



# BANK OF FINLAND

ANNUAL REPORT  
2000

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**Board of the Bank of Finland.**

From the left: Matti Vanhala, Sinikka Salo and Matti Louekoski.  
In the background the textile work *Arctos*, 1994, by Ritva Puotila.



# Overview

**T**he year 2000 was a propitious time for the world economy.

In the euro area, the economic situation and outlook were better and economic growth faster than at any time in the 1990s. The Finnish economy enjoyed its seventh consecutive year of robust growth. Underpinned by the rapid expansion of the world economy, oil prices rose further, leading to a general rise in inflation in the industrialized countries.

The pick-up in economic growth and mounting inflationary pressures, in particular, posed growing challenges to euro area monetary policy. Monetary policy had to be tightened several times during the year in order to maintain price stability.

At the beginning of the year the rate of increase in consumer prices in the euro area rose above the upper limit set for the price stability objective. This was mainly due to the continued rise in oil prices and the weakening of the euro. In addition, the annual rate of growth in the money supply consistently exceeded the reference value set by the ECB and loans to the private sector continued to grow at a rapid pace. The risk of a general increase in the rate of inflation had increased, posing a threat to price stability in the medium

term. In these circumstances a timely response to the risks to price stability was essential. This is also the best way in which monetary policy can promote sustainable economic growth and employment. Against this background, the Governing Council of the ECB raised its official interest rates in three steps, by 0.25 percentage point at a time, in February, March and April.

Later in the spring the risks to price stability were assessed to have grown further since the money supply and credit continued to expand at a rapid rate, the growth prospects for the euro area were very favourable and the euro had weakened further. Consequently, in June the ECB's interest rates were raised by 50 basis points to 4.25%.

Because of the depreciation of the euro, the Governing Council of the ECB had to pay increasing attention in the course of the year to the risk to price stability deriving from exchange rate developments. In the summer the rise in import prices due to higher energy costs and the depreciation of the euro was clearly evident in inflation, and the euro area inflation rate increased to 2½%. The ECB took the view that, although monetary policy could have no impact on the rise in inflation caused by higher oil prices in the short run,

monetary policy action was nevertheless needed to safeguard price stability over the medium term. Particularly in a situation where the economy is growing rapidly and capacity utilization rates are high, monetary policy has a crucial role to play in mitigating the risk that inflation expectations could increase and add to upward pressures on domestic costs and prices.

At the end of August and in early October the Governing Council of the ECB decided to raise official rates again. The rise in October took the key official rate to 4.75%, representing a total increase of 225 basis points since November 1999.

Oil prices reached new peaks in mid-September and remained at a high level until the beginning of December. The resulting rise in energy prices, together with increases in prices of other products, generated further upward pressure on consumer prices in the euro area in the final months of the year, and consumer price inflation accelerated to around 3% towards the end of 2000. The Governing Council of the ECB kept official interest rates unchanged after the October rate increase, however.

In December the ECB published, for the first time, a projection for economic developments over the next few years produced jointly by experts from the ECB and the national central banks. According to the projection, the growth performance of the euro area is expected to remain favourable over the projection horizon, which covers the period up to 2002. However, inflation is projected to exceed 2% initially, owing to past increases in energy prices and

the weakness of the euro. Towards the end of 2001 inflation is expected to slow to a level consistent with the price stability objective, provided that oil prices fall back as assumed in the projection and the euro strengthens slightly. It is important for maintaining price stability in the medium term that economic agents understand that the upward pressures on inflation stem from external factors and are of a one-off and transitory nature.

From the fiscal policy standpoint, the favourable macroeconomic environment offered a good opportunity to speed up consolidation of general government finances and lay the ground for continued positive economic developments. Though budgetary positions did improve in nearly all euro area countries, this was mainly due to a cyclical increase in tax revenue and a reduction in the share of interest payments on government debt. In most euro area countries, no attempt was made to consolidate general government finances through active fiscal policy.

Judging from member states' stability programmes, there is likely to be relatively little improvement in budgetary positions in 2001 and 2002 and there will be no strengthening in the cyclically adjusted area-wide budgetary position. With the improvement in the economic situation, fiscal policy has been relaxed, mainly as a result of planned tax cuts and discretionary increases in public spending.

The tax reforms in the euro area are welcome as they provide a means of reducing economic distortions and increasing labour supply and demand. There is neverthe-

less a need to counterbalance them by curbing spending growth so as to avoid a pro-cyclical easing in fiscal policy and enable the continuation of fiscal consolidation.

The current economic situation offers an opportunity to strengthen general government budgetary positions, which in many euro area countries are not yet on a sustainable basis. Moreover, public debt is still at a worryingly high level in several euro area countries, especially considering the pressure on general government budgetary positions associated with long-term challenges such as population ageing.

The Finnish economy continued to grow at a robust pace in 2000 and at a noticeably faster rate than the euro area on average. Growth was to a large extent based on a strengthening in export demand, although domestic demand remained firm as well. Exports of IT and telecommunications products experienced the fastest growth. Employment increased further, albeit at a slower rate than in the previous year, and unemployment fell slightly. Structural unemployment remained a serious problem.

The rise in interest rates reduced the risk of overheating in the economy. Activity in the housing market slackened. Private investment grew moderately considering companies' good financial position and the strength of economic growth. Although there was virtually no change in household real disposable income because of higher inflation, growth of private consumption slowed only slightly as the saving rate fell noticeably.

Finland's inflation rate picked up during 2000, mainly because of higher oil prices but also because domestic services prices increased at a faster rate than previously. The rate of increase in prices and wages in Finland was higher than the euro area average. The rise in labour costs implied by the new incomes policy agreement reached in the latter part of the year clearly exceeds estimated productivity growth in many sectors, and this is problematic from the point of view of employment.

A combination of rapid economic growth, fairly heavy taxation and a relatively strict policy with regard to central government spending helped to strengthen the general government budgetary position in 2000. Central government finances moved into surplus and the general government surplus grew further. There was a sharp increase in revenue from income and wealth taxes. Corporate tax receipts also increased as a result of companies' good financial performance and large sales proceeds in connection with corporate restructurings. There was a marked reduction in public indebtedness. Central government debt nevertheless remained large.

The improved outlook for public finances and for central government finances, in particular, opened the way for larger cuts in taxes in 2001 and 2002 than in previous years. Taxation of labour income in Finland has been very heavy by international standards, and this has hampered efforts to alleviate structural unemployment. More still needs to be done to remedy the incentive problems caused

by heavy taxation of labour income and the social benefits system so as to provide room for employment growth and thus make it easier to fund the public sector as the population ages.

The improvement in the central government's budgetary position has also generated mounting pressures for increasing expenditure. A significant increase in spending would, however, constitute a serious risk to fiscal balance in the next economic downturn.

In addition to the maintenance of price stability, the central bank is responsible for promoting the stability and efficiency of the financial system. The internationalization of financial markets and structural changes, such as mergers and financial conglomeration, across the financial services sector have increased the challenges for financial market supervision and highlighted the importance of co-operation between authorities.

The effects of transition to the Third Stage of Economic and Monetary Union are already evident in several areas of financial market activity. Integration of money markets has progressed quite far and integration of capital markets is under way. The extensive euro-denominated bond market has quickly become an important source of financing for the private sector and similarly stock markets have expanded and diversified during the past two years. Major steps forward have been taken in the consolidation of stock exchanges. The structure of the financial sector in Europe is changing continuously. Although bank mergers have so far been mostly national in

scope, there have also been some cross-border mergers and more are planned. Alliances between banks and insurance companies are also on the increase. The ever-quicken- ing pace of structural change in the financial sector poses major challenges as regards developing financial regulation and supervision, both at national and international level.

The Finnish banking sector has entered the new millennium in exceptionally good condition. Bank profitability has improved as a result of rapid growth of income from financial operations and other income. As market interest rates rose, the margin between lending and deposit rates widened in 2000, helping to increase net income from financial operations. Fee income was boosted by rapid growth in payment flows and asset management fees. Fee income from securities transactions remained strong as well, despite declining in the latter part of the year. Fee income from the sale of insurance products also gained in importance as a source of income for large banking groups.

A distinctive feature of developments in the Finnish securities market over the past couple of years has been a very sharp increase in equity trading. Continuing growth in trading volumes has put existing arrangements for equity settlement under heavy pressure, and consequently the Helsinki Exchanges have taken steps to improve the efficiency of settlement procedures. In October the book-entry registers for equity transactions were centralized within the Finnish Securities Deposito-

ry (APK). The centralization of registers was necessary for the competitiveness of the Finnish securities market, as it enables further development of custodial and settlement systems as well as the book entry system as a whole.

TARGET, the payment system operated by the central banks of EU member states, was the leading system for cross-border payments in Europe last year in terms of total value of payments. TARGET has enhanced the efficiency of the transmission of large-value pay-

ments in the euro area and reduced the risks associated with large-value payments. Oversight of payment systems is one of the key tasks of central banks and is aimed at ensuring that payment systems function smoothly and without disruption.

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

## Consumer price inflation accelerated in 2000

### Robust economic growth in the first half of the year

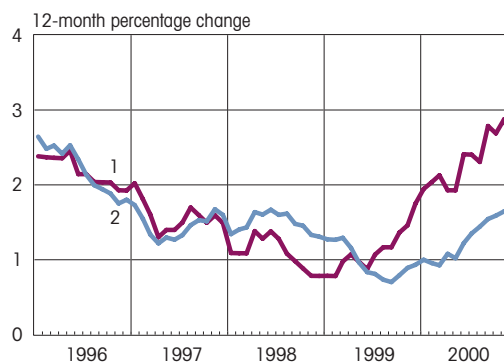
At the start of the year euro area inflation was slightly under 2% as measured by the annual rate of change in the Harmonized Index of Consumer Prices (HICP; Chart 1). The rise in world oil prices in 1999 had led to a pick-up in the rate of increase in energy prices. The depreciation of the euro also added to inflationary pressures. Euro area economic growth had picked up in 1999, as recovery in the global

economy boosted export demand for euro area products and domestic demand continued to grow at a steady pace.

During the first half of 2000 the global economy grew at a rapid pace. The boom in the United States continued and there were signs that Japan's long-lasting recession was slowly drawing to an end. In South America, too, economic growth was generally robust, as was the case for the South-east Asian countries that had been hit by economic crisis in 1997.

The euro area economy also continued to grow rapidly in the first half of 2000 (Chart 2). Growth

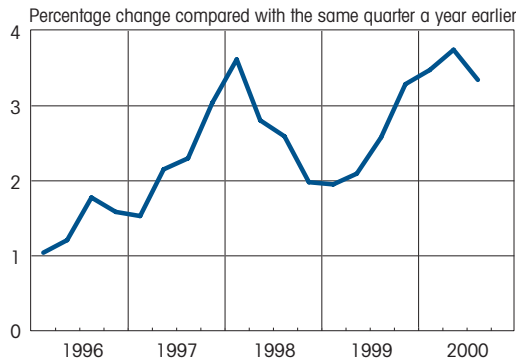
**Chart 1.**  
**Harmonized Index of Consumer Prices  
for the euro area**



1. Total index  
2. Total index excluding energy

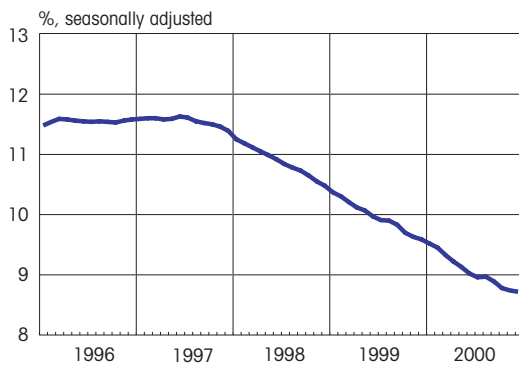
Source: Eurostat.

**Chart 2.**  
**Real GDP growth in the euro area**



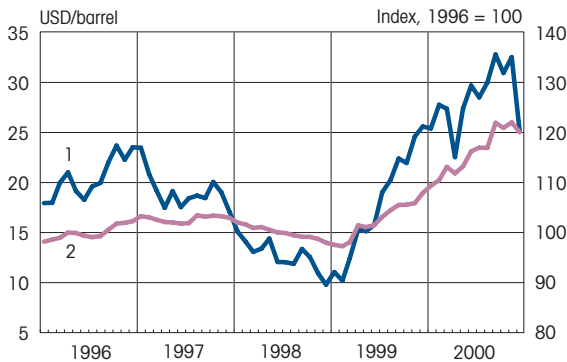
Source: Eurostat.

**Chart 3.**  
**Unemployment rate in the euro area**



Source: Eurostat.

**Chart 4.**  
**Energy prices**



1. Crude oil: North Sea Brent (left-hand scale)
2. Energy price in the euro area (right-hand scale)

Sources: Bloomberg and Eurostat.

was evenly spread among the various components of aggregate demand. Exports to non-euro area countries continued to increase because of robust global economic growth and the improved competitiveness of euro area products due to the depreciation of the euro. Fixed investment increased because of favourable prospects for economic growth, fairly low interest rates and high share prices. Household consumption also grew rapidly. Consumer confidence in the future was buoyed by a further decline in the euro area unemployment rate in 2000, following declines in each of the previous three years (Chart 3).

Most euro area countries recorded robust growth during the spring. In 1999 the German and Italian economies had grown considerably more slowly than the average for the euro area. In the first half of 2000 Germany, and to some extent Italy, approached the average growth rate for the euro area, as production for export, in particular, increased in both countries.

The rise in consumer prices continued to accelerate in the first half of 2000. World oil prices rose further, boosting energy prices in the euro area (Chart 4). The depreciation of the euro also put upward pressure on commodity prices in terms of euro. Robust economic growth added to the danger that higher oil prices and a weak euro would lead to a general rise in consumer prices in the euro area. Besides energy prices, the rate of increase in services and food prices also picked up slightly. The annual rate of increase in the HICP picked

up during the summer from just under 2% at the start of the year to around 2½%.

Euro area monetary and credit aggregates increased rapidly in the first half of 2000 (Chart 5). The growth of broad money (M3) rose to an annual rate of more than 6% in the spring, substantially above the 4½% reference rate set by the ECB Governing Council. Credit granted to the private sector also continued to increase at a rapid pace. Among the factors behind the rapid growth in monetary and credit aggregates were robust economic growth and the relatively low level of interest rates.

### Key interest rate raised several times

The ECB's Governing Council gradually tightened monetary policy by raising the Eurosystem's key rate six times in the course of the

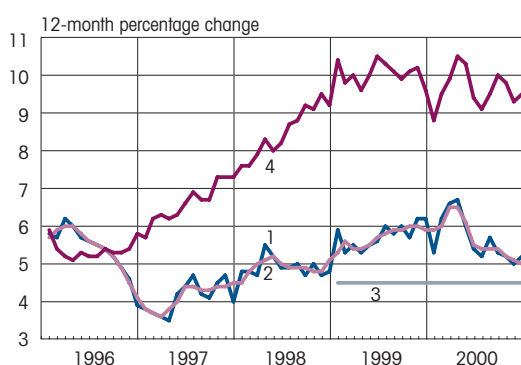
year (Chart 6). The increases together totalled 1.75 percentage points. The tightening was aimed at promoting price stability in the euro area over the medium term. The Governing Council has defined price stability as keeping year-on-year increases in the HICP for the euro area below 2%. In raising its key rate, the Governing Council was responding to increasing risks of inflation. The weakening in the external value of the euro had an easing effect on monetary conditions in the euro area, which was reflected in the rapid growth of money and credit.

The ECB's Governing Council had raised the Eurosystem's interest rate on the main refinancing operations to 3% in November 1999. In the course of 2000 the Governing Council raised the key rate step by step to 4.75%. Increases of 0.25 percentage point were effected on 3 February, 16 March and 27 April. On 8 June the Gov-

erning Council decided to raise the rate by 0.5 percentage point and announced that, as from the last week of June, the main refinancing operations would be conducted as variable rate tenders, with a minimum bid rate applied to each operation. The minimum bid rate now signals the stance of monetary policy, as the rate applied to the fixed rate tenders had previously done. The minimum bid rate was raised by 0.25 percentage point two more times, on 31 August and 5 October.

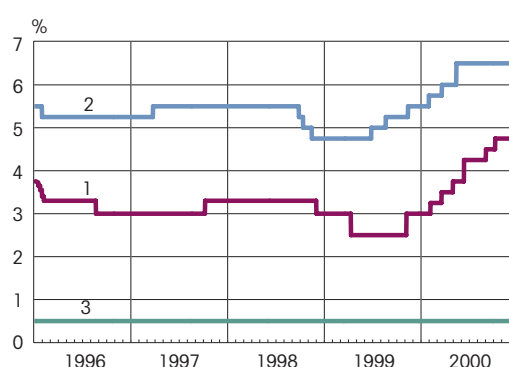
On December 2000 the ECB's Governing Council reconfirmed the prevailing reference value for the annual growth rate of the broad monetary aggregate (M3). The decision was based on the view that the available evidence continued to support the assumptions underlying the 4½% reference value set in December 1998 and confirmed a year later. The assumptions relate to the trend rate of

**Chart 5.**  
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.

**Chart 6.**  
Official interest rates

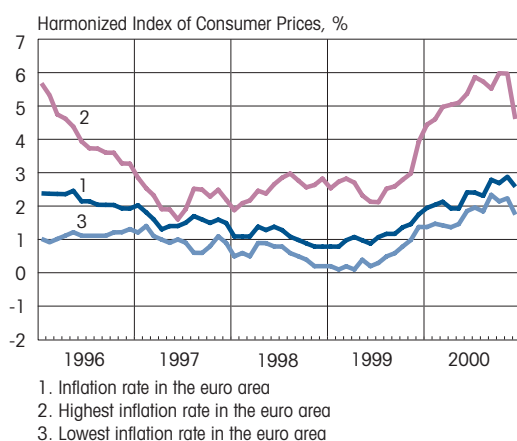


1. Eurosystem: main refinancing rate / minimum bid rate (German repo rate until end-1998)
2. United States: fed funds target rate
3. Japan: discount rate

Sources: European Central Bank and Reuters.



**Chart 7.**  
Inflation differentials in the euro area



Source: Eurostat.

growth of potential GDP and the medium-term trend of money velocity. The ECB's Governing Council announced that it was closely monitoring data concerning the rate of productivity growth in the euro area but that it did not feel that these indicated a need to revise the assumption on trend growth of potential GDP.

### Economic growth slowed in the second half of the year

Economic growth in the euro area slowed in the second half of the year. This was a result of slackening demand for exports due to slower economic growth around the world and slower growth of domestic demand due to higher interest rates. Moreover, the continuing rise in the price of oil effected an income transfer from the euro area to oil-producing countries outside the area. This left a smaller share of household income in the euro area for use in purchasing

commodities produced in the euro area; nor did exports to oil producing countries take up all the slack. In the latter part of the year the near-term outlook for economic growth in the euro area and around the world weakened, as the US economy appeared to be slowing after a long period of robust growth.

Growth in the euro area broad money aggregate (M3) began to decelerate moderately in the summer, largely because of rises in interest rates. The annual growth rate for M3 peaked in April at 6.6%, after which it decelerated fairly quickly. In the last quarter of the year M3 grew by 5.1% from the previous year, which was still faster than the reference value set by the ECB's Governing Council.

Although economic growth slowed and the outlook weakened, upward pressure on euro area consumer prices remained strong in the second half of the year, as oil prices rose and the euro continued to depreciate. The price of North

Sea Brent oil rose in the autumn to about USD 30–35 per barrel, from around USD 20–30 in the first half of the year. The external value of the euro was on average 4% lower than in the first half, in terms of its effective exchange rate. As a consequence, the annual rate of increase in the HICP increased to nearly 3% by year-end. Besides energy prices, the prices of other industrial goods, food and services also accelerated to some extent. However, at the very end of the year the inflation outlook was more benign, after the euro had appreciated and the price of oil had declined.

Inflation differentials across euro area countries widened somewhat in 2000. The difference between the highest and lowest inflation rates was about 3 percentage points at year-end (Chart 7). The sharp increase in the differential at the end of 1999 and the narrowing a year later were partly due to changes in excise duties in the country with the highest inflation – Ireland.

### The spread between short and long-term interest rates narrowed

Euro area money market interest rates continued on the upward trend that had begun in mid-1999. The three-month Euribor rate rose from about 3½% in January to about 5%, largely in anticipation of rises in the Eurosystem's key rate (Chart 8). During the last two months of the year, however, 3–12 month money market rates started to move lower as expectations of a



tightening of monetary policy declined in connection with the change in the inflation outlook.

Changes in the Eurosystem's key interest rate in 2000 were largely in line with market expectations, and thus money market rates did not react much to changes in the key rate. An exception was the announcement in June of a half percentage point hike, which was larger than the markets had expected and was followed immediately by a slight rise in money market rates. In the same connection, the Governing Council of the ECB announced that the main refinancing operations of the Eurosystem would in future be conducted as variable rate tenders, but added that this was not intended to alter the stance of monetary policy.

Long-term interest rates remained fairly low in the euro area throughout the year, which reflected the credibility of the goal of

price stability in the euro area and continued efforts to consolidate general government budgetary positions (Chart 9). The yield on the German ten-year government bond declined from 5½% at the start of the year to about 5% at year-end. The decline was partly a reflection of developments in the international bond markets, as yields on long-term US government bonds also fell in the course of the year. The differential between US and euro area long-term interest rates narrowed during the year. In January 2000 the yield on ten-year German government bonds was still lower, by more than a percentage point, than the corresponding US yield, but by year-end the differential had narrowed to less than half a percentage point. The narrowing of the differential was partly the result of changes in growth and inflation prospects in the United States and in the euro

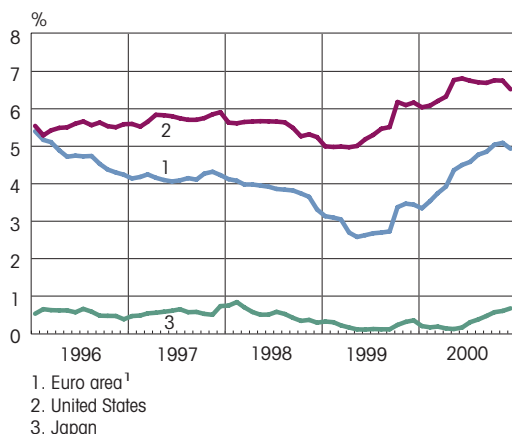
area. The declines in both German and US long-term yields on government bonds also reflected expectations of future reductions in the supplies of these bonds.

The spread between short and long-term interest rates in the euro area narrowed substantially during the year. The wide spread that prevailed at the start of the year reflected expectations of a tightening of monetary policy. The spread narrowed in the course of the year, as the Eurosystem's key interest rate was raised, in line with expectations. In December the spread virtually disappeared, as expectations of increasing inflation and further monetary tightening subsided.

## Euro continued to weaken

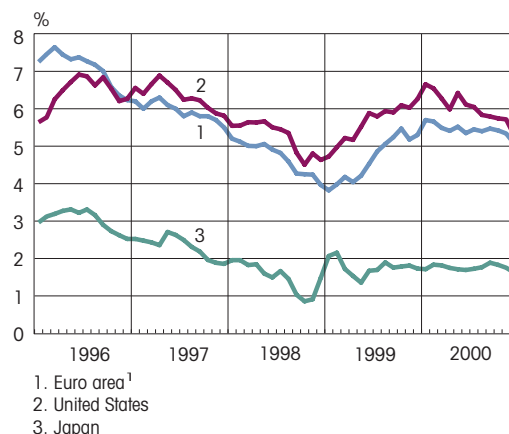
The external value of the euro was slightly lower at the end of 2000 than it had been at the beginning of

**Chart 8.**  
Three-month money market rates



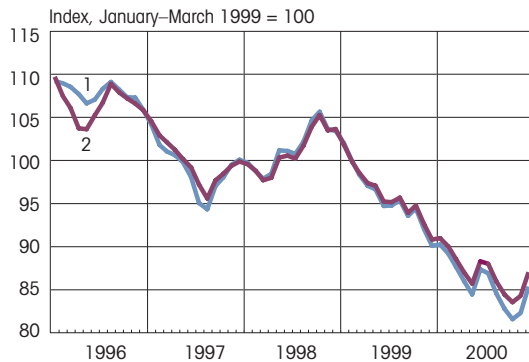
<sup>1</sup> Euribor from January 1999. Until end-December 1998 the euro area rate is calculated as the average of national rates weighted by GDP.  
Sources: European Central Bank and Reuters.

**Chart 9.**  
Ten-year government bond yields



<sup>1</sup> 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 and  
Finland's competitiveness indicator



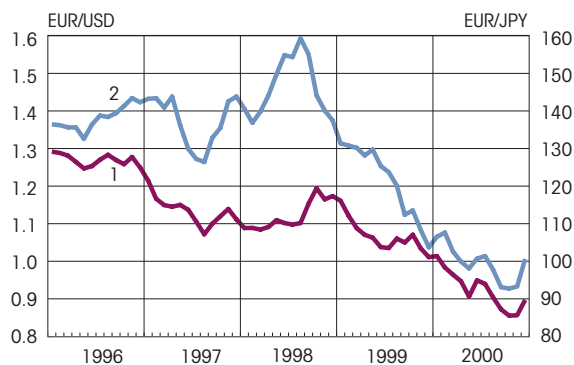
An upward movement in the index represents an appreciation of the euro / a weakening in Finnish competitiveness.

1. Euro's effective exchange rate, narrow country group<sup>1</sup>
2. Finland's narrow competitiveness indicator

<sup>1</sup> Before 1999 a trade-weighted index of the currencies of euro area countries.

Sources: European Central Bank and Bank of Finland.

**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.

the year, in terms of its effective exchange rate (Chart 10). The euro depreciated in the course of the year against the US dollar and Swiss franc (Chart 11) but was unchanged against the Japanese yen, pound sterling and Swedish krona over the 12-month period.

Except for a period of strengthening in May–June, the euro followed a depreciating trend,

in terms of its effective exchange rate, up until end-October. The weakening of the euro in the first half of the year occurred in spite of a pronounced pick-up in euro area economic growth. However, economic growth was also robust outside the euro area, especially in the United States. The depreciation of the euro, especially against the US dollar, may have been affected by

the greater attractiveness of the United States as an investment area as compared with the euro area. Signs of a slowing of US economic growth did not appear until around the end of the year.

During the last two months of the year the euro appreciated substantially, in terms of its effective exchange rate and against several of the major currencies. The appreciation was connected with the abrupt worsening in the outlook for the US economy.

During the second half of the year the Eurosystem supported the euro's external value by intervening in the currency markets. In September coordinated intervention was carried out, initiated by the ECB and supported by the central banks of the United States, Japan, the United Kingdom and Canada. In November the Eurosystem intervened again in the currency markets, out of concern for the possible effects of euro weakness on the global economy and upward pressure on the prices of euro area imports.

The exchange rates of the ERM II currencies – the Danish krone and Greek drachma – against the euro remained quite stable during the year. The krone's rate stayed inside its fluctuation range and very close to its central rate. The Greek drachma's central rate was revalued by 3½% in January 2000. At the end of the year the drachma's exchange rate against the euro approached the central rate of its new fluctuation range, which was the same as its irrevocable euro conversion rate, as decided in June 2000 with effect from the start of 2001.

## Favourable economic conditions reduced the general government deficit

According to the European Commission's forecast, the average fiscal deficit for general government in the euro area in 2000 amounted to 0.8% of GDP. The figure, which does not include one-off revenue from the sale of licences for third-generation mobile phones (UMTS), is ½ percentage point smaller than that for 1999 (Chart 12). About a half of the reduction in the deficit-to-GDP ratio was due to a reduction in interest payments relative to GDP and the rest was due to a fairly modest improvement in the primary surplus. Taking into account the revenue from mobile phone licences, the average general government fiscal position was a surplus of 0.3% of GDP.

The positive economic situation – rapid GDP growth and favourable demand structure – boost-

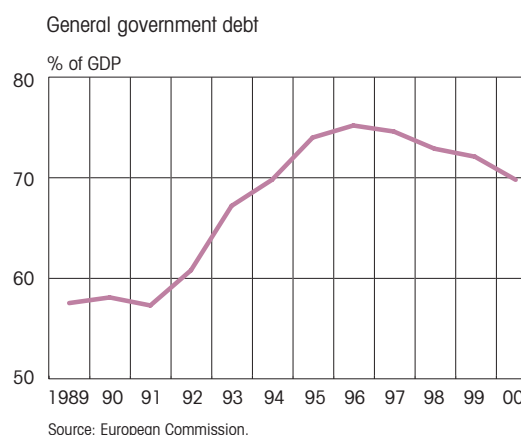
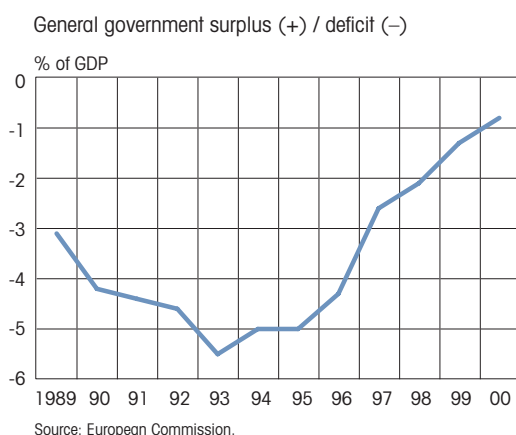
ed general government revenue. Strong growth in private consumption and wages led to increases in direct and indirect tax revenues and social security contributions. The surge in share and housing prices before and after the start of 2000 increased capital tax revenue and high oil prices boosted VAT revenue. As a result, the share of general government revenue in GDP stayed at its 1999 level. General government expenditure also increased, and its share in GDP declined only slightly, even though economic growth led to lower unemployment and related expenditure. This meant that the leeway that was created by the strong economy was not fully utilized for reducing deficits. Instead, a large part of this leeway was used to finance increased expenditure. However, many countries did try to slow spending growth via tighter expenditure control.

According to the forecast, the general government fiscal position

remained strongly positive – as in the previous year – in Ireland, Luxembourg, the Netherlands and Finland, and moved towards balance in Belgium and Spain (Table 1). In the other euro area countries the trends were towards a balanced fiscal position, but the deficit-to-GDP ratio remained above 1%. Economic growth in 2000 was below the average for Germany, France and Italy, and for this reason improvements in general government finances in these countries were smaller than the average; deficit-to-GDP ratios fell by less than half a percentage point.

The European Commission had estimated that the cyclically adjusted general government primary balance for the euro area would weaken slightly in 2000. This means that the actual reduction in the general government deficit was due entirely to cyclical effects and lower interest payments. It also means that in many euro area countries

**Chart 12.**  
General government fiscal position in the euro area



**Table 1.**  
General government fiscal position  
and debt

	General government surplus (+) / deficit (-), % GDP		
	1999	2000 <sup>1</sup>	2000 <sup>2</sup>
Belgium	-0,7	0,0	0,0
Germany	-1,4	-1,1	1,4
Spain	-1,1	-0,3	-0,3
France	-1,8	-1,4	-1,4
Ireland	1,9	4,2	4,2
Italy	-1,9	-1,3	-0,1
Luxembourg	4,4	4,9	4,9
Netherlands	1,0	1,1	1,8
Austria	-2,1	-1,7	-1,3
Portugal	-2,0	-1,9	-1,5
Finland	1,9	4,2	4,2
Euro area	-1,3	-0,8	0,3

<sup>1</sup> Excl. revenue from sales of mobile phone licences.

<sup>2</sup> Incl. revenue from sales of mobile phone licences.

Source: European Commission.

	General government debt, end-2000, % GDP	
	1999	2000
Belgium	115,9	111,1
Germany	61,1	60,0
Spain	63,3	61,0
France	58,9	58,3
Ireland	50,1	41,6
Italy	115,1	110,7
Luxembourg	6,0	5,5
Netherlands	62,9	56,9
Austria	64,6	64,4
Portugal	55,4	56,1
Finland	46,6	42,5
Euro area	72,1	69,8

Source: European Commission.

reductions in taxes and social security contributions were financed largely by tax revenue that was of a cyclical and one-off nature.

During the year many euro countries decided to make a reduction in labour taxes a key objective of economic policy for the coming years. Tax cuts would increase the potential for economic growth and facilitate structural change. But in order not to jeopardize rapid progress towards fiscal balance in general government finances, real growth in primary general govern-

ment expenditure must be kept as small as possible.

According to the forecast, the general government debt-to-GDP ratio for the euro area declined by more than 2 percentage points from the 1999 level, to less than 70% (Chart 12). The decline in the debt ratio for Ireland was particularly pronounced. In many countries the decline in the debt ratio was largely due to revenue from the sale of mobile phone licences, which altogether amounted to some 1.1% of euro area GDP and was used almost entirely to pay off central government debt.

## Implementation of monetary policy within the Eurosystem

### Monetary policy instruments

ECB monetary policy is conducted by means of the Eurosystem's operational framework for monetary policy, which comprises three elements: open market operations; standing facilities; and a minimum reserve system. Of the market operations, the weekly main refinancing operations are pivotal, since it is through these that euro area banks cover the bulk of their central bank financing needs. Since June 2000 the main refinancing operations have been conducted as variable rate tenders. The interest rate on the main refinancing operations (minimum bid rate in variable rate tenders) also serves as the key signalling rate for the stance of ECB monetary policy. During the year the Eurosystem also conducted its first two fine-tuning opera-

tions, with the aim of normalizing liquidity conditions.

In 2000 the average total reserve requirement for euro area credit institutions was EUR 112 billion, ie EUR 10 billion more than in 1999. Credit institutions' liquidity was also tightened by a roughly 25% year-on-year increase in the structural liquidity shortage<sup>1</sup> (EUR 21 billion), caused in part by a substantial increase in banknotes in circulation in the euro area. The main refinancing operations added EUR 158 billion of liquidity to the system (daily average), which was EUR 21 billion more than in 1999. The monthly longer-term refinancing operations added another EUR 58 billion daily – EUR 10 billion more than in 1999.

In contrast to 1999, the net effect of the standing facilities in 2000 was a modest decrease in euro area liquidity. The daily average amount of overnight deposits exceeded the 0.3 billion of liquidity-providing marginal lending by EUR 0.5 billion. Credit institutions generally use the overnight deposit facility during the final days of a reserve maintenance period, after they have met the reserve requirement for the period. The larger-than-normal end-of-month liquidity needs at the millennium changeover were clearly reflected in the use of the marginal lending facility (Chart 13).

The millennium changeover went smoothly in the euro area

<sup>1</sup> A structural shortage means that euro area credit institutions are in debt to euro area central banks. The banking system's structural surplus/shortage is strongly affected, inter alia, by central banks' net foreign exchange reserves and the amount of banknotes in circulation.

money markets, and the overnight interest rate quickly returned to its pre-changeover level following a rise in the final days of 1999. The ECB had also prepared for the millennium changeover by providing the banking system with more liquidity than usual in the final main refinancing operation of 1999. Hence, in order to level out the liquidity situation, on 5 January 2000 the Eurosystem conducted its first fine-tuning operation, in which liquidity was absorbed by collecting one-week deposits from euro area banks.

Short-term interest rates in the euro area rose across the board during 2000, due to hikes in ECB interest rates and related market expectations of interest rate increases (Chart 14). Market uncertainty was apparent eg in the fluctuations in overnight interest rates, which were wider than in 1999. The widest movements in over-

night rates generally occurred in the final days of reserve maintenance periods, when short-term liquidity needs stemming from the credit conditions facing credit institutions can sometimes cause large intraday movements in overnight interest rates. An exceptionally large amount of overnight deposits in June led to a rise in the overnight interest rate. The Eurosystem responded to the rate rise by providing the banks with overnight liquidity via a variable-rate fine-tuning operation.

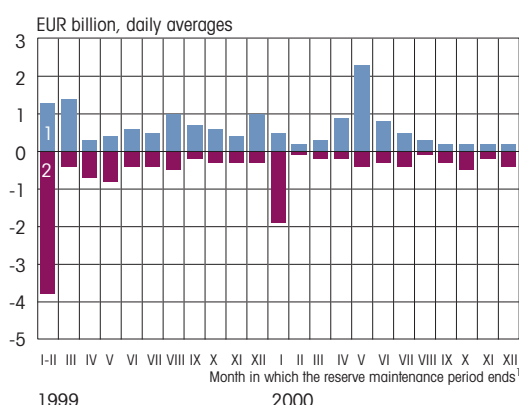
In the latter part of the year fluctuations in money market interest rates diminished and the upward trend in interest rates came to a halt. This was mainly due to a decline in expectations of rising interest rates in the euro area, but persistently good liquidity conditions among credit institutions also contributed to the steadying of short-term money market rates.

## Switch to variable rate tenders in main refinancing operations

Tender bids in the fixed-rate operations increased substantially in the first half of 2000 (Chart 15). This was because expectations of a hike in ECB interest rates increased credit institutions' willingness to fulfil their reserve requirements before the end of the maintenance period and to speculate on a widening spread between short-term money market rates and the interest rate on the main refinancing operations. This overbidding problem finally came to a head in an early June operation, when bids amounted to as much as some EUR 8,500 billion, which was 35% more than the total value of euro area collateral and over 100 times the amount of liquidity allocated in the operation.

The ECB's Governing Council decided in early June to switch to

**Chart 13.**  
Use of standing facilities in the euro area

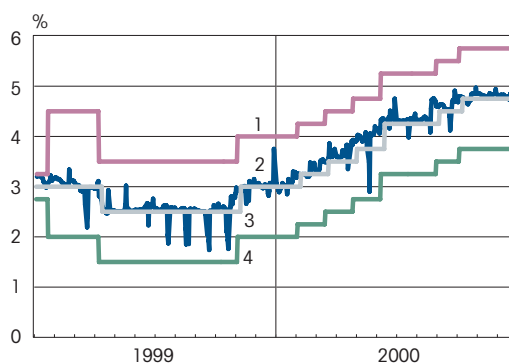


<sup>1</sup>Maintenance periods start on the 24<sup>th</sup> of the month and run to the 23<sup>rd</sup> of the following month.

1. Overnight deposits
2. Marginal lending facility

Source: European Central Bank.

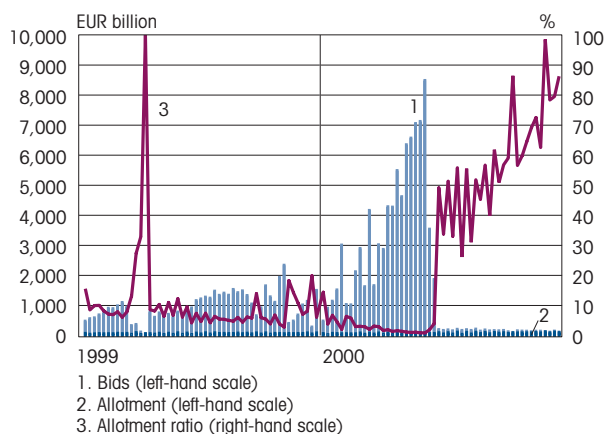
**Chart 14.**  
Eurosystem interest rates and overnight rate



1. Marginal lending rate
2. Eonia rate
3. Main refinancing rate (minimum bid rate from 28 June 2000)
4. Deposit rate

Source: European Central Bank.

**Chart 15.**  
Main refinancing operations of the Eurosystem



Source: European Central Bank.

variable rate tenders in its main refinancing operations, starting at the end of June. Under the new format, the ECB sets the minimum bid rate for each main refinancing operation. The minimum bid rate replaced the fixed main refinancing rate as a signalling device for the stance of ECB monetary policy. In this type of variable rate tender (American auction), the bid rate is applied in respect of each approved bid, and hence the bidders obtain financing at different rates.

The experience with variable rate tenders has been positive: banks' bids have become reasonable and the shortest-term money market rates have approached the minimum bid rate in the main refinancing operations, as intended by the ECB. In 2000 total bids in the fixed rate tenders amounted to about EUR 3,600 billion on average, as compared with only some EUR 160 billion for the variable rate tenders. Moreover, about 25% fewer credit institutions participated in the variable, as compared

with fixed-rate, operations, as reduced possibilities for speculation dampened credit institutions' interest in participating.

In connection with the ECB's decision to switch to variable rate tenders, it also decided to publish the estimated effects on euro area liquidity of autonomous factors, such as banknotes in circulation and government deposits held in Eurosystem central banks. This estimate will improve banks' ability to forecast future amounts of liquidity in the euro area and thus to plan their bidding in the main refinancing operations.

### Finnish credit institutions' role in the Eurosystem's monetary policy operations

Finnish credit institutions, whose liquidity situation remained good throughout 2000, participated in the Eurosystem's monetary policy operations less actively than in 1999. During the period of fixed-

rate tenders, Finnish credit institutions accounted on average for 0.5% of the Eurosystem's liquidity allocations in the main refinancing operations – similar to the level in 1999 – but in the variable rate tenders the share fell to 0.2%. Of the ten counterparties to the Bank of Finland's operations, seven participated in the main refinancing operations during 2000. Only three participated in the longer-term refinancing operations, and these accounted for only 0.1% on average of liquidity allocations to the euro area.

Because of the ample supply of liquidity, Finnish credit institutions have generally attempted to meet their reserve requirements earlier in the maintenance period, in comparison with other euro area credit institutions, when interest rates were expected to rise. This has meant that often in the latter part of the maintenance period Finnish credit institutions made overnight deposits, after having met their reserve requirements before the last days of the maintenance period. It was also reflected in the fact that the share of Finnish credit institutions in total euro area reserve requirements was smaller (1.4%) than their share of overnight deposits (3.5%)<sup>2</sup>. During 2000 Finnish credit institutions had less need to use the marginal lending facility; their average share in total euro area marginal lending fell from 1.1% in 1999 to 0.4%.

<sup>2</sup> The relatively large amount of overnight deposits was also affected by Finland's automatic deposit system, in which deposit funds not needed to meet the reserve requirement are converted – without separate request – into overnight deposits.



## No big changes in collateral arrangements for central bank credit

The ECB has established a unified collateral management system for central bank financing in the euro area. In this system, securities that are eligible as collateral for ECB monetary policy operations and intraday credit are eligible throughout the euro area. Securities considered eligible as collateral by central banks of non-euro EU countries (out-collateral) are accepted by euro area central banks as collateral for intraday credits only. The ECB maintains a database on eligible securities issued in the euro area, which are divided into two main classes: tier one and tier two. Those included on the tier one list are marketable debt instruments that meet the ECB's euro area-wide eligibility requirements. Tier two securities are important for national financial markets and banking systems and are approved by national central banks, subject to the ECB's minimum eligibility criteria.

During 2000 the nominal value of securities in the ECB's collateral database increased by more than 8% to EUR 6,200 billion at year-end. Of this amount, Finnish securities issued in Finland and held at the APK accounted for EUR 55 billion.

Tier one securities still account for over 90% of the Eurosystem's stock of eligible securities, although the share of tier two securities did increase in 2000. The bulk of tier two securities is marketable and largely comprises shares; nonmarketable securities

account for less than 1% of the total. The breakdown is quite different in Finland, where the EUR 42 billion worth of tier one securities accounts for about three-quarters of all eligible securities issued in Finland and held at the APK. Finland's tier one assets are comprised mainly of government bonds and Treasury bills. In the year under review, EUR 762 million worth (nominal value) of corporate bonds in book-entry form and commercial paper were added to the tier one list. The Bank of Finland's tier two list currently includes only bank CDs, in the amount of EUR 14 billion.

In accordance with a decision made by the ECB's Governing Council in April, tier two securities were divided into four liquidity classes. Haircuts applied to each class are based on the level and volatility of yields, as well as the assumed realization and maturity dates. The decision entered into force at the start of September and as a result haircuts applied to Finnish tier two assets rose to 11%.

In connection with the transfer of eligible securities issued in another EU country, the Eurosystem approves of delivery of collateral for central bank financing not only via the correspondent central banking model (CCBM) but also via links between central securities depositories. There were 62 approved links at the end of 2000, including those between the APK and Clearstream Banking Frankfurt and between the APK and the French Sicovam. These links enable two-way transfers of securities between Finland and Germany or France.

## Use of collateral in the euro area and Finland

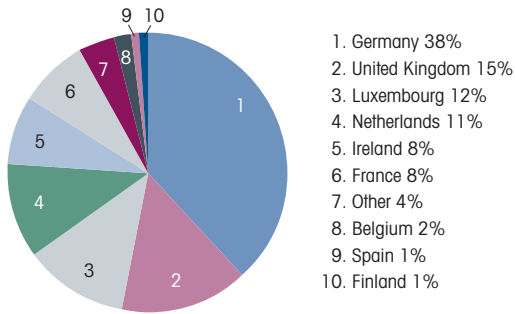
For the whole euro area, domestic tier one securities again accounted for the bulk of collateral usage, although their share in total usage decreased compared with 1999, and the share of foreign collateral increased. The share of domestic tier two collateral in total usage remained virtually unchanged. The shares of domestic collateral for banks located in Finland are in line with the distribution of the stock of collateral in Finland.

The use of foreign collateral increased in the euro area during 2000. The ECB had prepared for the effects of the millennium changeover by providing extra liquidity to the banking system in the last main refinancing operation of 1999. The banks ensured smooth payment flows by seeing to it that they had adequate collateral. Even excluding the impact of the exceptional turn-of-year collateral usage, the use of foreign collateral via the CCBM amounted to almost a third more on average in 2000 as compared with 1999. Of total foreign collateral usage in the euro area, 41% was in Italian issues and 14% in German issues (Chart 16). Securities issued in Finland accounted for less than 1% of total foreign collateral usage.

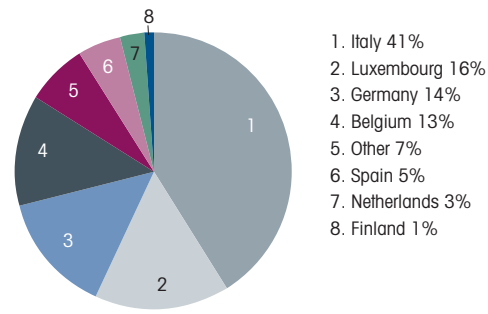
Banks located in Finland covered about a fifth of their collateral needs with foreign collateral via the CCBM or links between central securities depositories. Of the total usage of foreign collateral in the Eurosystem, banks located in Finland accounted for about 1%, compared with eg 38% for banks locat-

**Chart 16.**  
**Cross-border use of collateral by central banks in the EU area, situation at end-2000**

Breakdown by user country



Breakdown by country of issue



Source: European Central Bank.

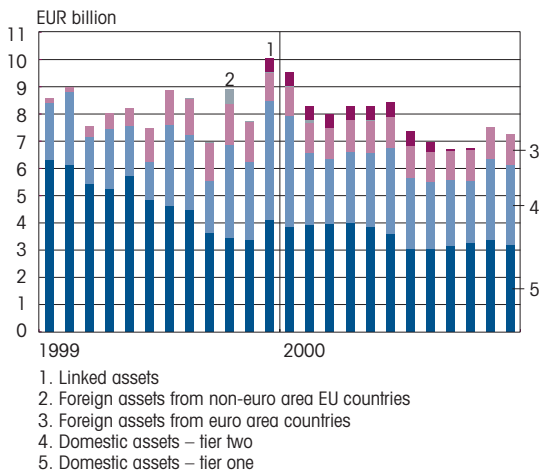
ed in Germany (Chart 16). Banks located in Finland used ‘outs-collateral’ approved by non-euro area EU central banks to a very limited extent in 2000 (Chart 17).

Collateral is managed in the Eurosystem by means of either pledging or earmarking. As regards the latter, credit is extended against earmarked securities as specified

in repurchase agreements. The Bank of Finland relies mainly on pledging arrangements to manage collateral for monetary policy operations and intraday credits. However, repurchase agreements are used in cases where the pledging of assets is problematic from a legal standpoint. In 2000 the Bank of Finland entered into only a few such repurchase agreements, and at the end of the year there were no open repos related to collateral management.

The total value of collateral pledged to the Bank of Finland was EUR 7 billion at end-2000, which was almost a third less than at the millennium changeover. The difference was partly due to the banks’ liquidity build-up in anticipation of the changeover. At the end of 2000 the Bank of Finland was holding in custody about EUR 1 billion worth of securities on behalf of other central banks.

**Chart 17.**  
**Value of pledged collateral assets held at the Bank of Finland in 1999 and 2000, end-of-month stocks**



Source: Bank of Finland.



# Economic developments in Finland

**T**he Finnish economy has been growing at a very rapid pace for many years now. Real GDP grew at an average annual rate of 4.5% in the period 1994–1999 and at an even faster rate in 2000. Rapid growth has been evident in prices and costs, as the rise in wages and prices in Finland has been slightly faster than in the euro area on average. Finland's inflation rate in 2000 was 0.6 percentage point faster than the euro area average. Reflecting the country's good economic performance, the number of employed increased and the unemployment rate has fallen to roughly the average level for the euro area. Faster export growth than in the previous year further strengthened the current account, which remained in healthy surplus, despite the fact that the value of imports increased as a result of higher oil prices. Robust economic growth and a relatively stringent stance with regard to spending further strengthened central government finances.

Companies' capital structures have remained sound and profitability has been exceptionally good. Strong corporate balance sheets are essential in a situation where Finland is no longer able to conduct its own monetary policy.

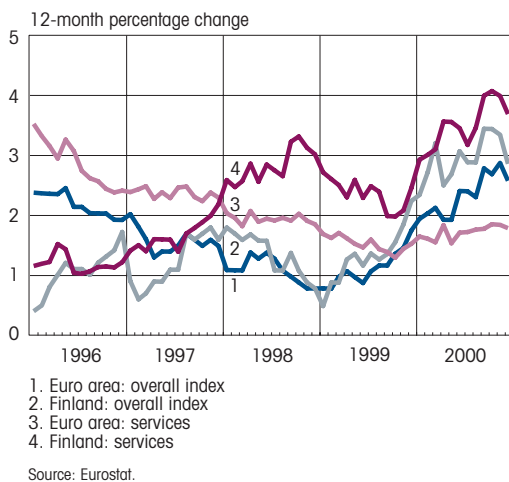
Household indebtedness has also remained at a reasonable level.

Though a number of external factors have helped Finland to adjust to the Third Stage of Economic and Monetary Union, developments at home have also made a positive contribution towards maintenance of monetary stability. In the new monetary policy environment, the responsibility for ensuring stable development has shifted to fiscal and labour market policy. Growth of public expenditure has been contained and rapidly rising tax receipts have been used to improve the central government's fiscal position. This has provided the means to deal with the challenges facing public finances in the future. Similarly, there has continued to be reasonable restraint in the labour market, although it would be better for employment if more attention were paid to sectoral differences in determining the scope for pay increases.

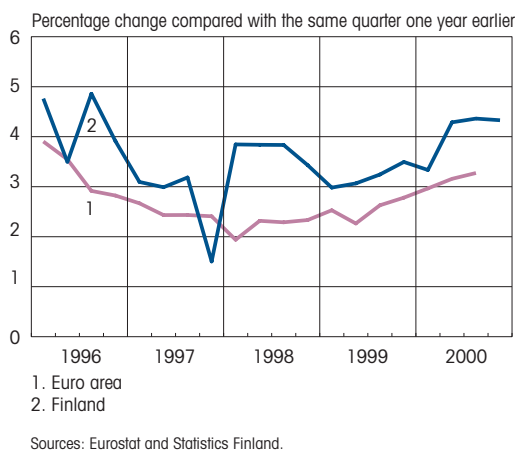
## Rate of increase in prices picked up during the year

The rate of increase in consumer prices in Finland picked up markedly in the course of 2000 and exceeded the euro area average by

**Chart 18.**  
**Harmonized Index of Consumer Prices**



**Chart 19.**  
**Industrial earnings**



a clear margin already at the beginning of the year. The Harmonized Index of Consumer Prices (HICP) rose by 3.0% in 2000 on average, compared with only 1.3% in 1999, the first year of monetary union. In December 2000 the 12-month rise in the HICP was 2.9%. As in other euro area countries, the main factors behind the pick-up in the rate of inflation were higher

oil product prices and to some extent also the rise in other import prices due to the weakness of the euro. An additional factor in Finland was a rise in services prices, which was faster than in the other euro area countries (Chart 18). This probably reflects the rapid rise in wages in relation to productivity growth in the Finnish services sector.

Measured by the national consumer price index (CPI), inflation in Finland was even faster than indicated by the HICP. In January 2000 the 12-month change in the CPI was 2.2% but by September it had accelerated to 4.2%, before slowing towards the end of the year. In addition to higher import prices, CPI inflation was affected by a rapid rise in lending rates in 2000. In fact, the rise in interest rates came at the right time as regards the housing market, which was in the process of overheating. The rise in housing prices came to end in the spring and prices even fell during the summer and the autumn.

The rise in import prices, which had started in the previous year, continued in 2000, mainly because of the increase in oil prices. Prices of some other commodities also increased. The effect on prices of production inputs of the rise in world commodity prices denominated in US dollars was reinforced by the euro's weak exchange rate. By contrast, intense international competition moderated the rise in prices of imports of finished products in spite of the euro's depreciation. All in all, import prices increased by 6.5% in the twelve months to December 2000.

Finnish export prices increased at an exceptionally rapid pace, mainly because of higher prices of products in the paper and basic metal industries. In addition to strong demand, export prices in these branches were boosted by high capacity utilization rates in both Finland and competitor countries. The weakening of the euro's

exchange rate also contributed to the rise in export prices. In contrast to previous years, export prices in the electrical and electronic equipment industries fell only modestly. On the whole, export prices continued to rise until late in the year, although signs of a softening in demand already began to emerge in some sectors during the autumn. Export prices increased by 8.1% in the twelve months to December 2000.

The rate of increase in wages picked up noticeably in 2000. Starting from the second quarter of the year, the index of wage and salary earnings rose at an annual rate of over 4% (Chart 19). The pick-up in the rate of increase in wages was due to the one-year collective agreements reached at the beginning of the year, which resulted in an average increase in negotiated wages of just over 3% in 2000.

A two-year centralized incomes policy agreement covering the vast majority of wage earners was reached in autumn 2000. The agreement, which is valid until 31 January 2003, will raise wage costs by about 3.1% in the first year and by about 2.3% in the second year. The pay increases include a 0.4% equality allowance and 0.5% sectoral allowance in the first year. The agreement also includes an index clause, which is based on the change in the consumer price index between January and December 2001. The index clause will be triggered if the CPI increases by more than 2.6%. No wage increase will be paid, however, if the rise in the CPI exceeds this limit by 0.4% or less. The impact of the incomes

agreement on wage costs is roughly the same as that reached at union level in the previous wage round.

### Growth of lending slowed

The Finnish contribution to the euro area broad monetary aggregate M3 started to decrease soon after the start of 2000 and by the end of 2000 it was 3.7% smaller than one year earlier. In contrast, the euro area M3 grew by 5.2% over the same period. The Finnish contribution varied widely from month to month, which was mainly due to large fluctuations in the public's holdings of money market paper.

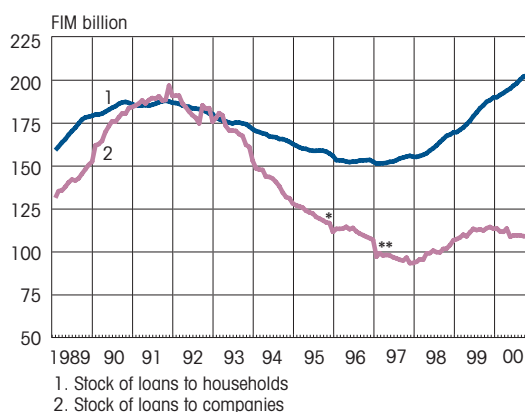
The popularity of bank deposits declined in the course of 2000, as there was heavy net investment in foreign mutual funds, particularly in the early months of the year in response to the rise in share

prices. Insurance-related investment also increased. The popularity of transaction accounts and other low-interest accounts decreased as a result of a rise in market interest rates and a change in the tax treatment of these deposits.

The growth of the stock of bank loans slowed (Chart 20). The stock of bank loans to companies remained unchanged but borrowing by companies from other financial institutions increased to the extent that the total stock of domestic loans to companies increased. Companies used mainly foreign sources of funding to finance their fairly large investments abroad.

Growth of bank loans to households slowed because of the rise in lending rates. After peaking in the first half of 1999, the annual rate of growth in new housing loans slowed to about 10% at the end of 2000, reflecting the quieter conditions in the housing market.

**Chart 20.**  
Stock of bank lending to households and companies in Finland



\* 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.

Interest rates on new housing loans rose by about one and half percentage points in the course of 2000 along with the rise in market interest rates. At the same time banks' own reference rates were chosen instead of market interest rates for nearly all new housing loans. The margin between bank lending rates and deposit rates widened as deposit rates rose by only about half as much as lending rates, despite the fact that the end of the tax exemption of deposits led to increased interest rate competition.

### Economic growth was driven by strong export demand

The pace of economic growth in Finland picked up markedly from the previous year as a result of faster export growth. Real GDP increased by 5.7% in 2000, exceeding the euro area average by a substantial margin; in 1999 the economy had grown by 4.2%

(Chart 21). Among the factors behind the growth of exports were a very rapid increase in world trade and an exceptionally sharp increase in world demand for telecommunications equipment. Finnish exports to markets outside the euro area also benefited from the weakened euro until late in the year. The Asian economies continued to recover from the crises in previous years and markets in eastern Europe also began to recover. Exports to Asian countries increased by nearly a half and those to Russia by 30%. Towards the end of the year demand in Russia and Asia, as too in European export markets, started to slow.

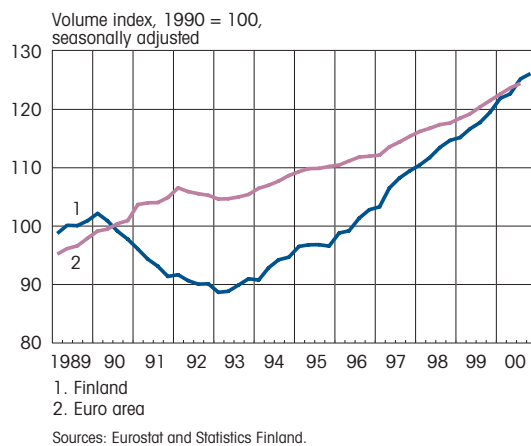
Reflecting the positive developments in export markets, the total volume of exports grew by as much as 17.7% and goods exports by 20%. Thus Finnish exports grew at a notably faster pace than world trade. Exports of the electronic equipment industry increased by a full 40%. Within a

few years this sector has developed into a key export industry alongside the forest industries and traditional metal and engineering industries, and it already accounts for about a third of the total value of goods exports, which is larger than the share of the forest industries. Several other sectors also benefited from the rapid expansion of world trade. In addition, the forest industries and the basic metal industry benefited from higher world market prices for their products.

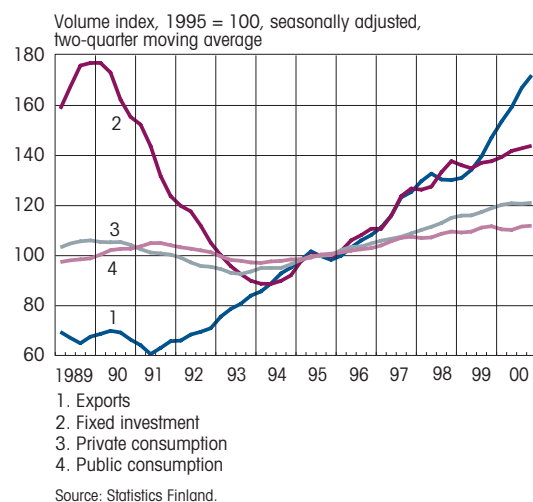
### Growth of domestic demand picked up as well

GDP growth was also boosted by the continued rapid growth of total domestic demand (Chart 22). In the early part of 2000 domestic markets were already overheating to some extent under the combined pressure of buoyant consumer and investment demand. Sales of con-

**Chart 21.**  
GDP in Finland and the euro area



**Chart 22.**  
Structure of demand



sumer durables, cars and dwellings were running at high levels. Consumers' and firms' optimism was underpinned by a sharp rise in stock prices, which continued until March, as well as by rising incomes. Incomes and wealth grew particularly strongly in the Greater Helsinki area as well as in other growth localities that have benefited from the good performance of the electronic equipment industry.

Adding to the risk of overheating was the very low level of interest rates at the beginning of the year. Lending rates had fallen both as a result of the decline in Euribor rates and the squeezing of interest rate margins in connection with interbank competition. As in the previous year, the stance of euro area monetary policy at the beginning of 2000 was fairly lax with respect to the economic situation in Finland. But a gradual rise in interest rates in the course of the spring and the summer, together with an increase in oil prices and a fall in stock prices, meant that the danger of overheating had receded by the time winter was at hand.

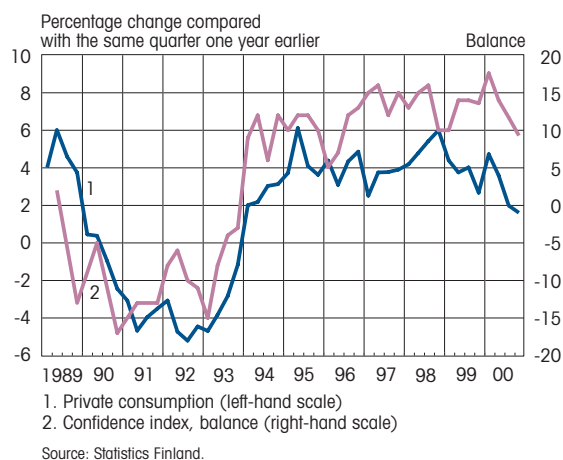
According to the consumer confidence indicator, households' confidence strengthened in the period from the launch of monetary union at the beginning of 1999 to February–March 2000 (Chart 23). Although confidence did subsequently weaken slightly during the spring, it was nevertheless still very high. Not until the autumn did disturbances in the oil market and fears of a further rise in interest rates start to undermine confidence about future developments in the Finnish economy. The household debt ratio is relatively

low in Finland, however, and debt service expenses account for only a small proportion of income (Chart 24). In consumer confidence surveys, consumers have repeatedly considered their own economic and financial situation to be strong.

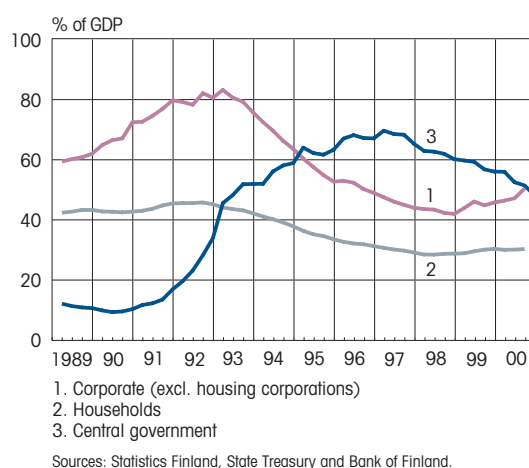
Owing to the pick-up in inflation, the growth of households' real disposable income in 2000 was a little slower than in 1999,

despite the fact that wages grew faster than in the previous year. Admittedly, employment growth was also slower on average than in the previous year. Wage-earners' share of national income was smaller than in 1999 as the operating surplus of the corporate sector grew faster than total output as a result of higher export prices and a sharp increase in productivity in the electronic equipment industry.

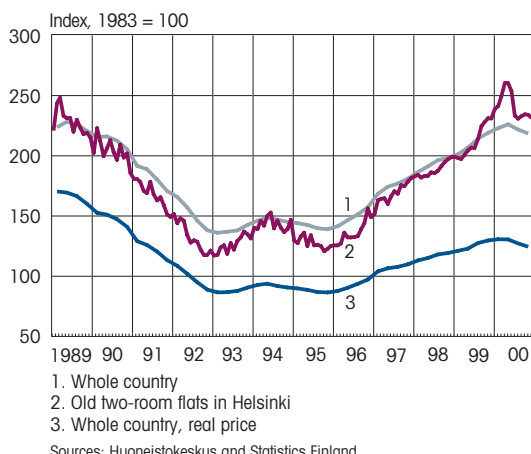
**Chart 23.**  
**Consumption and consumer confidence indicator**



**Chart 24.**  
**Sector indebtedness**



**Chart 25.**  
**Housing prices in Finland**



On the other hand, the rise in the value of dwellings and equity wealth provided more scope for consumer spending. Consequently, the household saving ratio fell noticeably in 2000.

As a result of strong growth in the early part of 2000, private consumption increased by 3.0% from the previous year. This was nearly the same rate of growth as in 1999. After the summer households had to consider their spending plans more carefully than before following the large increase in fuel prices. The increase in uncertainty in the autumn made consumers reduce purchases of durables, and demand for many products, such as cars, decreased.

Activity in the housing market remained brisk in the early months of the year, and selling times for properties were short in a large part of the country. In some of the more popular areas, asking prices jumped higher as would-be buyers competed for the best properties. During the spring conditions in the

housing market started to steady, and after the summer selling times lengthened and prices began to fall. A sharp increase in mortgage rates quashed expectations of a continuing rise in prices. In the late autumn housing market conditions in the Greater Helsinki area started to return to normal and prices levelled off. In the last quarter of 2000 prices of old flats in country as a whole returned to the level they had been one year earlier (Chart 25). Partly as a reflection of the unsettled conditions in the housing market, the volume of housing investment grew noticeably less than in the previous year.

Corporate profitability was exceptionally good on average in 2000 as capacity utilization rates were high and, partly because of the weakening of the euro, export prices continued to rise until the late in the year. A major factor behind the improvement in the average profitability of industrial companies was the good performance of the electronic equipment

industry, where the rate of productivity growth increased further. In many other sectors, however, productivity growth was modest. In the electronic equipment industry, the fastest growth in production inputs occurred in research and development, whereas there was little new investment in productive capacity. Problems in the availability of timber supplies limit the scope for expansion on a large scale by the forest industries in Finland. Thus, despite good profitability, growth of fixed investment in industry was fairly low in comparison with previous years. The expansion of operations by companies abroad may have also been a factor affecting investment activity in Finland. Overall, private investment increased by 5.7% in 2000.

### Broad-based increase in industrial output

The rate of growth in industrial output increased in 2000 from the previous year. In addition to a sharp increase in output in the electronic equipment industry, output grew in several other key industrial sectors as a result of good demand (Chart 26). Up until the summer nearly all the main industrial sectors enjoyed very favourable operating conditions. A few sectors remained in difficulties, however. For example, output decreased in the textiles, clothing, leather and shoe industries. Although activity in the construction sector quietened towards the end of the year, output for 2000 on average was still significantly higher than in the previous year. Growth

of manufacturing output began to slow in many branches during the autumn, but capacity utilization rates nevertheless remained high for the most part.

Within the space of just a few years the electronic equipment industry has evolved into the third pillar of Finland's productive base alongside the traditional forest and metal and engineering industries. Although output growth in the electronic equipment industry had levelled off in the latter part of 1999, growth for 2000 on average was still as high as 35% (Chart 27). In the most important branch, the manufacture of telecommunications equipment, output growth was even more impressive, at 47%. World demand for these products continued to grow at a rapid pace until the end of 2000, in addition to which Finland – essentially Nokia – increased its market share in this product group.

In the other metal and engineering industries, manufacture of machinery and equipment did not reach the same rate of growth as before the Asian crisis. Similarly, the manufacture of transport equipment did not start to recover until the latter part of the year. Output growth was modest in many labour-intensive branches of the metal and engineering industries. By contrast, there was strong demand for the products of the capital-intensive basic metal industry, and this branch was able to benefit from the international economic upturn.

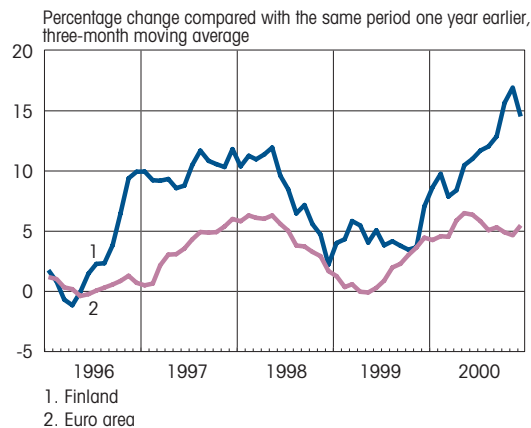
The year 2000 was also a good one for the forest industries, both in terms of volume of production and prices. In addition to favour-

able markets conditions, the forest industries benefited from the weak euro. The sector recovered quickly from the Asian crisis and prices of paper products continued to rise at a rapid pace until late 2000. Export prices of forest industry products grew by 11% on average and the volume of production by 6%. Although the market situation started to weaken at the very end of the year, this did not

show up in the output figures for 2000.

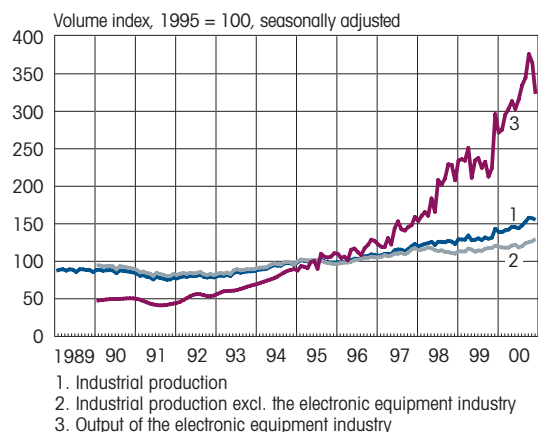
Production gathered steam in some other manufacturing branches in the course of 2000. Output in the chemical industry grew markedly from the previous year. There was some variation in the performance of this branch, however, which was further accentuated by the rise in oil prices. Output was boosted by the pick-up in con-

**Chart 26.**  
**Industrial production**



Sources: Eurostat and Statistics Finland.

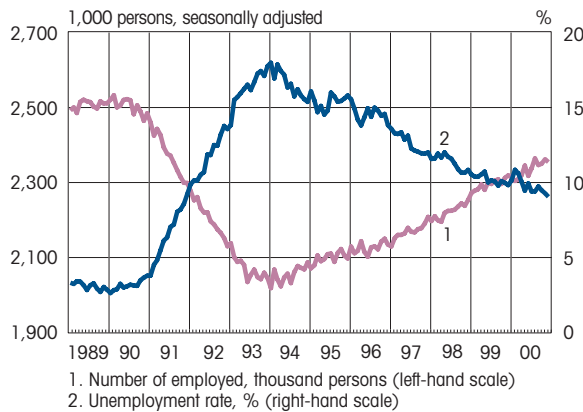
**Chart 27.**  
**Electronic equipment industry and industrial production**



Sources: Statistics Finland and Bank of Finland.



**Chart 28.**  
Number of employed and unemployment rate



Sources: Statistics Finland and Bank of Finland.

## Employment increased and unemployment fell slightly

The number of employed increased by 40,000 (1.7%) in 2000 on average (Chart 28). This was a smaller improvement than in 1999 despite faster GDP growth in 2000. The slower increase in employment was largely due to the fact that output growth was fastest in the capital-intensive sectors and in sectors with very high productivity growth. Whereas previously new jobs were created mainly in manufacturing, the strongest job growth in 2000 occurred in business and financial services. Employment also increased in the public sector. Although manufacturing employment fell slightly towards the end of 2000, it nevertheless grew by 1.4% for the year on average. In contrast, there was no increase in employment in the trade or construction sectors. The seasonally adjusted employment rate stood at 67.4% at the end of 2000.

Unemployment continued to fall slowly, and the seasonally adjusted unemployment rate stood at 9.1% at the end of 2000, compared with 9.9% one year earlier. There was also some alleviation of problems caused by structural unemployment. The number of long-term unemployed fell further as did the number of persons covered by labour market policy measures. Older persons and young people found it easier to find jobs than before. However, regional differences in unemployment decreased only a little, despite increased internal migration; unemployment remained a serious problem in Lapland, for example.

struction activity and manufacture of components in the electronic equipment industry. Several other branches benefited from the growth of domestic demand and construction activity and the food industry from the recovery in the Russian market, which had collapsed in connection with the Russian economic crisis in 1998.

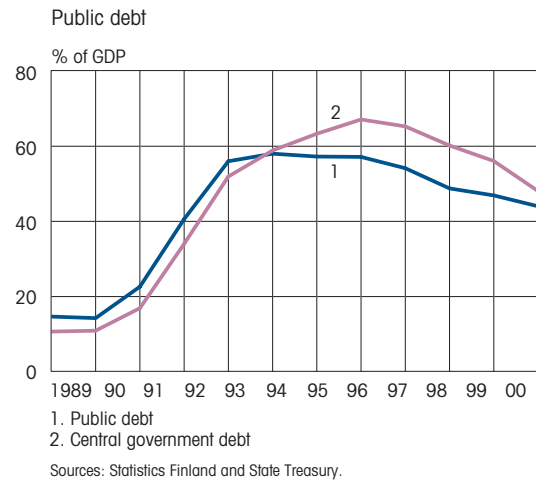
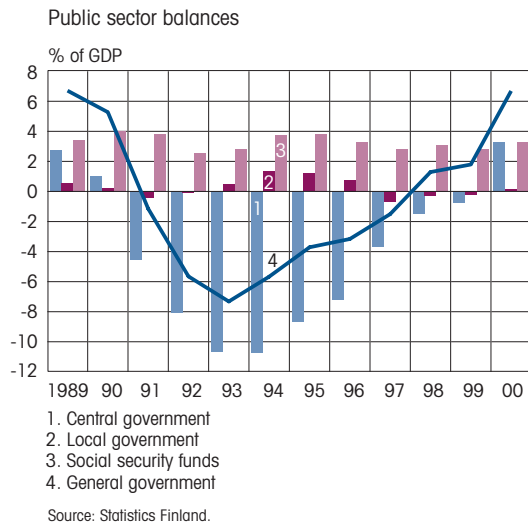
On the whole, activity in the construction sector remained fairly robust in 2000, although there were regional variations. In the Greater Helsinki area, in particular, very high occupancy rates and rising rents helped to sustain activity in the commercial property market. Building activity peaked in the early part of the year. There was a substantial increase in new commercial construction throughout the country. Residential building activity remained brisk as well, but growth was smaller in volume terms than in the previous year. The outlook for the construction sector weakened in the latter part of the year, despite shortages of

housing and office space in growth localities. Planned starts in the residential and commercial property sectors were deferred, partly in response to increased uncertainty caused by higher interest rates. As a result of strong activity in the early part of the year, however, growth of construction sector output in 2000 was about the same as in the previous year.

Service sector output was boosted by rapid growth of exports and private consumption. Transport and business services, which benefited from the growth of industrial production, expanded considerably in 2000. Activity in the financial services sector grew as a result of increased interest in wealth management. Output growth also picked up noticeably in the trade sector in the early part of the year. Although the rate of growth slowed in several subsectors in the latter part of the year, growth of output for the trade sector as a whole was higher than in the previous year.



**Chart 29.**  
**Public finances**



## Record improvement in central government finances

Continued robust economic growth and a relatively stringent approach to spending in central government finances further strengthened general government finances in 2000. Central government finances moved into surplus, local government finances shifted into a small surplus and the surplus in social security funds remained at about the same level as in the previous year (Chart 29). The surplus in general government finances totalled FIM 52.2 billion, equivalent to 6.7% of GDP. There was a further decline in public sector indebtedness.

Income taxes in 2000 were cut by making an inflation adjustment to tax scales at the beginning of the year and by introducing new tax tables in June, whereby the basic rate of income tax payable by wage and salary earners was reduced by one percentage point. In addition, the pensioners' health insurance

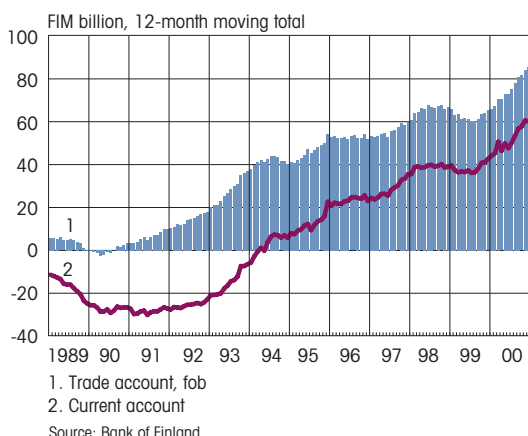
contribution rate was lowered. On the other hand, taxation for 2000 contained several elements that had a tightening impact, including, for example, abolition of the tax exemption of deposits and of the additional allowance for interest payments on housing loans as well as a one percentage point increase in the capital income tax rate. These changes almost offset the cuts in income tax. Corporate taxation increased by an amount equivalent to the increase in the capital income tax rate. Indirect labour costs declined, however, because of a cut in the unemployment insurance contribution rates for employees and employers. On the other hand, there was a small increase in the contribution rates of employers in the local government sector to the earnings-related pension scheme.

Revenue from income and wealth taxes grew sharply in 2000. Taxes paid by households were boosted by the faster rate of increase in total wages, tax on op-

tions income and capital gains tax on share transactions, and smaller tax cuts than in the previous year. Underlying the growth in corporate tax receipts was firms' continued good profitability, supplementary taxes in respect of taxation in previous years and capital gains in connection with corporate restructurings. The central government's relative share of tax revenue in 2000 grew because of options income, among other things. Altogether, central government receipts from direct taxes increased by 38%. Revenue from indirect taxes increased only a little in 2000. Revenue from fuel taxes decreased because of lower demand for fuels. Together with lower excise duties on alcohol, this reduced total receipts from excise duties compared with the previous year. There was an exceptionally large increase in the central government's dividend income as a result of corporate restructurings.

The rapid growth of corporate tax receipts boosted municipalities'

**Chart 30.**  
**Trade account and current account**



revenue as well. Real estate tax receipts also increased faster than in the previous year, but they still make up only a small proportion of municipalities' total tax revenue. Government grants to municipalities started to grow again with the changeover to full compensation for changes in the level of costs and an increase in discretionary grants. The revenue of the local government sector grew by 8% in all. Contributions to social security funds increased at a slightly slower pace than total wages because of the cuts in the contribution rates for unemployment insurance. There was a sharp increase in the dividend revenue of the employment pension funds, which was due to the fact that the funds invested a noticeably larger proportion of their financial assets than before in shares. The interest income of employment pension funds decreased from the previous year.

Central government expenditure hardly increased at all in 2000.

Tax receipts and proceeds from privatization grew faster than forecast, and in the three supplementary budgets for 2000 this additional revenue was used mainly to repay outstanding debt and to augment the assets of the State Pension Fund. Additional funds were also allocated to cover wage and salary expenses. All in all, central government expenditure grew by 0.4% in 2000.

The rate of increase in spending by municipalities increased along with the rise in revenue. Municipalities improved the level of social services provision. This was reflected in increased consumption expenditure, which rose by 4.6% from the previous year. By contrast, expenditure by social security funds fell slightly. Expenditure related to unemployment declined as a consequence of a further improvement in the employment situation. There was hardly any increase in pension expenditure as the pension index

rose only a little and the number of pensioners did not increase significantly.

The central government's debt position improved as a result of the budget surplus and continued robust economic growth; the debt-to-GDP ratio stood at 48% at end-2000. General government debt declined less than central government debt as the employment pension institutions ran down their investments in government securities faster than the decline in outstanding debt. The general government debt-to-GDP ratio (Maastricht definition) stood at 44% at end-2000.

In the spring and the autumn the Government specified the fiscal policy objectives for the next few years. The spending ceilings set for 2001—2004 in the budgetary framework were drawn up largely in conformity with the original guidelines set out in the Government's programme. The aim is to keep real expenditure in the period 2001—2004 at the budgeted level for 1999. The Government further decided that, if necessary for cyclical reasons, the savings resulting from lower unemployment and lower debt service expenses would not be used to increase other expenditure. Central government outlays in the budget proposal for 2001 slightly exceed the spending ceilings. The September update of the stability programme for 2001—2004 is based on the spending guidelines in the budgetary framework and the assumption that GDP will grow by over 3% a year on average. The general government surplus is projected to stabilize at around

4.5% of GDP and the central government surplus to remain in the region of 1.5–2% of GDP.

### The current account strengthened despite the rise in oil prices

The rapid growth of industrial production boosted imports of raw materials and production inputs in 2000. Imports of consumer goods also increased. Deliveries peaked in the spring and early summer when the economic outlook was still good. The rise in the oil price increased the value of imports. Total goods imports grew by 9% in volume from the previous year and by 23% in value. As the volume of exports grew by over 20% and the terms of trade remained virtually unchanged, the trade surplus widened to FIM 76 billion in 2000.

Reflecting the increase in non-residents' holdings in Finnish companies, the deficit on the income account increased to FIM 13.8 billion. Dividends on nonresidents' holdings amounted to FIM 14.6 billion. Owing to the large trade surplus, however, the current account surplus widened further to FIM 60 billion (Chart 30). In relation to national GDP, Finland's current account surplus is, at 7.7%, one of the largest in the euro area. The euro area as a whole had a very slight deficit. In contrast to Finland, export growth in the euro area was not able to compensate in full for the higher cost of oil im-

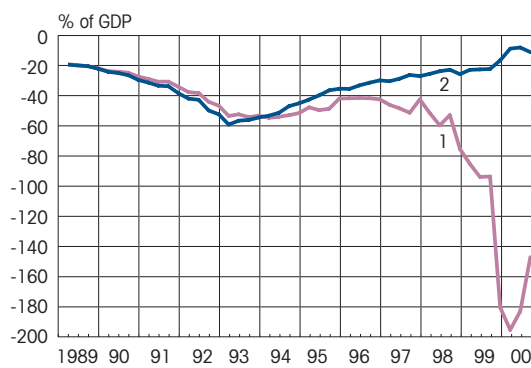
ports. The current account no longer has the same significance for economic policy that it had earlier, however.

As a result of a succession of large current account surpluses in recent years, there has been a rapid decline in Finland's external indebtedness (Chart 31). Net external debt (external liabilities minus assets, excl. equity items) amounted to just FIM 88.7 billion at end-2000, compared with almost FIM 200 billion at end-1995. The net external debt position of companies and financial institutions already shows a net claim. The net external debt of the general government sector was small, as there was no increase in the central government's external debt and the employment pension funds invested in foreign securities. At the end of 2000 the central government's

net external debt stood at about 29.9% of GDP.

Finland had external assets totalling FIM 938.8 billion at end-2000 and external liabilities totalling FIM 2,090.1 billion, so that Finland's net investment position showed a negative balance of FIM 1,151.3 billion. The large size of the net liability position is due to nonresidents' large holdings of Finnish shares and the sharp rise in share prices in recent years. The market value of nonresidents' holdings of Finnish shares fell to some extent in 2000, however, along with the fall in share prices, even though nonresidents' net investment in Finnish shares continued. The market value of nonresidents' holdings of Finnish shares amounted to FIM 1,306.3 billion at end-2000.

**Chart 31.**  
Net international investment position



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

Sources: Bank of Finland and Statistics Finland.

# Financial markets

One of the tasks of the Bank of Finland is to promote the stability, reliability and efficiency of the Finnish financial system and to participate in its development. Besides its domestic tasks, the Bank – as a member of the European System of Central Banks – works towards the same goals at international level, especially in the euro area.

In 2000 the Bank of Finland produced numerous reports and analyses on the stability, efficiency and structural development of the financial markets. Analytical findings were discussed eg in articles published in the Bank's various publications: *Euro & talous*, *Bank of Finland Bulletin*, discussion papers and working papers. In addition, Bank staff made numerous presentations, both in Finland and abroad.

As regards legislative preparation, the Bank participated, inter alia, in the banking services working group and rendered opinions on legislative proposals. The Bank also cooperated with other authorities, especially the Financial Supervision Authority (FSA).

The Bank of Finland participated in the Banking Supervision Committee of the European System of Central Banks (ESCB) and

four related working groups, as well as the Banking Advisory Committee, which functions under the aegis of the European Commission. In these fora, the Bank worked to promote financial market stability and efficiency and to develop international regulation and supervision.

The Banking Supervision Committee focused on analyses of banks' soundness and banking sector restructuring in the EU, as well as on improving cooperation in banking supervision. One of the main tasks of the Banking Advisory Committee was to participate in revision of capital adequacy requirements for credit institutions and investment firms. The Bank of Finland participated actively in the working group on the use of internal credit risk models. Within the Banking Advisory Committee, the focus was on developing regulations for financial conglomerates. The Bank also participated in the Brouwer working group.

In addition to the work of the ESCB and EU, the Bank of Finland was also actively involved in international cooperation regarding financial markets via the International Monetary Fund, the Bank for International Settlements and the Organization for Economic Cooperation and Development. The

Bank also worked with other Nordic central banks on monitoring financial markets and analysing their soundness.

## Banks

### Structural changes in banking

The structure of the financial sector in Europe is changing continuously. Although bank mergers have so far been mostly national in scope, some international mergers have taken place and others are planned. Mergers between banks and insurance companies are also on the rise.

The first significant example of financial conglomeration in Finland is the financial services group Sampo-Leonia, which is the result of a merger between Leonia and Sampo insurance Ltd. The investment bank Mandatum Bank was merged with the group at the beginning of 2001. The Sampo-Leonia merger was effected at the end of 1999 and further consolidation occurred in 2000. One decision made in the autumn was to combine funds management and asset management. The new group commenced operations at the start of 2001 and Sampo-Leonia became Finland's first important financial conglomerate. The commencement of activities by the holding company, Sampo-Leonia, which is listed on the stock exchange, was delayed until end-March 2001.

The Nordic Baltic Holding group continued its restructuring in 2000. In the spring the Danish Unidanmark group became a member of Nordic Baltic Holding, and the final phase of the group's Nor-

#### Box 1. Macroprudential supervision of financial markets

Promotion of the stability and efficiency of the financial system is referred to as 'oversight' or 'macroprudential supervision'. Macroprudential supervision refers to certain tasks of the central bank, especially oversight of the banking sector and surveillance of securities markets. Oversight, on the other hand, usually refers to central bank oversight of the financial infrastructure, ie payment and settlement systems. Oversight by the central bank differs from prudential supervision by financial supervisory authorities in that it focuses primarily on systemic risk aspects of financial markets and systems. In addition to systemic risk, oversight is concerned with the efficiency of financial markets. The Bank of Finland's key tasks in respect of oversight are ongoing surveillance and analysis of financial markets and participation in the development of related regulation and supervision. Analysis focuses on financial behaviour, financial institutions and development of the markets in terms of stability and efficiency. The Bank is involved in the development of the financial markets via its participation in the preparation of domestic legislation, cooperation with market participants, as well as its research and analytical work and communication of the findings to other authorities and the general public. The focus of oversight is on forecasting and crisis prevention. In serious crisis situations, the Bank participates in crisis management along with the Financial Supervision Authority and the Ministry of Finance.

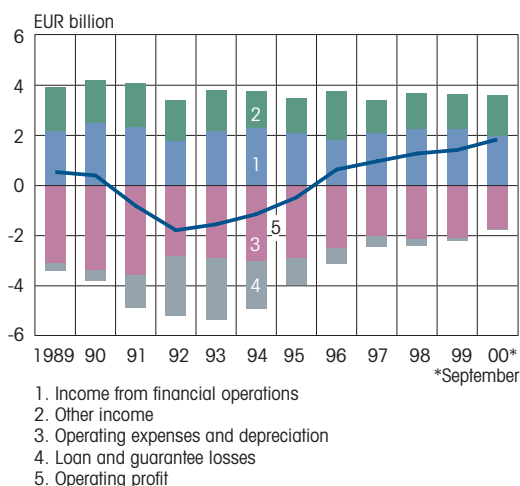
dic strategy was completed in December 2000, when the Norwegian Christiania Bank og Kreditkasse joined. The group, which was renamed Nordea, is a world leader in development of banking operations based on new technologies. The group provides its customers with a full range of banking and insurance services in Finland, Sweden, Denmark and Norway.

Besides mergers, banks have entered into various kinds of cooperation with corporate groups from

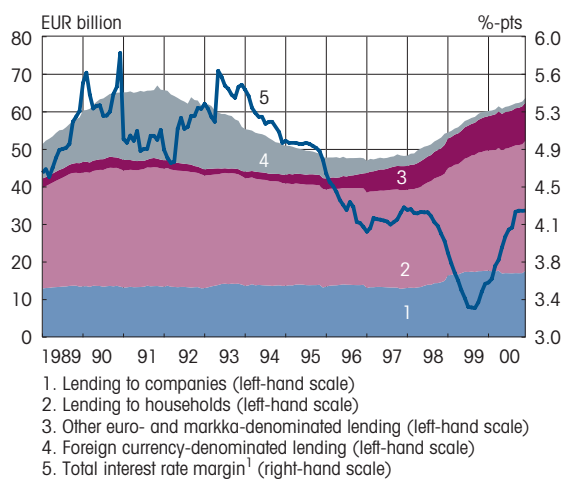
other sectors, eg insurance and retailing. In fact, the ever-quicken- ing pace of structural change in the financial sector presents formidable challenges for financial market regulation and supervision, both at domestic and international level.

Another structural change in progress in Finland is the expansion of mortgage banking business, which is helping to reduce the dependence of housing and real estate financing on short-term market interest rates and deposits.

**Chart 32.**  
Financial performance of deposit bank groups



**Chart 33.**  
Deposit banks: lending stock and total interest rate margin



<sup>1</sup> 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.

In 2000 two new credit institutions were established under the Mortgage Bank Act: OP-Asuntoluotto-pankki and Housing Loan Bank of Finland.

Competitive conditions in the Finnish housing loan market are also changing because of the entry of EuropeLoan Bank at the end of 2000. The bank operates out of Belgium and offers housing loans

only via the Internet. By the end of 2000 it was providing its services not only in Finland but also in Belgium, the Netherlands, Sweden and Germany.

The long-standing cooperation between Leonia and the postal service, through which banking services had been provided in post offices, ended at the end of 2000. Also at the end of the year, the

Council of State cancelled the license of Skopbank, at the bank's own request.

Foreign banks' market shares in Finland did not change significantly in the course of 2000, except in lending to companies. At the end of the year foreign banks' share of total lending was just over 5% and their share of deposits about 2%. Finnish branches of foreign banks have increased their share of lending to companies to about 11% through aggressive marketing.

## Bank profitability and efficiency

Uncertainty about the direction of the US economy also weakened the outlook for the banking sector towards the end of the year. Concern over the performance of the US banking sector increased when corporate profitability declined and bankruptcies increased. This led to an increase in banks' loan losses. Many US banks also had risk exposures associated with their substantial investments in telecommunication companies, both in the United States and Europe.

European banks were in good condition on average. Lending to the EU area continued to increase rapidly in 2000, at an annual rate of some 10%. There were, however, notable differences between individual countries. For example, in Germany and France lending growth remained moderate in 2000, whereas in southern Europe, Ireland and the Netherlands the lending stock increased sharply.

Profitability in the Finnish banking sector was excellent in



2000, largely due to robust growth in income from financial operations and other income. As market interest rates rose, the margin between lending and deposit rates widened, which strengthened banks' net income from financial operations, particularly in the first half of the year (Chart 32).

The expected intensification of deposit competition was not yet reflected in a narrowing in the total interest rate margin (Chart 33).

Net income from financial operations increased by nearly 20% in 2000 compared with 1999. There was a substantial increase in fee income, which was due to rapid growth in payment flows and asset management fees. Fee income from securities transactions remained strong despite a decline in the latter part of the year.

The growth in bank lending slowed substantially in 2000. There were, however, differences across sectors. The stock of lending to households again grew fairly rapidly (8%). Although the rise in interest rates curbed growth in the stock of housing loans, banks' new housing loans to households increased by 10.6% in 2000.

The abolition of the tax-exempt status of bank deposits in June 2000 led to a slight decline in households' new deposits. Although the average interest rate on deposits rose by about 0.7 percentage point in 2000, Finnish households channelled more of their savings into mutual funds and insurance products. Banks actively marketed both of these savings outlets, which resulted in an increase in market share for mutual funds and life insurance companies owned by large banks.

## Securities markets

### Restructuring in securities markets

The European securities markets are undergoing rapid change. Major projects involving share trading and settlement operations are being planned or under preparation. Upon completion, these could result in far-reaching changes in market structure. Numerous mergers and alliances are in the offing, involving both stock exchanges and settlement organizations. However, one such project, which was announced in the spring, was not realized, ie that involving the Frankfurt and London stock exchanges. The first significant step in combining European exchanges was taken in September 2000, when the Amsterdam, Brussels and Paris stock exchanges joined together to form the new Euronext exchange. Similar projects are in progress at global level. In June seven exchanges (New York, Australia, Hong Kong, Mexico, Sao Paulo, Tokyo, Toronto) joined Europe's Euronext in announcing a joint project aimed at combining their trading systems to create a global, 24-hour trading network.

Besides traditional marketplaces, numerous electronic marketplaces and trading systems are already in place or due to be introduced. Internet-based trading and issuance are swiftly gaining dominance in the securities markets. In Finland the Helsinki Exchanges and several broking firms have begun to develop their operations to meet the demands of new technologies. Internet-based share trad-

ing appeals particularly to small investors. Such trading, nonetheless, accounted for only a few per cent of the total value of shares traded on the Helsinki Exchanges in 2000.

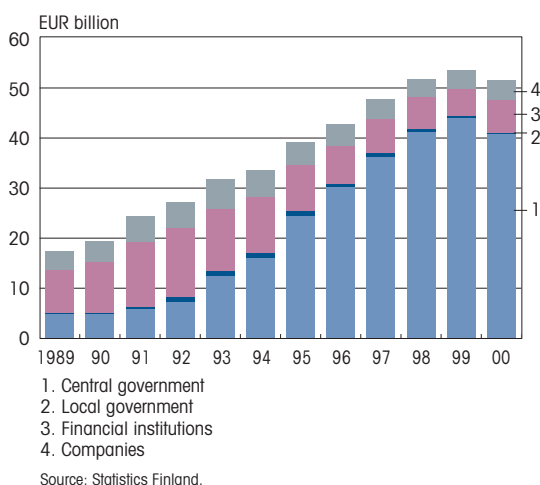
Integration of European securities markets is having an impact on investors' behaviour. Institutional investors in particular have been rapidly restructuring their portfolios. During 2000 mutual funds in the euro area grew at a rapid pace, led by global stock funds.

From the viewpoint of the individual investor, however, integration of securities markets has progressed much more slowly. Differences in taxation and regulation and in the dissemination of information have slowed the growth of international investment by individual investors. The formidable costs of cross-border trading and settlement deter the small investor from investing in foreign securities markets.

In October the European Central Securities Depositories Association (ECSDA) published a set of standards for cross-border settlement of securities trades. The purpose of the standards is to promote automated processing of trades and asset management transactions and to reduce the related costs. Adoption of the standards also facilitates the use of links between securities depositories.

As regards the Finnish securities market, the most significant development was the entry into effect in October of an amendment to the Act on the Book-Entry System that centralized book-entry securities registers within the Finnish Central Securities Depository.

**Chart 34.**  
**Bonds issued in Finland, end-year stocks**



tory (APK). The centralization of registers was necessary for the competitiveness of the Finnish securities market, as it enables further development of custodial and settlement systems as well as the book-entry system as a whole.

The tightening of competition has already become apparent in many aspects of the operations of marketplaces and settlement systems. Many European exchanges have begun to study the prospects for converting marketplaces into listed limited companies. On June 2000 the management of the Helsinki Exchanges Group (HEX) decided to explore the possibility of its own listing.

### Developments in securities markets in 2000

The introduction of the euro has had a positive impact on new issue activity in the euro-denominated bond market for a couple of years

now. Issues have increased as the markets have expanded, and new issuers have entered the markets. The primary beneficiaries have been companies and financial institutions that can now issue debt instruments in extensive market areas rather than more limited domestic markets. Central governments are still among the major issuers of euro-denominated bonds, accounting for 46% of total issuance in 2000. Despite the decline in issuance of mortgage bonds, the share of financial institutions in total issuance was 35%. Because of the increased financing needs of telecommunication operators, issuance of euro-denominated bonds increased compared with 1999.

The central government's budget surplus had a significant impact on the Finnish bond market. The stock of bonds began to decline in 2000, when the stock of outstanding central government bonds declined by nearly 7%. The underlying factors were increases

in tax revenue and income from asset sales (Chart 34). Despite the reduction in the stock of bonds, gross issuance of central government bonds increased substantially compared with 1999, partly because of conversions into longer-term bonds. Besides its bond financing, the central government raised another EUR 3 billion via syndicated loans, a source of financing that has been used by a few other small euro area countries.

Issuance of bonds by companies in Finland increased somewhat but remained moderate, at less than EUR 500 million. Issuance by financial institutions, in contrast, increased threefold, and banks' bond funding started to pick up.

The termination in June 2000 of the tax-exempt status of interest income on deposits increased households' interest in bonds as an investment outlet, and households converted bank deposits into higher-yielding bonds. Issuance by big banks, in domestic and especially international capital markets, helped to improve credit ratings.

The long-continued rise in international stock markets came to an end early in the year when the positive mood was replaced by widespread uncertainty. Particularly in the United States, companies' profit warnings and the rise in the price of oil caused share prices to turn downward. This was most apparent in the sharp decline in share prices of IT and telecommunication companies around the world. US share prices on the technologically-oriented Nasdaq exchange fell on average by 39% in 2000. Prices of shares of smaller IT



companies in Europe, ie those on the NM list, followed suit by falling sharply in 2000. Besides the pronounced price changes in 2000, the year was marked by an exceptionally wide dispersion in companies' stock market values.

Prices of bank shares rose in 2000 in nearly all of the industrial countries. Towards the end of the year, however, they turned down on many exchanges, when investors learned that many of the large internationally active banks had made loans to, and purchased bonds issued by, IT and telecommunication companies and had invested in risk capital firms.

Price fluctuations on the IT-oriented Helsinki Exchanges in 2000 were wider than ever before. The biggest daily rise and fall in the HEX all-share index were both nearly 16%. These extreme price changes occurred on days when the

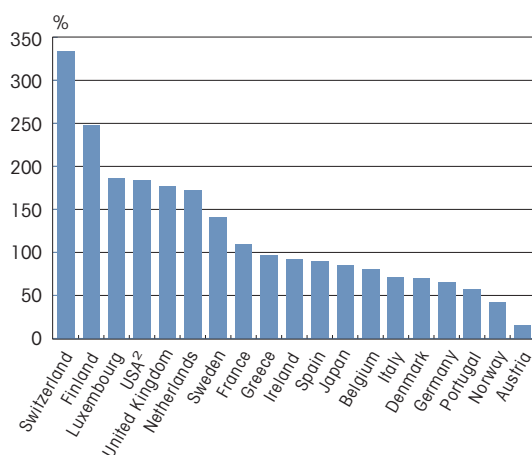
dominant company on the exchange, Nokia, released its interim reports. As prices fluctuated widely, daily trading on the exchange increased substantially. Partly for this reason, turnover doubled to EUR 227 billion. Another factor contributing to the increase in activity was the participation of several internationally active banks and broking firms as remote members.

Trading activity continued to be concentrated on a few companies. Nokia's contribution to total share trading on the stock exchange increased to about 67%, and the ten most traded shares accounted for over 90%. Share issuance on the Helsinki Exchanges rose to a record high in 2000, nearly EUR 12 billion. The largest single issue (EUR 8.6 billion) was that of StoraEnso Consolidated Papers in connection with a corpo-

rate buyout. The year-end market value of shares quoted on the Helsinki Exchanges was EUR 316 billion, which was again among the highest in the industrial countries relative to GDP (Chart 35).

International investors continued to play an increasingly active role on the Helsinki Exchanges in 2000. Their holdings accounted for more than 70% of the market value of listed shares at year-end (Chart 36). Nearly EUR 11 billion worth of Finnish shares, in net terms, were sold to foreign investors in 2000. Finnish debt instruments were also sold in large amounts to foreign investors. Sales of both money market instruments and bonds increased. Finnish pension funds sold government bonds in large amounts and purchased similar instruments issued in other euro area countries, as they changed the country-compositions of their

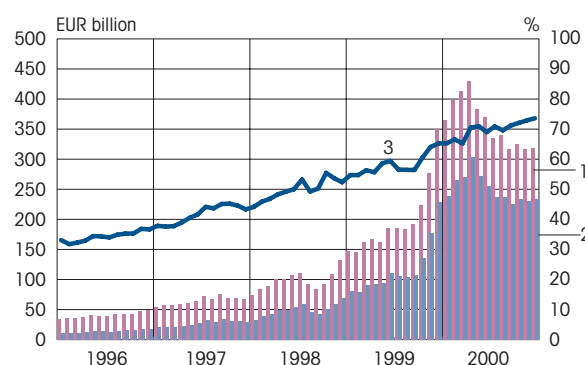
**Chart 35.**  
Ratio of market capitalization of listed shares to GDP<sup>1</sup> in selected countries as at 31 December 2000



<sup>1</sup> GDP figures are European Commission forecasts.  
<sup>2</sup> New York Stock Exchange and Nasdaq.

Sources: International Federation of Stock Exchanges, Eurostat and Bank of Finland.

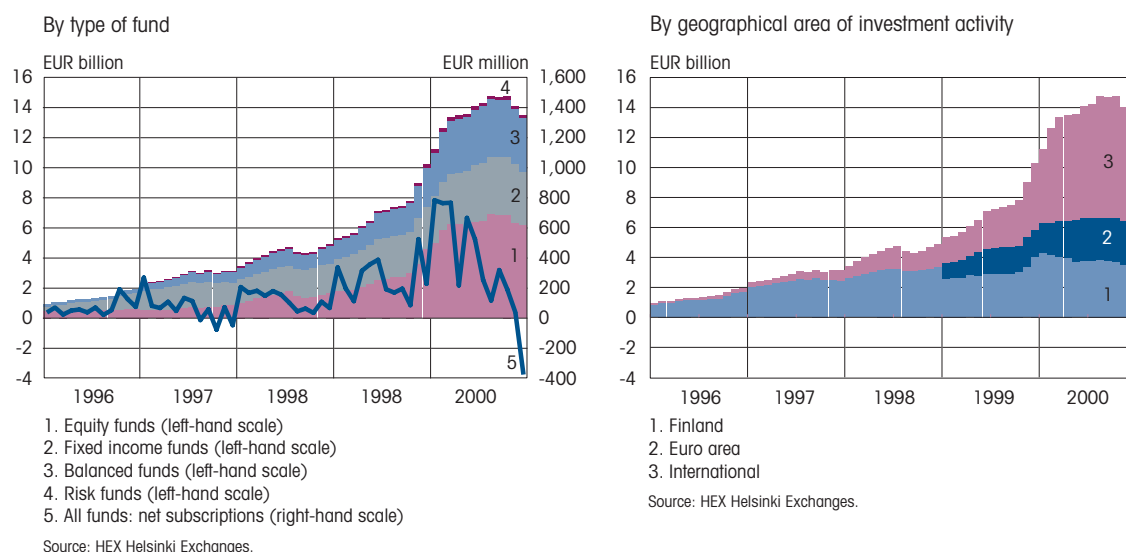
**Chart 36.**  
Market capitalization of listed shares and holdings of non-residents



1. Market capitalization of shares on the Helsinki Exchanges (left-hand scale)
2. Market capitalization of shares held by non-residents (left-hand scale)
3. Holdings of non-residents as a percentage of market capitalization (right-hand scale)

Sources: HEX Helsinki Exchanges and Finnish Central Securities Depository (APK).

**Chart 37.**  
**Mutual funds registered in Finland**



portfolios. Of the aggregate portfolio of pension funds and life insurance companies, a third is already invested in other euro area countries. Investments of Finnish employment pension funds amounted to almost EUR 65 billion at year-end, with bonds accounting for nearly a half and shares for a third.

Mutual funds registered in Finland grew substantially in size in 2000. New investments by mutual funds were channelled primarily into internationally-oriented stock funds. Balanced funds, which are the favourites of households, also recorded strong growth. However, mutual funds slipped in popularity towards the end of the year, partly due to a slowdown in the growth of insurance-related saving after a surge in the early part of the year. Insurance-related investment money flows into the securities market, often via mutual funds. As money

flowed into mutual funds, new funds were rapidly established, not only traditional funds but many types of specialized funds such as hedge funds and risk funds. Index funds have also entered the market. The investments of these funds mimic the composition of well-known indices such as the Euro Stoxx 50 index. At year-end Finnish funds had capital amounting to EUR 13.5 billion (Chart 37).

After extensive changes in 1999, Finland's primary dealer system for benchmark government bonds was revamped again in 2000. Leonia Bank withdrew from the system at the start of the year; Evli Rahamarkkinat withdrew in May; and Unibank was merged with Nordic Baltic Holding in September. In June four new international members were approved as primary dealers: Barclays Capital, Deutsche Bank, Salomon Smith Barney and Merrill Lynch.

Chairmanship of the Primary Dealer Committee for the benchmark bond system moved from the Bank of Finland to the State Treasury in the autumn of 2000.

Trade in derivative contracts on the Helsinki Exchanges has focused on stock derivatives since trade in interest rate derivatives was shifted from the Exchanges to Eurex in the autumn of 1999. In January 2000 trade in the most actively traded stock options was moved from the Helsinki Exchanges to Eurex. As a result, the number of trades in stock options and futures quoted on the Helsinki Exchanges fell by more than 40% in 2000 compared with 1999. On the other hand, trading in share lending agreements (LEX) on the Helsinki Exchanges increased by nearly a fifth in 2000. Trade in warrants on shares listed on the Helsinki Exchanges commenced in December 2000.

## Developments in regulation and supervision

### International regulation and supervision

Reform of capital adequacy regulations for credit institutions has moved ahead since the consultation round in spring 2000. Around the end of 2000 the Basel Committee on Banking Supervision presented its final recommendations. At the same time, the EU's corresponding recommendation, which is largely in line with that of the Basel Committee, was circulated for a second round of comments. This consultation round will end in spring 2001, and the final recommendation is due to be published in summer 2001. The aim is that EU countries should implement national legislation on the new capital adequacy requirements at the beginning of 2004. For the EU, the preparations are being coordinated by the Commission's Banking Advisory Committee, which includes representatives from the Bank of Finland as well as the Financial Supervision Authority and Ministry of Finance.

The Basel Committee's proposal contains three pillars that are intended to provide the basis for regulation and supervision of banks' capital adequacy: a new minimum capital requirement; an enhanced banking supervision process; and a greater degree of market discipline. The EU's proposal highlights the importance of not only international harmonization but also the need to apply capital adequacy regulations to banks involved in a wide range of

banking operations as well as to small banks and investment firms.

In November a working group set up by the Ecofin Council and headed by Alexandre Lamfalussy released its interim report on the development of regulations for the European securities markets. The report recommended, inter alia, a speeding up of the EU's regulatory process and establishment of a new securities committee within the EU. The working group's final report was completed in February 2001.

In September the European Commission's High Level Securities Supervisors Committee published its report on the contents of a directive on prevention of market abuse. One aim of the directive is to define market manipulation. The group also considered forms of cooperation, division of responsibilities and means of preventing market manipulation.

Within the framework of the Financial Sector Assessment Program, which was launched in 1999 by the International Monetary Fund and World Bank, assessments were made in 2000 of the strengths, weaknesses and risks of the financial sectors of several developed and developing countries. Finland's financial sector will be examined in 2001.

In 1999 the finance ministers and central bank governors of the G7 countries established a joint body called the Financial Stability Forum for addressing issues concerning the international financial markets. The Forum published several extensive reports in 2000 dealing with the stability, efficiency and functioning of financial markets. The cooperative body's

deposit guarantee working group attempted to evaluate the functioning of Finland's deposit guarantee system at the time of the banking crisis as well as the new Finnish legislation concerning the deposit guarantee system and its effectiveness.

### Domestic financial legislation and supervision

The new Mortgage Bank Act entered into effect at the start of 2000. The Act applies to operations whereby credit institutions issue bonds backed by real estate or government entities (as defined in the Act) and use the proceeds to make mortgage loans to the public. Changes that were made to the law in connection with investors' rights entered into effect at the start of 2001.

A law repealing the Postipankki Ltd Act entered into effect at the start of May 2000. The repealed act included provisions on Leonia Bank's rights and its obligation to handle payment transactions of the central government and on the use of post offices in the provision of Leonia's banking services.

The change in tax legislation that entered into effect at the beginning of 2000 marked a change in the tax treatment of interest earnings on deposits. All such earnings became taxable from 1 June 2000.

The working group on banking services set up by the Ministry of Finance in autumn 1999 completed its work in December 2000. The group's task was to assess the need for regulations concerning acceptance of deposits and other repaya-

ble funds from the public and the need for regulation of payment transmission and to make a proposal on implementing a directive on the issuance of e-money. In its report, which was published in January 2001, the group proposes that the Credit Institutions Act be amended to enable companies to accept funds repayable on demand to a limited extent. As regards payment transmission, it proposed that this be allowed in the most comprehensive sense only by credit institutions, ie deposit banks, payment

organizations and other lending institutions. The group also recommended that regulation of the outsourcing of banking services be specifically included in the Credit Institutions Act. The Bank of Finland took part in the working group.

In late autumn the Ministry of Finance proposed that the Financial Supervision Authority and the Insurance Supervision Authority be combined and that responsibility for preparing legislation governing the whole financial sector be con-

centrated in a single ministry. As regards legislation on statutory insurance, however, it felt that preparatory work should remain the remit of the Ministry for Social Affairs and Health. The Ministerial Finance Committee considered the proposal in December 2000 and January 2001 and submitted the matter for further preparation to the Permanent Secretaries of the Ministry of Finance and Ministry of Social Affairs and Health.

# Payment and settlement systems

One of the Bank of Finland's main tasks is to contribute to maintaining the reliability and efficiency of payment systems and to take part in the development of these systems. As a member of the ESCB, the Bank of Finland also endeavours to promote the smooth functioning of euro area payment and settlement systems and financial stability in the whole euro area. To fulfil these tasks the Bank oversees payment and settlement systems and provides payment system services. The Bank also participates in the development of payment and settlement systems and is involved in the preparation and drafting of related legislation.

## Changes in the operating environment in 2000

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 policy statement on payment systems oversight<sup>1</sup> drawn up by the

<sup>1</sup> For more information on the ECB's oversight policy, see the ECB publication *Role of the Eurosystem in the field of payment systems oversight* (<http://www.ecb.int/pub/pdf/paysysover.pdf>).

Payment and Settlement Systems Committee and applicable both to systems used for domestic and for cross-border payments. Oversight policy covers issues such as efficient implementation of monetary policy, financial stability, competitive neutrality and cross-border payments within the EU and with third countries.

In Europe, decentralized markets and systems have generally been found to be expensive. Among the major trends in the operating environment of payment and settlement systems are increasing use of information technology, ever-closer integration and the continuing opening up of national financial markets. Although the technical prerequisites for common payment and settlement systems exist, in practice service providers are having great difficulties in adapting to new requirements because of national economic interests, cultural differences, large one-off investments and legal and other problems.

The conflict between technical possibilities and fragmented markets was most pronounced in international capital markets, where counterparty risks became more prominent with the increase in share trading volumes. European stock exchanges sought to improve

## Box 2. Oversight

The Bank of Finland endeavours to ensure that risks associated with payment and settlement systems remain at an acceptable level. This activity is referred to as oversight. The legal basis for oversight is based on the tasks and objectives set out in the Act on the Bank of Finland (214/1998). The tasks of the central bank include oversight of payment and settlement systems at the macro level. Supervision of individual institutions is the responsibility of Finland's Financial Supervision Authority (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 functioning 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 barriers limiting the spread of risks and risk surveillance. 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 (reliability goal).

Oversight supports the efficient implementation of the Eurosystem's monetary policy operations. It also supports the stability and reliability of ESCB payment systems, and promotes the smooth functioning of the single market. The main forum for co-operation in the field of oversight within the ESCB is the Payment and Settlement Systems Committee and its working groups.

trading and settlement in a number of ways. These included attempts to merge marketplaces, but only one, the Euronext project, progressed as planned. Several proposals were put forward for enhancing the functioning of settlement systems, but their assessment and implementation still require a considerable amount of time.

With the globalization of stock exchange trading, the HEX Helsin-

ki Exchanges, for example, have recognized the importance of settlement for the smooth functioning of markets. HEX and the Finnish Central Securities Depository Ltd (APK) began reforming settlement practices. Implementation of this reform, however, depends on HEX's eventual international cooperation projects.

Reports drawn up by the European Commission and the ECB

revealed European citizens' dissatisfaction with the high cost and expense of credit transfer services within the EU. In response to this, the Euro Banking Association (EBA) developed an alternative to correspondent banking by introducing the STEP 1 (Straight Through Euro Processing) service for low-value cross-border payments in November.

Competition in the provision of large-value payment services has also begun to intensify. The ESCB has therefore had to give more thought to developing its own large-value payment system, TARGET. There are, however, many difficult questions and differing views concerning the structure and operating principles of TARGET, the resolution of which will take time.

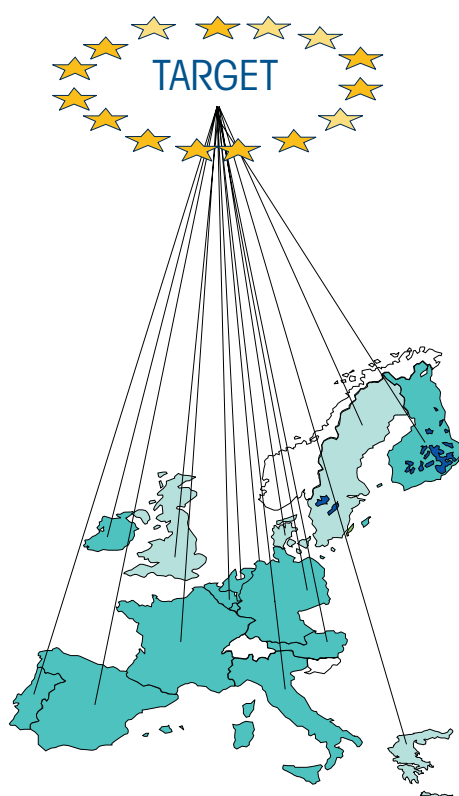
Use of electronic payment facilities is very widespread in Finland and Finland ranks among world's leading nations in this regard. Development in this area continued apace in 2000. With cross-border bank mergers, the use of electronic payment facilities will probably also increase in other Nordic countries and in other neighbouring countries. The world's first WAP-based securities brokerage service was introduced in Finland at the beginning of 2000.

### The BoF-RTGS system and TARGET

To minimize risks associated with national payment flows the Bank provides funds transfer services for banks and clearing houses through its BoF-RTGS system. The linking

Chart 38.

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



- 11 euro area central banks + European Central Bank + 4 other EU central banks
- Greece became the twelfth EU member state to join the euro area on 1 January 2001
- 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
- 40,000 cross-border payments per day

Source: European Central Bank.

of the BoF-RTGS to TARGET at the beginning of 1999 opened the way for safe funds transfer throughout the euro area. The link thus supports banks in the provision of payment services (Chart 38).

An average of 1,760 payments a day were executed via the BoF-RTGS system in 2000, with a total average daily value of about FIM 18 billion. The number of payments increased by 1% and the value by 8% from the previous year. Measured in terms of aggregate value, TARGET payments accounted for two thirds of the payments effected via the BoF-RTGS system. However, in terms of volume, the majority of the payments processed by the system (55%) were domestic payments (Chart 39).

In 2000 the daily average number of cross-border payments processed in the TARGET system as a whole was 40,000, with an aggregate value of EUR 430 billion. The average value of TARGET payments has decreased continuously, reflecting the increase in the share of customer payments, the average value of which is smaller than that of interbank payments. In 2000 customer payments accounted for around 34% of the total number of TARGET payments.

In terms of value, TARGET was noticeably more widely used than other European cross-border payment systems. TARGET has enhanced the efficiency of the transmission of large-value payments in the euro area and reduced

the risks associated with them.

However, the useability and operational reliability of the system still need to be improved, as use of the system was impaired to some extent during the year as a result of malfunctions.

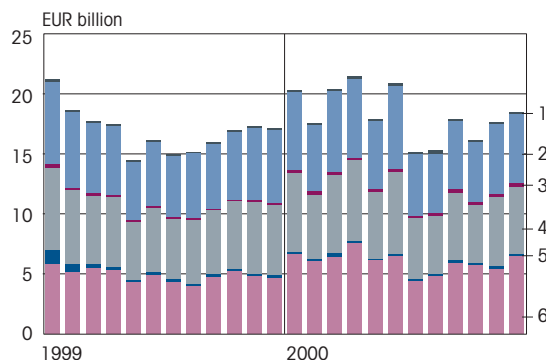
The liquidity positions of banks operating in Finland remained very good, and there was very little queuing because of liquidity shortages. At the end of the year the aggregate amount of the banks' intraday credit limit stood at around EUR 4.7 billion. The average usage rate of the limits remained low (Chart 40).

The Governing Council of the ECB revised the TARGET Guidelines on 3 October 2000, and the Rules of the BoF-RTGS system were amended accordingly. The

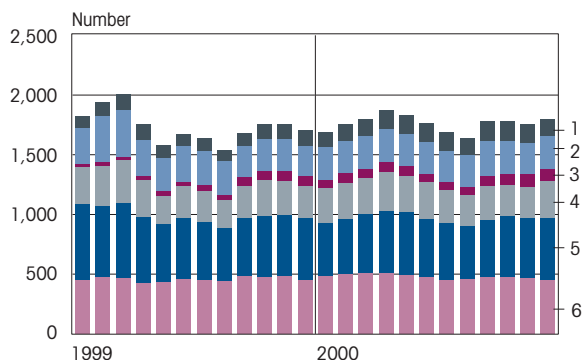


**Chart 39.**  
Transactions in BoF-RTGS

Value of transactions, daily average



Number of transactions, daily average



1. Incoming TARGET customer payments
2. Incoming TARGET interbank payments
3. Outgoing TARGET customer payments
4. Outgoing TARGET interbank payments
5. Loro payments
6. Other RTGS payments and payments between the Bank of Finland and settlement account holders

Source: Bank of Finland.

new rules entered into force on 1 January 2001. The key change was the inclusion of the TARGET reimbursement scheme. This scheme lays down the criteria according to which participants to TARGET are compensated for financial losses incurred as a result of malfunctions. It is applicable to

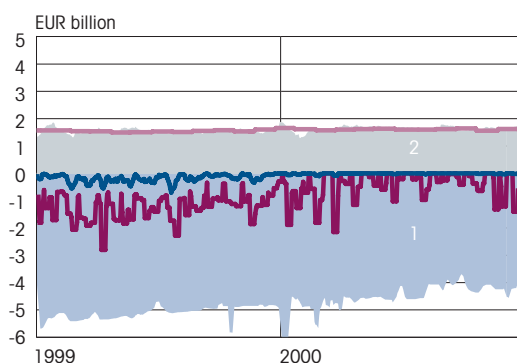
the euro area real-time gross settlement (RTGS) systems as well as the euro RTGS systems of the EU national central banks not participating in EMU.

The Governing Council of the ECB decided to keep TARGET closing days unchanged except for 31 December, when the system will

be closed<sup>2</sup> in order to safeguard a smooth cash changeover on 1 January 2002.

The development of TARGET was widely discussed within the ESCB during the year. Key issues were the possible centralization and automation of the system in order to increase efficiency. The issue of charges vs costs was identified as a particular problem by the NCBs. Concrete developments included a new version of TARGET software introduced in November. A new version of the account holder application was introduced in early 2001.

**Chart 40.**  
Finnish banks' minimum reserve deposits and intraday credit limits



1. Total limits<sup>1</sup>
2. Monthly average of end-of-day balances
3. Maximum use of limits<sup>2</sup>
4. Average use of limits<sup>1</sup>
5. Minimum reserve deposits, total

<sup>1</sup>Five-day moving average.  
<sup>2</sup>Five-day moving maximum.

Source: Bank of Finland.

### Development of other domestic payment systems

All major banks operating in Finland are party to the interbank agreement on payments, which

<sup>2</sup> A list of the TARGET closing days is available at [http://www.ecb.int/press/00/pr000525\\_2.htm](http://www.ecb.int/press/00/pr000525_2.htm).



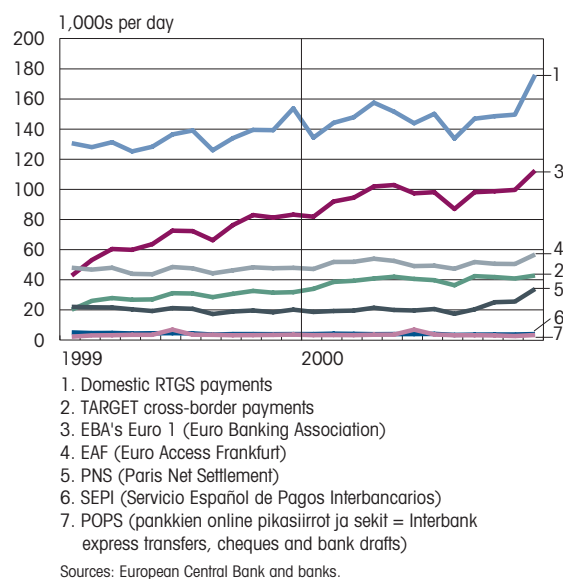
regulates the transfer of payments in the PMJ interbank system and the POPS system for interbank express transfers and bank drafts. No changes were made to the procedures for settlement of payments in the POPS system. By contrast, starting in the spring of 2000 PMJ funds transfers in the BoF-RTGS were executed in the night instead of in the morning as previously. The night settlement is fully automated. The new practice reduces counterparty risks in interbank credit transfers since banks credit customer accounts with funds transferred from other banks only after the night settlement. This practice was already used in the afternoon settlement run. The system checks that there are adequate funds in all BoF-RTGS accounts before funds are transferred. The average daily value of night settlement was EUR 440 million, more than three times that of the afternoon settlement runs (FIM 130 million).

The Avant cash card system and the ATM network are operated by the Automatia Group, which is owned by Finland's largest banks. Use of electronic money was still fairly limited in 2000. The Bank monitored progress in the use and regulation of electronic money and participated in the debate on regulation both at home and within the ESCB and the EU.

### Private large-value payment systems in the euro area and settlement of foreign exchange transactions

EURO 1, which is operated by the Euro Banking Association, is an EU-wide netting system for large

**Chart 41.**  
Average number of payments effected daily via various systems in the EU



and medium-value payments in euro. The two Finnish banks, Merita Bank and Leonia Bank, which were already participating in the system, were joined by Okobank in the autumn of 2000. Together with TARGET, this is the other major system for cross-border payments within the EU. Payments transmitted via the system averaged 96,000 a day, so in volume terms use of the system clearly exceeded that of TARGET (Chart 41).

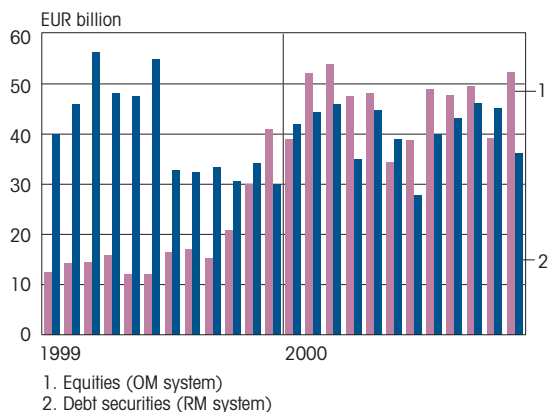
The international Continuous Linked Settlement Bank (CLS Bank) was originally scheduled to commence operations in October 2000, but operations will probably not commence before November 2001. CLS Bank will provide settlement services for foreign exchange transactions based on the payment-versus-payment (PVP) principle. In PVP-based settlement, the counterparties' funds transfers take place simultaneously, thus largely eliminating counterparty

risk. A number of Finnish banks will probably join this system.

### Retail payment services in the euro area and the EU

The EU forms a single market area, and execution of cross-border retail payments should be as efficient and reliable as that of domestic payments. In September 2000 the ECB published a report evaluating the fulfilment of objectives it had set for banks in a previous report published in 1999. In this progress report the ECB called on banks to reinforce their efforts to make the price and speed of cross-border payments in the euro area comparable with those for domestic payments in 2002. The ECB pointed out that the euro area banking sector and payment system service providers had already committed themselves to achieving these goals.

**Chart 42.**  
**Monthly values of securities transactions settled**  
**in the systems operated by**  
**the Finnish Central Securities Depository (APK)**



Source: Finnish Central Securities Depository (APK).

In its communication, the European Commission also underlined that the execution of cross-border retail payments should be made much more efficient, safer and cheaper than was currently the case. According to the European Commission, fees for cross-border payments should be lowered considerably and execution time speeded up.

In November 2000 the EBA launched a new cross-border retail payment service called STEP 1. This new system is the EBA's response to demands for improving the efficiency of cross-border payment services. STEP 1 offers small and medium-sized EU banks the possibility of easy and fast execution of cross-border retail payments in euro.

### Finnish securities and derivatives settlement systems

The APK operates systems for the settlement and registration of equity instruments (OM system) and

debt instruments (RM system). The OM system is a netting system based on batch processing. This system settles, inter alia, all trades executed on the HEX Helsinki Exchanges. The volume and value of trades settled in the OM system continued to grow in 2000, largely because of heavy trading in Nokia and other IT and telecommunications shares. Finland's system of book-entry registers was centralized under a single register with effect from 16 October 2000. Centralization enhanced the reliability of the system and enabled wide-ranging reforms.

At the end of the year the Bank participated in assessing the APK's optional reform plans scheduled for 2001 and 2002. To promote reform of securities settlement, the Bank organized seminars on settlement together with other authorities and the APK.

The RM real-time gross settlement system continued to operate smoothly throughout the year. The volume of transactions settled in the RM system declined from the

previous year, partially reflecting the slow advance of securitization. With the introduction of the euro, money market transactions have increasingly switched from certificates of deposits to interbank deposits. The volume of repo transactions settled in the RM system also decreased considerably from the previous year (Chart 42).

In 1999 the APK had established a link with the German Central Securities Depository (CSD) Clearstream Frankfurt for all financial instruments, and a link with the French CSD Sicovam for debt instruments. In December 2000 the cooperation between the APK and Sicovam was extended to include French shares. The link between the APK and the Dutch central security depository Necigef was extended to include other shares in addition to those of Huhtamäki Van Leer. Consequently, a Finnish investor or a foreign investor holding assets in custody in Finland may also manage the above-mentioned instruments in the Finnish book-entry system. Market participants made fairly active use of these links in their investment operations. The aggregate value of securities transferred via these links totalled over one billion euro in 2000.

The derivatives settlement system of the HEX Helsinki Exchanges is used for the settlement of derivatives transactions executed on HEX. In the settlement of domestic derivative contracts, HEX is the counterparty of the customer. In keeping with the agreement on cooperation between HEX and Eurex Frankfurt AG concluded in 1999, trading in derivatives with

the most liquid underlying instruments was shifted from HEX to Eurex. Thus most of the derivatives trade on HEX moved to Eurex in early 2000. Under Eurex rules securities intermediaries remain counterparties of customers, unlike under HEX rules. Even though Nokia options, in particular, became a major success on Eurex, not all the share options that were shifted to Eurex experienced significant growth in trading volumes. Consequently, on 11 December HEX relisted on its options trading list five underlying instruments that had previously been transferred to Eurex and began to settle trades in these again.

### International marketplaces and settlement systems

Following the introduction of the euro, investor behaviour in Europe has begun to change fundamentally. Investing in shares generally has become more widespread, and investors are also increasingly buying securities listed abroad, either directly or through mutual funds. Enlightened investors have begun to demand lower transaction costs, especially as regards trading in foreign shares. These new demands have been met by alternative marketplaces utilizing Internet technology and by e-brokers trading directly on the basis of low margins. As a result competition has intensified significantly, forcing marketplaces to adapt to new realities by combining operations.

Efforts by marketplaces to expand and rationalize their operations have, in turn, created great

pressures for convergence and integration of settlement systems. During the year the ESCB focused on furthering the integration of settlement systems by, inter alia, promoting the adoption of standards and organizing regular meetings with market participants. The ESCB does not wish to dictate how integration should proceed, but rather to act as a catalyst.

Unlike in Finland, transactions in stock exchanges in Europe are generally settled with one centralized counterparty on a clearing basis. Most European markets have had a dedicated central counterparty which has netted claims of original counterparties after novation, ie by itself becoming a counterparty to both parties. The London Clearing House put forward one option for integration of European markets by proposing the establishment of a European-wide network of central counterparties. It would comprise the London Clearing House itself and other European central counterparties. The aim is to reduce the number of cross-border transactions since only netted claims would be settled centrally by national or regional central counterparties. Such a network would take time to establish, however.

Since the inception of the Euronext stock exchange, a clearing house has been established in connection with Euroclear Bank uniting the central securities depositaries of the Netherlands, Belgium and France. The Euroclear settlement system allows transactions to be settled with commercial bank money, whereas the system developed by Sicovam, the French settlement system, allows settlement

in central bank money in all three countries.

Another major settlement system operator is Clearstream International, which is the result of a merger between the German and Luxembourg clearing houses (Deutsche Börse Clearing and Cedel International). A problem associated with the merger of such entities is that a joint technical system cannot be implemented quickly and that the original clearing houses must remain separate entities for legal reasons.

A third major settlement cooperation project is the alliance of two non-euro area CSDs, the Swiss SIS and British CrestCo. Apparently, this alliance, called the Settlement Network, does not aim at a merger, but rather at harmonizing practices and joining forces in developing new systems. The objective of the alliance is to create a settlement system with a uniform user interface.

Some national CSDs appear to have decided to remain independent for the time being. Parallel to international integration there were some national mergers of settlement systems, eg in Spain and Italy. In most European countries there is now only one major CSD. The full effects of structural change will only become evident in the markets in a few years' time, however, when the merged systems have been able to integrate their IT systems.

Stock exchanges and settlement systems have also harmonized their practices. In October the Paris stock exchange dispensed with monthly settlement for its main list, and in November the

Brussels stock exchange discontinued its two-week settlement period. The three-day settlement period (T+3) therefore seems to be becoming the standard for the major European stock exchanges.

### Cooperation with authorities and market participants

The Bank continued to cooperate with the FSA in the field of oversight of payment and settlement systems. Towards the end of 2000 the Bank participated in follow-up inspections conducted by the FSA aimed at determining the extent of banks' counterparty risks in connection with their foreign exchange transactions. The previous inspections had been conducted in 1997. Counterparty risks had, on the whole, decreased considerably during these three years and risk management had also improved.

The Bank also works closely with the Ministry of Finance, and working groups dealing with specific issues have been established. The Bank participates actively in the preparation of legislation related to payment and settlement systems.

The Bank worked closely with market participants. 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 to consider issues related to payment systems. The issues discussed have mainly been concerned the introduction of the euro and the maintenance of the currency supply. These fora have also been used for exchanging informa-

tion on, inter alia, TARGET and the preparation of the night settlement. The BoF-RTGS user group, comprising account holders, also met regularly to promote cooperation and system development.

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 with participants. In addition to the monthly oversight meetings, the Bank organized three seminars on clearing and settlement, thus contributing to the debate on the proposals for developing the OM system and risks connected with market integration. The Bank also cooperated directly with the APK, for instance within the framework of the joint coordination working group, and in operational issues, such as the development of collateral management.

In connection with the proposed listing of HEX, the Bank participated actively with other authorities in the preparatory work for developing and increasing the flexibility of self-regulation by HEX and the APK. The aim of this preparatory work is to ensure that oversight of settlement systems is sufficient and credible. The objective of oversight is to ensure that account operators and their agents comply with various regulations concerning the operation of the central securities depository, and that they operate in compliance with public information requirements. Existing legislation governing HEX will be amended in 2001 on the basis of this work.

### Developments in Finnish 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 projects both at home and abroad, for instance through participation in working groups preparing laws.

In December 1999 the new Netting Act (1084/1999) entered into force, thereby implementing the directive on settlement finality in payment and securities settlement systems (98/26/EC). The provisions of this act require that payment systems and other settlement systems must have written rules covering the matters prescribed in the Act. The rules must be submitted to the Ministry of Finance, which then requests opinions from the Bank of Finland and the Financial Supervision Authority. The Ministry of Finance notifies the European Commission which settlement systems fall within the scope of the above directive. The most important change in the operating environment of payment systems that was connected with the Netting Act was the requirement that all systems referred to in the Act (POPS, PMJ and the payment system services provided by Okobank and Aktia to their member banks) draw up written rules. These rules must specify, inter alia, the point in time after which a participant in the settlement system may not unilaterally cancel a payment order. This is important in the case of the insolvency of a participant.

The directive of the European Parliament and of the Council on the taking up, pursuit of and prudential supervision of the business of electronic money institutions (2000/46/EC) entered into force in September 2000. This directive harmonizes legislation on electronic money within the EU, and it must be transposed into national legislation by no later than 27 April 2002. The provisions of this directive are included in the legislative proposals of the working group on banking services.

During the year the Bank participated in the preparation of legislation on the implementation of

the directive on the issue of electronic money by the working group on banking services. The working group submitted its proposal in January 2001. Among other things, the working group proposes that the concept of payment organization be included in the Credit Institutions Act. Payment organization refers to an authorized credit institution providing general payment services and issuing electronic money. A payment organization would be able to accept funds repayable on demand from the public other than deposits only in connection with transfer of payments and issuance of electronic money. Gen-

eral payment services refer to the execution of payment orders with funds received from the customer beforehand. A payment organization would not be able to grant credit or provide other forms of financing.

The working group appointed by the Ministry of Finance to draft a proposal for the centralization of the book-entry system within the APK published its memorandum in early 1999. The Government bill to this effect was submitted to the Parliament in early 2000 and the book-entry registers were centralized within the APK on 16 October 2000.

# Maintenance of the currency supply

The Bank of Finland is responsible for the statutory duties with regard to the maintenance of the currency supply in Finland.<sup>1</sup> With the approval of the ECB, the Bank issues banknotes and coins in Finland and ensures their quality, authenticity and availability throughout the country. The Bank is also responsible for providing an efficient and secure currency supply system in Finland in cooperation with banks and other parties. In addition, the Bank contributes to the ESCB's preparations and decision-making pertaining to banknote matters and is responsible for preparations for the issue of euro banknotes and coins and implementation of the ESCB's harmonized decisions in Finland.

## Changes in Finland's currency supply system

The current kind of arrangements between the Bank of Finland and banks for ordering and returning notes and coins have been in existence since October 1988. The participating banks have been able to

<sup>1</sup> The Bank of Finland has five offices that are involved in the maintenance of the currency supply: the regional offices of Helsinki-Vantaa and Turku as well as the Kuopio, Oulu and Tampere branches. They are all part of the Payment Instruments Department.

place daily cash orders for each of their branches in any of the Bank's five offices and likewise return cash from each branch to the Bank of Finland. The Bank has debited each bank's settlement account with the Bank for the sums ordered and credited each bank's account for any amounts returned. Transportation has mainly been the responsibility of Finland Post as well as the cash-in-transit companies SPAC and Securitas. The cash ordered for Automatia's ATMs has been transported directly to the 20 cash centres operated by SPAC and Securitas in locations around the country. Because of the central role of Finland Post, the regional division of responsibilities of the Bank's offices as regards cash transportation has corresponded to the postal regions in Finland.

With the termination of cooperation between Finland Post and Leonia, banking services were discontinued at 469 post offices in 2000. As a result, these post offices could no longer function as part of the currency distribution network. Similarly, the cash transportation agreements to which Finland Post was party were discontinued by the end of 2000, whereupon all cash transportation services were transferred to SPAC, Securitas or some other cash-in-transit company



under separate agreements. Owing to these new arrangements, many localities no longer receive daily deliveries of banknotes and coins. The new arrangements will also have an impact on the regional division of responsibilities between the Bank's offices as well as on cash flows.

Another significant change in Finland's currency supply system was initiated in spring 2000, when Leonia, Merita Bank and the OKO-BANK Group Central Cooperative, which together own Automatia, decided to centralize the management and development of their currency distribution function in Automatia Pankkiautomaatit. To enable Automatia to participate in currency distribution, the Bank granted it access to a settlement account without an overdraft facility and signed a currency supply agreement with it in October 2000. Under the new arrangement, Automatia subcontracts cash centre services and transportation of notes and coins to and from the branches of its owner banks and their customers to SPAC and Securitas. By the end of the year the new system was in operation and Automatia was handling more than 90% of all cash orders and returns within the Bank's currency maintenance system. In January 2001 the other parties to the currency supply agreement, namely Paikallisuuspankkiliitto (Association of Local Cooperative Banks), Säästöpankkiliitto (Savings Banks' Association), Svenska Handelsbanken and Ålandsbanken signed a letter of intent on joining Automatia's currency distribution system.

As a result of the centralization of the currency distribution function, the role of the Bank is also changing. Whereas before it handled cash orders and returns for individual bank branches, it now increasingly acts as a wholesaler. As a consequence of this and the introduction of the euro bank notes and coins, the currency supply agreement will have to be renewed during 2001. The Bank gave notice of termination of the present agreement, which has a notice period of one calendar year, in December 2000.

### Common framework for the cash changeover was specified

In 2000 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 the production of euro banknotes and quality control, the issuance of euro banknotes and coins and their frontloading (advance distribution) and related debiting and collateral issues, and preparation of arrangements for prevention of counterfeiting. Issues related to the issuance of euro banknotes and coins were key elements of the work on specifying the common framework for the cash changeover in the euro area. Special emphasis was also given to preparations for the associated euro information campaign (see page 75). The Bank participated with the Ministry of Finance in the work of the EU's Economic and Financial Committee on prepa-

rations for the introduction of euro coins.

The production of euro banknotes began in July 1999. Twelve printing works in the euro area are involved in production. According to current estimates, around 14.5 billion euro banknotes with a total value of some EUR 650 billion will be produced before the notes are put into circulation on 1 January 2002. Ten billion notes are required to replace the national banknotes in circulation in the 12 euro area countries, while 4.5 billion notes will serve as a logistical reserve. It is estimated that some 50 billion euro coins with a total value of approximately EUR 15.7 billion will be required. Minting started in May 1998 and 15 mints are involved.

In November 1999 the ECOFIN Council approved a common statement setting out common principles for the issue of the euro banknotes and coins. In the statement, which had been prepared by the EU's Economic and Financial Committee in cooperation with the ECB and national central banks, the ECOFIN Council notes, inter alia, the following:

- The bulk of cash transactions should be effected in euro by the end of the first two weeks of 2002.
- The dual currency period should last between four weeks and two months.
- It would be helpful to distribute euro banknotes and coins to financial institutions and certain other key groups, such as cash-in-transit companies and retailers, before 1 January 2002, but this frontloading



should not lead to the putting of euro banknotes and coins into circulation before that date.

- Limited quantities of coins could be made available to the public on request, notably to vulnerable groups in the population, but not before the second half of December 2001.

The Governing Council of the ECB made, inter alia, the following specifications to these principles by the end of 2000:

- Frontloading of euro notes to the public is not allowed.
- The earliest possible dates for frontloading euro notes and coins will be harmonized in the euro area so that frontloading to credit institutions and sub-frontloading to certain other parties, such as cash-in-transit companies and retailers, is possible from 1 September 2001.
- Euro cash frontloaded to credit institutions (incl. Automatia) is to be debited in accordance with a harmonized debiting model on 2 January 2002, 23 January 2002 and 30 January 2002. In addition, delivery of collateral from credit institutions will be required by 28 December 2001 for the amounts of frontloaded cash.
- The credit institutions shall cover the risks of damage, theft or robbery as well as the risk of anticipated public use of the frontloaded cash.
- Sub-frontloading shall be performed by credit institutions against the delivery of appropriate collateral to the national central banks.

- The obligation of euro area national central banks to exchange and repatriate legal tender banknotes of other participating member states will be extended to 31 March 2002.
- Manufacturers of banknote dispensers can test their equipment with genuine euro banknotes in test facilities provided by the ECB in 2000 and under the supervision of the national central banks in 2001. Testing of coin dispensers can be done in facilities provided by the mints of participating member states, in Finland by the Mint of Finland.
- The police and businesses and organizations handling money professionally may be informed of the security features of the euro notes starting from 1 January 2001. Partners participating in the information campaign related to the introduction of the euro may be informed with effect from 1 July 2001 and the general public with effect from 1 September 2001.

In addition, the Governing Council of the ECB has decided that frontloading will be allowed, subject to certain provisions, outside the euro area with effect from 1 December 2001. The Governing Council has also approved for publication common guidelines that include the Governing Council's most important decisions concerning the cash changeover. Moreover, the Governing Council has approved the principle that the NCBs should provide currency supply services free of charge during the cash changeover

period. As far as the euro notes and coins are concerned, the Governing Council has decided that the NCBs should provide the separately defined, basic currency supply services free of charge and charge fees comparable to the market price level for all other services.

After specification of the common framework for the cash changeover in the euro area, the participating member states began to finalize their own national plans. The European Commission required that the plans be published before the end of 2000.

### Finland's plan for the cash changeover was published

On 13 October 2000 the Bank of Finland together with the Finnish Bankers' Association and its member banks published a plan entitled 'Cash changeover in Finland in 2002'.<sup>2</sup> The purpose of the plan is to provide a sufficiently detailed framework for the preparatory work of each of the parties involved in the various aspects of maintaining currency supply. The plan will be specified and updated as and when necessary. The aim is that it be possible for the bulk of cash payments to be effected in euro from the start of the third week of 2002.

The plan is based on national decisions and agreements, which comply with the common frame-

<sup>2</sup> At the same time the Ministry of Finance published its own comprehensive national plan entitled 'Plan for adoption of the euro 2001/2002'. The plans of both the Bank of Finland and the Ministry of Finance are available in Finnish, Swedish and English on the organizations' websites [www.bof.fi](http://www.bof.fi) and [www.vn.fi](http://www.vn.fi).

work for the cash changeover in the euro area. The Bank of Finland and the Ministry of Finance have decided (Statutes of Finland 1176/1999 and 1177/1999) that markka banknotes and coins will cease to have legal tender status with effect from 1 March 2002. This means that the changeover period will be two months. However, the Bank will redeem the present markka banknotes and coins for a further ten years following the termination of the markka's legal tender status. It has also been prescribed (890/2000) that euro-denominated cash payments will be rounded to the nearest multiple of 5 cent. Consequently, Finland will not need 1 and 2 cent coins for the use as change, although they will have legal tender status.

According to the plan, euro banknotes and coins will be issued via three main channels: EUR 20 and EUR 50 banknotes via cash dispensers; coins and EUR 5 and EUR 10 banknotes via retailers and other service providers; and larger value banknotes via banks. It has also been agreed that euro banknotes and coins will be front-loaded to banks and cash centres and that their distribution to business customers will begin at the turn of 2001/2002. The question of the amounts and availability of euro banknotes and coins required by retailers and other service providers for the changeover is still under study. The same applies to logistics during the changeover period and the use of the resources of the parties involved in currency distribution.

The Bank of Finland has ordered all the euro banknotes that

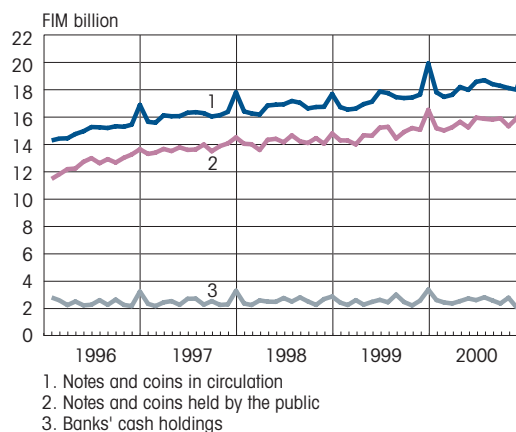
will be required in Finland at the beginning of 2002 from Setec, while the Ministry of Finance has ordered all the euro coins required from the Mint of Finland. According to current estimates, Finland will need nearly 100 million euro banknotes and about one billion euro coins during the changeover period. In addition, euro banknotes and coins will be produced for stock for logistical and unexpected needs. It has been estimated that at the end of 2001 there will be about

130 million markka banknotes and about 2.5 billion markka coins in circulation. It has also been estimated that nearly all markka banknotes and about a half of the markka coins will be returned to the Bank of Finland.

### Upward trend in currency in circulation continued

Reflecting the favourable performance of the economy, the upward

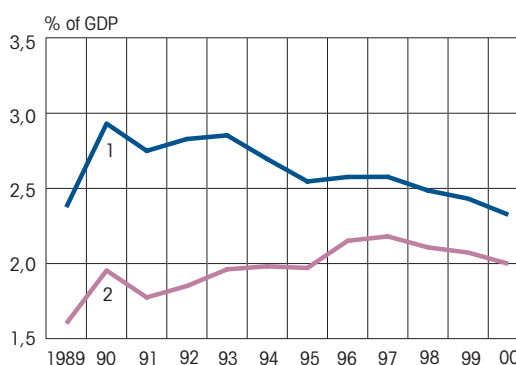
**Chart 43.**  
Holdings of notes and coins



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

Source: Bank of Finland.

**Chart 44.**  
Notes and coins in circulation<sup>1</sup> in relation to GDP

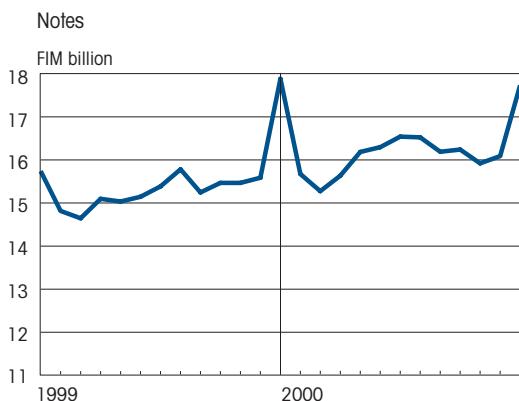


1. Notes and coins in circulation  
2. Notes and coins held by the public

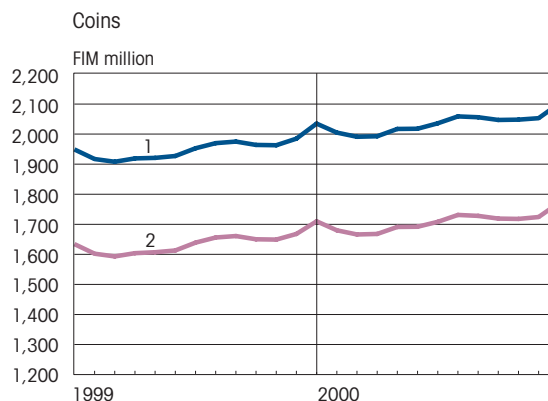
<sup>1</sup> The annual average of end-of-month figures.

Source: Bank of Finland.

**Chart 45.**  
Value of notes and coins in circulation

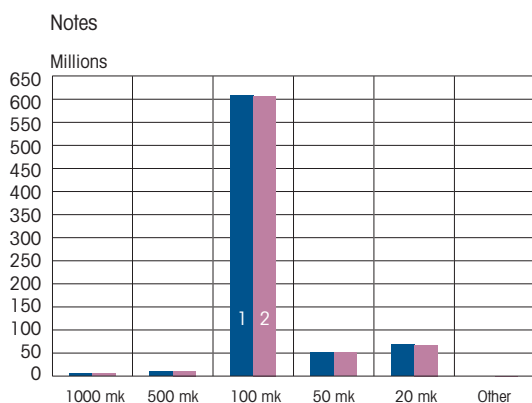


Source: Bank of Finland.

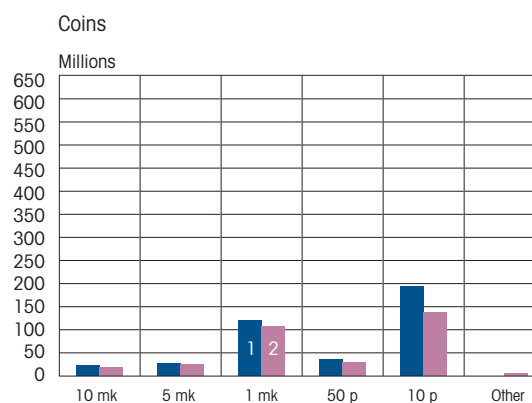


Source: Bank of Finland.

**Chart 46.**  
Flow of notes and coins through the Bank of Finland, 2000



Source: Bank of Finland.



Source: Bank of Finland.

trend in the value of currency in circulation continued during 2000. 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 nearly FIM 18.3 billion in 2000 on average, compared with

nearly FIM 17.5 billion in 1999 (Chart 43).

The ratio of currency in circulation to GDP was 2.3% in 2000 on average, which was one-tenth of a percentage point less than in 1999 (Chart 44). 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 varies between just over 3% to more than 10%.

The relatively low cash level is considered to be mainly due to the sophistication of Finnish payment systems, the limited use of banknotes for hoarding and the small amount of markka banknotes circulating abroad.

At end-2000 currency in circulation amounted to FIM 19,832 million, down 0.4% on the previous year. Despite the upward trend on an annual average basis, the decrease in currency in circulation

as shown by end-of-year figures was due to the fact that at end-1999 the value of currency in circulation was nearly FIM 1 billion higher than normal owing to preparations for the millennium changeover. Consequently, the value of banknotes in circulation fell by 0.8% in the course of 2000 and totalled FIM 17,732 million at the end of the year (Chart 45). The value of 100 and 20 markka notes in circulation increased slightly whereas the value of all other banknotes fell. The value of coins in circulation<sup>3</sup> increased by 3.2% and totalled FIM 2,101 million at the end of the year.

At the end of 2000 cash holdings by the public (incl. cash in ATMs owned by Automatia Pankkiautomaatit) amounted to FIM 17,127 million, up 3.5% from one year earlier (Chart 43). Banks' holdings amounted to FIM 2,706 million, which is 25.3% less than a year earlier, when banks, in particular, increased their holdings in preparation for the millennium changeover. Banks' cash holdings during the year were on average only 14.1% of total currency in circulation, which was over half a percentage point less than in 1999. Although the proportion has diminished by nearly a third since the beginning of the 1990s, it is still fairly large by international standards and in long-term perspective.

<sup>3</sup> The accounting practices of the Bank of Finland were harmonized with those of the Eurosystem with effect 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.

## Banknote flows increased

The total face value of banknotes ordered from the Bank of Finland in 2000 increased by 3.2% to FIM 75.0 billion. A total of 743 million banknotes (Chart 46) were ordered compared with 720 million in 1999. The total value of banknotes returned rose by 6.5% and totalled FIM 75.2 billion. A total of 742 million banknotes were returned compared with 708 million in 1999.

In the course of 2000 the Bank redeemed banknotes annulled on 1 January 1994<sup>4</sup> to a total value of just under FIM 3 million. However, banknotes belonging to these series are still in circulation to a value of FIM 230 million. The redemption period for these notes ends on 31 December 2003.

Banknotes in circulation flowed through the Bank of Finland 6.8 times on average in 2000 compared with 6.7 times in 1999. Finland's flow-through rate is fairly high compared with other EU countries, where the flow-through rate has ranged between less than one to nearly four on average in recent years. A breakdown of flow-through rates by denomination reveals great differences. The highest flow-through rate, 9.4, was for the 100 markka note. The rates for the other notes were as follows: 0.8 for the 1,000 markka note, 2.2 for the 500 markka note, 4.3 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

<sup>4</sup> All annulled banknotes and coins are specified on the Bank of Finland's website [www.bof.fi](http://www.bof.fi).

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 the threshold value of 4. This flow-through rate is considered to be the necessary and sufficient rate for ensuring the quality and authenticity of the banknotes in accordance with the Bank's statutory duties. The handling fee is revised every six months according to the flow of banknotes through the Bank in the preceding six-month period. On the basis of these criteria, the note-handling fee was increased by 40% from the previous year and was FIM 0.70 per 100 banknotes throughout the year. The fee was levied on 100 markka notes only as the flow-through rates of the other banknotes were below 4. In December 2000 the Bank announced that, on the basis of the preceding six-month period, the note-handling fee would remain unchanged for the first half of 2001 but would be applicable to 50 markka notes, as well as to 100 markka notes.

As a result of increased banknote flows and the higher handling fee, total revenue from the handling fee increased and totalled FIM 7.9 million in 2000 compared with FIM 6.0 million in 1999. The Bank also collected FIM 4.9 million from the banks for data processing services in connection with currency distribution. This was FIM 0.9 million less than in 1999. The decrease was due to a fall in the number of cash orders and returns handled by the Bank, which in turn resulted from the centralization of banks' currency distribution.

During 2000 and in January 2001 the Bank expanded and upgraded its banknote handling capacity by acquiring five new generation note sorting machines, which are capable of handling both markka and euro notes. These replaced six obsolete smaller sorting machines capable of handling only markka notes. The Bank already possessed three sorting machines capable of handling both markka and euro notes.

A total of 161 counterfeit Finnish banknotes were detected in 2000 compared with 201 in 1999. 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 six 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.

From the beginning of 1999 the national central banks of the euro area countries have been required to exchange the national legal tender banknotes of other euro area countries for national currency at the fixed conversion rates. The requirement is valid until 31 March 2002. In 2000 the Bank of Finland and its branches redeemed national banknotes of euro area countries to a total value of FIM 29 million, which is roughly double the value redeemed in 1999. Deutsche Mark banknotes represented more than half and Dutch Guilders nearly one fifth of

the total value of redeemed notes. The shares of other currencies were small. The national central banks of the other euro area countries redeemed Finnish banknotes to a value of FIM 1,278 million, which is just over a quarter more than in 1999. The share of the Bundesbank was about 97%. More than half of the redeemed banknotes were 100 markka notes and nearly a third 1000 markka notes. 500 markka notes were redeemed to some extent, whereas only a small amount of 50 and 20 markka notes were redeemed.

### Coin flows decreased

During 2000 ordinary coins put into circulation by the Bank of Finland had a total face value of FIM 511 million and ordinary coins returned to the Bank of Finland a face value of FIM 445 million (Chart 46). The value of coins put into circulation and returned fell by 11.9% and 10.4%, respectively.

The Bank collected FIM 4.1 million in coin handling fees in 2000, up FIM 0.2 million on 1999. Despite the reduced coin flows, income grew because of an increase in the handling fee.

Three commemorative coins were issued in 2000. A commemorative 100 markka silver coin was issued in honour of the international celebration of the Church's Jubilee Year and the 700<sup>th</sup> anniversary of Turku Cathedral. The issue was limited to 25,000 coins. A 100

markka silver coin was issued to commemorate the 450<sup>th</sup> anniversary of the City of Helsinki. The number of coins struck was 20,000 coins. The coin also commemorated the fact that Helsinki was one of the cultural capitals of Europe in 2000. Some of the coins were minted as a proof version with a gloss finished background and a matt finished motif. A 100 markka silver coin was issued to commemorate Aleksis Kivi, Finland's national author, and Finnish literature. The issue was limited to 22,000 coins, some of which were proof quality.

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 29 February 2000 at 7.2% of the amount in circulation but stood at 4.5% at the end of the year.

Of the coins annulled in 1994 and 1998, the Bank redeemed ordinary coins to a value of just over FIM 4 million and commemorative coins to a value of FIM 0.5 million. At the end of 2000 the value of annulled but unredeemed ordinary coins and commemorative coins amounted to FIM 290 million and nearly FIM 126 million, respectively. The redemption periods for annulled coins expire in 10 years from the annulment, that is on 31 December 2003 and on 31 December 2007.

# Management of foreign reserves

The Bank of Finland manages two types of foreign reserves: part of the foreign reserves of the ECB and its own foreign reserves. At the end of 2000 the share managed on behalf of the ECB amounted to EUR 772 million while the Bank's own foreign reserves totalled EUR about 8,611 million.

## The ECB's foreign reserves

When Finland entered the Third Stage of Economic and Monetary Union at the beginning of 1999, the Bank, together with the other national central banks (NCBs) participating in the Eurosystem, transferred part of its foreign reserves to the ECB, which is partly owned by the Bank. The transferred assets comprise foreign exchange assets and gold. In compensation for the transfer, the NCBs have a euro-denominated claim on the ECB, on which the ECB pays interest. Since any foreign exchange intervention is conducted using the assets of the ECB, security and liquidity are the basic requirements for the investment of the foreign reserves. The aim is to maximize the return on the reserves within the constraints set by these requirements.

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. The guidelines for the management of the portfolio are very similar to those applied by the Bank in the management of its own foreign reserves. The currency distribution of the reserves is kept fixed. The ECB has set benchmark portfolios for the currencies in the foreign reserves, and the NCBs aim to obtain a return on invested reserves that is higher than that on the benchmark portfolios. Risks and returns on the foreign reserves are subject to continuous monitoring.

The investment of the ECB's foreign reserves is being constantly developed by, for example, increasing the number of eligible investment instruments. The Bank and the other NCBs are actively involved in this development work through their participation in the activities of the ESCB's Market Operations Committee and a working group operating under it.

## The Bank of Finland's foreign reserves

The size of the Bank's foreign reserves under the single currency is stable and the reserves no longer



need to be as liquid as they were prior to the onset of monetary union. Therefore, more attention can be paid than before to improving the return on reserves.

The objectives of the Bank's investment policy are security, liquidity and return. The security objective refers to the requirement that the market value of assets must not fluctuate excessively as a result of the various risks involved. In addition, part of the reserves must be sufficiently liquid; it must be possible to convert it into cash quickly enough and at acceptable cost whenever needed. Within these constraints the aim is to obtain the best possible return.

The main risks associated with the investment of foreign reserves are exchange rate risk, interest rate risk, credit risk and liquidity risk. The expected return on reserves can be improved by raising the risk level. In defining the investment policy for the foreign reserve assets a combination of risks and return expectations is sought that best corresponds to the Bank's long-term objectives. The cornerstone of the investment policy is effective portfolio diversification.

The most important risk affecting the foreign reserves is exchange rate risk, which is caused by variations in the value of the reserve currencies against the euro and each other. The Bank attempts to limit exchange rate risk by spreading its holdings of foreign reserve assets among different currencies. This prevents a large change in the value of an individual currency from significantly affecting the value of reserves. At present, the reserve currencies are

the US dollar, the pound sterling, the Japanese yen, the Danish krone and the Swedish krona. The shares of investment currencies, ie the currency distribution, are reviewed at 2–3 year intervals. Between the reviews a fixed currency distribution is maintained. The Bank does not therefore attempt to take advantage of currency movements in its investment policy.

The second most important risk is interest rate risk. It is measured and managed in terms of duration. Duration describes changes in the value of investment portfolios resulting from a change in market interest rates. The duration of the foreign reserves is determined using the value-at-risk (VAR) method. This method is used to measure the probability distribution of gains and losses in the value of the reserves as a result of movements in currencies and interest rates. Particular attention is paid to the probability of large losses.

Interest rate risk is restricted by spreading investments among debt instruments with different maturities in the US, UK, Japanese, Danish and Swedish markets. In addition, market-specific limits have been set on the average duration of investments.

Credit risk refers to variations in the value of fixed income investments caused by changes in the creditworthiness of issuers of debt instruments or deposit-takers. A change in creditworthiness is usually connected with a change in credit rating.

Since 1999 part of the foreign reserves have been invested in debt instruments issued by entities with

a high credit standing, eg companies. In the long run these investments generate higher returns than corresponding government securities, because credit risk is attached to them and they are less liquid than government securities. The credit risk inherent in the credit portfolio is also measured using the VAR method.

Effective portfolio diversification is crucial in the management of credit risk. Diversification is achieved by setting maximum limits and minimum credit rating criteria for issuers and counterparty banks and maximum limits for the VAR figures derived for the credit risk on the credit portfolio.

Liquidity risk is mitigated by investing the bulk of the reserves in securities issued by governments and in short-term investments for which these securities serve as collateral. Government securities are the most liquid investment instruments.

The portfolio that is assessed to be best-suited to the Bank's long-term investment objectives is expressed in terms of neutral currency distribution and currency-specific benchmark portfolios. Benchmark portfolios are fictitious portfolios with a given target duration. Benchmark portfolios comprise government securities, debt instruments with credit risk exposure and short-term money market investments. The benchmark portfolios have been devised by the Bank and by definition they represent a neutral approach to investment. The currency distribution and the structure of benchmark portfolios largely determine the return on invested reserves.



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In practice, the aim is to obtain a return on invested reserves that is higher than the return on the benchmark portfolios.

The Bank's gold reserves amount to some 50,000 kg. About half of the reserves are invested.

A risk management unit separate from the portfolio management function is responsible for the risk management of the foreign reserves and monitoring compliance with limits. This unit also sets the benchmark portfolios, calcu-

lates returns on actual and benchmark portfolios and continuously monitors developments in the returns. The unit reports on risk management issues to a Board member who is not responsible for investment operations.

# International activities

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

As a rule, the Governing Council, which is the highest decision-making body of the Eurosystem and consists of the members of the Executive Board of the ECB and the governors of the euro area national central banks (NCBs), convened every second week in 2000. The General Council, which is composed of the governors of all EU NCBs and the President and Vice-President of the ECB, met four times during the year under review.

Although the most important decisions taken by the Governing Council of the ECB concern euro area monetary policy, it also addresses other issues relating to ECB activities that fall within its decision-making powers. For this reason, the participation of the Governor of the Bank of Finland in ECB Governing Council meetings is preceded by a comprehensive briefing process in which various departments of the Bank provide the Governor with relevant background material and proposals for positions to be taken at each meeting. 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 Governing Council. The committees have an advisory role, and hence committee proposals are not binding upon the ECB Executive Board when it makes its own recommendations to the Governing Council. Nevertheless, the committees' viewpoints are reported to the Governing Council even in cases where they deviate from the Executive Board's proposed decision.

The 13 committees of the ESCB convened as needed in the course of the year. In general, meetings were held once a month but some committees convened only a couple of times during the year. Like other NCBs, the Bank of Finland has one or two representatives on each committee. The committees have also set up working groups to examine a number of specific issues in more depth. About 70 representatives from various organizational levels at the Bank participated in the work of the committees and working groups. However, hundreds of Bank employees were involved indirectly with ESCB matters in one way or another.

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

### **Governing Council of the ECB and General Council of the ECB**

Matti Vanhala  
Esko Ollila, Deputy Member until 6 November 2000  
Matti Louekoski, Deputy Member, from 6 November 2000  
Kjell Peter Söderlund, Assistant

### **Committees**

#### **International Relations Committee**

Esko Ollila (until 6 November 2000)  
Sinikka Salo (from 6 November 2000)  
Kjell Peter Söderlund

#### **Budget Committee**

Antti Vuorinen

#### **Accounting and Monetary Income Committee**

Esa Ojanen  
Tuula Colliander

#### **Legal Committee**

Maritta Nieminen  
Eija Brusila

#### **Payment and Settlement Systems Committee**

Harry Leinonen

#### **Market Operations Committee**

Markus Fogelholm  
Harri Lahdenperä

#### **Banking Supervision Committee**

Heikki Koskenkylä

#### **Monetary Policy Committee**

Pentti Pikkarainen  
Tuomas Saarenheimo

#### **Banknote Committee**

Urpo Levo  
Paavo Perttu

#### **Internal Auditors Committee**

Taina Kivelä  
Erkki Kurikka

#### **Information Technology Committee**

Armi Westin  
Raimo Parviainen

#### **Statistics Committee**

Martti Lehtonen  
Laura Vajanne

#### **External Communications Committee**

Antti Juusela  
Antero Arimo

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Committee work is a very important part of ESCB cooperation, and it had a significant impact on daily work routines at the Bank in 2000. Experts – both those who are members of committees and those who are engaged in preparatory work in Finland – 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 requires the submission of memorandums, letters and answers to enquiries to committee secretaries. The proceedings of committee meetings are reported systematically at the Bank.

Twelve of the 13 ESCB committees work on issues related to central banking within the euro area. Matters concerning external relations were dealt with by the International Relations Committee. The NCBs of the participating member states each have two representatives on the committee; one of the NCB representatives is normally a member of the NCB's Board, in most cases the deputy governor. The ECB is also represented on this committee by a member of its Executive Board. In 2000 the committee handled, inter alia, issues concerning the Eurosystem that were raised at meetings of international organizations, mainly the International Monetary

Fund and the EU's Economic and Financial Committee, and that may have required a common position of the Eurosystem. Where necessary, the Governing Council took the ultimate decision on such positions.

NCB representatives of non-participating EU countries attended the meetings of the International Relations Committee whenever matters concerning the EU as a whole were discussed. This was also normal practice in other committees.

Important topics discussed by the International Relations Committee in 2000 included the development of international financial systems and EU enlargement.

Another important topic discussed by the committee was financial stability. Efforts were also made to establish common positions of the Eurosystem on the prevention and management of international financial crises.

Key topics relating to EU enlargement included convergence of the economies of the EU accession countries with the economies of the EU countries and cooperation between the NCBs of the accession countries and the Eurosystem. As a follow-up to the Seminar on the Accession Process held in Helsinki in 1999, the ECB and the central bank of Austria jointly arranged a high-level seminar for representatives from the NCBs of the candidate countries and the Eurosystem in Vienna in December. The International Relations Committee played a major role in planning the seminar.

In addition, the committee actively monitored developments in the international role of the euro and, together with the Monetary Policy Committee, prepared a report on this subject.

### Other activities related to the European Union

The Economic and Financial Committee, which works under the Council of European Union meeting in the composition of the Ministers of Finance and Economy (ECOFIN Council), is comprised of two representatives from each member state, the ECB and the Commission. One of a member state's representatives is from the

Ministry of Finance and the other from the NCB.

Since 1999 monitoring of economic developments in the EU countries has been enhanced in compliance with the principles agreed during the Finnish EU presidency. The key instrument used for monitoring is the annually published document *Broad economic policy guidelines*. In 2000 the Economic and Financial Committee for the first time systematically monitored the implementation of earlier guidelines and, in accordance with customary practice, submitted a draft for new guidelines to the ECOFIN Council based on the Commission's recommendation.

In addition, the Economic and Financial Committee was involved in the preparations for the accession of Greece to the euro area. At the initiative of Greece and in keeping with ERM II procedures, it was agreed in January 2000 to revalue the central rate of the Greek drachma against the euro by 3½%. In May the committee recommended to the Council, on the basis of the Commission's and ECB's convergence reports, that it approve the accession of Greece to the euro area, with effect from 1 January 2001. On 19 June 2000 the ECOFIN Council took the decision on Greece's adoption of the single currency.

Considerable attention was paid to developing the production of statistics on the EU, and on the euro area in particular. The Economic and Financial Committee submitted proposals to the European Commission and the EU member states on action to improve statistics and closely monitored the

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

#### **Economic and Financial Committee**

Esko Ollila (until 23 November 2000)  
Sinikka Salo (from 23 November 2000)  
Paavo Peisa, alternate member

#### **Economic Policy Committee**

Antti Suvanto

#### **Banking Advisory Committee**

Heikki Koskenkylä

implementation of its recommendations. In the monitoring of general government finances, the concept of deficit was defined more precisely, as regards, for example, accounting treatment of swap agreements and the sale of licences for third generation mobile phones (UMTS licences).

A working group on financial stability and crisis management functioning under the Economic and Financial Committee submitted a report to the informal meeting of the ECOFIN Council in Lisbon in April. The working group proposed several practical measures for improving monitoring, including closer cooperation between ministries, supervisory authorities and central banks. Finland was represented in the working group by Mr Esko Ollila, Deputy Governor of the Bank of Finland.

The Economic and Financial Committee prepared reports for the ECOFIN Council on changes called for by EU enlargement, particularly the need for increased use of qualified majority voting in the articles on Economic and Monetary Union in the Treaty Es-

tablishing the European Community. The committee also prepared drafts for conclusions on exchange rate issues pertaining to enlargement for the informal ECOFIN Council meeting in Versailles and the European Council meeting in Nice.

The committee continued its efforts to find common positions on international economic policy issues. To this end, in spring 2000 it submitted a memorandum on issues relating to the international financial architecture. The EU's common positions were also made known through speeches drafted by the committee and delivered by the president of the EU Council at the spring and autumn meetings of the IMF.

The Bank of Finland also has a representative on the EU's Economic Policy Committee. The committee was involved in the drawing up of the broad economic policy guidelines and in other procedures for the coordination of member states' economic policies. In particular, these procedures concerned structural policy aimed at improving growth potential and employment within the Community.

In Finland, the Bank of Finland participated in the work of the EU Affairs Committee responsible for coordinating cooperation between ministries. In mid-2000 the committee was transferred from the Ministry for Foreign Affairs to the Council of State. The Bank also took part in the preparatory work of the sub-committees of the EU Affairs Committee that addressed issues related to economic policy coordination, international financial issues, taxation, financial ser-

vices and capital movements, insurance services and EU enlargement.

The Treaty of Nice, which was completed at the conclusion of the EU Intergovernmental Conference in December 2000, included an amendment to the Statute of the European System of Central Banks and of the European Central Bank. A new item was inserted under Article 10 of the Statute which enables the Council of the European Union to amend Article 10 (2), which contains provisions on the general voting rules of the Governing Council of the ECB, without convening a full-scale Intergovernmental Conference. Such amendments, which are made on the recommendation of the ECB or the European Commission, nevertheless require unanimous approval by the European Council of the Heads of State and Government. The amendments will enter into force only after being ratified by all Member States in accordance with their respective constitutional requirements.

### 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 reassessing its role and tasks. The need for more in-depth consideration of these issues stems from criticism in recent years of both the IMF's policy recommendations and general way of functioning. There have been calls for reform both by non-government organizations (NGOs) opposed to

globalization and the member countries that finance the activities of the IMF. The reforms are also part of a wider process aimed at establishing a new code of good practices for international financial activities.

The reform process got a new leader in 2000, when Mr Michel Camdessus, managing director of the IMF since 1987, retired and Mr Horst Köhler from Germany was elected managing director by the Fund's Executive Board in March. Mr Köhler began his five-year term of office at the beginning of May.

From the extensive discussions carried on both within and outside the IMF, it became increasingly clear that to operate effectively, the IMF would have to focus more on the tasks and functions specifically assigned to it in its statute and mandate. This involves surveillance of member countries' economies and, where necessary, the drawing up and monitoring of economic adjustment programmes. The cornerstones of the new mode of operation are systems for managing economic and financial crises and, in particular, for anticipating and preventing them.

The financial crises in the 1990s further highlighted the importance of the part played by the IMF in averting crises that threaten the stability of the financial sector. The Financial Sector Assessment Program was launched to identify potential vulnerabilities in countries' financial systems. The analysis carried out under this programme reveals the strengths and potential risks of a member country's financial system. The drawing

up of reports based on this kind of analysis has begun in about 20 countries.

In 2000 the IMF continued its determined efforts to promote the efficiency and transparency of its activities. Amongst other things, it published a great number of press releases and reports on Article IV negotiations, financial arrangements and economic adjustment programmes with member countries. In the autumn, the IMF Board decided to set up an independent evaluation office at the IMF. The task of the Evaluation Office is to contribute to the evaluation of the IMF's internal and external activities in order to make the IMF more transparent and accountable.

The IMF also continued its efforts to strengthen the international financial architecture in various areas. Efforts to increase private sector involvement in financing arrangements made relatively slow progress and discussions focused on clarifying concepts and approaches at the principle level. Practical decisions are still made on a case-to-case basis. At the initiative of Mr Horst Köhler, Managing Director of the IMF, the Fund set up the Capital Markets Consultative Group, made up of experts representing the capital markets, to enhance the exchange of reliable and up-to-date information and increase the financial involvement of the private sector.

In 2000 further steps were taken to reduce poverty in the poorest member countries. To this end, the IMF cooperated with the World Bank under the HICP Initiative (Heavily Indebted Poor Countries Initiative). By the end of

2000, the IMF Executive Board had approved debt relief for around 20 heavily indebted poor countries.

The essential aim of reform of the IMF was, on the one hand, to clarify the Fund's own role and, on the other hand, to integrate its activities more closely than before with those of other international financial institutions, such as the World Bank and the regional development banks. The IMF Executive Board took the view that favourable developments in the world economy and financial stability could only be achieved by working together. The IMF's cooperation with the Financial Stability Forum and the Bank for International Settlements (BIS) strengthened efforts to stabilize global financial markets.

In 2000 the IMF's credit terms and financing arrangements were revised to better comply with the continuously changing global financial environment. The Contingent Credit Line, which is designed to prevent systemic risk, was adopted as the Fund's primary means of precautionary financing for crisis prevention. In addition, the Fund decided to shorten maturities on loans and to increase the cost of lending for larger credit amounts.

In summer 2000 an experts group set up by the IMF and headed by Professor Richard Cooper submitted its final report on the various formulas for calculating members' quotas. The report had attracted much attention beforehand and aroused discussion in different circles. In addition, the Nordic-Baltic Monetary and Financial Committee (NBMFC), which began to function in the spring, set

up its own working group to discuss quotas and member country representation. Member countries' voting powers in the Fund are determined on the basis of their fund quotas. Discussion of this issue is continuing.

In early June an Article 4 consultation was conducted in Finland on a somewhat smaller scale than before. As in 1999, the concluding remarks made by the IMF mission on the completion of the consultation were released to the general public. For the first time, the IMF mission held a press conference on the completion of the consultation. According to the IMF, the economic outlook for Finland was favourable, but serious problems remained, such as low productivity growth outside the high tech sector, high structural unemployment and a low average retirement rate. The mission commended the Finnish government's policy of restraint on the growth of public expenditure. According to the IMF, overheating was not an imminent risk for Finland, but it could become a problem if wage moderation did not continue in the next few years. The recommendations made by the IMF included income tax cuts and structural reforms to improve the flexibility of the labour market. Monetary policy was discussed only in terms of demands imposed on fiscal and structural policies in Finland by the single monetary policy in the euro area. The actual staff report drawn up by the mission was posted on the IMF's Internet website in August. The Fund examined the single monetary policy in its special spring and autumn reports on the euro area.

The Fund's External Relations Director visited Finland in August. The purpose of the visit was to establish an active dialogue with the media and the NGOs before the Joint Annual Meetings of the World Bank and the IMF in Prague on 26–27 September.

Finland was represented on the Fund's Board of Governors by Mr Matti Vanhala, Governor of the Bank of Finland. His deputy was Mr Esko Ollila, Deputy Governor of the Bank of Finland, until 23 November, and from 23 November Mr Matti Louekoski, Member of the Board of the Bank of Finland (Deputy Governor from 1 January 2001).

The IMF's International Monetary and Financial Committee (IMFC) convened for the first time under its new name in April. Mr Sauli Niinistö, Finland's Minister of Finance, represented the Nordic and Baltic countries at the meeting.

The NBMFC, consisting of representatives from the Nordic and Baltic central banks and ministries of finance, convened three times during the year to prepare joint positions and policies eg for the IMFC meeting. Finland was represented on the NBMFC by Mr Esko Ollila, Deputy Governor of the Bank of Finland, until 6 November and from 6 November by Mr Matti Louekoski, Member of Board of the Bank of Finland, and by Mr Johnny Åkerholm, Per-

manent Under-Secretary of State, from the Ministry of Finance, who chaired the committee. The alternate members of the NBMFC also convened three times in 2000. In addition to dealing with day-to-day matters, it prepared reports on, inter alia, the constituency's coordination work and cooperation between the Nordic-Baltic Representation Offices of the World Bank and the IMF.

The Nordic-Baltic constituency was represented on the Fund's Executive Board by Mr Olli-Pekka Lehmussaari from Finland, whose two-year term of office continues until the end of 2001. On 1 January 2000, the Bank of Finland took over responsibility for the coordination of the preparation of the constituency's positions for the period until the end of 2001.

### Other international activities

The Bank for International Settlements (BIS) functions as a bank and cooperative body for central banks. Governors and experts from central banks convene eight times a year in Basel 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 meetings.

Brazil repaid the loan granted by the BIS in 1998 prematurely in 2000. Thus, the commitment in respect of collateral for the loan provided by the Bank of Finland by means of an absolute guarantee issued by the Finnish government became void.

Within the Organization for Economic Cooperation and Development (OECD), representatives of the Bank of Finland participated in the work of several 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 reviews were considered at a meeting in June, and the country report was published in August.

The Bank of Finland also had a representative 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 macroeconomic analysis conducted by the Bank of Finland supports the Governor's participation in the activities of the ECB's Governing Council as well as the work of the Bank's representatives in the ECB's various committees and working groups and in other international bodies. Macroeconomic analysis is also used to assess the effects of the single monetary policy on the Finnish economy and the implications for the tasks of national economic policy.

Participation in the Eurosystem's twice-yearly forecast rounds is an important part of the Bank's macroeconomic analysis. The joint forecast of the Eurosystem is drawn up by the Monetary Policy Committee, which is composed of representatives from the ECB and national central banks. The Bank is responsible for the part of the forecast concerning Finland. In December 2000, for the first time, the ECB published the main contents of its forecast concerning the euro area. The Bank of Finland had begun to publish its forecast for Finland earlier in its quarterly publications *Euro & talous* and *Bank of Finland Bulletin*.

The Bank aspires to be at the international cutting edge in its selected core areas of economic

research. Research is mainly carried out by the Bank's Research Department and the Institute for Economies in Transition. The aim is that Bank experts with research training should, from time to time, have an opportunity to enhance their skills by participating in fixed-term research projects at the Research Department.

Economic research carried out by the Research Department takes place mainly within the framework of two programmes. The programmes have a twofold purpose: on the one hand, research seeks to underpin the Bank's contribution to the preparation of the Eurosystem's single monetary policy and, on the other hand, to help the Bank align itself to the major changes that are taking place in the financial markets and thus in the tasks of central banks.

Research programme 1, *Modelling of Monetary Policy*, is concerned with quantitative models used in policy preparation and forecasting. One of the application areas for these models is research into monetary policy strategy. Special emphasis in developing the models is therefore given to credibility and uncertainties, which are factors of prime importance for monetary policy. During 2000 a simulation model that explicitly

incorporates public expectations about future economic developments in the euro area was built under this research programme. Other projects in this research area included studies on the impact of productivity changes on inflation and employment and the relevance of uncertainty for the selection of monetary policy strategy. The Bank also participated in the activities of the Monetary Policy Transmission Network, which operates under the auspices of the Eurosystem. One area of research covered by the network was the impact of monetary policy on the behaviour of banks of different size.

In research programme 2, *Future of the Financial Services Sector*, the focus continued to be on economies of scale in stock exchange activities and consolidation of securities markets. Several projects in this research area were concerned with the development of stability policy and financial supervision to meet the needs of open competitive financial markets. Other projects included studies of the legal aspects of the expansion of banks' activities into non-banking business, macroeconomic factors affecting the occurrence of loan losses and the prospects for electronic money.

Research findings are primarily published in the form of discussion papers. Longer studies (such as doctoral theses) are published as books in the Bank's research series. Articles written by the Bank's re-

searchers are also published in international scientific research journals. In 2000 the Bank started to publish a twice-yearly research bulletin containing information on research conducted at the Bank.

### Research on transition economies

The Institute for Economies in Transition has four complementary functions: research, monitoring, information management and co-operation with the authorities. Research on transition economies, with a special focus on Russia and the Baltic States, has been defined as one of the Bank's core research areas, and the aim is to gain an international reputation as a leading centre of research in this field. Research done by the Institute is concerned mainly with macroeconomic policy, especially monetary and fiscal issues. This research is unique in its field within the European System of Central Banks.

Fifteen papers appeared in the Institute's Discussion Papers series in 2000. Efforts are also being made to publish the Institute's research work in external journals and other publication series. Seminar lectures and other articles are published on the Institute's website in its BOFIT Online publication series. The Institute continued to contribute to the World Bank's Transition Newsletter, which is also an important publicity channel.

The Institute's range of economic and financial reviews includes the long-established *Russian & Baltic Economies – The Week in Review* (in Finnish and in English), *Russian Economy – The Month in Review* and the *Baltic Economies – The Quarter in Review*. All of these publications have been well received, and their circulations increased further in 2000. All of the Institute's publications are also available in electronic form, which is becoming an increasingly important channel for their dissemination.

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 Institute's cooperation with various authorities strengthened further as the ESCB became more established.

Cooperation with the research community in Finland and abroad was developed further. Both of the Bank's research units have traditionally organized international research seminars. In 2000 four such seminars were held. Partners in this cooperation were, in addition to the central banks of the ESCB, the CEPR (Centre for Economic Policy Research, London) and the NBER (The National Bureau of Economic Research, Cambridge, USA).

# Statistics

Finland's participation in Stage Three of EMU has increased the Bank of Finland's statistical duties. Money and banking statistics and key items of balance of payment statistics required for the preparation of the single monetary policy fall within the competence of the ECB, and the national central banks (NCBs) are responsible for compiling them. Statistical matters in areas of concern to the European System of Central Banks (ESCB) are prepared by the Statistics Committee and the working groups operating under it. With the increase in the statistical duties of the ESCB, the Governing Council of the ECB has set cost-effectiveness as a key goal in statistical compilation. In line with this goal, the Governing Council requires that the costs and benefits of new statistics be assessed as part of the preparatory work.

Another important aspect of the Bank's statistical work is its extensive and close cooperation with Statistics Finland and other bodies producing statistics.

## Statistical cooperation within the ESCB

The preparatory work by the Statistics Committee on statistics re-

quired by the ESCB and commencement of regular statistical reporting takes several years. Among the main priorities in the work of the Committee in 2000 were to establish on a regular basis the compilation and publication of statistical series – money and banking statistics and balance of payment statistics – begun previously for Stage Three and preparation of a number of new financial statistics. The focus in the latter area was on harmonization of interest rate statistics, production of statistics on other financial institutions to complement statistics on monetary financial institutions (MFIs), and monetary union financial accounts. The ECB's project for a centralized securities register for the euro area moved ahead with the decision to build national components in 2001.

The Statistics Committee regularly reviews the quality of statistics. Owing to their importance for the preparation of the single monetary policy, the contents of euro area money and banking statistics and the related compilation methods are expressly prescribed in a regulation issued by the Governing Council. The MFI balance sheet statistics are used to calculate euro area monetary and credit aggregates. The reserve requirements for

individual credit institutions are also determined on the basis of the money and banking statistics.

However, some problems attach to compilation of these statistics as regards geographical and sectoral definitions of economic activities and assessment of financial transactions (flows) on the basis of changes in balance sheet items.

The ESCB's Internal Audit Committee inspected practices applied in the compilation of money and banking statistics and balance of payments statistics. Uniform practices ensure that statistics are harmonized and of high quality and that they are published with strict adherence to publication timetables.

There have been major revisions to euro area balance of payments statistics, and the errors and omissions item is rather large. This partly reflects the different collection methods currently applied by euro area countries. The ECB has underlined the importance of national measures for improving the quality of balance of payments statistics since there is no common legislation on this. For the same reason the ECB has devoted increased attention to comparison of banks' external items in balance of payments statistics with these items in banks' balance sheets. A number of countries in Continental Europe are updating their collection and compilation methods, and this issue was widely discussed by the Committee and its working groups. Finland's balance of payments statistics are compiled using very up-to-date and efficient methods.

## Other international and domestic cooperation

The Bank also cooperated at international level with Eurostat (Statistical Office of the European Communities), the International Monetary Fund (IMF) and other Nordic countries. Eurostat's Committee on Monetary, Finance and Balance of Payments Statistics focused special attention on conceptual harmonization of statistics and improving the coverage of EU and euro area short-term statistics. The Committee also dealt extensively with quality problems connected with balance of payments statistics.

In its IMF-related work, the Bank's Statistics Department coordinated the preparation of the Finnish section of the IMF's key economic statistics (Special Data Dissemination Standard, SDDS). Finland fulfilled the requirements for the SDDS in the spring of 2000. Several Finnish statistical authorities participate in the production of this publication, which is available on a regularly updated basis on the Statistics Finland website. Descriptions of the contents of the statistics and compilation methods are available on the IMF website. The SDDS was extended in early 2000 when the IMF introduced special reporting on international reserves and foreign currency liquidity. Nordic cooperation covered statistical duties common to all Nordic central banks, with special focus on technical aspects of practical cooperation.

Fulfilment of all international statistical requirements calls for increasingly extensive and close cooperation between Finnish au-

thorities. The Bank and Statistics Finland have agreed on cooperation to meet these requirements.

The Bank forwards general economic and public sector statistics compiled by Statistics Finland to the ECB.

## Compilation and publication of statistics

Monthly compilation and reporting of money, banking and balance of payments statistics to the ECB continued in accordance with set timetables. There was close and smooth cooperation with reporting institutions aimed at solving complex problems connected with reporting and statistical concepts. This helped to improve the reliability of statistics. Statistics are compiled according to established timetables and practices in order to meet ECB requirements concerning timeliness. There was a change in working practices when local cooperative and savings banks began reporting individually.

The Board of the Bank of Finland decided to extend the coverage of MFIs, the core sector in the money and banking statistics, with effect from 1 January 2001 to include other credit institutions, in addition to the Bank of Finland, deposit banks and money market funds. This brought the coverage of MFIs into line with EU legislation. The Bank organized meetings with the credit institutions concerned to brief them on the new reporting requirements entailed by the change.

Preparation of new money and banking statistics required a major

input on the part of the Bank's Statistics Department. For the NCBs, coordination within the ECB Statistics Committee and its working groups required planning and implementation of basic data collection practices, creation of IT systems for statistics and briefing of reporting institutions on reporting requirements.

Regular reporting of quarterly financial accounts data to the ECB began in 2000. Preparations also began at the Bank for compilation of national quarterly financial accounts data. The Bank began to forward statistical data to the ECB for compilation of statistics on other financial institutions.

The key project in the area of balance of payments statistics was revision of the survey frames and selection of enterprises used in the data collection surveys. At the same time survey coverage was extended to include investment firms, a particular purpose of

which was to determine households' investment abroad. These measures have increased the quality and reliability of balance of payments statistics. The nature of these statistics is changing as increasing globalization is causing large fluctuations in direct investment and securities markets. The prospect of enlargement of the euro area highlights the importance of country breakdowns in the balance of payments statistics. In Finland, the systems for compilation of balance of payments statistics and cooperation with Statistics Finland function smoothly. In accordance with the mutually agreed division of responsibilities, Statistics Finland submitted the first results of a survey on international trade in services in 1999. These results were used in compilation of national accounts and balance of payments statistics.

In accordance with established practice, euro area statistics com-

plied by the ECB are published as separate bulletins in English. The statistics are published in full in the Statistics section of the ECB Monthly Bulletin, which is also available in Finnish. Euro area statistics are also available on the ECB website. The NCBs publish statistics on their respective countries. The Bank of Finland publishes national statistics in the form of an extensive statistical review, *Financial Markets*, and in the form of separate statistical bulletins. All these statistics are available both as printed publications and online on the Bank's website. Statistics are also submitted to Eurostat, the IMF, the Bank for International Settlements (BIS), the Organization for Economic Cooperation and Development (OECD) and locally for redistribution to third parties. Communication relating specifically to statistics is the responsibility of the Bank's statistics desk.

# Information and publications

The communication practices adopted following the start of Stage Three of EMU were consolidated in the course of the year. The main task was to inform the Finnish public about the single monetary policy and its importance. As part of this policy, the Bank continued the practice adopted in 1998 whereby Mr Matti Vanhala, Governor of the Bank of Finland, is available for interview by Finnish journalists immediately after the regular press conferences given by Mr Wim Duisenberg, President of the ECB. Journalists in Helsinki can present questions to Mr Vanhala via a direct video connection.

The press conference given by the Governor in connection with the release of the Bank's Finnish-language quarterly *Euro & talous* has also become an important communication tool for the Bank. The press conference addresses economic developments in Finland and the rest of the euro area as well as economic policy issues. The Bank of Finland's twice-yearly macroeconomic forecast is also released in connection with these press conferences.

The Bank also participated actively in the work of the ESCB's External Communications Committee and its working group and

sought to improve communication both at home and within the ESCB.

The introduction of the euro banknotes and coins on 1 January 2002 calls for communication on a massive scale. To meet this need, the ECB and the national central banks (NCBs) have launched the Euro 2002 information campaign. In 2000 considerable effort was put into planning the campaign, which is being coordinated by the Eurosystem's joint project team. The central banks aim to inform the general public about the euro notes and coins, especially those groups who handle cash in their daily business or who can effectively disseminate information about the new money. A key goal is to familiarize members of the public with the appearance and security features of the euro banknotes and coins and the timetable for their introduction. An extensive information campaign will be conducted towards the end of 2001. It will be coordinated with the joint euro campaign of the Ministry of Finance and the European Commission.

Information on economic and monetary union was distributed by the Bank's experts and, in particular, the members of the Bank's EMU communication group. The Bank also answered numerous questions and other

**Table 2.**  
Print runs for Bank of Finland  
publications in 2000\*

Annual report	
– in Finnish	3,300
– in Swedish	800
– in English	2,000
Euro & talous	7,500
Bank of Finland Bulletin	5,600
Series A	–
Series E	1,800–1,900
Discussion Papers	1,400
Financial Markets statistical review	
– markka-amount version	450
– euro-amount version	900
Finnish Bond Issues	400
Institute for Economies in Transition	
– BOFIT Discussion Papers	1,300
– Russian & Baltic Economies – The Week in Review	
– in Finnish	1,000
– in English	1,500
– Russian Economy – The Month in Review	1,300
– Baltic Economies – The Quarter in Review	900

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

enquiries about EMU from members of the public.

In internal communication, the focus was on expanding the contents of the Bank's intranet and on establishing it as the principal channel of in-house communica-

tion. The staff magazine *Pankko* appeared six times during the year.

As in the previous year, the Bank's Publication and Language Services worked for the ECB, as well as the Bank and the Financial Supervision Authority. In addition to the ECB's annual report and the Monthly Bulletin, *Convergence Report 2000* and the updated version of *The single monetary policy in Stage Three, General documentation on Eurosystem monetary policy instruments and procedures* were translated into Finnish at the Bank. In addition, ECB press releases were translated into Finnish and Swedish.

Development of the Bank's website continued in so far as publications were concerned. Nearly all of the Bank's and ECB's latest publications are now available on the website.

The Bank's publications *Euro & talous* and *Bank of Finland Bulletin* appeared four times. The Annual Report, which was revised as regards both its contents and appearance, was published in Finnish,

Swedish and English-language editions. The statistical review *Financial Markets* was published monthly, in both markka-amount and euro-amount versions. Balance of payments statistics were published regularly in the form of various statistical bulletins. No studies were published in the Bank's A series, while three doctoral theses appeared in the E series. Twenty-four 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.<sup>1</sup>

In addition to the regular publications, various brochures and instruction booklets were produced for internal and external use.

<sup>1</sup> A list of Bank of Finland publications in 2000 is included in the Appendices. The publications by the Bank, the Institute for Economies in Transition and by the European Central Bank are also posted on the Bank's website ([www.bof.fi](http://www.bof.fi)).



# Organization and personnel

## Organization

The Board of the Bank of Finland was reduced to three members in the latter half of the year, following the death in June of Mr Matti Korhonen after a serious illness. Mr Esko Ollila, the Deputy Governor, stepped down from active involvement in the Board's work in the autumn and retired on 1 January 2001. The President of the Republic of Finland appointed Dr Sinikka Salo as member of the Board with effect from 16 October 2000. In the autumn the director level was removed from the organizational structure after Mr Pentti Koivikko stepped down from his duties and subsequently retired. No other changes were made to the organizational structure.

## Strategic planning

In the Bank's strategic planning the vision of the Bank of Finland was encapsulated in the words 'Bank of Finland - promoter of stability', an expression that is readily accessible for both change management and communication purposes.

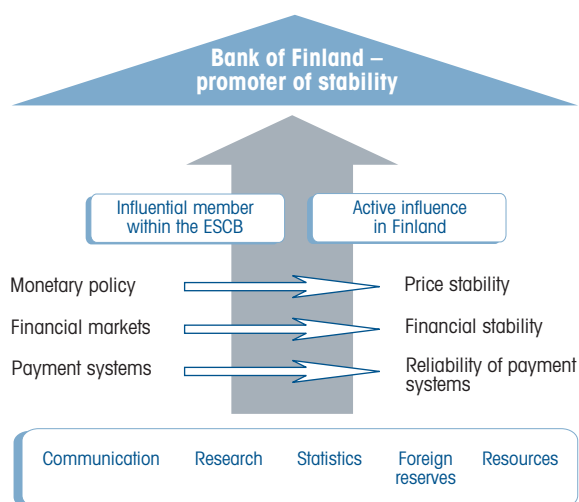
The Bank seeks to contribute to the creation of wealth and prosperity by working to secure monetary and financial stability. The

essential elements of monetary and financial stability are price stability, stable and secure financial markets and reliable payment systems and means of payment. The Bank aims to contribute to the definition and implementation of the Eurosystem's single monetary policy with the primary objective of maintaining price stability throughout the euro area. The Bank functions within the European Central Bank in the capacity of an owner and decision-maker. In Finland, it supports economic policies that seek to ensure that the Finnish economy remains stable, adaptable and competitive, and an attractive place for investment.

In strategic planning the Bank built on the scenario analyses of previous years. A broadly based analysis of the Bank's goals in terms of the structure, ways of operating and functions of the Eurosystem was undertaken by individual departments. The analysis also identified potential changes in the Eurosystem that the Bank should prepare for. The recent strategic approaches and change plans of some of the central banks within the European System of Central Banks (ESCB) were also studied.

The Bank's strategy was updated by setting strategic guidelines for monetary policy, financial stability and payment systems over

**Chart 47.**  
**The Bank of Finland's vision**



Source: Bank of Finland.

the next few years. These strategic guidelines highlight more clearly than before the key priorities as regards promoting monetary and financial stability. Priorities were also defined in the areas of communication, research, statistics, management of foreign reserves and resources.

## Operating expenses and income

The Bank of Finland's operating expenses in 2000 totalled FIM 526.2 million, which was FIM 69.8 million or about 15.3% more than the year before. The increase was mainly due to the preparations for the cash changeover at the beginning of 2002. Purchases of euro notes alone accounted for about FIM 61.6 million. The growing use of purchased services also contributed to the increase in operational costs.

The preparations for the cash changeover will give rise to substantial cost items of a one-off

nature in the Bank's budget for 2001 as well. The expenditure of the Bank's pension fund will also increase as an exceptionally large number of staff will be retiring over the next few years. Staff reduction through natural wastage will also result in growing use of purchased services. The Bank's income is projected to increase slightly in 2001, mainly as a result of higher income from real estate.

## Personnel

The Bank continued its policy of proactive personnel planning introduced in 1999. It covered the whole organization and involved coordinating the various departments' views of the Bank's priorities, needs for skills development and personnel projections for the following three-year period. The priorities are based on the Bank's strategic guidelines approved by the Board in the spring.

The total number of staff will gradually decrease in step with

changes in the Bank's activities. In the coming years a large number of staff will retire. At the same time, the Bank aims to increase the share of experts in its staff through new recruitments. The main emphasis will be on the core central bank functions while there will be an increase in purchases of support services.

As at the end of 2000 the Bank employed a total of 768 staff (including staff on leave of absence): 665 at the head office and 103 at the branches. Expressed in terms of man-years, the combined work contribution of permanent employees and employees on fixed-term contracts totalled 727 man-years in 2000.

A total of 43 staff were on leave of absence, 20 of whom were employed by the ECB.

Of the total staff, 90% had permanent positions and 10% were on fixed-term contracts.

The Bank's pension scheme is managed by an internal pension fund and the pension provisions correspond to those of 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 2000.

With the reform of the legislation governing openness of government activities, the salaries of the Bank's employees became public information on 1 December 1999. The criteria for implementing the principle of openness were laid down before the Act took effect, and these criteria were observed in the year under review. Most of the requests for information received by the Bank concerned the salaries

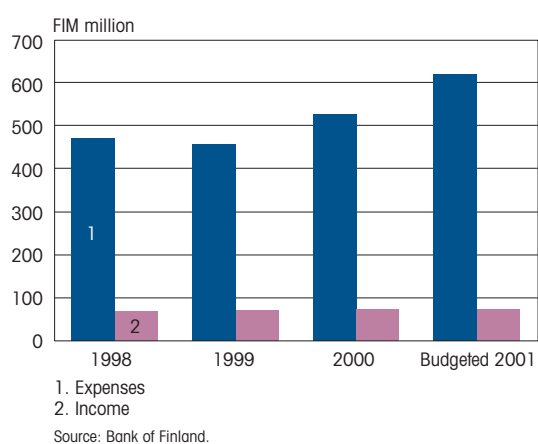
**Table 3.**  
The Bank of Finland's operating expenses and income, FIM million<sup>1)</sup>

	Budget 2001	Outturn 2000	Outturn 1999	Outturn 1998
<b>Expenses</b>				
Salaries and fees	172,6	170,9	168,9	166,6
Social security	23,5	22,6	24,1	24,3
Pensions	80,9	71,2	69,0	66,2
Training	10,2	7,6	7,1	7,1
Travel	10,7	8,8	8,1	8,6
IT services	26,2	22,5	24,1	21,0
Other purchased services	41,0	23,4	20,6	19,2
Real estate expenses	34,1	30,8	30,8	29,7
Other	29,9	25,5	26,4	23,8
<b>Total</b>	<b>429,1</b>	<b>383,3</b>	<b>379,1</b>	<b>366,5</b>
<b>Depreciation</b>				
IT equipment	4,0	16,4	11,6	13,0
Money handling machines	5,34	0,5	0,3	5,5
Buildings	52,0	51,5	51,0	36,0
Other fixed assets	7,64	6,2	7,6	10,9
<b>Total</b>	<b>69,0</b>	<b>74,6</b>	<b>70,5</b>	<b>65,4</b>
<b>TOTAL</b>	<b>498,1</b>	<b>457,9</b>	<b>449,6</b>	<b>431,9</b>
Banknote printing	119,0	68,3	6,7	39,8
<b>Total operating expenses</b>	<b>617,1</b>	<b>526,2</b>	<b>456,3</b>	<b>471,7</b>
<b>Income</b>				
Maintenance of the currency supply	10,7	16,6	15,2	14,1
Services sold to the Financial Supervision Authority	10,1	9,2	8,6	8,5
Real estate	39,3	34,9	33,0	29,8
Other	13,9	14,1	12,7	15,1
<b>Total income</b>	<b>74,0</b>	<b>74,8</b>	<b>69,5</b>	<b>67,5</b>
<b>NET</b>	<b>543,1</b>	<b>451,4</b>	<b>386,8</b>	<b>404,2</b>

<sup>1)</sup> Excludes the Financial Supervision Authority.

Source: Bank of Finland.

**Chart 48.**  
The Bank of Finland's operating expenses and income,  
1998 – 2001



**Table 4.**  
Changes in staff size at the Bank of Finland, 1991–2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Head office	731	735	685	675	679	655	670	679,5	681	665
Branches	178	159	140	106	117	111	106	103	104,5	103
Total	909	894	825	781	796	766	776	782,5	785,5	768

Source: Bank of Finland.

of Bank employees and new recruitments.

An employee attitude survey covering the entire staff was carried out in the spring. The aim of the survey was to find out employees' views on how the Bank had adjusted to the changes brought about by membership of the ESCB. The survey focused on management, job motivation and coping with job stress and the subjective experience of change.

### Staff development and training

To ensure achievement of the set training goals, personal development plans covering the next three years were drawn up for the Bank's researchers and other experts. The aim was to foster strategic dialogue and to identify skills development priorities.

Apprenticeship contracts leading to occupational examinations were used increasingly in the training of operative staff.

The Bank's training expenditure totalled FIM 7.6 million (4% of payroll). Training focused on professional development, which amounted to FIM 4.6 million. FIM 1.5 million was spent on interactive skills, communication skills and language training, and FIM 0.7 million on development of basic IT skills.

Seven of the Bank's supervisors attended internal management training programmes arranged by the ESCB. In addition to teaching management skills, these programmes focused on networking and development of international skills.

In IT training the main emphasis was on courses introducing the professionals in the field to new methods and equipment. User training mainly consisted of courses leading to the computer driving licence and, in the latter half of the year, introductory courses on new case management systems.

Major topics in economic training included statistics, econometrics and risk management. Three courses were arranged in modern macro theory and empirical analysis of fiscal policy under the guidance of internationally recognized experts. A total of 19 training sessions on economic issues were arranged, representing 792 trainee days. In addition to in-house training, experts participated actively in external training sessions and seminars, both at home and abroad.

The Bank launched training cooperation with EU and other European central banks by inviting their employees to attend some of the Bank's courses. The idea behind this initiative was to increase the supply of quality training to

central bank employees on a reciprocal basis, promote networking of researchers and experts, reduce training costs and make training more effective. A total of 10 employees of the central banks of the EU countries and 12 employees of Eesti Pank participated in the Bank's courses. Representatives of Finnish economic research institutes, the Ministry of Finance and the banks were also invited to attend some of the courses. A total of 19 participants from other Finnish institutions attended.

Courses for experts arranged by other central banks and by the International Monetary Fund were attended by a total of 21 Bank employees.

As in previous years, part of the Bank's research projects took the form of academic research studies. The preparation of licentiate and doctoral theses required six man-years, spread over ten different projects.

In keeping with established practice, the Bank of Finland continued to cooperate with the central banks of transition economies in the field of training. This mainly took the form of visits to Finland. The Bank arranged 9 visits involving 42 participants. Training cooperation focused on the Russian central bank.

# Information technology

After the millennium change, the focus of IT activities shifted to meeting the challenges presented by the introduction of the euro. Key areas of development as regards IT systems were system support for preparation for the cash changeover, renewal of banking applications, enhancement of electronic communication, archiving and data flow systems, and building on the benefits and opportunities provided by cooperation within the ESCB.

As regards currency supply, new systems were defined and implemented in preparation for the introduction of the euro banknotes and coins, and the Bank participated in related ESCB projects. The onset of Automatia's involvement in currency distribution also necessitated important changes to IT systems.

The need to modernize the banking systems portfolio had been recognized some years earlier. Abandonment of mainframe architecture was timed to coincide with the renewal of banking applications. The new banking systems portfolio will be built mainly in 2001. The focus in 2000 was on identifying the necessary properties of future banking applications and drafting a transition plan and

system architecture. The system will comprise third-party applications and custom-built IT systems. The change was accelerated by the procurement of a conversion tool, which will enable some current banking applications to be transformed to operate in the new environment. Application development tools and methods were also updated. The Bank's Windows NT platform was developed with the aim of making it into a high-availability environment, as required by banking applications. Renewing the entire IT environment involves not only updating of hardware and software; it also calls for step-by-step evaluation of processes, description of services and acquisition of new know-how, tools and methods. All these areas will be developed further in 2001.

The Bank's extensive website was widely used. Its competitiveness with comparable websites was examined and renewal of its structure and layout was started. The electronic archiving project, which was launched in the previous year, moved ahead when a new document management system, Documentum, was implemented in the Archives and the Registry. The project is designed to fulfil the requirements of the new Act on

the Openness of Government Activities.

The Bank participated in developing and promoting the use of the ESCB's joint data transfer projects. These included expansion and automatization of transfer of statistical data. In response to the increase in global monitoring, new data transfer solutions were built to improve connections to the BIS, OECD, Eurostat and IMF. A comprehensive plan was drafted for improving the competitiveness and identifying future development needs of IT systems serving the Bank's economists. The Bank's time series systems were upgraded to make them more compatible with corresponding ECB systems. A new version of the analysis and time series system used as an aid in decision-making was produced. Use of the system in the Ministry of Finance, which had acquired access to it in 1999, was established on a regular basis.

# Financial statements

## Balance sheet, EUR million

	31 Dec 2000	31 Dec 1999
<b>Assets</b>		
<b>Gold and gold receivables (1)</b>	<b>462</b>	<b>457</b>
<b>Claims on non-euro area residents denominated in foreign currency (2)</b>	<b>8,447</b>	<b>8,071</b>
Receivables from the IMF	692	930
Balances with banks and security investments, external loans and other external assets	7,755	7,141
<b>Claims on euro area residents denominated in foreign currency (3)</b>	<b>859</b>	<b>672</b>
<b>Claims on non-euro area residents denominated in euro (4)</b>	<b>0</b>	<b>2,389</b>
Balances with banks, security investments and loans	0	2,389
<b>Lending to euro area credit institutions related to monetary policy operations denominated in euro (5)</b>	<b>454</b>	<b>1,516</b>
Main refinancing operations	394	1,283
Longer-term refinancing operations	61	230
<b>Other claims on euro area credit institutions denominated in euro (6)</b>	<b>4</b>	<b>2</b>
<b>Intra-Eurosystem claims (7)</b>	<b>769</b>	<b>768</b>
Share in ECB capital	70	70
Claims equivalent to the transfer of foreign currency reserves	699	699
<b>Other assets (8)</b>	<b>615</b>	<b>638</b>
Euro area coins	16	17
Tangible and intangible fixed assets	248	240
Other current assets	170	234
Other	181	147
<b>Total assets</b>	<b>11,610</b>	<b>14,512</b>

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

	31 Dec 2000	31 Dec 1999
<b>Liabilities</b>		
Banknotes in circulation (1)	2,982	3,008
Liabilities to euro area credit institutions related to monetary policy operations denominated in euro (2)	2,475	4,884
Current accounts (covering the minimum reserve system)	2,475	4,884
Liabilities to other euro area residents denominated in euro (3)	1	1
Liabilities to non-euro area residents denominated in euro (4)	194	195
Liabilities to non-euro area residents denominated in foreign currency (5)	299	239
Deposits, balances and other liabilities	299	239
Counterpart of special drawing rights allocated by the IMF (6)	200	195
Intra-Eurosystem liabilities (7)	167	1,267
Other liabilities (8)	18	11
Revaluation account (9)	1,070	1,232
Provisions (10)	2,927	2,509
Capital and reserves (11)	969	969
Primary capital	841	841
Reserve fund	128	128
Profit for the financial year (12)	309	0
<b>Total liabilities</b>	<b>11,610</b>	<b>14,512</b>



## Profit and loss account, EUR million

	1 Jan – 31 Dec 2000	1 Jan – 31 Dec 1999
<b>INTEREST INCOME (1)</b>	<b>583</b>	<b>485</b>
<b>INTEREST EXPENSE (2)</b>	<b>-204</b>	<b>-147</b>
<b>NET INTEREST INCOME (3)</b>	<b>-379</b>	<b>338</b>
REALIZED GAINS RELATED TO FOREIGN EXCHANGE RATE MOVEMENTS (4)	375	198
REALIZED SECURITIES PRICE DIFFERENCES (5)	36	-131
<b>CENTRAL BANKING PROFIT BEFORE MONETARY INCOME AND OTHER INCOME</b>	<b>790</b>	<b>405</b>
NET SHARE OF MONETARY INCOME (6)	0	0
OTHER CENTRAL BANKING INCOME (7)	27	33
<b>CENTRAL BANKING PROFIT</b>	<b>818</b>	<b>437</b>
OTHER EXPENSES		
Staff cost (8)	-51	-50
Administrative expenses (9)	-16	-15
Depreciation of fixed assets (10)	0	0
Banknote production services (11)	-11	-1
Other expenses (12)	-10	-9
<b>CHANGES IN PROVISIONS (13)</b>	<b>-420</b>	<b>-361</b>
<b>PROFIT FOR THE FINANCIAL YEAR (14)</b>	<b>309</b>	<b>0</b>

## Appendices to the financial statements

	31 Dec 2000		31 Dec 1999	
<b>Foreign currency futures contracts, EUR million</b>				
Purchase contracts <sup>1</sup>	2,653.9		–	
Sales contracts <sup>1</sup>	1,707.0		–	
<b>Shares and other interests, nominal value, EUR million</b> (Bank of Finland's holding in parentheses)				
Setec	2.7	(40%)	2.7	(40%)
Rahakontti <sup>2</sup>	0	(52%)	0.2	(52%)
HEX, Helsinki Securities and Derivatives Exchange, Clearing House	1.9	(7%)	1.6	(7%)
Bank for International Settlements	11.5	(1.67%)	11.1	(1.67%)
Shares in housing companies	8.9		9.1	
Real estate shares	–		0.2	
Other shares and interests	0.1		1.1	
Total	25.1		26.0	
<b>Bank of Finland's liability share in the APK fund, EUR million</b>	0.1		0.1	
<b>Liability arising from pension commitments, EUR million</b>				
The Bank of Finland's pension liability	377.6		360.6	
– of which covered by reserves	305.0		294.5	
<b>Staff banking office, EUR million</b>				
– Deposits	17.1		17.7	
– Loans	7.4		7.6	

<sup>1</sup> Middle rate for the currency on the last business day of the year.

<sup>2</sup> Remaining liquidation dividend of EUR 35,495 as at 31 December 2000.

## The Bank of Finland's real estate

Building	Address	Year of completion	Volume m <sup>3</sup> (approx.)
Helsinki	Rauhankatu 16	1883/1961	49,500
	Unioninkatu 33 / Rauhankatu 19	1848/1954	50,500
	Snellmaninkatu 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	1968/1976/1998	6,100

The Board proposes to the Parliamentary Supervisory Council that EUR 180,000,000 of the profit of EUR 308,816,416.43 be transferred to the reserve fund and that the remaining EUR 128,816,416.43 be made available for the needs of the state.

Helsinki, 16 February 2001

THE BOARD OF THE BANK OF FINLAND

Matti Vanhala, Chairman

Matti Louekoski

Sinikka Salo

## 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, and the Bank's annual accounts for 1999 and 2000 have been drawn up in accordance with these harmonized principles.

In accordance with section 11 of the Act on the Bank of Finland, the Parliamentary Supervisory Council confirms, on the proposal of the Board, the principles applied in drawing up the annual accounts.

### 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 28 December 2000 (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.

### Claims and liabilities between national central banks of EU countries

As from 1 December 2000 claims and liabilities between the national central banks of EU countries have been netted so that each bank has a claim on or a liability to the ECB.

In 1999 claims and liabilities in respect of central banks participating in the Eurosystem had been shown on a net basis in the Bank's balance sheet. Liabilities and claims in respect of central banks not participating in the Eurosystem had been shown separately in the Bank's balance sheet.

### Fixed assets

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

The counteritem of buildings and land capitalized in the 1999

balance sheet at market prices is the revaluation account. Depreciation in respect of buildings and land has been entered by adjusting the revaluation account downwards so that depreciation does not affect the Bank's income or expense.

The economic lifetimes of assets are calculated as follows:

- computers, hardware and software, 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. Realized 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 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 1,577,165 troy ounces. In the annual accounts, gold has been valued at market price. At the beginning of the 1999 financial year the Bank (and the other central banks participating in the Eurosystem) had transferred about 20% of its gold holdings 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 1999 the Bank had 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

In 1999 this item had mainly consisted of balances with central banks of non-participating EU countries.

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

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

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

This item consists of balances with credit institutions in the euro area.

#### 7. Intra-Eurosystem claims

This item includes the Bank's share in the ECB's capital, its claim on the ECB equivalent to the foreign reserves and gold transferred to the ECB and other net claims of the central banks of the EU countries.

#### 8. Other assets

This item consists of markka-denominated coins in circulation, securities classified as securities held as financial fixed assets, fixed assets (buildings, machinery and equipment) and valuation results of off-balance-sheet items, 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 credit institutions related to monetary policy operations denominated in euro

Banks with an RTGS account at the Bank of Finland meet their reserve

requirement by maintaining the average of their daily RTGS account balances at least as high as the reserve requirement during the maintenance period.

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

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

### **4. Liabilities to non-euro area residents denominated in euro**

In 1999 this item had mainly consisted of balances with central banks of non-participating EU countries and in 1999 and 2000 it consisted of balances with international organizations and foreign banks holding loro accounts at the Bank of Finland.

### **5. 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.

### **6. Counterpart of special drawing rights allocated by the IMF**

This balance sheet item was originally denominated in SDRs and pertains to the International Monetary Fund.

### **7. Intra-Eurosystem liabilities**

In 1999 this item had consisted of net balances with the central banks participating in the Eurosystem. In 2000 the balances with the national

central banks were netted and the Bank of Finland had one balance with the ECB.

### **8. Other liabilities**

This item consists of accruals and other liabilities.

### **9. 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.

### **10. Provisions**

All provisions are included in this item. The Bank of Finland's pension liabilities total EUR 378 million; 81% of this amount is covered by the pension provision, ie EUR 305 million.

Under section 20 of the Act on the Bank of Finland, provisions can also 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 2,622 million.

### **11. Capital and reserves**

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

### **12. Profit for the financial year**

The profit for the financial year 2000 totalled EUR 309 million.

## **Notes to the profit and loss account**

### **1. Interest income**

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

### **2. Interest expense**

Interest totalling EUR 66 million was paid on reserve deposits. Interest expense also includes interest on intra-Eurosystem liabilities and interest paid on TARGET balances with non-participating EU central banks.

### **3. Net interest income**

Net interest income amounted to EUR 379 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 2000, realized gains related to foreign exchange rate movements amounted to EUR 375 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 2000, the realized gains related to securities price movements amounted to EUR 36 million.

## **6. Net share of monetary income**

This item shows 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**

Salaries amounted to EUR 35 million. Social security costs, EUR 17 million, include EUR 11 million in pensions paid during the financial year 2000.

## **9. Administrative expenses**

This item includes rents, representation costs, expense arising from the purchase of services, cost of equipment and expenses involved

in training, travel and recruitment of staff.

## **10. Depreciation of fixed assets**

Depreciation of fixed assets amounted to less than EUR ½ million.

## **11. Banknote production services**

Purchase of banknotes amounted to EUR 11 million.

## **12. Other expenses**

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

## **13. Changes in provisions**

Employees' employment pension contributions totalling EUR 1.7 million were collected from salaries during 2000 and transferred to the pension provision. In addition, the pension provision was augmented by the interest calculated

on employees' pension contributions and pension provisions made in prior years. Interest was calculated at the rate of 3%. The pension provision was increased by a total of EUR 9 million.

In addition to the pension provision in accordance with section 20 of the Act on the Bank of Finland, provisions were increased by EUR 411 million, which corresponds with the realized gains related to foreign exchange rate movements and realized securities price differences.

## **14. Profit for the financial year**

The profit for the financial year totalled EUR 309 million.

On 9 March 2001 the Parliamentary Supervisory Council decided that EUR 180 million be used to augment the reserve fund and that the remaining amount be transferred to the state.



## 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 2000 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 and of the European Central Bank. We have studied the audit report dated 28 February 2001.

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. We recommend that the profit for the financial year be disposed of as proposed by the Board.

Helsinki, 8 March 2001

Johannes Leppänen

Juha Karpio

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 records and the financial statements of the Bank of Finland for the period 1 January – 31 December 2000. 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, 28 February 2001

ARTHUR ANDERSEN OY  
Authorized Public Accounting Firm

Teppo Rantanen  
Authorized Public Accountant

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# Appendices

# Monetary policy measures of the Eurosystem in 2000

## January

On 5 January the Eurosystem conducted a liquidity-absorbing fine-tuning operation with same-day settlement. This measure aimed at restoring normal liquidity conditions in the money market after the successful transition to the year 2000.

At the request of the Greek authorities, the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decided to revalue the central rate of the Greek drachma in the exchange rate mechanism (ERM II) by 3½%, with effect from 17 January.

On 20 January the Governing Council of the ECB decided that the Eurosystem would allot an amount of EUR 20 billion for each of the longer-term refinancing operations to be conducted in the first half of 2000.

## February

On 3 February the Governing Council of the ECB decided to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.25%, starting from the operation to be settled on 9 February 2000.

In addition, it decided to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.25% and 2.25% respectively, both with effect from 4 February.

## March

On 16 March the Governing Council of the ECB decided to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.5%, starting from the operation to be settled on 22 March 2000. In addition, it decided to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.5% and 2.5% respectively, both with effect from 17 March.

## April

On 27 April the Governing Council of the ECB decided to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.75%, starting from the operation to be settled on 4 May. In addition, it decided to increase the interest rates on both the marginal lending

facility and the deposit facility by 0.25 percentage point, to 4.75% and 2.75% respectively, both with effect from 28 April.

## June

On 8 June the Governing Council of the ECB decided to raise the interest rate on the main refinancing operations of the Eurosystem by 0.50 percentage point to 4.25% and to apply this in the two operations (which would be conducted as fixed rate tenders) to be settled on 15 and 21 June. In addition, it decided to increase the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 5.25% and 3.25% respectively, both with effect from 9 June. It also announced that, starting from the operation to be settled on 28 June, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders, applying the multiple rate auction procedure. The Governing Council decided to set a minimum bid rate for these operations equal to 4.25%. The switch to variable rate tenders in the main refinancing operations was a response to the severe overbidding which had developed in the context of the fixed rate tender procedure. It was not intended as a

further change in the monetary policy stance of the Eurosystem.

On 19 June, in accordance with the Treaty establishing the European Community, the ECOFIN Council decided that Greece fulfilled the necessary conditions on the basis of the criteria set out in Article 121 (1) and abrogated the derogation of Greece with effect from 1 January 2001. At the same time, the ECOFIN Council adopted the irrevocable conversion rate between the Greek drachma and the euro, with effect from 1 January 2001. The conversion rate is equal to the drachma's central rate against the euro in the exchange rate mechanism, ERM II.

On 21 June the Governing Council of the ECB decided that the Eurosystem would allot an amount of EUR 15 billion for each of the longer-term refinancing operations to be conducted in the second half of 2000.

## August

On 31 August the Governing Council of the ECB decided to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.50%, starting from the operation to be settled on 6 September. In addition, it decided to

increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 1 September.

## October

On 5 October the Governing Council of the ECB decided to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October. In addition, it decided to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

## December

On 14 December the Governing Council of the ECB decided to reconfirm the existing reference value for monetary growth, namely an annual growth rate on  $4\frac{1}{2}\%$  for the broad aggregate M3. The Governing Council will undertake the next review of the reference value in December 2001.

# Key measures affecting the financial markets in 2000

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

### January

The Bank established a contact point to deal with potential problems during the millennium changeover weekend. The Bank also coordinated information exchange between national counterparties from 30 December 1999 to 4 January 2000. The contact point informed the changeover weekend cooperation group by issuing status reports. The experience gained during the changeover period and the preparation for it will also be useful in connection with the introduction of the euro banknotes and coins and in possible crisis situations.

### February and October

In February the Governing Council of the ECB approved six new links between securities settlement systems. These links enable the cross-border transfer of eligible collateral.

In October the ECB Governing Council approved two new links between securities settlement systems. This brought the total number of approved links to 64. These links are of major importance for the integration of euro area markets.

### May

Starting in May funds transfers in the BoF-RTGS were executed in the night instead of in the morning as previously. This new practice reduces counterparty risks in inter-bank credit transfers since banks credit customer accounts with funds transferred from other banks only after the night settlement. The night settlement is fully automated. The system checks that there are adequate funds in all BoF-RTGS accounts before funds are transferred. In addition to the night settlement, there is a settlement run in the afternoon.

On 31 May the Bank announced that banks' payment systems would be closed on 31 December 2001.

### June

On 21 June the ECB issued a policy statement on the role of the Eurosystem in the field of payment systems oversight. This policy statement was aimed at clarifying the Eurosystem's role in the field of payment systems oversight and the practical organization of oversight activities within the Eurosystem.

### December

Owing to reorganizations, the number of approved links between

securities settlement systems was reduced by two to stand at 62 at the end of December.

The Rules of the BoF-RTGS were revised to comply with TARGET guidelines (Guideline of the European Central Bank on a Trans-European Automated Real-time Gross settlement Express Transfer [TARGET]). The new rules are effective from 1 January 2001.

## EU directives and their implementation in Finland

### March

Directive 2000/12/EC of the European Parliament and of the Council relating to the taking up and pursuit of the business of credit institutions was published on 20 March.

### July

The Act to Amend the Credit Institutions Act entered into force on 21 July. The provisions on prudential requirements were amended to comply with EU legislation. Capital adequacy requirements for securities backed by housing property were amended to bring them in line with regulations governing housing loans. Capital adequacy requirements for mortgage bonds were amended to correspond to prevailing EU practice. Provisions on taking commodity risk into account in capital adequacy calculations were included in the amended Act. Furthermore, the risk weightings of some balance sheet items used in capital adequacy calculations were revised.

### September

Directive 2000/46/EC of the European Parliament and of the Council on the taking up, pursuit of and prudential supervision of the business of electronic money institutions was published on 18 September.

## Other key regulatory projects and measures

### January

The Mortgage Banks Act entered into force on 1 January. This Act is applicable to operations where a credit institution issues collateralized bonds, as defined in the Act, and uses the funds thus obtained to grant mortgages to the public.

### March

The consultation process concerning the new capital adequacy framework proposed by the Basel Committee on Banking Supervision and the European Commission in 1999 ended at the end of March. The Basel Committee published its final recommendations on a new capital adequacy framework at the turn of the year. The EU distributed its corresponding proposal for a second round of comments at the same time. This round will end in spring 2001.

### May

The Act on Repealing the Act on Postipankki Ltd entered into force on 1 May. The Act on Postipankki Ltd included provisions concerning the right and obligation of Leonia to execute government payment transfers and the use of the offices

of Finland Post Ltd for Leonia's business operations.

### June

The tax exemption of transaction accounts was abolished in accordance with an amendment to the Income Tax Act that had entered into force on 1 January.

The Board of the Helsinki Exchange Group began exploring the possibility of the Group's gaining a listing. The management investigated the matter in cooperation with the competent authorities and other relevant parties and in November an extraordinary general meeting decided that the Group would go public.

### September

On 12 September the European Commission's High Level Securities Supervisors Committee published a memorandum on the contents of a directive on preventing market abuse. The committee aims at defining market manipulation and assessing forms of cooperation, division of responsibilities and available means for preventing market abuse.

### October

An Act on the rounding of euro-denominated payments was issued on 27 October.

Legislation on centralization of the book-entry registers of the OM share settlement system operated by the Finnish Central Securities Depository (APK) entered into force on 16 October. Under the amended legislation, the previously decentralized book-entry registers were centralized into a single book-entry register, in which



account operators can make all necessary settlement-related entries.

The European Central Securities Depositories Association (ECSDA) published its recommendations on improving cross-border settlement of securities on 31 October. The aim of these recommendations is to reduce risks between national settlement systems and improve settlement. The ECSDA especially recommends implementation of delivery versus payment (DVP).

### November

The Committee of Wise Men set up by the ECOFIN Council published its initial report on the regulation of European securities markets on 9 November. The final report was published on 15 February 2001.

### December

A Ministry of Finance working group on banking services completed its proposal on acceptance of deposits and other repayable funds from the public and on revision of legislation on payment

transmission. The proposal was published in January 2001. The working group proposed an amendment to the Credit Institutions Act that would grant non-bank firms limited rights to accept repayable funds from the public. The working group also proposed that only credit institutions be authorized to provide the full range of payment transmission services and that provisions on outsourcing of banking services be included in the Credit Institutions Act.

# Main opinions issued by the Bank of Finland 2000

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

- To the Financial Supervision Authority on a guideline on the assessment of the fitness and propriety of managers and directors of credit institutions, 10 January
- To the Ministry of Finance concerning draft legislation on the centralization of the book-entry system under the Finnish Central Securities Depository (APK), 10 January
- To the Ministry of Finance concerning amendments to HEX rules on equities trading, 11 February
- To the Ministry of Finance concerning amendments to APK rules to safeguard settlement in the OM system, 17 February
- To the Financial Supervision Authority concerning amendments to the Regulations on the reporting of own funds, the own funds required for credit risk and the own funds required for covering market risk, 18 February
- To the Finnish Central Securities Depository (APK) concerning the proposed amendment of the APK's lower-level self-regulation, 9 March
- To the European Commission concerning its Consultation Document *A Review of Regulatory Capital Requirements for EU Credit Institutions and Investment Firms*, 17 March
- To the Basel Committee on Banking Supervision concerning its Consultative Paper *A New Capital Adequacy Framework*, 17 March
- To the Financial Supervision Authority concerning the Regulation on the public disclosure of trading in debt securities, 6 April
- To the Ministry of Finance concerning the authorization of securities brokers and revision of the lists of underlying assets included in product specifications, 27 April
- To the Ministry of Finance concerning amendment of credit institutions legislation, 5 June

- To the Financial Supervision Authority concerning marketing by credit institutions, 26 June
- To the Helsinki Exchanges Group Ltd concerning amendments to the rules of the Finnish Central Securities Depository (APK) required by the centralization of the book-entry system under the APK, 18 August
- To the Ministry of Finance on the total amount of contributions to be accrued in the Investor Compensation Fund in 2000, 31 August
- To the Ministry of Finance concerning confirmation of amendments to the rules of the Stock Exchange, 4 September
- To the Ministry of Finance concerning issue of warrants and public trading in warrants, 4 September
- To the Basel Committee on Payment and Settlement Systems concerning the document *Core Principles for Systematically Important Payment Systems*, 6 September
- To the Ministry of Finance concerning confirmation of amendments to the rules of the Finnish Central Securities Depository (APK), 13 September
- To the Ministry of Finance concerning amendment of the Mortgage Bank Act, 18 September
- To the Ministry of Finance concerning draft legislation on restricting the use of index clauses, 20 September
- To the Helsinki Exchanges Group Ltd concerning the effects on APK's decisions of the amendments to APK rules resulting from the centralization of the book-entry system under the APK, 3 October
- To the Ministry of Finance concerning the consultations proposed by the WTO Committee on Trade in Financial Services, 4 October
- To the Ministry of Finance concerning outsourcing by financial services undertakings, 5 October
- To the Ministry of Finance concerning the rules of the PMJ interbank payment system and the POPS system for interbank online express transfers, 20 November
- To the Ministry of Finance concerning the rules of the payment system operated by Aktia Savings Bank plc, 22 November
- To the Ministry of Education concerning a revision of the maximum interest rate applicable to study loans, 22 November
- To the Ministry of Finance concerning the rules of the payment system operated by OKOBANK, 29 November
- To the Financial Supervision Authority concerning the treatment of credit derivatives in credit institutions' capital adequacy calculations and large exposures, 30 November
- To the Ministry of Finance concerning a reduction in the absolute guarantee given by Asset Management Company Arsenal Ltd and Asset Management Company Arsenal-SSP Ltd, 14 December
- To the Financial Supervision Authority concerning revision of its Regulation on the Accounts of Credit Institutions, 19 December

## Other opinions

- To the Ministry for Foreign Affairs concerning the Government's proposal for ratifications of certain clauses in the Europe Agreements concluded with Bulgaria, the Czech Republic, Hungary, Poland, Romania and the Slovak Republic and in the protocols annexed thereto, 5 January
- To the Ministry for Foreign Affairs concerning the negotiations on an investment agreement between Finland and Singapore, 18 February
- To Arthur Andersen Oy, Authorized Accounting Firm, concerning the Bank of Finland's Annual Accounts for 1999, 6 and 7 March
- To the Ministry for Foreign Affairs concerning the investment agreement between Finland and Macedonia, 7 March

- To the Ministry of Finance concerning the commemorative coins to be issued in honour of the Church of Finland and the City of Helsinki , 21 March
- To the Supreme Administrative Court concerning an appeal made by Mr Ari Korvola , 21 March
- To the Ministry of Justice concerning a draft Convention approved by the Working Group on International Contract Practices established by the United Nations Commission on International Trade Law (UNCITRAL), 21 March
- To the Ministry of Social Affairs and Health concerning the final report on a study of the competitive aspects of the statutory occupational pension schemes, 6 April
- To the Ministry for Foreign Affairs concerning proposed revisions of Finland's bilateral investment protection agreements, 5 May
- To the Ministry for Foreign Affairs concerning the investment protection agreement between Finland and Bosnia-Herzegovina, 30 June
- To the Ministry of Justice concerning amendment of legislation on offences in office, 9 August
- To the Ministry for Foreign Affairs concerning the extension of the investment agreement between Finland and Russia, 10 August
- To the Ministry for Foreign Affairs concerning Finland's negotiations on investment protection agreements, 29 August
- To the Ministry of Finance concerning the commemorative coin in the honour of Aleksis Kivi and Finnish literature, 4 September
- To the Ministry of Justice concerning the proposed amendment of the Execution Act, 26 September
- To the Ministry of Justice concerning a memorandum on the amendment of the Limited Companies Act, 27 October
- To the Ministry for Foreign Affairs concerning the investment agreement between Finland and Mongolia, 15 November.



# Tables

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

0 less than half the final digit shown

. logically impossible

.. data not available

– nil

– change in contents of series

**Table 1.**  
Monthly balance sheet of the Bank of Finland, EUR million

Assets		I	II	III
<b>1</b>	<b>Gold and gold receivables</b>	<b>457</b>	<b>457</b>	<b>456</b>
<b>2</b>	<b>Claims on non-euro area residents denominated in foreign currency</b>	<b>8,124</b>	<b>8,227</b>	<b>8,314</b>
2.1	Receivables from the IMF	928	900	923
2.2	Balances with banks and security investments, external loans and other external assets	7,196	7,328	7,391
<b>3</b>	<b>Claims on euro area residents denominated in foreign currency</b>	<b>701</b>	<b>743</b>	<b>756</b>
<b>4</b>	<b>Claims on non-euro area residents denominated in euro</b>	<b>3,717</b>	<b>4,064</b>	<b>8,233</b>
4.1	Balances with banks, security investments and loans	3,717	4,064	8,233
4.2	Claims arising from the credit facility under the ERM II	–	–	–
<b>5</b>	<b>Lending to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>219</b>	<b>346</b>	<b>261</b>
5.1	Main refinancing operations	72	200	194
5.2	Longer-term refinancing operations	146	146	66
5.3	Fine-tuning reverse operations	–	–	–
5.4	Structural reverse operations	–	–	–
5.5	Marginal lending facility	–	–	–
5.6	Credits related to margin calls	–	–	–
<b>6</b>	<b>Other claims on euro area credit institutions denominated in euro</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>7</b>	<b>Securities of euro area residents denominated in euro</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>8</b>	<b>General government debt denominated in euro</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>9</b>	<b>Intra-Eurosystem claims</b>	<b>768</b>	<b>977</b>	<b>768</b>
9.1	Share in ECB capital	70	70	70
9.2	Claims equivalent to the transfer of foreign currency reserves	699	699	699
9.3	Claims related to the issuance of ECB debt certificates	–	–	–
9.4	Claims related to TARGET and correspondent accounts (net)	–	209	–
9.5	Claims related to other operational requirements within the Eurosystem	–	–	–
<b>10</b>	<b>Other assets</b>	<b>599</b>	<b>609</b>	<b>663</b>
<b>Total assets</b>		<b>14,587</b>	<b>15,425</b>	<b>19,453</b>

Source: Bank of Finland.

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



IV	V	VI	VII	VIII	IX	X	XI	XII
456	456	477	477	477	493	493	493	462
8,567 815	8,270 758	8,117 800	8,397 811	8,300 878	8,736 777	8,601 749	8,684 734	8,447 692
7,752	7,512	7,317	7,585	7,422	7,959	7,852	7,950	7,755
724	746	760	743	736	722	784	815	859
1,680 1,680 -	813 813 -	2,882 2,882 -	1,993 1,993 -	1,111 1,111 -	2,752 2,752 -	6,934 6,934 -	3,854 3,854 -	- - -
1,164 1,163 - - - -	884 884 - - - -	181 170 11 - - -	164 152 11 - - -	199 187 11 - - -	615 615 - - - -	300 240 61 - - -	251 190 61 - - -	454 394 61 - - -
2	3	3	3	3	4	4	4	4
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
768 70 699 - - -	768 70 699 - - -	2,912 70 699 - 2,144 -	768 70 699 - - -	2,489 70 699 - 1,721 -	795 70 699 - 27 -	2,853 70 699 - 2,084 -	2,228 70 699 - 1,460 -	769 70 699 - - -
640	614	620	613	618	665	654	632	615
14,001	12,555	15,952	13,159	13,932	14,783	20,623	16,961	11,610

Table 1. (cont.)

Liabilities		I	II	III
1	Banknotes in circulation	2,659	2,604	2,630
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	2,131	1,167	1,542
2.1	Current accounts (covering the minimum reserve system)	2,131	1,167	1,542
2.2	Deposit facility	–	0	0
2.3	Fixed-term deposits	–	–	–
2.4	Fine-tuning reverse operations	–	–	–
2.5	Deposits related to margin calls	–	–	–
3	Other liabilities to euro area credit institutions denominated in euro	–	–	–
4	Liabilities to other euro area residents denominated in euro	1	1	1
4.1	General government	–	–	–
4.2	Other liabilities	1	1	1
5	Liabilities to non-euro area residents denominated in euro	1,586	6,288	632
6	Liabilities to euro area residents denominated in foreign currency	–	–	–
7	Liabilities to non-euro residents denominated in foreign currency	289	412	223
7.1	Deposits, balances and other liabilities	289	412	223
7.2	Liabilities arising from the credit facility under the ERM II	–	–	–
8	Counterpart of special drawing rights allocated by the IMF	195	195	202
9	Intra-Eurosystem liabilities	3,007	–	9,136
9.1	Liabilities related to promissory notes backing the issuance of ECB debt certificates	–	–	–
9.2	Liabilities related to TARGET and correspondent accounts (net)	3,007	–	9,136
9.3	Liabilities related to other operational requirements within the Eurosystem	–	–	–
10	Other liabilities	8	50	137
11	Revaluation account	1,232	1,232	1,475
12	Capital and reserves	3,479	3,475	3,475
Total liabilities		14,587	15,425	19,453

Source: Bank of Finland.

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

IV	V	VI	VII	VIII	IX	X	XI	XII
2,722	2,686	2,782	2,799	2,750	2,731	2,704	2,682	2,982
873	1,604	1,905	1,948	1,192	1,848	1,584	1,187	2,475
873	1,604	1,905	1,948	1,192	1,848	1,584	1,187	2,475
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
1	1	1	1	3	1	1	1	1
-	-	-	-	-	-	-	-	-
1	1	1	1	3	1	1	1	1
4,128	1,597	5,887	2,063	4,459	4,170	10,404	7,047	194
-	-	-	-	-	-	-	-	-
375	105	147	368	210	263	147	172	299
375	105	147	368	210	263	147	172	299
-	-	-	-	-	-	-	-	-
202	202	200	202	204	211	211	211	200
570	1,161	-	718	-	-	-	-	167
-	-	-	-	-	-	-	-	-
570	1,161	-	718	-	-	-	-	167
-	-	-	-	-	-	-	-	-
181	249	317	345	399	523	535	624	18
1,475	1,475	1,240	1,240	1,240	1,561	1,561	1,561	1,070
3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	4,205
14,001	12,555	15,952	13,159	13,932	14,783	20,623	16,961	11,610

**Table 2.**  
Main refinancing operations of the Eurosystem

Date of settlement	Bids, EUR million	Allotment, EUR million	Allotment to Finnish credit institutions, EUR million	Participating credit institutions, number
	1	2	3	4
2000				
12.1	914,566	35,000	45	655
19.1	1,145,548	77,000	16	729
26.1	1,520,993	69,000	56	825
2.2	3,012,630	62,000	386	904
9.2	1,036,648	66,000	209	686
16.2	1,022,832	59,000	15	696
23.2	2,126,309	63,000	185	819
1.3	2,901,133	89,000	361	850
8.3	1,627,522	47,000	152	681
15.3	4,165,993	85,000	475	923
22.3	1,661,995	52,000	0	760
29.3	3,022,435	89,000	194	855
5.4	2,869,408	48,000	130	826
12.4	4,290,278	82,000	637	870
19.4	4,277,306	58,000	412	885
27.4	5,492,939	89,000	750	867
4.5	4,624,944	64,000	583	844
10.5	6,352,776	72,000	591	894
17.5	6,574,441	66,000	393	894
24.5	7,057,234	78,000	491	882
31.5	7,127,001	62,000	411	883
7.6	8,491,195	75,000	654	868
15.6	3,544,808	68,000	352	762
21.6	1,867,673	74,000	170	666
28.6	201,612	99,000	0	800
5.7	171,848	58,000	0	700
12.7	192,977	99,000	221	739
19.7	160,519	53,000	20	699
26.7	211,485	118,000	132	781
2.8	172,252	45,000	12	710
9.8	199,922	111,000	144	741
16.8	173,995	54,000	0	590
23.8	218,102	113,000	187	786
30.8	149,939	68,000	150	649
6.9	190,506	108,000	267	637
13.9	158,302	63,000	545	663
20.9	168,230	104,000	115	658
27.9	159,098	81,000	500	659
4.10	174,302	99,000	40	589
11.10	128,731	76,000	446	597
18.10	107,602	93,000	45	517
25.10	159,063	90,000	195	613
1.11	150,445	90,000	222	614
8.11	147,173	95,000	30	575
15.11	130,251	90,000	100	565
22.11	148,887	108,000	91	587
29.11	147,060	92,000	311	592
6.12	129,916	128,000	250	534
13.12	116,112	91,000	0	496
20.12	152,151	121,000	394	680
27.12	118,217	102,000	0	497

Sources: European Central Bank and Bank of Finland.

Fixed rate tenders		Variable rate tenders			Running for (...) days
Allotment ratio, %	Rate of interest	Minimum bid rate, %	Marginal rate, %	Weighted average rate, %	
5	6	7	8	9	10
3.83	3.00	.	.	.	14
6.72	3.00	.	.	.	14
4.54	3.00	.	.	.	14
2.06	3.00	.	.	.	14
6.37	3.25	.	.	.	14
5.77	3.25	.	.	.	14
2.96	3.25	.	.	.	14
3.07	3.25	.	.	.	14
2.89	3.25	.	.	.	14
2.04	3.25	.	.	.	14
3.13	3.50	.	.	.	14
2.94	3.50	.	.	.	14
1.67	3.50	.	.	.	14
1.91	3.50	.	.	.	15
1.36	3.50	.	.	.	15
1.62	3.50	.	.	.	13
1.38	3.75	.	.	.	13
1.13	3.75	.	.	.	14
1.00	3.75	.	.	.	14
1.11	3.75	.	.	.	14
0.87	3.75	.	.	.	15
0.88	3.75	.	.	.	14
1.92	4.25	.	.	.	13
3.96	4.25	.	.	.	14
.	.	4.25	4.29	4.32	14
.	.	4.25	4.29	4.30	14
.	.	4.25	4.29	4.30	14
.	.	4.25	4.29	4.30	14
.	.	4.25	4.30	4.31	14
.	.	4.25	4.31	4.31	14
.	.	4.25	4.30	4.31	14
.	.	4.25	4.35	4.37	14
.	.	4.25	4.47	4.50	14
.	.	4.25	4.68	4.71	14
.	.	4.50	4.55	4.57	14
.	.	4.50	4.58	4.59	14
.	.	4.50	4.56	4.58	14
.	.	4.50	4.65	4.68	14
.	.	4.50	4.67	4.68	14
.	.	4.75	4.76	4.78	14
.	.	4.75	4.75	4.76	14
.	.	4.75	4.80	4.82	14
.	.	4.75	4.84	4.85	14
.	.	4.75	4.83	4.84	14
.	.	4.75	4.78	4.80	14
.	.	4.75	4.80	4.82	14
.	.	4.75	4.82	4.83	14
.	.	4.75	4.75	4.79	14
.	.	4.75	4.76	4.78	14
.	.	4.75	4.80	4.86	14
.	.	4.75	4.79	4.84	14

**Table 3.**  
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
2000	1	2	3	4	5	6	7
27.1	87,052	20,000	66	354	3.28	3.30	91
2.3	72,960	20,000	0	336	3.60	3.61	91
30.3	74,929	20,000	0	325	3.78	3.80	91
27.4	64,094	20,000	0	326	4.00	4.01	91
1.6	64,317	20,000	11	309	4.40	4.42	91
29.6	41,833	20,000	0	258	4.49	4.52	91
27.7	40,799	15,000	0	235	4.59	4.60	91
31.8	35,417	15,000	0	240	4.84	4.87	91
28.9	34,043	15,000	0	225	4.84	4.86	92
26.10	43,085	15,000	61	241	5.06	5.07	91
30.11	31,999	15,000	0	226	5.03	5.05	91
29.12	15,869	15,000	0	165	4.75	4.81	90

Source: European Central Bank.

**Table 4.**  
Other tender operations

Date of settlement	Type of operations	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
				Fixed rate, %	Marginal rate, %	Weighted average rate, %	Running for (...) days
2000	1	2	3	4	5	6	7
5.1	Collection of fixed-term deposits	14,420	14,420	–	3.00	3.00	7
21.6	Reverse transaction	18,845	7,000	–	4.26	4.28	1

Source: European Central Bank.

**Table 5.**  
Key interest rates of the Eurosystem

Fixed rate tenders			Variable rate tenders		
Interest rate on the main refinancing operations			Minimum bid rate		
Decision date	Effective	%	Decision date	Effective	%
22.12.1998	1.1.1999	3.00	8.6.2000	28.6.2000	4.25
8.4.1999	14.4.1999	2.50	31.8.2000	6.9.2000	4.50
4.11.1999	10.11.1999	3.00	5.10.2000	11.10.2000	4.75
3.2.2000	9.2.2000	3.25			
16.3.2000	22.3.2000	3.50			
27.4.2000	4.5.2000	3.75			
8.6.2000	15.6.2000	4.25			
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
3.2.2000	4.2.2000	2.25	3.2.2000	4.2.2000	4.25
16.3.2000	17.3.2000	2.50	16.3.2000	17.3.2000	4.50
27.4.2000	28.4.2000	2.75	27.4.2000	28.4.2000	4.75
8.6.2000	9.6.2000	3.25	8.6.2000	9.6.2000	5.25
31.8.2000	1.9.2000	3.50	31.8.2000	1.9.2000	5.50
5.10.2000	6.10.2000	3.75	5.10.2000	6.10.2000	5.75

Source: European Central Bank.



**Table 6.**  
Euro area banking system's liquidity position, averages of daily positions, EUR billion

Maintenance period ending in <sup>1</sup>	Liquidity-providing factors						Liquidity-absorbing factors				Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem						Banknotes in circulation	Central government deposits with the Euro-system	Other factors, net			
	Euro-system's net assets in gold and foreign currency	Main re-financing operations	Longer-term re-financing operations	Marginal lending facility	Other liquidity-providing operations	Deposit facility				Other liquidity-absorbing operations		
	1	2	3	4	5	6	7	8	9	10	11	12
<b>1999</b>												
December	351.7	150.4	65.0	0.3	0.0	1.0	0.0	354.3	59.0	47.5	105.6	460.8
<b>2000</b>												
January	362.3	138.5	75.0	1.9	0.0	0.5	3.3	363.0	41.0	61.2	108.7	472.3
February	367.8	130.9	70.5	0.1	0.0	0.2	0.0	347.6	49.2	64.2	108.1	455.9
March	369.2	136.1	66.2	0.2	0.0	0.3	0.0	347.6	51.7	63.5	108.6	456.4
April	377.1	136.7	61.0	0.2	0.0	0.9	0.0	349.7	45.6	69.1	109.7	460.3
May	378.8	142.6	60.0	0.4	0.0	2.3	0.0	353.8	41.9	71.8	112.0	468.2
June	378.1	140.9	59.9	0.3	0.2	0.8	0.0	354.1	38.3	72.1	114.2	469.1
July	380.8	157.9	59.9	0.4	0.0	0.5	0.0	357.0	50.4	76.8	114.2	471.7
August	382.0	163.1	55.4	0.1	0.0	0.3	0.0	359.2	48.8	80.0	112.4	471.9
September	381.6	173.1	51.1	0.3	0.0	0.2	0.0	354.8	56.6	81.2	113.3	468.3
October	396.3	176.5	45.7	0.5	0.0	0.2	0.0	354.5	47.4	102.5	114.4	469.1
November	398.6	183.7	45.0	0.2	0.0	0.2	0.0	352.7	49.8	109.2	115.7	468.6
December	394.4	210.4	45.0	0.4	0.0	0.2	0.0	360.4	61.1	111.1	117.4	478.0

Source: European Central Bank.

<sup>1</sup> Maintenance periods start on the 24<sup>th</sup> of the month and run to the 23<sup>rd</sup> of the following month.

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

Maintenance period ending in <sup>1</sup>	Liquidity-providing factors							Liquidity-absorbing factors			Credit institutions' current accounts 1 + 2 + 3 + 4 + 5 - 6 - 7 - 8 - 9 - 10	Base money, 6 + 8 + 11	
	Euro-system's net assets in gold and foreign currency	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations	Banknotes in circulation	Central government deposits with the Euro-system			Other factors, net
		Main re-financing operations	Longer-term re-financing operations	Marginal lending facility	Other liquidity-providing operations								
	1	2	3	4	5	6	7	8	9	10	11	12	
<b>1999</b>													
December	7,957.7	227.8	228.4	0.0	0.0	20.7	0.0	2,793.5	-	3,994.3	1,605.5	4,419.8	
<b>2000</b>													
January	8,245.0	828.0	230.0	0.0	0.0	62.1	54.2	2,842.7	-	4,594.0	1,750.2	4,655.0	
February	8,320.3	311.4	154.4	0.0	0.0	4.4	0.0	2,619.4	-	4,547.4	1,615.0	4,238.7	
March	8,304.7	481.1	85.6	0.0	0.0	11.5	0.0	2,597.3	-	4,687.9	1,574.7	4,183.5	
April	8,572.8	535.6	66.3	0.0	0.0	19.7	0.0	2,638.1	-	4,867.0	1,650.2	4,308.1	
May	8,622.8	1,146.6	6.6	0.0	0.0	28.4	0.0	2,681.2	-	5,446.0	1,620.3	4,329.9	
June	8,656.8	923.5	8.1	3.2	0.0	14.5	0.0	2,749.2	-	5,194.6	1,633.9	4,397.6	
July	8,570.7	201.2	10.9	0.0	0.0	3.2	0.0	2,800.1	-	4,358.4	1,620.9	4,424.2	
August	8,556.9	156.6	10.9	3.0	0.0	18.0	0.0	2,768.9	-	4,339.2	1,601.2	4,388.1	
September	8,576.6	475.0	2.5	0.2	0.0	14.8	0.0	2,724.4	-	4,685.4	1,629.7	4,368.9	
October	8,885.7	546.9	0.0	3.0	0.0	5.6	0.0	2,711.3	-	5,074.7	1,644.0	4,361.0	
November	8,984.9	262.4	56.7	0.8	0.0	4.7	0.0	2,680.3	-	5,060.6	1,559.2	4,244.2	
December	9,106.9	367.4	60.6	2.1	0.0	7.1	0.0	2,845.2	-	5,056.0	1,628.8	4,481.1	

Source: Bank of Finland.

<sup>1</sup> Maintenance periods start on the 24<sup>th</sup> of the month and run to the 23<sup>rd</sup> of the following month.

**Table 7.**

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
<b>1999</b>							
December	9,187.4	5,123.4	113.5	169.3	1,204.9	503.5	2,072.8
<b>2000</b>							
January	9,265.7	5,164.6	108.0	156.8	1,210.3	547.9	2,078.2
February	9,338.9	5,189.6	114.5	164.5	1,220.7	553.1	2,096.4
March	9,490.8	5,306.7	117.1	174.9	1,231.3	543.8	2,116.9
April	9,629.4	5,411.5	116.7	174.7	1,243.2	537.5	2,145.9
May	9,641.5	5,390.3	118.4	188.4	1,241.3	541.4	2,161.7
June	9,539.4	5,316.9	120.4	184.7	1,250.6	506.7	2,160.1
July	9,590.1	5,348.0	119.8	192.3	1,258.0	489.9	2,182.2
August	9,686.5	5,393.8	122.9	197.1	1,269.0	502.5	2,201.3
September	9,773.3	5,465.7	123.6	193.6	1,270.2	502.1	2,218.2
October	9,931.2	5,531.9	127.6	201.1	1,283.2	534.2	2,253.2
November	10,074.5	5,653.4	130.0	199.9	1,282.2	561.5	2,247.6
December	10,075.1	5,713.4	136.7	188.5	1,273.3	528.4	2,234.7

Source: European Central Bank.

**Table 8.**

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

Maintenance period ending in <sup>1</sup>	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
<b>2000</b>					
January	107.7	108.5	0.8	0.0	3.00
February	107.5	107.9	0.4	0.0	3.12
March	108.0	108.4	0.5	0.0	3.27
April	108.7	109.5	0.8	0.0	3.50
May	111.3	111.8	0.5	0.0	3.67
June	113.4	113.9	0.5	0.0	3.90
July	113.3	114.0	0.7	0.0	4.28
August	111.8	112.3	0.5	0.0	4.32
September	112.6	113.1	0.5	0.0	4.57
October	113.7	114.2	0.5	0.0	4.69
November	115.1	115.5	0.4	0.0	4.81
December	116.6	117.2	0.6	0.0	4.78
<b>2001</b>					
January	118.5	119.0	0.5	0.0	4.77

Source: Bank of Finland.

<sup>1</sup> Maintenance periods start on the 24<sup>th</sup> of the month and run to the 23<sup>rd</sup> of the following month.

## 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
<b>1999</b>							
December	91,469	68,463	870	13,107	3,769	276	4,984
<b>2000</b>							
January	90,248	69,318	495	10,638	3,804	539	5,453
February	91,826	67,772	381	13,525	3,782	762	5,604
March	92,641	67,207	277	15,233	3,491	693	5,740
April	93,806	71,499	269	11,642	3,779	782	5,836
May	91,748	67,425	406	13,907	3,520	839	5,652
June	92,050	68,267	398	13,030	3,683	999	5,673
July	92,914	68,778	393	13,484	3,718	943	5,598
August	94,738	70,638	432	12,810	4,186	1,092	5,580
September	90,052	67,769	528	11,359	3,929	1,098	5,369
October	93,432	70,513	657	11,689	4,099	1,141	5,333
November	96,043	72,170	916	11,965	4,062	1,678	5,252
December	101,278	76,915	1,409	9,110	4,210	920	8,716

Source: European Central Bank.

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

Maintenance period ending in <sup>1</sup>	Required reserves	Actual reserves	Excess reserves	Deficiencies	Interest rate on minimum reserves, %
	1	2	3	4	5
<b>2000</b>					
January	1 658	1 750	91.4	0.0	3.00
February	1 614	1 615	0.6	0.0	3.12
March	1 575	1 575	0.0	0.0	3.27
April	1 599	1 650	51.0	0.0	3.50
May	1 620	1 620	0.3	0.0	3.67
June	1 634	1 634	0.0	0.0	3.90
July	1 601	1 621	20.2	0.0	4.28
August	1 600	1 601	1.4	0.0	4.32
September	1 619	1 630	10.6	0.0	4.57
October	1 644	1 644	0.4	0.0	4.69
November	1 559	1 559	0.1	0.0	4.81
December	1 623	1 628	5.1	0.0	4.78
<b>2001</b>					
January	1 667	1 667	0.0	0.0	4.77

Source: Bank of Finland.  
<sup>1</sup> Maintenance periods start on the 24<sup>th</sup> of the month and run to the 23<sup>rd</sup> of the following month.

**Table 9.**  
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 <sup>1</sup>		
	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
1996	4,090.4	3.9	..	64.7	..	..
1997	4,267.4	4.0	..	69.6	7.2	..
1998	4,464.1	4.8	..	71.2	2.6	..
1999	4,791.0	6.2	5.9	75.3	5.4	4.6
2000	5,082.5	5.2	5.0	72.6	-3.7	-1.3
<b>2000</b>						
January	4,800.9	5.3	5.9	74.2	2.7	6.0
February	4,822.4	6.2	6.0	78.4	9.9	8.7
March	4,862.5	6.6	6.5	80.1	13.6	10.2
April	4,954.4	6.7	6.5	77.3	7.2	8.9
May	4,951.8	6.0	6.1	77.7	5.9	7.1
June	4,944.1	5.4	5.5	77.9	8.3	6.7
July	4,953.7	5.2	5.4	77.7	6.0	8.3
August	4,957.6	5.7	5.4	78.7	10.7	7.0
September	4,957.8	5.3	5.4	74.9	4.4	5.0
October	4,977.9	5.2	5.2	73.8	-0.2	1.0
November	5,013.0	5.0	5.1	73.8	-1.2	-1.7
December	5,082.5	5.2	5.0	72.6	-3.7	-1.3

Sources: European Central Bank and Bank of Finland.  
<sup>1</sup> Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

**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
2000	4.12	4.244	4.325	4.400	4.556	4.682	4.789	5.27	5.49
<b>2000</b>									
January	3.04	3.150	3.244	3.343	3.556	3.756	3.949	5.12	5.75
February	3.28	3.359	3.452	3.537	3.735	3.932	4.111	5.19	5.72
March	3.51	3.589	3.666	3.747	3.936	4.110	4.267	5.04	5.50
April	3.69	3.791	3.864	3.925	4.083	4.252	4.365	5.24	5.46
May	3.92	4.163	4.267	4.362	4.544	4.720	4.849	5.48	5.59
June	4.29	4.370	4.428	4.502	4.681	4.846	4.965	5.31	5.39
July	4.31	4.408	4.488	4.583	4.837	4.978	5.105	5.42	5.48
August	4.42	4.574	4.683	4.777	5.011	5.139	5.248	5.41	5.43
September	4.59	4.698	4.772	4.853	5.038	5.136	5.219	5.42	5.49
October	4.76	4.854	4.919	5.041	5.103	5.165	5.218	5.34	5.45
November	4.83	4.925	5.074	5.092	5.131	5.162	5.193	5.26	5.40
December	4.83	4.943	4.938	4.933	4.913	4.888	4.870	4.89	5.14

Sources: European Central Bank, Reuters and Bloomberg.

**Table 11.**  
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
2000	2.3	3.0
<b>2000</b>		
January	1.9	2.3
February	2.0	2.7
March	2.1	3.2
April	1.9	2.5
May	1.9	2.7
June	2.4	3.1
July	2.3	2.9
August	2.3	2.9
September	2.8	3.4
October	2.7	3.4
November	2.9	3.3
December	2.6	2.9

Sources: Eurostat and Statistics Finland.

**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 13.**  
Nominal competitiveness indicators for Finland and the effective exchange rate of the euro calculated by the ECB

	Narrow indicator <sup>1</sup>	Narrow plus euro area indicator <sup>1</sup>	Broad indicator <sup>1</sup>	Effective exchange rate of the euro, narrow group of countries <sup>1</sup>	Bank of Finland's old currency index <sup>2,3</sup>
	January-March 1999 = 100				1982 = 100
	1	2	3	4	5
1996	106.6	103.3	96.4	107.9	115.3
1997	99.8	100.4	94.0	99.1	118.5
1998	101.1	100.6	96.5	101.5	118.9
1999	96.0	97.8	97.9	95.7	121.2
2000	87.0	92.8	92.8	85.7	126.6
<b>2000</b>					
January	91.0	95.1	95.4	90.2	124.2
February	90.0	94.6	94.7	89.2	124.8
March	88.6	93.7	93.8	87.7	125.8
April	87.0	92.9	92.9	86.0	126.8
May	85.7	92.1	92.0	84.5	127.6
June	88.3	93.5	93.7	87.4	125.7
July	88.0	93.4	93.4	86.9	125.9
August	86.0	92.3	92.1	84.6	127.2
September	84.4	91.4	91.1	82.8	128.0
October	83.6	91.0	90.6	81.6	128.5
November	84.3	91.4	91.0	82.3	128.0
December	87.0	93.0	92.8	85.4	126.2

Sources: European Central Bank and Bank of Finland.

<sup>1</sup> An upward movement of the index represents an appreciation of the euro. The narrow indicator comprises 13 countries, the narrow plus euro area indicator 23 countries and the broad indicator 32 countries.

<sup>2</sup> Formerly the Bank of Finland currency index.

<sup>3</sup> The index falls when the euro (before 1999 the markka) appreciates.

**Table 14a.**  
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
2000	0.8252	0.9236	1.0388	89.30	99.47	111.88
<b>2000</b>						
January	0.9791	1.0137	1.0388	102.75	106.53	109.10
February	0.9639	0.9834	1.0068	104.62	107.64	111.88
March	0.9543	0.9643	0.9725	98.53	102.59	104.65
April	0.9085	0.9470	0.9673	97.48	99.92	102.61
May	0.8875	0.9060	0.9359	95.69	98.09	100.07
June	0.9327	0.9492	0.9668	98.12	100.71	102.52
July	0.9216	0.9397	0.9542	99.60	101.39	102.78
August	0.8906	0.9041	0.9264	94.77	97.76	101.56
September	0.8476	0.8721	0.9000	90.30	93.11	95.75
October	0.8252	0.8552	0.8802	89.30	92.75	95.95
November	0.8406	0.8564	0.8730	91.55	93.26	96.44
December	0.8735	0.8973	0.9310	97.52	100.61	106.92

Source: European Central Bank.

**Table 14b.**  
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
2000	5.7237	6.4376	7.2052	0.0531	0.0598	0.0666

Source: 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
2000	0.57110	0.60948	0.64020	8.0550	8.4452	8.8600
<b>2000</b>						
January	0.60470	0.61834	0.63240	8.5125	8.5968	8.6725
February	0.60200	0.61466	0.62520	8.4170	8.5114	8.5935
March	0.59850	0.61063	0.62010	8.2455	8.3884	8.4700
April	0.57940	0.59802	0.60880	8.1400	8.2671	8.3295
May	0.57110	0.60151	0.62260	8.0550	8.2410	8.4120
June	0.62150	0.62927	0.64020	8.2185	8.3177	8.4210
July	0.61500	0.62304	0.63130	8.3485	8.4070	8.4950
August	0.59780	0.60710	0.61720	8.3065	8.3917	8.4740
September	0.59670	0.60773	0.61540	8.3500	8.4145	8.5265
October	0.57600	0.58933	0.60270	8.4507	8.5245	8.6185
November	0.59120	0.60039	0.61280	8.4740	8.6289	8.7150
December	0.60300	0.61342	0.62540	8.5003	8.6622	8.8600

	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
2000	9.2873	9.7554	10.4110	0.6711	0.7040	0.7381

**Table 15a.**  
Other euro exchange rates, averages

	Greek drakma	Danish krona	Swiss franc	Icelandic krona	Norwegian krona	Bulgarian lev	Cyprus pound
	1	2	3	4	5	6	7
1999	325.7625	7.4355	1.6003	77.177	8.3104	..	0.57884
2000	336.63	7.4538	1.5579	72.585	8.1129	..	0.57392
<b>2000</b>							
January	331.07	7.4439	1.6103	73.377	8.1215	..	0.57721
February	333.18	7.4453	1.6069	72.000	8.0991	..	0.57592
March	333.89	7.4473	1.6042	71.038	8.1110	..	0.57521
April	335.22	7.4505	1.5740	70.002	8.1545	..	0.57452
May	336.60	7.4570	1.5562	69.359	8.1994	..	0.57288
June	336.64	7.4607	1.5608	72.275	8.2490	..	0.57456
July	336.86	7.4589	1.5505	73.410	8.1763	..	0.57428
August	337.27	7.4578	1.5506	72.408	8.0959	..	0.57271
September	338.60	7.4627	1.5307	72.434	8.0266	..	0.57241
October	339.45	7.4472	1.5130	72.83	8.0032	1.9482	0.57241
November	340.16	7.4564	1.5216	74.89	7.9950	1.9468	0.57241
December	340.70	7.4580	1.5137	77.30	8.1334	1.9520	0.57270
	Polish zloty	Romanian leu	Slovenian tolar	Slovakian koruna	Turkish lira	Australian dollar	Canadian dollar
	14	15	16	17	18	19	20
1999	4.2274	..	194.4737	..	..	1.6523	1.5840
2000	4.0082	..	206.6127	..	..	1.5889	1.3706
<b>2000</b>							
January	4.1603	..	199.8146	..	..	1.5421	1.4687
February	4.0782	..	201.2455	..	..	1.5642	1.4270
March	3.9460	..	202.7540	..	..	1.5827	1.4082
April	4.0065	..	203.9081	..	..	1.5878	1.3890
May	4.0731	..	204.9301	..	..	1.5703	1.3549
June	4.1731	..	206.8081	..	..	1.5968	1.4018
July	4.0528	..	207.8614	..	..	1.5978	1.3886
August	3.9446	..	208.5482	..	..	1.5575	1.3406
September	3.9174	..	209.1689	..	..	1.5749	1.2945
October	3.9670	20986	209.9911	43.663	579614	1.6176	1.2924
November	3.9000	21489	211.4028	42.930	586149	1.6387	1.3204
December	3.8744	22939	213.0077	43.551	608514	1.6422	1.3679

Sources: European Central Bank and Bank of Finland.

	Czech koruna	Estonian kroon	Hungarian forint	Lithuanian litas	Latvian lats	Malta lira
	8	9	10	11	12	13
1999	36.8862	15.6466	252.7672	..	..	..
2000	35.599	15.6466	260.04	..	..	..
<b>2000</b>						
January	36.005	15.6466	254.91	..	..	..
February	35.685	15.6466	256.12	..	..	..
March	35.627	15.6466	257.08	..	..	..
April	36.323	15.6466	258.45	..	..	..
May	36.549	15.6466	259.03	..	..	..
June	35.974	15.6466	259.73	..	..	..
July	35.608	15.6466	260.22	..	..	..
August	35.356	15.6466	260.88	..	..	..
September	35.440	15.6466	262.35	..	..	..
October	35.236	15.6466	262.92	3.4214	0.5324	0.3933
November	34.609	15.6466	264.09	3.4262	0.5376	0.3952
December	34.834	15.6466	264.95	3.5889	0.5597	0.4020

	Hong Kong dollar	New Zealand dollar	Singapore dollar	South Korean won	South African rand	Special drawing rights of the International Monetary Fund
	21	22	23	24	25	26
1999	..	2.0145	..	1267.24	..	0.779666
2000	..	2.0288	..	1043.41	..	0.699799
<b>2000</b>						
January	..	1.9716	..	1145.64	..	0.740057
February	..	2.0057	..	1110.77	..	0.731052
March	..	1.9674	..	1076.28	..	0.718124
April	..	1.9097	..	1051.31	..	0.706858
May	..	1.9355	..	1015.20	..	0.690580
June	..	2.0174	..	1060.81	..	0.713516
July	..	2.0394	..	1047.54	..	0.709622
August	..	2.0305	..	1007.37	..	0.690973
September	..	2.0882	..	973.33	..	0.673208
October	6.6682	2.1346	1.4982	965.10	6.3928	0.664203
November	6.6789	2.1438	1.4970	990.61	6.5770	0.667879
December	6.9982	2.0905	1.5580	1089.59	6.8602	0.693438

**Table 15b.**  
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
2000	3.8165	0.7977	0.7329	0.0177	3.7420	2.9307	4.3380	10.3599

Source: Bank of Finland.

	Czech koruna	Estonian kroon	Hungarian forint	Polish złoty	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
2000	0.1670	0.3800	0.0229	1.4834	0.0288	0.0819	0.00570	8.49634

**Table 16.**  
Notes and coin in circulation, at year-end, FIM million

	1996	1997	1998	1999	2000
<b>Notes</b>					
1000 markka	5,153.3	5,579.9	5,635.7	6,544.9	6,363.4
500 "	2,562.0	2,596.9	2,541.8	2,937.8	2,761.0
100 "	6,007.8	6,430.2	6,256.2	7,194.3	7,321.9
50 "	654.2	615.7	608.9	626.3	611.1
20 "	413.4	423.1	428.2	449.0	463.0
10 "	45.4	42.9	41.2	40.4	39.6
Redeemed <sup>1</sup>				-132.3	-48.6
<b>Total</b>	<b>14,836.1</b>	<b>15,688.7</b>	<b>15,512.0</b>	<b>17,660.4</b>	<b>17,511.4</b>
Ceased to be legal tender on 1 January 1994	249.5	243.5	237.4	232.6	229.9
<b>Coins</b>					
<b>Ordinary coins</b>					
10 markka	392.4	415.3	439.5	475.5	508.8
5 "	435.5	440.1	367.9	377.5	384.4
1 "	413.6	428.7	322.8	343.9	359.6
50 penni	91.5	97.1	100.5	107.0	110.7
10 "	105.5	112.7	119.1	127.4	133.1
<b>Total</b>	<b>1,438.5</b>	<b>1,493.9</b>	<b>1,349.8</b>	<b>1,431.3</b>	<b>1,496.6</b>
<b>Commemorative coins</b>					
2000 markka	13.8	13.8	13.8	13.8	13.8
1000 "	35.0	55.0	55.0	55.0	62.9
100 "	106.0	110.2	117.0	119.7	124.6
50 "	70.4	69.7	-	-	-
25 "	19.6	22.0	2.5	2.5	2.5
10 "	38.1	38.0	0.0	0.0	0.0
<b>Total</b>	<b>282.9</b>	<b>308.7</b>	<b>188.3</b>	<b>191.0</b>	<b>203.8</b>
<b>Total coins</b>	<b>1,721.4</b>	<b>1,802.6</b>	<b>1,538.1</b>	<b>1,622.3</b>	<b>1,700.4</b>
Ceased to be legal tender on 1 January 1994 and 1 January 1998	109.0	107.2	426.8	420.7	416.0

Source: Bank of Finland.

<sup>1</sup> 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 17.**  
Deliveries of notes and coin, FIM million

	1996	1997	1998	1999	2000
<b>Notes delivered by Setec</b>					
1000 markka	–	–	–	–	–
500 ”	–	–	–	–	–
100 ”	2,180.0	1,625.0	65.0	–	–
50 ”	765.0	–	–	510.0	–
20 ”	5.0	736.0	1,191.0	69.0	–
Total	2,950.0	2,361.0	1,256.0	579.0	–
in millions of notes	37.4	53.1	60.2	13.7	–
<b>Notes destroyed, in millions of notes</b>	42.1	79.9	30.2	35.4	31.4
<b>Coins delivered by the Mint</b>					
<b>Ordinary coins</b>					
10 markka	9.3	33.0	8.0	41.0	30.0
5 ”	5.9	29.0	4.0	2.5	2.5
1 ”	15.0	24.1	34.0	6.0	15.0
50 penni	8.5	4.0	6.0	2.5	5.0
10 ”	10.5	7.0	9.5	4.0	7.5
<b>Commemorative coins</b>					
2000 markka	–	–	–	–	–
1000 ”	–	20.0	–	8.0	–
100 ”	3.3	5.2	8.1	3.3	5.4
25 ”	–	2.5	–	–	–
10 ”	0.0	–	–	0.0	–
Total	52.5	124.8	69.6	67.3	65.4
<b>Coins destroyed, in millions of coins</b>					
Ordinary coins	27.3	22.8	16.7	12.2	10.6
Commemorative coins	0.0	0.0	0.0	0.0	0.0

Source: Bank of Finland.

**Table 18.**  
Notes sorted at the Bank of Finland, in millions

	1996	1997	1998	1999	2000
1000 markka	4.6	4.7	3.8	3.8	5.1
500 ”	9.4	9.5	8.2	10.6	10.5
100 ”	454.8	488.8	401.2	545.6	531.6
50 ”	67.1	54.8	59.5	50.7	52.7
20 ”	48.3	58.7	59.3	57.5	59.1
10 ”	–	–	–	–	–
Total	584.2	616.5	532.0	668.2	659.0

Source: Bank of Finland.

**Table 19.**  
Bank of Finland interbank funds transfer system (BoF-RTGS)

	Account holders, number	Domestic payments, number in thousands	Value, EUR billion	Outgoing TARGET payments, number in thousands	Transactions						
					Value, EUR billion	Incoming TARGET payments, number in thousands	Value, EUR billion	TARGET payments, total number in thousands	TARGET payments, total value, EUR billion	Transactions, total number in thousands	Transactions, total value, EUR billion
	1	2	3	4	5	6	7	8	9	10	11
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
2000	14	215.6	1,552.4	93.2	1 561.5	105.3	1 559.6	198.4	3,121.2	414.1	4,673.6
<b>2000</b>											
January	14	16.9	136.6	7.6	142.5	8.1	140.6	15.7	283.1	32.7	419.8
February	14	17.6	127.7	8.1	126.1	8.6	125.2	16.7	251.3	34.3	379.1
March	14	20.4	151.5	8.7	156.8	9.4	157.0	18.1	313.7	38.5	465.2
April	14	16.5	135.5	7.3	137.9	7.9	136.4	15.2	274.3	31.7	409.8
May	14	17.1	116.0	7.3	113.5	8.2	114.5	15.5	227.9	32.6	343.9
June	14	18.6	117.0	8.1	135.9	9.0	136.4	17.1	272.2	35.6	389.2
July	14	17.1	89.3	7.2	124.9	8.6	124.8	15.8	249.8	32.9	339.1
August	14	18.1	108.7	7.6	117.5	9.3	120.6	16.9	238.1	35.0	346.9
September	13	17.8	121.9	7.7	141.0	9.4	137.6	17.2	278.6	35.0	400.4
October	14	19.2	119.2	7.8	121.1	9.6	121.2	17.3	242.3	36.6	361.6
November	14	19.1	150.9	8.0	132.2	9.2	132.0	17.2	264.2	36.3	415.1
December	14	17.2	177.9	7.7	112.2	7.9	113.4	15.6	225.6	32.9	403.5

Source: Bank of Finland.



**Table 20.**  
Banks' intraday credit limits

End of period	Total limits, EUR million	Maximum usage rate of limits <sup>1</sup> , %	Average usage rate of limits <sup>2</sup> , %	End-of-day balances <sup>3</sup> , EUR million
	1	2	3	4
1996	1,942	..	10	..
1997	2,793	89	10	944
1998	3,227	44	6	951
1999	6,500	52	4	1,588
2000	4,700	39	0	1,614
<b>2000</b>				
January	4,920	31	1	1,513
February	5,005	31	1	1,512
March	4,444	39	0	1,706
April	4,602	24	0	1,573
May	4,519	10	0	1,718
June	3,917	20	0	1,669
July	4,568	5	0	1,586
August	4,355	21	0	1,692
September	3,646	12	0	1,571
October	4,165	15	0	1,632
November	4,245	31	0	1,516
December	4,700	33	0	1,677

Source: Bank of Finland.

<sup>1</sup> 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).

<sup>2</sup> 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.

<sup>3</sup> Average value for period.

**Table 21.**  
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
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
2000	181.3	8.8	174.2	138.5	355.1	147.3
<b>2000</b>						
January	13.4	0.6	14.3	10.8	27.7	11.5
February	13.2	0.6	15.9	11.2	29.2	11.8
March	14.7	0.7	14.6	11.3	29.2	12.0
April	13.7	0.7	13.7	10.9	27.4	11.6
May	16.8	0.8	15.7	12.8	32.5	13.6
June	15.9	0.8	15.0	12.5	31.0	13.3
July	17.1	0.8	14.0	11.6	31.0	12.4
August	16.1	0.7	14.3	11.2	30.0	11.9
September	14.6	0.8	14.7	12.1	29.3	12.3
October	16.2	0.8	15.8	9.0	32.0	10.0
November	12.0	0.6	11.0	10.7	23.0	11.4
December	17.6	0.9	15.2	14.4	32.8	15.3

Source: Bank of Finland.

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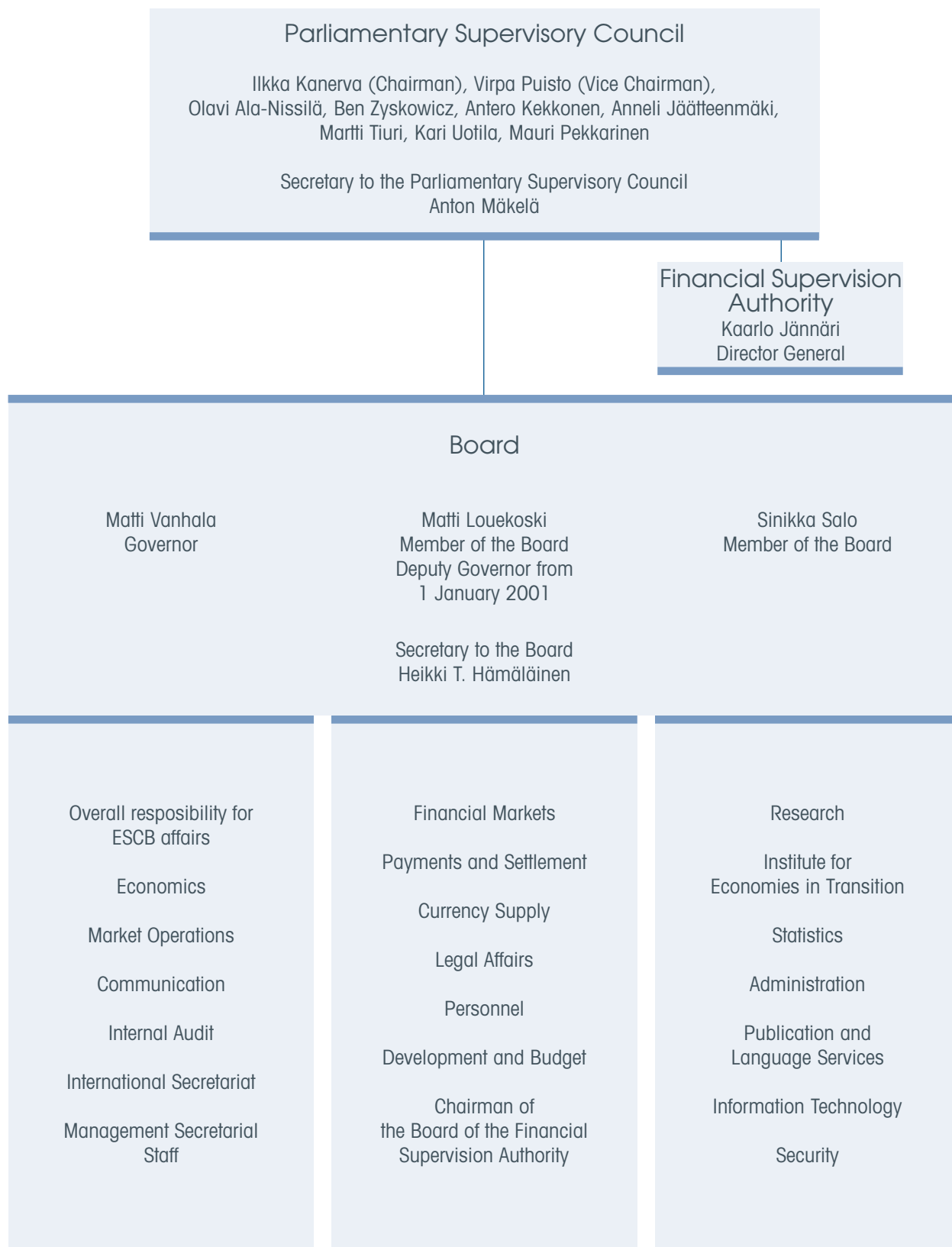
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## at end-2000



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\* Adviser to the Board

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