the ECB. The General Council convened four times in Frankfurt and held one telephone conference.

Board members and experts from the Bank of Finland participated in the work of the European System of Central Banks (ESCB) in all preparation stages. The Bank of Finland had representatives in the ESCB committees and in the Budget Committee and Human Resource Conference (altogether 15, see Box 2) as well as in most of the working groups (approximately 60). In 2008, a total of 11 Bank of Finland employees were seconded at the ECB on fixed-term contracts of varying length.

The Eurosystem also includes a number of high-level temporary committees in various areas such as banknotes, ICT and market operations. Members of the Bank of Finland's Board attend the meetings of these committees within their respective areas of responsibility.

## Bank of Finland and international economic policy

The Bank of Finland participates in international cooperation through various organisations and cooperation bodies. According to Finnish law, the Bank of Finland is responsible for the contacts of the Finnish Republic with the International Monetary Fund (IMF). In addition, the Bank of Finland participates in the activities of the Bank for International Settlements (BIS), five EU committees and the Organization for Economic Cooperation and Development (OECD).

#### International Monetary Fund

Finland's representative in the highest authority governing the IMF, the Board of Governors, was the Bank of Finland's Governor Erkki Liikanen, with Pentti Hakkarainen, Vice Chairman of the Bank of Finland's Board, being his alternate.

#### Box 2

#### Representatives of the Bank of Finland in the ECB, EU and other international bodies in 2008

Bank of Finland in the Governing Council of the ECB

Erkki Liikanen, member Pentti Hakkarainen, alternate member

Maritta Nieminen, assistant Antti Suvanto, assistant

#### Bank of Finland in the ESCB committees, the Budget Committee and Human Resources Conference

Accounting and Monetary Income Committee Esa Ojanen (until 30 April 2008) Tuula Colliander

Banking Supervision Committee Kimmo Virolainen

Banknote Committee Mauri Lehtinen Kari Takala

Committee on Cost Methodology Timo Keskimäki Annika Karjalainen

External Communications Committee Jouko Marttila Heli-Kirsti Airisniemi (until 27 February 2008) Hanna Saira (28 February 2008– 2 November 2008) Richard Brander (from 3 November 2008) Information Technology Committee Armi Westin Raimo Parviainen

Internal Auditors Committee Erkki Kurikka Pertti Ukkonen

International Relations Committee Sinikka Salo Olli-Pekka Lehmussaari

Legal Committee Maritta Nieminen Eija Brusila

Market Operations Committee Pentti Pikkarainen Tuomas Välimäki Monetary Policy Committee Antti Suvanto (until 27 August 2008) Veli-Matti Mattila (until 10 February 2008) Tuomas Saarenheimo (from 11 February 2008) Jarmo Kontulainen (from 28 August 2008)

Payment and Settlement Systems Committee Harry Leinonen Anna-Maija Tikkanen

Statistics Committee Helka Jokinen Harri Kuussaari

Budget Committee Antti Vuorinen

Human Resources Conference Aura Laento

#### Representatives of the Bank of Finland on EU committees

Economic and Financial Committee Pentti Hakkarainen Hannu Mäkeläinen, alternate member

Economic Policy Committee Mikko Spolander Committee of European Banking Supervisors Kimmo Virolainen

Committee on Monetary, Financial and Balance of Payments Statistics Jorma Hilpinen Balance of Payments Committee Jorma Hilpinen

#### Representatives of the Bank of Finland in the Bank for International Settlements and OECD

Meetings of the governors of the Bank for International Settlements (BIS) Erkki Liikanen Economic Policy Committee (OECD) Antti Suvanto Veli-Matti Mattila Financial Markets Committee (OECD) Jyrki Haajanen The Board of Governors held its annual meeting in October in Washington.

The Fund's International Monetary and Financial Committee (IMFC), an advisory committee, met twice in 2008. In April, the meeting was chaired by Italy's Minister of Finance, Tommaso Padoa-Schioppa, and in October by Egypt's Minister of Finance Youssef Boutros-Ghali, who is the first-time chairman of the committee representing emerging market and developing countries. In April, the representative of the Nordic-Baltic constituency was Sweden's Minister of Finance Anders Borg and in October Stefan Ingves, Governor of the central bank of Sweden.

Responsibility for the Fund's operations rests with the 24-member Executive Board and the Managing Director, who acts as the Board's Chairman. The position of the Managing Director continued to be held by Dominique Strauss-Kahn from France.

Within the International Monetary Fund, Finland belongs to the Nordic-Baltic constituency, which has one common representative in the Board of the Fund. In January 2008, Jens Henriksson from Sweden began his twoyear office as representative of the constituency and member of the Board. The Bank of Finland, together with the Ministry of Finance, contributed to coordination within the Nordic-Baltic constituency in order to present a common view of issues to be discussed at the Board.

The Nordic-Baltic Monetary and Financial Committee (NBMFC) convened twice in 2008 to prepare constituency positions.<sup>1</sup> Finland's representative in the Committee was Pentti Hakkarainen, Vice Chairman of the Board of the Bank of Finland. The alternate members of the NBMFC also convened twice in 2008 to make preparations for the committee meetings. The committee of the alternate members was chaired by the representative of the Bank of Finland, Olli-Pekka Lehmussaari, and the tasks of the secretariat were taken care of by the Bank of Finland's General Secretariat.

In October and November, an expert group of economists from the IMF conducted an Article IV consultation in order to assess the economic situation and policies in Finland. At the end of the consultation, the expert group published a statement declaring that Finland faces major challenges although Finland ranks among the best-performing economies within the EU. The expert group concluded that the escalation of the global financial crisis will adversely affect economic activity. In the long term, Finnish economic growth and sustainability of public finances risk being jeopardised by the nation's rapidly ageing population and a slow-down in productivity.

The IMF enquired after member states' opinion on the amendments of the Articles of Agreement of the IMF concerning voice and participation in the IMF and expansion of the investment

<sup>&</sup>lt;sup>1</sup> More information on the views presented by the Nordic-Baltic constituency in the Board of the IMF is available in the 'Biannual Report on Recent Policy Developments in the International Monetary Fund'. The Nordic-Baltic Office, IMF (http://www.suomenpankki. fi/en/suomen\_pankki/kv\_yhteistyo/imf.htm).

authority of the IMF. The principal aim of the voice and participation reform is to improve the participation of emerging markets and developing countries in the Fund's decision-making process. The purpose of the expansion of the investment authority is to expand the fund's income base in such a way that sustainable long-term financing will be safeguarded. Finland has approved the proposed amendments to the Articles of Agreement. The amendments will become effective once three fifths of the member states with an 85% qualified majority of the fund's total voting rights will have approved them.

There was a distinct upward turn in the IMF's financing arrangements with member states in November, as many member states' economy weakened following the escalation of the financial market turmoil. Towards the end of the year, Iceland and Latvia from the Nordic-Baltic constituency had to resort to financing arrangements with the IMF. Hungary, from amongst the EU member states, also sought financing assistance from the IMF.

The global financial market turmoil prompted an extensive discussion on the IMF's role in solving the crisis. According to the G20 group of countries' heads of state, convening in November, the fund's global membership base and macroeconomic expertise make it a fitting organisation for evaluating reasons for the crisis and drawing conclusions on the need for reform of the international financing system. The G20 group considered it important that the IMF has adequate resources for supporting its member states.

#### EU committees

The European Union's Economic and Financial Committee (EFC) prepares issues related to economic and monetary union for discussion by the EU Council convening in the composition of Economic and Finance Ministers (ECOFIN). The members of the Economic and Financial Committee comprise representatives of the Ministries of Finance of EU member states and national central banks, as well as of the ECB and the European Commission. National central banks are represented in the meetings of the extended composition (8 meetings in 2009), where matters concerning economic conditions, financial markets, statistics and IMFrelated matters are discussed. The current financial market turmoil and measures taken by the member states to address it dominated these meetings, particularly towards the end of the year, with issues such as deposit protection schemes and special funding support to banks being key topics discussed.

The Economic and Financial Committee convenes biannually in the composition known as the *Financial Stability Table (FST)*. Present at the FST meetings are not only the Committee members but also representatives of the EU's supervisory committees and of the *Financial Services Committee (FSC)*. In 2008, the discussions were dominated by the evaluation and management of the severe financial market situation. Preparing a plan of measures for improving financial market supervision within Europe was one key area of work for the FST.

The Economic and Financial Committee, supported by its Sub-Committee on IMF and Related Issues (SCIMF), prepared the EU's common IMF policy.

The EU's *Economic Policy Committee (EPC)* prepares issues for the Council of Ministers in relation to the broad economic policy guidelines and structural political issues belonging to the Lisbon strategy. This Committee is composed of representatives from the member states' Ministries of Finance and central banks as well as from the European Commission and ECB.

The Committee of European Banking Supervisors (CEBS) discusses issues concerning regulation and supervision of the banking sector with a particular focus on harmonising supervisory methods and improving cross-border cooperation in supervision. In the period under review, the committee also devoted ample time and resources on addressing the current financial market turmoil. The committee members are high-level European banking supervisors and supervision experts from national central banks.

The Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) is composed of representatives of national statistics authorities, Eurostat, national central banks and the ECB. The Committee's task is to improve conditions for statistical cooperation between the ECB and Eurostat and issue statements on statistical matters.

The Eurostat's *Balance of Payments Committee* is composed of statistical authorities responsible for balance of payments statistics as well as central banks. The purpose of the Committee is to assist the Eurostat in the adoption of a European Parliament and Council regulation on EU balance of payments statistics.

#### Bank for International Settlements

The *Bank for International Settlements* (*BIS*) arranges six statutory Governorlevel meetings a year, all of which are attended by the Governor of the Bank of Finland. In the period under review, these meetings addressed the current economic situation with a particular focus on events in the financial markets. These discussions are highly relevant for developing international cooperation in supervision and regulation.

As shareholder of BIS, the Bank of Finland was also represented at the BIS annual general meeting in June.

#### OECD

Representatives of the Bank of Finland participated in the activities of the Organisation for Economic Cooperation and Development (OECD) through two committees. These committees are the OECD's Economic Policy Committee (EPC) and the Committee on Financial Markets. These committees are important forums for international cooperation and exchange of information in the areas of economic policy and financial markets.

#### Other international activities

In the course of 2008, members of the Bank of Finland board participated in a number of international seminars and conferences. Erkki Liikanen, Governor of the Bank of Finland, gave an introductory presentation on population ageing in Finland and its impact on the economy at a conference arranged by the central bank of Greece. In Brussels, Erkki Liikanen gave three presentations in the review period: His topic at the Belgian Financial Forum was the Finnish welfare model relative to the Nordic model, at the EU Parliament Financial Forum he talked about modern payment facilities and at the Brussels Economic Forum he addressed the potential of EMU. In Rome, Erkki Liikanen attended a highlevel seminar on climate change and its impact on central banks, as an invited commentator. The seminar was a joint effort between East Asia-Pacific central banks and the Eurosystem. In Kansas City, Erkki Liikanen gave a presentation on the European economy and financial markets. In Tallinn, he attended the Ragnar Nurkse seminar and gave a presentation on the 10-year anniversary of the euro, while in Stockholm he addressed the Nordic welfare model.

Pentti Hakkarainen, Vice Chairman of the Board, also attended a number of international meetings and conferences dealing with a range of topics, among them the financial market.

Sinikka Salo, member of the Board, opened the annual general meeting of the *Centre for European Policy Research (CEPR).* The theme of the meeting was innovation and intellectual property in financial services. Sinikka Salo also opened a high-level seminar on the condition of the Russian and Chinese economies, arranged in Helsinki.

Seppo Honkapohja, member of the Board, gave a presentation on wellfunctioning monetary policy regulations in four international events: a workhshop on monetary policy in the New York area, a seminar of the Board of the Federal Reserve Bank of the USA, an economic policy conference of the Federal Reserve Bank of Saint Louis and in the ECB seminar series. At the Philadelphia Global Interdependence Center, Seppo Honkapohja discussed the financial crisis experienced by the Nordic countries' the 1990s. He also gave a presentation on the current financial market crisis at the ECB Central Banking conference and lectured in a number of foreign universities (eg Saint Andrews, Mannheim and Leuven). In Helsinki, he opened the Emerging Markets meeting.

In the period under review, the Bank of Finland hosted a number of distinguished foreign guests. In March, the bank was visited by Frederic Mishkin, member of the Board of the Federal Reserve Bank of the USA, and Stefan Ingves, Governor of the central bank of Sweden. In July, Erkki Liikanen hosted Mervyn King, Governor of the Bank of England.

Nordic cooperation continued at both Governor and expert level. The annual get-together of the Governors of Nordic central banks was arranged in Iceland in June. Besides the governors, the meeting was also attended by other representatives of the five Nordic central banks. A special topic at the meeting was Nordic cooperation in preparing for and managing financial market crises. The Governors also met unofficially several times during the year at other international events.

In 2008, the traditional seminar between the central bank of Estonia and the Bank of Finland was held in Narva under the leadership of the governors of both banks. The seminar addressed both countries' financial situation and questions pertaining to financial supervision.

#### Communications

Emergence of the international financial crisis in 2008 heightened interest towards the tasks of central banks among the media and general public. At the Bank of Finland, this augmented interest was particularly reflected in an increase in the number of queries from the general public and the number of requests for interviews of the Bank's experts. These queries were addressed swiftly by phone and email. In addition, the Bank's senior management and experts regularly commented on relevant economic issues in the media. The Bank's press conferences also received a much wider coverage in the media than in previous years.

Targeted communication highlighting chains of events has contributed to consolidating the stability of the Finnish financial system at a time when international financial developments have amplified uncertainty in businesses and households. In keeping with this, a separate section focusing on the financial crisis was added to the Bank's website.

A more general aim of the Bank's external communication is to further public awareness on financial matters and maintain the general public's trust in the Bank of Finland and the Eurosystem. A key target group are school children and teachers, through whom understanding about economic affairs is spread to the younger generation. To further this aim, the Bank has made a special website www.euro.fi available for those studying in upper secondary schools and vocational colleges. A new set of interactive study tools was added to the website over the course of the year. The web material includes tasks that teachers can use in their classes as well as exercises that students can complete independently online.

The Bank further encourages the young to familiarise themselves with economic affairs by way of the Talousguru (Economics Guru) competition. In January 2008, the Bank of Finland hosted the final round of this challenge for the first time. The Bank's partners in this annual competition are the Finnish association of history and social studies teachers and the Federation of Finnish Financial Services.

The Bank of Finland Museum constitutes an important channel of communication between the Bank and the general public of all ages. In addition to school visits, the museum and its Studia Monetaria lecture series are attended by nearly 10,000 visitors each year. The seasonal exhibition focusing on gold as a basis for monetary systems was inaugurated at the museum in March 2008, and it was open until the end of the year. Whilst highlighting the gold standard as a monetary system, gold was presented both as a preserver of value and a means of exchange. The museum also acquired the allegedly largest gold nugget ever discovered in Finland, which was panned in 1910 at Laanila, near Inari, in Lapland. In June, the museum had the privilege of having as an exhibit the world's largest gold coin, minted by the Royal Canadian Mint and weighing 100 kilograms.

The multimedia displays at the museum continue to attract international interest. A copy of the monetary policy game has been introduced at the museums of the central banks of Iceland and Latvia, and in the period under review it was also introduced in Greece.

A major in-house communication project in 2008 was the revamp of the Bank's intranet to replace the old service introduced in 1996. This overhaul has improved internal communication and speeded up work processes and working methods. Integrating web-based desktops, the office system and the Bank's standard applications into a single functional entity, the new internet can be

The largest coin in the world, a Canadian 100 dollar made of solid gold, went on display, briefly, at the Bank of Finland Museum in June 2008.

The picture has been manipulated to enable both sides of the coin to be seen.



personalised into an individual electronic desktop. The intranet also includes an online version of the in-house staff magazine Pankko, providing regularly updated material that complements the quarterly-issued printed magazine.

The Bank's revamped intranet and Pankko Online were presented at the ECB's External Communications Committee (ECCO). Furthermore, ESCB intranet and Internet experts visited the Bank of Finland to familiarise themselves with the contents and operation of the new intranet service.

The Bank of Finland and the Financial Supervision Authority (FIN-FSA) joined forces with an external communications training provider to launch an in-house media skills training programme targeted at the Bank's experts. The training focuses on improving the participants' presentation skills and coaching them for interviews. Throughout the year some 30 Bank and FIN-FSA experts attended the training.

With effect from the beginning of 2009, the bi-annual Bank of Finland macroeconomic forecast is published as a special issue of the Bank of Finland Bulletin titled Economic outlook. In the period under review, 18 online studies and reports were published in the BoF online series. The statistics illustrating the number of users accessing the online service show that demand for online publications has increased steadily. Please refer to the appendix (page 100) for details about key publications in 2008. A more comprehensive list is available online on the Bank's website under 'Publications'.

## Management and organisation

### Organisation of the Bank of Finland

4 February 2009

#### PARLIAMENTARY SUPERVISORY COUNCIL

Timo Kalli, Chairman, Antti Kalliomäki, Vice Chairman, Pekka Ravi, Liisa Jaakonsaari, Tanja Karpela, Martti Korhonen, Mika Lintilä, Marja Tiura, Ben Zyskowicz

Anton Mäkelä, Secretary to the Parliamentary Supervisory Council

#### BOARD

<b>Erkki Liikanen</b> Governor	Pentti Hakkarainen Deputy Governor	<b>Sinikka Salo</b> Member of the Board	<b>Seppo Honkapohja</b> Member of the Board
Monetary policy preparation and implementation, preparation for meetings of the Governing Council and General Council of the ECB.	Financial stability issues, Chairman of the Board of the Financial Supervisory Authority.	Banking operations: payments and maintenance of currency supply.	Research, information technology and Bank of Finland's own investments.
Member of the Board to whom the Heads of	Member of the Board to whom the Heads of	Member of the Board to whom the Head of	Member of the Board to whom the Head of

Financial Markets and

Statistics, and

Administration report.

to whom the Heads of Banking Operations, the General Secretariat and Internal Audit report.

#### Arno Lindgren, Secretary to the Board

#### DEPARTMENTS

Currency reports.

Monetary Policy and Research Antti Suvanto	<ul><li>Forecasting</li><li>Information Services</li><li>Economic Development and Analysis</li></ul>	Institute for Economics in Transition (BOFIT)	Research
Financial Markets and Statistics <i>Kimmo Virolainen</i>	<ul><li>Financial Stability</li><li>Oversight of Market Infrastructure</li></ul>	<ul><li>Statistics</li><li>Balance of Payments</li><li>Financial Statistics</li></ul>	• Information Management
Banking Operations Pentti Pikkarainen	<ul><li>Market Operations</li><li>Risk Management</li><li>Investments</li></ul>	<ul><li>Back Office</li><li>TARGET Division</li></ul>	
<b>Currency</b> Mauri Lehtinen	• Regional Offices Kuopio, Oulu, Tampere, Vantaa		
General Secretariat Kjell Peter Söderlund	European and International Affairs Legal Affairs Communications	Strategy and Organisation	Senior Secretarial Staff
Administration Pirkko Pohjoisaho-Aarti	<ul><li>Administrative Services</li><li>Language Services</li><li>Risk Control</li><li>Accounting</li></ul>	Personnel Information Technology Security	
Internal Audit Erkki Kurikka			

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

Monetary Policy and

Research reports.

### Management system

The Board of the Bank of Finland readjusted its division of responsibilities in 2008 in that each member of the Board now manages key functions in the Bank's operations across divisional boundaries. This shift serves to consolidate the Bank's functional integrity and improve the quality of work.

In addition to the division of responsibilities, other key areas in the Bank's management system are strategy, objectives and results agreements, action planning, staffing ceilings and budgetary framework as well as evaluation of overall risk exposures. Performance and remuneration discussions are also an important part of the management system.

The Bank of Finland's Board conducts a bi-annual evaluation of achievement of the objectives set in the objectives and results framework. Alongside the objectives and results framework, the Bank's operations are guided by department-specific objectives and results agreements, geared towards achievement of the goals set in the strategy.

Another major improvement to the management system in 2008 was transition into process management in two key functions ie the analysis and preparation of monetary policy as well as the implementation of monetary policy and liquidity management. With the importance of unrestricted flow of up-todate information becoming increasingly important – especially at times of change in the operational environment – process management has the primary objective of ensuring smooth cooperation between different organisational units. The changes implemented also support the readjusted division of responsibilities among the members of the Board.

Through process management, the aim is to improve customer perspective and effectiveness of the Bank's activities, maintain job motivation and enhance attractiveness of the working environment. Realisation of these objectives paves way for conditions conducive to efficient operations; consequently over

The beginning of 2009 saw in the tenth anniversary of the euro. In January, President Martti Ahtisaari gave his evaluation of the significance of the euro at the first of the year's Studia Generalia lecture series hosted by the Bank of Finland.



### Bank of Finland objectives and results framework

	Strategic guideline	Indicator	Objective	Achieved 12/2007	Achieved 12/2008
	1. The Bank of Finland's success within the Eurosystem builds on research and analysis.	Governor's assessment of effectiveness on Eurosystem decision making	Good [=4].	4.01	4.03
	2. The Bank of Finland exercises influence in domestic economic policy-making by combining macroeconomic and financial market expertise.	Media impact monitoring of a) Forecast report b) Stability report Stakeholder satisfaction survey	4 4 4	4.3 3.7 -	4.4 4.9 4.8
Service competence and effectiveness	3. The Bank of Finland guarantees that financial market participants operating in Finland have access to internationally competitive central bank services.	Customer satisfaction surveys on TARGET and TARGET2 migration support Outcome of crisis management	4 Positive evaluation	4.5 and 4.6 Good	4.5 Crisis management
nce and		drills based on self-assessment Financial market counterparty	4	4.1	drills were postponed due to the acute financial market crisis 4.3
mpete	4. The Bank of Finland is respon-	Satisfaction of professional	4	3.1	3.1
rvice con	4. The Bank of Finland is respon- sible for maintenance of Finland's currency supply and for the improvement of its quality, efficiency and security.	cash-handling counterparties Consumer satisfaction survey on the quality of banknotes		Not asked	3.6
I Se		Consumer satisfaction with the coverage of the ATM network	4	Not asked	75%
	5. Public confidence in the Bank of Finland and awareness of the activities of the Bank and the	Results of VIP image survey	In the upper quartile of the benchmark group	3/24	2/35
	Eurosystem is promoted through effective and well-targeted communications.	Results of Omnibus survey on the public's awareness of the bank	In the upper quartile of the benchmark group	3/12	3/12
\$	6. The Bank of Finland's financial assets are invested in accordance with international commitments	Yield of financial assets	Yield exceeds the central bank rate	43 basis points above the tactical norm	99 basis points above the tactical norm
of resources	and crisis management require- ments, with a view to allowing for stable profit distribution	Distributed earnings (in euro)	Even distribution of earnings	EUR 250 m	EUR 250 m
	without jeopardising the Bank's capital adequacy.	Equity	2008 EUR 2.277 m 2009 EUR 2.390 m	EUR 2,310 m	EUR 2.554 m
Efficient use		Balance of payments risk buffers from currency-denominated net receivables	More than 40% of currency positions	42%	49.5%
II Effic	7. The Bank of Finland is one of the most efficient EU central	Operational strength: Bank's headcount	2008: 495 2009: 483	490	468
Ι	banks in terms of the number of staff and operating costs.	Departmental operating expenses	2008 EUR 57.6 m 2009 EUR 59.2 m	EUR 49.7 m	EUR 54.3 m

	Strategic guideline	Indicator	Objective	Achieved 12/2007	Achieved 12/2008
al	8. Process management is intro- duced to improve the speed and quality of the Bank of Finland's internal processes.	Achievement of speed and quality objectives set in the objectives and results contracts.	Defined in depart- mental and process contracts	Department-level reporting	Department-level reporting
Smooth functioning of internal processes	9. The Bank of Finland and Financial Supervision Authority improve their exchange of information and division of responsibilities.	Elimination of overlapping tasks	No overlapping tasks	Improvement pro- gramme has been carried out	Overlapping tasks were eliminated and information flow was improved. Preparations on the merger of the former financial and insurance supervision authorities.
h fi F		Delivery time	4 weeks	4 weeks	4 weeks
III Smoot	10. The Bank of Finland's ICT environment enables efficient work regardless of time and location shifts.	Internal survey	2008: 3.7 2009: 4	3.2–3.9	2.7–3.5
	11. The activities of the Bank of Finland are ecologically sustainable.	To be specified in the environ- mental policy in 2009.	To be specified in the environmental policy in 2009.	-	-
SS	12. The competence of the Bank of Finland's staff is raised.	Number of doctoral degrees	2008: more than 26 2011: more than 32	32	29
wellne		Education level index	2008: more than 5.3 2011: more than 5.8	5.5	5.6
tence and at work	13. The Bank of Finland's research meets international standards in	Number of articles in refereed journals	2008: more than 22	22	24
Competence and wellness at work	core areas.	External evaluation of the research function	Good	Good	Not evaluated in 2008
IV Co	14. Through cooperation we enhance pleasure in our daily work at the Bank of Finland and	Job satisfaction index	More than 3.4	3.24	Reported every second year
	foster innovation.	Sick leave absence	Below 3.5%	3.19 %	3.27%

time, process management is also seen to generate cost savings.

Readjustments were also made to the Bank's organisation in 2008. Document Services in the Administration department were merged with Information Services in the Monetary Policy and Research department. The Board of Governors also decided that the risk management function be separated from the investment function and transferred to the Administration department with effect from 2009. The purpose of this change was to enhance independency of risk management from the investment function.

### Personnel

Challenges for the Bank of Finland's personnel management in 2008–2009 include cost-effective operations that meet the objectives set, appropriately proportioned rewards for excellent performers and provision of an inspiring and creative working community.

As stated in its personnel vision, the Bank of Finland is a highly-respected employer that provides conditions for a modern, learning organisation. The Bank operates in an ethically sustainable, egalitarian and equitable manner, and leadership is characterised by a responsible and motivating approach. Departments are responsible for daily HR management and employer activities in line with the Bank's HR policy. HR planning has been integrated with the Bank's key action planning, decision-making and steering systems.

At the end of 2008, the Bank of Finland employed 468 staff; 416 at the head office and 52 in currency maintenance. Of the total staff, 54% held expert positions. The number of staff in attendance declined by 4.5% in the year under review. At the end of 2008, the Financial Supervision Authority (FIN-FSA) employed 138 staff, of which 73% held expert positions. The FIN-FSA's employees are each under a contract of employment with the Bank of Finland, and the Bank is responsible for providing the FIN-FSA with personnel administration functions. The Financial Supervision Authority and the Insurance Supervisory Authority were merged with effect of 1 January 2009 under a new Financial Supervisory Authority, which operates in connection with the Bank of Finland.

# Employee competence and well-being at work

The Bank takes an active approach in encouraging job rotation to provide the employees with opportunities for a versatile career and a more in-depth competence in central banking affairs. This will be achieved through fixed-term appointments and the Movere job rotation concept introduced with effect from 2009.

Senior manager and expert positions at the Bank of Finland and the new Financial Supervisory Authority can be filled on a fixed-term basis. The fixed-term nature of jobs does not affect employees' existing permanent employment contracts.

The existing set of titles was renewed to better reflect experts' experience and competence among peers.

In 2008, the coaching programme, previously targeted at all superiors, was extended to senior-level experts. It is aimed that the entire target group will have completed the training by 2011. So far, 68 people have carried through the coaching programme.

A work approach favouring dialoguing and interpersonal communication was promoted by way of various events under the overall theme of 'Speak up!' Furthermore, a series of lectures was arranged to increase employees' knowledge and understanding of the reasons for and characteristics of the global financial crisis and of the methods taken to address it.

The training for economists was dominated by emphasis on methodological competences in key areas of the bank's strategy. Particular emphasis was placed on tools for the construction and

#### Table 5. Highlights of human resource management<sup>1</sup>

	2007	2008
Staff size		
Operational strength, Bank of Finland	490	468
Operational strength, Financial Supervision Authority	141	137.5
Man years	527.3	495.6
Turnover rate for those leaving the Bank's service	8.5%	13%
Turnover rate for those entering the Bank's service	4.5%	7%
Internal mobility	5%	9%
Number of newly retired employees	26	36
Average age of retiring employees	58 years	57.7 years
Number of pensions currently paid <sup>2</sup>	1,036	1,065
Staff structure		
Average staff age	45.8 years	45.8 years
Proportion of experts and superiors	60.4%	62.8%
Proportion of women	48%	48.1%
Education level index <sup>3</sup>	5.5	5.6
Salaries and bonuses		
Salaries in relation to market salaries <sup>4</sup>	102.0%	104.0%
Fixed increases in pay	2.99%	4.5%
General increase	2.59%	2.9%
Performance-based increase	0.4%	1.6%
Bonuses as a proportion of payroll	0.70%	0.35%
Average pay for women/average pay for men	98%	99%
Pensions		
Pensions paid <sup>5</sup>	EUR 18.8 m	EUR 20.4 m
Competence		
Training costs/payroll	3.0%	3.96%
Training days/man-year	2.7	4.3
Wellness at work		
Absence from work due to sick leave	3.19%	3.27%
Job satisfaction index (employee attitude survey 2007)	3.24	-

<sup>1</sup> Figures refer to the Bank of Finland, unless otherwise mentioned. Figures referring to the Financial Supervision Authority are published in the FIN-FSA Annual Report. 2

Includes pensions paid to the retired employees of the FIN-FSA.

<sup>3</sup> Education level index is calculated from the basic level of education of staff included in the operational strength. The

 <sup>4</sup> The Bank of Finland's 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).

<sup>5</sup> Includes pensions paid to the retired employees of the old FIN-FSA.

use of macroeconomic models and for stability analysis, such as the types of statistical, econonometric and simulation methods that modelling work requires.

EUR 1.1 million was used for training at the Bank of Finland and EUR 0.2 million at the FIN-FSA. This accounted for 4.0%, and 2.0%, of payroll, respectively.

#### Labour market issues

The organisation's collective two-year civil service agreement is valid from 15 February 2008 to 28 February 2010. Wage increases for the period 2008–2010 amount to a total of 8.0%. In line with the civil service agreement, the bank introduced, for the first time in spring 2008, the so-called wage negotiation model where an agreed percentage from the negotiated overall wage increase percentage is channelled to personal wage increases based on the employee's performance.

The negotiated overall pay rise for all employees was 2.9% of payroll and the performance-based rate 1.6%. Bonuses represented 0.35% of payroll. In 2009, the overall pay rise and performance-based rise account for 1.8% and 1.7% of payroll, respectively.

The Bank of Finland's team came out the winners of the Nordic countries' central bank football championship 2008.



### Budget and operative costs

Budgets were prepared for the Bank of Finland and the Bank's pension fund for 2009-2011 in autumn 2008. The Financial Supervision Authority merged with the Insurance Supervisory Authority to form a new financial and insurance supervisory authority - the Financial Supervisory Authority - on 1 January 2009. Only a draft budget was made for the new authority during the budget planning discussions in 2008, because the new authority commenced operations at the beginning of 2009 as a transitional organisation. As the official new organisation and its budget will only become definite at the beginning of 2009, the Financial Supervisory Authority's budget for 2009 will not be presented in this annual report.

#### Bank of Finland's budget

The Bank of Finland's operating expenses for 2008 totalled EUR 101.3 million. Staff expenses were higher than usual on account of a contribution of EUR 30.0 million made to the Bank's pension fund. The Bank's share of the contribution was EUR 28.6 million. Operating income amounted to approximately EUR 25.9 million, Operating income was higher than usual due to gains recognised on the sales of the Turku offices and the real estate in Snellmaninkatu 23. The net operating expenses totalled EUR 75.4 million.

Operating expenses budgeted for 2009 amount to EUR 83.7 million. Staff expenses will increase slightly from 2008, once the effect from the Bank's pension fund contribution has been eliminated. Staff-related expenses and other expenses are also estimated to increase. Depreciations budgeted for 2009 will remain at the level of 2008.

Operating expenses are estimated to remain fairly stable over the medium term, except for banknote procurement costs which will increase from 2009 onwards. With falling staff numbers, staff expenses are expected to decrease slightly by 2011.

Investment expenses amounted to EUR 7.1 million in 2008. Investment expenditure on renovations totalled EUR 2.6 million. Other long-term acquisitions totalled EUR 4.5 million.

Investment expenditure in 2009 is estimated to exceed previous-year expenses by approximately EUR 6.6 million. Expenditure on real estate projects is estimated at EUR 6.5 million. Other long-term acquisitions are budgeted at EUR 7.2 million.

#### Pension fund's budget

The pension fund's operating expenses for 2008 totalled EUR 22.9 million. Pensions paid, amounting to EUR 20.4 million, was the largest cost item. Operating income totalled EUR 41.6 million, including the pension fund contribution of EUR 30 million.

The pension fund's expenses are estimated to increase in the three coming years, which is largely due to growth in pensions paid. Income is estimated to remain unchanged.

Investment expenditure arising from the renovation of pension fund premises totalled EUR 0.5 million in 2008. Renovation expenditure in 2009 is estimated at EUR 1.0 million.

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

## Table 6.Budget for the Bank of Finland, EUR m

	Outturn 2008	Budget 2009	Budget 2010	Budget 2011
1. Operating expenses and income				
EXPENSES	88.2	65.3	65.4	65.8
Staff expenses*	63.6	36.0	35.4	35.4
Staff-related expenses	3.2	3.9	4.2	4.5
Other expenses	21.3	25.4	25.9	25.9
DEPRECIATION	7.7	7.7	7.7	7.3
IT equipment	4.1	3.7	3.5	3.5
Money handling machines	0.9	1.0	1.0	0.6
Buildings	1.7	1.9	2.0	2.1
Other fixed assets	1.0	1.1	1.2	1.1
Total	95.8	73.0	73.2	73.1
Banknote procurement	3.9	9.1	9.5	9.5
Cash depot system	1.6	1.6	1.6	1.6
Total operating expenses	101.3	83.7	84.3	84.2
INCOME				
Services to the Financial				
Supervision Authority / Financial				
Supervisory Authority	-2.2	-2.2	-2.2	-1.9
Real estate	-20.3	-8.0	-8.3	-8.6
Other income	-3.3	-2.2	-2.2	-1.8
Total income	-25.9	-12.4	-12.7	-12.3
Net	75.4	71.4	71.6	71.9
2. Investment				
Real estate investments	2.6	6.5	2.1	2.0
Head office premises	0.5	0.6	0.4	0.3
Vantaa premises	2.0	5.6	1.5	1.5
Other premises	0.1	0.3	0.2	0.2
	0.1	0.5	0.2	0.2
IT equipment and software	2.8	4.9	2.4	2.2
Money handling machines	0.0	0.7	0.3	0.0
Security equipment	1.5	1.6	1.1	0.5
Other equipment and machinery	0.2	0.0	0.2	0.0
Total investment expenditure	7.1	13.7	6.1	4.7

\* Staff expenses for 2008 include a contribution of EUR 28.6 million paid to the Bank of Finland pension fund. Totals/sub-totals may not add up because of rounding.

#### Table 7. Budget for the Bank of Finland's pension fund, EUR m

	Outturn 2008	Budget 2009	Budget 2010	Budget 2011
1. Operating expenses and income				
EXPENSES				
Staff expenses	0.1	0.2	0.2	0.2
Pension fund activities expenses	0.9	0.8	0.8	0.8
Pension fund real estate expenses	0.7	0.8	0.8	0.8
DEPRECIATION	1.0	1.1	1.1	1.1
PENSIONS				
Pensions paid	20.4	21.0	21.9	22.9
Unemployment insurance fund				
contributions/premiums	-0.2	-0.3	-0.3	-0.3
Total expenses	22.9	23.6	24.5	25.5
INCOME				
Employment pension contributions*	-8.6	-6.5	-6.4	-6.4
Pension fund contribution	-30.0	0	0	0
Rents	-1.1	-1.1	-1.1	-1.1
Internal rents	-1.9	-1.9	-1.9	-1.9
Total income	-41.6	-9.6	-9.5	-9.5
Net	-18.7	14.0	15.0	16.0
2. Investment				
Real estate of the pension fund	0.5	1.0	0.3	0.2
Total investment expenditure	0.5	1.0	0.3	0.2

\* Financial Supervisory Authority's employment pension contributions for 2009–2011were not assessed in autumn 2008 budget planning discussions. Totals/sub-totals may not add up because of rounding.

## Tablel 8.Budget for the Financial Supervision Authority, EUR m

	Outturr 2008
1. Operating expenses and income	
EXPENSES	15.4
Staff expenses*	12.6
Staff-related expenses	0.6
Other expenses	2.1
DEPRECIATION	0.0
SERVICES FROM THE BANK OF FINLAND	2.2
Total operating expenses	17.6
INCOME	
Supervision fees	-16.8
Processing fees	-0.8
Total income	-17.6
Net	0
2. Investment	
IT equipment and software	0.2
Total investment expenditure	0.2

\* Staff expenses for 2008 include a contribution of EUR 1.4 million paid to the Bank of Finland pension fund.

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

#### Financial Supervision Authority's budget

Due to the establishment of the new financial and insurance supervisory authority, in 2007 the Financial Supervision Authority's budget was drafted, exceptionally, for 2008 only. The Financial Supervision Authority's operating expenses for 2008 totalled EUR 17.6 million. Staff expenses include a contribution of EUR 1.4 million paid to the pension fund. Income amounted to EUR 17.6 million. Investment expenditure totalled EUR 0.2 million. **Financial statements** 

## Balance sheet, EUR million

		31 Dec 2008	31 Dec 2007
ASS	SETS		
1	Gold and gold receivables	980	896
2	Claims on non-euro area residents		
	denominated in foreign currency	4,597	4,515
	Receivables from the IMF	356	260
	Balances with banks and security investments,		
	external loans and other external assets	4,241	4,254
3	Claims on euro area residents denominated		
	in foreign currency	2,577	1,394
4	Claims on non-euro area residents denominated in euro	581	394
5	Lending to euro area credit institutions related to		
	monetary policy operations denominated in euro	2,600	230
	Main refinancing operations	350	30
	Longer-term refinancing operations	2,250	200
6	Other claims on euro area credit institutions		
	denominated in euro	0	3
7	Securities of euro area residents denominated in euro	7,265	6,863
8	Intra-Eurosystem claims	10,162	7,465
	Participating interest in ECB	73	73
	Claims equivalent to the transfer of foreign reserves Claims related to TARGET2 and correspondent	717	717
	accounts (net)	5,197	2,951
	Net claim related to the allocation of euro banknotes		
	within the Eurosystem	4,174	3,724
9	Other assets	1,254	1,048
	Euro area coins	22	24
	Tangible and intangible fixed assets	185	196
	Other current assets	481	508
	Other	566	320
	Total assets	30,016	22,809

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

		31 Dec 2008	31 Dec 2007
LIA	BILITIES		
1	Banknotes in circulation	12,532	11,148
2	Liabilities to euro area credit institutions related to		
	monetary policy operations denominated in euro	8,110	5,910
	Current accounts (covering the minimum		
	reserve system)	1,015	2,901
	Overnight deposits	7,095	9
	Fixed-term deposits (liquidity-absorbing		
	fine-tuning operations)	-	3,000
3	Liabilities to other euro area residents denominated in euro	3,009	0
4	Liabilities to non-euro area residents denominated in euro	37	4
5	Liabilities to euro area residents denominated		
	in foreign currency	0	0
6	Liabilities to non-euro area residents denominated		
	in foreign currency	-	88
7	Counterpart of special drawing rights allocated by the IMF	158	153
8	Intra-Eurosystem liabilities	-	_
9	Other liabilities	191	171
10	Revaluation account	1,622	854
11	Provisions	2,092	2,368
12	Capital and reserves	1,864	1,704
	Primary capital	841	841
	Reserve fund	1,023	863
13	Profit for the financial year	401	410
	Total liabilities	30,016	22,809

### Profit and loss account, EUR m

		31 Dec 2008	31 Dec 2007
1	Interest income	844	709
2	Interest expense	-223	-146
3	NET INTEREST INCOME	621	563
4	Foreign exchange rate differences	-485	-379
5	Securities price differences	37	-34
6	Change in foreign exchange rate and price difference provision	448	413
	NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND RISK PROVISIONS	621	563
7	Net result of pooling of monetary income	26	8
8	Share in ECB profit	-	-
9	Provisions in respect of monetary policy operations	-102	-
10	Other central banking income	25	3
	CENTRAL BANKING PROFIT	569	574
11	Other income	41	29
	Operating expenses	-116	-108
12	Staff costs	-46	-46
13	Pension fund contribution	-30	-22
14	Administrative expenses	-27	-26
15	Depreciation of fixed assets	-8	-8
16	Banknote procurement costs	-4	-4
17	Other expenses	-2	-2
	OPERATING PROFIT	494	495
	Profit for the pension fund	-22	21
18	Income of the pension fund	67	47
19	Expenses of the pension fund	-89	-26
20	Changes in provisions	-71	-106
21	PROFIT FOR THE FINANCIAL YEAR	401	410

### Appendices to the financial statements, EUR million

	31 Dec 2008	31 Dec 2007
Foreign currency futures contracts		
Purchase contracts	-	22.6
Sales contracts	-	48.5
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	2.8	6.2
Other shares and interests	0.0	0.1
Total	25.2	28.6
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	509.3	489.5
– of which covered by reserves	456.1	479.1
Customer service office		
Deposits	17.9	17.9
Loans	4.9	5.0

 $^{1}$  In parentheses, the Bank of Finland's relative holdings of the BIS shares in circulation.

#### The Bank of Finland's real estate

Building	Address	Year of completion	Volume m <sup>3</sup> (approx.)	
Helsinki	Rauhankatu 16	1883/1961/2006	49,500	
	Rauhankatu 19	1954/1981	38,790	
	Snellmaninkatu 6 <sup>1</sup>	1857/1892/2001	26,930	
	Snellmaninkatu 2 <sup>1</sup>	1901/2003	3,200	
	Ramsinniementie 34	1920/1983/1998	4,600	
Киоріо	Puutarhakatu 4	1993	11,900	
Oulu	Kajaaninkatu 8	1973	17,700	
Tampere	Hämeenkatu 13 b <sup>1</sup>	1942	36,000	
Vantaa	Turvalaaksontie 1	1979	311,500	
Inari	Saariseläntie 7	1968/1976/1998	6,100	

<sup>1</sup> Transferred to the ownership of the Bank of Finland's pension fund from the beginning of 2002.

The Board proposes to the Parliamentary Supervisory Council that EUR 150,863,535.15 of the profit of EUR 400,863,535.15 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 250,000,000 be made available for the needs of the State.

Helsinki, 3 March 2009

#### THE BOARD OF THE BANK OF FINLAND

Erkki Liikanen, Chairman

Pentti Hakkarainen

Sinikka Salo

Seppo Honkapohja

. /. Arno Lindgren

Financial statements

### 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 Supervision 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 the revaluation account and unrealised losses are taken to the profit and loss account. In the case of gold, no distinction is made between price and exchange rate differences; rather, a single revaluation is made. Unrealised gains and losses related to foreign exchange rate movements during the

Currency	2008	2007
US dollar	1.3917	1.4721
Japanese yen	126.1400	164.9300
Australian dollar	2.0274	1.6757
Norwegian krone	9.7500	7.9580
Danish krone	7.4506	7.4583
Swedish krona	10.8700	9.4415
Swiss franc	1.4850	1.6547
Pound sterling	0.9525	0.7334
Canadian dollar	1.6998	1.4449
Special Drawing Rights (SDRs)	0.9051	0.9311
Gold	621.5420	568.2360

financial year are calculated on the basis of the daily net average rate method. Foreign exchange rates used in the financial statements are presented in the following table.

#### 3. Valuation and amortisation of securities etc.

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

Reverse repurchase agreements are recorded as collateralised deposits on the assets side of the balance sheet. Repurchase agreements, or repos, are recorded as collateralised 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.

### 4. Accounting conventions relating to intra-ESCB balances

Transactions between the national central banks (NCBs) of EU countries are primarily processed via TARGET2, the Trans-European Automated Real-time Gross

settlement Express Transfer system. These transactions give rise to bilateral balances in accounts held between EU central banks. These bilateral balances are novated to the ECB daily, leaving each NCB with a single net bilateral position vis-à-vis the ECB only.

#### 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, as a rule, from the calendar month following acquisition.

The counteritem of buildings and land capitalised in the 1999 balance sheet at market prices is the revaluation account. Depreciation in respect of buildings 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 during the year of acquisition.

#### 6. Banknotes in circulation

The ECB and euro area national central banks (NCBs), which together comprise the Eurosystem, have issued euro banknotes as from 1 January 2002.<sup>1</sup> Cyprus and Malta joined the Eurosystem in 1 January 2008, after which the Eurosystem consisted of 15 NCBs. 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.<sup>2</sup> The ECB has been allocated a

Key for subscription of the ECB's capital, 1 Jan	nuary 2008 %
Nationale Bank van België/	
Banque Nationale de Belgique	2.4708
Deutsche Bundesbank	20.5211
Central Bank and Financial Services	
Authority of Ireland	0.8885
Bank of Greece	1.8168
Banco de España	7.5498
Banque de France	14.3875
Banca d'Italia	12.5297
Central Bank of Cyprus	0.1249
Banque centrale du Luxembourg	0.1575
Bank Centrali ta' Malta/	
Central Bank of Malta	0.0622
De Nederlandsche Bank	3.8937
Oesterreichische Nationalbank	2.0159
Banco de Portugal	1.7137
Banka Slovenije	0.3194
Suomen Pankki – Finlands Bank	1.2448
Subtotal Eurosystem	69.6963
Bulgarian National Bank	0.8833
Čecká národní banka	1.3880
Danmarks Nationalbank	1.5138
Eesti Pank	0.1703
Latvijas Banka	0.2813
Lietuvos Bankas	0.4178
Magyar Nemzeti Bank	1.3141
Narodowy Bank Polski	4.8748
Banca Natională a României	2.5188
Národná banka Slovenska	0.6765
Sveriges Riksbank	2.3313
Bank of England	13.9337
Subtotal for non-euro area NCBs	30.3037
Total	100.0000

share of 8% of the total value of euro banknotes in circulation, with the remaining 92% being 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<sup>3</sup> are disclosed under the sub-item 'Intra-Eurosystem claims/liabilities: Net claim/liability

 $<sup>^1</sup>$   $\,$  Decision ECB/2001/15 of 6 December 2001 on the issue of euro banknotes.

<sup>&</sup>lt;sup>2</sup> 'Banknote allocation key' means the percentage that results from taking into account the ECB's share in the total euro banknote issue and applying the subscribed capital key to the NCB's share in that total.

<sup>&</sup>lt;sup>3</sup> Decision ECB/2001/16 of 6 December 2001 on the allocation of monetary income of the national central banks of participating Member States form the financial year 2002.

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.

From 2002 until 2007 the intra-Eurosystem balances arising on the euro banknotes were adjusted in order to avoid significant changes in NCBs' relative income positions as compared to previous years. The adjustments were effected by taking into account the differences between the average value of banknotes in circulation of each NCB in the period from July 1999 to June 2001 and the average value of banknotes that would have been allocated to them during that period under the ECB's capital key. The adjustments were reduced in annual stages until the end of 2007.

Starting from 2008 the monetary income on euro banknotes will be 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> This income was not distributed for 2004, because the ECB's net profit for the year was less than its income on euro banknotes in circulation. The ECB's income on banknotes was not distributed in 2005–2007 in order to increase the provision for foreign exchange rate, interest rate and gold price risks. In 2008 the ECB distributed income on banknotes.

#### 7. Changes in accounting conventions

There were no changes in accounting conventions in the financial year 2008.

#### 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 Statute and any decisions by the ECB's Governing Council.

#### 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 (ECB/2006/16) does not regulate accounting for the pension fund. The pension 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 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 items

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.

<sup>&</sup>lt;sup>4</sup> Decision ECB/2005/11.

### Notes on the balance sheet

#### Assets

#### 1. Gold and gold receivables

The Bank's holdings of gold total 1,576,523 troy ounces (1 troy ounce = 31.103 g). In the annual accounts, gold has been valued at market price. At the beginning of 1999 the Bank of Finland – and the other NCBs participating in the Eurosystem – transferred about 20% of its gold holdings to the ECB.

Gold	31 Dec 2008	31 Dec 2007
Holdings (troy ounces, million)	1.6	1.6
Price: euro per troy ounce	621.5	568.2
Market price value (EUR m)	979.9	895.8
Change in market value (EUR m	a) 84.0	134.9

### 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).

Breakdown of receivables from the IMF denominated in	
foreign currency	

	31 Dec 2008		31 Dec 2007	
	EUR m	SDR m	EUR m	SDR m
Reserve tranche				
in the IMF	177.8	169.2	89.0	82.9
SDRs	171.3	163.0	165.1	153.7
Other receivables from the IMF	6.6	6.3	6.2	5.8
Total	355.8	338.5	260.3	242.4
10141	333.0	530.5	200.3	242.4

EUR/SDR exchange rate in financial years 2007 and 2
---

	2008	2007
End-March	0.96	0.88
End-June	0.97	0.89
End-September	0.92	0.91
End-December	0.91	0.93

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 item.

The Bank of Finland's SDR allocation amounts to EUR 171.3 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 355.8 million. On 31 December 2008 the exchange rate between SDR and EUR was: SDR 1 = EUR 1.1048. In 2008 the market rate of SDR was below the average cost price, and valuation losses were therefore recognised in accordance with accounting rules.

### Claims on non-euro area residents denominated in foreign currency

In addition to the IMF counteritem, this item includes balances with banks and security investments, as well as external loans and other external assets.

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

31 Dec 2008 EUR m	31 Dec 2007 EUR m
206.5	247.0
3,511.0	3,675.8
518.1	331.1
5.5	0.5
4,241.1	4,254.4
	EUR m 206.5 3,511.0 518.1 5.5

At the beginning of 1999 the Bank of Finland transferred part of its claims denominated in US dollars and Japanese yen to the ECB.

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

Currency	31 Dec 2008		31 Dec 2007	
	EUR m	%	EUR m	%
Pound sterling	988.5	24.5	1,490.4	37.2
Swiss franc	479.3	11.9	400.0	10.0
US-dollar	2,121.0	52.6	1,794.4	44.8
Japanese yen	440.3	10.9	322.0	8.0
Total	4,029.1	100.0	4,006.8	100.0

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

Maturity	31 Dec 2008		31 Dec 2007	
	EUR m	%	EUR m	%
Up to 1 year	1,207.6	30.0	865.0	21.6
Over 1 year	2,821.5	70.0	3,141.8	54.2
Total	4,029.1	100.0	4,006.8	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. The item also includes claims arising from reverse operations with Eurosystem counterparties amounting to EUR 1.6 billion, in connection with the US dollar Term Auction Facility. Under this program, USD 20 billion were provided by the Federal Reserve to the ECB by means of a temporary reciprocal currency arrangement (swap line) with the aim of offering shortterm US dollar funding to Eurosystem counterparties. The ECB simultaneously entered into back-to-back swap transactions with NCBs that have adopted the euro, which used the resulting funds to conduct liquidity-providing operations with the Eurosystem counterparties.

## Off-balance sheet items: foreign exchange swap and forward transactions

Off-balance sheet items include forward liabilities to the ECB with a value of EUR 1.6 billion outstanding as at

31 December 2008. These liabilities arose in connection with the US dollar Term Auction Facility established by the Federal Reserve (see note 3. Claims on euro area residents denominated in foreign currency).

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

	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Balances with banks	1,471.2	446.2
Coupon bonds	1,088.1	932.1
Discount papers	17.6	15.4
Other	0.2	0.7
Total	2,577.1	1,394.4

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

Currency	31 Dec	: 2008	31 Dec	2007
	EUR m	%	EUR m	%
Pound sterling	426.3	38.6	392.8	41.5
Swiss franc	0.0	0.0	10.0	1.1
US dollar	647.5	58.6	544.7	57.5
Japanese yen	31.9	2.9	0.0	0.0
Total	1,105.7	100.0	947.5	100.0

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

Maturity	31 De	c 2008	31 Dec	2007
	EUR m	%	EUR m	%
Up to 1 year	229.3	20.7	189.0	19.9
Over 1year	876.4	79.3	758.5	80.1
Total	1,105.7	100.0	947.5	100.0

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

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

Claims on non-euro area residents denominated in euro		
31 Dec 2008	31 Dec 2007	
EUR m	EUR m	

	EUR m	EUR m
Balances with banks	246.7	129.0
Coupon bonds	333.9	264.7
Discount papers	0.0	0.0
Other	0.0	0.6
Total	580.7	394.3

Maturity breakdown of securities of non-euro area residents denominated in euro

Maturity	31 De	c 2008	31 Dec	2007
	EUR m	%	EUR m	%
Up to 1 year	50.8	15.2	30.0	11.3
Over 1 year	283.2	84.8	234.7	88.7
Total	333.9	100.0	264.7	100.0

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

This item consists of claims relating to monetary policy instruments used by the Bank of Finland to implement monetary policy as part of the Eurosystem. The item includes claims (+ interest) on Finnish credit institutions, and the amount recorded is determined by credit institutions' liquidity needs.

Main refinancing operations are liquidity-providing operations which are conducted weekly in the form of reverse transactions and executed through standard tenders. They play a pivotal role in fulfilling the objectives of Eurosystem's market operations and provide the bulk of refinancing to the banking sector. Claims on the main refinancing operations amounted to EUR 350.0 million at the end of 2008.

Longer-term refinancing operations are liquidity-providing transactions that are executed once a month in the form of reverse transactions and carried out through standard tenders. Claims on longer-term refinancing operations totalled EUR 2,250.0 million. Lending to euro area credit institutions related to monetary policy operations denominated in euro

	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Main refinancing operations	350.0	30.0
Longer-term refinancing operations	2,250.0	200.0
Total	2,600.0	230.0

### 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 0.3 million in the financial year 2008, compared with EUR 3.2 million in the previous year.

### 7. Securities of euro area residents denominated in euro

This item includes coupon bonds and discount papers issued in the euro area. The Bank of Finland adjusted the distribution of its financial assets in February-March 2006 by exchanging its investments denominated in Swedish krona and Danish krone into euro-denominated investments. Prior to 2006 the Bank had no eurodenominated investments.

Breakdown of securities of euro area residents denominated in euro			
	31 Dec 2008 EUR m	31 Dec 2007 EUR m	
Coupon bonds Discount papers	7,235.1 30.0	6,839.1 24.0	
Total	7,265.1	6,863.1	

### Maturity breakdown of securities of euro area residents denominated in euro

Maturity	31 Dec	31 Dec 2008		2007
	EUR m	%	EUR m	%
Up to 1 year	1 582.7	21.8	1 423.2	20.7
Over 1 year	5 682.5	78.2	5 439.9	79.3
Total	7 265.1	100.0	6 863.1	100.0

#### 8. Intra-Eurosystem claims

This balance sheet includes the following claims:

- participating interest in ECB
- claims equivalent to the transfer of foreign reserves
- claims related to TARGET2 and correspondent accounts (net)
- net claim related to the allocation of euro banknotes within the Eurosystem
- share in ECB's income derived from banknotes
- net result of pooling of monetary income

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 when new members join the EU. The Bank of Finland's percentage share in the ECB's capital has been 1.2448% since 1 January 2007.

Item 'Claims equivalent to the transfer of foreign reserves' includes the share of foreign reserve assets transferred by the Bank of Finland to the ECB when Finland joined the Eurosystem. 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. They are denominated in euro at a value fixed at the time of their transfer.

This item also consists of net balances of NCBs' TARGET2 accounts if the Bank of Finland has had a claim against the Eurosystem in the period under review.

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. 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'.

#### 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.

Book value	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Land	11.0	11.4
Buildings	158.0	167.2
Machinery and equipment	10.7	10.9
Art and numismatic collection	0.4	0.4
Total	180.1	189.9

Intangible fixed assets		
Book value	31 Dec 2008 EUR m	31 Dec 2007 EUR m
	LUK M	LUK m
IT systems	4.8	6.1
Total	4.8	6.1

Other holdings and sundry asset	s	
	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Euro area coins	21.9	24.2
Shares and other equity	25.3	29.2
Pension fund's investments	456.1	479.1
Accruals	346.7	312.3
Other sundry assets	219.0	7.8
Total	1,068.9	852.6

#### 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 2008 the Bank's share of euro banknotes in circulation was EUR 12,532.4 million.

Banknotes in circulation	31 Dec 2008 EUR m	31 Dec 2007 EUR m
EUR 5	99.8	97.7
EUR 10	61.4	75.1
EUR 20	1,870.8	1,764.7
EUR 50	3,604.3	3,066.4
EUR 100	92.4	150.0
EUR 200	327.0	281.6
EUR 500	2,350.0	1,995.7
Total	8,405.7	7,431.2
ECB issue	- 1,089.9	- 969.4
CSM figure	5,216.6	4,685.8
Banknotes in circulation in accord	!-	
ance with the ECB's capital key	12,532.4	11,147.6

## 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 and overnight 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 enlarging the structural liquidity shortage 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. Due to the financial crisis, overnight deposits were exceptionally high in the last quarter of 2008.

### 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 residents.

### 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 reserve assets.

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

This item is the counteritem of SDRs (cf. item on the asset side). Originally the amount of SDRs and their counteritem were equal. As a result of transactions, the Bank of Finland's claims related to SDRs were bigger than their counteritem on the liabilities side of the balance sheet at the end of 2008. On the liabilities side, the counteritem was SDR 142.7 million and has remained at this level for several years, since it is not used for trading purposes. In the balance sheet, the item is presented in euro, valued at the rate prevailing on the last day of the year (EUR 157.6 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'. The bank of Finland had no intra-Eurosystem liabilities at the end of the financial year 2008.

#### 9. Other liabilities

Other liabilities	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Finnish markka banknotes in		
circulation	130.1	132.0
Accruals	27.6	15.0
Accounts payable	0.5	0.8
Other	33.1	23.0
Total	191.3	170.8

#### 10. Revaluation account

This item includes revaluations of land and buildings and other valuation differences arising from changes in accounting practice in 1999. The item also includes unrealised valuation gains arising from the market valuation of foreign currency-denominated items and securities. Compared with the previous year, the item increased by EUR 769 million, of which EUR 390 million accounted for a rise in the value of securities. The euro's appreciation against other currencies increased the item by EUR 315 million, whereas a rise in the gold price increased the item by EUR 84 million. This item also includes a downward adjustment of EUR 10 million arising from the counteritem of depreciation of buildings.

#### 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 2008 these provisions totalled EUR 2,092 million. Provisions consist of a general provision, provision against real value loss, pension liability provision and provisions in respect of monetary policy operations.

The pension liability provision is made to cover Bank of Finland's pension liabilities. The Bank's pension liabilities total EUR 509 million: 89.6% of this amount is covered by the pension provision, ie EUR 456 million.

In accordance with the general accounting principle of prudence, the Governing Council has deemed it appropriate to establish provisions totalling EUR 5.7 billion against the risks arising from transactions with Eurosystem counterparties during 2008. In accordance to Article 32.4 of the Statute, these risks will be shared among all the national central banks of participating Member States (NCBs) in proportion to their subscribed capital key shares in the ECB prevailing in 2008.

As a result, a provision for EUR 102 million equivalent to 1.78603% of the total provision was created.

#### 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.

Provisions (EUR m)	Provisions as at 1 Jan 2007	Changes in provisions 2007	Total provisions 31 Dec 2007	Changes in provisions 2008	Total provisions 31 Dec 2008
Foreign exchange rate and price					
difference provision	638	-413	224	-224	-
General provision	1,220	0	1,220	-224	996
Provision against real value loss	361	85	446	93	539
Pension liability provision	459	21	479	-22	456
Provisions in respect of					
monetary policy operations	-	-	-	102	102
Total	2,676	-308	2,368	-275	2,092

Capital and reserves (EUR m)	31 Dec 2008	31 Dec 2007
Primary capital Reserve fund	840.9 1.022.8	840.9 862.7
Capital and reserves, total	1,863.7	1,703.6

Profit for the financial year (EUR m)	2008	2007
Transferred for the needs of the State	250.0	250.0
Bank of Finland's share of profit (transferred to reserve fund)	150.9	160.1
Total	400.9	410.1

#### 13. Profit for the financial year

The profit for the financial year 2008 totalled EUR 400.9 million.

### Notes to the profit and loss account

#### 1. Interest income

Interest income received outside		2008			2007	
the euro area (EUR m)	Euro- denominated	Foreign currency denominated	Total	Euro- denominated	Foreign currency denominated	Total
Gold investments	0.0	1.4	1.4	0.0	1.9	1.9
Non-euro area coupon bonds	14.2	143.8	158.1	7.5	171.4	178.9
Non-euro area discount papers	0.3	8.3	8.6	2.6	10.2	12.8
Non-euro area deposits	11.2	6.2	17.4	7.9	10.3	18.2
Other	2.8	5.4	8.1	0.7	8.7	9.4
Total	28.5	165.0	193.5	18.8	202.5	221.3

Interest income received from		2008			2007	
the euro area (EUR m)	Euro- denominated	Foreign currency denominated	Total	Euro- denominated	Foreign currency denominated	Total
Euro area coupon bonds	280.3	53.0	333.3	245.1	55.0	300.1
Euro area discount papers	2.0	0.8	2.8	5.2	4.8	10.0
Euro area deposits	1.5	25.7	27.3	2.6	1.9	4.5
ESCB items	205.5	0.0	205.5	148.6	0.0	148.6
Monetary policy items	79.8	0.0	79.8	22.1	0.0	22.1
Other	0.0	1.8	1.8	0.0	2.1	2.1
Total	569.1	81.3	650.4	423.7	63.8	487.5

Interest income from and outside the euro area totalled EUR 843.9 million. Of this, EUR 246.3 million consisted of foreign currency-denominated interest income and EUR 597.6 million on euro-denominated interest income. Interest income on ESCB items totalled EUR 205.5 million. Of this, EUR 25.0 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's capital key and the adjustments, EUR 145.9 million, is entered on a net basis. Interest income on TARGET2 balances totalled EUR 34.5 million.

#### 2. Interest expense

Interest expense paid outside the euro area (EUR m)	Euro- denominated	2008 Foreign currency denominated	Total	Euro- denominated	2007 Foreign currency denominated	Total
Non-euro area deposits	0.0	-1.1	-1.1	0.0	-2.2	-2.2
Other	0.0	-4.1	-4.1	0.0	-7.2	-7.2
Total	0.0	-5.2	-5.2	0.0	-9.4	-9.4

Interest expense paid in the euro area (EUR m)	Euro- denominated	2008 Foreign currency denominated	Total	Euro- denominated	2007 Foreign currency denominated	Total
ESCB items	-24.3	0.0	-24.3	-20.7	0.0	-20.7
Monetary policy items	-161.1	0.0	-161.1	-115.3	0.0	-115.3
Other	-8.4	-24.2	-32.6	-0.1	-0.5	-0.6
Total	-193.8	-24.2	-218.0	-136.1	-0.5	-136.5

Interest expense paid in and outside the euro area totalled EUR 223.2 million. Of this, EUR 141.2 million was paid on minimum reserve deposits. Interest expense paid on TARGET2 balances of Eurosystem central banks totalled EUR 24.3 million.

#### 3. Net interest income

Net interest income	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Interest income		
Financial assets	558.6	538.2
Money market deposits	79.8	22.0
Claims on the ESCB	205.5	148.6
Total	843.9	708.8
Interest expense		
Financial assets	-37.8	-9.8
Current accounts	-161.1	-115.3
Liabilities to the ESCB	-24.3	-20.7
Total	-223.2	-145.9
NET INTEREST INCOME	620.7	563.0

#### 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 2008 losses related to foreign exchange rate movements amounted to EUR 485.1 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 an item-by-item basis. In 2008 the realised losses related to securities price movements totalled EUR 36.9 million.

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

Realised gains and losses as well as valuation losses arising from foreign exchange rate and price differences, EUR 448.2 million, were reduced from provisions in accordance with the financial reporting policy. Of this, EUR 224 million was covered by reducing the remaining foreign exchange rate and price difference provision, and the remaining EUR 224.2 million by reducing the general provision. All provisions have been specified in the notes on the balance sheet under assets.

#### 7. Net result of pooling of monetary income

This item shows the net sum of monetary income paid to and redistributed from the Eurosystem. The amount of each NCB's monetary income is determined by using the actual income that derives from the 'earmarkable assets' that are held against the liability base. The liability base consists of the following items: banknotes in circulation; liabilities to credit institutions related to monetary policy operations denominated in euro; net intra-Eurosystem liabilities resulting from TARGET2 transactions, and 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.

'Earmarkable assets' consist of the following items: lending to credit institutions related to monetary policy operations denominated in euro; euro-denominated claims equivalent to the transfer of foreign reserves; net claims resulting from TARGET2 transactions; net claims related to the allocation of euro banknotes; and the proportion of gold that corresponds to the application of capital key from the total amount of gold of each NCB. Gold is not considered to generate income. If the value of NCB's 'earmarkable assets' exceeds or falls short of the value of its liability base, income is calculated for the difference by applying the interest rate on main refinancing operations. The monetary income pooled by the Eurosystem is to be allocated among the NCBs according to the subscribed capital key. The actual net result of pooling of monetary income totalled EUR 26.1 million in 2008.

#### 8. Share in ECB profit

The ECB did not distribute any profit for the financial year 2007.

### 9. Provisions in respect of ECB monetary policy operations

In accordance with the general accounting principle of prudence, the Governing Council has deemed it appropriate to establish provisions totalling EUR 5.7 billion against the risks arising from transactions with Eurosystem counterparties during 2008. In accordance to Article 32.4 of the Statute, these risks will be shared among all the national central banks of participating Member States (NCBs) in proportion to their subscribed capital key shares in the ECB prevailing in 2008.

As a result, a provision for EUR 102 million equivalent to 1.78603% of the total provision was created.

#### 10. Other central banking income

This item includes the ECB's income derived from banknotes, EUR 21.5 million, distributed by the ECB in the form of an interim distribution from the financial year 2008. The item also includes dividend income, EUR 3.0 million, consisting primarily of shares in the Bank for International Settlements (BIS).

#### 11. Other income

This item consists of the Financial Supervision Authority's supervision fees, EUR 17.6 million. It also includes gains from the sale of fixed assets, EUR 13.5 million, rental income, EUR 6.2 million, as well as commissions and fees.

#### 12. Staff costs

Staff costs 3	31 Dec 2008	31 Dec 2007
	EUR m	EUR m
Salaries and fees	36.0	36.3
Employer's payments to the pension fi	ınd 6.8	6.8
Other staff-related costs	2.9	3.0
Total	45.7	46.1
Average staff size	2008	2007
Therage stuff size	Number	Number
	of staff	of staff
Bank of Finland	474	504
Financial Supervision Authority	139	139
Total	613	643

#### 13. Pension fund contribution

Upon approval of the Parliamentary Supervisory Council, the Bank of Finland paid a contribution of EUR 30 million to the Bank's pension fund in 2008 so as to bring the value of the pension fund's assets closer to the targeted pension liability coverage.

	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Pension fund contribution	30.0	22.1

#### 14. Administrative expenses

Administrative expenses	2008 EUR m	2007 EUR m
Supplies and purchases	1.0	1.7
Machinery and equipment	3.4	3.1
Real estates	8.9	8.5
Staff-related expenses	3.8	3.6
Purchase of services	8.7	8.3
Other	1.2	1.2
Total	26.9	26.4

This item includes rents, meetings and interest grouprelated 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.

#### 15. Depreciation of fixed assets

Depreciation of tangible fixed assets	31 Dec 2008 EUR m	31 Dec 2007 EUR m
Buildings	1.7	1.7
Machinery and equipment	2.7	2.8
Pension fund's land and buildings	1.0	1.0
Total	5.4	5.5

Depreciation of intangible fixed assets	31 Dec 2008 EUR m	31 Dec 2007 EUR m
IT systems	3.3	3.1
Total	3.3	3.1

#### 16. Banknote procurement costs

Banknote procurement costs totalled EUR 3.9 million.

#### 17. Other expenses

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

#### 18. Income of the pension fund

This item includes income of the Bank of Finland pension fund's investment activities, EUR –37.7 million. The item also includes the Bank of Finland's and Financial Supervision Authority's employer contributions as well as employee's share of premium income, EUR 8.6 million. The contribution of EUR 30.0 million paid by the Bank of Finland to the pension fund is also included in this item.

#### 19. Expenses of the pension fund

This item includes expenses of the Bank of Finland pension fund's investment activities, EUR 1.3 million, pensions paid, EUR 20.4 million, management costs and depreciations of fixed assets managed by the pension fund.

#### 20. Changes in provisions

This item includes the reduction of the pension liability provision, EUR 22 million, and the increase of the provision against real value loss, EUR 93 million. All provisions have been specified on the notes on the balance sheet under liabilities.

#### 21. Profit for the financial year

Profit for the financial year 2008 totalled EUR 400.9 million. The Board proposes to the Parliamentary Supervisory Council that EUR 250 million of the profit would be made available for the needs of the State.

#### 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)		2007	2006	2005	2004
Assets					
Gold and gold receivables		896	761	686	507
Claims on non-euro area residents denominated in foreign currency	4,597	4,515	4,750	8,719	8,790
Receivables from the IMF	356	260	279	384	591
Balances with banks and security investments, external loans and other external assets	4,241	4,254	4,470	8,336	8,199
Claims on euro area residents denominated in foreign currency	2,577	1,394	1,061	854	755
Claims on non-euro area residents denominated in euro	581	394	368	0	0
Lending to euro area credit institutions related to monetary policy operations denominated in euro		230	1,025	1,692	2,450
Main refinancing operations	350	30	500	1,200	1,800
Longer-term refinancing operations		200	525	492	650
Other claims on euro area credit institutions denominated in euro		3	60	0	2
Securities of euro area residents denominated in euro		6,863	4,998	0	-
Intra-Eurosystem claims		7,465	5,886	6,407	4,639
Participating interest in ECB	73	73	74	74	74
Claims equivalent to the transfer of foreign reserves	717	717	717	717	717
Claims related to TARGET2 and correspondent accounts (net)	5,197	2,951	1,157	1,686	-
Net claim related to the allocation of euro banknotes within the Eurosystem	4,174	3,724	3,938	3,930	3,848
Other assets	1,254	1,048	933	840	786
Euro area coins	22	24	25	31	17
Tangible and intangible fixed assets	185	196	204	209	210
Other current assets	481	508	488	471	425
Other	566	320	216	129	134
Total assets	30,016	22,809	19,843	19,198	17,948

BALANCE SHEET (EUR m)	2008	2007	2006	2005	2004
Liabilities					
Banknotes in circulation	12,532	11,148	10,419	9,374	8,313
Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	8,110	5,910	3,766	3,536	3,156
Current accounts (covering the minimum reserve system)	1,015	2,901	3,765	3,535	3,156
Overnight deposits	7,095	9	1	1	0
Fixed-term deposits (liquidity-absorbing fine-tuning operations)	-	3,000	-	-	-
Liabilities to other euro area residents denominated in euro	3,009	0	0	1	0
Liabilities to non-euro area residents denominated in euro	37	4	4	1	1
Liabilities to euro area residents denominated in foreign currency	0	0	0	0	0
Liabilities to non-euro area residents denominated in foreign currency	_	88	-	509	930
Counterpart of special drawing rights allocated by the IMF	158	153	163	173	163
Intra-Eurosystem liabilities	-	-	_	11	526
Other liabilities	191	171	162	153	179
Revaluation account	1,622	854	762	974	514
Provisions	2,092	2,368	2,676	2,735	2,580
Capital and reserves	1,864	1,704	1,596	1,530	1,474
Primary capital	841	841	841	841	841
Reserve fund	1,023	863	756	689	633
Profit for the financial year	401	410	293	200	112
Total liabilities	30,016	22,809	19,843	19,198	17,948

PROFIT AND LOSS ACCOUNT (EUR m)	2008	2007	2006	2005	2004
Interest income	844	709	528	403	397
Interest expense	-223	-146	-100	-73	-115
Net interest income	621	563	428	331	282
Foreign exchange rate differences	-485	-379	-56	67	-196
Securities price differences	37	-34	-100	1	29
Change in foreign exchange rate and price difference provision	448	413	156	-68	167
Net result of financial operations, write-downs and risk provisions	621	563	428	331	282
Net result of pooling of monetary income	26	8	5	3	-22
Share in ECB profit	-	-	-	-	-
Provisions in respect of monetary policy operations	-102	_	-	-	-
Other central banking income	25	3	3	3	3
Central banking profit	569	574	437	336	263
Other income	41	29	31	23	24
Operating expenses	-116	-108	-95	-83	-101
Staff costs	-46	-46	-47	-49	-49
Pension fund contribution	-30	-22	-10	-	-20
Administrative expenses	-27	-26	-25	-17	-18
Depreciation of fixed assets	-8	-8	-7	-6	_4
Banknote procurement costs	_4	-4	-5	-3	-1
Other expenses	-2	-2	-1	-8	-9
Operating profit	494	495	373	277	186
Profit for the pension fund	-22	21	18	36	40
Changes in provisions	-71	-106	-98	-113	-114
Profit for the financial year	401	410	293	200	112

### 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 2008 in accordance with generally accepted auditing standards.

During the financial year the Bank's Internal Audit audited the Bank's accounting records and activities. We have examined the internal audit reports.

We have read the Bank's annual report and received representations from the Board concerning the Bank's activities.

The financial statements have been drawn up in accordance with the principles of financial statements approved by the Parliamentary Supervisory Council and current rules and regulations. The financial statements give a true and fair view of the Bank's financial position and results.

We propose that the profit and loss account and balance sheet for the financial year audited by us be approved. We recommend that the profit for the financial year be disposed of as proposed by the Board.

Helsinki, 12 March 2009

#### Olli Nepponen

Eero Heinäluoma

Esko Kiviranta

Markku Koskela Authorised Public Accountant Kari Manner Authorised Public Accountant

. / . Kalervo Virtanen Authorised Public Accountant

## Statement regarding the audit as defined in the 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 2008 as defined in the 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 on 10 November 2006 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 on 10 November 2006.

Helsinki, 27 February 2009

KPMG Oy Ab

Raija-Leena Hankonen Authorised Public Accountant

## Appendices

### Monetary policy measures of the Eurosystem in 2008

July	In accordance with the decision of the Governing Council of the ECB on 3 July 2008, the minimum bid rate on the main refinancing operations was increased by 0.25 percentage point to 4.25%, starting from the operation settled on 9 July 2008. Simultaneously, the interest rates on the marginal lending facility and the deposit facility were increased by 0.25 percentage point, to 5.25% and 3.25%, respectively.
October	In accordance with the decision of the Governing Council of the ECB on 8 October 2008, the minimum bid rate on the main refinancing operations was decreased by 0.50 percentage point to 3.75%, starting from the operation settled on 15 October 2008. Simultaneously, the interest rates on the marginal lending facility and the deposit facility were decreased by 0.50 percentage point, to 4.75% and 2.75% respectively, with immediate effect.
	Moreover, the Governing Council of the ECB decided on 8 October 2008 that the weekly main refinancing operations would be carried out through a fixed-rate tender procedure with full allotment. The procedure was introduced starting from the operation settled on 15 October 2008.
	In addition, as of 9 October 2008, the Governing Council of the ECB reduced the corridor of standing facilities from 2.00 percentage points to 1.00 percentage point around the interest rate on the main refinancing operation. Accordingly, the interest rate on the marginal lending facility decreased to 4.25% and the deposit rate increased to 3.25%.
	On 15 October 2008, the Governing Council of the ECB decided to further expand the collateral framework and enhance the provision of liquidity. In accordance with the decision, the longer-term refinancing operations were also carried out through fixed-rate tender procedures, with full allotment, starting from the operation settled on 30 October 2008.
November	In accordance with the decision of the Governing Council of the ECB on 6 November 2008, the interest rate on the main refinancing operations was decreased by 0.50 percentage point to 3.25%, starting from the operation settled on 12 November 2008. Simultaneously, the interest rates on the marginal lending facility and the deposit facility were decreased by 0.50 percentage point, to 3.75% and 2.75%, respectively.
December	In accordance with the decision of the Governing Council of the ECB on 4 December 2008, the interest rate on the main refinancing operations was decreased by 0.75 percentage point to 2.50%, starting from the operation settled on 10 December 2008. Simultaneously, the interest rates on the marginal lending facility and the deposit facility were decreased by 0.75 percentage point, to 3.00% and 2.00% respectively.
	On 18 December 2008, the Governing Council of the ECB decided to widen the corridor of standing facilities again to 2.00 percentage points, starting from 21 January 2009.

### Key measures affecting the financial markets in 2008

Measures by th	he European System of Central Banks
January	Cyprus and Malta joined the euro area on 1 January 2008. The Governing Council of the ECB approved the report entitled 'Oversight Framework for Card Payment Schemes - Standards', which lays down oversight standards with regard to card payment schemes operating in the euro area. By extending oversight to widely-used card payment schemes, the Eurosystem wishes to ensure their safety and efficiency.
March	The Eurosystem and the Central Bank of the Russian Federation launched a three-year cooperation programme in the areas of banking supervision and internal audit. The implementation of the programme started on 1 April 2008. In addition to the ECB, the programme involves the central banks of Germany, Greece, Spain, France, Italy, the Netherlands and Austria, as well as the Bank of Finland.
April	The ECB published its eighth TARGET Annual Report on the system's operation in the previous year. The Eurosystem's TARGET is by far the most important European system for large-value payments. Between November 2007 and May 2008, TARGET migrated by stages to a new single technical platform, TARGET2. The Bank of Finland's RTGS system changed over to using the TARGET2 system successfully in February 2008. The ECB published a second report on financial integration in Europe. The report assesses the state of financial integration in the euro area, based on a set of indicators developed by the ECB,
	<ul><li>and in the light of selected topics. It also provides an overview of the Eurosystem's activities in the field of financial integration.</li><li>On 4 April 2008, the ECB issued an opinion on the merger of the Finnish Financial Supervision Authority and the Insurance Supervisory Authority to form a new authority, the Financial Supervisory Authority.</li></ul>
June	The ECB published its June 2008 Financial Stability Review concerning the stability of the euro area financial system. The report assesses the stability of the system with regard to its ability to facilitate economic processes and prevent financial market shocks from spreading further. By publishing the report, the ECB seeks to promote awareness in the financial industry and among the public at large of issues relevant to the stability of the euro area financial markets.
July	The ECB published its first Payment Systems and Market Infrastructure Oversight Report. The report provides a description of the general framework for the ECB's oversight activities and measures in 2007. At its meeting on 17 July 2008, the Governing Council of the ECB decided to launch the TARGET2-Securities (T2S) project, on the basis of the positive feedback received to the invitation expressed by the Governing Council in May to join the T2S initiative. The project envisages a centralised single technical platform for securities settlement, aimed at harmonising European securities settlement processes and procedures.

	At the same meeting of 17 July 2008, the Governing Council of the ECB also decided to launch a project for the next generation of collateral management. Accordingly, collateral management handling procedures will be transferred to a single platform. The name of the project is CCBM2 (Collateral Central Bank Management), and is scheduled to commence live operations simultaneously with the T2S platform at the latest, subject to the outcome of an analysis of the synergies with T2S. The decision was preceded by two market consultations, of which the last took place in February 2008.
September	The biennial review of the risk control measures in Eurosystem credit operations was released on 4 September 2008. The review proposes some technical refinements to the risk control framework.
October	The Governing Council of the ECB decided to expand the list of assets eligible as collateral for central bank credit, effective until the end of 2009. Debt instruments denominated, for example, in the US dollar, the pound sterling and the Japanese yen, as well as assets with lower-than- normal credit standards and credit claims were accepted as collateral. Eligibility as collateral was also granted to certain debt instruments issued by credit institutions and traded on non- regulated markets, and subordinated debt instruments protected by an acceptable guarantee. The ECB published its annual report on EU banking structures. As well as structural developments, the report describes the incentives included in the 'originate and distribute' model and major risks in the year ahead as identified in a survey of EU banks. The Eurosystem and the Committee of European Securities Regulators (CESR) launched a public consultation on recommendations for central securities depositaries and central counterparties in securities clearing and settlement. These recommendations aim to increase the safety, soundness and efficiency of securities clearing and settlement, related systems, and central counterparties. The Governing Council of the ECB approved a new custody arrangements for international debt securities in global registered form. The new holding structure is a precondition for using these instruments as eligible collateral in Eurosystem credit operations. Following a transitional period (30 September 2010), only debt instruments issued in line with this holding structure will be accepted as collateral. At the same time, the Governing Council of the ECB also decided that international debt securities in individual note form issued after a similar transitional period will be withdrawn from the list of eligible assets for Eurosystem credit operations.
November	In order to enhance the risk management of OTC derivatives trading, the relevant authorities have submitted initiatives for organising the trading through a central counterparty. The Eurosystem sees the use of a central counterparty as a solution to reduce the counterparty risk inherent in trading with these financial instruments, to increase market transparency and the availability of information, to standardise the criteria for evaluation of exposures and to free up collateral. For this reason, the ECB hosted a meeting with European stakeholders concerning the establishment of such a central counterparty in Europe.

	The sixth progress report on the Single Euro Payments Area (SEPA) was published on 24 November 2008. It was preceded by a joint statement issued in September with the European Commission on how interchange fees related to pan-European direct debit could be resolved. Upon the request of the Finnish Ministry of Finance, the ECB issued an opinion on a draft law concerning state capital investment in deposit banks.
December	<ul><li>The ECB published its semi-annual Financial Stability Review concerning the stability of the euro area financial system.</li><li>The Governing Council of the ECB updated the list of securities settlement systems eligible for the settlement of collateral for Eurosystem credit operations.</li><li>The ECB issued an opinion on amending the Directive on deposit-guarantee schemes.</li><li>The Governing Council of the ECB published its recommendations for state guarantees concerning debt instruments issued by banks and the pricing of recapitalisations.</li></ul>

### EU regulatory projects and their implementation in Finland

September	An amendment to the Securities Markets Act concerning the disclosure requirements of securities issuers became effective. The amendment implemented certain changes to the financial statement directives and certain articles of the directive on statutory audit.
October	The European Commission put forward a revision of the Capital Requirements Directives (2006/48/EC and 2006/49/EC). The main changes concern improving the management of large exposures, upgrading cooperation between supervisors of cross-border banking groups, improving the quality of banks' capital, developing liquidity risk management and enhancing risk management for securitised products.
	The European Commission put forward a revision of the Directive on Deposit Guarantee Schemes (1994/19/EC). The reform increases the minimum level of coverage for deposits first to EUR 50,000, and subsequently to EUR 100,000. In Finland, an increase in deposit protection to EUR 50,000 was approved in December.
	The European Commission issued a regulation implementing the amendments to international accounting standards that had been adopted by the International Accounting Standards Board (IASB) in respect of the reclassification of certain financial instruments. From the third quarter of 2008 onwards, under exceptional circumstances, assets held for trading with no trading purpose may be reclassified as assets held for maturity.
	The European Commission put forward a proposal for revising the E-Money Directive (2000/46/EC). The revision aims at facilitating market access for innovative solutions.

November	The European Commission adopted a proposal for a regulation on credit rating agencies, which seeks to impose rules on the activities of credit rating agencies.
December	The Directive on Payment Services (2007/64/EC) will be implemented in Finnish legislation in the areas of competence of both the Ministry of Finance and the Ministry of Justice. A working group of the Ministry of Justice, responsible eg for the rights and obligations of providers and users of payment services, submitted its report in December 2008. By contrast, the efforts of the Ministry of Finance working group to clarify institutional requirements for payment service providers continued into 2009.
Other issues	
February	A Government bill for a revision of the Emergency Powers Act was submitted to Parliament.
June	A Memorandum of Understanding on Cooperation, signed between European Union financial supervisory authorities, central banks and finance ministries on cross-border financial stability, entered into force.
August	The act on detection and prevention of money laundering and financing of terrorism became effective. The act implements the Directive of the European Parliament and of the Council on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing. The act is supplemented by a Council of State decree, issued in September, on detection and prevention of money laundering and financing of terrorism. The Council of State made a decision on the objectives for security of supply. Contingency planning for payments and currency supply is guided by the Bank of Finland.
October	The euro area and other EU countries issued a declaration on a common framework for temporary measures to restore financial stability. The declaration recommended measures for safeguarding bank liquidity, facilitating the funding of banks and providing financial institutions with additional capital resources, if necessary. In Finland, the Ministry of Finance announced a plan, based on the EU countries' declaration, for measures to support the financial system, whenever required. In December 2008, Parliament agreed to the provision of temporary and unsecured state guarantees in the maximum amount of EUR 50 billion, to cover bonds with maturities of up to five years, issued by viable and solid banks. A private-sector solution was found for the payout of deposits held with the Icelandic Kaupthing Bank's Finnish Branch. Accordingly, a special purpose vehicle was to be established to take over the financial responsibility for the repayment of the Icelandic bank's Finnish deposits to depositors. Parliament gave its assent to the Government's proposal to guarantee the claims of banks participating in the Kaupthing settlement, as such claims may be subject to rights of recovery or similar rights. The guarantee would cover claims on a total deposit amount of not more than EUR 115 million.

November	The International Monetary Fund (IMF) approved of a financing package for Iceland. Together with Norway, Sweden and Denmark, Finland decided to supplement the IMF funding by a loan amounting to USD 2.5 billion.
December	<ul><li>The International Monetary Fund (IMF) approved of a financing package for Latvia. Together with Norway, Sweden and Denmark, Finland decided to supplement the IMF funding by a loan amounting to EUR 1.8 billion.</li><li>Legislation concerning the new combined financial and insurance supervisory authority, the Financial Supervisory Authority, was passed.</li><li>Passage of an amendment to the Act on the Bank of Finland concerning the appointment of members to the Bank's board was achieved.</li></ul>

### Main opinions issued by the Bank of Finland 2008

#### Opinions concerning legislation on and development of the financial markets

Opinion	
To the Finance Committee of Parliament concerning	<ul> <li>a Government bill concerning a state guarantee related to the repayment of deposits with Kaupthing Bank, Finnish Branch, 24 October</li> </ul>
To the Financial Supervision Authority concerning	<ul> <li>an interpretation issued by the Authority in respect of the impact of a negative fair value reserve on the calculation of the maximum amount of additional own funds (Tier 2 capital), 14 August</li> <li>amendments to the following standards: <ol> <li>Authorisations and notifications</li> <li>Customer identification and customer due diligence; Prevention of money laundering, terrorism financing and market abuse</li> <li>Internal control arrangements</li> <li>Ze Takeover bids and mandatory bids</li> </ol> </li> </ul>
To the Ministry of Finance concerning	<ul> <li>the rules of the Investors' Compensation Fund, 7 January</li> <li>confirmation of an amendment to the rules of the Finnish Central Securities Depository (APK), 5 February</li> <li>a memorandum of the working group for financial supervision dealing with the merger of the Financial Supervision Authority and the Insurance Supervisory Authority to form the Financial Supervisory Authority, 28 March</li> <li>an amendment to the Real Estate Funds Act, 13 June and 25 June</li> <li>an amendment to the Mutual Funds Act, 27 August</li> <li>confirmation of the total amount of contributions collected for the Investors' Compensation Fund, 9 September</li> <li>revision of the Securities Markets Act, 30 September</li> <li>confirmation of an amendment to the rules of the Finnish Central Securities Depository (APK), 14 October</li> <li>a law amending the Act on the Financial Supervisory Authority and certain other related laws, 16 October</li> <li>an amendment to the Act on the Government Guarantee Fund and the Credit Institutions Act, 5 November</li> <li>a draft law related to the consortium of deposit banks, 12 November</li> <li>a draft law related to state capital investment in deposit banks, 21 November</li> <li>the rules of ACH Finland plc's settlement system, 8 December</li> <li>a change to insurance cover applied for by the Finnish Central Securities Depository (APK), 11 December</li> </ul>

To the Ministry of Justice concerning	<ul> <li>a memorandum on the implementation in Finland of an amendment to the Second Council Directive concerning public limited liability companies, 12 March</li> <li>the European Commission's proposal for a European Private Company Statute, 19 May</li> </ul>
To the European Commission concerning	- potential changes to the Capital Requirements Directive, 16 June
To the Finnish Central Securities Depository (APK) concerning	<ul> <li>the impact of the introduction of the TARGET2 system on the APK's rules and decisions by the managing director, 18 January</li> <li>changes to the APK's rules and decisions by the managing director, 2 September</li> <li>an amendment to the decision of the APK's managing director, 18 December</li> </ul>
To the Investors' Compensation Fund concerning	<ul> <li>the application by Danske Bank A/S, Finnish Branch, for membership of the Investors' Compensation Fund, 1 October</li> </ul>
To the Deposit Guarantee Fund concerning	<ul> <li>the application by Danske Bank A/S, Finnish Branch, for membership of the Deposit Guarantee Fund, 4 June</li> <li>additional deposit coverage applied for by Kaupthing Bank hf., Finnish Branch, 13 October</li> </ul>

### Bank of Finland's publications in 2008

Periodical publications	
Euro & talous	(in Finnish) Four quarterly issues.
Euro ざ talous -special issue	Two issues focusing on <i>the economic outlook</i> and one issue focusing on the stability of the financial system.
Bank of Finland Bulletin	Two issues.
Bank of Finland Bulletin -special issue	Two issues of Economic outlook one issue of Financial Stability.
Annual report	Published separately in Finnish, Swedish and English.
Research publications	
Scientific monographs	E:40 Maritta Paloviita, Dynamics of inflation expectations in the euro area. Dissertation.
Discussion Papers	30 online studies and reports in the areas of macroeconomics and financial markets were published in English.
Research Newsletter	Four quarterly issues of the online research bulletin in Finnish and in English.
Studies and reports	18 online studies and reports were published in the BoF Online series.
	Four quarterly issues of the Financial Market Report were published in Finnish and in English.
	Corporate funding survey, published in November (in Finnish only).
Expository studies	A:111 Harry Leinonen, Payment habits and trends in the changing e-landscape 2010+.
	A:112 Jorma Hilpinen (ed.) Internationalisation of the Finnish economy in the
	21st century in terms of the financial and balance of payments statistics. (In Finnish only).
Statistical publications	<i>Financial markets</i> , a monthly online publication (in Finnish, Swedish and English).
	<i>Finland's balance of payments</i> , a monthly online publication (in Finnish, Swedish and English).
	<i>Finland's balance of payments</i> , annual statistics, published online in March and September (in Finnish, Swedish and English).
	Portfolio investment in Finland's balance of payments, an annual online publication (in Finnish, Swedish and English).
	Direct investment in Finland's balance of payments, an annual online publication (in Finnish, Swedish and English).
	<i>Finnish bond issues</i> , an annual online publication (in Finnish, Swedish and English).
	Monetary and banking statistics, a monthly online publication (in Finnish, Swedish and English).
	<i>Currency reserve and currency-denominated liquidity</i> , a monthly publication (in English).

Studies published by t	he Institute for Economies in Transition
Research publications	<ul><li>33 online studies were published in the BOFIT Discussion Papers series (in English).</li><li>8 publications appeared in the BOFIT Online series (in Finnish or in English).</li></ul>
Monitoring publications	<ul> <li>BOFIT Viikkokatsaus, a weekly online publication (in Finnish).</li> <li>BOFIT Weekly, a weekly online publication (in English).</li> <li>BOFIT Venäjä-ennuste, a bi-annual online publication (in Finnish).</li> <li>BOFIT Russia Forecast, a bi-annual online publication (in English).</li> <li>BOFIT Venäjä-tilastot, an online publication (in Finnish).</li> <li>BOFIT Russia Statistics, an online publication (in English).</li> <li>BOFIT Kiina-tilastot, an online publication (in Finnish).</li> <li>BOFIT China Statistics, an online publication (in English).</li> <li>BOFIT China Statistics, an online publication (in English).</li> <li>BOFIT China Statistics, an online publication (in English).</li> <li>Focus/Opinion – Asiantuntijan näkemys series, 8 online articles were published (in Finnish).</li> <li>Focus/Opinion – Expert view series, 8 online articles were published (in English).</li> </ul>
Orders and subscriptions	A comprehensive list of publications is available on the Bank of Finland's website (http://www.bof.fi/en/julkaisut/index.htm). 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 publication of their desired publication. Online subscriptions can be made at http://www.bof.fi/en/julkaisut/sahkoisten_julkaisujen_tilaaminen/index.htm. The Bank's publications Euro & talous (in Finnish) and Bank of Finland Bulletin and their special issues as well as the Bank's and ECB's annual reports also appear in print. Online subscriptions to the printed copies can be made at http://www.bof.fi/en/julkaisut/painettujen_julkaisujen_tilaaminen/index.htm. Back copies of printed publications can also be ordered from that same website address.

#### Studies published by the Institute for Economies in Transition

## 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

Assets	Jan	Feb	Mar
1 Gold and gold receivables	896	896	896
<ol> <li>Claims on non-euro area residents denominated in foreign currency</li> <li>Receivables from the IMF</li> <li>Balances with banks and security investments, external loans and other external assets</li> </ol>	<b>4,442</b> 260 <b>4,182</b>	<b>4,449</b> 258 4,191	<b>4,636</b> 258 4,378
3 Claims on euro area residents denominated in foreign currency	1,112	1,114	1,594
<ul> <li>4 Claims on non-euro area residents denominated in euro</li> <li>4.1 Balances with banks, security investments and loans</li> <li>4.2 Claims arising from the credit facility under ERM II</li> </ul>	713 713 -	<b>610</b> 610 -	<b>533</b> 533
<ul> <li>5 Lending to euro area credit institutions related to monetary policy operations denominated in euro</li> <li>5.1 Main refinancing operations</li> <li>5.2 Longer-term refinancing operations</li> <li>5.3 Fine-tuning reverse operations</li> <li>5.4 Structural reverse operations</li> <li>5.5 Marginal lending facility</li> <li>5.6 Credits related to margin calls</li> </ul>	200   	<b>1,098</b> 848 250 – – –	1,749 988 761 _ _ _
6 Other claims on euro area credit institutions denominated in euro	68	53	2
7 Securities of euro area residents denominated in euro	6,548	6,690	6,821
8 General government debt denominated in euro	-	-	-
<ul> <li>9 Intra-Eurosystem claims</li> <li>9.1 Participating interest in ECB</li> <li>9.2 Claims equivalent to the transfer of foreign reserves</li> <li>9.3 Claims related to the issuance of ECB debt certificates</li> <li>9.4 Claims related to TARGET and correspondent accounts (net)</li> <li>9.5 Claims related to other operational requirements within the Eurosystem</li> </ul>	<b>4,760</b> 73 717 - 250 3,719	<b>4,277</b> 73 717 - 3,486	<b>4,277</b> 73 717 – 3,486
10 Other assets	953	970	966
Total assets	19,692	20,156	21,474

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

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
934	934	934	933	933	933	989	989	980
<b>4,207</b> 255	<b>4,265</b> 265	<b>4,283</b> 265	<b>4,024</b> 264	<b>4,156</b> 261	<b>4,272</b> 261	<b>4,590</b> 274	<b>4,681</b> 355	<b>4,597</b> 356
3,953	4,000	4,019	3,760	3,895	4,011	4,316	4,325	4,241
2,592	2,366	1,891	2,319	2,503	2,328	1,592	2,645	2,577
<b>647</b> 647 -	<b>526</b> 526	<b>486</b> 486 –	<b>679</b> 679 –	<b>667</b> 667 –	<b>594</b> 594 –	<b>721</b> 721	618 618 -	<b>581</b> 581 -
<b>1,981</b> 1,200 781 – –	<b>2,151</b> 1,000 1,151 - 0	<b>2,346</b> 1,450 896 – –	<b>1,844</b> 948 896 – –	1,176 36 1,141 - -	<b>2,564</b> 1,400 1,164 –	3,074 	2,530 300 2,230 - -	<b>2,600</b> 350 2,250 - -
- 112	- 123	52	- 152	- 0	- 0	- 0	- 0	- 0
6,718	6,836	6,950	6,552	6,719	6,799	6,867	6,976	7,265
-	-	-	-	-	-	-	-	-
<b>4,314</b> 73 717 –	<b>4,260</b> 73 717 –	<b>4,260</b> 73 717 –	<b>4,261</b> 73 717 –	<b>4,239</b> 73 717 –	<b>4,239</b> 73 717 –	<b>4,160</b> 73 717 –	<b>4,647</b> 73 717 –	10,162 73 717 
3,523	3,470	3,470	3,470	3,449	3,449	3,858	3,856	4,174
1,247	1,265	1,271	1,313	1,349	1,372	1,148	1,156	1,254
22,752	22,727	22,475	22,075	21,742	23,102	23,142	24,240	30,016

### Table 1. (cont.)

#### Liabilities Feb Mar Jan 1 10,880 10,741 10,824 Banknotes in circulation Liabilities to euro area credit institutions related to 2 monetary policy operations denominated in euro 3,043 3,152 3,015 2.1 Current accounts (covering the minimum reserve system) 3,036 3,152 3,012 2.2 Deposit facility 7 1 4 2.3 Fixed-term deposits \_ 2.4 Fine-tuning reverse operations 2.5 Deposits related to margin calls 3 Other liabilities to euro area credit institutions denominated in euro 19 4 Liabilities to other euro area residents denominated in euro 20 15 General government 4.1 19 15 4.2 Other liabilities 20 Liabilities to non-euro area residents denominated in euro 5 10 3 5 Liabilities to euro area residents denominated in foreign currency 0 0 0 6 54 73 242 7 Liabilities to non-euro area residents denominated in foreign currency Deposits, balances and other liabilities 54 73 242 7.1 Liabilities arising from the credit facility under ERM II 7.2 \_ \_ 8 Counterpart of special drawing rights allocated by the IMF 153 153 153 9 Intra-Eurosystem liabilities 447 1,617 9.1 Liabilities related to promissory notes backing the issuance of ECB debt certificates 9.2 Liabilities related to TARGET and correspondent accounts (net) 447 1,617 9.3 Liabilities related to other operational requirements within the Eurosystem 10 Other liabilities 299 336 370 854 854 11 **Revaluation** account 854 4,379 4,379 4,379 12 Capital and reserves 12.1 Primary capital 841 841 841 12.2 Reserve fund 863 863 863 12.3 Pension provisions 458 458 458 12.4 Other provisions 2,217 2,217 2,217 Total liabilities 19,692 20,156 21,474

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

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
10,915	11,038	11,143	11,250	11,228	11,319	11,954	12,015	12,532
3,974 3,974 _ _ _	<b>3,479</b> 3,479 - - -	2,971 2,971 - - -	2,051 2,051 - - -	2,045 2,043 1 - -	4,372 4,369 3 - -	3,852 1,484 2,368 _ _	2,498 1,505 993 – –	8,110 1,015 7,095 –
_	-	_	-	_	-	-	-	-
11 _ 11	<b>9</b> - 9	6 - 6	15  15	9 - 9	9 - 9	6 - 6	<b>3,010</b> 3,000 10	<b>3,009</b> 3,000 9
10	3	7	3	3	3	2	2	37
0	0	0	0	0	0	0	0	0
62 62 -	43 43 -	3 3 -	- - -	-1 -1 -	32 32 -	0 0 -	24 24 -	- - -
148	148	148	148	148	148	155	155	158
1,782	2,117	2,538	3,093	2,763	1,633	1,745	588	-
	_ 2,117 _	- 2,538 -	- 3,093 -	_ 2,763 _		_ 1,745 _	- 588 -	- -
328	370	389	433	466	503	565	597	592
1,039	1,039	1,039	851	851	851	1,120	1,120	1,622
<b>4,481</b> 841 1,023 479 1,889	<b>4,481</b> 841 1,023 479 1,889	<b>4,231</b> 841 1,023 479 1,889	<b>4,231</b> 841 1,023 479 1,889	<b>4,231</b> 841 1,023 479 1,889	<b>4,231</b> 841 1,023 479 1,889	<b>4,231</b> 841 1,023 479 1,889	<b>4,231</b> 841 1,023 479 1,889	<b>3,956</b> 841 1,023 456 1,636
22,752	22,727	22,475	22,075	21,742	23,102	23,142	24,240	30,016

	Fixed rate tenders			Variable rate tenders	
Interest ra	te on main refinancing	operations		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 Nov 2000	4.75
3 Feb 2000	9 Feb 2000	3.25	10 May 2001	15 May 2001	4.50
	22 Mar 2000	3.50		5 Sep 2001	
16 Mar 2000		3.75	30 Aug 2001		4.25 3.75
27 Apr 2000	4 May 2000		17 Sep 2001	19 Sep 2001	
8 Jun 2000	15 Jun 2000	4.25	8 Nov 2001	14 Nov 2001	3.25
			5 Dec 2002	11 Dec 2002	2.75
			6 Mar 2003	7 Mar 2003	2.50
			5 Jun 2003	6 Jun 2003	2.00
			1 Dec 2005	6 Dec 2005	2.25
			2 Mar 2006	8 Mar 2006	2.50
			8 Jun 2006	15 Jun 2006	2.75
			3 Aug 2006	9 Aug 2006	3.00
			5 Nov 2006	11 Oct 2006	3.25
			7 Dec 2006	13 Dec 2006	3.50
			8 Mar 2007	14 Mar 2007	3.75
			7 Jun 2007	13 Jun 2007	4.00
			3 Jul 2008	9 Jul 2008	4.25
8 Oct 2008	15 Oct 2008	3.75	5 Jui 2000	<i>y Jul 2000</i>	1.25
6 Nov 2008	12 Nov 2008	3.25			
4 Dec 2008	10 Dec 2008	2.50			
4 Dec 2008	10 Dec 2008	2.50			
		Standing	facilities		
Inte	erest rate on deposit faci	lity	Interest 1	rate on marginal lending	g facility
Decision	Effective	%	Decision	Effective	%
date		,	date	_,,	
22 Dec 1998	1 Jan 1999	2.00	22 Dec 1998	1 Jan 1999	4.50
22 Dec 1998	4 Jan 1999	2.75	22 Dec 1998	4 Jan 1999	3.25
21 Ian 1999	22 Ian 1999	2.00			
21 Jan 1999 8 Apr 1999	22 Jan 1999 9 Apr 1999	2.00	21 Jan 1999	22 Jan 1999	4.50
8 Åpr 1999	9 Apr 1999	1.50	21 Jan 1999 8 Apr 1999	22 Jan 1999 9 Apr 1999	4.50 3.50
8 Åpr 1999 4. Nov 1999	9 Apr 1999 5 Nov 1999	1.50 2.00	21 Jan 1999 8 Apr 1999 4 Nov 1999	22 Jan 1999 9 Apr 1999 5 Nov 1999	4.50 3.50 4.00
8 Apr 1999 4. Nov 1999 3 Feb 2000	9 Apr 1999 5 Nov 1999 4 Feb 2000	1.50 2.00 2.25	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000	4.50 3.50 4.00 4.25
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000	1.50 2.00 2.25 2.50	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000	4.50 3.50 4.00 4.25 4.50
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000	1.50 2.00 2.25 2.50 2.75	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000	4.50 3.50 4.00 4.25 4.50 4.75
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000	1.50 2.00 2.25 2.50 2.75 3.25	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000	4.50 3.50 4.00 4.25 4.50 4.75 5.25
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000	1.50 2.00 2.25 2.50 2.75 3.25 3.50	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000	4.50 3.50 4.00 4.25 4.50 4.75 5.25 5.50
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000	1.50 2.00 2.25 2.50 2.75 3.25 3.50 3.75	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000	4.50 3.50 4.00 4.25 4.50 4.75 5.25 5.50 5.75
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001	1.50 2.00 2.25 2.50 2.75 3.25 3.50 3.75 3.50	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001	4.50 3.50 4.00 4.25 4.50 4.75 5.25 5.50 5.75 5.50
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001	1.50 2.00 2.25 2.50 2.75 3.25 3.50 3.75 3.50 3.25	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001	1.50 2.00 2.25 2.50 2.75 3.25 3.50 3.75 3.50 3.25 2.75	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001	4.50 3.50 4.00 4.25 4.50 4.75 5.25 5.50 5.75 5.50 5.25 5.50 5.25 4.75
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001	4.50 3.50 4.00 4.25 4.50 4.75 5.25 5.50 5.75 5.50 5.25 5.50 5.25 4.75 4.25
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002	9 Åpr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Åpr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Åug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.75\\ 2.25\\ 1.75\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 4.75\\ 4.25\\ 3.75\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003	9 Åpr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Åpr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Åug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002	9 Åpr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Åpr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Åug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.75\\ 2.25\\ 1.75\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 4.75\\ 4.25\\ 3.75\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 31 Aug 2000 31 Aug 2000 10 May 2001 10 May 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Dec 2005	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 5 Jun 2003	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 5 Jun 2003	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.75\\ 3.50\\ 3.00\\ \end{array}$
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8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 30 Aug 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Dec 2005 8 Mar 2006	$ \begin{array}{r} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ \end{array} $	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Dec 2005 8 Mar 2006	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\\ 3.00\\ 3.25\\ 3.50\\ \end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006 8. Jun 2006	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Dec 2005 8 Mar 2006 15 Jun 2006	$\begin{array}{c} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.75\\ 1.50\\$	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 10 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Dec 2005 8 Mar 2006 15 Jun 2006	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\\ 3.00\\ 3.25\\ 3.50\\ 3.75\\ \end{array}$
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8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006 8 Jun 2006 7 Dec 2006 7 Dec 2006	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 8 Mar 2006 15 Jun 2006 9 Aug 2006 11 Oct 2006 13 Dec 2006 13 Dec 2006	$\begin{array}{c} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.75\\ 2.00\\ 2.25\\ 2.50\end{array}$	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006 3 Aug 2006 5 Oct 2006 7 Dec 2006	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 13 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 8 Mar 2006 15 Jun 2006 9 Aug 2006 11 Oct 2006 11 Oct 2006	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\\ 3.00\\ 3.00\\ 3.25\\ 3.50\\ 3.75\\ 4.00\\ 4.25\\ 4.50\\ \end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 1 Dec 2005 2 Mar 2006 8. Jun 2006 3 Aug 2006 5 Oct 2006 8 Mar 2007	9 Apr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 8 Mar 2006 15 Jun 2006 9 Aug 2006 11 Oct 2006 13 Dec 2006 14 Mar 2007	$\begin{array}{c} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.75\\ 1.50\\ 1.75\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ \end{array}$	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 3 Jun 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006 3 Aug 2006 5 Oct 2006 5 Oct 2006 7 Dec 2006 8 Mar 2007	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 8 Mar 2006 15 Jun 2006 9 Aug 2006 11 Oct 2006 13 Dec 2006 14 Mar 2007	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\\ 3.00\\ 3.25\\ 3.50\\ 3.75\\ 4.00\\ 4.25\\ 4.50\\ 4.50\\ 4.75\\ \end{array}$
8 Åpr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 1 Dec 2005 2 Mar 2006 8. Jun 2006 3 Aug 2006 5 Oct 2006 7 Dec 2006 8 Mar 2007 7 Jun 2007	9 Åpr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 6 Jun 2006 15 Jun 2006 15 Jun 2006 11 Oct 2006 13 Dec 2006 14 Mar 2007 13 Jun 2007	$\begin{array}{c} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.00\\ 2.25\\ 2.50\\ 2.75\\ 3.00\\ \end{array}$	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006 3 Aug 2006 5 Oct 2006 8 Jun 2006 5 Oct 2006 8 Mar 2007 7 Jun 2007	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Dec 2005 8 Mar 2006 15 Jun 2006 15 Jun 2006 11 Oct 2006 13 Dec 2006 14 Mar 2007 13 Jun 2007	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\\ 3.00\\ 3.25\\ 3.50\\ 3.50\\ 3.50\\ 3.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.00\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 1 Dec 2005 2 Mar 2006 8. Jun 2006 3 Aug 2006 5 Oct 2006 7 Dec 2007 7 Jun 2007 3 Jul 2008	9 Åpr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Åpr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Åug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 6 Jec 2005 8 Mar 2006 15 Jun 2006 15 Jun 2006 14 Mar 2007 13 Jun 2007 9 Jul 2008	$\begin{array}{c} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.75\\ 1.50\\ 1.75\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.00\\ 3.25\\ \end{array}$	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5 Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 5 Jun 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006 8 Jun 2006 5 Oct 2006 7 Dec 2006 8 Mar 2007 7 Jun 2007 3 Jul 2008	22 Jan 1999 9 Apr 1999 9 Apr 1999 4 Feb 2000 17 Mar 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 6 Dec 2005 8 Mar 2006 15 Jun 2006 15 Jun 2006 15 Jun 2006 14 Mar 2007 13 Jun 2007 9 Jul 2008	$\begin{array}{c} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.75\\ 3.50\\ 3.00\\ 3.25\\ 3.50\\ 3.50\\ 3.75\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.00\\ 5.25\end{array}$
8 Apr 1999 4. Nov 1999 3 Feb 2000 16 Mar 2000 27 Apr 2000 8 Jun 2000 31 Aug 2000 5. Oct 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5. Dec 2002 6 Mar 2003 1 Dec 2005 2 Mar 2006 8. Jun 2006 8. Jun 2006 8. Jun 2006 3 Aug 2006 5 Oct 2006 7 Dec 2006 8 Mar 2007 7 Jun 2007 3 Jul 2008 8 Oct 2008	9 Åpr 1999 5 Nov 1999 4 Feb 2000 17 Mar 2000 28 Åpr 2000 9 Jun 2000 1 Sep 2000 6 Oct 2000 11 May 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 6 Jec 2005 8 Mar 2006 15 Jun 2006 13 Dec 2006 14 Mar 2007 13 Jun 2007 9 Jul 2008 8 Oct 2008	$\begin{array}{c} 1.50\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.25\\ 3.50\\ 3.75\\ 3.50\\ 3.25\\ 2.75\\ 2.25\\ 1.75\\ 1.50\\ 1.00\\ 1.25\\ 1.50\\ 1.75\\ 2.00\\ 2.25\\ 2.50\\ 2.75\\ 3.00\\ 3.25\\ 2.75\\ \end{array}$	21 Jan 1999 8 Apr 1999 4 Nov 1999 3 Feb 2000 27 Apr 2000 8 Jun 2000 30 Aug 2000 10 May 2001 30 Aug 2001 17 Sep 2001 8 Nov 2001 5 Dec 2002 6 Mar 2003 1 Dec 2005 2 Mar 2006 8 Jun 2006 8 Jun 2006 3 Aug 2006 5 Oct 2006 8 Jun 2006 7 Dec 2006 8 Mar 2007 7 Jun 2007 3 Jul 2008 8 Oct 2008	22 Jan 1999 9 Apr 1999 5 Nov 1999 4 Feb 2000 28 Apr 2000 9 Jun 2000 6 Oct 2000 11 May 2001 31 Aug 2001 31 Aug 2001 18 Sep 2001 9 Nov 2001 6 Dec 2002 7 Mar 2003 6 Jun 2003 6 Jun 2003 8 Mar 2006 15 Jun 2006 15 Jun 2006 15 Jun 2006 11 Oct 2006 13 Dec 2006 14 Mar 2007 13 Jun 2007 9 Jul 2008 8 Oct 2008	$\begin{array}{r} 4.50\\ 3.50\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.25\\ 5.50\\ 5.75\\ 5.50\\ 5.25\\ 4.75\\ 4.25\\ 3.75\\ 3.50\\ 3.00\\ 3.00\\ 3.25\\ 3.50\\ 3.50\\ 3.75\\ 4.00\\ 4.25\\ 4.50\\ 4.75\\ 5.00\\ 5.25\\ 4.75\\ 5.00\\ 5.25\\ 4.75\\ 5.00\\ 5.25\\ 4.75\\ 5.00\\ 5.25\\ 4.75\\ 5.00\\ 5.25\\ 4.75\\ 5.00\\ 5.25\\$
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## Table 2.Key interest rates of the Eurosystem

Source: European Central Bank.

Reserve base as of:	Total	Liabilities to reserve coefficient		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
2007						
Dec	17,394.7	9,438.8	815.0	2,143.1	1,364.0	3,633.9
2008						
Jan	17,678.3	9,525.3	845.1	2,140.6	1,512.9	3,654.4
Feb	17,734.6	9,572.0	844.7	2,132.7	1,533.9	3,651.2
Mar	17,703.3	9,551.7	840.2	2,126.0	1,558.4	3,627.1
Apr	17,956.0	9,762.0	856.2	2,135.6	1,562.3	3,640.0
May	18,092.7	9,817.8	910.6	2,156.1	1,548.9	3,659.3
Jun	17,971.8	9,775.4	916.3	2,172.4	1,439.4	3,668.1
Jul	18,035.4	9,825.2	938.2	2,175.7	1,407.4	3,689.0
Aug	18,165.4	9,888.1	948.6	2,184.4	1,438.7	3,705.6
Sep	18,231.2	9,968.9	917.1	2,186.7	1,457.1	3,701.5
Oct	18,439.8	10,156.0	900.0	2,211.7	1,445.4	3,726.8
Νον	18,396.5	10,195.5	884.3	2,227.2	1,378.8	3,710.8
Dec	18,169.6	10,056.8	848.7	2,376.9	1,243.5	3,643.7

## Table 3.Reserve base of euro area credit institutions subject to reserve requirements, EUR bn

Source: European Central Bank.

#### Reserve base of Finnish credit institutions subject to reserve requirements, EUR m

Reserve base as of:	Total	Liabilities to reserve coeffici		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
007	1	2	3	4	5	6
007 Dec	191,636	135,978	22,598	5,461	0	27,599
008						
Jan	189,692	133,375	23,035	5,438	8	27,836
Feb	195,677	140,448	21,776	5,358	0	28,096
Mar	198,761	143,557	21,981	5,998	0	27,225
Apr	207,592	152,832	23,403	4,577	40	26,739
May	207,493	151,648	24,268	4,762	32	26,783
Jun	209,174	152,792	24,460	4,791	176	26,955
Jul	207,229	149,636	25,261	4,856	48	27,428
Aug	213,990	155,659	25,235	4,843	48	28,205
Sep	216,344	156,123	25,578	4,852	213	29,578
Oct	221,079	159,279	25,731	5,042	397	30,629
Νον	219,306	156,887	26,357	5,147	103	30,812
Dec	220,819	159,664	25,561	5,087	501	30,006

Maintenance period ending in	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
2007					
Dec	195.9	196.8	1.0	0.0	4.17
2008					
Jan	199.8	200.9	1.1	0.0	4.20
Feb	201.6	200.9	0.8	0.0	4.17
Mar	201.6	205.3	0.7	0.0	4.10
Apr	204.8	203.3	0.6	0.0	4.10
May	208.9	207.5	0.8	0.0	4.24
Jun	207.8	208.8	0.8	0.0	4.24
Jul	207.5	208.1 212.7			4.06
Aug			0.8	0.0	
Sep	214.1	214.8	0.7	0.0	4.35
Oct	213.3	214.0	0.7	0.0	4.38
	214.8	216.8	2.0	0.0	4.58
Nov	216.1	218.6	2.4	0.0	3.94
Dec	217.2	218.7	1.5	0.0	3.25
2009					
Jan	220.2	221.5	1.2	0.0	2.50

## Table 4.Reserve maintenance of euro area credit institutions subject to reserve requirements, EUR bn

Source. European Central Bank.

#### 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
2007					
Dec	2,933	2,934	1.2	0.0	4.20
2008					
Jan	3,040	3,041	0.8	0.0	4.17
Feb	3,137	3,139	2.0	0.0	4.10
Mar	3,094	3,101	7.0	0.0	4.19
Apr	3,210	3,213	3.0	0.0	4.24
May	3,277	3,278	2.0	0.0	4.17
Jun	3,490	3,492	2.0	0.0	4.06
Jul	3,484	3,486	2.2	0.0	4.35
Aug	3,511	3,514	3.0	0.0	4.38
Sep	3,464	3,549	85.0	0.0	4.58
Oct	3,578	3,586	8.0	0.0	3.94
Nov	3,600	3,607	7.0	0.0	3.25
Dec	3,666	3,699	33.0	0.0	2.50
2009					
Jan	3,631	3,635	4.0	0.0	2.00

Source: Bank of Finland.

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Ia		5

	Euro	area monetary aggreg	gate M3		bilities of Finnish mor titutions included in	
	Stock <sup>3</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>4</sup> , %	3-month mov avg of 12-month change <sup>4</sup> , %
	1	2	3	4	5	6
2004	6,537.5	6.6	6.5	88.2	6.3	6.4
2005	7,074.4	7.4	7.5	95.7	8.2	7.8
2006	7,741.1	10.0	9.8	102.9	7.9	8.3
2007	8,650.4	11.5	11.8	122.8	19.7	18.6
2008	9,390.6	7.6	7.1	129.3	5.1	5.8
2008						
Jan	8,781.8	11.5	11.4	123.2	18.9	18.6
Feb	8,828.2	11.3	10.9	123.5	17.2	17.1
Mar	8,855.9	10.0	10.6	124.4	15.3	16.6
Apr	8,941.8	10.4	10.1	125.5	17.2	15.3
Мау	8,989.5	10.0	10.0	126.6	13.4	13.9
Jun	9,024.7	9.6	9.6	126.3	11.1	11.8
Jul	9,100.0	9.2	9.2	125.9	10.8	10.4
Aug	9,156.9	8.8	8.9	126.5	9.3	9.3
Sep	9,227.6	8.7	8.7	126.8	7.9	7.9
Oct	9,373.4	8.7	8.3	126.6	6.5	6.9
Νον	9,365.9	7.7	8.0	126.6	6.4	6.0
Dec	9,390.6	7.6	7.1	129.3	5.1	5.8

#### Euro area monetary aggregate M3 and corresponding items of Finnish monetary financial institutions<sup>1</sup>

<sup>1</sup> Excl. negotiable instruments held by central governments and non-euro area residents.
 <sup>2</sup> Excl. notes and coins held by the public.
 <sup>3</sup> Seasonally and calendar effect adjusted.
 <sup>4</sup> Calculated from monthly differences in stocks adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.
 Sources: European Central Bank and Bank of Finland.

#### Table 6. Key market interest rates

	Eonia rate		Euribor rates (actual/360)						
		1-month	2-month	3-month	6-month	9-month	12-month	5-year	ent bonds 10-year
	1	2	3	4	5	6	7	8	9
2004	2.05	2.081	2.094	2.107	2.149	2.203	2.274	3.25	4.11
2005	2.09	2.144	2.166	2.186	2.236	2.283	2.335	2.85	3.35
2006	2.84	2.945	3.018	3.083	3.238	3.353	3.440	3.59	3.78
2007	3.87	4.080	4.194	4.277	4.351	4.406	4.449	4.18	4.29
2008	3.87	4.276	4.484	4.644	4.727	4.774	4.826	3.88	4.30
2008									
Jan	4.02	4.197	4.351	4.482	4.501	4.499	4.498	3.83	4.14
Feb	4.03	4.182	4.279	4.362	4.356	4.350	4.349	3.58	4.06
Mar	4.09	4.305	4.429	4.596	4.593	4.590	4.590	3.58	4.00
Apr	3.99	4.369	4.575	4.784	4.795	4.809	4.820	3.95	4.22
Мау	4.01	4.387	4.678	4.857	4.897	4.945	4.994	4.17	4.47
Jun	4.01	4.472	4.738	4.941	5.088	5.230	5.361	4.69	4.78
Jul	4.19	4.472	4.748	4.961	5.148	5.254	5.393	4.64	4.77
Aug	4.30	4.487	4.759	4.965	5.160	5.230	5.323	4.21	4.47
Sep	4.27	4.660	4.834	5.019	5.219	5.289	5.384	4.05	4.43
Öct	3.82	4.831	4.952	5.113	5.178	5.211	5.248	3.57	4.33
Nov	3.15	3.843	4.170	4.238	4.295	4.328	4.350	3.14	4.09
Dec	2.49	2.993	3.195	3.293	3.365	3.417	3.452	2.99	3.72
	2.49 Dean Central Ba			3.293	3.365	3.417	3.452	2.99	3.72

Sources: European Central Bank, Reuters and Bloomberg.

# Table 7.Nominal competitiveness indicators for Finland and the effective exchange rate of the euro calculatedby the ECB

	Narrow indicator <sup>1</sup>	Narrow plus euro area indicator <sup>1</sup>	Broad indicator <sup>4</sup>	Effective exchange rate of the euro, narrow group of countries <sup>1</sup>
		January–Ma	<i>arch</i> 1999 = 100	
	1	2	3	4
2004	103.1	101.6	103.1	107.5
005	103.0	101.6	102.7	107.5
2006	103.7	101.9	102.8	108.4
2007	108.0	104.0	104.8	114.1
2008	114.5	107.0	107.3	121.5
2008				
Jan	112.6	106.1	106.8	120.0
Feb	112.5	106.0	106.6	119.8
Mar	115.2	107.3	108.0	123.4
Apr	116.9	108.0	108.6	125.3
May	116.5	107.8	108.3	124.7
Jun	117.0	108.1	108.4	124.9
Jul	117.9	108.5	108.8	125.5
Aug	115.6	107.4	107.6	122.8
Sep	114.1	106.7	106.8	120.3
Öct	110.4	105.1	105.1	115.7
Νον	109.9	104.8	104.8	115.0
Dec	115.3	107.4	107.8	121.0

<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
2004	2.1	0.1
2005	2.2	0.8
2006	2.2	1.3
2007	2.1	1.6
2008	3.3	3.9
2008		
Jan	1.8	1.3
Feb	1.8	1.2
Mar	1.9	1.6
Apr	1.9	1.5
May	1.9	1.3
Jun	1.9	1.4
Jul	1.8	1.6
Aug	1.7	1.3
Sep	2.1	1.7
Oct	2.6	1.9
Nov	3.1	2.2
Dec	3.1	1.9
Sources: Eurostat and Statist	ics Finland.	

		US dollar			Japanese yen	
	Low	Average	High	Low	Average	High
	1	2	3	4	5	6
2004	1.1802	1.2439	1.3633	126.34	134.44	141.03
2005	1.1667	1.2441	1.3507	130.88	136.85	143.47
2006	1.1826	1.2556	1.3331	137.50	146.02	156.93
2007	1.2893	1.3705	1.4874	150.93	161.25	168.68
2008	1.2460	1.4708	1.5990	115.75	152.45	169.75
2008						
Jan	1.4482	1.4718	1.4895	153.50	158.68	163.83
Feb	1.4513	1.4748	1.5167	154.59	157.97	160.57
Mar	1.5196	1.5527	1.5812	152.50	156.59	158.55
Apr	1.5526	1.5751	1.5940	157.55	161.56	164.43
May	1.5347	1.5557	1.5761	158.81	162.31	164.07
Jun	1.5336	1.5553	1.5784	161.82	166.26	169.23
Jul	1.5589	1.5770	1.5990	165.66	168.45	169.75
Aug	1.4598	1.4975	1.5574	160.19	163.63	169.16
Sep	1.3934	1.4370	1.4731	148.07	153.20	158.01
Oct	1.2460	1.3322	1.4081	115.75	133.52	149.55
Nov	1.2525	1.2732	1.2935	119.30	123.28	127.89
Dec	1.2608	1.3449	1.4616	116.91	122.51	129.22

## Table 9.Key euro exchange rates, currency-value of one euro

		Pound sterling			Swedish krona	
	Low	Average	High	Low	Average	High
	7	8	9	10	11	12
2004	0.65560	0.67866	0.7088	8.8992	9.1243	9.2810
2005	0.66240	0.68380	0.7073	8.9758	9.2822	9.6325
2006	0.66800	0.68173	0.7006	8.9661	9.2544	9.4733
2007	0.65485	0.68434	0.7348	9.0190	9.2501	9.4754
2008	0.74130	0.79628	0.9786	9.2790	9.6152	11.2305
2008						
Jan	0.74130	0.74725	0.76000	9.3625	9.4314	9.5105
Feb	0.74160	0.75094	0.76520	9.3001	9.3642	9.4510
Mar	0.76050	0.77494	0.79580	9.3581	9.4020	9.4730
Apr	0.78320	0.79487	0.80610	9.3020	9.3699	9.4190
May	0.77900	0.79209	0.80145	9.2790	9.3106	9.3555
Jun	0.78630	0.79152	0.79740	9.3118	9.3739	9.4703
Jul	0.78670	0.79308	0.79920	9.3935	9.4566	9.5163
Aug	0.78165	0.79279	0.80500	9.3475	9.3984	9.4622
Sep	0.78730	0.79924	0.81330	9.4591	9.5637	9.7943
Oct	0.77165	0.78668	0.80630	9.6510	9.8506	10.1225
Νον	0.79690	0.83063	0.85980	9.8512	10.1275	10.4025
Dec	0.84155	0.90448	0.97855	10.3588	10.7538	11.2305

Source: European Central Bank.

	Czech koruna	Danish krone	Estonian kroon	Hungarian forinti	Lithuanian litas	Latvian lats	Puolan zloty
	1	2	3	4	5	6	7
2004	31.891	7.4399	15.6466	251.66	3.4529	0.6652	4.5268
2005	29.782	7.4518	15.6466	248.05	3.4528	0.6962	4.0230
2006	28.342	7.4591	15.6466	264.26	3.4528	0.6962	3.8959
2007	27.766	7.4506	15.6466	251.36	3.4528	0.7001	3.7837
2008	24.946	7.4560	15.6466	251.51	3.4528	0.7027	3.5121
2008							
Jan	26.050	7.4505	15.6466	256.03	3.4528	0.6982	3.6092
Feb	25.377	7.4540	15.6466	262.15	3.4528	0.6967	3.5768
Mar	25.208	7.4561	15.6466	259.94	3.4528	0.6970	3.5363
Apr	25.064	7.4603	15.6466	253.75	3.4528	0.6974	3.4421
May	25.100	7.4609	15.6466	247.69	3.4528	0.6987	3.4038
Jun	24.316	7.4586	15.6466	242.42	3.4528	0.7032	3.3736
Jul	23.528	7.4599	15.6466	231.82	3.4528	0.7035	3.2591
Aug	24.287	7.4595	15.6466	235.88	3.4528	0.7039	3.2920
Sep	24.497	7.4583	15.6466	240.68	3.4528	0.7060	3.3747
Oct	24.768	7.4545	15.6466	260.15	3.4528	0.7093	3.5767
Νον	25.193	7.4485	15.6466	265.32	3.4528	0.7092	3.7326
Dec	26.120	7.4503	15.6466	265.02	3.4528	0.7084	4.0044

## Table 10.Other euro exchange rates, currency-value of one euro, average

	Turkish lira	Australian dollar	Canadian dollar	Chinese yuan renminbi	Hong Kong dollar	Indonesian rupiah	South Korean won
	16	17	18	19	20	21	22
2004	1777052	1.6905	1.6167	10.2965	9.6881	11117.42	1422.62
2005		1.6320	1.5087	10.1953	9.6768	12070.84	1273.61
2006	1.8089	1.6668	1.4237	10.0096	9.7545	11512.37	1198.58
2007	1.7865	1.6348	1.4678	10.4178	10.6912	12528.33	1272.99
2008	1.9064	1.7416	1.5594	10.2236	11.4541	14165.16	1606.09
2008							
Jan	1.7322	1.6694	1.4862	10.6568	11.4863	13839.19	1387.66
Feb	1.7632	1.6156	1.4740	10.5682	11.4996	13542.26	1392.57
Mar	1.9309	1.6763	1.5519	10.9833	12.0832	14241.09	1523.14
Apr	2.0500	1.6933	1.5965	11.0237	12.2728	14497.21	1555.98
May	1.9408	1.6382	1.5530	10.8462	12.1341	14436.99	1613.18
Jun	1.9206	1.6343	1.5803	10.7287	12.1425	14445.41	1604.95
Jul	1.9128	1.6386	1.5974	10.7809	12.3004	14442.77	1604.58
Aug	1.7669	1.6961	1.5765	10.2609	11.6932	13700.21	1566.23
Sep	1.7843	1.7543	1.5201	9.8252	11.1905	13430.23	1630.26
Oct	1.9612	1.9345	1.5646	9.1071	10.3368	13283.63	1759.07
Νου	2.0342	1.9381	1.5509	8.6950	9.8687	14984.85	1783.12
Dec	2.0894	2.0105	1.6600	9.2205	10.4240	15276.62	1850.06

Sources: European Central Bank and Bank of Finland.

	Slovak koruna	Swiss franc	Icelandic krona	Norwegian krone	Bulgarian lev	Croatian kuna	Romanian leu	Russian rouble
	8	9	10	11	12	13	14	15
2004	40.0218	1.5438	87.14	8.3697	1.9533		40510	35.8105
2005 2006	38.5989 37.2341	1.5483 1.5729	78.23 87.76	8.0092 8.0472	1.9558 1.9558	 7.3247	36622	35.1860 34.1109
2008	33.7752	1.6427	87.63	8.0165	1.9558	7.3375	 3.3353	35.0183
2008	31.2617	1.5874		8.2237	1.9558	7.2239	3.6826	36.4207
2008								
Jan	33.5465	1.6203	94.50	7.9566	1.9558	7.3155	3.6937	36.0300
Feb	33.0848	1.6080	98.07	7.9480	1.9558	7.2707	3.6557	36.1357
Mar	32.4986	1.5720	112.08	7.9717	1.9558	7.2662	3.7194	36.8259
Apr	32.3741	1.5964	116.65	7.9629	1.9558	7.2654	3.6428	37.0494
May	31.4657	1.6247	117.46	7.8648	1.9558	7.2539	3.6583	36.9042
Jun	30.3223	1.6139	123.28	7.9915	1.9558	7.2469	3.6556	36.7723
Jul	30.3185	1.6193	123.61	8.0487	1.9558	7.2297	3.5764	36.8261
Aug	30.3338	1.6212	122.07	7.9723	1.9558	7.1947	3.5271	36.2502
Sep	30.2830	1.5942	131.33	8.1566	1.9558	7.1223	3.6248	36.3727
Öct	30.4592	1.5194	274.64	8.5928	1.9558	7.1639	3.7479	35.2144
Νον	30.3850	1.5162	242.95	8.8094	1.9558	7.1366	3.7838	34.7964
Dec	30.1958	1.5393		9.4228	1.9558	7.2245	3.9227	37.8999

	Malaysian ringgit	New Zealand dollar	Philippine peso	Singapore dollar	Thai baht	South African rand	IMF SDRs
	23	24	25	26	27	28	29
2004 2005 2006 2007 2008	4.7265 4.7116 4.6044 4.7076 4.8893	1.8731 1.7660 1.9373 1.8627 2.0770	 64.379 63.026 65.172	2.1016 2.0702 1.9941 2.0636 2.0762	50.050 50.063 47.594 44.214 48.475	8.0092 7.9183 8.5312 9.6596 12.0590	0.839260 0.841434 0.853046 0.894924 0.930134
2008	7.0023	2.0770	05.172	2.07.02	10.175	12.0370	0.750134
Jan	4.8090	1.9054	60.079	2.1062	44.758	10.3101	0.929175
Feb	4.7548	1.8513	59.845	2.0808	46.085	11.2899	0.930124
Mar	4.9455	1.9344	64.031	2.1489	48.848	12.3712	0.950887
Apr	4.9819	1.9960	65.790	2.1493	49.752	12.2729	0.962426
May	5.0081	2.0011	66.895	2.1259	49.942	11.8696	0.952438
Jun	5.0666	2.0424	68.903	2.1278	51.649	12.3467	0.960579
Jul	5.1258	2.0900	70.694	2.1438	52.821	12.0328	0.966943
Aug	4.9843	2.1097	67.307	2.1024	50.697	11.4680	0.944732
Sep	4.9461	2.1293	67.113	2.0549	49.264	11.5899	0.923652
Oct	4.6895	2.1891	63.882	1.9666	45.872	12.9341	0.879151
Νον	4.5682	2.2554	62.496	1.9183	44.677	12.8785	0.858517
Dec	4.7755	2.4119	64.505	1.9888	47.107	13.4275	0.901712

#### Table 11. Irrevocable euro conversion rates as from 1 Jan 1999

Country	Currency	Units of currency per euro	Country	Currency	Units of currency per euro
Austria	schilling	13.7603	Luxembourg	franc	40.3399
Belgium	franc	40.3399	Netherlands	guilder	2.20371
Germany	mark	1.95583	Portugal	escudo	200.482
Spain	peseta	166.386	Greece*	drakma	340.750
Finland	markka	5.94573	Slovenia**	tolar	239.640
France	franc	6.55957	Cyprus***	pound	0.585274
Ireland	pound	0.787564	Malta***	lira	0.429300
	lira	1936.27			

Table 12.

#### Exchange rate mechanism ERM II

Currency	Central rate EUR 1 =	Fluctuation band, %	Upper rate*	Lower rate*	Valid from	
	1	2	3	4	5	
Danish krone	7.46038	± 2.25	7.62824	7.29252	1 Jan 1999	
Estonian kroon	15.6466	± 15	17.9936	13.2996	28 Jun 2004	
Lithuanian litas	3.45280	± 15	3.97072	2.93488	28 Jun 2004	
Latvian lats	0.702804	± 15	0.808225	0.597383	2 May 2005	
Slovak koruna	30.1260	± 15	34.6449	25.6071	29 May 2008	

\* 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	2003	2004	2005	2006	2007	2008
500 euro	1.8	2.1	1.6	1.5	1.7	2.4
200 "	1.8	1.7	1.3	1.2	1.2	1.4
100 "	6.7	5.7	5.4	5.2	5.7	6.8
50 "	84.4	74.6	76.5	79.6	83.9	95.7
20 "	290.5	222.4	179.3	180.7	191.3	236.8
10 "	30.3	37.4	32.2	31.1	32.0	41.6
5 "	31.0	45.2	39.6	38.8	39.0	48.9
Total	446.5	389.2	335.9	338.1	354.7	433.6
Source: Bank of Finla	nd.					