BANK OF FINLAND

ANNUAL REPORT 1999

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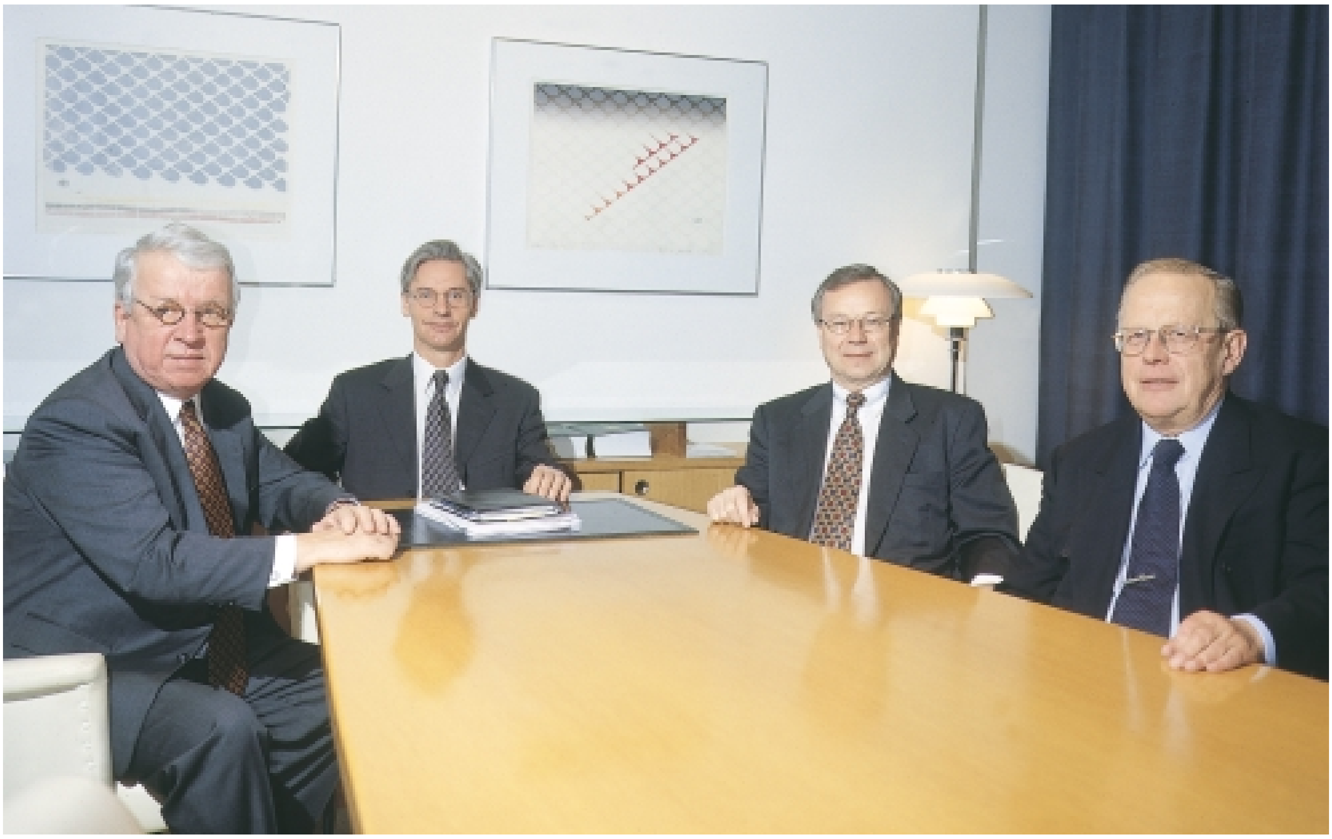


Board of the Bank of Finland.
From the left: Esko Ollila, Matti Vanhala, Matti Louekoski and Matti Korhonen.

The governor's review

A new era in European economic integration dawned in 1999 when Finland and ten other European countries entered the Third Stage of Economic and Monetary Union (EMU), began to conduct a single monetary policy and adopted a single currency, the euro. The transition to monetary union went very smoothly, which was helped by the fact that the changeover had been carefully planned and the participating countries had already achieved price stability and convergence in interest rates before the starting date. This created a good basis for the single monetary policy that the European Central Bank (ECB) began to conduct together with the national central banks (NCBs).

For the countries involved, transition to the single monetary policy brought with it a fundamental change in the operating environment of monetary policy. The Eurosystem's stability-oriented monetary policy strategy, which is based on two pillars, was introduced without any noteworthy problems. The aim is to maintain price stability, the primary objective assigned to the ECB, from the point of view of the euro area as a whole. Monetary policy decision-making is centralized in the Governing Council of the ECB, which comprises the members of the Executive Board of the ECB and the governors of the NCBs of the participating countries. Implementation of monetary policy remains the responsibility of the NCBs, a task which they carry out together with the ECB.

In view of the magnitude of these changes, the Eurosystem's single monetary policy got off to a good start. Decision-making within the Governing Council was based on the approved strategy, in-depth analysis and ongoing discussion and deliberation. The current assessment is that the necessary monetary policy decisions taken by the new body in the course of the year were reasonably well timed.

At the onset of monetary union, inflation in the euro area had already slowed to a very moderate rate by historical standards. Furthermore, the increased competition resulting from the opening up of economies, freeing of competition, greater ease of conducting trade and improved comparability of prices was conducive to maintenance of price stability. It is to be hoped that monetary union will also have an impact on wage agreements and the pricing of goods and services in a way that is compatible with price stability. Although the rate of increase in prices picked up in the course of 1999, largely because of higher oil prices, it remained within the limits set by the ECB for the price stability objective throughout the year.

The transition to monetary union took place in conditions of relatively low interest rates. The NCBs of the participating countries had completed the convergence of their official interest rates in late 1998. For various reasons, including the Asian and Russian crises, economic activity slowed and the rise in prices virtually came to a halt. In spring 1999 the Governing Council of the ECB decided to reduce interest rates further. The interest rate on the main refinancing operations was lowered to 2.50%, and money market rates and bank lending rates responded by falling to historically very low levels throughout the euro area. As, moreover, the euro depreciated, monetary policy in Europe was very easy in 1999. Therefore monetary policy provided strong support to the euro area economies. Unemployment nevertheless remained at a high level in Europe and it continues to be a major problem.

In summer and autumn 1999 the euro area economy began to show signs of recovery. Besides the easy stance of monetary policy, the upturn in activity benefited from robust economic growth in the United States and recovery from recession in the Southeast Asian economies. The Governing Council raised interest rates in early November. The markets welcomed the rate hike. Even after the increase, interest rates in the euro area were still very low, and easy monetary conditions continued to support the recovery of the euro area economy.

In recent months economic growth in the euro area has gained momentum and the rate of increase in prices has accelerated. According to forecasts, price stability will be maintained in 2000, but stronger economic growth, higher energy prices and rapid credit growth have increased inflation risks. These risks are being monitored closely within the Eurosystem and it will be endeavoured to decide at the appropriate time on necessary monetary policy measures to safeguard price stability.

The adoption of the single monetary policy has increased the demands on the various areas of economic policy where decisions are taken at national level. Given a single monetary policy, only national fiscal, incomes and structural policies can address problems that are due to differences in national economic performance. The objective of the Stability and Growth Pact, which sets out the guiding principles for fiscal policy, is to achieve budgetary positions in general government finances that are close to balance or in surplus within the next few years.

Although most EU countries are estimated to have achieved the budget targets they set for 1999, in many countries the structural balance in general government finances did not strengthen to any significant degree. The reduction in deficits was due in large part to a decline in interest payments and, in some countries, also to faster-than-expected economic growth. There was only a very small decline in the euro area's large public debt.

Despite the improved economic outlook for the euro area and planned spending cuts, budgetary positions in a number of EU countries are sensitive to an economic slowdown and higher interest rates. There is still a concern that in some countries the 3% reference value for the budget deficit will be breached unless new fiscal measures are taken. In many countries the consolidation of public finances calls for more ambitious measures than those announced so far.

After a gap of a couple of years, EU countries should now exploit the potential provided by the recovery in economic activity to put government finances on a sounder footing and to mitigate long-term structural problems. It should be stressed that the medium-term objective stated in the Stability and Growth Pact to achieve budgetary positions close to balance or in surplus is not intended to deal solely with the risks associated with normal cyclical fluctuations but also with pressures on public expenditure caused by excessive debt ratios and population ageing. Government spending must be reined in so as to allow a narrowing in the tax wedge. Moreover, the prerequisites for growth and employment must be enhanced by reforms that improve the functioning of markets and increase efficiency in the public sector. An accelerated reduction in public debt in the fastest growing countries would alleviate inflationary pressures in these countries and help to foster balanced growth.

The Finnish economy continued to grow at a robust pace in 1999 and at noticeably faster than the euro area on average. Growth slowed in the first half of the year because of a weakening in export demand, but strong domestic demand and a recovery in exports in the second half of the year helped to sustain relatively rapid growth throughout the year. Employment continued to grow and unemployment fell. Structural unemployment remains high, however. The structure of exports diversified and price competitiveness remained good. As the traditional sectors were hit by the weakness of export demand, the growth of industrial production rested entirely on the continued strong growth of the electronics and telecommunications sector.

The fall in interest rates boosted private consumption and investment. Private investment in non-manufacturing sectors grew considerably. Housing prices rose in response to lower interest rates, strong income expectations, a substantial increase in equity wealth and internal migration. Although there was a marked increase in housing investment, it was not enough to eliminate the imbalance between supply and demand in growth centres. Confidence in the future was attested by the fact that both firms and households increased their borrowing and indebtedness.

Inflation increased in Finland towards the end of 1999, mainly because of higher oil prices, and exceeded the euro area average. In December the 12-month change in consumer prices increased to over 2%, as measured by the Harmonized Index of Consumer Prices.

Continued robust economic growth and a fairly tight stance in government spending helped to strengthen the financial position of the public sector in 1999. Tax receipts grew notably while public expenditure, including employment-related spending and interest payments, declined and the increase in government transfers slowed as a result of cuts decided in previous years. Central government finances moved towards balance and the surplus of the public sector as a whole increased. The large public deficits that characterized the early 1990s have been replaced by surpluses and a downward trend has been established in public debt.

The surplus in public finances, and especially central government finances, will grow over the next few years as a consequence of good economic performance and a decline in interest payments on government debt. However, the balance in public finances is built on a very high level of taxation, which, for structural reasons, is unsustainable in the longer term. If growth is to be secured in the future, there will have to be a significant reduction in taxation. This will have to be accompanied by further adjustment in public spending so as to make it possible to maintain balance in central and local government finances in conditions where the tax burden is substantially lower than at present.

In addition to the maintenance of price stability, the Bank of Finland is responsible for promoting the stability and efficiency of the financial system. This task, which is referred to as oversight, covers the banking sector, the securities markets and financial market infrastructure, ie payment and settlement systems. Oversight is concerned particularly with risks that could jeopardize the reliable functioning of the entire financial system. The transition to economic and monetary union has increased the challenges for oversight and underlined the importance of cooperation between the relevant authorities in the euro area.

The start of the Third Stage of EMU has been reflected in euro area financial markets in many ways. A wave of mergers, alliances and take-over bids has speeded up the pace of structural change in the banking sector in the euro area. There are also signs of a trend towards increasing cross-border consolidation in the banking industry. The single monetary policy and the launch of the EU-wide TARGET payment system have contributed to the rapid integration of money markets. The securitization of euro area financial markets is well under way, as evidenced in a marked increase in share and corporate debt issues.

Finnish banks have entered economic and monetary union in good condition by historical standards. Following the banking crisis, the banking sector has gone through a process of streamlining that has left it structurally competitive, and Finnish banks are now among the most profitable and efficient in Europe. With the exception of wholesale banking, foreign banks still have a relatively small presence in Finland. But the ever faster pace of consolidation in the banking sector and heightened interbank competition worldwide pose great challenges for Finnish banks in the future. On top of this, competition extending across different fields of activity is changing the nature of banking.

A striking feature of developments in Finnish securities markets in 1999 was the very rapid growth of market capitalization and trade in the equity market. The growth of equity transactions has placed pressures on the settlement of trades, and attention will have to be given in the future to upgrading settlement procedures. The globalization of securities markets is leading to rapid integration of market infrastructure in Europe. In Finland this has meant, inter alia, the establishment of links with national securities depositories in the German and French securities markets.

The changeover to the single monetary policy has brought with it many operational and organizational changes at the Bank of Finland. It is the Bank's task and obligation to endeavour to be an effective influence within the European System of Central Banks (ESCB) and for this reason the Bank devotes considerable resources to expertise in the ESCB's wide-ranging work. The NCBs assist the ECB in preparatory work through participation in the committees and associated working groups set up to deal with matters in various fields. These bodies have become a central element of cooperation within the ESCB, and this has had a major impact on day-to-day work at the Bank of Finland. At home, the Bank of Finland seeks to promote national fiscal and other economic policies that are compatible with the ECB's monetary policy. The Bank is also actively involved in efforts to ensure that financial and payment systems in Finland are safe and efficient.

Implementation of monetary policy decisions – ECB money market operations –is decentralized through the NCBs. The Bank of Finland manages its own foreign reserves, in addition to part of the ECB's foreign reserves. Transition to monetary union has entailed a marked increase in statistical tasks and in cooperation in the sphere of statistics, both at home and within the ESCB. The ECB's active external communication and publication policy has been reflected in the work of the Bank of Finland in the form of an increase in the quantity of material produced and a heavier workload. The Bank of Finland has endeavoured to increase transparency within the ESCB by, inter alia, starting the publication of its own forecasts and disseminating information on issues related to economic and monetary union to the general public.

The Bank of Finland's organization was streamlined and its operations revamped to better correspond to the demands of cooperation within the ESCB. The most important changes were the merger of the two key departments responsible for economic analysis and preparation of monetary policy and the combination of statistical tasks previously scattered among different departments into a single department. Though some functions were streamlined, the total number of staff did not decline significantly in 1999 as the transition to monetary union meant an increase in tasks in some areas.

Monetary policy, economic developments and implementation of monetary policy in the euro area

Price stability prevailed in the euro area in 1999

Transition to the single monetary policy was accomplished without major problems

The European Central Bank (ECB) and the national central banks of the EU countries that adopted the euro assumed responsibility for the euro area's single monetary policy on 1 January 1999. The ECB's Governing Council set the interest rate on the main refinancing operations of the Eurosystem at 3%, which was the common national steering rate adopted by all the euro area countries, except Italy, in December 1998. At the same time, the interest rate on the marginal lending facility was set at 4.5% and the deposit rate at 2%.

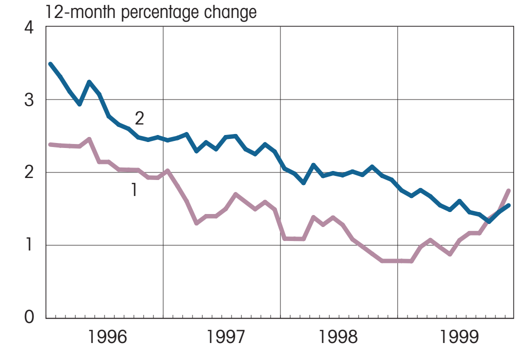
Such a low initial setting for the ECB's key interest rate was made possible by the prevailing conditions of price stability and slowing economic growth in the euro area. The interest rate settings were in harmony with the primary objective of Eurosystem monetary policy –price stability –which is defined as an annual rate of increase in the Harmonized Index of Consumer Prices (HICP) of less than 2% for the euro area. The aim is to achieve this target over the medium term.

The ECB's strategy for attaining price stability comprises two pillars. The first is the money supply. In this connection, a reference value of 4½% was set for the annual growth rate of the broad monetary aggregate M3 in 1999, as measured by the three-month moving average. The other pillar is a broad assessment of the outlook for price developments and the risks to price stability in the euro area. The assessment is based on analysis of conditions in the financial markets and a wide range of other economic indicators.

The deceleration in inflation in the euro area countries, which had started in mid-1998, continued until the beginning of 1999, by which time the annual rate of increase in the HICP was well below 1% (Chart 1). The slowing of inflation was a result of declines in the prices of goods imports and particularly energy prices. The prices of services, which have an impact on domestic inflation, rose considerably faster than goods prices.

The rate of increase in euro area consumer prices picked up slightly during the first half of 1999, partly because of a strong upturn in crude oil prices from the start of the year (Chart 2). A slow-

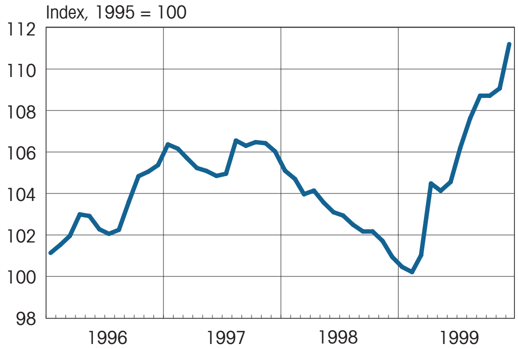
Chart 1.
Harmonized Index of Consumer Prices for the euro area



1. Total index
2. Services

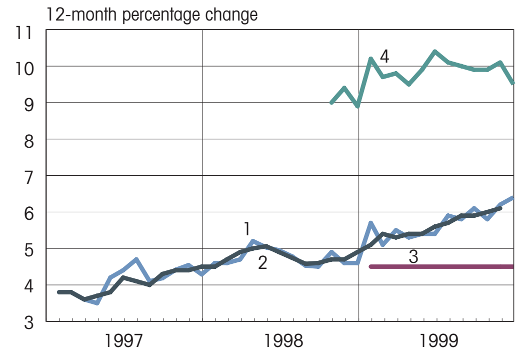
Source: Eurostat.

Chart 2.
Energy prices in the euro area



Source: Eurostat.

Chart 3.
Monetary and credit aggregates in the euro area



1. M3
2. M3 (3-month centred moving average of 12-month percentage change)
3. Reference value for the growth of M3
4. Bank lending to the private sector

Source: European Central Bank.

ing in the rate of increase in food and services prices had a dampening effect on inflation. Deregulation in the telecommunications sector and tightening competition in certain euro area countries helped to slow the rise in service prices.

The growth of monetary aggregates was fairly subdued in the early part of 1999 (Chart 3). Nonetheless, the average rate of increase in the broad aggregate M3 did climb marginally above its reference value in response to a decline in interest rates. However, the gap was rather small in view of the uncertainty and special factors associated with the inception of the euro area. Lending in the euro area grew at a considerably faster pace than M3, particularly lending to the private sector. Growth was fastest in the small peripheral countries, where interest rates had fallen rapidly and the economic outlook was better than the euro area average.

The slowing in global economic growth became more evident in growth in the euro area countries in the latter part of 1998. The financial crisis in Brazil in early 1999 provided a reminder of the vulnerability of emerging market economies. But output in the United States continued to grow at a faster-than-expected pace. Moreover, there were signs of incipient recovery in several Asian countries, although Japan continued to be plagued by serious economic problems.

The slowest phase of GDP growth in the euro area occurred in early 1999 (Chart 4). The slowing was particularly pronounced with regard to industrial production.

Economic growth was sustained by domestic demand, which offset the negative impact of net exports and inventory changes. Private consumption and investment both made positive contributions to economic growth.

Key interest rate lowered in April

In April the Governing Council decided to ease monetary policy by lowering the interest rate on the main refinancing operations by 0.5 percentage point to 2.5% (Chart 5). The decision was based on the view that euro area inflation would remain under 2% in the medium term. The Governing Council did not consider that the slight acceleration in inflation –due mainly to a rise in energy prices –posed a threat to price stability in the medium term. Nor did analysis of other economic variables reveal risks that could jeopardize price stability in the euro area.

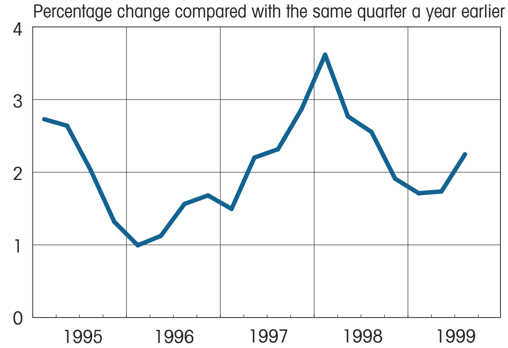
Despite a surge in the world oil prices in the early part of the year, the resulting rise in energy prices was reflected only gradually in the overall level of consumer prices in the industrial countries. The rise in prices was mitigated by both tighter competition in many sectors and the continued existence of spare capacity. The annual rate of inflation in the euro area, as measured by the HICP, rose above 1% in the latter part of the summer.

During the spring and summer months growth prospects for the world economy improved, as the outlook for GDP growth in Japan picked up and the crisis economies of Southeast Asia and South America generally continued to perform well. Among the EU countries outside the euro area, growth prospects improved noticeably in the United Kingdom and Sweden. Growth in the euro area picked up in the second quarter as exports and industrial production recovered. In the third quarter growth strengthened further, and growth rate differentials across euro area countries narrowed as output in the hitherto slower growing economies also gained momentum.

Key interest rate raised at the beginning of November

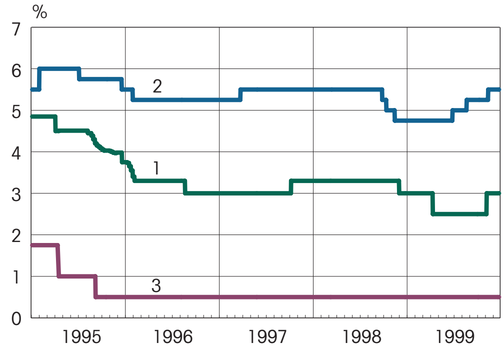
On 4 November the Governing Council decided to raise the interest rate on the main refinancing operations of the Eurosystem by 0.5 percentage point to 3%. Thus the rate returned to the level that had prevailed before the cut in April. The rationale for the rate hike was that the build-up in price pressures that had started in the early part of the summer posed a threat to price stability. Moreover, the outlook for economic growth had improved and several indicators, particularly growth in the money supply and lending, pointed to easy monetary conditions in the euro area. The Governing Council judged that the rate hike would help to check price pressures in the

Chart 4.
Real GDP growth in the euro area



Source: Eurostat.

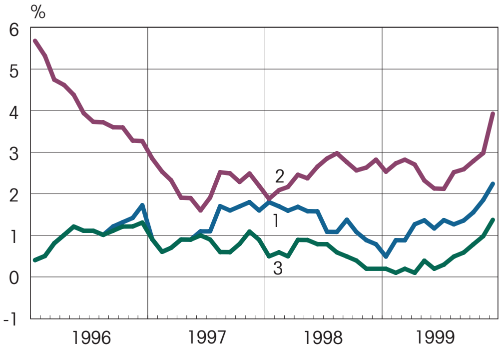
Chart 5.
Official interest rates



1. Eurosystem: main refinancing rate (German repo rate until end-1998)
2. United States: fed funds target rate
3. Japan: discount rate

Sources: European Central Bank and Reuters.

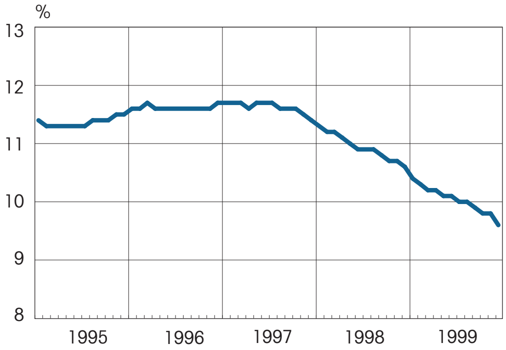
Chart 6.
Inflation differentials in the euro area



1. Inflation rate in Finland
2. Highest inflation rate in the euro area
3. Lowest inflation rate in the euro area

Sources: Statistics Finland and Eurostat.

Chart 7.
Unemployment rate in the euro area



Source: Eurostat.

medium term and keep expected inflation below 2%.

The interest rate decision was influenced by data on money supply and lending growth. The growth rate of M3 had accelerated during the latter part of the summer and the autumn. The three-month average for the annual growth rate was 5.9% for July–September, ie nearly 1½ percentage points above the reference value. Moreover, the volume of lending, especially to the private sector, had continued to grow at fairly rapid pace. Overall, the continuing and widening gap between the actual and reference growth rates for M3 suggested that there was an abundance of liquidity in the euro area, which was judged to pose a potential threat to price stability in the medium term.

At the beginning of December the Governing Council decided to keep the reference value for money growth in 2000 the same as in 1999, ie 4½%. The decision was based on the fact that the underlying components of the reference value –the definition of euro area price stability, estimated GDP trend growth and the trend decline in M3 velocity –had remained essentially unchanged.

Favourable economic performance in the latter part of the year

During the final months of 1999 the rise in euro area consumer prices continued to accelerate modestly and HICP annual inflation was 1.7% in December. This was mainly the result of continued increases in prices of energy and the weakening of the euro. A slowdown in the rate of increase in, for example, food prices, was one of the factors that helped to dampen overall inflation. A look at the inflation differential between the euro area countries with the highest and lowest inflation rates shows that the gap, which was just over 2 percentage points in January, narrowed slightly in the course of the year (Chart 6).

Reflecting favourable developments and growth prospects for the global economy, real GDP growth in the euro countries picked up substantially in the final months of 1999. However, for the year as a whole, GDP growth –at just over 2% –was notably weaker than in 1998, largely because of the poor growth performance in the first half of 1999.

Unemployment in the euro area declined in the course of the 1999 and stood at just below 10% at year-end (Chart 7). Starting in the late spring the decline in the unemployment rate slowed, but it picked up again in the final quarter of the year as economic growth strengthened. Although the unemployment rate for the whole euro area remained at a level that was high in comparison with the past and by international standards, some tightness was observed in the labour markets of several of the faster growing countries, either in specific sectors or on an economy-wide basis.

The current account surplus for the euro area in 1999 was EUR 43 billion, which was nearly 1% of GDP. The inflow of external funds into the euro area resulted not only from the current account surplus; euro area banks also attracted a large amount of external investment capital. Capital outflows from the euro area, both portfolio investment and direct investment, went mainly to the United States. Taken as a whole, the euro area's external assets and liabilities are nearly in balance; Germany has a small net asset position while most other countries have net liabilities.

Market interest rates rose in the course of the year

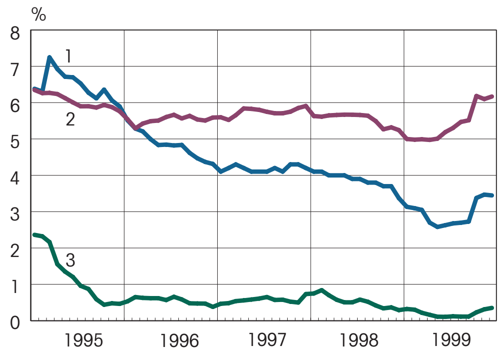
The changeover to the single monetary policy was accomplished without any major problems, and in the early months of the year euro area interest rates were relatively stable. Money market rates in the euro area remained around 3% during the first quarter. At that time the markets were expecting a further decline in interest rates (Chart 8). Confidence in the euro was reflected in a decline in long-term interest rates in the euro area. In Germany the ten-year government bond yield fell below 4% at the start of 1999, a decline of more than 1.5 percentage points compared with a year earlier. The decline was partly the result of growing uncertainty in the international financial markets, which heightened investors' interest in, for example, the euro area. During the same period rates on US long-term government bonds declined by slightly less than a percentage point, resulting in a widening in the differential between euro area and US long-term rates (Chart 9).

The Governing Council's April decision on interest rates took the financial markets by surprise as regards the magnitude of the change. The markets had been expecting a 25 basis point reduction, as reflected in the decline in market rates before the decision. Euribor rates fell sharply in response to the interest rate cut.

The substantial decline in interest rates quelled market expectations of further rate cuts. Movements in long-term rates were dominated mainly by movements in corresponding US rates. Nonetheless, by early summer the differential between euro area and US long-term rates had widened to about 1.5 percentage points.

In the early part of the summer euro area long-term interest rates, in particular, turned up. Between the start of June and mid-August yields on ten-year government bonds rose by nearly a percentage point and the euro area yield curve steepened markedly. Initially, interest rates moved in response to the rise in US long-term rates, which was associated with expectations of a tightening in the country's monetary policy. Later, interest rate

Chart 8.
Three-month money market rates

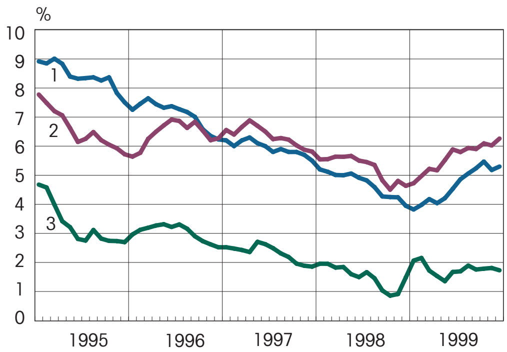


1. Euro area[1]
2. United States
3. Japan

[1] Euribor from January 1999. Until end-December 1998 the euro area rate is calculated as the average of national rates weighted by GDP.

Sources: European Central Bank and Reuters.

Chart 9.
Ten-year government bond yields

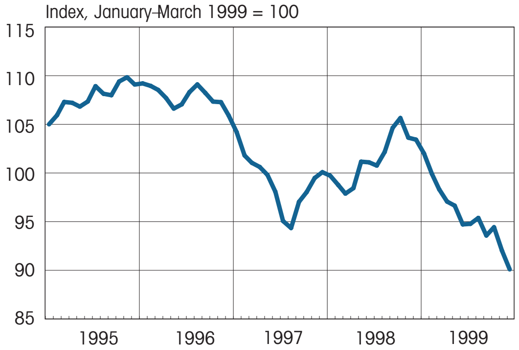


1. Euro area[1]
2. United States
3. Japan

[1] From January 1999 the weights are the nominal outstanding amounts of government bonds. Until end-December 1998 yields are calculated on the basis of harmonized national government bond yields weighted by GDP.

Sources: European Central Bank and Reuters.

Chart 10.
External value of the euro

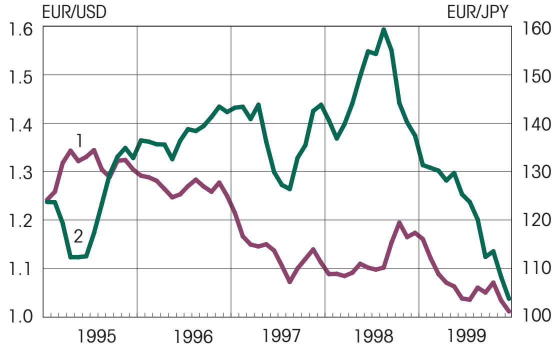


An upward movement in the index represents an appreciation of the euro.

Before 1999 a trade-weighted index of the currencies of euro area countries.

Source: European Central Bank.

Chart 11.
Euro exchange rates against the US dollar and the Japanese yen



An upward movement of the curve represents an appreciation of the euro.
Ecu exchange rate until end-December 1998.

1. Value of one euro in US dollars (left-hand scale)
2. Value of one euro in Japanese yen (right-hand scale)

Source: Reuters.

movements were influenced largely by improved growth prospects for the euro area and expectations of a possible tightening in the single monetary policy. By mid-August the gap between ten-year and three-month rates on the German yield curve had widened to more than 2 percentage points, compared with 0.6 percentage point at the start of the year.

Around the beginning of October money market rates rose again in response to improving growth prospects and expectations of a hike in the Eurosystem's key interest rates. As the decision in early November to raise the key rates was closely in line with market expectations, money market rates remained virtually unchanged after the rate hike. During the autumn months developments in money market rates were also influenced by uncertainties concerning the millennium changeover. At the end of September the three-month Euribor rate rose by nearly 0.4 percentage point when the first three-month agreements maturing in 2000 were made.

As regards long-term interest rates, the November rate hike reduced market uncertainty and led to a slight fall in market rates. At the end of 1999 the yield on German ten-year government bonds was 5.4%. Long-term interest rate differentials within the euro area remained small throughout the year, never exceeding 0.3 percentage point.

The euro depreciated

During the first half of 1999 the euro depreciated substantially in terms of the trade-weighted index (Chart 10) against both the US dollar and the Japanese yen (Chart 11). Exchange rate developments were largely due to cyclical asymmetries between the US and euro area economies and especially to the weak economic performance of the core countries of the euro area. Other factors contributing to the euro's weakness were uncertainty concerning the stance of German and Italian economic policy and the prolongation of the war in Kosovo.

A change seemed to have occurred in the latter part of July when the euro began to appreciate noticeably, especially against the dollar. This was partly a result of the improved prospects for the German economy. It nevertheless proved to be a transitory development, and in the autumn the euro depreciated again. The continued strength of the US economy helped to sustain the dollar against the euro. In late November and in December the euro was lower against the dollar than at any other time in 1999. In the course of the year the euro depreciated most against the US, Canadian and certain Asian currencies. By contrast, the euro's exchange rate did not change as much against many European currencies, such as the Swiss franc, Swedish krona and Norwegian krone. In terms of the trade-weighted index, the euro depreciated by 15% in the course of 1999.

Favourable economic conditions helped reduce the euro area general government deficit by more than had been anticipated

EU member states published their first stability and convergence programmes[1] around late 1998 and early 1999. In these programmes the EU countries presented their fiscal policy plans for the next few years and measures that would be taken to achieve consolidation of public finances.

In their stability programmes, the euro area countries forecast an improvement in government finances over the next few years. The euro area general government deficit was expected to decline to 1.8% of GDP in 1999 and further to 1.1% in 2001; the corresponding figures for debt-to-GDP ratios were 72.4% and 69.9%. Individual countries' programmes differed greatly, however, in terms of their degree of ambition. Ireland, Luxembourg and Finland aimed to maintain or increase their general government surpluses, while Germany, France, Italy, Austria and Portugal aimed at reducing their deficits to about 1% of GDP during the period concerned.

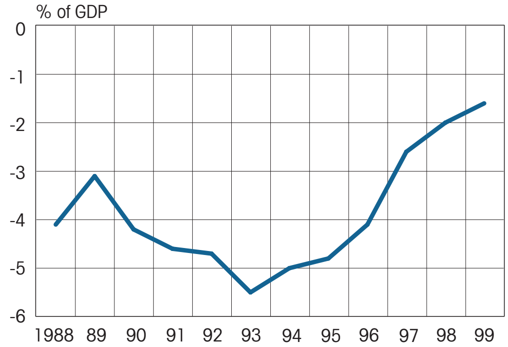
Preliminary data indicate that in 1999 the ratio of the general government deficit to euro area GDP fell by about half a percentage point from the previous year to about 1½%, which was slightly better than projected in the stability programmes (Chart 12). The decline in the general government deficit was primarily a result of lower interest expenditure, reflecting a fall in the average interest rate on debt and a slight reduction in the size of the outstanding debt. Growth in household income and private consumption expenditure, together with companies' favourable financial results, boosted tax receipts in the euro area countries. Economic growth helped to reduce unemployment and related expenditure. Overall, however, the ratio of general government expenditure to GDP remained at roughly the same level as in 1998 and the primary surplus increased only slightly.

In Ireland and Finland, the general government balance remained clearly in surplus in 1999 (Table). In the other euro countries,

[1] Stability programmes for euro area countries and convergence programmes for other EU countries.

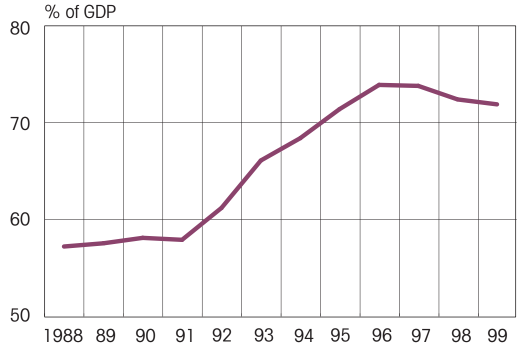
Chart 12.
General government fiscal position in the euro area

General government surplus (+) / deficit (–)



Source: Eurostat.

General government debt



Source: Eurostat.

Table.
General government fiscal position

General government surplus (+) / deficit (–), % of GDP[1)]

	1998 Stability programme	1998 Preliminary[2)]	1999 Stability programme	1999 Preliminary[2)]
Belgium	–1,6	–1,0	–1,3	–0,9
Germany	–2,5	–1,7	–2,0	–1,2
Spain	–1,9	–2,3	–1,6	–1,3
France	–2,9	–2,7	–2,3	–2,1
Ireland	1,7	2,1	1,7	3,2
Italy	–2,6	–2,7	–2,0	–2,0
Netherlands	–1,3	–0,8	–1,3	–0,6
Austria	–2,2	–2,4	–2,0	–2,2
Portugal	–	– 1,5	–2,0	–1,3
Finland	1,1	1,4	2,4	2,3

General government debt, % of GDP[1)]

	1998 Stability programme	1998 Preliminary[2)]	1999 Stability programme	1999 Preliminary[2)]
Belgium	117,5	116,2	114,5	114,9
Germany	61,0	60,7	61,0	61,0
Spain	67,4	64,8	66,4	63,5
France	58,2	60,3	58,9	60,3
Ireland	59,0	55,0	52,0	52,0
Italy	118,2	116,8	114,6	114,7
Netherlands	68,6	66,6	66,4	64,3
Austria	64,5	63,3	63,5	63,5
Portugal	58,0	56,5	56,8	54,8
Finland	51,9	48,5	48,5	47,1

[1)] Deficit and debt figures for the stability programmes are based on the old statistical procedures (ESA 79). The figures for the stability programme updates are based on the new statistical procedures (ESA 95). The Commission estimates are based on statistical methods employed by the euro area countries, which may in some cases differ from the methodology of ESA 79 or ESA 95. Because of the changes in statistical procedures, the stability programme figures, the stability programme update figures, the Commission figures and Statistics Finland figures are not fully comparable.

[2)] Sources: Austria and Portugal: Commission forecast, Eurostat and EC Economic Data Pocketbook, 15 December 1999; Finland: Statistics Finland; all other countries: stability programme updates.

deficit reductions meant progress toward fiscal balance. The larger euro countries trimmed their deficits as projected. The German deficit declined by about half a percentage point. In France the deficit declined by over half a percentage point but was still over 2% of GDP. In Italy too the deficit declined by over half a percentage point, as a result of which the country achieved the 2% deficit-to-GDP ratio set in its stability programme. In the smaller countries, above-average economic growth led to above-average improvements in general government balances.

For the euro area as a whole, only minor progress was made in 1999 in reducing general government deficits on a discretionary basis. The leeway created by higher tax receipts and lower debt service costs was used to cut taxes and social security contributions. In countries where tax reforms led to reductions in government revenue, expenditure was cut only enough to offset the lost-revenue effects on the financial balance.

Implementation of monetary policy within the Eurosystem

Monetary policy instruments

The operational framework for the single monetary policy was adopted at the beginning of 1999 for the purpose of conducting ECB monetary policy. The framework comprises three interrelated core elements: open market operations; standing facilities; and a minimum reserve system. The functions associated with implementation of the single monetary policy are for the most part decentralized between the national central banks (NCBs), which act in accordance with instructions issued by the ECB's Governing Council and Executive Board. These functions include policy operations as well as payment systems and collateral management. In 1999 all Eurosystem monetary policy operations were implemented in a decentralized manner.

Eurosystem monetary policy is conducted mainly via open market operations in accordance with strategies determined by the ECB's Governing Council. These operations have an impact on short-term money market rates. The most important open market operations are the weekly main refinancing operations, which for the most part cover the central bank financing needs of euro area banks. The main refinancing operations are tender operations that are open to a large group of counterparties and have a maturity of two weeks.

In order to maximize the steering effect on short-term money market rates, the ECB conducted its main refinancing operations in 1999 only by means of fixed rate tenders.

In addition to the main refinancing operations, the Eurosystem provides banks with liquidity via longer-term refinancing operations. In these monthly operations, three-month collateralized loans are granted. As the longer-term refinancing operations are not intended to signal the stance of monetary policy, all of them were conducted by means of variable rate tenders in 1999. The Eurosystem did not conduct any fine tuning operations in 1999.

The primary purpose of the Eurosystem's standing facilities is to assist credit institutions in managing their liquidity. If a credit institution with access to the standing facilities finds, on a given day, that its liquidity is inadequate, it can obtain overnight liquidity from an NCB against eligible assets. Or, if an institution has excess liquidity at the end of the day, it can make an overnight deposit.

In order to discourage excessive use of the standing facilities and encourage credit institutions to rely mainly on the money market for managing their liquidity, the ECB sets the interest rate on the marginal lending facility considerably higher and the rate on the deposit facility considerably lower than the rate on the main refinancing operations. As such a large group of credit institutions has access to the standing facilities, the interest rates on the marginal lending facility and the deposit facility form the ceiling and floor for overnight rates in the money market. By changing the interest rates applied to the standing facilities, the ECB can also send signals concerning the stance of monetary policy.

The minimum reserve system is the third core element of the Eurosystem's operational framework. Credit institutions operating in the euro area are required to hold reserve deposits in NCBs. An institution's reserve base includes the following balance sheet items: deposits, debt securities and money market paper. The reserve requirement, which is 2% of the reserve base, is the minimum average balance that a credit institution is required to hold at an NCB during a given one-month maintenance period. The averaging feature of the minimum reserve system enables credit institutions to adjust their reserve balances to take advantage of interest rate changes and thus tends to dampen fluctuations in shorter-term money market rates. The reserve requirement also raises credit institutions' aggregate demand for central bank financing on average by the amount of the requirement. Since the Eurosystem pays interest on required reserves at the same rate as that applied in the main refinancing operations, credit institutions are not financially burdened by the reserve requirement.

The changeover to the euro did not result in any notable changes in the Bank of Finland's monetary policy instruments. This was partly because in the years leading up to the changeover the Bank revamped its policy instruments to bring them in line with those of the Eurosystem. The smallest changes were in the standing facilities. The minimum reserve system was also left almost intact, the major change being the payment of interest on credit institutions' reserve deposits.

Changes in open market operations were more significant. Where before Finnish banks operated in a system characterized by excess liquidity, they now had to adjust to a general shortage of liquidity in the euro area. At the same time the main instrument for market operations, the Bank of Finland's liquidity-absorbing CD tenders, were replaced by the Eurosystem's liquidity-providing main refinancing operations.

In the course of 1999 the Eurosystem met the bulk of credit institutions' central bank financing needs via the main refinancing operations. The daily average amount of liquidity provided to credit institutions through the main financing operations was EUR 137 billion; longer-term financing added another EUR 48 billion on average. The net effect of the standing facilities was to increase total liquidity by a small amount: the marginal lending facility provided EUR 1 billion and the deposit facility absorbed EUR 0.8 billion a day on average. In 1999 the average total reserve requirement for participating credit institutions was EUR 102 billion.

Only minor changeover problems in euro area money markets

With the introduction of the single currency at the beginning of 1999, the operating environment for euro area money markets expanded to embrace the whole euro area. This meant that credit institutions had to adjust quickly to a totally new situation. In particular, important changes occurred in liquidity management as regards instruments and counterparties. Overall, the transition to a euro area-wide money market went very smoothly.

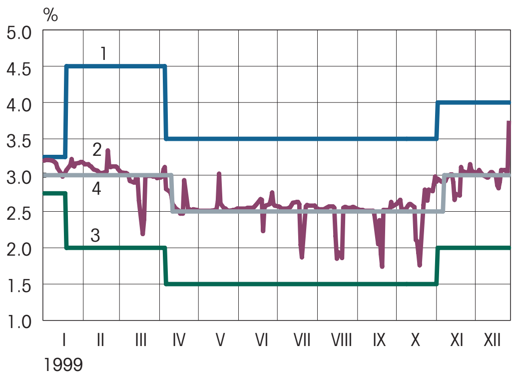
The introduction of the euro led to an increase in cross-border money market transactions. In fact, over half of all money market transactions in 1999 were cross-border transactions. The volume of money market deposits and repos grew considerably, the bulk of transactions being in very short-term instruments. The money markets integrated to a significant degree in the course of the year, which helped increase the depth of the markets. Particularly positive developments in this connection occurred in the deposit and swap markets. Euribor rates secured an undisputed position as the main reference rates in the derivatives markets.

In the initial stage of the euro area money markets, credit institutions' liquidity management was marked by a number of exceptional uncertainties. As reserve requirements were based on balance sheets at end-1998, credit institutions' individual and aggregate requirements were not known until end-January 1999. Another uncertainty regarding liquidity needs was the initial unevenness of the distribution of liquidity within the euro area. Because of these uncertainties, the Governing Council decided to set an exceptionally narrow corridor for money market interest rates from the beginning of 1999 in order to improve the functioning of the money markets (Chart 13). Moreover, the initial reserve maintenance period was exceptionally a month longer than usual.

At the very beginning of 1999, certain factors were at work that had the effect of slowing the redistribution of liquidity. This was evident in the abundant use made of the marginal lending facility (Chart 14). Owing to occasional problems involving payment systems and eg credit institutions' payment orders, the operating hours of the TARGET system were temporarily lengthened. The use of the standing facilities was not connected solely with the demand for overnight loans, however, as institutions were at the same time making use of the deposit facility. This situation was symptomatic of the initial problems that arose in connection with the distribution of liquidity among credit institutions.

The initial problems nevertheless turned out to be short-lived, and the Governing Council decided to widen the interest rate corridor with effect from 22 January. Thus the ECB reduced the NCBs' role in

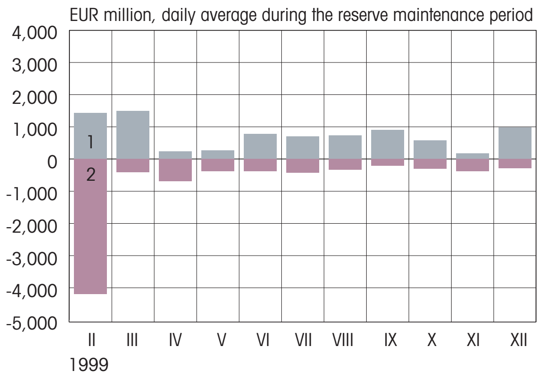
Chart 13.
Eurosystem interest rates and money market rates



1. Marginal lending rate
2. Eonia rate
3. Deposit rate
4. Main refinancing rate

Source: European Central Bank.

Chart 14.
Use of standing facilities in the euro area



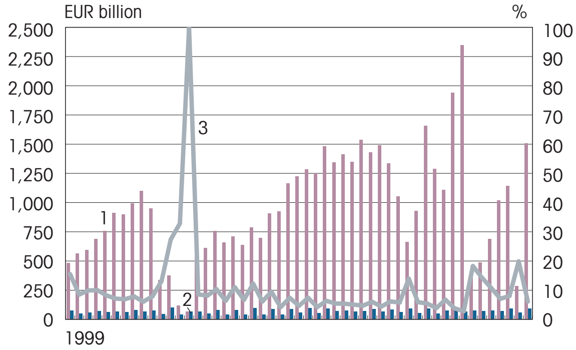
Month in which the reserve maintenance period ends.

1. Overnight deposits
2. Marginal lending facility

Source: European Central Bank.

evening out credit institutions' liquidity and gave the money markets more leeway in which to function. In order to increase the effectiveness of the liquidity redistribution process, the Governing Council had earlier decided to apply an interest rate corridor that was asymmetric with respect to the main refinancing rate. The result was that borrowing overnight liquidity from the central bank became relatively more costly than making overnight deposits with the central bank. The money markets then began to operate more efficiently, as reflected in a dampening of fluctuations in overnight interest rates and a narrowing of cross-country differences in overnight rates. It can be said that the euro area-wide money markets began to function effectively already at the beginning of February.

Chart 15.
Main refinancing operations of the Eurosystem



1. Bids (left-hand scale)
2. Allotment (left-hand scale)
3. Allotment ratio (right-hand scale)

Source: European Central Bank.

Main refinancing operation became the key instrument for managing system liquidity

In the main refinancing operations, credit institutions' total bid amounts have greatly exceeded the amounts of liquidity allotted. Right from the start of 1999 credit institutions' total bids in the tenders amounted to about ten times the amount of liquidity allotted, and at times during the year total bids were substantially higher (Chart 15).

By the second quarter of the year expectations of a decline in interest rates began to have an important effect on liquidity management, in respect of both credit institutions and the Eurosystem. At the beginning of April these expectations strengthened to the point that, even though the ECB accepted all tender bids for liquidity, it was unable to distribute the intended total amount of liquidity. Then on 8 April the Governing Council cut the main refinancing rate by a half percentage point. At the same time the Council made the interest rate corridor symmetric with respect to the main refinancing rate, so that the marginal lending rate was a percentage point above and the rate on the deposit facility a percentage point below the main refinancing rate.

In the early part of the third quarter market expectations of a rise in interest rates began to take root. As these expectations gained strength, the amounts of credit institutions' tender bids increased and the allotment ratios dropped to very low levels. However, as the end of the quarter approached, expectations of an interest rate rise eased slightly, only to strengthen even more at the start of the fourth quarter.

Just before the Governing Council's decision of 4 November to raise the main refinancing rate by a half percentage point, expectations of a rate hike led to bids in the main refinancing operation that were 35 times the allotted amount of liquidity. After the rate hike, the spread between money market rates and the main refinancing rate narrowed substantially, and this in turn dampened the overall interest in Eurosystem operations as the year wound down. There was in fact a pronounced slowing of overall money market activity in December as credit institutions scaled back operations in the face of uncertainties associated with the millennium changeover.

Another key factor behind the rise in money market rates in the second half of the year was the risk premium on deposits and other financial contracts maturing after year-end. The premia were particularly large in mid-November. Although uncollateralized loans attracted the largest premia, collateralized contracts maturing after year-end also included premia.

Because of uncertainties connected with the millennium changeover, the Governing Council made temporary arrangements in respect of Eurosystem operations. In each of the last three longer-term refinancing operations in 1999, EUR 25 billion of liquidity was allotted, as compared with the usual EUR 15 billion. In order to avoid the maturing of any operations during the first week of 2000, the Governing Council decided to exceptionally lengthen the maturity of each of the last two main refinancing operations to three weeks. Activity in the money markets slowed markedly before year-end, but after the smooth millennium changeover, activity levels quickly returned to normal.

Finnish credit institutions' role in Eurosystem operations

Within the decentralized framework for implementation of Eurosystem monetary policy, the Bank of Finland's role was to execute operations in which the counterparties were credit institutions located in Finland. Finnish credit institutions' share of total liquidity allotted in the Eurosystem's main refinancing operations ranged from zero to 1.3% and averaged 0.5%. For the longer-term refinancing operations, the average share was similar. During the year eight of the credit institutions belonging to Bank of Finland's eleven counterparties took part in the main refinancing operations. Four credit institutions participated in the longer-term refinancing operations.

The small (even in relative terms) share of Finnish credit institutions in Eurosystem operations is explained by the particularly good liquidity situation of Finnish credit institutions. In contrast to most other euro area countries, the Finnish banking sector had a surplus liquidity position vis-à-vis the central bank in 1998. For this reason, Finnish credit institutions obtained a large amount of liquidity immediately at the beginning of 1999 with the maturing of Bank of Finland CDs that had been issued in liquidity-absorbing operations towards the end of 1998. The strong liquidity position of Finnish companies also made it easier for credit institutions to obtain inexpensive funding in 1999. As a result of all these factors, Finnish credit institutions were for the most part on the lending side of liquidity transfers vis-à-vis foreign credit institutions in 1999. It was only when money market conditions became extremely tight that Finnish credit institutions resorted to substantial use of central bank financing.

The highly liquid position of Finnish credit institutions was also reflected in their asymmetric use of the standing facilities in 1999. These institutions accounted for only 1.1% of total usage of the marginal lending facility in the Eurosystem compared with 3.7% for the deposit facility. Altogether, twelve credit institutions operating in Finland made use of Eurosystem standing facilities.

At the end of 1999 there were 346 Finnish credit institutions participating in the minimum reserve system. These institutions held reserve deposits at the Bank of Finland, either in their own current accounts, in special reserve accounts, or in correspondent banks' current accounts. Generally speaking, member banks of the Amalgamation of cooperative banks met their reserve requirements via OKOBANK and the independent cooperative banks and savings banks via Aktia Sparbank. Other entities subject to reserve requirements held most of their reserves in their current accounts at the Bank of Finland. Finnish credit institutions accounted for 1.5% of total euro area reserve requirements.

Collateral arrangements for central bank credit become uniform throughout the Eurosystem

The onset of Stage Three of EMU brought significant changes in collateral arrangements for central bank credit. The stock of assets eligible as collateral grew and became more homogeneous, so that the same securities became eligible throughout the euro area for use in money market operations as well as for intraday and overnight credit.

Eligible assets are broken down into two main classes: tier one and tier two. Tier one assets are marketable debt instruments that meet the ESCB's uniform euro area-wide eligibility criteria. Tier two assets are other securities that are of particular importance for national financial markets and banking systems and which meet eligibility criteria set by national central banks subject to ECB minimum criteria. For example, the Bank of Finland approves as tier two assets only domestically issued marketable debt securities in book-entry form and denominated in euro or national denominations of the euro.

Securities issued in the non-euro EU countries, ie the United Kingdom, Greece, Denmark and Sweden, can also be used as collateral for intraday credit, subject to bilateral agreements between central banks.

At year-end the total nominal value of eligible assets issued in Finland and held at the Finnish Central Securities Depository (APK) was about EUR 57 billion. The corresponding figure for the whole euro area was about EUR 5,500 billion, excluding a very small amount of nonmarketable assets. Tier one assets accounted for 96% of the total stock of collateral in the euro area, compared with 68% for Finland.

The ESCB bears responsibility for credit risks associated with tier one assets. For tier two assets and assets issued in non-euro EU countries, the responsibility lies with the NCBs that list the assets.

As part of the collateral management framework, euro area-wide risk control arrangements were put in place at the beginning of 1999. In calculating an institution's collateral requirement, an initial margin is added, which varies according to the original maturity of the credit. In addition, a haircut is applied to an asset's market value in determining its collateral value. The size (percentage) of the haircut depends on the maturity of the debt instrument and whether the interest rate is fixed or variable. The collateral value of securities used as collateral for a central bank credit must always meet the total requirement, which comprises the amount of the credit, the interest rate and the initial margin. Since the start of 1999 euro area central banks have granted credit only against adequate collateral. This full collateral requirement did not cause changes in collateral management in Finland since the Bank of Finland had previously required adequate collateral in respect of both money market operations and payments-related intraday credit.

Changes in collateral management in Finland

In Finland all assets used as collateral must be in book-entry form. Tier one assets are mainly benchmark bonds and other debt instruments issued by the central government. So far, the Finnish tier two list has included only bank CDs. In October 1998 the Board of the Bank of Finland took a decision in principle to approve assets from non-euro EU countries as collateral for intraday credit in Finland. This decision became effective on 16 August 1999.

Prior to 1999 the Bank of Finland's liquidity-providing money market operations were conducted on the basis of repurchase agreements using CDs issued by the banks and the Bank of Finland. To obtain intraday credit, the banks pledged collateral to the Bank of Finland. CDs were not accepted as collateral for intraday credit.

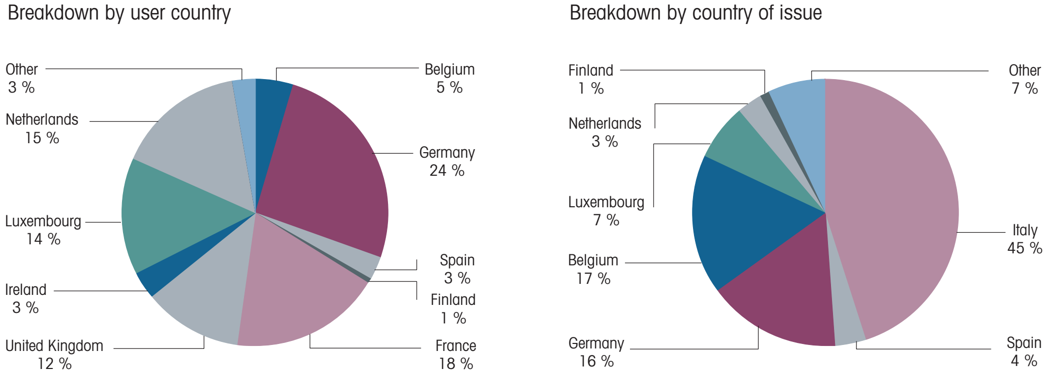
With the introduction of the euro, the Bank of Finland also began to conduct money market operations on a collateralized basis and to apply the pooling system in collateral management. In a pooling system, all assets pledged by the same bank to the Bank of Finland are used as security for the total amount of credit obtained by the bank; there is no link between collateral and specific credit operations. The pooling model enables flexible exchange of collateral while credit is outstanding. The adoption of uniform collateral assets throughout the Eurosystem means that banks can also use CDs as collateral for intraday credit.

Collateral assets issued in Finland are processed through automatic collateral management accounts in the APK's system. Collateral assets that have been issued in other countries are handled via the Correspondent Central Banking Model (CCBM), according to which central banks act as collateral depositories for each other. In addition, at the end of May 1999 the ECB approved 29 collateral-transfer links between securities depositories, and more have been approved since then.

One of the approved links is that between the APK and Deutsche Börse Clearing AG[2], which can be used for two-way transfers of Finnish and German securities between the respective securities depositories. Since the beginning of December it has been possible to use the link to route collateral assets transferred from Germany to Finland directly to the Bank of Finland. In September 1999 a link between the French depository, Sicovam SA, and the APK was approved.

[2] Since 1 January 2000 Clearstream Banking AG, Frankfurt.

Chart 16.
Cross-border use of collateral by central banks in the EU area, situation at end-1999



Source: European Central Bank.

Use of collateral in the euro area and Finland

The use of collateral was not entirely uniform across the euro area during the first year, as some cross-country differences persisted. For the whole euro area, the bulk of domestic collateral consisted of tier one securities. There was little use of tier two securities as collateral in the euro area as a whole, and those that were used were for the most part nonmarketable securities in paper form. In Finland the use of tier two securities was more common than in the euro area on average.

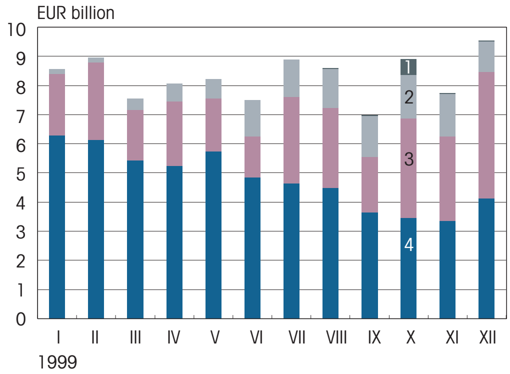
Although banks in the euro area as a whole used mainly domestic collateral, they did made greater-than-expected use of securities issued in other euro countries.

At the end of 1999 banks located in Finland were using 1% of the total amount of cross-border collateral in use throughout the Eurosystem, compared with 24% for banks in Germany, for example (Chart 16). Of the total amount of cross-border collateral used in the euro area, Italian issues accounted for 45%. The corresponding figure for Finnish issues was about 1%.

Banks operating in Finland began to use securities issued in non-euro EU countries as collateral for intraday credit as soon as this became possible in August 1999. In other euro area countries, the use of securities issued in non-euro EU countries as collateral was insignificant.

At year-end the total value of collateral pledged to the Bank of Finland was EUR 9.5 billion (Chart 17), and the Bank was holding EUR 1 billion worth of securities in custody for other central banks.

Chart 17.
Value of pledged collateral assets held at the Bank of Finland in 1999, end-of-month stocks



1. Foreign assets from non-euro area EU countries
2. Foreign assets from euro area countries
3. Domestic assets – tier two
4. Domestic assets – tier one

Source: Bank of Finland.

Economic developments in Finland

The Finnish economy grew at an exceptionally rapid pace in the years preceding the start of the Third Stage of Economic and Monetary Union (EMU). In the period 1994–1998 GDP growth averaged 4.6% a year, which was noticeably faster than the average for the EU area. Despite robust growth, domestic prices and costs remain subdued, moving closely in line with developments in the rest of the euro area. No significant imbalances emerged in the economy and the convergence criteria for economic and monetary union were met successfully.

During the years of rapid economic growth, the capital structure, profitability and competitiveness of the corporate sector all improved substantially. At the same time household indebtedness decreased significantly and the general government fiscal position moved into surplus. By contrast, unemployment and government debt were still at worryingly high levels when the Third Stage of EMU started.

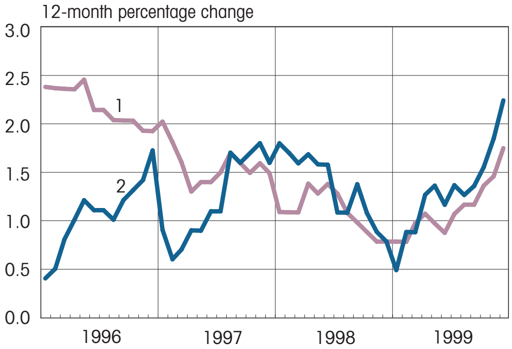
With the launch of the Third Stage of EMU, the euro area adopted a single monetary policy. This signalled the end of Finland's national monetary policy. The single monetary policy is formulated on the basis of economic conditions prevailing in the euro area as a whole. The stance of monetary policy does not take into account the special needs of individual countries or regions within the euro area. Consequently, national fiscal policy and the domestic labour market bear a major responsibility for ensuring stable economic growth and moderate cost developments.

Rise in prices picked up towards the end of the year

At the start of the Third Stage of EMU, the rate of increase in consumer prices in Finland, as measured by the Harmonized Index of Consumer Prices (HICP), was in line with the price stability objective set by the Governing Council of the European Central Bank (ECB), despite robust economic growth. The same was true for the rate of increase in consumer prices in Finland throughout 1999, although it did exceed the euro area average by a small margin, except for a short time in the early part of the year (Chart 18).

In January 1999 consumer prices in Finland, as measured by the HICP, were only 0.5% higher than a year earlier. This was mainly

Chart 18.
Price stability in the euro area and Finland

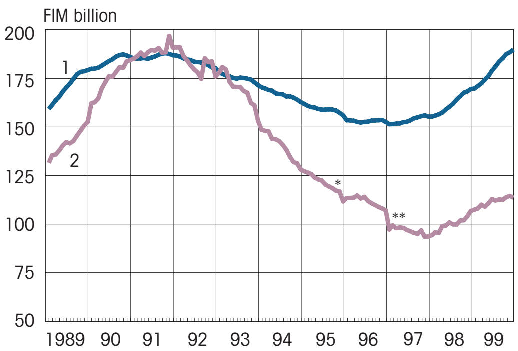


Harmonized Index of Consumer Prices

1. Euro area
2. Finland

Sources: Statistics Finland and Eurostat.

Chart 19.
Stock of bank lending to households and companies in Finland



1. Stock of loans to households
2. Stock of loans to companies

* Bank loans amounting to approx. FIM 5 billion were transferred to asset management companies in December 1995.

** Following items removed from stock in connection with statistical revision: a) bonds and other bearer instruments treated as investment assets; b) lending by foreign branches of domestic banks.

Source: Bank of Finland.

due to the low level of world commodity prices, reflecting global oversupply. In the spring the rate of increase in prices in Finland picked up, mainly as a result of rises in rents and petrol prices. In addition, services prices rose at a rate that was almost one percentage point faster than the euro area average. Towards the end of the year a rise in import prices, especially energy prices, led to a further increase in inflation. Measured as the twelve-month change in the HICP, consumer prices rose by 2.2% in December.

Import prices rose by 11.4% in the twelve months to December 1999 as a result of a rise in world oil prices, a weakening of the euro against the US dollar and increases in the prices of oil products and base metals in the course of the year. Reflecting the rapid rise in import prices, industrial producer prices increased by 4.6%. The higher prices of pulp and oil products, in particular, had significant impact on producer prices.

Export prices remained fairly stable in 1999, and thus the terms of trade weakened substantially. Export prices rose by less than 2% in the twelve months to December 1999, which was due in large part to declines in prices of electrical and telecommunications products. By contrast, prices of pulp and paper products rose modestly already in the spring in response to the global recovery in export demand. Similarly, prices of basic metals started to rise quite sharply in the spring. Prior to that, world market prices of basic metals had fallen considerably for almost a year.

Labour costs rose only a little in 1999, reflecting the impact of the two-year pay settlements agreed in late 1997 and the small size of wage drift. In the last quarter of 1999 the level of nominal earnings was 2.5% higher than a year earlier.

Lending grew rapidly

The rate of growth in the Finnish contribution to the euro area monetary aggregate M3 varied markedly in the course of 1999, as in previous years. This largely reflected fluctuations in the public's holdings of money market paper. In the latter part of the year the rate of growth of the Finnish contribution to euro area M3 was nearly the same as for the euro area as a whole. In December 1999 the twelve-month rate of change in the Finnish contribution to the broad monetary aggregate was 6.0% compared with 6.2% for the whole euro area. For the narrow monetary aggregates M1 and M2, the growth of the Finnish contributions was for the most part slower than the corresponding euro area-wide aggregates.

In contrast to the monetary aggregates, the growth of lending to the private sector in Finland exceeded the euro area average. The stock of credit in Finland grew by about 12–13% whereas the average rate for euro area countries was about 10%. Demand for loans by both households and companies was brisk in 1999, although demand by companies did slacken towards the end of the year (Chart 19).

Interest rates on new loans were very low in 1999, which boosted borrowing. In the first half of the year they fell to historically low levels along with the decline in market interest rates and heightened interbank competition. In the second half of the year interest rates on new loans moved higher as a result of a rise in market interest rates. Banks' interest rate margins shrank noticeably in early 1999, as lending rates fell by more than deposit rates.

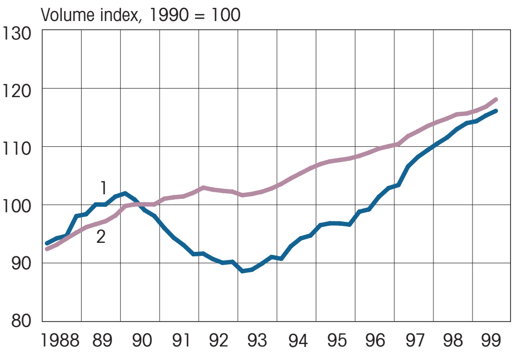
Growth was driven by domestic demand in the early part of the year

The Finnish economy continued to grow at a rapid pace in 1999, albeit not quite as fast as the average for the previous five years (Chart 20). Growth of real GDP nevertheless exceeded the euro area average by a clear margin, as in previous years. In the first half of the year strong domestic demand helped ensure that the economy grew at a moderately fast pace despite a weakening in export demand, and in the second half of the year the pace of growth picked up again as exports started to recover. According to preliminary data, the economy grew by 3.5% in 1999 compared with 5.0% in 1998.

Because of robust economic growth, Finland was not at the same stage of the business cycle as the euro area countries on average when the single monetary policy was launched. For this reason, the stance of the single monetary policy was relatively easy given the economic conditions prevailing in Finland.

Private consumption continued to grow strongly in 1999, buoyed by low interest rates and favourable developments in income and employment, although the rate of growth slowed from the previous year (Chart 21). Against a background of increased consumer purchasing power, competition in markets for consumer goods tightened noticeably. Consumer spend-

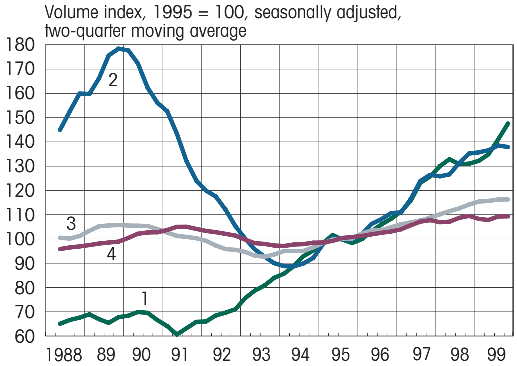
Chart 20.
GDP in Finland and the EU area



1. Finland
2. EU area

Sources: Statistics Finland and OECD.

Chart 21.
Structure of supply



1. Exports
2. Fixed investment
3. Private consumption
4. Public consumption

Source: Statistics Finland.

ing focused increasingly on consumer durables and telecommunications services. Spending on expensive categories of goods was evident, for example, in the car trade, where sales increased by 6.5% from the previous year. By contrast, demand for other consumer goods decreased and this was reflected in a slowdown in the growth of retail trade.

The favourable financial situation of consumers was also evident in the indicator of consumer confidence published by Statistics Finland (Chart 22). According to the indicator, consumers' confidence concerning their own financial position and the general economic situation remained strong throughout the year and was substantially higher than in EU countries on average.

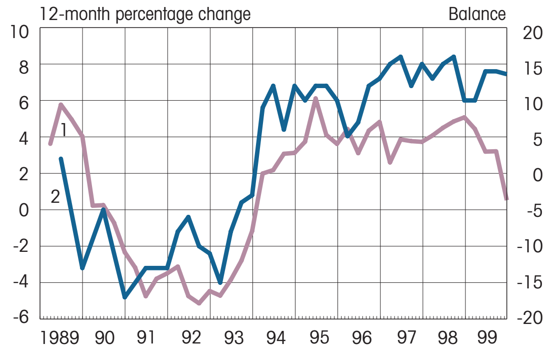
Robust consumer confidence concerning the future and the low interest rates helped to sustain the buoyancy of the housing market; prices rose strongly and the stock of housing loans grew considerably (Chart 23). The stock of housing loans increased by 15.8% in 1999 and new housing loans reached a record level. The average interest rate on new loans fell by 0.7 percentage point in the first half of 1999 but climbed back to the level prevailing at the start of the year in the second half of 1999. According to figures compiled by Statistics Finland, prices of old flats in the country as a whole increased by 10.6% in the last quarter of 1999 compared with the same quarter one year earlier. Only at one time in the past 30 years (1988–1991) have real housing prices been higher than they were in 1999.

Like consumer demand, investment activity remained robust in 1999. Investment in productive capacity grew strongly as a result of both low interest rates and improved prospects for demand and productivity in many sectors (Chart 21). In the services sector, in particular, investment continued to grow strongly. In industry, by contrast, investment intentions weakened because of the poor export performance in the early part of the year, and as a result fixed investment hardly increased at all from the previous year. In the latter part of the year, however, the outlook for industrial investment improved substantially because of good export prospects and high capacity utilization rates.

Export prospects improved in the latter part of the year

Export demand weakened in the first half of 1999 because of the effects of the Asian and Russian crises. All sectors of manufacturing suffered, with the exception of electronics and telecommunications (Chart 21). The sluggishness of world export demand led to oversupply in manufacturing, and as a result both the volume and

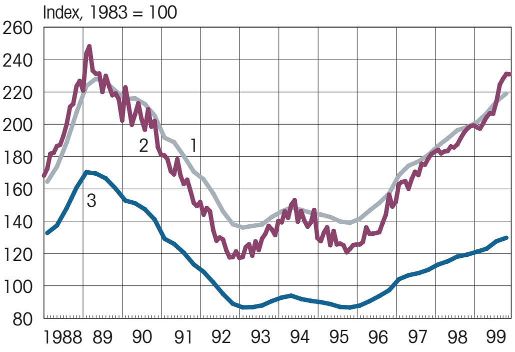
Chart 22.
Consumption and consumer confidence



1. Private consumption (left-hand scale)
2. Confidence index, balance (right-hand scale)

Source: Statistics Finland.

Chart 23.
Housing prices in Finland



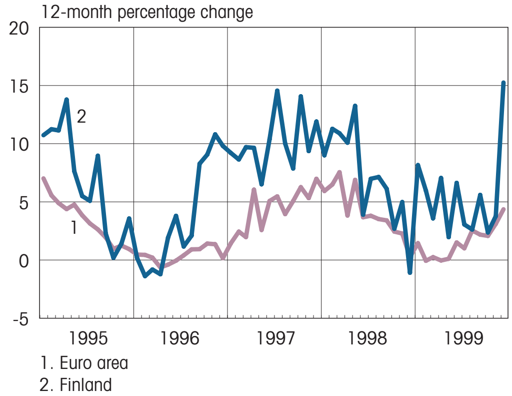
1. Whole country
2. Old two-room flats in Helsinki
3. Whole country, real price

Sources: Huoneistokeskus and Statistics Finland.

value of Finnish exports declined in comparison with the first six months of the previous year. Export markets recovered in the second half of 1999, however, and this helped to boost activity in the traditional export industries as well. For example, the volume and value of exports of paper and wood products turned up in the summer. Moreover, with the pick-up in export demand, export prices rose in several key sectors. The competitiveness of the export industries improved as a result of the weakening of the euro.

The regional breakdown of exports in 1999 reveals that exports to the EU area increased slightly from the previous year while exports to Russia fell sharply owing to the poor economic situation in that country. Exports to Russia declined by about 30% in value from 1998; the food, building materials and printing industries were particularly badly hit. The value of exports to China and some Asian crisis economies also declined from the previous year.

Chart 24.
Industrial production



Sources: Statistics Finland and Eurostat.

Electronics and telecommunications boosted industrial output

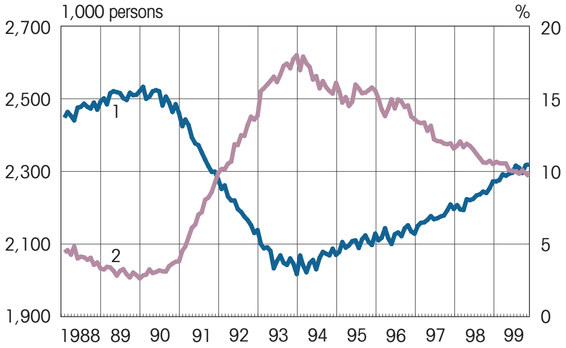
Manufacturing, construction and trade made the main contributions to the growth of total output in 1999. Sales in the trade sector continued to grow at a fairly robust pace. Activity in the construction sector remained buoyant and operating conditions and prospects in the sector continued to be good. Housing and commercial construction grew considerably from the previous year whereas industrial and agricultural construction declined.

In the first half of the year the growth of industrial production was driven by the metal and engineering industries but, with the improvement in market conditions, output in the forest and chemical industries grew towards the end of the year. All in all, industrial production increased by 5.5% from the previous year (Chart 24).

Output in the metal and engineering industries increased by 10% from the previous year. There were contrasting developments within the sector, however: output in the electronics and telecommunications sector grew by 24% whereas output in the rest of the sector declined by 1.5%. The strength of output in the electronics and telecommunications sector was largely based on the continued very rapid increase in world demand for mobile telephones. The exceptionally strong rate of growth in the sector started to slow towards the end of the year, however. The slowdown may have been partly due to resource constraints in Finland.

The pick-up in demand for forest industry products in the summer was reflected in an increase in the output of the paper and wood products industry compared with the same period a year earlier. All grades of paper benefited from the recovery in demand, which was due to the faster growth of the world economy and increased use of paper products in connection with the millennium changeover. Demand for pulp also picked up towards the end of the year and pulp stocks declined rapidly, leading to a fairly strong rise in prices. Overall, output in the paper and wood products industry increased by 3% in 1999, despite being flat in the first half of the year. The revival in export demand was also evident in the chemical industry, where output started to grow towards the end of the year.

Chart 25.
Number of employed and unemployment rate



1. Number of employed, 1,000 persons (left-hand scale)
2. Unemployment rate, % (right-hand scale)

Source: Statistics Finland.

Industrial confidence concerning the future strengthened in 1999. Towards the end of the year the industrial confidence indicator showed that confidence was higher than the euro area average. The quarterly survey of business confidence conducted by the Confederation of Finnish Industry and Employers in October indicated that economic conditions were expected to improve further in the near term. Export prospects were good in especially the paper, electronics and telecommunications and chemical industries.

There was a further rapid improvement in employment

The employment situation continued to improve in 1999 (Chart 25). The seasonally adjusted employment rate, ie the employed as a percentage of persons aged 15 to 64, was just under 67% at year-end, which was about two percentage points higher than a year earlier. There were exceptionally large increases in both the number of employed and the size of the labour force. The numbers of both part-time jobs and short-term contracts increased further. The fastest growth of employment occurred in the services and construction sectors. Availability of skilled labour weakened notably in the building industry and the electronics and telecommunications sectors.

The unemployment rate fell in the early part of the year, but the decline slowed in the latter part of the year. The seasonally adjusted unemployment rate remained virtually unchanged at around 10% from June to November before dropping to 9.8% in December. An increase in the size of the labour force slowed the fall in the unemployment rate, but at the same time the number of vacancies grew considerably. Analysed regionally, unemployment fell most of all in the growth centres. Finland's unemployment rate was roughly the same as the euro area average.

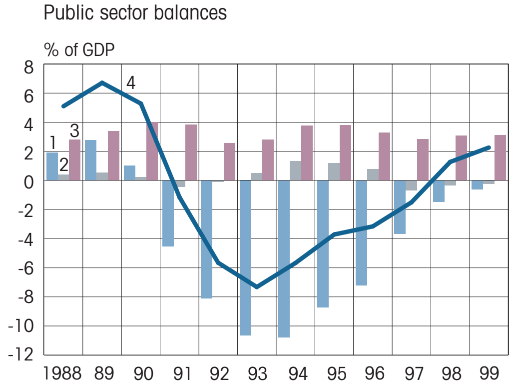
There was a further strengthening in public finances

Continued robust economic growth and a fairly tight stance in government spending helped to strengthen the financial position of the public sector in 1999. The deficit in central government finances declined substantially, local government finances were in slight deficit overall and the surplus in social security funds grew further (Chart 26). The surplus of the public sector as a whole amounted to FIM 16.2 billion, equivalent to 2.3% of GDP. The large public sector deficits of the early 1990s have been replaced by growing surpluses and public debt has begun to decline.

Government revenue from income and wealth taxes grew slowly in 1999. Wage earners' income taxation was cut by about FIM 2 billion and VAT receipts grew more slowly than in previous years because of sluggish growth of consumption. In addition, increased import penetration reduced receipts from other indirect taxes. In particular, growth in receipts from excise duty on alcohol and tobacco slowed from the previous year.

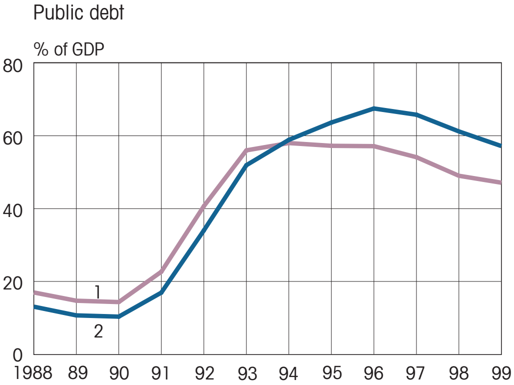
Similarly, the tax receipts of the local government sector grew relatively slowly because the maximum amounts of the earned income deduction and deduction for work-related expenses in local government taxation were raised and corporate taxes did not have the same impact on total tax receipts as in previous years. Contributions to social security funds increased more or less in line with

Chart 26.
Public finances



1. Central government
2. Local government
3. Social security funds
4. General government

Source: Statistics Finland.



1. Public debt
2. Central government debt

Sources: Statistics Finland and State Treasury.

total wages as no significant changes were made to contribution rates in 1999. Income on the assets of the employment pension institutions did not increase owing to the fall in interest rates.

The level of public expenditure remained at broadly the same level as in the previous year. Earnings-related unemployment benefits, in particular, and outlays related to maintenance of employment declined by a total of nearly 7% as a result of rising employment. The ratio of general government primary expenditure (expenditure excluding interest payments) to GDP fell by about 1.5 percentage points in 1999. Roughly half of the decline was structural, ie due to factors that were not connected with the economic cycle. The growth of transfers, in particular, slowed as a consequence of savings decisions taken in previous years. Central government interest payments declined by a couple of billion markkaa. Overall, central government expenditure in 1999 was slightly below the spending ceiling set by the Government. The ratio of public revenue to GDP fell slightly because of the modest easing in taxation.

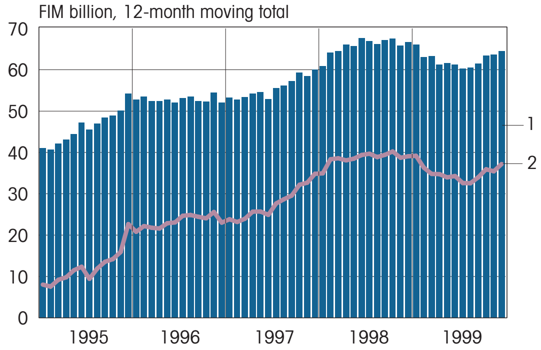
The government repaid some FIM 20 billion of its outstanding debt in 1999. The weakening of the euro increased the markka value of the debt by FIM 10 billion. The debt-to-GDP ratio declined by almost four percentage points to 57%. The decline was due mainly to GDP growth and the proceeds received by the central government from privatization. Holdings of government bonds by the employment pension institutions declined substantially so that the public debt-to-GDP ratio (Maastricht definition) declined only a little (Chart 26).

The guidelines for fiscal policy over the next few years were defined in the programme of the new Government in the spring in terms of four objectives: to achieve a structural surplus in central government finances; to reduce the ratio of central government debt to GDP to below 50%; to keep real central government expenditure unchanged at the budgeted level for 1999 throughout the Government's four-year term; and to cut household income tax by FIM 10–11 billion over the same period. The budgetary framework agreed in early May for the years 2000–2003 was based on the economic policy guidelines set out in the Government's programme. Similarly, the Government's budget proposal for 2000 and the September 1999 update of the stability programme for 1999–2003 were drawn up on the basis of the policy guidelines laid down in the Government's programme and the budgetary framework.

The trade surplus narrowed slightly

Finland's current account surplus amounted to about 5.2% of GDP in 1999. The surplus was slightly

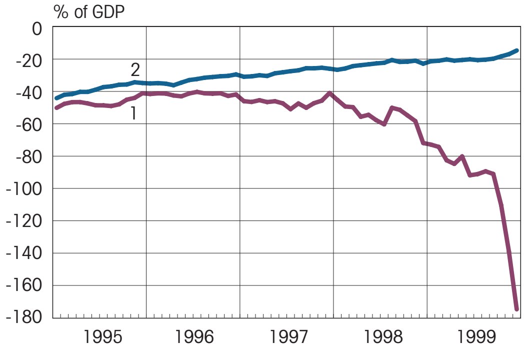
Chart 27.
Trade account and current account



1. Trade account, fob
2. Current account

Source: Bank of Finland.

Chart 28.
Net international investment position



1. Net international investment position
2. Net international investment position, excl. shares and other equity items

Source: Bank of Finland.

smaller than in the previous year owing to a contraction in the surplus on goods. This, in turn, was due to the weak performance of goods exports in the early part of the year (Chart 27). In addition, the rise in commodity prices, and oil in particular, boosted the value of imports in the latter part of the year. In volume terms, imports grew by 3.3% from the previous year.

As regards other current account items, the income account strengthened somewhat since the decline in interest payments on foreign debt was larger than the increase in dividends on nonresidents' holdings of Finnish shares. The deficit on the current transfers account increased slightly, partly because contributions to the EU budget exceeded receipts.

Finland's current account surplus was again one of the largest in the euro area. The euro area as a whole had a surplus equivalent to about 1% of GDP, according to preliminary figures. Most of Finland's surplus derived from transactions with non-euro area countries, which accounted for 58% of the surplus in 1999 compared with 46% in 1998.

As a result of the surplus, Finland's external debt decreased further. Net external debt (external liabilities minus assets, excl. equity items) has declined in recent years owing to a succession of current account surpluses (Chart 28). This interest-bearing external debt amounted to about 15% of GDP at end-1999. The central government's net external debt has hardly declined at all in recent years; at end-1999 it still stood at almost 30% of GDP.

Finland's net investment position, which is calculated as the difference between all liabilities and assets, shows a substantial negative balance; at end-1999 liabilities exceeded assets by FIM 1,261 billion. The large size of nonresidents' holdings of Finnish shares and the rise in share prices have weakened Finland's net investment position markedly in recent years. The market value of nonresidents' holdings of Finnish shares was FIM 1,285 billion at end-1999.

Financial markets

Under the Act on the Bank of Finland, the Bank acts as part of the European System of Central Banks in the manner laid down in the Treaty establishing the European Community and the Statute of the European System of Central Banks (ESCB) and of the European Central Bank (ECB). According to the Statute, the ESCB is required to contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.[1] The Act on the Bank of Finland also requires the Bank to participate in maintaining the stability and reliability of the payment system and overall financial system and to participate in their development.

Promotion of the stability and efficiency of the financial system is referred to as 'oversight' or 'macroprudential supervision'. Oversight encompasses the banking sector, securities markets and financial market infrastructure, ie payment and settlement systems. The Bank of Finland's primary tasks in connection with macroprudential supervision are ongoing surveillance and analysis of financial markets and participation in the development of supervision and regulation. Analysis covers financial practices and institutions as well as development of markets from the viewpoint of stability and efficiency.

The Eurosystem supports the policies of national supervisory authorities by actively promoting their cooperation with each other and with the Eurosystem. This cooperation is concerned mainly with macro-level stability and structural issues related to financial markets. The main forum for cooperation is the ESCB's Banking Supervision Committee and its related working groups, which comprise representatives of the central banks of EU member states, national supervisory authorities and the ECB.

The Bank of Finland participates in the development of the financial markets by taking part in the legislative process, collecting and disseminating information and cooperating with other authorities, banks and financial market participants. Cooperation is particularly active with the Financial Supervision Authority (FSA), Ministry of Finance and State Treasury. The Bank influences financial market legislation by participating in working groups and delivering opinions on legislative proposals. The Bank also informs the general

[1] The ECB is also required to offer advice and guidance in connection with financial legislation and may be assigned special tasks in this area.

Table.
Consolidation of European banks

Consolidation starting		Stage
	Germany	Consolidation is just starting.
	Italy	Consolidation is under way.
	France	Consolidation has advanced partially.
	Spain/Portugal	Consolidation is taking place at national level.
	United Kingdom	Minor changes are expected.
	Austria	Consolidation is almost complete at national level.
	Ireland	Consolidation is complete at national level; cross-border mergers to follow.
	Switzerland	Consolidation is complete.
	Nordic countries	Consolidation is complete; mergers between banks and insurance companies and cross-border mergers are expected.
	Benelux	Consolidation at Benelux level; consolidation at European level is expected.
Consolidation close to completion		

Sources: Salomon Smith Barney and Bank of Finland.

public about structural developments in financial markets and financial market conditions and prospects.

By working together with ESCB and EU bodies, the Bank is able to take part in financial market surveillance and development of supervision and regulation at international level. The Bank also participates in international development work on financial markets carried out under the auspices of notably the International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD) and Bank for International Settlements (BIS).

Banks

Structural changes in banking

The European banking sector was subject to strong pressure for change throughout the 1990s, which intensified towards the end of the decade. Deregulation, innovative use of IT and increased emphasis on shareholder value have changed banking markets. Probably the most powerful forces for change have been developments in IT and telecommunications. These have led to the introduction of a broad range of new financial products and channels for marketing them.

The pace of change in the European banking sector gained added momentum with the introduction of the euro at the beginning of 1999. This spurred the development of a genuine single market in financial services. The effects of the introduction of the single currency vary a great deal across financial services and markets, however. Whereas the development of integrated money markets in the euro area has been swift, retail banking markets are still dominated by national financial institutions, largely because of cross-country differences in taxation, supervision, legislation and culture.

The effects of pressure for change in the European banking sector are evident in the form of globalization, securitization and tightening of competition. Banks have begun to look for cost efficiencies, market power and new markets through mergers and cooperative agreements. In 1999 a number of large European banks attempted to form alliances and made take-over bids. Some of these restructurings reached fruition (Table).

Cross-border restructurings have occurred mainly within areas that are relatively homogeneous economically and culturally, such as the Benelux and Nordic countries. Of the international alliances, the most important in 1999 was the merger of the German Deutsche Bank and Bankers Trust in the United States.

The MeritaNordbanken Group continued to expand in the Nordic countries and the Baltic States. In September 1999 the group made a bid for the Norwegian Christiania Bank. The group began to simplify its ownership structure towards the end of the year. Now the group has only one holding company, Nordic Baltic Holding, which is registered in Stockholm. The holding company owns the group's parent, MeritaNordbanken, which is located in Helsinki. Merita Bank and Nordbanken remain banking subsidiaries of MeritaNordbanken.

The consolidation of the Finnish banking and insurance sectors got under way in October when

Leonia Bank and the insurance company Sampo agreed on the formation of a financial conglomerate. A further step forward was taken in December when some of the shares of the insurance company Pohjola were sold to an investor group comprising cooperative banks, the insurance company Ilmarinen and their joint bodies. Previously, the overlapping of banking and insurance business had been based on cross-sector operations. Banks formed life insurance companies and sold insurance products, although there were no significant cross-ownership arrangements between the two types of institutions.

Tightening competition and prospective institutional changes are forcing banks to develop new products and distribution channels. This led to a number of changes in the Finnish banking sector in 1999. Negotiations on the continuation of cooperation between Leonia Bank and the Finnish postal service ended without results. Leonia Bank's services will not be provided in post offices after 2000. Leonia Bank began to provide limited banking services at outlets of the R-kiosk chain in November 1999.

Technological advances were a striking feature of developments in the Finnish banking sector in 1999. Finland has become a world leader in the application of IT in the provision of banking services. For example, Finland has the highest number of Internet customers in relation to population. In 1999 banking services also became available via mobile phone-Internet links.

The share of foreign banks in total lending in Finland increased slightly compared with 1998. At end-1999 they accounted for 4.6% of total lending (2.8% in 1998) and 1.6% of deposits (1.9% in 1998). In November 1999 Trevise Bank, part of the Danish Unibank group, commenced operations in Finland. The bank specializes in provision of asset management services.

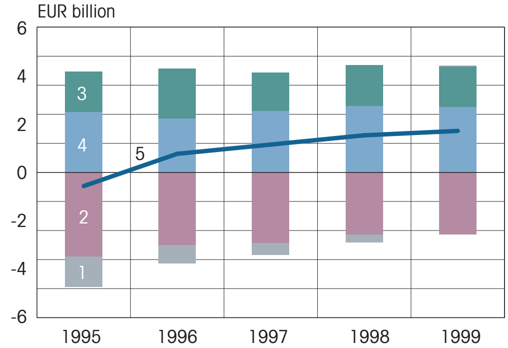
In November 1999 the Government submitted a report to Parliament on bank support provided during the banking crisis. According to the report, the sum total of support, excluding interest payments, was about EUR 5.6 billion. The Bank of Finland's share of losses amounted to about EUR 670 million.

Bank profitability and efficiency

The worst of the threats posed to European financial markets by international crises receded in the early part of 1999. Provisions for possible loan losses resulting from the Russian and Asian crises had weakened the financial results of some banks in Europe in 1998. In Finland, only the largest banks made provisions for loan losses in connection with the Russian and Asian crises. Total loan loss provisions began to decline sharply in 1999.

Although the profitability of Finnish banks was very good in 1999, the effects of a changing operating environment were apparent in their financial results. The heightened competition brought about by integration and deregulation of banking markets had a growing impact on banks. Though the volume of banking business grew significantly compared with the previous year, the banking sector's aggregate net income from financial operations declined slightly. Tightened competition was evident in banks' narrower interest rate margins. The good financial results were largely due to the low level of loan losses (for some banks, loan and guarantee losses constituted a positive item because of recovery of loan losses) and cost reductions (Chart 29).

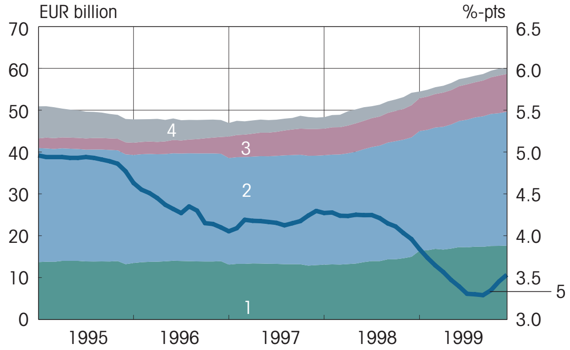
Chart 29.
Financial performance of deposit bank groups



1. Loan and guarantee losses
2. Other expenses
3. Other income
4. Income from financial operations
5. Operating profit

Source: Financial Supervision Authority.

Chart 30.
Deposit banks: lending stock and interest rate margin



1. Lending to companies (left-hand scale)
2. Lending to households (left-hand scale)
3. Other euro and markka-denominated lending (left-hand scale)
4. Foreign currency-denominated lending (left-hand scale)
5. Interest rate margin[1] (right-hand scale)

[1] Difference between average markka lending and deposit rates; since the beginning of 1999 difference between average interest rates on euro-denominated lending and deposits.

Source: Bank of Finland.

Although Finnish banks are efficient compared with other European banks, the need to further streamline operations was still apparent in 1999.

Lending to firms and households in Finland increased substantially in 1999, by 10% and 12% respectively. The stock of housing loans grew by about 16%. The strong growth was partly due to the lengthening of repayment periods (Chart 30).

There was a further slight increase in the amount of deposits, although Finns channelled a larger portion of their savings than before into other types of investment. As in 1998, about half of households' financial assets were held in the form of deposits. Investment in funds and personal pension schemes increased steadily. Finnish banks successfully promoted their own funds as investment vehicles for households.

Securities markets

Structure of securities markets

The forces making for change in the securities markets are similar to those impinging on the banking sector. Among the key factors at work are financial liberalization and harmonization of financial market regulation within the European Union, networking benefits in connection with technological advances, globalization of the provision of financial services and the single currency.

Changes in the operating environment have enabled the realization of economies of scale in securities transactions. The location of a marketplace has become increasingly less important, and competition has increased between financial centres, stock exchanges and settlement systems. Change nevertheless continues to be hampered by differences in culture, language, taxation and regulation, as well as the need to know local conditions and customs.

The growth in share and derivatives transactions executed via the Internet began to have an impact on the operations of traditional brokerage firms. The number of firms offering brokerage services via the Internet increased and the volume of such transactions continued to grow. In Finland, for example, the Internet banking services provided by banks include services that enable small investors to execute trades easily, quickly and at lower cost than before. In US markets, in particular, Internet-oriented trading systems are being developed entirely outside stock exchanges.

European exchanges continued their cooperative efforts and sought to form competitive alliances. The most striking example of cooperation between exchanges is that of eight European exchanges (Milan, London, Zurich, Brussels, Amsterdam, Frankfurt, Paris and Madrid), which is aimed at developing a pan-European electronic marketplace for shares of the largest European companies. In September 1999 the exchanges unveiled a common market model, which is due to become operational by November 2000. By contrast, the creation of a single trading platform has been shelved for the time being. Cooperation between the Nordic exchanges led to the creation of the Norex link by the Stockholm and Copenhagen exchanges. The Oslo exchange has also expressed interest in joining the link.

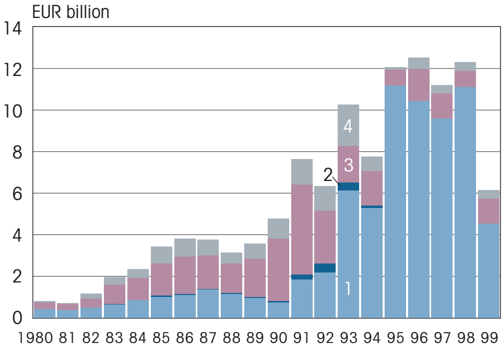
Investors showed a keen interest in companies operating in new and expanding markets. Prices of the shares of these companies rose sharply, especially in the latter part of the year.

Electronic trading systems have gradually assumed greater importance in European debt markets as well. An important step towards electronic trade in debt instruments was taken in early 1999 with the launch of EuroMTS, which aims to become a marketplace for debt instruments issued by governments in the euro area. There were also several ongoing projects aimed at developing European repo markets.

The joint German-Swiss derivatives exchange, Eurex, which is located in Frankfurt, was able to gain a major share of trading in derivatives based on the most liquid government debt instruments and by end-1999 it had become the world's largest derivatives exchange. Trading in money market instruments based on Euribor rates is now centred on the London Futures and Options Exchange (LIFFE). European trade in stock derivatives was also becoming partially concentrated on Eurex and LIFFE.

Efforts were made to bring securities trading practices in Finland into line with global trends. HEX Ltd, Helsinki Securities and Derivatives Exchange, Clearinghouse (HEX) launched several projects aimed at improving its operational efficiency and increasing cooperation in order to strengthen its position in the face of growing competition. In September 1999 trading in HEX's most liquid derivative instruments was initiated on Eurex, in accordance with an agreement on cooperation between the two exchanges. Moreover, HEX had discussions with the German Deutsche Börse AG on the use of the latter's trading system.

Chart 31.
Bonds issued in Finland



1. Central government
2. Local government
3. Financial institutions
4. Companies

Sources: Financial Supervision Authority and State Treasury.

Developments in securities markets in 1999

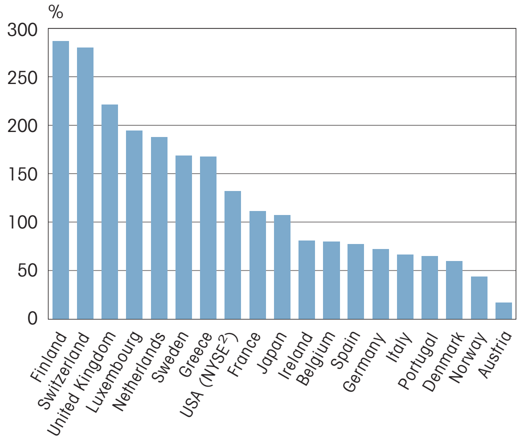
The introduction of the euro has brought about a rapid change in investor behaviour. As exchange rate risk is no longer a concern, many institutional investors, in particular, began to invest increasingly in interest rate-based instruments issued by other euro area countries. This boosted demand for debt issued by the core European countries whereas demand for debt instruments issued by the smaller countries decreased.

Central governments were again the largest issuers of euro-denominated bonds, accounting for 44% of the total value of issues. Financial institutions accounted for less than 40%.

The Finnish government's borrowing requirement declined further in 1999. This was reflected in bond issues in Finland. Benchmark government bonds were the only item of government borrowing that grew in 1999. No debt was issued in foreign currencies. The share of short-term debt fell to a few per cent of total borrowing (Chart 31).

As before, Finnish companies made little use of bond financing, and issue activity declined slightly from the previous year. In the other European countries, companies' reliance on this type of financing has been on the increase. To a greater extent than in previous years, European companies financed acquisitions and restructurings with debt financing obtained from the bond markets, instead of resorting to bank financing. Despite rapid growth, corporate issues accounted for only about 10% of total euro-denominated issues. Integration of euro area bond mar-

Chart 32.
Ratio of market capitalization of listed shares to GDP[1] in selected countries as at 31 December 1999



[1] GDP forecasts for 1999 are based on European Commission data, except for Switzerland and Norway, the figures for which are based on OECD data.
[2] New York Stock Exchange.

Source: Bank of Finland.

kets was held back by several factors, including national differences in taxation, the decentralized nature of settlement activities and a lack of credit ratings.

The disappearance of the threat of an international financial crisis and low interest rates helped to sustain the record growth of stock markets around the world. HEX was again one of the fastest growing exchanges in the world, and share values on HEX were more volatile than the average for European stock exchanges. HEX's market capitalization-to-GDP ratio rose further and was one of the highest in the industrial countries (Chart 32).

The high volatility was mainly due to the fact that a large portion of stock exchange turnover was based on trading in shares of just a few technology companies. For example, Nokia shares accounted for about 60% of HEX's total market capitalization at end-1999 and technology companies as a group for about three-quarters.

Share turnover and the number of listed companies in Finland grew rapidly in 1999. In all, 28 new companies were listed on the stock exchange during the year. Their initial public offerings raised nearly EUR 2 billion in new risk capital. The share of technology companies in companies listed on HEX increased further in 1999.

The central government's proceeds from sales of its share holdings amounted to over EUR 3.4 billion, with Sonera shares accounting for a major part of the total (about EUR 3 billion).

The importance of international investors in trading on HEX continued to grow in 1999. At year-end foreign investors held just over 60% of the market capitalization of listed companies.

Mutual funds registered in Finland grew steadily during 1999, led by equity funds. Fixed-income and balanced funds also grew, albeit at a slower pace than equity funds (Chart 33).

Both the number and range of mutual funds increased. Besides domestic equity, fixed-income and balanced funds, investors now have access to various types of international funds. These provide small investors, in particular, with easier access to ownership of foreign shares. Banks have prepared for the diminishing importance of deposits by offering their customers the additional option of investing in funds.

Trading in derivatives based on fixed-income instruments was moved off HEX with the start of Stage Three of EMU. During 1999 trading in derivatives focused on contracts based on stock indices and individual shares. Trading in the latter was fairly active (Chart 34).

A number of changes were effected in 1999 in the primary dealer system for benchmark Finnish government bonds. Goldman Sachs withdrew from the system in February and Den Danske Bank in October. Leonia Bank announced its withdrawal from the beginning of 2000. The French Banque Nationale de Paris (BNP) joined the system in June 1999.

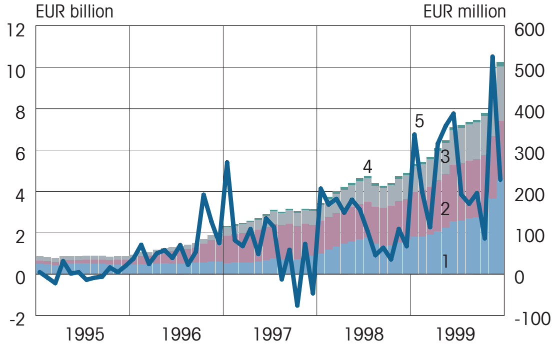
Developments in supervision and regulation

International financial supervision

In June 1999 the G10's Basel Committee on Banking Supervision issued a proposal for a new capital adequacy framework for banks and other financial service providers. At the same time the European Commission was working on a revision of a directive along broad-

Chart 33.
Mutual funds registered in Finland

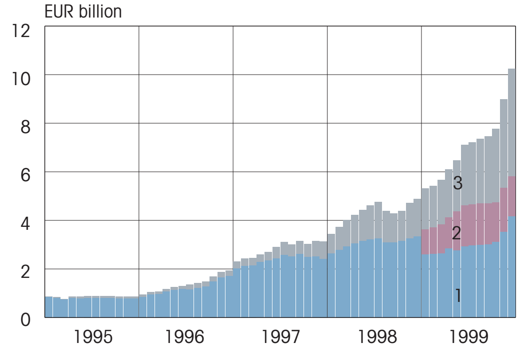
By type of fund



1. Equity funds (left-hand scale)
2. Fixed income funds (left-hand scale)
3. Balanced funds (left-hand scale)
4. Risk funds (left-hand scale)
5. All funds: net subscriptions (right-hand scale)

Source: HEX Helsinki Exchanges.

By geographical area of investment activity



1. Finland
2. Euro area
3. International

Source: HEX Helsinki Exchanges.

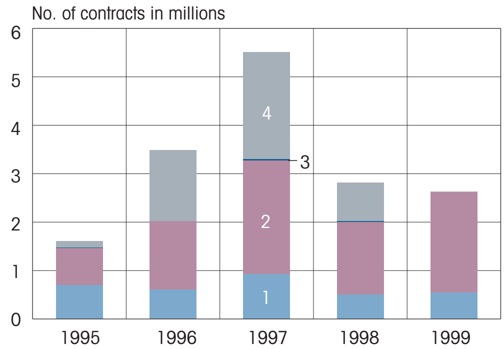
ly similar lines as the Basel Committee's proposal. The main aim of the planned reform is to modify the minimum capital requirements for banks' claims on companies to conform more closely to actual credit risks. Draft proposals were distributed for comment, and working groups are continuing to hone the details. Within the EU the process is being coordinated by the Commission's Banking Advisory Committee (BAC), which includes representatives of the Bank of Finland as well as the Ministry of Finance and Financial Supervision Authority.

In November 1999 the Financial Services Policy Group (FSPG), which was set up in December 1998, published a progress report on implementation of the Commission's action plan for financial services. The report called for all available means to be used to speed up the regulatory process in view of the rapid changes occurring in the financial markets.

Among the issues dealt with by the European Council in 1999 were two Commission proposals for amendments to the *Council Directive on undertakings for collective investment in transferable securities* (UCITS) and proposals for directives on the distance selling of financial services and take-over bids. The purpose of the proposed amendments to the UCITS directive is to bring it into line with market developments and remove major ambiguities in its interpretation, which have impaired uniform application of the directive. The directive on the distance selling of financial services is aimed at promoting the free flow of financial services by harmonizing member

Chart 34.
Turnover in derivative instruments on HEX

No. of contracts in millions



1. Stock index options
2. Stock options
3. Currency derivatives
4. Interest-rate derivatives

Source: HEX Helsinki Exchanges.

states' legislation on distance selling and consumer protection.

In February 1999 the central bank governors of the G10 countries decided to change the name of the Euro-currency Standing Committee to the Committee on the Global Financial System and to clarify its remit. The Committee's primary task is now to promote the stability and efficiency of the global financial system.

In April 1999 the finance ministers and central bank governors of the G7 countries set up a new cooperative body, the Financial Stability Forum, to address issues concerning the international financial markets. The Financial Stability Forum aims to promote the stability of international financial markets through exchange of information between supervisors and international cooperation.

Domestic financial legislation

A new Mutual Funds Act entered into effect in February 1999. The act applies to the activities of management companies and custodians as well as to the marketing of mutual fund units to the general public.

The Act on the Insurance Supervision Authority (ISA) entered into force in April 1999. The act established the ISA under the Ministry of Social Affairs and Health and assigned it the task of supervising and inspecting entities engaged in insurance and pension insurance business and in other areas of insurance, subject to certain exceptions concerning statutory earnings-related pensions. Although the ISA is administratively subordinate to the Ministry of Social Affairs and Health, it is independent in its decision-making. The ISA's costs are covered by inspection fees collected from supervised entities.

The ISA and FSA cooperate closely with each other and, for example, have largely overlapping boards. They have drafted a common supervisory protocol, which defines their cooperative activities in practical terms.

New regulations concerning securities market crimes entered into force in June 1999. In connection with the reform, the provisions on penalties included in the old Securities Markets Act and the Act on Trading in Standardized Options and Futures were transferred to the penal code, which lays down penalties for misuse of inside information, price distortion and disclosure-related crimes. These crimes are now subject to more severe penalties than before and involve the penal liability of a legal person.

A law on security and contract of suretyship entered into force in October 1999. The new law improves the position of private persons acting as guarantors. However, it was attempted to draft the law in such a way that it does not significantly weaken the strength of a guarantee.

In December 1999 Parliament approved a Government bill that raised the tax rate on capital income from 28% to 29% and another Government bill on removing the tax-exempt status of interest earnings on deposits. These laws entered into force in January 2000. The latter law is applicable to interest earnings on bank deposits only from 1 June 2000.

A new law on mortgage banking entered into force at the beginning of 2000. The law covers mortgage banking activities conducted by special credit institutions that have the exclusive right to finance their operations by the issuance to the general public of bonds backed by real estate or government entities. The activities of mortgage banks were restricted to the granting of loans secured by shares of housing or real estate companies, occupancy rights or real estate mortgages. Loans can also be granted to government entities. Under the law, the easing of restrictions on mutual fund investments and capital adequacy calculations for insurance companies (allowed under an EU directive) can be applied to mortgage bonds.

The continuously evolving nature of the financial markets is giving rise to pressures for reform of financial market legislation. In autumn 1999 the Ministry of Finance established a working group on banking services to assess the need to further develop regulations on the acceptance of deposits and other demand liabilities as well as the availability of services.

Payment and settlement systems

Changes in the operating environment

The introduction of the euro gave added impetus to the major changes in payment and settlement systems in the euro area brought about by rapid advances in information technology. The European System of Central Banks (ESCB) contributed actively to this development, together with the European Commission. At the beginning of the year the EU-wide TARGET system (Trans-European Automated Real-time Gross settlement Express Transfer; Chart 35), linking together national real-time gross settlement systems (RTGS), was introduced. The launching of TARGET was a prerequisite for a single monetary policy in the euro area. It also contributed to the swift integration of money markets in the euro area.

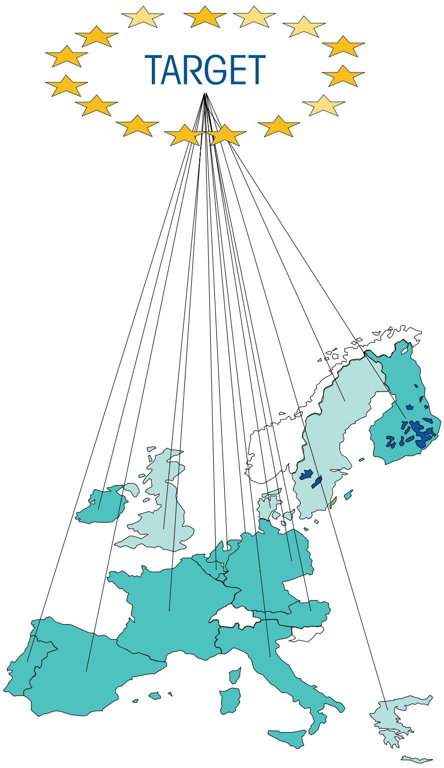
The Bank of Finland's BoF-RTGS system provided a safe and reliable mechanism for the transfer of euro-denominated domestic and cross-border payments and settlement of interbank payments. The other domestic payment systems made a partial transition to the euro environment in that they had the capacity to process both markka and euro-denominated payments. Securities markets in Finland and in the euro area in general changed over completely to trading and settlement in euro from the beginning of 1999. The Finnish Central Securities Depository's (APK) BoF-RTGS account with the Bank of Finland provides participants with safe securities settlement using central bank money.

The changes caused by the introduction of the euro, together with the ongoing rapid technical development of payment systems and the introduction of new payment methods and instruments, meant that the operating environment of banks and the central bank was in a constant state of flux. For instance, the volume of payments based on self-services offered by banks grew continuously in the course of the year. In Finland growth was strongest in Internet-based services. Both the range and use of Internet banking services increased. Share trading on the Internet also became increasingly popular.

Development of payment and settlement systems

The Bank of Finland bears part of the responsibility for ensuring that payment and settlement systems in Finland function smoothly, reliably and efficiently. Similarly, in ac-

Chart 35.
TARGET –Trans-European Automated Real-time Gross settlement Express Transfer system



- 11 euro area central banks + European Central Bank + 4 other EU central banks
- More than 5,000 account holders in national RTGS systems
- Real-time gross payment system for all credit transfers in euro within the euro area
- System open from 8.00 am to 7.00 pm Finnish time
- Possibility of reaching almost any EU credit institution
- Nearly 30,000 cross-border payments per day

Source: European Central Bank.

cordance with the Treaty establishing the European Community and the Statute of the European System of Central Banks, the ESCB plays a key role in promoting the stable and smooth operation of the financial system in the euro area. As a member of the ESCB, the Bank of Finland promotes the smooth operation of payment and settlement systems and financial stability in the whole euro area.

The Bank of Finland participated actively in the work of the ESCB's Payment and Settlement Systems Committee and its various working groups. The work focused on the oversight, monitoring and development of payment and settlement systems in the euro area and the drafting of common standards for the systems. Another important area was the ongoing development of the ESCB's own services, primarily TARGET. The Bank's aim was to ensure that considerations and needs of importance for Finnish financial markets received adequate attention in the development of the systems.

The Bank of Finland also contributed to the stability, reliability and efficiency of payment and settlement systems through its oversight of the systems, as well as by delivering opinions on system rules and taking an active part in legislative work in the field. The Bank worked closely with other competent authorities in the field, in particular with the Financial Supervision Authority (FSA), the Ministries of Finance and Justice and the competition authorities.

Oversight

In keeping with their duties, the Bank of Finland and the ESCB seek to ensure that payment and settlement systems function reliably and smoothly and without risk to users. This is done, inter alia, through development of the systems, risk assessment and macroprudential supervision. These activities are referred to as oversight. The tasks and objectives of the central bank as laid down in the Act on the Bank of Finland constitute the legal basis for the Bank's oversight of payment and settlement systems.

Through its oversight of payment and settlement systems, the Bank endeavours to keep payment system risks at an acceptable level.

The central bank's task is specifically to oversee payment and settlement systems in their entirety, whilst the supervision of the risks of individual market participants falls within the purview of the FSA.

Difficulties experienced by one segment of the financial markets or by a single market participant may spread quickly via payment and settlement systems to the whole financial system and significantly impair the operation of financial markets (systemic risk). Another danger is that risks and problems may be transmitted from country to country via international payment systems. To prevent the occurrence and spread of disruptions in payment and settlement systems, the Bank participates, together with the FSA, in developing methods for controlling risks in the financial sector. The primary aim of oversight is to prevent systemic risk from materializing (stability goal), in particular through the creation of barriers limiting the spread of risks. It is also important for oversight that the conditions for access to systems are open and equal and thus conducive to free competition (efficiency goal) and that the systems have a sound legal basis.

In Finland the Bank's oversight takes many different forms, including regular meetings with the parties involved. System operators are further required to report any problems to the Bank as soon as they arise. They are also required to submit regular reports on the functioning of systems. The reports are analysed to identify any risk factors and problems in advance and thus enable remedial action to be taken in good time.

The reporting of particularly the APK on the operation of its securities settlement systems was improved in the course of the year. The monitoring of the APK's share clearing and settlement system required much work, especially towards the end of the year.

The tasks of the ESCB as laid down in the Treaty on the European Union constitute the legal basis for the oversight conducted by the ESCB. Oversight contributes to the efficient execution of the ESCB's monetary policy operations and promotes stable and smooth payment systems and a well functioning single market.

During the year the Bank was actively involved in the oversight of payment and settlement systems and the development of oversight within the ESCB. The Governing Council of the ECB adopted the general oversight policy drawn up by the Payment and Settlement Systems Committee and applicable to systems used for both domestic and cross-border payments. Oversight policy covers issues such as efficient execution of monetary policy, financial stability, competition neutrality and cross-border payments within the EU and in respect of third countries.

The oversight policy adopted by the Governing Council is implemented by the ECB and the national central banks (NCBs). The main responsibility for the oversight of international payment systems in the euro area (cross-border, offshore and multi-currency systems) rests with the national central bank of the country whose national legislation is applicable to the system, unless the features of the system give the Governing Council reason to decide otherwise. Notwithstanding this, the ECB is responsible for the oversight of the euro settlement system (Euro 1) operated by the Euro Banking Association (EBA). It is the duty of the ECB and the NCBs to ensure that uniform oversight policy is applied to all systems. With the changeover to the euro, the differences between domestic and cross-border systems have become blurred, which means that cooperation between the NCBs and the ECB will become increasingly important in the future.

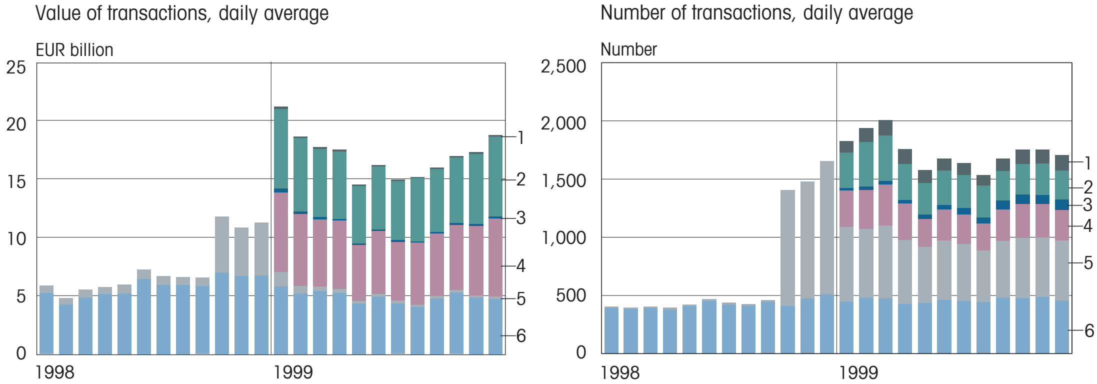
The ESCB has not yet adopted a common policy for the oversight of securities settlement systems. Hence the oversight of the systems is based on the national legislation of the euro area countries. As a user of securities settlement systems, the ESCB has nevertheless set minimum standards for the settlement systems used for execution of monetary policy and for the custody of collateral for central bank money.

The BoF-RTGS and TARGET

The Bank of Finland provides banks and clearing houses with fast and safe payment and settlement services in central bank money. Therefore the Bank's BoF-RTGS system helps to safeguard the stability and efficiency of markets. The establishment of a link between the BoF-RTGS and TARGET opened the way for safe payment transfers throughout the euro area.

Following the introduction of TARGET, the number of payments effected via the BoF-RTGS in-

Chart 36.
Transactions in BoF-RTGS



1. Incoming TARGET customer payments
2. Incoming TARGET interbank payments
3. Outgoing TARGET customer payments
4. Outgoing TARGET interbank payments
5. Loro payments (before October 1998 loro clearing)
6. Other RTGS payments and payments between the Bank of Finland and settlement account holders

Source: Bank of Finland.

creased considerably in 1999. An average of 1,740 payments a day were processed in the system with an average daily value of about EUR 17 billion. Compared with the previous year, the number of payments more than doubled and the aggregate value doubled. Measured in terms of aggregate value, TARGET payments accounted for a little more than half of the payments effected via the BoF-RTGS. However, in terms of volume, the majority of the payments processed by the system, 70%, were domestic payments. Following the changeover to the euro, the share of so-called loro payments in the total value of payments effected via the BoF-RTGS declined substantially, although they still accounted for a fairly large proportion of the total volume of payments (Chart 36).

The BoF-RTGS has a built-in centralized queuing facility designed to facilitate banks' management of intraday liquidity. Banks can put payments into a queue up to several days before their value date. Queued payments are executed in the order of priority indicated by the account holder and on a 'first in, first out basis'. The system also has a mechanism for the solution of gridlock in the system. The banks' liquidity position was very good during the year and the queuing facility was resorted to only in exceptional circumstances.

At the end of the year the aggregate amount of the banks' intraday credit limit stood at some EUR 6.5 billion. The average usage rate of the limits remained low (Chart 37).

With the introduction of TARGET, the criteria for access to the BoF-RTGS and the rules on intraday credit were revised to conform to the international guideline on TARGET. The new rules entered into force on 1 January 1999. Under the new rules, investment firms are also eligible for intraday credit, subject to special conditions. However, no investment firm applied for access to intraday credit in 1999.

Other domestic payment systems and electronic money

Most banks operating in Finland have signed the interbank agreement on payments, which regulates the transfer of interbank payments in the PMJ interbank system and the POPS system. The interbank payment system (PMJ) is used for payment transfers, recurrent payments, direct debits and bank card payments. Settlement of these payments is effected twice a day by the Bank of Finland, at 8.30 am and at 3.45 pm. In spring 2000 the morning settlement will be replaced by an automatic settlement run after midnight.

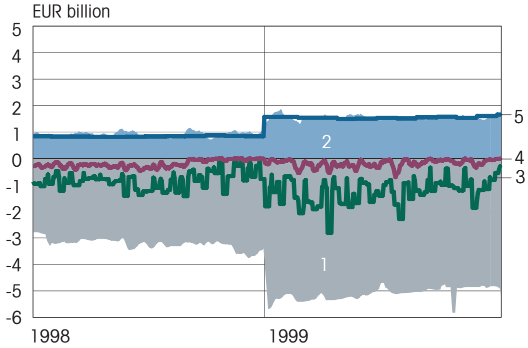
The POPS system is used for interbank express transfers, cheques and bank drafts. The settlement method applied to POPS payments depends on the value of the payment. Payments exceeding the interbank bilateral limit – the RTGS limit – are settled on a gross basis in the BoF-RTGS before the client's account is credited with the payment. Smaller payments are netted bilaterally so that the banks' net positions vis-à-vis each other are updated constantly during the day by the exchange of payment settlement data.

The ATM network and card-based electronic cash scheme are operated by the Automatia companies, Automatia Pankkiautomaatit and Automatia Rahakortit, which are owned by Finland's largest banks. Automatia Rahakortit operates the Avant payment system, which is based on electronic money stored in smart cards. Use of electronic money was not yet very widespread in 1999. In the course of the year the Bank monitored progress in the use and regulation of electronic money and participated in the debate on the directive regulating the issue of electronic money both at home and within the ESCB and EU. Oversight of electronic money also falls within the purview of the Bank.

Large-value payment systems in the euro area

Measured in euro, TARGET was easily the most widely used European system for cross-border payments. During the year an average of 29,000 cross-border payments a day were transmitted via the system, with an aggregate value of some EUR 360 billion. Germany was the main user of TARGET, accounting for approximately 27% of the volume of payments, measured in terms of the value of outgoing payments. The corresponding figure for Finland was about 1%.

Chart 37.
Finnish banks' minimum reserve deposits and intraday credit limits



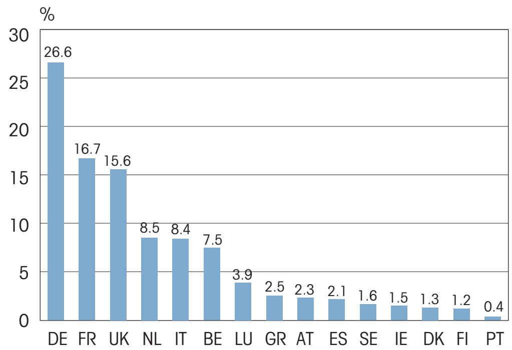
1. Total limits[1]
2. Monthly average of end-of-day balances
3. Maximum use of limits[2]
4. Average use of limits[1]
5. Minimum reserve deposits, total

[1] Five-day moving average.
[2] Five-day moving maximum.

Source: Bank of Finland.

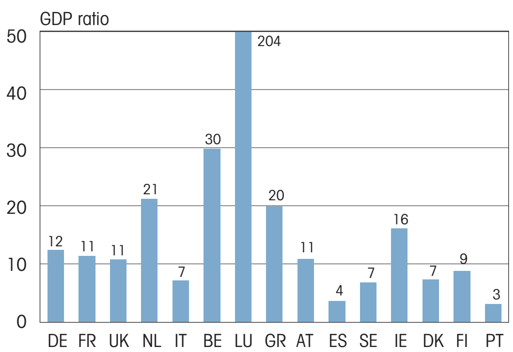
Chart 38.
TARGET cross-border payments in the EU, 1999

Shares of participating countries in total value of outgoing TARGET cross-border payments



Source: European Central Bank.

Ratio of outgoing TARGET cross-border payments to GDP[1] in participating countries



[1] GDP forecasts for 1999 are based on European Commission data.

Sources: Bank of Finland, European Central Bank and European Commission.

In relation to GDP, however, the Benelux countries, headed by Luxembourg, were the largest users (Chart 38).

TARGET enhanced the efficiency of the transmission of large-value payments in the euro area and reduced the risks associated with large-value payments. However, there is still room for improvement in terms of the availability and operational reliability of the system, as use of the system in the euro area was impaired for a few days during the year as a result of disruptions in some countries in continental Europe.

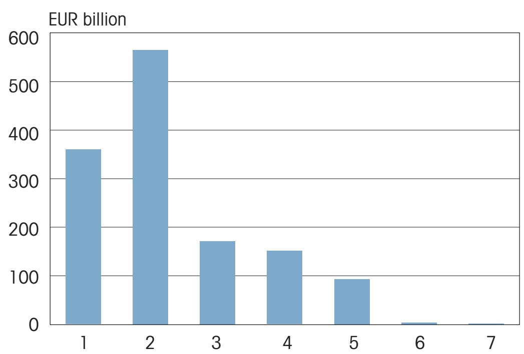
Euro 1, which is operated by the Euro Banking Association, is an EU-wide netting system for large and medium-value payments in euro. Two Finnish banks, Merita Bank and Leonia Bank, participated in the system. Together with TARGET, this is the second major system for cross-border payments within the EU. The volume of payments transmitted via the system averaged 66,500 a day, so that use of the system clearly exceeded that of TARGET in terms of number of payments. Four euro area countries also have their own large-value netting systems. The two largest systems are Euro Access Frankfurt (EAF) in Germany and Paris Net Settlement (PNS) in France. The Spanish Servicio Español de Pagos Interbancarios (SEPI) and the Finnish POPS system are much smaller (Chart 39).

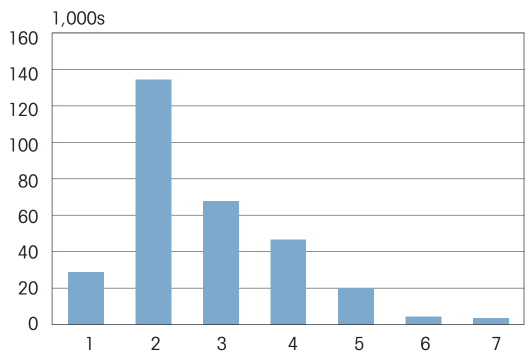
Retail payment services in the euro area

The euro area constitutes a single market area, and consequently the execution of payments within the area should be as efficient and reliable as within a single country. However, the launch of Stage Three of EMU had little practical impact on cross-border retail payments. In many countries charges for retail cross-border payments were still higher and execution times longer than for domestic payments, leaving considerable room for improvement in terms of efficiency. This situation is partly due to differences between the systems of the euro area countries and the systems' different stages of development.

The implementation of the directive on cross-border credit transfers (97/5/EC) also highlighted the need for improving cross-border retail payment services. In September 1999 the ECB published a set of objectives for improving cross-border retail payment services in the euro area, calling on the industry to put the enhanced systems in place by 1 January 2002, when euro notes and coins will be put into circulation. The objectives concern, inter alia, fees and execu-

Chart 39.
Large-value payment systems in the euro area: average daily number and value of payments, 1999





1. TARGET payments (cross-border payments within the EU)
2. Domestic RTGS payments
3. EBA's Euro 1 (Euro Banking Association)
4. EAF (Euro Access Frankfurt: until 1998 Elektronische Abrechnung Frankfurt)
5. PNS (Paris Net Settlement)
6. SEPI (Servicio Español de Pagos Interbancarios)
7. POPS (pankkien on-line pikasiirrot ja sekit)

Sources: European Central Bank and banks.

tion times for cross-border retail payments in the euro area, which the ECB argues should be made comparable with those for domestic payments.

Central securities depositories in the euro area and links between them

Central securities depositories in the euro area both provide securities settlement services and act as the principal custodians for the collateral posted for access to central bank funds. Their operational reliability is also crucial for the smooth functioning of the banking system. Settlement systems must guarantee that central bank funds cannot be withdrawn until the securities posted as collateral for credit have unconditionally and irrevocably been transferred to the central bank.

The ESCB assesses settlement systems against nine standards, which must be met by the central securities depositories approved by the ESCB. The assessment is based on the minimum standards published by the European Monetary Institute (EMI) in January 1998. European settlement systems that comply with the standards can be used for execution of the ECB's credit operations. The standards include requirements such as adequate macroprudential supervision and operational reliability. The assessment is updated annually. The same standards apply to the assessment of the links between central securities depositories, ie the direct connections established between central securities depositories for the cross-border transfer of securities. The eligible central securities depositories and their links are listed on the ECB's website (www.ecb.int).

Securities and derivatives settlement systems

The APK operates systems for the settlement and registration of shares (OM system) and debt instruments (RM system). Money market instruments are settled on a gross basis; by contrast, share trades are still settled on a net basis. The HEX Helsinki Exchanges also maintain a system for the settlement of standardized derivative contracts. The oversight of these systems is the responsibility of the Bank of Finland.

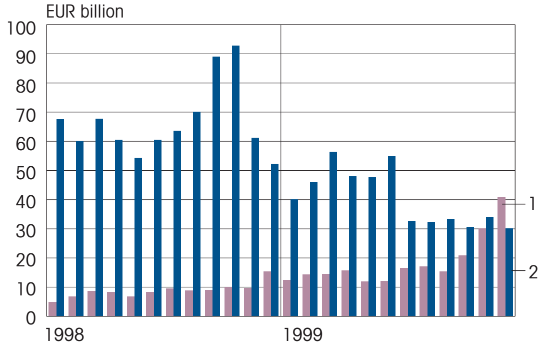
The OM system is a netting system based on batch processing. All trades executed on HEX are settled in this system. The volume and value of trades settled in the OM system grew in 1999, largely because of heavy trading in Nokia shares towards the end of the year. Compared with one year earlier, the value of trades settled more than doubled (EUR 222 billion), whereas their number (about 2.2 million) almost doubled. This substantial increase in trading volume led to capacity problems in connection with the clearing and settlement of share trades towards the end of the year. Some progress was made in the course of the year in implementing the project aimed at centralization of the book-entry system.

The RM system is an RTGS system for debt instruments. The system functioned reliably in the year, without any notable disruptions. The RM system is used for the safekeeping of Finnish eligible securities pledged as collateral with the Bank of Finland. In the course of the year two-way links were established between the RM system and the systems of the German Deutsche Börse Clearing AG and the French Sicovam SA. The links were approved for the transfer of collateral for credit granted by the ESCB.

The value of transactions settled in the RM system declined in the course of the year, and in December the value of transactions settled in the OM system exceeded that of transactions settled in the RM system for the first time since the introduction of the OM system (Chart 40). The reduced volume in the RM system was largely due to a switch in trading in the euro area to more liquid government bonds, primarily bonds issued by the major euro area countries. Another factor was the ESCB's intervention procedures, as a consequence of which the Bank of Finland stopped issuing certificates of deposit at the beginning of the year.

The derivatives settlement system of the HEX Helsinki Exchanges is used for the settlement of derivatives transactions executed on HEX. In the settlement of derivative contracts, HEX is the counterparty of the client and the securities intermediary is responsible for posting collateral and for other practical measures. In keeping with the agreement on cooperation between HEX and Eurex Frankfurt AG, the shift in trading in derivative contracts from HEX to Eurex

Chart 40.
Monthly values of securities transactions settled in the systems operated by the Finnish Central Securities Depository (APK)



1. Equities (OM system)
2. Debt securities (RM system)
Source: Finnish Central Securities Depository (APK).

started in October. This change will lead to a substantial decline in the trading and settlement of derivative contracts in Finland.

Several proposals for the development of securities settlement services were put forward in the euro area. In the course of the year securities links were increasingly constructed between national central securities depositories along the lines of a model proposed by the European Central Securities Depositories Association (ECSDA). In early 1999 Cedel International, the Luxembourg-based international central securities depository and clearing corporation, and the German central securities depository Deutsche Börse Clearing AG announced their intention to join forces. This marked the start of the integration of European clearing and settlement services. Towards the end of the year, Cedelbank's rival, the Belgium-based international central securities depository Euroclear SA, and the French central securities depository and clearing corporation Sicovam SA announced their intention to form an alliance in the near future.

Changeover to the year 2000 in payment and settlement systems

The millennium changeover required major changes in the IT applications of payment and settlement systems worldwide, and considerable resources were allocated to these projects in Finland as well. Together with the FSA, the Bank of Finland coordinated the progress made in achieving Year 2000 compliancy of payment and settlement systems. The changeover to the year 2000 proceeded without difficulty, both in payment and settlement systems and other banking systems, and no disruptions occurred during the millennium changeover. All systems of the ECB and the national central banks of the European Union started smoothly on 3 January 2000.

Cooperation in the area of payment and settlement systems in Finland

In the course of the year the Bank and the FSA agreed on practical measures for cooperation in the supervision of payment and settlement systems.[1]

The Bank also worked closely with market participants in the field of payment and settlement systems. The fora for cooperation set up in partnership with the banks in 1995, the Payment Systems Steering Group and its subgroup, the Payment Systems Cooperation Group, convened regularly in the course of the year to consider issues related to payment systems. Various subgroups also worked under the Payment Systems Cooperation Group, each focusing on a specific area. The BoF-RTGS user group, comprising account holders, also met regularly.

The Bank of Finland also took part in the work of the APK's consultative committees on clearing and settlement services. The committees discussed improvements in clearing and settlement services and other issues of topical interest. The Bank contributed to the debate on proposals for developing the OM system. The Bank also cooperates directly with the APK, for instance within the framework of a joint coordination working group,

[1] For a description of the Bank's oversight activities in the financial markets, see pages 35–36.

and on an ongoing basis in operational issues, such as the development of collateral management.

Developments in legislation and EU directives

The legislation on payment and settlement systems has continued to evolve as EU directives have been transposed into national legislation. The Bank of Finland was actively involved in the preparation of the projects both at home and abroad, for instance through participation in several working groups.

In November the Ecofin Council adopted a common position on a proposal for a directive of the European Parliament and the Council on the taking up, pursuit and prudential supervision of the business of issuers of electronic money. The directive is to be submitted to the European Parliament in early 2000.

The directive on cross-border credit transfers (97/5/EC) was adopted in 1997 and member states were required to implement it in their national legislation by 14 August 1999. The directive applies to all credit transfers up to EUR 50,000 between member states of the European Economic Area. In Finland the Act also applies to all domestic credit transfers. According to the Act, a credit transfer is executed when the sum in question is paid into the beneficiary's account with a bank or another institution. The directive was implemented in Finland in August 1999.

The directive on settlement finality was implemented in Finland with the entry into force in December 1999 of a new Act on Certain Conditions Applicable to Securities and Foreign Exchange Trading and to Settlement Systems. The scope of the Act was extended to include gross settlement systems for securities transactions. The Act also applies to collateral posted with the central bank in connection with its performance of central banking functions.

The operator of a settlement system is required to notify the Ministry of Finance of the rules of the system. This reporting obligation does not, however, apply to the Bank of Finland, clearing organizations as referred to in the Securities Markets Act, nor corporations as referred to in the Act on Trading in Standardized Options and Futures. The Ministry of Finance approves the rules of the last-mentioned entities on the basis of applicable legislation.

In its memorandum published in April 1999, the working group appointed by the Ministry of Finance to draft a proposal for the development of the book-entry system, inter alia, proposed that the book-entry registers be centralized at the APK and that the book entry registrars become account managing corporations within the APK. The Government bill to this effect is likely to be submitted to Parliament in early 2000.

Maintenance of the currency supply

The Bank of Finland's main task with regard to the maintenance of the currency supply is to ensure the secure and efficient issue and handling of banknotes and coins and the quality, authenticity and availability of notes and coins throughout the country. The Bank is also responsible for developing the currency supply function in cooperation with banks and other parties. In addition, the Bank is responsible for preparations for the issue of euro banknotes and coins and for other currency supply tasks in Stage Three of Economic and Monetary Union (EMU).

Finland's entry into Stage Three of EMU at the beginning of 1999 and the introduction of the single currency, the euro, directly affected the Bank's maintenance of the currency supply in two ways. First, whereas before the Bank had the exclusive right to issue banknotes and coins, it now issues notes and coins with the approval of the European Central Bank (ECB). Second, during the transition period 1999–2001 the Bank is obliged to exchange national banknotes of other euro area countries for Finnish currency at the fixed conversion rates. In addition, the Bank's preparatory work and cooperation with other parties regarding the issue of euro banknotes and coins have started to take concrete form. The decisions to annul the legal tender status of current markka banknotes and coins with effect from 1 March 2002 are examples of this.

In spring 1999 banks in the Kuopio and Vaasa districts began to work together on a trial basis in currency distribution. Merita Bank, the OKOBANK Group Central Cooperative, Leonia Bank and Automatia Pankkiautomaatit took part in this cooperative arrangement. Currency supply logistics and management and supervision of the cash centres were centralized in Automatia Pankkiautomaatit. In Kuopio, the Bank of Finland branch also participated in the trial by adjusting its service hours and participating not only in normal currency distribution but also in filling ATM cassettes.

The markka is making way for the euro

In December the Bank decided (1176/1999) to annul the legal tender status of 1986 and 1993 type banknotes from 1 March 2002. The 1986 type comprises 10, 50, 100, 500 and 1000 markka notes and the 1986 Litt. A type 50, 100, 500 and 1,000 markka notes. The 1993 type comprises the 20 markka note, as well as the Litt. A type of this note. All markka or penni notes older than the current banknote series had been annulled earlier. The Bank had last annulled banknotes at the beginning of 1994.

In December the Ministry of Finance decided (1177/1999) to annul the legal tender status of ordinary 10 and 50 penni and 1, 5 and 10 markka coins in the current series from 1 March 2002. The previous decisions on annulling markka and penni coins had taken effect at the beginning of 1994 and 1998.

As a consequence of these decisions the dual circulation of markka and euro banknotes and coins will last for only two months from the beginning of 2002. After that time the Bank will redeem the then annulled markka banknotes and coins for a further ten years until 29 February 2012. In November EU Finance Ministers meeting in the Ecofin Council decided to reduce the period for the changeover to euro banknotes and coins from 6 to 1–2 months, because the national decisions about the length of the period were considered urgent from the viewpoint of the preparations for the cash changeover.

Preparations for cash changeover were stepped up

Under Article 106 (1 and 2) of the Treaty establishing the European Community, the ECB obtained the exclusive right to authorize the issue of banknotes and the right to approve the volume of coins issued in the euro area countries when the euro was introduced at the beginning of 1999. According to Council Regulation (EC) No 974/98, this also pertains to national banknotes and coins in the euro area, because they are sub-units of the euro. In April the Governing Council of the ECB decided that the national central banks of the euro area countries could continue to issue national banknotes without quantitative limits until the end of 2001. However, the ECB's approval is required annually for the maximum amount of national coins to be issued during the following year.

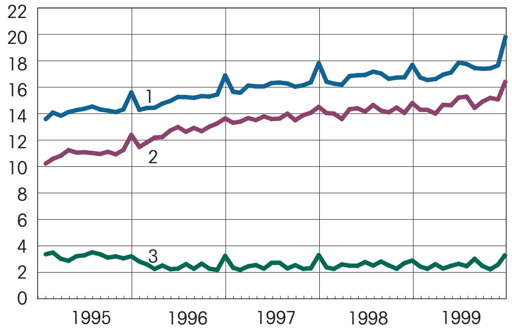
In 1999 the Bank of Finland participated actively in the work of the ESCB Banknote Committee and its working groups on preparations for the introduction of euro banknotes. This work focused on issues related to producing euro banknotes, organizing arrangements for research, quality control and prevention of counterfeiting, logistics for the cash changeover and preparations for an information campaign on the cash changeover. The Bank participated with the Ministry of Finance in the work of the EU's Economic and Financial Committee on preparations for the introduction of euro coins. The key cash changeover issue dealt with by the committee was the drawing up of a common statement on the length of the cash changeover period for approval by the Ecofin Council.

The pilot production of euro banknotes was completed in February. The results were good, and only some modifications in the technical specifications of the notes were necessary. The Governing Council of the ECB confirmed the modifications in April and decided that mass production could go ahead on that basis. Eleven printing works in the euro area are involved in production. Each national central bank may decide where the euro banknotes required in its country will be printed. After the printing of test banknotes, some printing works started mass production of certain denominations already in July 1999. According to current estimates, around 13 billion euro banknotes with a total value of some EUR 600 billion will be produced before the notes are put into circulation on 1 January 2002. These estimates include not only the notes needed to replace national banknotes in circulation but also logistical stocks. The estimates will be updated annually to take account of possible changes in the demand for banknotes.

In November 1999 the Bank of Finland ordered all the euro banknotes required in Finland at the beginning of 2002 from Setec, which started printing the notes around the end of November 1999. The Ministry of Finance has ordered all the euro coins required in Finland from the Mint of Finland. Minting had started in September 1998, and by the end of 1999 about one-third of the estimated requirement had already been produced. The Bank of Finland, as the issuing authority, draws up annual estimates of the requirements for euro banknotes and coins.

It has been widely held in the euro area countries that, in order to ensure a smooth and rapid cash changeover at the beginning of 2002, it should be possible to distribute euro banknotes and coins in advance, at least to certain target

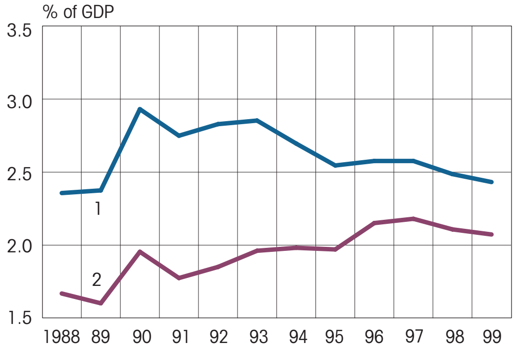
Chart 41.
Holdings of notes and coins



1. Notes and coins in circulation
2. Notes and coins held by the public
3. Banks' cash holdings

Source: Bank of Finland.

Chart 42.
Notes and coins in circulation* in relation to GDP



1. Notes and coins in circulation
2. Notes and coins held by the public

* The annual average of end-of-month figures.

Source: Bank of Finland.

groups involved in cash distribution. In January 1999 the Governing Council of the ECB decided that, under Council Regulation (EC) No 974/98, frontloading of euro banknotes and coins to the public could not be allowed, because it would have the same effect as issuing currency. However, at the same time the Governing Council considered that frontloading of euro banknotes and coins to key cash distribution groups would be legally possible provided that the notes and coins were not put into circulation until the beginning of 2002.

In February 1999 the ECB published a tender notice in the Official Journal of the European Communities concerning a contract for a Europe-wide information campaign on the introduction of the euro banknotes and coins. There were 40 applications in all. In early November the Governing Council of the ECB selected Publicis as the agency to assist the ECB in organizing the EURO 2002 information campaign for the introduction of the euro banknotes and coins. In Finland the agency is represented by Publicis-Törmä.

The preparations for the cash changeover gained momentum in November when the Ecofin Council approved a common statement on the issue of the euro banknotes and coins. In the statement, member states undertook to make their best efforts to ensure that the bulk of cash transactions could be effected in euro by the end of the first two weeks of 2002. Member states took the view that the dual currency period should last between four weeks and two months. They further felt that it would be helpful to distribute euro banknotes and coins to financial institutions and certain other groups, such as security carriers and retailers, before 1 January 2002, but that this frontloading should not lead to the putting of euro banknotes and coins into circulation before that date. Furthermore, to help people familiarize themselves with the new coins, limited quantities of coins could be made available to the public on request, notably to vulnerable groups in the population, during the second half of December 2001. The statement nevertheless notes that these views leave room for the participating countries to implement the cash changeover in the way which bests suits the specific circumstances in each country.

Since 1988 the Bank of Finland and other banks responsible for currency distribution have used a common data system for the transfer and handling of data on the currency supply. The banks in question have started preparations to create a similar, partly more sophisticated, system for handling data on euro banknotes and coins.

Further increase in value of currency in circulation

Reflecting the favourable performance of the economy, the value of currency in circulation continued to increase in 1999. Although substitute means of payment are becoming increasingly widespread, the value of currency in circulation has increased continuously over the last few decades, apart from the recession years in the first half of the 1990s, when the value remained unchanged. The value of currency in circulation was on average nearly FIM 17.5 billion in 1999, compared with FIM 16.8 billion in 1998 (Chart 41).

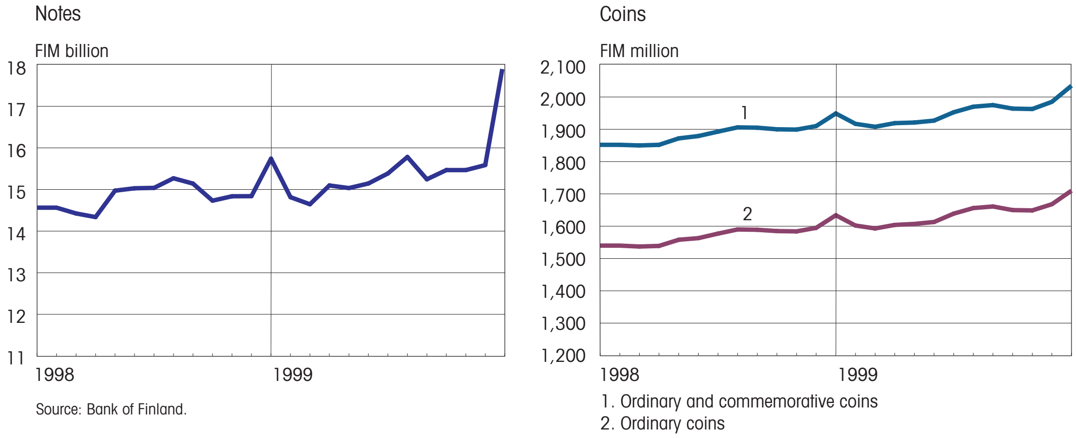
The ratio of currency in circulation to GDP was on average 2.4% in 1999, which was slightly lower than in 1998 (Chart 42). This ratio was still the lowest of EU member states, apart from Luxembourg, which forms a monetary union with Belgium. In the other EU countries the ratio varied between just over 3% to more than 10%. The relatively low cash level is largely considered to be due to the sophistication of Finnish payment systems, the limited use of banknotes for hoarding and the small amount of markka banknotes circulating abroad.

In December the parties responsible for currency supply made preparations for increased demand for cash, especially by the public, as it was feared that the millennium changeover would cause disruptions in payment systems. Banks' purchases of cash from the Bank of Finland in December were much larger than in the previous year, whereas the increase in the amount of cash returned was substantially smaller. At the turn of the year the value of currency in circulation was almost FIM 1 billion higher than would have been the case had there been no preparations for the millennium changeover. Banks and Automatia Pankkiautomaatit held a large share of this amount, as withdrawals by the public did not differ significantly from normal and no disruptions occurred. In early January 2000 the value of currency in circulation therefore fell by considerably more than usual at this time of the year.

At end-1999 currency in circulation amounted to FIM 19,919 million, an increase of 12.6% from the previous year. The value of banknotes in circulation increased by 13.6% in 1999 and amounted to FIM 17,884 million at the end of the year (Chart 43). The value of 100 markka notes in circulation increased most, by FIM 937 million. The value of coins[1] in circu-

[1] The accounting practices of the Bank of Finland were harmonized with those of the Eurosystem from 1 January 1999. Among other things, this means that the value of coin in circulation is no longer disclosed in the Bank's balance sheet but is instead netted against total coinage and the difference allocated to other assets.

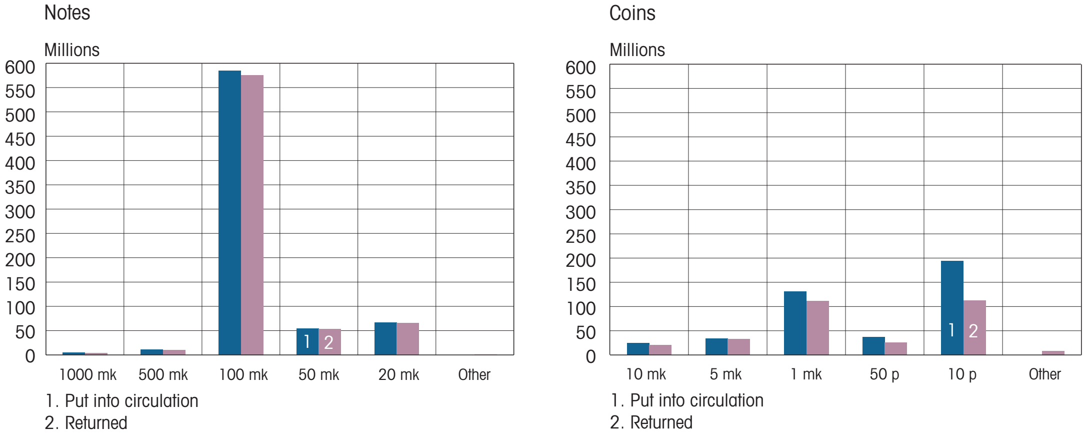
Chart 43.
Value of notes and coins in circulation



1. Ordinary and commemorative coins
2. Ordinary coins

Source: Bank of Finland.

Chart 44.
Flow of notes and coins through the Bank of Finland,1999



Source: Bank of Finland.

lation also increased in 1999, by 4.4%, and amounted to FIM 2,035 million at the end of the year.

At the end of 1999 cash holdings by the public (incl. cash in ATMs owned by Automatia Pankkiautomaatit) amounted to FIM 16,528 million, an increase of 11.7% from one year earlier. Banks' holdings amounted to FIM 3,390 million, which is 17.5% more than a year earlier. Banks' cash holdings during the year were on average only 14.7% of total currency in circulation, which was half a percentage point less than in 1998. This percentage has decreased by well over a half since the beginning of the 1990s, mainly as a result of banks' rationalization measures. Nevertheless it is still relatively high in long-term perspective and by international standards.

Sharp increase in banknote flows

The total face value of banknotes ordered from the Bank of Finland in 1999 increased sharply compared with 1998, ie from FIM 53.7 billion to FIM 72.7 billion. A total of 720 million banknotes were ordered (Chart 44), which is 32% more than the year before. The total value of banknotes returned also rose, from FIM 53.9 billion to FIM 70.6 billion, or by 31%. There was a particularly pronounced increase in flows of 100 and 500 markka notes.

In the course of the year the Bank redeemed banknotes annulled on 1 January 1994 to a total value of FIM 5 million. However, banknotes belonging to these series are still in circulation to a value of FIM 233 million. The redemption period for these notes ends on 31 December 2003.

Banknotes in circulation flowed through the Bank of Finland 6.7 times on average in 1999, which means that the banknotes returned to the Bank at intervals of 1 month and 24 days on average. Even if the dual circulation of euro and markka banknotes lasts only two months, it is longer than the current average flow-through rate for markka banknotes. In 1998 the flow-through rate for banknotes was 5.4. In 1999 the 100 markka banknote had the highest flow-through rate of all the banknotes, 9.3, as against 7.1 in the previous year. The rates for other banknotes were more or less the same as in 1998: 0.7 for the 1,000 markka note, 2.0 for the 500 markka note, 4.4 for the 50 markka note and 3.1 for the 20 markka note.

The Bank of Finland charges a fee for handling banknotes, which is levied in accordance with the Act on government charges at cost price but applicable only to the extent that the annual rate of flow of banknotes through the Bank of Finland exceeds a given threshold value, which is based on the Bank's statutory duties. In 1998 the Bank decided to set the threshold value at 4, because a higher flow-through rate was considered unnecessary for the quality control of banknotes and a smooth cash changeover in 2002. To further enhance the impact of the measure, the Bank also decided to review the handling fee every six months according to the flow of banknotes through the Bank in the preceding six-month period. On the basis of these considerations, the note-handling fee was set at FIM 0.50 per 100 banknotes throughout the year. The fee was actually levied on 100 and 50 markka notes only, since their flow-through rates were the only ones that exceeded the threshold value. At the beginning of December the Bank of Finland, on the basis of the preceding review period, confirmed the handling fee for the first half of 2000 at FIM 0.70 per 100 banknotes of the 100 markka denomination.

Despite the increased flow of banknotes, total revenue from the handling fee decreased from FIM 6.6 million in 1998 to FIM 6.0 million in 1999. This was because the handling fee was smaller than in 1998. The Bank also collected FIM 5.8 million from the banks for data processing services in connection with currency distribution. This was FIM 1.2 million more than in 1998 and was due to an increase in the size of the fee.

The Bank of Finland orders the banknotes it needs from Setec (see Appendices, Table 16). As the issue of markka banknotes will end in January–February 2002, the new banknotes already in the Bank's vaults and the notes that will be subsequently sorted for redistribution were sufficient for the Bank to take its last delivery of banknotes from Setec in August. In connection with its note sorting in 1999, the Bank cancelled one-third (35 million notes) of the average number of banknotes in circulation.

A total of 201 counterfeit Finnish banknotes were detected in 1999. In 1998 there had been 323. In both years most of the counterfeit notes were the result of single forgeries. The Bank of Finland and the National Bureau of Investigation jointly organized nine training seminars on the detection of counterfeit banknotes. The Bank also provided material on recognition of genuine banknotes for persons who handle money in the course of their work.

Redemption of national banknotes of euro area countries started

From the beginning of 1999 the national central banks of the euro area countries were required to exchange the national legal tender banknotes of other euro area countries for national currency at the fixed conversion rates. This was based on the provisions of Article 52 of the Statute of the European System of Central Banks and the guidelines for its implementation issued by the Governing Council of the ECB.

The Bank of Finland and its branches redeemed national banknotes of euro area countries to a total value of FIM 14 million in 1999. Deutsche Mark banknotes represented two-thirds of the total value, whereas the shares of the next most redeemed currencies ranged between 5 and 10%. Only about one-tenth of the total amount redeemed was done so at the request of nonresidents.

The national central banks of the other euro area countries redeemed Finnish banknotes to a value of FIM 1,005 million. As FIM 980 million of this amount was redeemed by the German central bank, the shares of the other national central banks were very small. This partly reflects the fact that the redemption is organized in different ways in different euro area countries. Most of the redeemed banknotes were 100 markka notes, ie about 60% of the total amount exchanged. 1000 and 500 markka notes were also redeemed to some extent whereas only a small amount of 50 and 20 markka notes were redeemed.

No changes in flow of coins

Ordinary coins put into circulation by the Bank of Finland had a total face value of FIM 580 million and ordinary coins returned to the Bank of Finland a face value of FIM 497 million. The value of coins put into circulation rose by FIM 12 million whereas the value of returned coins fell by FIM 13 million compared with the previous year. In 1998 both the amount of coins ordered and returned had decreased by more than FIM 200 million.

The Bank collected FIM 3.9 million in coin handling fees, which was FIM 1.4 million more than in 1998. The increase was due to an increase in the size of the fee.

Three commemorative coins were issued in 1999. To honour Finland's EU presidency, a commemorative 10 markka coin was issued with a silver centre and an outer ring of gold. The issue was limited to 3,000 coins. The coin was also minted in a special version of 100,000 coins with a centre of aluminium-bronze and an outer ring of cupro-nickel, as in the ordinary 10 markka coin. Two coins were issued to commemorate Jean Sibelius and Finnish music. The gold coin had the denomination of 1,000 markkaa and the issue was limited to 8,000. The silver coin had the denomination of 100 markkaa and the number of coins struck was 33,000.

According to Council Regulation (EC) No 3603/93, the central bank of an EU member state may not hold more than 10% of the total value of coin in circulation. The value of coin held by the Bank of Finland peaked on 28 February 1999 at 8.7% of the amount in circulation but stood at 4.8% at the end of the year.

Of coins annulled in 1994 and 1998, the Bank redeemed ordinary coins to a value of FIM 6 million and commemorative coins to a value of FIM 0.4 million. At the end of 1999 the value of annulled but unredeemed ordinary coins and commemorative coins amounted to FIM 295 million and FIM 126 million respectively.

Management of foreign reserves

Since the start of Stage Three of EMU, the Bank of Finland has managed two types of foreign reserves: part of the foreign reserves of the ECB and its own foreign reserves.

At the beginning of 1999 the national central banks (NCBs) of the euro area transferred part of their own foreign reserve assets to the ECB, which is owned by the NCBs. The assets transferred totalled almost EUR 40 billion, of which 15% was in the form of gold and the remaining 85% in the form of foreign currency reserves. The Bank's share amounted to about EUR 700 million. In compensation for the transfer, the Bank has a euro-denominated claim on the ECB, on which the ECB pays interest. These reserves are needed for potential foreign exchange operations by the ECB.

The foreign reserves transferred to the ECB are not invested by the ECB itself but by the NCBs, subject to constraints fixed at the ECB. These constraints are similar to those applied by the Bank in the investment of its own foreign reserves. As the foreign reserves are included in the balance sheet of the ECB, the ECB bears the associated risks. Investment policy in respect of the foreign reserves is determined by the ECB, and the NCBs participate in developing the investment policy through their involvement in committee work.

The role of the Bank's own foreign reserves has changed considerably since the start of Stage Three of EMU. The Bank holds reserves in order to, inter alia, meet any additional needs of the ECB and financing requirements in Finland's relations with the International Monetary Fund (IMF). By contrast, the foreign reserves are no longer used for foreign exchange operations by the Bank. Moreover, the Finnish State Treasury has started to conduct central government operations on the foreign exchange market independently. Consequently, the foreign reserves are very stable in size and they no longer need to be as liquid as they were prior to Stage Three. For these reasons, investment policy was changed significantly in 1999 by including securities issued by companies with good credit ratings in the list of eligible instruments. The Bank is one of the first central banks to invest part of its foreign reserves in these higher-yielding assets.

The Bank's foreign reserves are invested in international financial markets in gold and debt instruments denominated in foreign currency. In addition, part of the reserves are held as special drawing rights issued by the IMF and as a reserve tranche with the IMF. The Bank's foreign reserves totalled about EUR 8 530 million at the end of 1999.

The objectives of the Bank's investment policy are security, liquidity and return. The security objective refers to the requirement that the value of assets must not fluctuate excessively as a result of the various risks involved. The liquidity objective means that it must be possible to convert foreign reserves into cash quickly and at reasonably low cost whenever needed. The aim is to maximize the return on the reserves within the security and liquidity constraints. The key element of the investment policy is effective portfolio diversification, the purpose of which is to limit changes in the value of reserves and ensure sufficient liquidity of reserve assets.

The main risks associated with the investment of foreign reserves are exchange rate risk, interest rate risk, credit risk and liquidity risk. The most important of these is exchange rate risk. Exchange rate risk refers to changes in the value of reserves caused by exchange rate fluctuations. The Bank attempts to reduce exchange rate risk by spreading its holdings of foreign reserve assets among different currencies, thereby preventing changes in the value of individual currencies significantly affecting the value of reserves. The most important investment currencies in 1999 were the US dollar, the pound sterling, the Japanese yen, the Danish krone and the Swedish krona. The shares of investment currencies, the 'currency distribution', is reviewed regularly on the basis of, inter alia, the previous behaviour of the currencies.

Interest rate risk refers to variation in the return on reserves as a consequence of changes in market interest rates. Interest rate risk is measured in terms of duration. Duration describes changes in the market value of investment portfolios resulting from a change in market interest rates. One of the techniques used in setting duration is the value-at-risk method. This examines the distribution of returns and especially losses the likelihood of which is small. Interest rate risk is also managed by spreading investments among the markets of the main investment currency countries and debt instruments with different maturities and by setting market-specific limits on the average duration of investments.

Credit risk refers to changes in the value of reserves caused by changes in the creditworthiness of issuers of investment instruments or deposit-takers. Credit risk is reduced by investing the bulk of the reserves in securities issued by the governments of the main investment currency countries and in short-term investments for which these securities serve as collateral. This also ensures adequate liquidity of the reserves. Part of the foreign reserves is invested in securities issued by companies with good credit ratings and in short-term bank deposits. The credit risk attached to this 'credit portfolio' is managed by imposing constraints based on the value-at-risk method and limits derived from these constraints. Security is also enhanced through effective portfolio diversification and imposition of minimum credit rating criteria in respect of issuers and banks.

Investment benchmarks customized by the Bank serve as guidelines for investment activity. These benchmark portfolios are fictitious portfolios designed to take into account, as far as possible, long-term objectives and constraints in the investment of foreign reserves. Benchmark portfolios represent a neutral approach to asset allocation. In practice, the aim is to obtain a return on invested reserves that is higher than the return on benchmark portfolios. Deviations from benchmark portfolios are restricted by limits. Returns on actual and benchmark portfolios are subject to continuous monitoring.

Responsibility for risk management in connection with investment of foreign reserves lies with a unit which is separate from portfolio management, and compliance with the constraints imposed on investment activity is monitored constantly.

Following the transfer of part (20%) of its gold reserves to the ECB, the Bank's reserves amount to some 50,000 kg, almost half of which is invested in short-term interest-bearing gold deposits. The risks inherent in these investments are restricted by means of portfolio diversification and imposition of limits and maturity constraints.

Owing to actual and assumed future gold sales by central banks, the price of gold fell to its lowest level for 20 years in 1999. In late September 15 European central banks agreed to restrict their gold sales over the next five years and to maintain their gold deposits at no more than current levels. The measure helped stop the decline in the gold price, at least for the time being. Deposit rates also returned to close to the average levels for the past few years.

International activities

The Bank of Finland as part of the European System of Central Banks

With the launch of the euro and the start of the single monetary policy at the beginning of 1999, the European Central Bank and the European System of Central Banks moved from the preparatory stage to normal day-to-day business. Similarly, at the Bank of Finland, activities related to the single monetary policy and other tasks performed jointly in the context of the Eurosystem became part of day-to-day central banking activities.

The European System of Central Banks (ESCB) is composed of the national central banks (NCBs) of all 15 member states of the European Union and the European Central Bank (ECB), which is owned by the NCBs. The unofficial designation 'Eurosystem' is used when referring to the ECB and the 11 NCBs that have adopted the euro as an integrated whole. Pursuant to their Statute, the ESCB and the ECB implement jointly the tasks conferred on them.

The ECB's highest decision-making body is the Governing Council, which normally convenes twice a month and brings together the governors of the 11 euro area NCBs and the members of the Executive Board of the ECB. The General Council is composed of the governors of all 15 EU NCBs and the President and Vice-President of the ECB. It meets four times a year.

Responsibility for the day-to-day business of the ECB lies with the six-member Executive Board, which operates on a full-time basis in Frankfurt. The Executive Board presents matters to the Governing Council for decision.

The most important element of the decision-making powers of the Governing Council of the ECB is deciding on the monetary policy for the euro area. In practice, however, these powers also cover all other issues relating to ECB activities. For this reason, preparation by the Governor of the Bank of Finland for ECB Governing Council meetings includes a briefing process in which the Bank provides the Governor with relevant background material and proposals for positions to be taken at the meetings. The Bank's Board also reviews this material prior to each Governing Council meeting.

Through committees established for various areas of operation, the NCBs participate, together with the ECB, in the preparation of matters for submission to the ECB

Representatives of the Bank of Finland on the ECB Governing Council and General Council and on ESCB committees

Governing Council of the ECB

General Council of the ECB
Matti Vanhala (Governor)
Esko Ollila (Deputy Governor), Deputy Member
Kjell Peter Söderlund (Head of Unit), Assistant

Committees

International Relations Committee
Esko Ollila (Deputy Governor)
Kjell Peter Söderlund (Head of Unit)

Budget Committee
Antti Vuorinen (Budget Planner)

Accounting and Monetary Income Committee
Esa Ojanen (Head of Department)
Tuula Colliander (Head of Division)

Legal Committee
Maritta Nieminen (Lawyer)
Eija Brusila (Lawyer)

Payment and Settlement Systems Committee
Harry Leinonen (Adviser to the Board)

Market Operations Committee
Markus Fogelholm (Head of Department)
Harri Lahdenperä (Head of Division)

Banking Supervision Committee
Heikki Koskenkylä (Head of Department)

Monetary Policy Committee
Pentti Pikkarainen (Head of Department)
Tuomas Saarenheimo (Adviser)

Banknote Committee
Urpo Levo (Head of Department)
Paavo Perttu (Banknote Adviser)

Internal Auditors Committee
Taina Kivelä (Head of Unit)
Erkki Kurikka (Internal Auditor)

Information Technology Committee
Pertti Simola (Head of Department), until 15 November 1999
Raimo Parviainen (Head of Division)

Statistics Committee
Martti Lehtonen (Head of Department)
Laura Vajanne (Head of Division)

External Communications Committee
Antti Juusela (Head of Unit)
Antero Arimo (Head of Department)

Governing Council. The committees have an advisory role, and committee proposals are not binding upon the ECB Executive Board when it makes its own recommendations for decisions to be taken by the Governing Council. In practice, however, the committees' viewpoints are reported to the Governing Council even in cases where the Executive Board's proposal for a decision deviates from the committee's position.

Altogether, there are 13 committees in the ESCB. The committees convene whenever the need arises. In general, meetings are held once a month or in some cases a few times a year. Like other national central banks, the Bank of Finland has one or two representatives on each committee. The committees have set up several working groups to examine a large number of specific issues in more depth. The Bank is represented on many of the working groups as well. About 60 representatives from various organizational levels at the Bank have participated in the work of committees and working groups. However, hundreds of Bank employees are involved in ESCB matters in one way or another.

Experience so far shows that committee work has become an important part of ESCB cooperation. This has had a direct and significant impact on daily work routines at the Bank. Committee work affects a large number of the Bank's experts involved in preparatory work, either directly (as committee members) or indirectly (as other experts). These experts need to familiarize themselves with background material and take part in in-house preparatory meetings where they elaborate the positions to be taken by the Bank's representatives. In addition, committee work often requires the sending of memorandums, letters and answers to enquiries to committee secretaries. The proceedings of committee meetings are also reported systematically at the Bank.

Twelve of the 13 ESCB committees work on issues related to central banking within the euro area. The work of these committees is discussed in more detail in other chapters. Matters related to the Eurosystem's external relations are dealt with by the International Relations Committee. The ECB and the NCBs of the participating member states each have two representatives on the committee; one of the NCB representatives is the deputy governor. The ECB is represented on this committee by a member of its Executive Board. The committee handles, inter alia, issues concerning the Eurosystem that are raised at meetings of international organizations and other international groupings and that may require a common position of the Eurosystem. Where necessary, the Governing Council takes the ultimate decision on such positions.

Important topics discussed by the International Relations Committee in 1999 included the procedure for formulating the ECB's common positions on international issues, structural reform of the international financial system and international codes of conduct for monetary and financial policies. On the initiative of the committee, a number of studies were carried out in the course of the year on, for example, indicators of financial market stability, exchange rate cooperation between G7 countries and –in partnership with the Monetary Policy Committee –the international role of the euro.

Another important topic discussed by the committee was EU enlargement. On the initiative of the committee, a Seminar on the Accession Process was held in Helsinki on 11 and 12 November 1999 and was attended by the governors of the central banks of the candidate countries. The purpose of the seminar was to carry out a wide-ranging review of the central banking issues involved in the accession process, to identify the main problem areas and to enhance cooperation between the Eurosystem and central banks of candidate countries. Representatives from the Eurosystem and from the central banks of the 12 EU candidate countries participated in the seminar. The seminar was jointly organized by the ECB and the Bank of Finland.

Other activities related to the European Union

With the onset of Stage Three of Economic and Monetary Union, the Economic and Financial Committee began its work under the Council of the European Union meeting in the composition of the Ministers of Finance and Economy (ECOFIN Council). Under the Treaty establishing the European Community, the committee's tasks and composition are largely the same as those of the Monetary Committee, which was dissolved at the end of Stage Two. The Economic and Financial Committee is comprised of two representatives from each member state, the ECB and the Commission. One of the representatives of the member state is from the ministry of finance and the other from the NCB.

The most important topics dealt with by the Economic and Financial Committee in 1999 were issues related to economic policy coordination between member states, in particular between countries participating in the euro area. Questions concerning the external representation of the EU and the euro area were also discussed on a number of occasions.

On the basis of preparations by the Economic and Financial Committee, the ECOFIN Council submitted a report to the European Council convening in Helsinki on the experiences gained in economic policy coordination in Stage Three of Economic and Monetary Union and on proposals for ways of improving existing procedures. The report proposes the streamlining of coordination procedures and enhanced cooperation between the various compositions of the Council. It also stresses the importance of the document *Broad economic policy guidelines* in the coordination of member states' economic policies. Economic policy coordination respects the autonomy and competence of the various parties involved. From the ECB's point of view this means that, in connection with procedures for coordination of economic policies, the ECB will not be a party to agreements that could jeopardize room for manoeuvre and independence in monetary policy.

One area of activity that figured prominently in the work of the Economic and Financial Committee was the formulation of common positions on international economic policy issues. The committee also took part in drawing up the EU's first common strategies with regard to certain non-EU countries.

Representatives of the Bank of Finland on EU committees

Economic and Financial Committee
Esko Ollila (Deputy Governor)

Alternate Members of the Economic and Financial Committee
Paavo Peisa (Adviser)

Economic Policy Committee
Antti Suvanto (Adviser to the Board)

Banking Advisory Committee
Heikki Koskenkylä (Head of Department)

It also contributed to preparations for both normal and 'informal' ECOFIN Council meetings; the autumn informal meeting was held in Turku, Finland.

During the year under review, the EU reached a consensus with the other parties involved on the representation of the EU and the euro area in international fora, especially in the context of the G7 Finance Ministers' and Governors' Group. In accordance with this agreement, during the Finnish presidency of the European Union, Finland's representative was present at the G7 Group meetings whenever they addressed issues related to EMU and took part in the activities of the new 'G20' [1].

The EU's Economic Policy Committee was involved in drawing up the broad economic policy guidelines and in other procedures for coordination of member states' economic policies, in particular with regard to structural policy issues. The committee played a major part in, for example, the preparations for a meeting between representatives from the Council, the ECB and the social partners that was organized for the first time during the Finnish presidency.

In Finland, the Bank of Finland participated in the work of a committee on EU affairs responsible for coordinating cooperation between ministries. The Bank took also part in the preparatory work of the sub-committees of this committee that addressed issues related to economic policy, the accession process, the financial markets, taxation and payments.

International Monetary Fund (IMF)

In addition to its traditional forms of activity, such as surveillance of member countries' economies and financing arrangements, the IMF focused on strengthening the architecture of the international financial system and promoting the HIPC Initiative (Heavily Indebted Poor Countries Initiative), which aims at easing the debt burden of the poorest member countries.

Surveillance of member countries' economies accounts for a significant part of the IMF's activities. The main emphasis is on bilateral Article IV consultations. In 1999 the world economic outlook improved, and there were no financial crises like those witnessed in the previous years.

Brazil, one of the crisis countries in the previous years, devalued its currency, the real, in January. On account of this, the Brazilian government judged it necessary to revise its economic programme, which is supported by the IMF's stand-by arrangement as part of a package of international financial support. The change in the economic programme did not affect the amount of the stand-by arrangement, and according to the Fund's Executive Board implementation of the revised programme progressed well.

In July the IMF granted Russia a stand-by credit of SDR 3.3 billion, which Russia will use for repayment of its former debts to the IMF. Approval of the stand-by credit was hampered by confusion about the activities of the Russian central bank. In early 1999 it became evident that the Russian central bank had given the IMF a misleading impression of the true state of its foreign reserves in 1996. Had the IMF known the real amount of the central bank's reserves, it is possible that Russia would not have obtained the disbursements of IMF funds made at that time.

As part of its surveillance procedures, the IMF held the Article IV consultation with Finland in May-June. The concluding remarks issued by the IMF mission on com-

[1] The G20 consists of countries that are important for the stability of the international financial system, such as the G7 countries and some emerging market economies, as well as key international organization and the EU. The ECB also takes part in the work of this group.

pletion of the consultation were published for the first time. The actual staff report drawn up by the mission was posted on the IMF's Internet website after the Fund's Executive Board had completed its discussions on Finland in October. Also published in connection with the consultation were a public information notice summarizing the discussions by the Executive Board, a statement by the Fund's Alternate Executive Director representing the Nordic and Baltic countries on the Fund's Executive Board, a statement by the IMF Staff Representatives on Finland and background information on fiscal policy.

The staff report concentrated on fiscal and structural policies. It noted that, although Finland had conducted appropriate economic policies, there were structural problems in public finances and the labour market, due, in part, to an ageing population. Particular attention was drawn to the upward pressure on public expenditure caused by population ageing. Monetary policy was discussed only in terms of demands imposed on fiscal and structural policies by the single monetary policy in the euro area. The IMF examined the single monetary policy in its special spring and autumn reports on the euro area.

In the wake of the Asian crisis, criticism of the IMF's modes of operation and programmes intensified. Partly for this reason, the IMF seeks to develop an operational framework for strengthening the architecture of the international financial system with a view to preventing financial crises. One of the new tools for crisis prevention is the CCL (Contingent Credit Line) lending window, which was approved by the IMF Interim Committee at its spring meeting. This facility is designed to provide short-term financing for strengthening balance of payment positions in countries that are otherwise in sound economic condition but find themselves threatened by contagion from turbulence occurring in the international financial markets. No country applied for CCL financing in 1999.

The pattern of developments typical of recent crises whereby the private sector withdraws from countries in crisis, leaving the resultant financing gap to be filled with public funds, has met with strong criticism. Hence, in drafting plans for financing to Romania, Ukraine, Pakistan and Ecuador, particular attention was paid to private sector participation. The arrangements made were, however, very closely tied to the special conditions prevailing in individual countries. Reaching agreement on uniform practices for private sector involvement is difficult. Indeed, the private sector's responsibility for the prevention and resolution of financial crises is likely to remain on the IMF's agenda in the future.

The IMF continues to develop its standard for data dissemination (Special Data Dissemination Standard –SDDS), which was established in 1996 and to which Finland is a subscriber. The purpose of this initiative is to strengthen the architecture of the international financial system by creating uniform statistical standards to facilitate access to information and cross-country comparison of information. In early 2000 at the latest all countries that subscribe to the SDDS will provide national statistics on key economic data so that it will be possible to access this data via the Fund's Internet website.

The SDDS and the general endeavour to increase transparency in respect of the economic position of member countries and IMF operations are closely related to efforts to strengthen the architecture of the international financial system. Transparency has been promoted by, inter alia, publication of an increasingly wider range of IMF documents. An 18-month pilot project for publication of annual consultation staff reports was launched in April. Finland is participating in this project, as described above.

The main achievement of the IMF's Annual Meeting held in autumn 1999 was to finally reach agreement on the Fund's financial contribution to the HIPC Initiative. The IMF's contribution to this debt reduction initiative is SDR 3.9 billion, broken down into the Fund's own contribution (SDR 2.4 billion) and member countries' contributions provided on a bilateral basis (SDR 1.5 billion).

Besides the dispute over sharing the financing burden, resolution of the HIPC financing issue was also delayed by the fact that, in line with an agreement made at the G7 summit in the summer, the IMF Executive Board, as late as August 1999, approved changes to the criteria applicable to this initiative, which was launched in 1996. As a result, debt relief will be provided faster, in larger amounts and to a larger number of countries than originally agreed and funds freed from debt service will be reallocated to poverty reduction more efficiently than before. The authorities of each member country receiving debt relief will draw up a Poverty Reduction Strategy Paper, with assistance from the IMF and the World Bank. The IMF's financing vehicle for the HIPC Initiative, the Enhanced Structural Adjustment Facility (ESAF), was renamed the Poverty Reduction and Growth Facility (PRGF) to better reflect the new strategy.

The IMF's Interim Committee was renamed the International Monetary and Financial Committee and given permanent status. The committee's mandate remains unchanged, however.

At the beginning of 1999 the ECB was accorded observer status at the IMF. A representative from the ECB may attend all IMF Executive Board meetings that deal with euro area monetary policy, staff reports on economic policies conducted by individual euro area member countries and various issues concerning the world economy.

Cooperation between EU countries in IMF-related matters intensified during the year under review. This took place primarily in Washington between representatives from the EU countries that are on the IMF Executive Board and, where appropriate, in the context of the EU's Economic and Financial Committee. During the Finnish EU presidency, coordination of EU Executive Directors on the IMF Executive Board was managed by the Finnish Alternate Executive Director, Mr Olli-Pekka Lehmussaari.

Finland was represented on the Fund's Board of Governors by Mr Matti Vanhala, Governor of the Bank of Finland. Mr Esko Ollila, Deputy Governor of the Bank of Finland, served as his deputy.

The Danish central bank's responsibility for coordinating the preparation of constituency positions for the Nordic and Baltic countries came to an end at the close of 1999.

Mr Kai Aaen Hansen from Denmark represented the Nordic and Baltic countries on the Fund's Executive Board until the end of 1999.

The Nordic Financial Commission (NFU) convened once in 1999 to prepare for the spring meeting of the IMF's Interim Committee. The Nordic-Baltic Constituency Committee also met only once. The meeting was mainly concerned with preparing common constituency positions for the IMF autumn meetings.

Central bank governors and ministers of finance decided in autumn 1999 to establish a new forum for cooperation, the Nordic-Baltic Monetary and Financial Committee. Its purpose is to enhance cooperation within the constituency in the area of international monetary and financial issues. The new committee convened for the first time in November. The committee and its alternate meetings replace the Constituency Committee. Finland is represented on the Nordic-Baltic Monetary and Financial Committee by Mr Esko Ollila, Deputy Governor of the Bank of Finland, and Mr Johnny Åkerholm, Permanent Under-Secretary of State, from the Ministry of Finance.

Other international activities

The Bank for International Settlements (BIS) acts as a joint bank and cooperative body for central banks. Governors and experts from central banks convene monthly in Basle to discuss issues pertaining to monetary and economic policy and the international financial system. Financial market developments and other questions of current concern to central banks also feature on the agenda for the monthly meetings. In 1999 the ECB became a shareholder of the BIS, as a result of which the Bank of Finland has indirectly increased its involvement in the activities of the BIS.

In December 1998 the BIS granted a credit facility of up to USD 14.5 billion to Brazil on behalf of the industrial countries within the framework of a USD 41 billion international financial support programme. The IMF and the World Bank also participated in the programme. Finland's share in this arrangement amounted to USD 50 million. The Finnish government issued an absolute guarantee to the Bank of Finland, thus enabling the Bank to make a commitment in respect of a collateral arrangement providing security for the BIS's claim on the Brazilian central bank.

Within the Organization for Economic Cooperation and Development (OECD), representatives of the Bank of Finland participated in the work of a number of committees. The OECD's Economic Policy

Committee deals with general macroeconomic and structural policy issues. The Economic Development and Review Committee is responsible for monitoring and assessment of individual member countries and their economic policies. Representatives of the Bank of Finland participated in both committees. In March OECD experts paid their regular visit to Finland to conduct a country review. The review was considered at a meeting in June, and the country report was published in July.

The Bank of Finland was also represented on the OECD's Financial Markets Committee, which monitors financial market developments and trends, and on the Committee on Capital Movements, which is responsible for supervising member countries' compliance with OECD codes for liberalization of capital movements and services.

Economic analysis and research

The primary objective of macroeconomic analysis at the Bank is to support the Bank's active participation in the decision-making and work of the ECB's Governing Council, committees and working groups. Another objective is to examine and assess the impact of the single monetary policy on the Finnish economy and domestic economic policy from the point of view of price stability and balanced economic development.

In recent years there has been a marked shift in the focus of macroeconomic analysis at the Bank so as to ensure consistency with the changed circumstances brought about by the transition from autonomous monetary policy to the euro area's single monetary policy. In addition to analysis of economic developments and economic policy in Finland, euro area issues have been identified as a key area for economic monitoring and research.

The Bank's macroeconomic forecasts are normally produced twice a year in connection with the Eurosystem's forecast. The Bank is responsible for the part of the Eurosystem's forecast concerning Finland. The joint forecast of the Eurosystem is drawn up under the leadership of the Monetary Policy Committee, which is composed of representatives from national central banks and the ECB. Practical responsibility for producing the forecast lies with the Working Group on Forecasting (WGF) and the Working Group on Public Finance (WGPF), which report to the Monetary Policy Committee. The Bank is represented on both these working groups.

In 1999 the Bank started regular publication of its macroeconomic forecast for Finland. The forecast is published in connection with the economic review articles in *Euro & talous* and the *Bank of Finland Bulletin*. The Eurosystem's forecast for the euro area as a whole has not been published so far.

The Bank has a long track record in econometric macro-modelling. Macroeconometric models are used for forecasting and scenario analysis. In the development and application of models, the focus is shifting from models describing the Finnish economy alone towards models covering the euro area and the world economy. The Bank participates in developing the joint models of the ECB and the Eurosystem and bears a particular responsibility for modelling the Finnish economy. The development of forecasting models within the ESCB is coordinated by the Working Group on Econometric Modelling (WGEM), which functions under the Monetary Policy Committee. The Bank is represented on this working group.

Although its ongoing economic monitoring naturally focuses on the euro area and Finland, the Bank also keeps abreast of developments in non-euro area countries, notably the other Nordic countries, the United Kingdom, the United States and Japan. Emerging market economies are another key area of interest. The Bank prepares its own assessment of recent economic developments once a month, prior to the first monthly meeting of the ECB Governing Council.

With the introduction of the single monetary policy, domestic economic policy has assumed increased importance in securing balanced economic development. Accordingly, domestic economic policy, especially fiscal policy and labour market issues, are carefully analysed at the Bank. In addition to domestic economic policy, the Bank makes a detailed assessment of the stance and principles of the single monetary policy. In the ESCB, public sector issues are analysed by the Working Group on Public Finance, which functions under the Monetary Policy Committee.

Strengthening economic research has been one of the Bank's key objectives in recent years. This is based on the judgement that research that is properly oriented, of high quality and internationally recognized is a prerequisite for the Bank's effective and constructive participation in the activities of the ESCB. By conducting research, the Bank also seeks to anticipate changes in the sphere of central banking brought about by rapid structural change in the financial markets. The Bank's research is integrated with post-graduate research by staff members so that some of the Bank's research projects are at the same time academic studies, such as doctoral theses, leading to higher degrees.

Economic research conducted by the Research Department focuses on two main areas: the modelling of monetary policy (research programme 1); and the future of the financial services sector (research programme 2).

Research programme 1 is concerned with developing techniques for analysis of the effects of monetary policy. One of the main aims of the programme is to upgrade macroeconomic models used in policy preparation and forecasting so that they can be used to analyse credibility, expectations and structural change. Projects in this research area have included studies of the relevance of monetary policy uncertainty for inflation, policy selection and statistical estimation of models describing economic behaviour.

Research programme 2 is concerned with forecasting structural changes in the operating environment of central banks and the effects of these changes on the tasks of central banks and other authorities. The aim is to shed light on eg the effects of electronification and the international integration of the financial services sector. Studies carried out in the course of the year as part of the projects under this programme dealt with, inter alia, economies of scale in stock exchange activities and the effects of technological advances on them as well as the role of central banks in safeguarding the liquidity of other banks.

Research findings are published in the form of mimeographed discussion papers and printed publications in the Bank's research series. Electronic dissemination of research reports via the Internet has also been developed lately. Abstracts of all research reports and many full reports are posted on the Bank's Internet website.

An external quality evaluation of the Bank's research activity was carried out in 1999 on the basis of a commission from the Board. The purpose of the evaluation was to provide an objective basis for further development of the Bank's research work. The evaluation report was published in early October on, inter alia, the Bank's Internet website. The external evaluation panel, comprising two foreign and one Finnish expert, noted in their report that there is 'a most successful research culture' at the Bank, which the panel believed helped to increase professional competence. The panel also made a number of recommendations concerning the scientific quality of the Bank's research, in-house research training, dissemination of research findings, research content, internal organization of research, recruitment of economists and external contacts.

The evaluation panel emphasized the central role of research on economies in transition now that the Bank is part of the European System of Central Banks. Research in this area falls within the competence of the Institute for Economies in Transition, which has four complementary functions: research; monitoring; information management; and cooperation with the authorities.

Research done by the Institute for Economies in Transition focuses mainly on monetary and fiscal issues. In 1999 the Institute started to publish its research findings in its own Discussion Papers series, the printed version of which has a circulation of about 1,300. Efforts are also being made to publish the Institute's research work in external journals or other publication series. The Institute's electronic BOFIT Online publication series on its Internet website may be accessed for reading seminar lectures, other articles, etc.

In the course of the year, cooperation was intensified with the research community both at home and abroad. Cooperation agreements of various kinds were signed with research institutes in Russia, the Baltic States and eastern central Europe. The Institute contributed to the World Bank's Transition Newsletter, which is also an important publicity channel.

In 1999 a new publication called *Baltic Economies –The Quarter in Review* was added to the Institute's existing range of economic and financial reviews, *Russian & Baltic Economies - The Week in Review* and *Russian Economy –The Month in Review* . All these publications have been well received, and their circulations increased in 1999. The Institute's publications are also available in electronic form, which is becoming an increasingly important channel for their dissemination.

The geographic focus of research and monitoring by the Institute is still on Russia and the Baltic States, although the significance of China has increased.

The Institute's information service, which, at least in the Nordic countries, is without parallel in this field, was developed further, especially in respect of electronic information acquisition and management. The successful establishment of the ESCB and the Finnish EU presidency were factors that increased interest in the Institute's activities.

Statistics

The Bank of Finland's statistical duties consist of the compilation of money, banking and balance of payments statistics. This involves extensive cooperation in Finland, within the ESCB and internationally. In connection with the reorganization of the Bank at the beginning of June 1999, all the Bank's statistics production functions were combined into a newly created Statistics Department.

The money, banking and balance of payments statistics required by the ECB are produced in accordance with the ECB's statistical reporting requirements. These statistics are also submitted to the Bank for International Settlements (BIS) and the International Monetary Fund (IMF). In addition, the Statistics Department provides the BIS, the ECB and the IMF with general economic statistics on the real economy, and receives large quantities of summary statistical data on the euro area from the ECB.

Within the ESCB, matters concerning euro area-wide statistics are prepared by the Statistics Committee and the working groups that operate under it in the following areas: Money and Banking Statistics; Balance of Payments and External Reserves Statistics; Monetary Union Financial Accounts; General Economic Statistics. The procedures for submitting statistical data to the ECB were established in the course of 1999. In this context, special attention was paid to the observance of deadlines and the authenticity and consistency of statistics.

The tools used by the ECB to harmonize statistics across the euro area are descriptions of procedures applied in the compilation of statistics and oversight and checks of compliance with instructions. The ECB's *Balance of payments book*, which describes the methods applied in the compilation of balance of payments statistics, was published at the end of 1999. A survey on the methods used by national central banks and the ECB to ensure the confidentiality of individual items of data required in the compilation of statistics was conducted in 1999 on the basis of instructions issued by the ECB. At the end of the year, the first statistics-related internal audit required by the ECB was carried out; the audit focused on the systems used for transmitting statistical data between the ECB and the national central banks. An ECB Regulation stipulating that the ECB has the power to impose sanctions in cases where the reporting institutions do not fulfil stated reporting requirements entered into force in November 1999.

The Bank also participates in statistical cooperation at European level within Eurostat, the Statistical Office of the European Communities, as a member of the advisory Committee on Monetary, Finance and Balance of Payments Statistics (CMFB) and its Working Group on Balance of Payments Statistics. The CMFB functions as an organ for cooperation between the euro area countries, the other EU member states, Norway, Iceland and Switzerland and the EU candidate countries. In 1999 the CMFB highlighted the importance of expanding the production of statistics on the euro area and the EU. This requires that member states be able to quickly produce uniform statistics on the same subjects. The further development of balance of payments statistics has also been accorded an important role in the work of the CMFB. Among other things, the CMFB has sought solutions to problems in the collection of balance of payments data on transactions between the euro area countries that arise as a result of the introduction of the single currency.

Statistical cooperation with the other Nordic countries and Estonia continued. Nordic cooperation covers money, banking and balance of payments statistics. Its importance in the development of statistical compilation methods has grown, despite the fact that each Nordic country has a different approach to integration, owing to which there are slight differences in the methods they use in compiling statistics.

The International Monetary Fund has actively developed a consistent publication system for key economic statistics that are published with a short time lag (Special Data Dissemination Standard): this system includes extensive descriptions of the contents of the statistics and the methods of compiling them and incorporates national Internet websites showing key economic figures. The Bank of Finland is the national coordinator for this IMF project in Finland and cooperates in this capacity with several Finnish authorities that produce statistics. The Bank also cooperates extensively with Statistics Finland in the compilation of other statistics. The cooperation aims at deriving mutual benefit from existing statistical data and at avoiding duplication in statistical work.

On the basis of national data supplied to it by the national central banks, the ECB compiles a monthly consolidated balance sheet of the Monetary Financial Institutions (MFI) sector, based on a common definition of an MFI and the application of harmonized classifications and concepts across all euro area countries. In Finland, deposit banks, branches of foreign banks in Finland engaged in deposit bank activities and money market funds are classified as MFIs. National monthly statistics on MFIs are sent to the ECB 15 business days after the end of each month.

On the basis of the monthly balance sheet of the euro area MFI sector, the ECB calculates and publishes the monetary aggregates for the euro area, to which the Council of the ECB has given a prominent role in its stability-oriented monetary policy strategy. The national central banks calculate the minimum reserve requirements of MFIs on the basis of the monthly balance sheet. The central role of the monthly balance sheet of the MFI sector in the monetary policy of the Eurosystem underlines the importance of high-quality statistics. Special attention was therefore paid to the quality of statistics during 1999, and all euro area central banks introduced a system for monitoring the authenticity and timeliness of balance sheet statistics on MFIs.

National central banks compile, on a quarterly basis, detailed statistical data on the sectoral, currency and geographical breakdowns of MFIs' balance sheets and on the purposes for which loans have been granted. This information is used in in-depth monetary policy analysis and in the financial accounts that describe financial intermediation. The compilation of these quarterly statistics was initiated in spring 1999. During the year the national central banks submitted to the ECB detailed historical quarterly data dating back to the fourth quarter of 1997.

Interim systems for compiling statistics on euro area securities markets and retail bank interest rates were introduced in 1999. The harmonization of euro area statistics in these areas is under way. In autumn 1999 the Bank started to compile monthly securities markets statistics for the ECB. In the initial phase, the securities markets statistics cover mainly bonds and notes. In 1999 the Bank also conducted an extensive survey on the availability of statistical data required for the compilation of quarterly financial accounts.

From the beginning of 1999 the Bank started to compile balance of payments statistics according to ECB requirements, ie broken down into data on the euro area and the rest of the world. Apart from the new regional breakdown, the introduction of the single currency did not require any changes in data collection for Finnish balance of payments data. The production and publication of monthly and quarterly statistics continued almost without change. The Bank of Finland compiles and publishes monthly statistics on Finland's international investment position. Most of the other national central banks compile these statistics only once a year.

In some euro area countries, the introduction of the euro revealed notable difficulties in the collection of basic data required for balance of payments statistics in cases where data collection was based on cross-border payments transacted by banks. The Bank did not experience such problems, since it uses surveys to collect data from financial institutions and other undertakings.

However, owing to the considerable increase in the item 'Errors and omissions' in the balance of payments in 1998, matters concerning data collection and quality of balance of payments statistics were discussed in depth at the Bank. As a result of these discussions, the Bank initiated studies to improve the selection of recipients of balance of payments surveys, and further developed the quality control of statistics. A seminar focusing on quality control of statistics was arranged jointly with Sveriges Riksbank.

Within the European System of Central Banks, the ECB combines the statistics of the separate member states into aggregate statistics covering the entire euro area. The ECB publishes some of these statistics in separate English-language statistical bulletins, in addition to which they are published in their entirety as a statistical annex to the ECB's Monthly Bulletin. The ECB's Monthly Bulletin, which is published simultaneously in all the official EU languages, is translated into Finnish by the Bank. The euro area statistics compiled by the ECB are also available on the ECB's Internet Website.

The national central banks participating in the ESCB continue to publish their own national statistics. The Bank of Finland publishes statistics partly in the form of separate statistical bulletins and partly in the form of an extensive statistical review, *Financial Markets*. The bulletins and the review are available both as printed publications and online on the Bank of Finland's Internet Website. In 1999 the Bank of Finland started to publish separate versions of these statistics in markka and euro amounts.

Information and publications

The start of Stage Three of EMU at the beginning of 1999 also meant that the Bank's communication policy had to be adjusted to the new operating environment. Informing the Finnish public about the ECB's monetary policy and other activities and participating in the ECB's growing communication activities were key elements of the Bank's communication in 1999.

Mr Matti Vanhala, Governor of the Bank of Finland, continued the practice adopted in 1998 of briefing representatives of Finnish media on the meetings of the ECB Governing Council after the press conference given by the ECB President. Since spring 1999 there has been a direct video connection to Helsinki from Mr Vanhala's press conferences, thus enabling journalists in Finland to receive the news immediately and present questions to Mr Vanhala.

The Bank participated actively in the work of the ECB's External Communications Committee, which deals with the ECB's information and publishing activities. In addition to the ECB's communication policy, the Committee discussed ESCB-wide cooperation in the communication field.

The ECB's active information and publication policy was reflected in an increase in press releases and other publications translated by the Bank and in a heavier workload. The most demanding publications in this respect were the ECB's annual report and the Monthly Bulletin, both of which were translated into Finnish at the Bank. It was agreed that, starting from the beginning of the year, the Monthly Bulletin would be published simultaneously in all 11 official EU languages. In addition, a large number of ECB press releases and other material produced by the ECB were translated into Finnish and Swedish at the Bank.

The Internet became increasingly important as a channel for distributing press releases and publications. The Bank's web pages were revised to reflect the Bank's new status as part of the ESCB. Most of the Bank's publications are now available on the Bank's website (www.bof.fi). The website is in Finnish, Swedish and English.

A new brochure describing the Bank's role and tasks was published in six languages.

The Bank received numerous requests for information concerning economic and monetary union. The euro information phone service provided by the Bank and e-mail were important communication channels. The Bank's staff, and

Table.
Print runs for Bank of Finland publications in 1999*

Annual report	
– in Finnish	3,300
– in Swedish	800
– in English	2,000
Euro & talous	7,500
Bank of Finland Bulletin	5,800
Series A	1,600–10,000
Series E	1,500–1,900
Discussion Papers	800-1500
Financial Markets statistical review	
– markka-amount version	500
– euro-amount version	1,000
Finnish Bond Issues	400
Institute for Economies in Transition	
– BOFIT Discussion Papers	1,300
– Russian & Baltic Economies – The Week in Review	
– in Finnish	900
– in English	1,350
– Russian Economy – The Month in Review	1,000
– Baltic Economies – The Quarter in Review	600

* It is endeavoured to set print runs to match demand (subscriptions and orders for single copies) as closely as possible.

particularly the specially trained members of the EMU communications group, held numerous presentations on EMU-related issues for various groups ranging from students to pensioners, both at the Bank and external locations.

The Bank's internal communication was also revamped in 1999. In particular, the principles governing the use of electronic communication were clarified. All communication concerning the entire organization was concentrated on the Intranet, which became the main internal communication channel.

The onset of Stage Three also brought with it changes to the Bank's own publications. At the beginning of the year the name of the Finnish-language quarterly *Markka & talous* was changed to *Euro & talous*, and the English-language *Bank of Finland Bulletin* began to be published on a quarterly rather than a monthly basis. The contents and layout of the latter were also changed. Both publications are now printed in four colours. The Bank's annual report was revised after completion of the first year of economic and monetary union.

Both *Euro & talous* and the *Bank of Finland Bulletin* appeared four times. The annual report was published in Finnish, Swedish and English. The statistical review *Financial Markets* was published on a monthly basis, in both markka-amount and euro-amount versions. Its contents were expanded to include statistics previously published in the statistical annex to the *Bank of Finland Bulletin*. Key statistics on the euro area were also added. Balance of payments statistics were published regularly in the statistical bulletin *Finland's Balance of Payments*. No studies were published in the Bank's A series while three studies, one of which was a doctoral thesis, appeared in the E series. Twenty-three papers were published in the *Discussion Papers* series, which comprises research and analytical studies conducted in various departments of the Bank. The Institute for Economies in Transition produced a wide range of publications, most of which were published in both printed and online versions.[1]

In addition to its regular publications, the Bank published various brochures and guidelines for internal and external use.

[1] A list of Bank of Finland publications in 1999 is included in the Appendices. A list of publications by the Institute for Economies in Transition is available on the Bank's website (www.bof.fi).

Organization and personnel

The Board decided to reorganize the Bank in spring 1999 on the basis of a proposal submitted by a working group that was set up to examine the need for change in the context of the European System of Central Banks (ESCB). The new organizational structure is better suited to the new conditions created by the transition to economic and monetary union. As a result of the changes, the Bank's functional units are now larger and more clear-cut than before. The most important change was the merger of the Monetary Policy and Economics Departments into a single Economics Department. At the same time, the Board revised its own division of responsibilities.

The scenarios describing alternative future developments in the Bank's operating environment were revised during spring 1999. The aim of this revision was to analyse developments in the Bank's operating environment over a time horizon of some five to ten years. These scenarios are not forecasts but rather a means of outlining possible future courses of development in the Bank's operating environment. Seminars were held at which scenario work was linked to the Bank's strategic planning. The staff were actively informed about the scenarios.

The strategic policies serving as a guideline for the Bank's operations over the next few years were revised after several stages of discussions within the Bank. The Bank aims to be an effective member of the ESCB and an active influence in Finland. Being influential means that the Bank is an active, competent and sought-after expert at European level and takes an active part in developing the ESCB. In Finland, the Bank promotes economic policy that is compatible with the successful performance of the Finnish economy and the single monetary policy and actively seeks to ensure that Finland's financial and payment systems are efficient and secure.

Personnel

Personnel strategy in 1999 focused on renewal and development of the Bank's staff structure, expertise, management, organizational structure and modes of operating.

The total number of staff will decrease in the coming years through a process of natural wastage, as a significant number of staff will retire. At the same time, the Bank seeks to increase the share of experts in its staff through new recruitments. The main em-

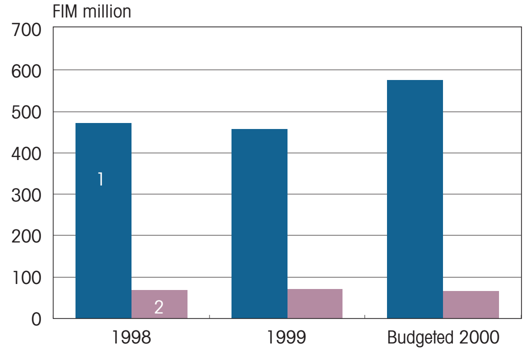
Table.
The Bank of Finland's operating expenses and income, FIM million[1)]

	Budgeted 2000	Outturn 1999	Outturn 1998
Expenses			
Salaries and fees	169.1	168.9	166.6
Social security	23.1	24.1	24.3
Pensions	74.7	69.0	66.2
Training	9.7	7.1	7.1
Travel	10.0	8.1	8.6
IT services	23.3	24.1	21.0
Other purchased services	27.5	20.6	19.2
Banknote printing	100.0	6.7	39.8
Real estate expenses	32.7	30.8	29.7
Other	28.3	26.4	23.8
Total	498.4	385.8	406.3
Depreciation			
IT equipment	11.9	11.6	13.0
Money handling machines	3.0	0.3	5.5
Buildings	54.2	51.0	36.0
Other fixed assets	8.0	7.6	10.9
Total	77.1	70.5	65.4
Total expenses	575.5	456.3	471.7
Income			
Maintenance of the currency supply	14.6	15.2	14.1
Services sold to the Financial Supervision Authority	9.1	8.6	8.5
Real estate	31.8	33.0	29.8
Other	11.4	12.8	15.1
Total income	66.9	69.6	67.5
NET	508.6	386.7	404.2

[1)] Excludes the Financial Supervision Authority.

Source: Bank of Finland

Chart 45.
The Bank of Finland's operating expenses and income



1. Expenses
2. Income

Source: Bank of Finland.

Table.
Number of Bank of Finland staff, 1990–1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Head office	755	731	735	685	675	679	655	670	679,5	681
Branches	187	178	159	140	106	117	111	106	103	104,5
Total	942	909	894	825	781	796	766	776	782,5	785,5

Source: Bank of Finland

phasis will be on the core central bank functions while there will be an increase in purchases of support services. This will support the objective of maintaining a flat organizational structure.

The Bank's objectives of playing an active and influential role in the single monetary policy and contributing to the public debate on Finnish economic policy pose new challenges for the competence of the Bank's managers and experts. Competence in the basic central bank functions should be very high by European standards while competence in other areas should be competitive by Finnish standards.

As at the end of 1999 the Bank employed a total of 785.5 staff (including staff on leave of absence): 681 at the head office and 104.5 at the branches. Expressed in terms of man-years, the combined work contribution of permanent employees and employees on fixed-term contracts totalled 744.6 man-years in 1999.

A total of 41 staff were on leave of absence, 20 of whom were employed by the ECB. In addition, there was considerable demand for the Bank's experts in other banks and Finnish companies.

Of the total staff, 91% had permanent positions and 9% were on fixed-term contracts. A total of 20 staff changed jobs within the Bank.

The considerable number of staff retirements in the coming years and the changes in the Bank's operating environment have highlighted the importance of human resource planning. In order to prepare for the changes, proactive human resource planning was introduced to help ensure continuity of operations, manageability of change and availability of expertise. The impact of natural wastage is anticipated by planning the quantity and quality of resources and the refocusing and appropriate allocation of expertise. The development of resources is analysed over a three-year horizon with the aim of ensuring that the organizational structure, tasks and expertise meet the requirements for operating within the ESCB.

The Bank's pension scheme is managed by an internal pension fund and corresponds to the government pension scheme. Around 80% of the Bank's pension liabilities are covered by reserves. A total of FIM 72 million was paid out in pensions in 1999.

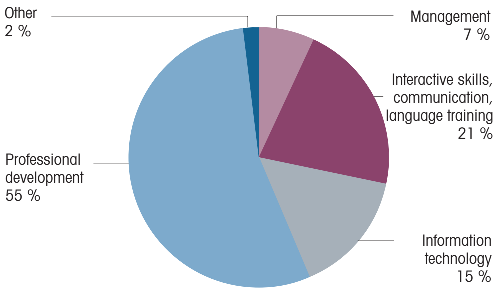
After the Bank became part of the ESCB on 1 January 1999, the smooth operation of international payment and communication systems was secured by introducing staggered working hours in some departments and standby and emergency arrangements. The EU-wide banking hours laid down for the TARGET system caused overtime on most bank holidays in units responsible for the operation and maintenance of TARGET.

The entry into force of the Act on the Openness of Government Activities (621/1999) at the beginning of December served to underscore the obligation of the authorities to promote the openness of their activities. In line with the requirements of the new act, the Bank's modes of operating and information systems were revised to better comply with the principle of openness and good information management practice.

Staff development and training

As before, there was special focus on management of expertise. The Bank's areas of strategic expertise are analysis of economic and mon-

Chart 46.
The Bank of Finland's training expenses



Source: Bank of Finland.

etary policies related to the EU and Finland's neighbouring areas, monitoring and communication of the ECB's monetary policy decisions and assessing their implications, participation in the development of financial markets and management of processes of change within the organization.

The Bank's training expenditure totalled FIM 7.1 million (4.0% of payroll). Training focused on professional development, which amounted to FIM 3.9 million. FIM 1.5 million was spent on interactive skills and language training and FIM 1.1 million on development of basic IT skills.

As in previous years, the Bank continued to support post-graduate studies in the field of economics. Some of the Bank's research projects serve both the research needs of the Bank and the individual academic aspirations of staff members. During the year the preparation of doctoral and licentiate theses at the Bank's Research Department required slightly more than three man-years, spread over six different projects.

Key areas in economic training were economic policy and its coordination in the euro area, risk analysis of financial markets, econometrics and recent developments in macroeconomics. A series of lectures on EMU was organized in cooperation with the University of Helsinki. Some of the lectures were open to the public and held at the university. A total of 18 training sessions on economic and legal issues were organized, representing some 550 trainee days. In addition to in-house training, experts participated actively in external training sessions and seminars, both at home and abroad. The third Young Professionals training programme ended in the spring as planned. Of the seven young economists who took part, four were employed by the Bank on completion of the programme.

The Bank's in-house management training programme focused on team leaders in 1999. Personnel management was the main theme in the six-day training programme attended by 25 staff from various departments.

The need for basic IT training remained great. The changeover to new office systems was completed at the end of the year. Expenses due to IT training provided for staff amounted to FIM 870,000, representing nearly 800 trainee days. In addition, computer-aided self-study programmes were introduced towards the end of the year. More than 100 staff members had passed an examination in basic IT skills (computer driving licence) by the end of the year.

In 1999, as part of the training assistance provided by the Bank to central banks of economies in transition, the Bank arranged 16 visits involving 68 participants. Training assistance was primarily provided to the central banks of Russia, Poland and Latvia. Part of the training was organized in connection with a project under the EU's Tacis Programme that came to an end in the spring. Owing to the internal situation of the Russian central bank, some of the training sessions scheduled for 1999 were postponed to 2000. At the Bank's invitation, economists from the Estonian central bank took part in some training sessions arranged for economists.

Information technology

In 1999 the focus of the Bank's IT activities was on ensuring that the changes to information systems necessitated by the transition to Stage Three of EMU became established in practice and on maintaining basic IT services. As regards the latter, the top priority was achieving Year 2000 compliance of the Bank's systems.

The EMU-related systems implemented at the beginning of 1999 were designed to meet ESCB requirements regarding functions, capacity and support organization. A new system was implemented for the management of collateral located in non-euro area EU member states. Projects connected with currency distribution were initiated in preparation for the introduction of euro banknotes and coins. A new project, TARGET 2000, implementing new message types and additional night-time clearing of payments, was launched with a view to enhancing the TARGET system.

The Bank's Year 2000 project for ensuring Year 2000 compliance of IT systems was completed in 1999. The compliance of ESCB systems was also ensured. Detailed timetables and implementation procedures, together with contingency plans, were drawn up for the millennium change. In the same connection, operational reliability of the whole system was improved in many areas, and contingency plans and back-up arrangements were tested.

A new version of the analysis and time series system used in decision-making was introduced. The Ministry of Finance also acquired access to this system in the autumn under an agreement with the Bank.

The Bank's Intranet was updated. It was decided to purchase a new document management system to improve document management and fulfil the requirements of the new Act on the Openness of Government Activities.

The systems used by the Bank's economists and banking operation systems were reviewed in order to secure their competitiveness and identify future requirements.

The Bank's IT Help Desk was chosen as Finland's Help Desk of the Year.

Financial statements

Balance sheet, EUR million

	31 Dec 1999	31 Dec 1998
Assets		
Gold and gold receivables (1)	**457**	**493**
Claims on non-euro area residents denominated in foreign currency (2)	**8,071**	**7,881**
Receivables from the IMF	930	1,003
Balances with banks and security investments, external loans and other external assets	7,141	6,878
Claims on euro area residents denominated in foreign currency (3)	**672**	**648**
Claims on non-euro area residents denominated in euro (4)	**2,389**	**0**
Balances with banks, security investments and loans	2,389	0
Lending to financial sector counterparties of euro area (5)	**1,516**	**3**
Main refinancing operations	1,283	–
Longer-term refinancing operations	230	–
Other lending	2	3
Intra-Eurosystem claims (6)	**768**	**70**
Share in ECB capital	70	70
Claims equivalent to the transfer of foreign currency reserves	699	–
Other claims (7)	**638**	**612**
Total assets	**14,512**	**9,708**

	31 Dec 1999	31 Dec 1998
Liabilities		
Banknotes in circulation (1)	3,008	2,647
Liabilities to euro area financial sector counterparties denominated in euro (2)	4,884	2,176
Current accounts (covering the minimum reserve system)	4,884	2,176
Certificates of deposit issued by the Bank of Finland (3)	–	832
Liabilities to other euro area residents denominated in euro (4)	1	95
Liabilities to non-euro area residents denominated in euro (5)	195	3
Liabilities to non-euro area residents denominated in foreign currency (6)	239	210
Deposits, balances and other liabilities	239	210
Counterpart of special drawing rights allocated by the IMF (7)	195	170
Intra-Eurosystem liabilities (8)	1,267	–
Other liabilities (9)	11	4
Revaluation account (10)	1,232	453
Provisions (11)	2,509	2,147
Capital and reserves (12)	969	969
Total liabilities	14,512	9,708

Profit and loss account, EUR million

	1 Jan –31 Dec 1999	1 Jan –31 Dec 1998
INTEREST INCOME (1)	485	459
INTEREST EXPENSE (2)	–147	–82
NET INTEREST INCOME (3)	338	377
REALIZED GAINS RELATED TO FOREIGN EXCHANGE RATE MOVEMENTS (4)	198	–265
REALIZED SECURITIES PRICE DIFFERENCES (5)	–131	43
CENTRAL BANKING PROFIT BEFORE MONETARY INCOME AND OTHER INCOME	405	155
NET SHARE OF MONETARY INCOME (6)	0	–
OTHER CENTRAL BANKING INCOME (7)	33	47
CENTRAL BANKING PROFIT	437	202
OTHER EXPENSES		
Staff cost (8)	–50	–49
Administrative expenses (9)	–15	–14
Depreciation of fixed assets (10)	0	–18
Banknote production services (11)	–1	–7
Other expenses (12)	–9	–11
CHANGES IN PROVISIONS (13)	–361	–103
PROFIT FOR THE FINANCIAL YEAR (14)	0	0

Appendices to the financial statements

	31 Dec 1999		31 Dec 1998	
Foreign currency futures contracts, EUR million				
Purchase contracts[1]	–		431.6	
Sales contracts[1]	–		106.3	
Shares and other interests, nominal value, EUR million				
(Bank of Finland's holding in parentheses)				
Scopulus	–		0.3	(100%)
Setec	2.7	(40%)	2.7	(40%)
Rahakontti[2]	0.2	(52%)	5.9	(52%)
HEX, Helsinki Securities and Derivatives Exchange, Clearing House	1.6	(7%)	1.6	(7%)
Bank for International Settlements	11.1	(1.67%)	9.8	(1.67%)
Shares in housing companies	9.1		9.1	
Real estate shares	0.2		0.2	
Other shares and interests	1.1		0.8	
Total	26.0		30.4	
Bank of Finland's liability share in the APK fund, EUR million	0.1		0.1	
Liability arising from pension commitments, EUR million				
The Bank of Finland's pension liability	360.6		346.5	
– of which covered by reserves	294.5		284.2	
Financial services office, EUR million				
– Deposits	17.7		17.2	
– Loans	7.6		7.2	

[1] Middle rate for the currency on the last business day of the year.
[2] Remaining liquidation dividend of EUR 0.2 million as at 31 December 1999.

The Bank of Finland's real estate

Building	Address	Year of completion	Volume m^3 (approx.)
Helsinki	Rauhankatu 16	1883/1961	49,500
	Unioninkatu 33 / Rauhankatu 19	1848/1954	50,500
	Snellmaninkatu 4-6	1857/1892	16,170
	Ramsinniementie 34	1920/1983/1998	4,600
Kuopio	Puutarhakatu 4	1993	11,900
Mikkeli	Päiviönkatu 15	1965	7,500
Oulu	Kajaaninkatu 8	1973	17,700
Tampere	Hämeenkatu 13	1942	36,000
Turku	Linnankatu 20	1914	10,500
Vantaa	Suometsäntie 1	1979	311,500
Inari	Saariselkä	1958/1976/1998	6,100

Helsinki, 10 February 2000

THE BOARD OF THE BANK OF FINLAND

Matti Vanhala, Chairman

Esko Ollila   Matti Louekoski   Matti Korhonen

Notes to the financial statements

Accounting conventions

The Bank of Finland observes the accounting principles and techniques adopted by the Governing Council of the ECB on 1 December 1998, and the Bank's annual accounts for 1999 have been drawn up in accordance with these harmonized principles. The annual accounts for 1998 have been adjusted to conform with the harmonized principles. Valuation gains and losses arising from the market valuation of items have been entered in the revaluation account.

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.

Gold and items denominated in foreign currency

In the annual accounts, foreign currency-denominated items and gold have been converted into euro at market rates and prices. Items denominated in foreign currency have been revalued on a currency-by-currency basis. Securities have been valued on an item-by-item basis.

Revaluation differences related to foreign exchange rate movements and securities price movements are treated separately. In the case of gold, however, no distinction is made between price and exchange rate differences; rather, a single revaluation is made. Gold has been valued at the market price as at 30 December 1999 (US dollar price of gold converted into euro).

Repurchase agreements and reverse repurchase agreements

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

Intra-Eurosystem items

Claims and liabilities in respect of central banks participating in the Eurosystem are shown on a net basis in the Bank's balance sheet.

Fixed assets

As from the beginning of the 1999 financial year, fixed assets have been valued at acquisition price less depreciation. Depreciation is calculated on a straight-line basis over the expected economic lifetime of an asset, starting from the second calendar month following acquisition.

In the annual accounts for 1998, which have been adjusted for the sake of comparability, buildings and land have been capitalized in the balance sheet at market prices, and their counteritem is the revaluation account. Depreciation in respect of buildings and land for the 1999 financial year 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;
– equipment and furniture: 10 years;
– buildings: 25 years.

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

Off-balance-sheet items

Forward foreign exchange transactions are taken into account when the net average cost of a currency position is calculated. 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.

Accounting principles applied to the profit and loss account

Income and expenses are entered on an accruals basis.

Realized income and expenses are entered in the profit and loss account. Exchange rate gains and losses have been calculated using the daily net average rate method. Gains and losses related to securities price movements have been calculated using the average cost method.

Unrealized gains are entered in the revaluation account.

Unrealized losses are entered in the profit and loss account, if they exceed previous revaluation gains registered in the revaluation account in the balance sheet. Unrealized losses taken to the profit and loss account are not reversed against any future unrealized gains in subsequent years. If unrealized losses are entered in the profit and loss account in respect of a security or a currency, the net average price of the security or the net average rate of the currency is adjusted correspondingly before the beginning of the next financial year.

Unrealized losses are not netted against unrealized gains. Unrealized gains and losses in respect of securities and foreign currency-denominated items are entered on an item-by-item basis and a currency-by-currency basis. Unrealized gains and losses in respect of gold are entered separately.

The difference between the acquisition price and nominal value of securities is entered as income or expense over the maturity of the security.

Notes to the balance sheet

Assets

1. Gold and gold receivables

The Bank's holdings of gold total 1,577,475 troy ounces. In the annual accounts, gold has been valued at market price. At the beginning of the financial year the Bank (and the other central banks participating in the Eurosystem) transferred about 20% of its holdings of gold to the ECB.

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

This item includes holdings of special drawing rights allocated by the International Monetary Fund (IMF), Finland's reserve tranche in the IMF, balances with banks, investments in securities and other items denominated in foreign currency. At the beginning of the financial year the Bank transferred to the ECB part of its claims denominated in US dollars and Japanese yen. These claims and the holdings of gold referred to above together form the Bank's share in the funds of the ECB.

3. Claims on euro area residents denominated in foreign currency

This item consists of balances with banks and investments in securities.

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

This item consists mainly of balances with central banks of non-participating EU countries.

5. Lending to financial sector counter-parties of euro area

This item consists of the balances of monetary policy instruments and other claims at year-end.

6. Intra-Eurosystem claims

This item includes the Bank's share in the ECB's capital and its claim on the ECB equivalent to the foreign reserves and gold transferred to the ECB.

7. Other claims

This item consists of coins in circulation issued in the euro area, securities classified as securities held as financial fixed assets, fixed assets (buildings, machinery and equipment) and valuation results of off-balance-sheet instruments, accruals and other assets.

Liabilities

1. Banknotes in circulation

This item consists of markka-denominated notes in circulation held by the public and banking institutions.

2. Liabilities to euro area financial sector counter-parties denominated in euro

Banks with an RTGS account at the Bank of Finland meet their minimum reserve requirement by maintaining the monthly averages of their daily RTGS account balances at least as high as the minimum reserve requirement.

3. Certificates of deposit issued by the Bank of Finland

Bank of Finland certificates of deposit were used in market operations in the 1998 financial year.

4. Liabilities to other euro area residents denominated in euro

This item consists of euro-denominated liabilities to banking institutions other than those subject to the minimum reserve requirement.

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

This item consists mainly of balances with central banks of non-participating EU countries and with international organizations and foreign banks holding loro accounts at the Bank of Finland.

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

This item includes repurchase agreements entered into for the purpose of managing foreign reserve assets.

7. Counterpart of special drawing rights allocated by the IMF

This SDR-denominated balance sheet item is connected with the International Monetary Fund.

8. Intra-Eurosystem liabilities

This item consists of net balances with the central banks participating in the Eurosystem.

9. Other liabilities

This item consists of accruals and other liabilities.

10. Revaluation account

This item includes revaluations of land and buildings and other valuation differences arising from the change in accounting practice. In addition, the item includes unrealized valuation gains arising from the market valuation of foreign currency-denominated items and securities.

11. Provisions

All provisions are included in this item. The Bank of Finland's pension liabilities total EUR 361 million; 82% of this amount, ie EUR 295 million, is covered by the pension provision.

Under section 20 of the above-mentioned Act, 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. The provisions made under this section amounted to EUR 2,211 million.

12. Capital and reserves

This item consists of the Bank's primary capital and reserve fund.

Notes to the profit and loss account

1. Interest income

Most of the interest income consists of interest income on gold and reserve assets and on intra-Eurosystem claims.

2. Interest expense

Interest expense, EUR 43 million, consists of interest paid on minimum reserve deposits. The item also includes interest expense on intra-Eurosystem liabilities and interest paid on balances with central banks of non-participating EU countries.

3. Net interest income

Net interest income amounted to EUR 338 million.

4. Realized gains related to foreign exchange rate movements

Currencies are examined on a currency-by-currency basis on each business day. When a currency position decreases in connection with a sale of the currency concerned, a gain or loss is realized. In 1999, realized gains related to foreign exchange rate movements amounted to EUR 198 million.

5. Realized securities price differences

In the accounts, securities are treated on an item-by-item basis. When securities are sold, a gain or loss is realized. In 1999, the realized losses related to securities price movements amounted to EUR 131 million.

6. Net share of monetary income

This item shows the allocation of monetary income to the Bank as the net sum of monetary income paid to the Eurosystem and monetary income redistributed from the Eurosystem.

7. Other central banking income

This item includes dividend income, commissions and fees and other income.

8. Staff cost

Staff cost amounted to EUR 34 million. Social security costs, EUR 16 million, include EUR 11 million in pensions paid during the financial year.

9. Administrative expenses

This item includes rents, representation costs, expense arising from the purchase of outsourced services, cost of equipment and expenses involved in the training, travel and recruitment of staff.

10. Depreciation of fixed assets

Depreciation on movable property amounted to less than half a million euro.

11. Banknote production services

Purchase of banknotes amounted to EUR 1 million.

12. Other expenses

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

13. Changes in provisions

Employees' employment pension contributions totalling EUR 1.6 million were collected from salaries during 1999 and transferred to the pension provision. In addition, the pension provision was increased by crediting employees' pension contributions and pension provisions made in prior years with interest. Interest was calculated at the rate of 3%. The pension provision was increased by a total of EUR 9 million.

The provision in accordance with section 20 of the Act on the Bank of Finland was increased by EUR 348 million.

14. Profit for the financial year

After adjustments, the result for the financial year was EUR 0 million.

Auditors' 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 1999 in accordance with generally accepted auditing standards.

During the financial year the Bank's Internal Audit unit 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 explanations from the Board concerning the Bank's activities.

The Authorized Public Accounting Firm Arthur Andersen Oy has audited the accounting records and the financial statements in accordance with Article 27 of the Statute of the European System of Central Banks. We have studied the audit report dated 6 March 2000.

The financial statements have been drawn up in accordance with the principles on 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.

Helsinki, 6 March 2000

Johannes Leppänen

Ville Itälä

Reino Majala
Authorized Public Accountant

Iivo Polvi
Chartered Public Finance Auditor,
Approved Auditor

Matti Saarinen

./. Kalervo Virtanen
Authorized Public Accountant

Statement

regarding the audit as defined in Article 27 of the European System of Central Banks Statute

In our capacity as independent auditors as defined in Article 27 of the European System of Central Banks Statute, recommended by the Governing Council of the European Central Bank and appointed by the Council of the European Union, we have audited the accounting recordes and the financial statements of the Bank of Finland for the period 1 January –31 December 1999. The financial statements, which comprise the profit and loss account, balance sheet and notes to the financial statements, have been prepared by the Board.

The financial statements have been audited to the extent necessary to obtain reasonable assurance that the financial statements are free of material misstatement.

In our opinion, 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 1 December 1998. The financial statements present a true and fair view of the profitability and financial position of the Bank of Finland.

Helsinki, 6 March 2000

ARTHUR ANDERSEN OY
Authorized Public Accounting Firm

Teppo Rantanen
Authorized Public Accountant

Appendices

Monetary policy measures of the Eurosystem

1998

December

On 22 December 1998 the Governing Council of the ECB decided that the first main refinancing operation of the Eurosystem would be a fixed rate tender offered at an interest rate of 3.0%. In addition, it was decided that the first longer-term refinancing operation would be conducted through a variable rate tender using the single rate allotment procedure.

The Governing Council furthermore decided to set the interest rate for the marginal lending facility at a level of 4.5% and the interest rate for the deposit facility at a level of 2.0%, with effect from 1 January 1999. As a transitional measure, between 4 and 21 January 1999, the interest rate for the marginal lending facility was set at a level of 3.25% and the interest rate for the deposit facility at a level of 2.75%.

On 31 December 1998 the Council of the European Union, acting with the unanimity of the member states of the European Union without a derogation, adopted the irrevocable conversion rates for the euro, with effect from 1 January 1999.

On 31 December 1998 the ministers of the euro area member states, the ECB and the ministers and central bank governors of Denmark and Greece decided, in a common procedure involving the European Commission, to fix the central rates against the euro for the currencies participating in the exchange rate mechanism which came into operation on 1 January 1999. Further to this decision on the euro central rates, the ECB, Danmarks Nationalbank and the Bank of Greece established by common accord the compulsory intervention rates for the Danish krone and the Greek drachma. A fluctuation band of ± 2.25% would be observed around the euro central rate for the Danish krone. The standard fluctuation band of ± 15% would be observed around the euro central rate for the Greek drachma.

1999

January

On 12 January 1999 the Governing Council of the ECB announced that the first longer-term refinancing operations of the Eurosystem would be conducted by means of three parallel tenders, with EUR 15 billion being allotted in each operation. The same amount would be allotted in each of the longer-term refinancing operations conducted during the first three months of 1999.

On 21 January 1999 the Governing Council of the ECB decided to revert to the interest rates on the Eurosystem's two standing facilities which it had set for the start of Stage Three, ie to set the interest rate for the marginal lending facility at a level of 4.5% and that for the deposit facility at a level of 2.0%, with effect from 22 January 1999.

March

On 4 March 1999 the Governing Council of the ECB decided that for forthcoming longer-term refinancing operations of the Eurosystem the multiple rate method of allotment would be applied, starting with the next longer-term refinancing operation.

April

On 8 April 1999 the Governing Council of the ECB decided to reduce the interest rate on the main refinancing operations by 0.5 percentage point to 2.5%, starting with the next refinancing operation. In addition, the interest rate on the marginal lending facility was lowered by 1.0 percentage point to 3.5% and the interest rate on the deposit facility by 0.5 percentage point to 1.5%, both with effect from 9 April 1999.

On 22 April 1999 the Governing Council of the ECB announced that, for the longer-term refinancing operations to be settled during the next six months, the intention was to continue to allot an amount of EUR 15 billion per operation.

May

On 20 May 1999 the Governing Council of the ECB decided to change the maturity of the longer-term refinancing operation scheduled to be settled on 30 September 1999. The redemption date of this operation was brought forward from 30 December to 23 December 1999. Correspondingly, the longer-term refinancing operation which was originally scheduled to be announced on 27 December 1999 and to be allotted and settled on 30 December 1999 would be announced on 21 December, allotted on 22 December and settled on 23 December 1999.

September

On 23 September 1999 the ECB released to the public the indicative calendar for the Eurosystem's tender operations in 2000. It also announced that no new main refinancing operation would be initiated in the first week of the year 2000, and that no such operation would mature during the week. For this reason the maturity of the main refinancing operation of 21 December 1999 would be lengthened exceptionally to three weeks. To avoid two main refinancing operations maturing on 12 January 2000, the maturity of the operation of 30 December 1999 would also be lengthened to three weeks.

October

On 21 October 1999 the Governing Council of the ECB decided that, for the next three longer-term refinancing operations, the intention was to allot an amount of EUR 25 billion per operation.

November

On 4 November 1999 the Governing Council of the ECB decided to raise the interest rate on the main refinancing operations of the Eurosystem by 0.5 percentage point to 3.0%. In addition, the interest rates on both the marginal lending facility and the deposit facility were increased by 0.5 percentage point to 4.0% and 2.0% respectively, both with effect from 5 November 1999.

December

On 2 December 1999 the Governing Council of the ECB decided to confirm the reference value for monetary growth, namely an annual growth rate of 4½% for the broad monetary aggregate M3. As before, the Governing Council would assess monetary developments in relation to the reference value on the basis of a three-month moving average of annual growth rates for M3. The Governing Council also decided to review the reference value on a regular annual basis.

Key measures affecting the financial markets in 1999

Measures by the European System of Central Banks (ESCB) and the Bank of Finland

January

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) became operational on 4 January, at 8 am Finnish time. TARGET was formed by linking together 15 national real-time gross settlement (RTGS) systems, including the Bank's BoF-RTGS, and the ECB payment mechanism. At the same time, the Rules of the BoF-RTGS were changed, and the correspondent central bank model (CCBM) developed by the ESCB was introduced. The CCBM enables cross-border use of tier one and tier two collateral throughout the EU area.

March

On 31 March 1999 the Governing Council of the European Central Bank (ECB) decided that, in view of the Year 2000 changeover, the TARGET system would be closed on 31 December 1999 to facilitate technical preparations connected with changes to IT systems. The closing of TARGET applied to both the Interlinking mechanism and all domestic euro RTGS systems participating in or connected to TARGET. Finnish banks' payment systems were therefore closed on 31 December 1999. Under an amendment to section 5, paragraph 2, of the Act on Promissory Notes that entered into force on 1 November 1999, the payment of debts and other obligations falling due on 31 December 1999 could be deferred to the following business day, namely 3 January 2000.

May/October

On 20 May 1999 the Governing Council of the ECB approved and published a list of links between securities settlement systems that could be used for the transfer of foreign collateral approved by the Eurosystem. The Governing Council approved additional links on 7 October 1999.

EU directives and their implementation in Finland

August

Directive 97/5/EC of the European Parliament and of the Council on cross-border credit transfers was implemented nationally with the entry into force of the Act on Credit Transfers (821/1999) on 14 August 1999. The provisions of this Act apply to cross-border credit transfers of up to EUR 50,000 and to all domestic credit transfers.

November

On 22 November 1999 the European Commission published a Green Paper entitled *A review of regulatory capital requirements*. This consultation document is based on a report on a new capital adequacy framework published by the Basel Committee on Banking Supervision in June. The consultation process concerning the Green Paper will continue until 31 March 2000. The Commission's aim is that a Directive amending the Directives on the capital adequacy of credit institutions and investment firms will be approved during 2002.

December

The Directive on settlement finality in payment and securities settlement systems was implemented in full in Finland with the entry into force on 11 December 1999 of a new Act on Certain Conditions Applicable to Securities and Foreign Exchange Trading and to Settlement Systems (1084/1999). The new Act extended the scope of the law to include gross settlement systems for securities transactions. The Act replaced the former Act on Certain Conditions Applicable to Securities and Foreign Exchange Trading and to Payment Systems. The provisions of the Act limit the possibility of netting or otherwise settling an obligation of a party to a transaction after insolvency proceedings have been opened against that party.

Key regulatory and other measures

January

On 12 January 1999 Finland's Financial Supervision Authority (FSA) appointed an attorney to supervise the liquidation of Skopbank. The other liquidators had been appointed at an extraordinary general meeting of Skopbank on 30 December 1998.

February

Members of the Forum of European Securities Commissions (FESCO), which brings together national securities regulators in the EEA (including Finland's Financial Supervision Authority, FSA), signed a memorandum of understanding on 1 February 1999. The purpose of the memorandum is to enhance cooperation between the competent authorities in the fields of surveillance and investigation and to increase the exchange of information.

April

The Act on the Insurance Inspectorate entered into force on 1 April 1999, when the Inspectorate officially commenced operations. The Inspectorate is an independent decision-making body, although for administrative purpose it falls under the Ministry of Social Affairs and Health.

On 26 April 1999 FESCO approved European standards for assessing the fitness and propriety of directors and senior managers in investment firms. These standards complement the principles established by the provisions of the Investment Services Directive (93/22/EEC) and the 'BCCI' Directive (95/26/EC).

May

In its press release of 5 May 1999 the FSA called on banks to revise their plans for reducing risks associated with their real estate holdings. Banks were requested to define the required rate of return for all their real estate holdings and to value real estate at market value. The FSA further required banks to publish the net present value of real estate holdings not in the banks' own use, as well as the basis for its calculation.

June

On 3 June 1999 the Basel Committee on Banking Supervision published a report on a new capital adequacy framework, initiating a consultation process that will continue until 31 March 2000. After this process, the Committee will issue its final recommendations on reforming the capital adequacy framework.

July

The Finnish Government issued a proposal for abolishing the tax exemption of transaction accounts (HE 32/1999) through an amendment to the Act on Income Tax. Other proposed changes concerned the right to deduct voluntary pension insurance premiums from income tax. It was proposed that the conditions for the full deductibility of these premiums be tightened. The proposal applies to interest payable on deposits from 1 June 2000.

August

On 9 August 1999 the FSA prohibited the securities firm Stude from continuing to offer investment services. This was the first such prohibition issued in Finland. The FSA proposed to the Ministry of Finance that Stude's authorization be withdrawn.

December

The Act on the Openness of Government Activities (621/1999) entered into force on 1 December 1999. The new act supersedes the previous Act on the Publicity of Official Documents. The new Act also applies to the Bank of Finland.

Main opinions issued by the Bank of Finland 1999

Opinions concerning legislation on and development of the financial markets

- To the Ministry of Finance concerning regular disclosure obligations of issuers of securities and the information to be disclosed in connection with the disclosure and publication of holdings, 26 February
- To the Ministry of Finance concerning the transfer of the business activities of HEX Ltd to the Helsinki Exchanges as part of the restructuring of the HEX Group, 15 March
- To the Ministry of Finance concerning a memorandum of the working group on development of credit institutions legislation, 16 April
- To the Finnish Central Securities Depository (APK) concerning penal charges in respect of settlement lags in the OM system, 7 May
- To the Ministry of Finance concerning the total amount of contributions to be accrued in the Investor Compensation Fund in 1999, 20 May
- To the Ministry of Finance concerning a memorandum of the working group on development of the book-entry system, 31 May
- To the Ministry of Justice concerning a memorandum of the working group on the finality of settlement in payment and securities settlement systems, 8 July
- To the Ministry of Finance concerning proposed amendments to the Act on Trading in Standardized Options and Futures and related legislation, 9 July
- To the Ministry of Finance concerning proposed amendments to the provisions on tax exemption of derivatives and stock exchange trades laid down in the Asset Transfer Tax Act and to the provisions on capital gains and losses on the transfer of standardized futures and options laid down in the Income Tax Act, 30 July
- To the Ministry of Finance concerning amendment of the legislation on mortgage banks, 31 August
- To the Ministry of Social Affairs and Health concerning an interim report on a study of the competi-

tive aspects of occupational pension schemes, 31 August

- To the Ministry of Finance concerning an application by HEX Ltd, Helsinki Securities and Derivatives Exchange, Clearing House for confirmation of its rules on equity trading on the Helsinki Exchanges, 8 September

- To the Finnish Central Securities Depository (APK) on proposed amendments to decisions by the board and managing director of the APK, 16 September

- To the Ministry of Finance concerning confirmation of the rules of the Finnish Central Securities Depository (APK), 21 September

- To the Ministry of Finance concerning confirmation of amendments to the rules of the Investor Compensation Fund, 22 September

- To the Ministry of Justice concerning new legislation on cooperative societies, 30 September.

- To the Ministry of Justice concerning a legal amendment shortening the cash changeover period for the euro, 4 November

- To the Financial Supervision Authority concerning a recommendation for the inclusion of additional information on financial instruments in annual accounts, 5 November

- To the Ministry of Finance concerning an application by Merita Bank Plc to open a branch in Latvia, 17 November

- To the Finnish Consumer Agency concerning a revision in the structure of stock exchange fees, 18 November

- To the Ministry of Finance concerning the Government's proposal for amending the Credit Institutions Act, 19 November

- To the Ministry of Finance concerning confirmation of amendments to the rules of the Investor Compensation Fund, 24 November

- To the Ministry of Education concerning a revision of the maximum interest rate applicable to study loans, 24 November

- To the Ministry for Foreign Affairs concerning an International Convention for the Suppression of the Financing of Terrorism, 1 December

- To the Ministry of Finance concerning revisions to the insider rules applied by the Stock Exchange, 10 December

- To the Finnish Central Securities Depository (APK) concerning proposed amendments to APK rules for the purpose of securing settlement in the OM system, 17 December.

Other opinions

- To the Ministry for Foreign Affairs concerning securities issued by Russia before 1917, 11 February

- To the Ministry for Foreign Affairs concerning the investment protection agreements between Finland and Ecuador and between Finland and Quatar, 8 March

- To the Ministry for Foreign Affairs concerning the investment protection agreements between Finland and Tunisia and between Finland and Croatia, 17 March

- To the Ministry for Foreign Affairs concerning legal barriers to mergers between Nordic companies, 23 March

- To the Ministry of Finance concerning the commemorative coin to be issued in connection with Finland's presidency of the European Union, 17 May

- To the Ministry for Foreign Affairs concerning the investment protection agreements between Finland and Costa Rica, between Finland and Singapore and between Finland and Azerbaijan, 28 May

- To the Ministry of Finance concerning amendment of the Value-Added Tax Act, 1 June

- To the Ministry for Foreign Affairs concerning the negotiations on an investment protection agreement between Finland and China, 29 June

- To the Environment Centre of Uusimaa concerning a proposal for the preservation of buildings by the Kruununhaka Society and the Association of the Residents of Kruununhaka, 5 July

- To the Ministry of Finance concerning the commemorative coins to be issued in the honour of Jean Sibelius and music composition, 14 September

- To the Ministry of Trade and Industry concerning amendment of the Accounting Act and Audit Act, 19 November

- To the Ministry for Foreign Affairs concerning the negotiations on a free trade agreement between the EC and the Cooperation Council for the Arab States of the Gulf, 15 December.

Tables

Discrepancies between constituent figures and totals are due to 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 million

Assets		I	II	III
1	Gold and gold receivables	389	389	389
2	Claims on non-euro area residents denominated in foreign currency	7,293	7,068	7,253
2.1	Receivables from the IMF	945	789	788
2.2	Balances with banks and security investments, external loans and other external assets	6,348	6,278	6,465
3	Claims on euro area residents denominated in foreign currency	320	459	357
4	Claims on non-euro area residents denominated in euro	680	3,848	5,479
4.1	Balances with banks, security investments and loans	680	3,848	5,479
4.2	Claims arising from the credit facility under the ERM II	–	–	–
5	Lending to financial sector counterparties of euro area	1,234	1,644	1,053
5.1	Main refinancing operations	619	1,191	810
5.2	Longer-term refinancing operations	611	452	242
5.3	Fine-tuning reverse operations	–	–	–
5.4	Structural reverse operations	–	–	–
5.5	Marginal lending facility	–	–	–
5.6	Credits related to margin calls	–	–	–
5.7	Other lending	3	1	2
6	Securities of euro area residents denominated in euro	–	–	–
7	General government debt denominated in euro	–	–	–
8	Intra-Eurosystem claims	768	1,873	768
8.1	Share in ECB capital	70	70	70
8.2	Claims equivalent to the transfer of foreign currency reserves	699	699	699
8.3	Claims related to the issuance of ECB debt certificates	–	–	–
8.4	Other claims within the Eurosystem (net)	–	1,104	–
9	Other assets	602	623	639
Total assets		11,286	15,903	15,938

Liabilities		I	II	III
1	Banknotes in circulation	2,492	2,463	2,473
2	Liabilities to euro area financial sector counterparties denominated in euro	1,030	1,962	2,120
2.1	Current accounts (covering the minimum reserve system)	1,030	1,962	2,120
2.2	Deposit facility	–	0	–
2.3	Fixed-term deposits	–	–	–
2.4	Fine-tuning reverse operations	–	–	–
2.5	Deposits related to margin calls	–	–	–
3	Liabilities to other euro area residents denominated in euro	28	53	77
3.1	General government	–	0	–
3.2	Other liabilities	28	53	77
4	Liabilities to non-euro area residents denominated in euro	1,520	7,544	1,497
5	Liabilities to euro area residents denominated in foreign currency	–	–	–
6	Liabilities to non-euro area residents denominated in foreign currency	99	115	193
6.1	Deposits, balances and other liabilities	99	115	193
6.2	Liabilities arising from the credit facility under the ERM II	–	–	–
7	Counterpart of special drawing rights allocated by the IMF	172	172	172
8	Intra-Eurosystem liabilities	2,370	–	5,811
8.1	Liabilities related to promissory notes backing the issuance of ECB debt certificates	–	–	–
8.2	Other liabilities within the Eurosystem (net)	2,370	–	5,811
9	Other liabilities	29	47	49
10	Revaluation account	430	430	430
11	Capital and reserves	3,116	3,116	3,116
Total liabilities		11,286	15,903	15,938

Source: Bank of Finland.

IV	V	VI	VII	VIII	IX	X	XI	XII
411	411	411	397	397	397	449	449	457
7,739	7,573	7,726	7,618	7,572	7,485	7,495	7,546	8,071
942	938	932	902	887	770	812	798	930
6,797	6,636	6,793	6,716	6,685	6,714	6,683	6,748	7,141
307	464	339	485	523	633	622	676	672
6,955	1,699	5,092	0	94	757	4,297	219	2,389
6,955	1,699	5,092	0	94	757	4,297	219	2,389
–	–	–	–	–	–	–	–	–
811	750	1,282	1,368	535	274	1,146	257	1,516
657	714	1,246	1,248	393	132	960	25	1,283
94	34	34	119	140	140	183	230	230
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
59	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
2	2	2	2	2	2	2	2	2
–	–	–	0	–	–	–	–	–
–	–	–	0	–	–	–	–	–
768	2,563	4,483	5,799	1,549	2,795	768	1,544	768
70	70	70	70	70	70	70	70	70
699	699	699	699	699	699	699	699	699
–	–	–	–	–	–	–	–	–
–	1,794	3,715	5,031	780	2,027	–	776	0
664	636	623	662	661	734	742	686	638
17,656	14,096	19,956	16,330	11,331	13,075	15,519	11,377	14,512

IV	V	VI	VII	VIII	IX	X	XI	XII
2,528	2,555	2,676	2,654	2,604	2,595	2,602	2,634	3,008
892	2,039	1,857	1,656	1,736	1,510	2,022	1,419	4,884
892	2,039	1,855	1,656	1,736	1,510	2,022	1,419	4,884
–	–	2	–	–	–	–	–	0
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
14	2	2	2	1	2	1	1	1
–	–	–	–	–	–	–	–	–
14	2	2	2	1	2	1	1	1
8,886	5,043	10,951	7,516	2,506	4,399	3,758	2,642	195
–	–	–	–	–	–	–	–	–
213	185	173	90	60	109	67	96	239
213	185	173	90	60	109	67	96	239
–	–	–	–	–	–	–	–	–
181	181	182	185	185	185	187	187	195
878	–	–	–	–	–	2,530	–	1,267
–	–	–	–	–	–	–	–	–
878	–	–	–	–	–	2,530	–	1,267
125	152	176	193	206	241	235	277	11
823	823	823	917	917	917	1,004	1,004	1,232
3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,479
17,656	14,096	19,956	16,330	11,331	13,075	15,519	11,377	14,512

Table 2.
Main refinancing operations of the Eurosystem

Date of settlement	Bids, EUR million	Allotment, EUR million	Allotment to Finnish credit institutions, EUR million	Allotment ratio, %	Participating credit institutions, number	Rate of interest	Running for (...) days
	1	2	3	4	5	6	7
1999							
7.1	481,626	75,000	183	15.57	944	3.00	13
13.1	563,409	48,000	260	8.52	1,068	3.00	14
20.1	593,418	59,000	40	9.94	966	3.00	14
27.1	689,467	69,000	580	10.01	1,038	3.00	14
3.2	757,724	62,000	142	8.18	998	3.00	14
10.2	911,302	65,000	821	7.13	1,041	3.00	14
17.2	896,138	62,000	356	6.92	914	3.00	14
24.2	991,109	78,000	834	7.87	983	3.00	14
3.3	1,100,797	67,000	580	6.09	965	3.00	14
10.3	950,369	75,000	473	7.89	928	3.00	14
17.3	335,249	44,000	262	13.12	665	3.00	14
24.3	372,647	102,000	547	27.37	554	3.00	14
31.3	118,683	39,000	20	32.86	403	3.00	14
7.4	67,353	67,353	0	100.00	302	3.00	14
14.4	781,721	67,000	631	8.57	841	2.50	14
21.4	612,275	50,000	62	8.17	713	2.50	14
28.4	754,825	78,000	595	10.33	743	2.50	14
5.5	655,789	42,000	49	6.40	648	2.50	14
12.5	708,881	78,000	447	11.00	662	2.50	14
19.5	638,583	43,000	249	6.73	687	2.50	14
26.5	784,380	96,000	465	12.24	687	2.50	14
2.6	698,358	43,000	62	6.16	666	2.50	14
9.6	907,145	86,000	531	9.48	760	2.50	14
16.6	922,203	39,000	398	4.23	786	2.50	14
23.6	1,165,521	86,000	849	7.38	894	2.50	14
30.6	1,222,128	57,000	224	4.66	877	2.50	14

Sources: European Central Bank and Bank of Finland.

Table 3.
Key interest rates of the Eurosystem

Interest rate on the main refinancing operations		
Decision date	Effective	%
22.12.1998	1.1.1999	3.00
8.4.1999	14.4.1999	2.50
4.11.1999	10.11.1999	3.00

Source: European Central Bank.

Standing facilities					
Interest rate on the deposit facility			Interest rate on the marginal lending facility		
Decision date	Effective	%	Decision date	Effective	%
22.12.1998	1.1.1999	2.00	22.12.1998	1.1.1999	4.50
22.12.1998	4.1.1999	2.75	22.12.1998	4.1.1999	3.25
21.1.1999	22.1.1999	2.00	21.1.1999	22.1.1999	4.50
8.4.1999	9.4.1999	1.50	8.4.1999	9.4.1999	3.50
4.11.1999	5.11.1999	2.00	4.11.1999	5.11.1999	4.00

Date of settlement	Bids, EUR million	Allotment, EUR million	Allotment to Finnish credit institutions, EUR million	Allotment ratio, %	Participating credit institutions, number	Rate of interest	Running for (…) days
	1	2	3	4	5	6	7
7.7	1,282,746	95,000	664	7.41	867	2.50	14
14.7	1,247,454	53,000	88	4.25	856	2.50	14
21.7	1,479,409	94,000	752	6.35	915	2.50	14
28.7	1,342,169	73,000	495	5.44	858	2.50	14
4.8	1,412,815	76,000	165	5.38	834	2.50	14
11.8	1,346,203	68,000	131	5.05	816	2.50	14
18.8	1,538,142	73,000	314	4.75	876	2.50	14
25.8	1,431,145	86,000	79	6.01	830	2.50	14
1.9	1,490,635	66,000	249	4.43	808	2.50	14
8.9	1,334,847	82,000	56	6.14	783	2.50	14
15.9	1,051,251	61,000	26	5.80	749	2.50	14
22.9	660,532	92,000	106	13.93	635	2.50	14
29.9	926,416	55,000	10	5.94	694	2.50	14
6.10	1,655,341	90,000	881	5.44	673	2.50	14
13.10	1,289,972	50,000	85	3.88	791	2.50	15
20.10	1,107,860	75,000	296	6.77	833	2.50	14
28.10	1,937,221	74,000	665	3.82	941	2.50	13
3.11	2,344,082	66,000	440	2.82	888	2.50	14
10.12	404,857	74,000	36	18.28	493	3.00	14
17.11	484,348	69,000	0	14.25	486	3.00	14
24.11	687,973	74,000	25	10.76	563	3.00	14
1.12	1,018,950	72,000	156	7.07	663	3.00	14
8.12	1,141,163	92,000	156	8.06	670	3.00	14
15.12	286,824	57,000	42	19.87	527	3.00	15
22.12	1,505,405	92,000	867	6.11	840	3.00	21
30.12	485,825	70,000	416	14.41	774	3.00	20

Table 4.
Longer-term refinancing operations of the Eurosystem

Date of settlement	Bids, EUR million	Allotment, EUR million	Allotment to Finnish credit institutions, EUR million	Number of participants	Marginal rate, %	Weighted average rate	Running for (…) days
	1	2	3	4	5	6	7
1999							
14.1	79,846	15,000	231	466	3.13	3.13	42
14.1	39,343	15,000	210	311	3.10	3.10	70
14.1	46,152	15,000	170	329	3.08	3.08	105
25.2	77,300	15,000	72	417	3.04	3.04	91
25.3	53,659	15,000	0	269	2.96	2.97	98
29.4	66,911	15,000	22	313	2.53	2.54	91
27.5	72,294	15,000	12	319	2.53	2.54	91
1.7	76,284	15,000	107	298	2.63	2.64	91
29.7	64,973	15,000	0	281	2.65	2.66	91
26.8	52,416	15,000	33	256	2.65	2.66	91
30.9	41,443	15,000	0	198	2.66	2.67	84
28.10	74,430	25,000	150	313	3.19	3.42	91
25.11	74,988	25,000	80	321	3.18	3.27	98
23.12	91,088	25,000	0	301	3.26	3.29	98

Source: European Central Bank.

Table 5.
Euro area banking system's liquidity position, averages of daily positions, EUR billion

Maintenance period ending in[1]	Liquidity-providing factors						Liquidity-absorbing factors			Credit institutions' current accounts	Base money
		Monetary policy operations of the Eurosystem									
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Other operations	Marginal lending facility	Deposit facility	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors, net		
	1	2	3	4	5	6	7	8	9	10	11
1999											
January	.	.	.	.	.	.	.	.	.	.	.
February	328.2	104.6	34.2	30.6	3.8	1.3	329.3	41.1	29.5	100.2	430.8
March	323.6	136.4	45.0	0.0	0.4	1.4	326.9	49.8	25.0	102.2	430.5
April	338.4	130.1	45.0	0.0	0.7	0.3	331.0	42.9	39.0	101.1	432.3
May	342.5	121.6	45.0	0.0	0.8	0.4	333.9	36.3	38.0	101.2	435.5
June	339.8	132.0	45.0	0.0	0.4	0.6	337.0	40.4	37.2	101.9	439.6
July	342.4	143.1	45.0	0.0	0.4	0.5	342.1	45.7	39.5	102.9	445.6
August	343.2	150.1	45.0	0.0	0.5	1.0	344.8	47.3	42.1	103.6	449.4
September	343.5	150.4	45.0	0.0	0.2	0.7	342.1	51.4	41.6	103.2	446.0
October	349.7	143.0	45.0	0.0	0.3	0.6	342.5	45.4	45.9	103.5	446.7
November	351.8	140.5	53.7	0.0	0.3	0.4	343.1	51.5	47.3	104.1	447.5
December	351.7	150.4	65.0	0.0	0.3	1.0	354.3	59.0	47.5	105.6	460.6

Source: European Central Bank.

[1] Maintenance periods start on the 24th of the month and run to the 23rd of the following month.

Liquidity position of the Finnish banking system, averages of daily positions, EUR million

Maintenance period ending in[1]	Liquidity-providing factors						Liquidity-absorbing factors			Credit institutions' RTGS-accounts	Base money, 6+7+10
		Monetary policy operations of the Eurosystem									
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Other operations	Marginal lending facility	Deposit facility	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors, net		
	1	2	3	4	5	6	7	8	9	10	11
1999											
January	.	.	.	.	.	.	.	.	.	.	.
February	7,536.6	601.2	491.4	0.0	24.9	21.4	2,494.6	–	4,542.4	1,530.0	4,046.0
March	7,392.5	1,098.4	457.5	0.0	9.9	44.3	2,458.5	–	4,908.1	1,550.4	4,053.1
April	7,760.1	524.8	248.6	0.0	4.0	13.8	2,499.5	–	4,484.7	1,539.5	4,052.8
May	7,763.9	627.4	118.5	0.0	7.4	1.5	2,523.5	–	4,497.3	1,470.1	3,995.1
June	7,848.4	708.7	39.9	0.0	9.0	16.1	2,573.7	–	4,510.0	1,506.3	4,096.1
July	7,900.7	966.0	116.3	0.0	41.6	27.5	2,644.8	–	4,820.0	1,532.3	4,204.6
August	7,961.5	692.1	122.8	0.0	0.0	13.3	2,627.2	–	4,658.6	1,476.4	4,116.9
September	7,932.4	273.0	139.1	0.0	1.2	27.3	2,591.9	–	4,157.5	1,569.0	4,188.2
October	7,849.5	533.1	54.7	0.0	2.3	85.6	2,594.0	–	4,174.5	1,558.8	4,238.4
November	7,888.7	599.8	163.9	0.0	1.3	5.9	2,597.2	–	4,508.6	1,503.8	4,106.9
December	7,957.7	227.8	228.4	0.0	0.0	20.7	2,793.5	–	3,994.3	1,605.5	4,419.8

Source: Bank of Finland.

[1] Maintenance periods start on the 24th of the month and run to the 23rd of the following month.

Table 6.
Reserve base of euro area credit institutions subject to reserve requirements, EUR billion

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Money market paper	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6	7
1998							
December	.	.	.	.	.	.	.
1999							
January	8,607.7	4,838.6	83.1	146.0	1,105.5	510.6	1,923.9
February	8,638.8	4,801.1	86.9	148.9	1,111.6	543.9	1,946.5
March	8,684.9	4,803.1	88.8	151.2	1,125.6	549.8	1,966.4
April	8,741.1	4,827.6	93.3	160.3	1,129.3	542.0	1,988.6
May	8,797.6	4,867.1	101.1	158.7	1,130.8	541.0	1,999.0
June	8,857.3	4,916.6	106.3	152.0	1,145.5	517.6	2,019.3
July	8,848.9	4,895.7	109.2	155.5	1,153.5	513.8	2,021.2
August	8,856.3	4,893.0	113.2	165.4	1,164.9	484.8	2,035.0
September	8,969.1	4,912.7	120.6	170.0	1,166.5	537.2	2,062.1
October	9,083.7	4,967.3	129.0	178.5	1,180.3	554.2	2,074.5
November	9,295.2	5,079.6	135.9	202.9	1,193.3	562.6	2,121.0
December	9,188.1	5,121.7	113.6	169.4	1,204.9	507.0	2,071.6

Source: European Central Bank.

Table 7.
Reserve maintenance of euro area credit institutions subject to reserve requirements, EUR billion

Maintenance period	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
1999					
1.1–23.2	98.3	99.3	1.1	0.1	3.00
24.2–23.3	100.6	101.5	0.9	0.1	3.00
24.3–23.4	100.1	100.7	0.6	0.0	2.84
24.4–23.5	100.2	101.0	0.8	0.0	2.50
24.5–23.6	100.9	101.5	0.6	0.0	2.50
24.6–23.7	102.0	102.7	0.8	0.0	2.50
24.7–23.8	102.8	103.5	0.6	0.0	2.50
24.8–23.9	102.6	103.0	0.5	0.0	2.50
24.9–23.10	102.8	103.3	0.6	0.0	2.50
24.10–23.11	103.4	104.0	0.5	0.0	2.73
24.11–23.12	104.9	105.4	0.5	0.0	3.00
2000					
24.12–23.1	107.7	108.5	0.8	0.0	3.00

Source: European Central Bank.

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

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Money market paper	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6	7
1998							
December	87,323	63,810	389	15,827	2,183	278	4,837
1999							
January	86,008	63,101	474	15,242	2,199	224	4,768
February	86,043	62,855	474	15,320	2,241	288	4,864
March	84,431	62,121	331	13,800	2,965	166	5,049
April	85,717	61,912	272	14,830	3,021	466	5,216
May	87,111	63,564	274	14,472	3,013	550	5,238
June	86,212	64,629	451	12,281	3,277	436	5,138
July	88,913	64,462	445	14,499	3,248	637	5,622
August	89,379	65,972	769	13,577	3,443	630	4,989
September	87,430	64,428	1,365	12,995	3,255	442	4,946
October	90,967	64,912	1,191	15,876	3,568	455	4,965
November	93,610	66,149	1,445	17,029	3,665	335	4,986
December	91,469	68,463	870	13,107	3,769	276	4,984

Source: Bank of Finland.

Reserve maintenance of Finnish credit institutions subject to reserve requirements, EUR million

Maintenance period	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
1999					
1.1–23.2	1,566	1,566	0.0	0.0	3.00
24.2–23.3	1,542	1,546	4.0	0.0	3.00
24.3–23.4	1,539	1,539	0.4	0.0	2.84
24.4–23.5	1,491	1,511	20.7	0.0	2.50
24.5–23.6	1,506	1,507	1.0	0.2	2.50
24.6–23.7	1,532	1,532	0.3	0.0	2.50
24.7–23.8	1,513	1,517	4.3	0.0	2.50
24.8–23.9	1,554	1,569	15.1	0.0	2.50
24.9–23.10	1,563	1,578	14.5	0.0	2.50
24.10–23.11	1,542	1,542	0.4	0.0	2.73
24.11–23.12	1,605	1,606	0.2	0.0	3.00
2000					
24.12–23.1	1,658	1,750	91.4	0.0	3.00

Source: Bank of Finland.

Table 8.
Euro area monetary aggregate M3 and corresponding items of Finnish monetary financial institutions

	Euro area monetary aggregate M3			Deposits of Finnish monetary financial institutions included in M3[1)]		
	Stock, EUR billion	12-month change, %	3-month moving average of 12-month change, %	Stock, EUR billion	12-month change, %	3-month moving average of 12-month change, %
	1	2	3	4	5	6
1995	..	..	..	..	..	..
1996	4,079.8	4.0	..	64.7	..	..
1997	4,254.8	4.3	..	69.3	7.2	..
1998	4,455.1	4.7	..	71.1	2.5	..
1999	4,778.6	6.2	..	75.3	6.0	..
1999						
January	4,499.2	5.8	5.3	71.3	4.0	3.9
February	4,486.4	5.2	5.5	70.5	5.2	4.4
March	4,502.2	5.4	5.3	69.6	4.0	5.5
April	4,540.5	5.2	5.4	71.1	7.5	5.6
May	4,573.2	5.4	5.4	72.4	5.3	5.8
June	4,596.8	5.5	5.6	71.3	4.5	5.3
July	4,606.7	5.8	5.7	72.6	5.9	4.0
August	4,587.8	5.7	5.8	70.8	1.5	3.4
September	4,613.4	5.9	5.8	71.4	2.9	3.6
October	4,635.5	5.6	5.9	73.9	6.4	5.1
November	4,685.2	6.1	6.0	74.8	6.1	6.2
December	4,778.6	6.2	5.7	75.3	6.0	5.4

Sources: European Central Bank and Bank of Finland.

1) Excl. notes and coin.

Table 9.
Harmonized Index of Consumer Prices for the euro area and Finland, annual percentage changes

	Euro area	Finland
	1	2
1996	2.2	1.1
1997	1.6	1.2
1998	1.1	1.4
1999	1.1	1.3
1999		
January	0.8	0.5
February	0.8	0.9
March	1.0	0.9
April	1.1	1.3
May	1.0	1.4
June	0.9	1.2
July	1.1	1.4
August	1.2	1.3
September	1.2	1.4
October	1.3	1.6
November	1.5	1.9
December	1.7	2.2

Sources: Eurostat and Statistics Finland.

Table 10.
Key market interest rates

	Eonia rate	Euribor rates (actual/360)						Yields on Finnish government bonds	
		1-month	2-month	3-month	6-month	9-month	12-month	5-year	10-year
	1	2	3	4	5	6	7	8	9
1999	2.74	2.862	2.913	2.961	3.054	3.114	3.183	4.07	4.74
1999									
January	3.14	3.158	3.146	3.132	3.092	3.071	3.062	3.40	3.91
February	3.12	3.126	3.109	3.095	3.040	3.026	3.030	3.51	4.04
March	2.93	3.055	3.051	3.047	3.025	3.022	3.046	3.63	4.26
April	2.71	2.695	2.696	2.696	2.704	2.748	2.756	3.37	4.07
May	2.55	2.566	2.573	2.579	2.598	2.663	2.683	3.42	4.24
June	2.56	2.605	2.615	2.627	2.680	2.781	2.836	3.78	4.58
July	2.52	2.635	2.655	2.676	2.898	2.946	3.030	4.15	4.92
August	2.44	2.614	2.657	2.695	3.053	3.130	3.237	4.45	5.15
September	2.43	2.584	2.643	2.727	3.107	3.193	3.301	4.60	5.32
October	2.50	2.763	2.933	3.376	3.457	3.550	3.684	4.93	5.56
November	2.94	3.061	3.466	3.468	3.484	3.578	3.689	4.72	5.27
December	3.04	3.509	3.437	3.446	3.512	3.656	3.826	4.79	5.37

Sources: European Central Bank, Reuters and Bloomberg.

Table 11.
Effective exchange rate of the euro and competitiveness indicator for Finland

	Effective exchange rate for the euro[1], 1999 Q1 = 100	Competitiveness indicator for Finland[2),3)], 1982 = 100
	1	2
1995	107.8	111.6
1996	107.9	115.3
1997	99.1	118.4
1998	101.5	119.0
1999	95.7	121.2
1999		
January	102.0	118.0
February	99.9	119.0
March	98.3	119.8
April	97.1	120.5
May	96.6	120.5
June	94.7	121.6
July	94.8	121.8
August	95.4	121.4
September	93.6	122.5
October	94.4	121.8
November	92.0	123.1
December	90.1	124.2

Sources: European Central Bank and Bank of Finland.

1) An upward movement of the index represents an appreciation of the euro.
2) Formerly the Bank of Finland currency index.
3) The index falls when the euro (before 1999 the markka) appreciates.

Table 12.
Irrevocable euro conversion rates as from 1 January 1999

Country	Currency	Units of currency per euro	Markkaa per units of currency
Austria	schilling	13.7603	0.432093
Belgium	franc	40.3399	0.147391
Germany	mark	1.95583	3.04000
Spain	peseta	166.386	0.0357346
Finland	markka	5.94573	
France	franc	6.55957	0.906421
Ireland	pound	0.787564	7.54952
Italy	lira	1936.27	0.00307071
Luxembourg	franc	40.3399	0.147391
Netherlands	guilder	2.20371	2.69805
Portugal	escudo	200.482	0.0296572

Source: European Union.

Table 13a.
Key euro exchange rates

	US dollar			Japanese yen		
	Low	Average	High	Low	Average	High
	1	2	3	4	5	6
1999	1.0015	1.0658	1.1790	102.48	121.32	134.40
1999						
January	1.1384	1.1608	1.1790	126.33	131.35	133.73
February	1.0969	1.1208	1.1342	126.86	130.78	134.40
March	1.0692	1.0883	1.1012	127.81	130.20	133.92
April	1.0581	1.0704	1.0867	125.48	128.16	131.27
May	1.0456	1.0628	1.0799	126.70	129.71	132.40
June	1.0280	1.0378	1.0474	123.97	125.32	126.80
July	1.0124	1.0353	1.0698	121.60	123.71	125.18
August	1.0433	1.0604	1.0791	115.53	120.10	123.39
September	1.0342	1.0501	1.0682	107.94	112.39	117.49
October	1.0453	1.0706	1.0869	109.59	113.52	116.24
November	1.0077	1.0338	1.0572	102.82	108.25	110.36
December	1.0015	1.0110	1.0239	102.48	103.72	105.32

Source: European Central Bank.

Table 13b.
Other euro exchange rates, averages

	Swiss franc	Danish krone	Norwegian krone	Greek drachma	Australian dollar	New Zealand dollar	Canadian dollar	Cyprus pound
	1	2	3	4	5	6	7	8
1999	1.6003	7.4355	8.3104	325.7625	1.6523	2.0145	1.5840	0.57884
1999								
January	1.6055	7.4412	8.6512	323.5600	1.8387	2.1588	1.7646	0.58174
February	1.5979	7.4352	8.6497	321.9815	1.7515	2.0623	1.6786	0.58057
March	1.5954	7.4325	8.5065	322.4957	1.7260	2.0451	1.6510	0.57959
April	1.6015	7.4327	8.3186	325.5277	1.6684	1.9723	1.5944	0.57924
May	1.6025	7.4333	8.2348	325.2086	1.6046	1.9249	1.5527	0.57877
June	1.5951	7.4314	8.1676	324.1555	1.5805	1.9479	1.5244	0.57792
July	1.6040	7.4388	8.1811	324.9500	1.5757	1.9664	1.5403	0.57778
August	1.6004	7.4376	8.2602	326.4095	1.6451	2.0154	1.5833	0.57871
September	1.6015	7.4337	8.2270	327.0014	1.6186	2.0097	1.5518	0.57830
October	1.5943	7.4334	8.2885	329.2019	1.6414	2.0798	1.5808	0.57903
November	1.6051	7.4366	8.1907	328.7186	1.6179	2.0178	1.5160	0.57782
December	1.6012	7.4403	8.0977	329.6759	1.5798	1.9891	1.4906	0.57699

Source: European Central Bank and Bank of Finland.

	Pound sterling			Swedish krona		
	Low	Average	High	Low	Average	High
	7	8	9	10	11	12
1999	0.62150	0.65874	0.71220	8.5500	8.8075	9.4696
1999						
January	0.69100	0.70291	0.71220	8.8650	9.0826	9.4696
February	0.67890	0.68851	0.69750	8.8530	8.9077	9.0025
March	0.66150	0.67127	0.68290	8.8310	8.9403	9.0070
April	0.65690	0.66502	0.67720	8.8705	8.9140	9.0200
May	0.65240	0.65825	0.66340	8.9185	8.9722	9.0280
June	0.64120	0.65025	0.65780	8.6655	8.8284	8.9830
July	0.64910	0.65779	0.67310	8.6905	8.7446	8.8200
August	0.65560	0.66014	0.66700	8.6830	8.7519	8.8110
September	0.63270	0.64683	0.66340	8.5770	8.6337	8.7235
October	0.63920	0.64587	0.65190	8.6350	8.7272	8.8645
November	0.62970	0.63702	0.64160	8.5560	8.6330	8.7215
December	0.62150	0.62651	0.63100	8.5500	8.5865	8.6185

	Czech koruna	Estonian kroon	Hungarian forint	Polish zloty	Slovenian tolar	Icelandic krona	South Korean won	Special drawing rights of the International Monetary Fund
	9	10	11	12	13	14	15	16
1999	36.8862	15.6466	252.7672	4.2274	194.4737	77.177	1,267.24	0.779666
1999								
January	35.7411	15.6466	250.7920	4.1047	189.0726	80.617	1,362.52	0.826357
February	37.8004	15.6466	250.3005	4.2483	190.2392	79.574	1,330.14	0.811726
March	37.9934	15.6466	253.6448	4.2962	190.4445	78.574	1,336.36	0.798653
April	37.9823	15.6466	252.3741	4.2796	192.0508	78.239	1,290.73	0.790208
May	37.6847	15.6466	250.2105	4.1805	193.7697	78.440	1,271.96	0.788462
June	37.0939	15.6466	249.3536	4.0939	195.4837	77.165	1,212.47	0.774410
July	36.5031	15.6466	250.4305	4.0172	196.8874	77.123	1,229.43	0.773255
August	36.4359	15.6466	253.5227	4.1966	196.9873	77.286	1,271.21	0.777291
September	36.3130	15.6466	255.2759	4.2908	196.3492	76.216	1,260.13	0.762617
October	36.6199	15.6466	257.6329	4.4014	196.7690	75.810	1,289.85	0.770679
November	36.3722	15.6466	254.9645	4.3970	196.8145	74.268	1,215.49	0.752185
December	36.0477	15.6466	254.3655	4.2160	198.1957	73.275	1,149.08	0.736446

Table 14a.
Key markka exchange rates

	US dollar			Japanese yen		
	Low	Average	High	Low	Average	High
	1	2	3	4	5	6
1990	3.5320	3.8233	4.0890	0.0247	0.0265	0.0287
1991	3.5390	4.0457	4.5550	0.0268	0.0301	0.0351
1992	3.8400	4.4835	5.2750	0.0310	0.0355	0.0423
1993	5.2940	5.7189	6.0614	0.0426	0.0517	0.0583
1994	4.5345	5.2184	5.7999	0.0467	0.0511	0.0544
1995	4.1839	4.3658	4.8071	0.0411	0.0466	0.0522
1996	4.3311	4.5905	4.8487	0.0396	0.0423	0.0464
1997	4.6290	5.1944	5.6120	0.0396	0.0430	0.0480
1998	4.8383	5.3415	5.6275	0.0368	0.0409	0.0448
1999	5.0430	5.5787	5.9368	0.0442	0.0490	0.0580

Source: Bank of Finland.

Table 14b.
Other markka exchange rates

	Swiss franc	Danish krone	Norwegian krone	Greek drachma	Australian dollar	New Zealand dollar	Canadian dollar	Cyprus pound
	1	2	3	4	5	6	7	8
1990	2.7576	0.6181	0.6110	..	2.9881	..	3.2773	..
1991	2.8208	0.6322	0.6236	..	3.1520	..	3.5335	..
1992	3.2000	0.7444	0.7222	0.0235	3.2891	..	3.7057	..
1993	3.8706	0.8822	0.8059	0.0250	3.8854	..	4.4340	..
1994	3.8179	0.8207	0.7393	0.0215	3.8142	..	3.8235	..
1995	3.6941	0.7790	0.6889	0.0189	3.2379	2.8742	3.1809	..
1996	3.7211	0.7921	0.7111	0.0191	3.5930	3.1659	3.3666	..
1997	3.5785	0.7859	0.7339	0.0190	3.8590	3.4366	3.7528	..
1998	3.6880	0.7977	0.7078	0.0181	3.3629	2.8659	3.6075	..
1999	3.7154	0.7996	0.7155	0.0183	3.5985	2.9515	3.7536	10.2718

Source: Bank of Finland.

	Pound sterling			Swedish krona		
	Low	Average	High	Low	Average	High
	7	8	9	10	11	12
1990	6.4310	6.8083	7.2000	0.6369	0.6459	0.6545
1991	6.8630	7.1308	8.0730	0.6430	0.6684	0.7623
1992	7.5720	7.8748	9.0230	0.7369	0.7714	0.8845
1993	8.0390	8.5819	8.9630	0.6826	0.7350	0.8106
1994	7.3630	7.9821	8.5960	0.6339	0.6758	0.7076
1995	6.5150	6.8907	7.5560	0.5713	0.6123	0.6576
1996	6.7110	7.1642	7.8690	0.6483	0.6847	0.7154
1997	7.7950	8.5058	9.0930	0.6533	0.6799	0.7016
1998	8.3100	8.8470	9.4010	0.6188	0.6721	0.7096
1999	8.3484	9.0259	9.5667	0.6279	0.6751	0.6954

	Czech koruna	Estonian kroon	Hungarian forint	Polish zloty	Slovenian tolar	Icelandic krona	South Korean won	Special drawing rights of the International Monetary Fund
	9	10	11	12	13	14	15	16
1990	..	..	..	..	..	0.0656	..	5.18322
1991	..	..	..	..	..	0.0684	..	5.52733
1992	..	..	..	..	..	0.0778	..	6.31546
1993	..	0.4323	..	..	..	0.0846	..	7.98671
1994	..	0.4021	..	..	..	0.0745	..	7.46629
1995	..	0.3809	..	..	..	0.0674	..	6.61879
1996	..	0.3816	..	..	..	0.0689	..	6.66357
1997	..	0.3742	..	1.5845	..	0.0732	..	7.14420
1998	..	0.3798	..	1.5307	..	0.0751	0.00385	7.24306
1999	0.1612	0.3800	0.0235	1.4065	0.0306	0.0770	0.00469	7.62600

Table 15.
Notes and coin in circulation, at year-end, FIM million

	1995	1996	1997	1998	1999
Notes					
1000 markka	4,440.1	5,153.3	5,579.9	5,635.7	6,544.9
500 "	2,505.0	2,562.0	2,596.9	2,541.8	2,937.8
100 "	5,540.6	6,007.8	6,430.2	6,256.2	7,194.3
50 "	692.5	654.2	615.7	608.9	626.3
20 "	396.2	413.4	423.1	428.2	449.0
10 "	50.1	45.4	42.9	41.2	40.4
Redeemed[1)]					-132.3
Total	13,624.5	14,836.1	15,688.7	15,512.0	17,660.4
Ceased to be legal tender on 1 January 1994	252.8	249.5	243.5	237.4	232.6
Coins					
Ordinary coins					
10 markka	365.2	392.4	415.3	439.5	475.5
5 "	428.6	435.5	440.1	367.9	377.5
1 "	390.4	413.6	428.7	322.8	343.9
50 penni	85.9	91.5	97.1	100.5	107.0
10 "	96.3	105.5	112.7	119.1	127.4
Total	1,366.4	1,438.5	1,493.9	1,349.8	1,431.3
Commemorative coins					
2000 markka	13.8	13.8	13.8	13.8	13.8
1000 "	35.0	35.0	55.0	55.0	55.0
100 "	104.0	106.0	110.2	117.0	119.7
50 "	70.7	70.4	69.7	-	-
25 "	19.7	19.6	22.0	2.5	2.5
10 "	38.1	38.1	38.0	0.0	0.0
Total	281.3	282.9	308.7	188.3	191.0
Total coins	1,647.7	1,721.4	1,802.6	1,538.1	1,622.3
Ceased to be legal tender on 1 January 1994 and 1 January 1998	111.1	109.0	107.2	426.8	420.7

Source: Bank of Finland.

1) Markka value of the banknotes that have been credited by the Bank of Finland and remain in the possession of other euro area central banks. The euro area central banks have agreed that the redeeming central bank will be credited by the issuing central bank for the notes redeemed upon notification of the total amount of notes redeemed, without a breakdown by denomination. The breakdown by denomination is forwarded to the issuing central bank only when the notes are delivered.

Table 16.
Deliveries of notes and coin, FIM million

	1995	1996	1997	1998	1999
Notes delivered by Setec					
1000 markka	–	–	–	–	–
500 "	–	–	–	–	–
100 "	5,000.0	2,180.0	1,625.0	65.0	–
50 "	–	765.0	–	–	510.0
20 "	400.0	5.0	736.0	1,191.0	69.0
Total	5,400.0	2,950.0	2,361.0	1,256.0	579.0
in millions of notes	70.0	37.4	53.1	60.2	13.7
Notes destroyed. in millions of notes	57.7	42.1	79.9	30.2	35.4
Coins delivered by the Mint					
Ordinary coins					
10 markka	45.1	9.3	33.0	8.0	41.0
5 "	45.1	5.9	29.0	4.0	2.5
1 "	40.0	15.0	24.1	34.0	6.0
50 penni	0.5	8.5	4.0	6.0	2.5
10 "	8.5	10.5	7.0	9.5	4.0
Commemorative coins					
2000 markka	13.8	–	–	–	–
1000 "	–	–	20.0	–	8.0
100 "	8.6	3.3	5.2	8.1	3.3
25 "	–	–	2.5	–	–
10 "	0.0	0.0	–	–	0.0
Total	161.6	52.5	124.8	69.6	67.3
Coins destroyed. in millions of coins					
Ordinary coins	91.5	27.3	22.8	16.7	12.2
Commemorative coins	0.0	0.0	0.0	0.0	0.0

Source: Bank of Finland.

Table 17.
Notes sorted at the Bank of Finland, in millions

	1995	1996	1997	1998	1999
1000 markka	4.9	4.6	4.7	3.8	3.8
500 "	10.5	9.4	9.5	8.2	10.6
100 "	396.0	454.8	488.8	401.2	545.6
50 "	68.6	67.1	54.8	59.5	50.7
20 "	73.0	48.3	58.7	59.3	57.5
10 "	1.0	–	–	–	–
Total	554.0	584.2	616.5	532.0	668.2

Source: Bank of Finland.

Table 18.
Bank of Finland interbank funds transfer system (BoF-RTGS)

	Account holders, number	Transactions									
		Domestic payments, number in thousands	Value, EUR billion	Outgoing TARGET payments, number in thousands	Value, EUR billion	Incoming TARGET payments, number in thousands	Value, EUR billion	TARGET payments, total number in thousands	TARGET payments, total value, EUR billion	Trans-actions, total number in thousands	Trans-actions, total value, EUR billion
	1	2	3	4	5	6	7	8	9	10	11
1995	18	110.0	1,430.8							110.0	1,430.8
1996	17	98.9	1,340.4							98.9	1,340.4
1997	19	100.9	1,515.9							100.9	1,515.9
1998	18	181.3	1,935.5							181.3	1,935.5
1999	14	223.4	1,308.7	87.3	1,502.9	105.8	1,504.0	193.0	3,006.9	416.4	4,315.6
1999											
January	14	19.3	133.6	6.6	143.8	8.1	140.6	14.7	284.4	34.0	417.9
February	14	18.9	113.1	7.3	127.6	10.0	128.2	17.3	255.8	36.2	368.9
March	14	22.4	130.3	8.9	136.3	12.0	137.5	20.9	273.8	43.2	404.1
April	14	19.2	120.2	7.5	126.4	9.6	124.9	17.1	251.3	36.3	371.5
May	14	16.8	90.3	5.8	103.8	8.0	105.1	13.8	208.9	30.6	299.3
June	14	18.6	110.0	6.8	121.1	8.7	120.2	15.5	241.3	34.0	351.3
July	14	17.8	95.5	6.8	113.8	8.5	113.8	15.3	227.6	33.1	323.2
August	14	16.6	89.2	6.3	120.1	8.0	120.5	14.3	240.6	30.9	329.8
September	14	18.2	105.6	7.6	122.4	8.0	122.9	15.6	245.2	33.8	350.8
October	14	18.0	109.0	7.8	115.5	8.1	115.2	15.9	230.7	33.9	339.7
November	14	19.1	107.4	8.1	139.3	8.5	140.2	16.6	279.5	35.7	386.9
December	14	18.5	104.5	7.8	132.8	8.3	134.9	16.1	267.7	34.7	372.2

Source: Bank of Finland.

Table 19.
Banks' intraday credit limits

End of period	Total limits, EUR million	Maximum usage rate of limits[1], %	Average usage rate of limits[2], %	End-of-day balances[3], EUR million
	1	2	3	4
1995	2,078	..	11	..
1996	1,942	..	10	..
1997	2,793	89	10	944
1998	3,227	44	6	951
1999	6,500	52	4	1,588
1999				
January	5,216	33	2	1,748
February	5,413	38	4	1,429
March	4,954	36	4	1,664
April	5,304	52	5	1,443
May	4,987	35	4	1,598
June	4,397	32	5	1,461
July	5,087	45	5	1,524
August	5,037	30	3	1,545
September	4,495	25	2	1,597
October	4,895	25	2	1,671
November	4,724	38	3	1,490
December	6,500	23	1	1,887

Source: Bank of Finland.

1) The maximum usage rate is the ratio of the maximum value of the combined sum of banks' debit balances on settlement accounts with the Bank of Finland to total limits during the relevant period (calculated since the beginning of 1997).

2) The average usage rate of limits is the ratio of banks' average debit balances on settlement accounts with the Bank of Finland to total limits during the relevant period.

3) Average value for period.

Table 20.
Domestic clearing operations

	Debit entries		Credit entries		Total entries	
	Number, millions	Value, EUR billion	Number, millions	Value, EUR billion	Number, millions	Value, EUR billion
	1	2	3	4	5	6
1995	199.6	195.2	156.2	136.6	355.8	331.8
1996	128.0	150.9	139.2	243.2	267.2	394.1
1997	131.2	123.7	146.2	243.6	277.4	367.2
1998	158.2	47.4	163.6	154.8	321.8	202.2
1999	164.9	8.1	167.8	124.5	332.0	132.6
1999						
January	11.2	0.7	12.8	9.0	24.0	9.7
February	11.3	0.5	14.7	9.7	26.0	10.2
March	13.9	0.6	15.0	9.7	28.2	10.3
April	13.3	0.7	13.4	9.8	26.7	10.5
May	12.5	0.6	13.7	10.6	26.2	11.2
June	14.2	1.0	14.7	10.5	28.9	11.5
July	15.3	0.6	13.2	10.3	28.5	10.9
August	15.0	0.6	13.0	9.8	28.0	10.4
September	13.6	0.6	14.0	10.6	27.6	11.2
October	13.4	0.7	13.9	10.9	27.3	11.6
November	15.1	0.7	14.4	11.4	29.5	12.1
December	16.1	0.8	15.0	12.2	31.1	13.0

Source: Bank of Finland.

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