Bank of Finland Bulletin 12/1998

CONTENTS

Monetary policy and the outlook for the economy	3
Financial stability in Finland	9
The euro in the global currency markets and in Europe by Matti Vanhala	15
Changes in the reference rate system with the changeover to monetary union by Jarmo Kontulainen and Maritta Nieminen	19
Items: Revision of the Bank of Finland Bulletin Direct investment in Finland's balance of payments, 1997 Supplementary budget	23
Measures concerning monetary and foreign exchange policy and the financial markets	25
Monetary policy instruments	26
Finland in brief	30
Statistics • List of tables on page	S1
Charts • List of charts on page	S29
Bank of Finland Organization	

BANK OF FINLAND BULLETIN

Publisher
Suomen Pankki – Finlands Bank

Editor-in-Chief
Matti Vanhala

Edited
by the Bank of Finland's Publication and Language Services

ISSN 0784-6509

Mailing address:
P.O.Box 160,
FIN-00101 HELSINKI,
FINLAND

Phone:
National (09) 1831
International +358 9 1831

Telex: 121224 SPFBFI
Fax: +358 9 174872
Cable: SUOMENPANKKI

Printed by Libris Oy,
Helsinki 1998

The Bank of Finland Bulletin is posted on our website (http://www.bof.fi/).

Monetary policy and the outlook for the economy

The economic and financial crises that began over a year ago in southeast Asia and spread to Russia, South America and several other emerging economies have in the autumn caused a downward adjustment in the outlook for the world economy. The crises have brought uncertainty and pronounced volatility to the global financial and currency markets as investors have fled to quality. Another consequence of the crises has been a sharp decline in world prices of oil and other primary commodities, which has generally eased inflation pressures in the industrial countries. Many central banks have reacted to the easing by lowering their key interest rates. Euro area central banks cut their key rates in concert in the first week of December. The decision was based on uncertain conditions in the international financial markets as well as a benign inflation outlook.

The deepening and contagion of economic problems around the world has also darkened the outlook for the euro countries. The realization of monetary union has however substantially alleviated the impact of the crises on euro area money and currency markets. The impact is most noticeable in the more pessimistic expectations, sentiments and forecasts. The effects on the real economy are anticipated to remain muted, and growth prospects are still fairly upbeat. Forecasts for euro country GDP growth in 1999 are clustered around 2 ½ per cent. The slowdown from this year is due largely to a projected decline in exports. Several trends are still buoying domestic demand in the euro economies: decelerating inflation, improving employment conditions, declining interest rates, and improving terms of trade.

In Finland economic conditions are favourable for the launch of the single monetary policy. Inflation and inflation expectations have remained low despite rapid growth. Companies' financial structures, profitability and competitiveness have improved in recent years; household sector indebtedness has come down to the level of the early 1980s; and general government finances have shifted into surplus. Thus the economy has acquired a structural buffer for short-term recessions. On the other hand, the general government debt is still fairly large and unemployment is high.

The overall convergence of the euro economies has progressed surprisingly well in recent years. This has been abetted by the firm commitment to monetary union on the part of political decision-makers and labour market organizations. Persistently moderate inflation has enabled the present historically low level of interest rates in the euro area. For this reason, the central banks of the euro countries with interest rates exceeding those of the core countries lowered their interest rates by more than 50 basis points on average during the autumn. Following the interest rate cuts of early December the key rates of all euro central banks, except for the Bank of Italy, stood at 3 per cent. This means that the ECB's initial interest rate at the start of 1999 will most likely be at this level. In connection with the lowering of the key rates, the Bank of Finland cut its base rate from 4.0 per cent to 3.5 per cent, effective 15 December.

Whereas general government financial deficits have been declining in an encouraging manner in the last few years, forecasts are now pointing to only slight improvements this year and next year. This is the case even though many countries are still far from the target specified in the Stability and Growth Pact. According to an EU Commission forecast, the structural deficit of the public sector will not decline at all this year.

In light of the recent lowering of interest rates, monetary policy should not constrain domestic demand nor slow the growth of intra-euro area foreign trade. Euro area interest rates are lower than US rates, and the euro area current account is forecasted to remain in surplus. Forecasts indicate that price stability is not under threat. However, it will be necessary that fiscal policies not be eased in a way that raises suspicions about fudging on the objectives of the Stability and Growth Pact.

At the start of December the ECB Council decided on the reference value for the money supply. The reference value will apply to the growth rate of the broad monetary aggregate, which comprises, in addition to cash and bank deposits, money market fund units and short-term debt certificates held by the public. The reference value for annual money growth, initially set at 4 ½ per cent, will be reviewed in December 1999. This value is consistent with price stability, growth in potential output and the trend in the velocity of circulation of money.

Chart 1.

Euro area inflation, Harmonized Index of Consumer Prices

US monetary policy eased

During the autumn the US Federal Reserve has eased its monetary policy on three occasions. The rate cuts have had a calming effect on financial markets. The dollar has appreciated against the major currencies, share prices have turned up, and the risk of a credit crunch has diminished. Despite high volatility, US share prices are at a record high level; compared to the early 1990s, the price level has doubled. Further enhancing the outlook is that economic growth in the US is estimated to have continued to beat expectations in the third quarter. Nonetheless, the risks attached to future economic developments have increased, as witnessed eg by the spread between the cost of risky corporate financing and the yield on safer government bonds. In spite of the easing of market conditions, it remains likely that the financial markets will continue to be highly volatile and that liquidity problems are not yet precluded.

The Japanese economy is facing very serious problems. The deepening of the recession is largely a result of a lack of confidence among consumers and entrepreneurs. But beyond these internal factors, the situation has been exacerbated by the Asian crisis. The country's economy has been spurred by sizable stimulation packages, and substantial support measures have been taken to revive the banks' lending capacity. Nonetheless, output continues to decline, and this is perhaps the prime obstacle to recovery in Asia and elsewhere around the world. Japan's GDP fell in the first three quarters of this year by about 3 per cent compared to the year-earlier period. The export sector, which has been practically the only source of growth in the economy, has suffered from currency depreciations in neighbouring countries and, in the autumn, yen appreciation vs the dollar.

The risk of a deepening of the world financial crisis has recently diminished. This is partly the result of significant measures taken by the Japanese government to manage the banking crisis and the turn in US monetary policy toward easing as well as the IMF's support package for Brazil. Moreover, some of the southeast Asian economies have shown clear signs of recovery as stock markets have firmed, interest rates have fallen, and exchange rates have rebounded.

Interest rates in euro countries at historic lows

Several factors are contributing to buoyant domestic demand in the euro countries: cyclical conditions, accomplished consolidation of public finances, optimism surrounding the euro launch, low interest rates, and low inflation expectations due partly to the Asian crisis. This should enable a continuation of the growth in foreign trade between euro countries.

The continuing robust growth of total output in the euro countries suggests that consumer confidence has not subsided despite the world's economic problems. It appears that the euro area will in the coming years become the engine for the global economy, as the euro's external value is relatively strong and the terms of trade have improved and thus increased the purchasing power of the euro countries. According to an EU Commission forecast, the growth rate for the euro countries will slow somewhat, from 3 per cent in 1998 to 2.7 per cent in 1999.

The Asian crisis and the appreciation of the euro in the autumn have had a pronounced dampening effect on export growth in the euro countries. The confidence of manufacturers as well as growth in manufacturing output have clearly declined in the euro countries as well as in the US and Japan.

There has not been a significant change recently in the inflation outlook for the euro countries. For the near-term, inflation pressures appear to be minimal, especially in light of the moderate slowing of the growth of total output. According to the Harmonized Index of Consumer Prices (HICP), the average rate of inflation is slightly above 1 per cent p.a. Country-specific inflation rates range from 0.5 in France to 2.6 in Ireland. Nor do preliminary estimates of money supply growth for the euro area portend an increase in inflation pressures. In the early part of the year, the broad money stock grew at an annual rate of about 5 per cent.

Deflation, however, is not on the horizon for the euro area. The benignity of inflation pressures is closely tied to the low level of euro area import prices. Domestic price pressure is indicated by an overall rise in prices of services of about 2 per cent (Chart 1).

Decline in import prices constrains inflation

Euro area inflation has remained subdued in recent months, and there are no signs of a significant near-term acceleration of inflation in the core countries. Measured by the Harmonized Index of Consumer Prices (HICP), the average annual inflation rate for the euro area was 1.0 per cent in October. Against a background of declining import prices, inflation should remain moderate.

Inflation pressures have been constrained by the downtrend in import prices. This is largely a result of declining prices of primary commodities in world markets due to the Asian crisis and an oversupply of oil. According to the euro area consumer price index, energy products cost the consumer nearly 4 per cent less in September 1998 than a year earlier. This in itself reduced euro area inflation by 0.3 percentage point in September.

In recent months, the decline in prices of imported goods, particularly energy products, has helped restrain the overall rise in goods prices. Prices paid for goods by euro area consumers were only 0.7 per cent higher in September compared to year-earlier prices. Cross-country differences have remained fairly constant in recent months. The prices of goods have hardly risen at all in Germany, France and Belgium since September 1997, while Ireland, Spain and Italy have experienced rises of nearly 2 per cent.

Prices of services, on the other hand, have risen at an annual rate of about 2 per cent in the euro area during the early part of the year. Moreover, cross-country differences in annual rates of increase have widened somewhat in recent months. Whereas the outlook for service prices in Germany and France is benign, the annual inflation rate for services has risen to about 4 per cent in recent months in those border countries that are in a more advanced phase of the current economic upswing, ie Ireland, Portugal and Spain. The reduction in unused production capacity and the tightening of labour market conditions could boost inflation in these countries further above the euro area average.

In Finland the rise in consumer prices, which at the start of 1998 was proceeding at a faster rate than in the other euro countries, slowed in July-August to a rate below the average for the euro countries. However, in September there was a temporary small upward shift in inflation in certain services, particularly in telephone services and travel. In October inflation eased, and the rise in the HICP was 1.1 per cent compared to October 1997. Inflation was constrained in October mainly by the abolishment of the stamp duty on loans and the decline in the prices of fuel oil, petrol and coffee.

Inflation in Europe, October 1998, HICP

Luxembourg	0.5	Portugal	2.6
France	0.5	Ireland	2.6
Germany	0.6	*Euro countries*	*1.0*
Belgium	0.7		
Austria	0.7	Sweden	0.1
Finland	1.1	Denmark	1.1
Netherlands	1.5	UK	1.3
Spain	1.6	Greece	4.5
Italy	1.9	*EU 15*	*1.2*

In the largest euro country, Germany, domestic demand has more clearly become the engine for economic growth in the first half of the year. The EU Commission forecasts that German economic growth will decelerate from 2.8 per cent in 1998 to 2.2 per cent in 1999. French GDP has grown at an annual rate somewhat in excess of 3 per cent already for three quarters in a row, starting with the last quarter of 1997. Demand is buoyed by consumer optimism; the consumer confidence indicator rose in September to a record high level. Economic growth in France is also expected to slow to an annual rate of just above 2 per cent over the second half of this year and early part of next year.

Finnish growth remaining steady

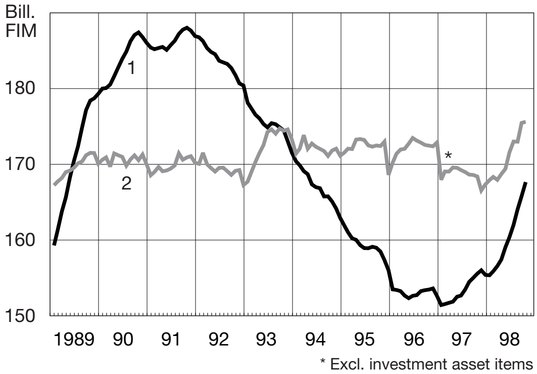
Economic growth in Finland, though estimated to be slowing as in the other euro countries, is expected to continue to outpace growth in those countries. While the risk of overheating that was still apparent in the summer has dissipated, an abrupt collapse in output is not on the horizon, even though disaster scenarios for the world economy have been presented during the autumn. The focus of growth in Finland is clearly shifting to domestic demand, as in other euro countries.

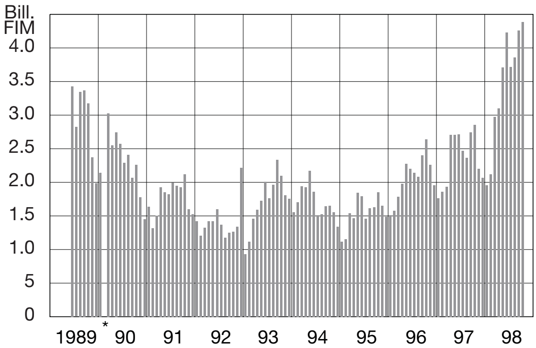
Export growth in the forest and engineering industries was still robust in the early part of the year owing largely to strong order books. The deepening and contagion of the Asian crisis however began to have an impact on export growth in the summer months so that the monthly increases came to a halt. Exports to Asian countries have declined by nearly 50 per cent, and exports to Russia have also slumped.

The October survey of business confidence showed a pronounced weakening in the outlook for all branches of manufacturing. Even traditional domestic sectors, such as foodstuffs, graphics and

Chart 2.

Banks' markka-denominated lending to companies and households





New housing loans

construction, are anticipating a slowdown as a result of the Russian crisis. Manufacturing companies expect growth in real output to continue but at a slower pace. In recent months the growth has been largely dependent on the electronics industry. Investment growth has remained sluggish in all branches of the sector. On the other hand, domestic investments have been more efficient than before; small amounts of investment have generated relatively large increases in output.

The consumer confidence indicator has weakened somewhat in recent months. Its numerical value, which for a couple of years had remained at a fairly high level of about 15, has dropped to ten, which is the level of 1994 and 1995. Nonetheless, this is still the highest for the EU countries, except for Ireland and the Netherlands. Confidence in personal finances has remained steady while expectations for the whole economy have weakened substantially. The improvement in the employment situation and rising real income have bolstered consumer confidence. The rise in housing prices has continued, which is helping to maintain confidence in the domestic markets despite a decline in share prices. The growth in private consumption has in fact been robust in the early part of the year, due largely to sales growth in the automobile and wholesale sectors. The outlook for consumption is fairly good, assuming uncertainty regarding the world economy abates without seriously affecting households' expectations.

According to the survey of consumer confidence, households' planned borrowing and housing purchases have remained buoyant. The demand for bank loans, particularly housing loans, has in fact increased rapidly since spring of this year, as households have been increasingly willing to borrow in order to purchase dwellings. This willingness is founded on low interest rates and positive expectations. Another demand-enhancing factor is the population shift to growth centres. The total amount of housing loans to households has already topped the former peak established around the turn of the decade. The abolishment of the stamp duty on loans, which entered into effect at the start of May, temporarily spurred borrowing as well as the refinancing of old housing loans at lower interest rates. The demand for housing loans has also been stimulated by lower interest rates on new housing loans fostered by interest rate competition among the banks. In August–September the amount of housing loans rose to a record level (Chart 2).

Housing prices have continued on a firm uptrend and before long will be approaching the peak nominal levels reached at the turn of the decade. In real terms, however, the price level is still a third lower than it was then. There is still a risk of overheating in the housing market, particularly in the growth centres, where heavy population influxes have caused a shortage of rental and owner-occupied housing. The concentration of business and office construction has increased the strain on production resources and put upward pressure on construction costs. Offer prices have continued to rise. Increases in construction costs have actually outpaced overall inflation, albeit the rise has come to a halt in the last couple months.

The growth in construction activity has also slowed since its surge in the early part of the year. The construction confidence indicator, which is calculated on the basis of companies' order books and planned staff levels, began to indicate a definite decline in confidence in the third quarter of this year. The phase of peak growth in housing construction is already winding down, and construction permits have also declined. In the construction in-

Demand for markka lending by banks has increased

Banks' markka-denominated lending has begun to record vigorous growth this year, after having remained stagnant since the recession. The stock of markka lending has already surpassed that at the end of 1990. In October the twelve-month growth in the stock of lending increased to about 9 per cent and the annualized rate of growth was some 15 per cent in August–October. In January–October the stock of markka lending increased by FIM 25 billion to more than FIM 300 billion.

However, because the stock of foreign currency-denominated lending is presently at a low level, the stock of total lending has not yet approached the level attained at the start of the decade. In the late 1980s and early 1990s, the banks intermediated inflows of foreign currency-denominated loans to a value of over FIM 100 billion, compared to the present stock of foreign currency-denominated lending of slightly more than FIM 10 billion.

The increased demand for loans is not reflected in the money stock figures. The monetary aggregates have been growing at a moderate rate for a long period of time.

The growth in the lending stock is attributable to an increase in households' demand for loans. The stock of loans to households began to increase slowly already in 1997, but it was not until this year that the pace packed up substantially. New housing loans have been raised in the peak months of 1998 in amounts exceeding FIM 4 billion, compared to a monthly average of about FIM 2 billion in 1996–1997. Part of the increase is explained by the abolishment of the stamp duty in the spring, which has enabled banks to compete more aggressively for customers. The stock of housing loans has grown by about 10 per cent during the year, partly owing to lower interest rates.

The interest rate margin on stocks of markka-denominated lending vs deposits has narrowed this year because of the decline in lending rates. The heightening of competition between banks has resulted in a narrowing of the margin that is added to reference rates. The margin added to prime rates has decreased for many banks in 1998, though not significantly. Margins on HELIBOR-linked loans have also narrowed this year. These margins of course vary greatly from customer to customer, but it is apparent that good customers have benefited from the competition between banks through lower interest rates. The interest rate margin on new housing loans has diminished substantially. The most pronounced change has been in respect of loans tied to the longer-term HELIBORs. In the period January–October, the average rate on new housing loans fell by about 0.5 percentage point to 5.3 per cent.

Prime rate-linked loans have dominated the housing loan market, with nearly two-thirds of the total amount of loans raised in recent months having been linked to prime rates. Less than a third of the total amount of housing loans has been linked to HELIBOR rates and only a very minor portion has been on a fixed-rate basis.

dustry, expectations regarding sales prices have declined somewhat, which increases the uncertainty associated with start-ups, even though profitability is still good.

Overall output is still growing due to a surge in private consumption and construction. The growth is however forecasted to decelerate considerably. The growth of real manufacturing, excluding electrical output, has already come to a halt. Employment levels are continuing to rise in the service sector. By contrast, employment growth has slowed in manufacturing and construction. Unemployment is declining sluggishly, as the supply of labour has recently been increasing nearly in line with the increase in the demand for labour. Mismatches are occurring more frequently in the supply and demand for labour, in terms of both location and job skills. The unemployment rate in Finland has however dropped below the average level for the EU countries.

The rise in consumer prices in Finland slowed in the spring and summer to the extent that by July the rate of rise was below the average for euro countries. The pronounced disinflation has been a result of falling import prices whereas the growth in housing costs has put upward pressure on domestic consumer prices. Inflation is estimated to remain subdued. Stable inflation is being supported by moderate wage pressures, tightening competition also in the nontradables sector, and the prospect of low international commodity prices for the near future. The slowing in the growth of output in the tradables sector has alleviated the production bottlenecks that surfaced in the early part of the year and is reducing the risk of a pick-up in inflation pressures.

The general government financial position is clearly moving into surplus this year and is anticipated to continue to strengthen during the next few years. This is the case despite the slowing of the rate of economic growth. The central government's budget deficit will remain at a fairly high level this year. The second supplementary budget for 1998 was taken up by Parliament around the November–

December changeover. Because of additional revenues from taxes, dividends and sales of shares, there was an upward adjustment in total net revenue of FIM 10 billion, which will reduce central government net borrowing to FIM 5 billion. It is projected that fiscal policy will be tightened slightly in 1999 even though a cut in income taxes with effect at the start of the year will have an annual expansionary impact of about FIM 3 billion. According to the stability programme of the Finnish Government, the central government deficit should remain at about 1 per cent of GDP over the next few years. The deficit is almost entirely structural.

3 December 1998

• Key words: inflation, monetary policy, economic performance

Financial stability in Finland

Following a period of unease in early autumn, there has been a notable improvement in recent weeks in the tone of the world's financial markets. Share prices have turned up again and spreads on bond yields, which had widened considerably in response to earlier events, have started to narrow. The US Federal Reserve lowered its key interest rate three times in the autumn, which has been particularly helpful in restoring market confidence. Nonetheless, investor behaviour is still characterized by exceptional cautiousness, and future bouts of instability are still possible.

The turbulence that originated in southeast Asia over a year ago and had by early autumn assumed global proportions, not only lowered expectations regarding share prices but also affected real economies around the world. In particular those industries perceived to be the most dependent on emerging economies have been particularly affected by these developments. In regard to financial stability, it is noteworthy that share prices fell considerably in the banking and financial sector (Chart 1).

The case of Long Term Capital Management (LTCM), a hedge fund, is an illustrative example of how market unease can jeopardize the stability of the global financial system. LTCM represented a threat to the stability of the banking system because it had multiplied its risk exposure on the basis of funds obtained from open-handed banks. If LTCM had failed and its enormous investment portfolio had been liquidated, this would have caused serious market disturbances. For this reason, the Federal Reserve's actions as behind-the-scenes catalyst in the September takeover of LTCM by private creditor banks can be regarded as justified.

Other factors that have increased global uncertainty are the problems of the Japanese economy and weakened condition of the country's banking system. The banks' bad debts have been estimated to amount to possibly as much as 20 per cent of the country's annual GDP[1]. It can therefore be anticipated that, regardless of any supportive measures the government might take, the Japanese banking crisis will continue to affect international capital flows and international competition in banking as many Japanese banks downsize their international operations.

As a result of the recent turmoil, several large western banks have also built up substantial loan loss reserves in the face of notably deteriorating financial results, and further losses could be on the way. On the other hand, western banks on average have a strong capital position at the moment, and one can conclude that for the time being they will be able to cope with foreseeable losses.

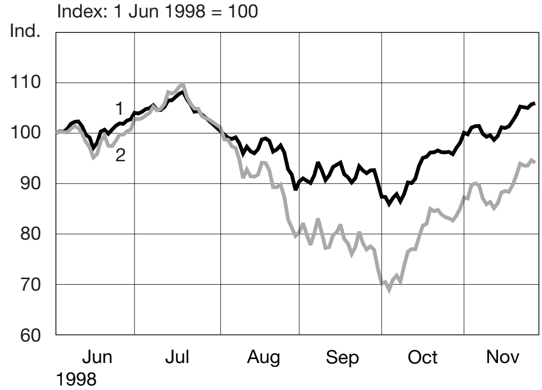
Problem contagion revealed deficiencies in the international financial system

The Asian crisis and its spread into Russia, Latin America and other emerging economies has been particularly revealing in that it has brought to light substantial deficiencies in the functioning of inter-

Chart 1.

World stock indices: general, banking

Index: 1 Jun 1998 = 100



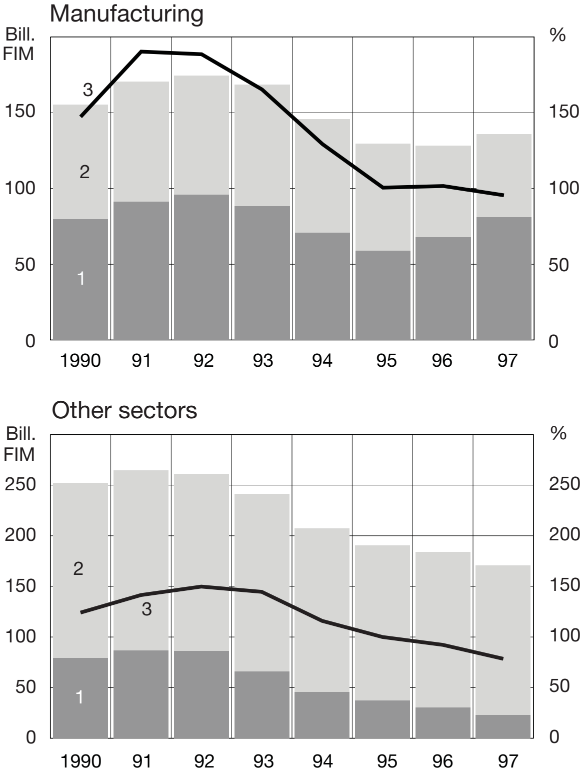
1. MSCI, The World Index
2. MSCI, Banking

Source: Morgan Stanley Capital International (MSCI).

[1] For comparative purposes, it might be mentioned that Finnish banks' nonperforming loans amounted to slightly over 10 per cent of Finnish GDP in 1993 in the most severe phase of the banking crisis. It should be noted that methods of calculating nonperforming loans have differed somewhat between the two countries.

Chart 2.

Corporate debt: markka value and per cent of value added



1. Foreign currency-denominated debt
2. Markka-denominated debt
3. Debt as per cent of value added

national financial markets. Above all, international lenders had become overconfident about their claims on the emerging economies being guaranteed under all circumstances, either by crisis-country governments or, as a last resort, by the international community.

On the other hand, Russia's decision in August to temporarily suspend all servicing of its external debt and the inability of the Russian government to meet its expenditure obligations have brought home the cold truth that international lenders cannot always rely on being bailed out in the end. The realization by investors that the leading western countries were reluctant to use tax funds to safeguard the investors' claims has in fact been one of the reasons why the exit of investors from one country has simultaneously triggered exits from other countries even when there have been no obvious direct links between the countries.

In November the International Monetary Fund announced a financing package for Brazil aimed at stemming the spread of the crisis. Finland will participate directly in the rescue under the New Arrangements to Borrow (NAB), which comprise a part of the package. Finland is also participating in the loan guarantee arrangement provided for Brazil by the industrial countries under the aegis of the Bank for International Settlements.

On the whole, the Asian crisis and its fallout have provoked the international community to update many of the practices in respect of financial markets regulation and supervision, investor protection, and foundations of the financial system. Against this background, the development of the international financial architecture – still in its initial phase – may be regarded as an important step toward financial stability.

Changeover to the euro and the prospects for competition in the European financial markets

The onset of Stage Three of EMU at the start of 1999 will bring highly visible and fundamental changes to the European financial markets. The single currency – the euro – and the single monetary policy conducted by the participating eleven EU countries will give rise to a very large European financial market, which will be more stable, but also more competitive, than the old national markets. Heightened competition has already become evident in the wholesale financial markets, and changes in the same direction are expected soon in the retail supply of financial services.

Owing to their good performance in the last few years, European banks are presently on average relatively well positioned to bear losses. However, the risks to which the banks have recently been exposed have led to substantial losses in connection with loans to emerging economies. This will hardly prevent them from further risk taking because of the tighter competition that will come with the euro changeover.

Over the longer run, the EU banking sector will clearly need to upgrade its efficiency and competitiveness. In many countries, particularly in continental and southern Europe, competition among banks is still rather low-keyed despite large numbers of banks, banks' cost efficiency is low, and the banking sector is marked by overcapacity. As a result, the introduction of the euro is likely to lead to substantial cost-cutting and more mergers in the financial sector. In the Nordic countries, where there has been a significant reduction in the number of banks and numerous cross-border bank mergers and other cooperative arrangements, the banking sectors have already become more consolidated; nonetheless the intensity of competition has not decreased.

Stage Three of the EMU presents a challenge to Finnish banks

The unease in the international financial markets has had a fairly small impact on the outlook for the Finnish financial sector. Contrary to the situation at the onset of the 1990s, Finnish firms and households are now clearly well positioned to withstand a crisis. For example, the indebtedness of Finnish companies has decreased significantly (Chart 2). Finnish companies' average indebtedness is in fact currently at a moderate European level. Other factors contributing to the stability of the domestic financial markets include a surplus on the external current account, improved financial balance in the public sector, companies' strong financial results and competitiveness, as well as ready availability of financing.

Against this background, the outlook for Finnish banks as a whole seems to be favourable. Banks' financial performance has been good; solvency ratios have improved; and investments in the riskiest areas of international banking have remained moderate. Furthermore, Finnish banks have been rapidly improving their efficiency and profitability since the banking crisis (Chart 3). On the other hand, the banks are still burdened by large amounts of low-income real estate holdings, which have been conspicuously difficult to dispose of rapidly.

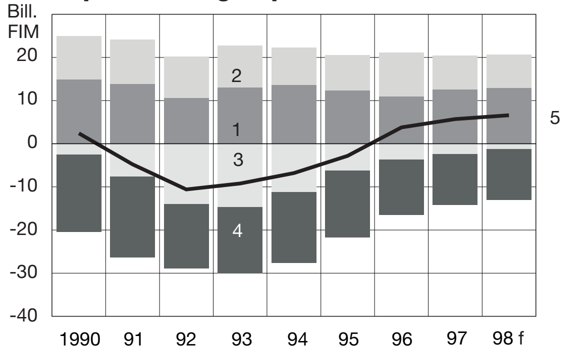
The crises in Asia and Russia could eventually affect Finnish banks, mainly indirectly, as for instance through the unexpected problems of domestic corporate customers as well as in cross-border interbank funding. Finnish banks' direct risk exposure in the actual crisis areas has been relatively small (Chart 4).

This year we have seen signs of intensified loan competition between banks in Finland. The banks' loan stock has grown at a somewhat faster pace than warranted eg by the increase in investment. However, from the viewpoint of financial market stability, the situation is not yet alarming. Banks' average interest rate margins have remained fairly wide and stable, and the tightening of competition has not cut into banks' net interest income (Chart 5). Margins have narrowed mainly for loans to households, where interest rate margins have traditionally been wide and loan losses small.

A relatively large share of savings in Finland is still held in low-interest bank deposits, mainly because of tax advantages. So far, this has contributed materially to the strong profitability of Finnish banks. This special Finnish phenomenon is expected to gradually diminish. Already in the last few years, financial savings have been flowing increasingly into investment outlets other than bank accounts. Hence from the viewpoint of bank profitability, one crucial factor is the degree to which banks succeed in replacing lost interest income by other income such as commissions from the intermediation of alternative investments.

Chart 3.

Deposit bank groups' financial results



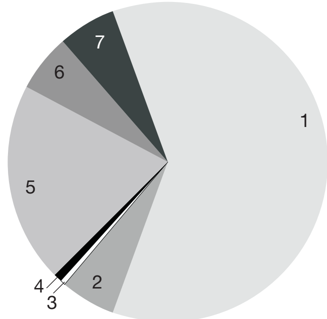
1. Net income from financial operations
2. Other income
3. Loan and guarantee losses
4. Other expenses
5. Net operating profit

f = forecast

Chart 4.

Bank groups' foreign assets, gross

June 1998

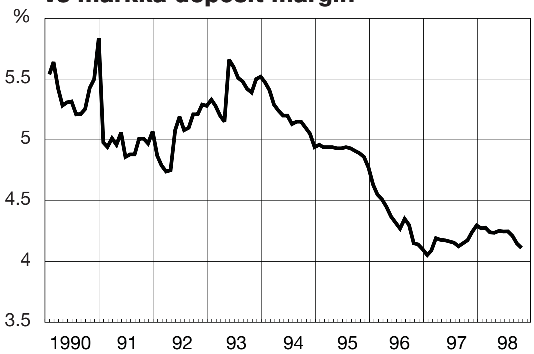


Total assets: FIM 154 billion

1. EU (61.0 %)
2. Rest of Europe (5.6 %)
3. Russia (0.6 %)
4. Baltic countries (0.8 %)
5. United States (20.5 %)
6. Japan and Southeast Asia (5.8 %)
7. Rest of the world (5.8 %)

Chart 5.

Banks' markka lending vs markka deposit margin



After the launch of Stage Three of EMU, there will be considerably less foreign exchange dealing, and a substantial portion of domestic debt instrument trading in Finland will be replaced by trading in euro-denominated instruments in international financial centres. Combined with the increasing competition in the retail banking sector, the changeover will thus expose the banks with considerable strategic risks. However, on the operative level, the banks seem to be well equipped to handle the changeover.

Finnish banks have a substantial amount of software that must be checked to ensure that the traditional two-digit year denotation will not present any problems when year '00' begins. However, all signs suggest that the banks will be fully prepared to deal with the Year 2000 problem. The authorities are also closely monitoring the preparations.

More intense competition in financial system infrastructure

During the run-up to the euro, competition between European payment systems has tightened and prices of payment services have declined. Since particularly cross-border payments are still very slow, costly and error-prone, competition can be expected to have a greater effect on the cost and quality of these services. An additional new feature will be the TARGET system[2], which was developed by the central banks of EU member states. This is a new, very rapid and secure EU-wide system for processing and settling euro-denominated interbank payments, but it can also handle transfers of customer payments. The TARGET system will become a benchmark for private payment systems.

The Finnish Central Securities Depository Ltd (FCSD) plays a central role in the operation of Finnish securities markets. It acts as the central securities depository for book-entry securities issued in Finland and as settlement agent for securities transactions reported to it. The FCSD settlement system for debt instruments (RM system) has operated satisfactorily from the technical viewpoint. By contrast, there have been sporadic disturbances in the FCSD settlement system for share transactions (OM system), which have led to longer-than-agreed settlement lags. The authorities; the FCSD; HEX Helsinki Exchanges; and settlement system participants have however taken various measures to improve the reliability of the settlement of share transactions. The project on the centralized registration of all equity instruments in the FCSD is an important step in the long-run upgrading of the efficiency and reliability of share transactions settlement.

All credit operations of the European System of Central Banks (ESCB) must be fully collateralized. This requirement links securities settlement systems closely to the implementation of the single monetary policy and to the TARGET system. As part of the preparations for Stage Three of EMU, the ECB and the national central banks of EU member states have set minimum standards for securities settlement systems to be used by the ESCB in the settlement of its credit operations and have made an assessment of EU securities settlement systems in light of those standards. The RM system of the FCSD will meet all the ESCB minimum standards from the start of 1999, when it begins to observe TARGET operating times. The instruments (shares) used so far in FCSD's OM system do not meet ESCB eligibility requirements for use as collateral.

After some initial delays due to technical reasons, the new electronic share trading system of HEX Helsinki Exchanges was introduced in September 1998. The error-fee and efficient functioning of data systems and the international links provided by them are imperative for the successful operation of support services for national stock exchange operations and securities trading in the new competitive EMU environment. The new cooperative project of HEX Helsinki Exchanges, the German stock exchange Deutsche Börse, and the derivatives exchange Eurex will improve the competitiveness of HEX Helsinki Exchanges in this respect.

The financial markets are stable – prepare for surprises and heightening competition

Against the background of Finland's present ability to withstand crisis as well as the stable outlook for the euro area, the outlook for the Finnish financial

[2] TARGET = Trans-European Automated Real-time Gross-settlement Express Transfer.

Bank of Finland's role in maintaining financial stability

Besides their main duty – that of conducting monetary policy – central banks are often involved to varying degrees in the promotion of financial stability. This stems mainly from the fact that a stable and reliable financial system serves to facilitate the conduct of monetary policy. In addition, a stable financial system can support other economic policies as well as the overall functioning of society. The growth of financial markets has made it increasingly important to control, and prevent realization of, the major risks that can lead to systemic crisis in the financial system.

As regards the Bank of Finland, its statutory domestic duties include participation in the maintenance of the stability and efficiency of the financial system as well as in its development. This mandate is considered to apply particularly to payment and settlement systems, but also more generally. Furthermore, as a member of the European System of Central Banks (ESCB), the Bank of Finland is obliged to promote the smooth operation of payment systems and to contribute to the stability of the financial system.

In Finland the preparation of legislation and regulations on the financial system is mainly the responsibility of the Ministry of Finance. The Financial Supervision Authority, which functions as an independent authority in connection with the Bank of Finland, is responsible for supervising the risks of financial market participants, such as credit institutions, investment firms, stock exchanges and central securities depositories, as well as the legality of their operations. The scope and content of the supervision are defined in financial market legislation, eg in laws governing credit institutions and securities markets.

However, because of its position at the centre of the payment system, the Bank of Finland automatically assumes a leading role in concluding agreements on operating principles for interbank payment systems.

Otherwise, the Bank of Finland's role in promoting financial stability encompasses only a limited amount of regulatory power or other means of directly impinging on the operations of market participants. Instead, the Bank for the most part exerts its influence indirectly, mainly through various modes of cooperation with other authorities and financial industry representatives, through publications directed at market participants and the general public, and through research and analysis. The current article, which is the first biannual assessment of the state of the financial system, is an example of the Bank's continuing effort to increase the transparency of its operations.

It seems likely that the ESCB will have an important part in promoting the stability of the euro area financial system. In this respect, it will be particularly concerned with payment and settlement systems that operate in the euro area. Moreover, the Banking Supervision Committee, which functions in connection with the European Central Bank, provides a forum for cooperation between central banks and banking supervisors of EU member states in the field of banking supervision.

With the introduction of the euro, it will become increasingly important to achieve an efficient allocation of liquidity across the whole euro area. To ensure that this happens, the EU central banks have developed a real-time payment system called TARGET, which they will jointly adopt. In addition, the ESCB will participate in the oversight of other payment and settlement systems. This oversight will focus on the functioning of the systems themselves, in particular those systems used in monetary policy operations and in other wholesale payments, rather than on the firms that offer their services via those systems. As a legal basis for the oversight, the European Central Bank is entitled to issue regulations on payment systems and to impose sanctions as necessary. These regulations are binding in their entirety and directly applicable throughout the euro area. The Bank of Finland will participate in the oversight in cooperation with the Financial Supervision Authority, the broad guidelines for which will be drafted within the ESCB framework.

In central bank parlance, the term 'macroprudential supervision' has recently come to refer to their role as overall monitors of systemic stability. In fact, the growing emphasis on macroprudential supervision clearly reflects the increased dependence of the economy on the financial markets. Macroprudential supervision focuses on the financial system and the intermediation of financing as a whole in pursuing its objective of reducing financial fragility and preventing systemic risk. Ultimately, macroprudential supervision provides additional bases for the decisionmaking of central banks and other authorities responsible for economic policy and prudential supervision.

Essential harmonization of national legislation, the 'home-country principle' as applied to prudential supervision, and the mutual recognition of national laws and regulations are currently the foundations of financial market regulation within the EU. However, because financial markets will become more integrated in Stage Three of EMU, the maintenance of financial stability will inevitably require deeper and closer cooperation among the ESCB and national authorities of member states.

markets can be considered stable. Sufficient stability will persevere in a typical cyclical slowing of growth. By contrast, should there be another manifest weakening of global financial conditions and prospects, unrest would increase also in the Finnish financial markets. A similar reaction could be caused if for instance a big European bank were to face unexpected difficulties. In the future, international developments will be increasingly important for the stability of the Finnish financial system.

The operating environment of the banks and other financial intermediaries in the Finnish financial markets will become more competitive with the launch of the euro. The national economy will benefit considerably from this competition in the form of decreasing average financing costs and more diversified financial services. On the other hand, in a competitive environment, customers must also pay increased attention to the risk exposures of financial institutions. A cost-efficient and competitive domestic financial sector is nonetheless the best guarantee of a stable financial system.

30 November 1998

• Key words: financial stability, financial systems, financial markets, banks, payment and settlement systems

The euro in the global currency markets and in Europe[1]

by **Matti Vanhala**,
Governor
Bank of Finland

Anticipation of the launch of the euro at the start of next year has evoked positive expectations in the euro area. But since the introduction of a common currency for a fairly large group of countries is indeed an unparalleled undertaking, it seems prudent to pause here and give some thought to the challenges and risks that inhere in the project. Efforts have been made to reduce those risks by means of extensive cooperative preparations, especially as regards monetary policy. In constructing the euro edifice, the aim has been to base it as much as possible on the monetary policy experiences of the individual euro countries. These experiences are applicable to both the monetary policy strategy of the European System of Central Banks and the policy instruments that will be used to carry out that strategy. Still, many issues remain open concerning the future of the euro.

In evaluating the international role of the euro, we should keep in mind that the euro area is relatively closed in terms of foreign trade. Both its exports and imports vis-à-vis the outside world amount to only 10 to 15 per cent of the area's total output. Monetary policy for the euro area will be designed mainly on the basis of assessments of area-wide internal developments. The primary objective of monetary policy – price stability – was spelled out already in the Maastricht Treaty. The single monetary policy should take account of the euro's external value only to the extent that this will affect area-wide price stability.

The economy of the euro area is slightly smaller than that of the United States. The difference in total output between the two economies, measured on the basis of purchasing power parity, is about 20 per cent. At prevailing exchange rates, the nominal difference is about the same, but to the extent that the euro appreciates against the dollar this difference will shrink. The world's third major economy, Japan, is about half the size of the euro area economy.

Within the next few years, the dollar and the euro will be the leading currencies in the global markets. However, the United States accounts for only about a fifth of total world output, and this proportion, as well as that of the euro countries, has been steadily declining over recent decades. The crises in the emerging economies and in Japan will during the next few years undoubtedly slow, but hardly reverse, the downward trend. Thus the dollar and the euro will not lack for rivals in the currency markets. The yen is already a rival, and it will be interesting to see just when the Chinese yuan renminbi, in particular, emerges as an important world currency.

It is clear that the euro will dominate the foreign exchange markets in Europe and to an extent in neighbouring areas. Nonetheless, it is likely that the dollar will retain its position as the world's premier currency and key reserve currency far out into the future.

I would like now to first present my view of the euro's position in the global currency system and then to evaluate the role of the euro in Europe.

The euro in the global currency system

It will be interesting to see how the dollar-euro relationship evolves over time. Since the euro area economy will be almost as large as the US economy, it has generally been anticipated that the euro will assume a share of the key role that the dollar has played in the world economy since the 1930s.

One widely debated issue concerns whether the euro will become a strong and stable currency. It is already evident that the euro will debut as a very stable currency. This view receives support from external circumstances, but it is also true that doubts as to the credibility of the European Central Bank (ECB) have dissipated. In using the expression 'stability of the euro', I am referring here specifically to its internal value. Euro area-wide inflation is close to one per cent, and the ECB will undoubtedly conduct monetary policy so as to keep inflation in line with the defined price stability objective: an annual inflation rate of less than two per cent. Price stability is the firm basis upon which the euro will emerge as a key international currency.

Quite another subject is the external value of the euro, ie the stability and strength of its exchange rate. Although the euro area will constitute a fairly large and closed economy, the euro exchange rate will naturally be a matter of some importance. It will be even more important to periph-

[1] Based on a speech delivered at the conference Samfunn og økonomi (Society and the Economy) 1998, Oslo, 23 October 1998.

eral euro countries, such as Finland, and of course also to small noneuro countries, such as Norway. More than a third of Finland's foreign trade is with the euro area, and almost two-thirds is with non-euro area countries. In the case of Norway, the euro area share of foreign trade is actually somewhat larger.

The euro's exchange rate will present problems if it is highly volatile and prone to – possibly protracted – periods of undervaluation or overvaluation.

It is notoriously difficult to determine whether a currency is undervalued or overvalued. Different indicators often yield results that differ from each other by several tens of percentage points. Nor is it a straightforward task to define the equilibrium exchange rate, which will depend on both the external and internal balance of the economy. If some indicators show that the current exchange rate is equal to the equilibrium rate, while at the same time the country is suffering from high unemployment, one can well argue that the exchange rate is not in equilibrium. Even in light of these caveats, we can be fairly certain that present dollar exchange rates of the currencies to be merged into the euro probably do not diverge significantly from their long-run averages. Though it is possible that the euro is somewhat undervalued, the deviation can hardly be a significant one.

In recent months, the euro area currencies have appreciated against the dollar. Looking at a slightly longer time-frame, the dollar has not weakened in terms of its trade-weighted index, as the currencies of neighbouring countries of the United States have depreciated. Euro area currencies, on the other hand, have been appreciating across the spectrum. The currencies of all the western countries have in fact strengthened in 1997 and 1998 decidedly more than the normally applied trade-weighted currency indices suggest, since these indices generally do not include the devalued currencies of the developing countries. So far, the strengthening of the euro has not posed problems and has perhaps been beneficial because – as I noted earlier – the euro continues to be more likely undervalued than overvalued. Nonetheless, if the trend of recent months were to continue, the exchange rates between the major currencies would likely become the subject of concerned discussion in the euro area right from the start of the monetary union.

There are a number of factors that will have a firming impact on the euro's external value over the next few years. The dollar has been buoyed in recent years by US economic policy, which has been more stringent than that pursued in the euro area. The key interest rates for monetary policy have been a couple of percentage points higher there than in the euro area core countries and federal government finances have been in surplus. US monetary policy now seems to be on an easing trend, and expectations of further easing have softened the dollar.

The current account, which is also the balance between aggregate savings and investment, is becoming problematic for the United States. The country has long been a debtor country; households in particular are borrowing heavily. The situation in the euro area is the reverse: The euro area-wide current account surplus is almost as large as the US deficit, ie about two per cent of total output. The global decline in share prices may act as a constraint on the willingness to incur debt and thus restrain demand, especially in the US where savings in the form of equity play a major role. If so, domestic demand in the United States would slacken and the current account would improve, but only if the dollar were to depreciate at the same time.

The euro area's strong external financial position has buoyed the euro, but the crisis in the developing economies is turning this into a partly negative factor. Euro area financial institutions have channelled – or have been forced to channel – their savings surpluses into relatively weak economies because of a shortage of creditworthy borrowers around the world. These institutions are now facing the risk of larger losses on these loans than are their American competitors.

One widely discussed topic is the type and extent of adjustments in long-term investment portfolios that will be induced by the euro launch. It is likely that we will see substantial portfolio reallocations, spurred also by vigorous development of financial markets. To be sure, the investments will flow in both directions. For example, if the euro is perceived as a stable and credible currency, it will certainly attract investment. But at the same time, the euro will become an important international lending currency and foreign borrowers will be entering the markets as sellers of euro. Thus investment and lending transactions would largely offset each other and hence we might not see major pressures on the exchange rate. Portfolio adjustments will also be less abrupt because of the years-long transition period in connection with the introduction of the euro, which has already begun.

It is expected that in the course of time the euro will assume a position alongside the dollar as a key world reserve currency. As for the dollar, it has been pondered whether overvaluation of the dollar and US indebtedness have been partly the result of the dollar's reserve currency status. After all, borrowing is easy for a country whose currency is a reserve currency, since investors – especially those responsible for placing foreign reserve assets – more or less automatically buy government paper of the reserve currency country, which is thus exempt from exchange rate risk. Private sector entities in a reserve currency country can also borrow without exposure to exchange rate risk. Nor is it necessary for a reserve currency country to hold large amounts of foreign reserve assets, since it can 'print' money also for meeting international obligations.

The reserve currency status of the euro raises several questions: (1) Will the euro too tend to become overvalued on average, ie will the euro's exchange rate tend to appreciate over the long run and lead to dissipation of the euro area current account surplus? (2) Will the fact that investors of foreign reserve assets have an alternative to the dollar have a destabilizing effect on the euro-dollar exchange rate? (3) Will the reserve currency status of the euro have not only beneficial effects – of which we can site at least seigniorage and a certain amount of leeway and influence in connection with economic policy – but also burdens, eg by hindering control of the euro area money supply? We can try to answer these questions only after long experience in the euro environment.

Different theories have been put forward on whether euro-dollar exchange rate volatility will be greater or less than Deutschemark-dollar volatility has been. The argument for greater volatility is based partly on the idea that, because the share of foreign trade in the euro economy will be small, the exchange rate will lose much of its importance, just as in the United States – whence term 'benign neglect'. Moreover, competition between the euro and the dollar as reserve currencies and more widely in the global financial markets may lead to more asset shifting between these currencies and thus cause significant exchange rate gyrations. Ex ante, we do not have clear answers to these questions.

Experience with major currencies shows that their exchange rates cannot be kept stable indefinitely via interventions in foreign exchange markets. Intervention can only have a temporary impact. Nonetheless, concerns that exchange rates could become more volatile have given rise to the question of international cooperation regarding exchange rate policies and to some public discussion of the prospect of a trade war, particularly between the euro area and the United States. My own feeling is that both scenarios are highly unlikely. It is virtually impossible to stabilize the exchange rates of major currencies by direct measures, and attempts to do so often have the reverse effect. The only practical means of supporting a stable euro-dollar exchange rate will be to work toward some degree of convergence of economic policy goals and steady conduct of overall economic policy on both sides of the Atlantic. The higher the degree of integration of economies, the more important it will be to succeed in all areas of economic policy. In this sense, international coordination of economic policy would be desirable and important.

The euro will probably not be able to challenge the dollar as the world's most important pricing currency for a long time. The dollar is likely to retain its well-established position as a vehicle currency in foreign exchange markets and as a pricing currency for raw materials. The dollar's position in this respect is underpinned by the highly efficient US markets and, in the case of raw materials, also by the fact that the United States – unlike the euro area – is an important producer of raw materials. Nonetheless, a strong euro will gradually gain a foothold as a pricing currency in international markets.

Exchange rates are affected not only by purely economic factors but also by many other considerations. Of these, the most important are political factors. Typically, the dollar appreciates in response to unexpected political or military disturbances. This is probably due to the country's stable political system, its economic and military strength, and widespread confidence in its market-oriented economic policies.

The euro area is almost as large as the United States in economic terms, but it lacks some of the above-mentioned strengths of the US economy. The euro area economic policymaking mechanism is not highly coherent and is under pressure for change. Moreover, the area has no common security policy. It remains to be seen how the policymaking mechanism and size of the euro area will affect the euro's exchange rate. It is clear that poor policy coordination within the euro area would weaken the euro. Extension of the euro area to include the whole EU would strengthen the euro, assuming a high degree of integration in the area. The absence of the UK and Sweden from the euro area may cause some difficulties for Ireland and Finland. On the other hand, if a smaller euro area is able to achieve closer and more credible policy coordination, this ought to strengthen the value of the euro.

The euro's role within Europe

What then will be the euro's role within Europe? What will change in the euro area countries and in the countries remaining outside the euro area? These are difficult questions, to which we cannot expect reasoned answers for several years or even decades.

The eleven countries that will participate in the euro area at the start of next year account for three-quarters of the total output of European OECD countries. Of the transition economies, Poland, Czech Republic and Hungary are OECD countries. The share of the eleven countries in European output declines slightly, depending on which other transition economies are included in the calculation. In Europe the only real rivals for the euro will be the pound sterling and perhaps to some extent the Swiss franc. The UK economy represents almost half of the European economy remaining outside the euro area but amounts to only just under a fifth of the euro area economy. Nonetheless, the fact that London will clearly remain the key financial centre in Europe, at least for the foreseeable future, will bolster the status of the pound sterling. Along with the pound sterling, the Swedish krona is another noneuro area EU currency that will be floating for the time being. The Swiss franc will continue to follow its own course but is likely to mimic fairly closely the movements of the euro.

The euro's effective currency area will be larger than the euro area itself since several noneuro European countries will peg their currencies to the euro. These linkages will be of widely varying degrees. The Danish krone will have a tight link, being an ERM II currency with a narrow fluctuation range of ± 2.25 per cent. ERM II, which is the successor exchange rate arrangement to the present ERM, will also include Greece, but the drachma's fluctuation range will be a full ± 15 per cent. As to the Norwegian krone, I am speechless in Norway.

Most of the transition economies currently have an exchange rate target, and in many cases the currency is wholly or partially linked to the Deutschemark. By partial linkage, I refer to some type of crawling peg that is less rigid than a proper peg. We will probably see shifts from the Deutschemark to the euro, and in some cases, primarily in countries that have started EU membership negotiations in connection with the next round of enlargement, the euro will probably be weighted more heavily in the currency basket. Estonia, for example, has announced that it will continue its strict currency board regime with the Deutschemark being replaced by the euro. Certain African countries will also peg their currencies to the euro, thanks to historical ties to the French franc.

The transition economies that will peg their currencies to the euro are very small compared to the euro area. Nothing very substantial will devolve to the euro area as a result of these linkages in terms of value added or enhancement to the euro's global status. But these linkages are generally important as regards the stabilization of the transition economies themselves and their integration into the European framework. However, the sustainability of these pegs depends on whether economic development in these countries is compatible with the euro area. They will need to do a good job in the conduct of economic policy and they must see to the solidity of their financial institutions. Unsuccessful pegging benefits no one and in fact can lead to pronounced volatility in real exchange rates and in turn to trade distortions.

Another important question is how extensively the euro will be used outside the euro area eg as a pricing and invoicing currency in foreign trade and as an investment and loan currency. There is much talk of change, but the true scope of the change will be seen only gradually. Should the euro be used on a wider scale, this would facilitate to some extent the foreign economic activities of euro countries but would also complicate the conduct of monetary policy in the noneuro countries. Although changes of this nature are likely to happen, there is no reason to exaggerate their advantages to the euro area or their disadvantages to outsiders. It cannot be assumed, for instance, that a company located in the euro area could automatically and without cost transfer foreign exchange rate risks to a counterparty. Such things have historically depended primarily on companies' mutual negotiating positions, and this will continue to be the case even after the launch of the euro.

In those noneuro area countries that begin to make wide use of the euro, the interest rate policies pursued by national central banks will have a diminishing impact on the economy. On the other hand, the euro will hardly cause a decisive change in the already-prevailing situation. In any case, large multinational companies already operate to some extent independently of national currencies and national monetary policies. However, the bulk of a country's business activity continues to depend on domestic fiscal and monetary policies. Even if companies in noneuro countries partially switch to euro pricing, national currencies will still be used in pricing and paying taxes, wages and salaries as well as in retail trade.

The problems of countries not participating in the euro area can be compared with those of participating countries. The euro obviously will not banish economic problems. Perhaps the sum total of the problems is broadly the same under any regime; only the forms and timing differ. The euro will bring some obvious, well-known benefits to the euro area, such as a decrease in the costs of currency exchange and more transparent pricing. Country-specific foreign exchange disturbances will disappear and interest rate spikes will be much more modest. On the other hand, there will still be wide – perhaps even wider than before – fluctuations in exchange rates outside the euro area. These fluctuations will be largely independent of a specific country's economic conditions – as will the ECB's interest rate settings.

23 October 1998

• Key words: euro, dollar, exchange rate

Changes in the reference rate system with the changeover to monetary union

by **Jarmo Kontulainen,** Head of Office
Monetary Policy Department
and **Maritta Nieminen,** Legal Counsel
Legal Affairs Unit
Bank of Finland

The changeover to Stage Three of Economic and Monetary Union (monetary union) and the adoption of the euro will result in changes in national money markets and in reference interest rates. National reference rates for banks' deposit and lending rates will be for the most part abolished. When the scope of the money market becomes the whole euro area, reference rates calculated on the basis of national factors will no longer adequately reflect market interest rate developments and so will be replaced by rates that are representative of the whole euro area. As a part of the European System of Central Banks, the Bank of Finland will no longer be able to participate in the maintenance of a national system of reference rates. In practice, this means that the Bank can no longer set the base rate nor calculate and publish HELIBOR rates.

Because of the coming changes in the reference rate system, the Finnish Government has presented a proposal to Parliament on an act on reference interest rates and amendments to the Interest Rate Act (HE 176/1998). Accordingly, the Bank of Finland's base rate and the short-term reference rates defined by the Bank would be replaced by new reference rates. The principal aim of the Government's proposal is to remove legal uncertainties regarding continuity of contracts due to the change in reference rates. Problems of interpretation could arise in respect of contracts that have no provisions on changes in a reference rate or method of calculation.

In the context of preparations for monetary union, the removal of legal uncertainties regarding contract continuity has been considered an important issue by the EU. Thus the EU Council issued a directive on certain regulations related to the introduction of the euro (EY 1103/97), which states that the introduction of the euro will not in general cause changes in conditions contained in contracts and other documents, nor rescind contracting parties' obligations, nor give contracting parties the right to unilaterally change or terminate a contract.

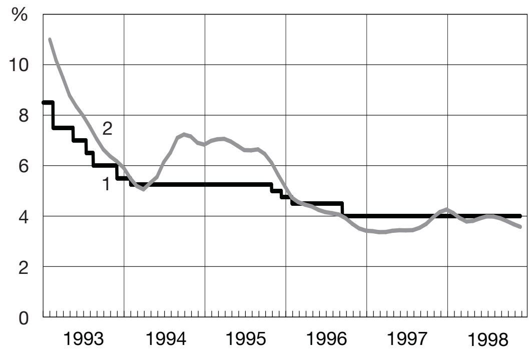
The directive does not however take into account changes in national reference rate systems that will occur at the start of monetary union nor the associated uncertainties regarding contract continuity. The directive does not at all address the case where a reference rate included in the contract conditions is no longer quoted or the calculation method is changed so fundamentally as to mean that it is no longer the same interest rate. Because of the uncertainties regarding the change in reference rates, it is essential that potential problems of contract interpretation be removed via national legislation. In Finland the base rate is used both as an applied interest rate and as a reference rate in legislation and in contracts. As regards the base rate, new legislation is needed also because the Bank of Finland, as a part of the European System of Central Banks, will no longer be able to set the base rate and because current legislation makes numerous references to the Bank of Finland's base rate.

Bank of Finland's role in determining reference rates

Compared to many other central banks, the Bank of Finland has been fairly actively involved in the defining of reference rates. The Bank sets the base rate and defines and calculates the HELIBOR rates, the Bank's long-term reference rates, and a reference rate based on the Interest Rate Act (633/1982). According to section 6, paragraph 2, of the current Act on the Bank of Finland (719/1997), the Bank sets the base rate and other interest rates applied by the Bank and may, if necessary, define and publish other interest rates used as reference rates. The base rate is an administered rate set by the Bank of Finland's Board. The legislation does not define the base rate but merely specifies the decisionmaking procedure. The calculation methods and publishing of the HELIBOR and long-term reference rates are based on decisions by the Bank's Board.

The Bank of Finland's participation in the European System of Central Banks has led to certain amendments to the current law governing the Bank, as well as in matters of authority with respect to reference rates. The new Act on the Bank of Finland, passed by Parliament in March 1998 (214/1998) for entry into force on 1 January 1999, does not contain any provisions on the base rate or other reference rates.

Chart.



1. Base rate
2. 12-month HELIBOR (3-month moving average)

Legislative changes

The Government bill concerning reference rates would enter into force on 1 January 1999. The bill contains provisions on replacements for the Bank's base rate and the HELIBOR rates. The base rate, which has previously been set by the Bank, would be affirmed by the Ministry of Finance each year in June and December, with effect over the next half calendar year, and would be equal to the average of published twelve-month market rates over the three-month period prior to each affirmation date. The base rate is to be calculated to the accuracy of one-quarter percentage point, in accord with current practice. The purpose of the proposal is to put in place a comprehensive legal provision that will substitute the rate affirmed by the Ministry of Finance for the Bank's base rate in the numerous references to the later rate in legislation and contracts.

The base rate would not change immediately when the new law enters into force, as the new base rate will initially be the same as the old one. The first time that the base rate is to be affirmed as the average twelve-month market rate is June 1999 (Chart). The new rate will be published in Finland's statute book and will enter into effect on the first day of the next calendar month. At the start of December, the Bank lowered the base rate to 3.0 per cent, with effect from 15 December 1998.

According to the bill, the Ministry of Finance will decide which interest rates are to replace the HELIBOR rates, which the Bank will continue to calculate and publish until the law enters into force. In making this decision, the Ministry of Finance is to determine which market rates are most likely to be generally used in the euro area and most nearly correspond to the Bank-defined HELIBOR rates at the time of the decision. The Government's proposal is based on the assumption that most of the euro-area countries' national reference rates will be replaced by Euribor rates and so the intent is that the Ministry of Finance would choose the Euribor rates as replacements for the HELIBOR rates as from the start of 1999. The Government's proposal also takes into account the possibility that Euribor rates will not yet be available at the turn of the year. Accordingly, the Ministry would decide later on the replacement of HELIBOR rates by Euribor rates. In the interim, the 'HELIBOR' rates calculated by the Finnish Bankers' Association would be applied.

Before deciding on the matter, the Ministry of Finance would request opinions from the Bank of Finland and Financial Supervision Authority. The new reference rates would be determined by the Ministry and would generally have effect as from the next contractual rate adjustment. The Ministry's decision would be published in the statute book at latest 14 days before the rates become effective. The new legislation would not affect the freedom of contract and would apply only to those cases in which neither the legislation nor the contract or other document provides for the abolishment or change of an applied reference rate.

The Government's proposal also contains a bill to amend the Interest Rate Act. This is necessary because the Bank no longer affirms any market interest rates and thus not the three-month market rate used as a benchmark under the Act. The Bank's authority in this respect would be transferred to the Ministry of Finance.

Deregulation of interest rates and the introduction of market-based reference rates

In November 1986 the Bank of Finland issued guidelines to the banks on market-based reference rates for lending that provided for the gradual easing of interest rate controls. The guidelines stated that henceforth short- and medium-term lending rates applicable under loan contracts could be tied to reference rates reflective of the costs of market-based financing. Up until that time, only the base rate or a direct derivation thereof could be used as a reference rate in a variable-rate loan contract with maturity of more than one year. Rates applied in all housing and long-term (over-five-year) loans had to be either base-rate-tied or fixed.

The introduction of HELIBOR rates however did not occur until the start of May 1987 when the Bank again eased interest rate controls. In all lending except for housing (thus also in over-five-year loans) it was then possible to use money market rates as reference rates. In changing over to the HELIBOR arrangement, the aim was to facilitate public access to information on current market interest rates and to unify the highly variegated usage of reference rates. The Bank in fact recommended the use of HELIBOR rates in market-based lending. At the same time, the Bank switched the focus of its monetary policy operations to trading in certificates of deposit. The daily HELIBOR rates were then defined as the average offer rates quoted at 1 pm on the same day by the five largest banks on CDs of corresponding maturity (1, 2, 3, 6, 9 and 12 months).

At the start of 1988 the Bank of Finland announced that it would initiate periodic publication of reference rates for application in fixed-rate loans. These market rates could now for the first time be used, along with the Bank's base rate, as reference rates for new long-term housing loans. The new three- and five-year reference rates were to be equal to the monthly averages of the five largest banks' daily offer rates on certain three- and five-year bonds, ie taxable, bank-guaranteed, fixed-rate coupon bullet bonds. The Bank noted that, because the domestic markets for long-term financial assets were thin, it would be useful to require that banks provide transactions data on the bonds used in calculating long-term reference rates.

The reference rate system was further expanded in December 1989 when the Bank of Finland added the banks' own prime rates (to be introduced at the start of 1990) to the list of recommended reference rates. These prime rates could be applied to all forms of bank lending and funding. However, over the years the banks have generally used their prime rates as pure reference rates rather than applying them to best-customer loans.

Reference rate system becomes more market oriented in the 1990s

The next revision of the reference rate system did not occur until 1995 when the Bank of Finland announced a change in the calculation of HELIBOR rates. One consideration in making the change was the restructuring that had taken place in the banking sector as a result of the banking crisis. Starting in June 1995 and for the time being, offer rates on certain banks' own CDs would be taken into account in calculating HELIBOR rates. The specified banks were all those that were approved by the Bank of Finland as counterparties for money market operations and which the Bank determined to be providing regular quotes on CDs. Another change in the calculation method was the exclusion of the highest and lowest offer rates for each maturity.

Also in 1995 the Bank recommended that the long-term reference rates no longer be applied in new or extended contracts. However, no new changes were made in the calculation and publication of the rates. The reason for the Bank's recommendation was related to changes that had occurred in the markets for bank-issued bonds. The reference rates had lost their credibility because of the banking crisis and the expansion of the government debt markets.

The end of the era of regulation can be identified with the Bank of Finland's decision in 1996 to rescind all its circulatory letters to the banks dealing with interest rates as well as the guidelines contained in them. All guidelines affecting monetary policy were then combined in a single binder referred to as the 'Bank of Finland's guidelines for credit institutions'. In the guidelines dealing with reference rates, it was stated that the Bank considers the choice and use of reference rates to be a matter for agreement between a credit institution and its customer. The Bank considered the task of monitoring definitions and applications of reference rates by credit institutions to belong to the Financial Supervision Authority and consumer affairs officials, each in accord with its authority. The FSA has in fact issued guidelines on conditions to be incorporated in loan and deposit contracts.

From HELIBORs to Euribors

The Bank of Finland in December 1997 decided that it would eventually discontinue the quoting of HELIBOR rates as well as three- and five-year reference rates. By that time, the Finnish Bankers' Association had begun to calculate its own reference rates using the same formulae. The Bank postponed its decision on when it would stop quoting but linked the timing to the final decision on Finland's participation in the monetary union. By that time, the idea had arisen within the European Monetary Institute that national central banks participating in monetary union should not publish their own reference rates. It was also felt that euro area-wide reference rates would replace national systems and that banks and customers should take this into account in concluding new agreements. However, in May 1998 the Bank of Finland decided to continue to quote HELIBOR rates until end-1998 in the interests of continuity in the use of reference rates and smooth functioning financial markets.

It is intended that from the start of 1999 euro area-wide Euribor (European interbank offered rate) rates will replace the HELIBOR rates. Presumably, the changeover to Euribor rates will not be limited in scope to contracts that either lack provisions on changes in reference rates or provide for the changeover to a Euribor rate pursuant to the new law on reference rates. For instance, Euribor rates could replace HELIBOR rates in all new loans. It would seem reasonable that Euribor rates would replace HELIBOR rates also in contracts concluded after 1994 that contain provisions on arrangements to be applied should the quoting of reference rates be discontinued.

The Euribor rates are to be published daily at 11.00 am Brussels time by the market data firm Bridge Telerate. The service will be maintained by the European Banking Federation (EBF) and Financial Markets Association (ACI), organizations that represent a broad spectrum of banks and financial markets. The banks to be included in the Euribor universe reflect the diversity of the euro money markets and comprise the top banks in the

EU area. Euribor rates will be quoted for all twelve maturities of from one to twelve months every day on which the European central banks' payment system TARGET is open. The Euribor rates will be based on rates paid on euro-denominated interbank term deposits. The value date will be the second business day after the day of the quote. The Euribor rates will be based on the 360-day rule and will be averages of the banks' quotes (excl. the highest and lowest 15 per cent of quotes). The banks will release these quotes daily by 10.45 am.

The group of banks quoting for Euribor banks will also provide data for the overnight rate for the euro area money market. This so-called Eonia (European overnight index average) rate, which will be the effective rate based on actual volumes traded, will be calculated with the support of the ECB.

Interest-rate linkages of markka lending and deposits after the launch of monetary union[1]

Changes that will occur in reference rate arrangements for bank lending will affect a large part of loan agreements in effect at the time. In September 1998 the stock of lending tied to the base rate, a HELIBOR rate, or a long-term reference rate was about FIM 178 billion, or some 61 per cent of the total stock of markka-denominated lending. New base-rate-tied loans are granted monthly in the amount of only a few tens of millions of markkaa on average, and practically no new lending is tied to long-term reference rates. By contrast, new lending tied to HELIBOR rates amounts to FIM 6–9 billion per month, which is about half of the total amount of new lending. Behind these aggregate figures, there is a huge number of individual contracts between banks and customers.

Changes in the reference rate system to come with monetary union will have virtually no effects on bank funding. Base-rate-tied deposits have almost disappeared. In September these deposits amounted to about FIM 8 billion, which was some 3 per cent of markka deposits held by the public. HELIBOR-tied deposits amount to only about FIM 17 billion (roughly 6 per cent of total markka deposits). It should however be noted that there are wide cross-bank differences in practices regarding reference rates applied in funding, which complicates compilation of the data.

3 December 1998

• Key words: base rate, HELIBOR rate, reference rate system, Euribor

[1] Changes have occurred frequently over the years in interest conditions attached to bank lending and funding. See the article by Tapio Korhonen 'Terms and conditions governing bank lending and funding rates' in Bank of Finland Bulletin 10/96.

Items

Revision of the Bank of Finland Bulletin

The start of Economic and Monetary Union will also involve a number of revisions in the Bank of Finland's publications. For the monthly Bank of Finland Bulletin, this means becoming a quarterly publication with a revised layout. The most important change affecting the contents of the Bulletin will be the removal of the statistical tables. Publication of articles will continue, with the inclusion of presentations of the Bank of Finland's economic studies.

There are numerous users of the Bulletin's statistics. Bulletin subscribers will receive a letter in which they will be offered an opportunity to subscribe for the Bank's fee-based monthly statistical review 'Financial Markets'. This publication will include most of the tables previously published in the Bulletin but not previously contained in the statistical review. The revision to the review will be made gradually during January–March 1999, and the review will also be posted, free of charge, on the Bank of Finland's Internet website (http://www.bof.fi/).

The whole contents of the Bulletin will continue to be posted on the Bank's website.

Direct investment in Finland's balance of payments, 1997

According to a survey carried out by the Bank of Finland, there was in 1997 a net outflow of direct investment on the financial account amounting to FIM 16.4 billion: Finnish direct investment abroad totalled FIM 27.4 billion and foreign direct investment in Finland FIM 11 billion. At end-1997 the book value of Finnish direct investment abroad was FIM 110 billion and of foreign direct investment in Finland FIM 51.7 billion. In the current account, Finnish companies' income on foreign direct investment totalled FIM 10.3 billion and foreign investors' income on direct investment in Finland FIM 6.9 billion.

Outward direct investment

Active internationalization of Finnish companies. In 1997 Finnish companies exported capital totalling FIM 27.4 billion in net terms to foreign subsidiaries and associates (FIM 17.7 billion in equity, FIM 4.2 billion in loans and FIM 5.5 billion in reinvested earnings, ie retained earnings growth). Capital exports increased by FIM 10.9 billion on the previous year. Investments by manufacturing companies amounted to FIM 22.3 billion. Metal and engineering companies in particular increased their investments abroad. Capital was exported to EU countries to a value of FIM 19.5 billion.

At end-1997 the book value of Finnish direct investment abroad totalled FIM 110 billion, of which the share of manufacturing companies was FIM 94.4 billion, with metal and engineering accounting for the major part. The major immediate host countries at yearend were the United States, Sweden and the Netherlands.

Finnish companies' income on direct investment totalled a record FIM 10.3 billion. Income from Finnish direct investment abroad (investee profits and net interest earnings) totalled FIM 10.3 billion in 1997, up FIM 5.4 billion on the previous year. Metal and engineering companies in particular experienced improved investee profitability.

Direct investment income is broken down into dividends, interest and reinvested earnings (change in investees' retained earnings). Finnish companies repatriated from their foreign subsidiaries and associates FIM 3.9 billion in dividends and FIM 1.5 billion in interest and remitted to them FIM 0.6 billion in interest. Retained earnings of foreign subsidiaries and associates increased by FIM 5.5 billion.

Turnover and employees of Finnish companies' subsidiaries operating abroad. In 1997 the total turnover of Finnish companies' subsidiaries operating abroad (subsidiaries with balance sheet total exceeding FIM 50 million) was FIM 268 billion (FIM 214 billion in 1996), and they employed 143 500 persons on average, compared to 137 000 in 1996. Measured in terms of turnover and number of employees, the major host countries for Finnish subsidiaries were Sweden, the United States, Germany, the United Kingdom and France.

The turnover of Finnish-owned manufacturing companies located abroad totalled FIM 160 billion and their employees numbered 115 500. The leading manufacturing sector abroad was metal and engineering. Foreign sales companies employed 16 500 persons.

Inward direct investment

Foreign capital flowed into the Finnish manufacturing sector. In 1997 foreign enterprises invested FIM 11 billion worth of capital in net terms in their subsidiaries and associates in Finland, compared to FIM 5.1 billion in 1996. Investments of capital in manufacturing companies amounted to FIM 8.3 billion. Capital was imported from EU countries to a value of FIM 8.6 billion. The book value of foreign enterprises' direct investment in Finland totalled FIM 51.7 billion at yearend. Manufacturing companies accounted for FIM 29.9 billion, of which FIM 15 billion was invested in the metal and engineering industry. The share of sales companies amounted to FIM 11.7 billion. The major immediate investor countries at yearend were Sweden, the Netherlands and the United States.

Foreign enterprises' income on direct investment in Finland totalled FIM 6.9 billion. Income on foreign direct investment in Finland totalled FIM 6.9 billion in 1997, compared to FIM 5.3 billion in 1996. Income on investment in manufacturing companies amounted to FIM 4.5 billion, while income generated by sales companies totalled FIM 1.5 billion. Foreign-owned companies remitted to their foreign investors FIM 2.9 billion in dividends and FIM 0.4 billion in net interest. Retained earnings of foreign-owned enterprises increased by FIM 3.6 billion.

Supplementary budget

Parliament approved the second supplementary budget for 1998 at the start of December. Gross additions to revenue amount to FIM 19 billion and reductions to FIM 1.5 billion. This implies in a net increase of FIM 17.5 billion in 1998 budgeted revenues and a revised total of FIM 192 billion. Tax revenues have been boosted substantially by improved employment conditions, the positive trend in company profitability, and continued strong growth in private consumption. Income from asset sales will also exceed the previous projection by a wide margin, owing inter alia to the privatization of Sonera and Fortum. The positive trend in companies' financial results is also reflected in robust growth in the central government's dividend receipts. On the other hand, projected revenues from the stamp tax and mortgage tax have been revised downward slightly.

The supplementary budget includes additional expenditures of FIM 9 billion and reductions of FIM 1.5 billion and hence a net expenditure increase of FIM 7.5 billion. This will raise the total amount of the 1998 budget to FIM 197 billion. The largest item increase in expenditure is in net interest payments on central government markka-denominated debt, mainly due to a considerable shortfall in premia on issues of serial bonds and costs associated with conversions of serial bonds maturing in 1999. Projections for central government consumption and investment expenditures are also revised upward slightly. Despite the improvement in the employment situation, overall costs of managing unemployment are revised downward only marginally. The central government's net borrowing is revised downward by the excess of net additional revenue, ie FIM 10.5 billion, to a total of FIM 5 billion.

Measures concerning monetary and foreign exchange policy and the financial markets

1998

JANUARY

Finnish deposit guarantee scheme revised. The Finnish deposit guarantee scheme is revised as from the start of 1998 by amendment and extension of the Act on Credit Institutions (1229/97). All deposit banks must now belong to a common deposit guarantee fund. Instead of the previous full coverage, the guarantee is now limited to a maximum of FIM 150 000 per depositor/bank.

MARCH

Tender rate. On 19 March, the Bank of Finland raises its tender rate from 3.25 per cent to 3.40 per cent. In addition, the interest rate on banks' excess reserves is raised from 1.25 per cent to 1.40 per cent.

APRIL

Abolishment of stamp tax on lending. Parliament has abrogated the stamp tax as it applies to lending and mortgages, effective with respect to agreements concluded on or after 29 April 1998.

DECEMBER

Tender rate and base rate. On 3 December 1998, the Bank of Finland lowers the tender rate from 3.4 per cent to 3.0 per cent. In this connection, the Bank lowers the interest rate on excess reserves from 1.4 per cent to 1.0 per cent. It is also decided to lower the base rate from 4.0 per cent to 3.5 per cent, as from 15 December 1998.

Monetary policy instruments – December 1998

The Bank of Finland's monetary policy objective is to stabilize the inflation rate at about 2 per cent. This corresponds to the price stability objectives of the major ERM countries. Finland joined the Exchange Rate Mechanism (ERM) of the European Monetary System on 14 October 1996. The central rate for the markka is presently FIM 6.01125 per ECU and the corresponding central rate against the Deutschemark is FIM 3.04. The Bank of Finland is responsible for ensuring that the markka remains within the ±15 per cent fluctuation margin vs the other ERM currencies.

The Bank of Finland's instruments of monetary policy comprise market operations, the liquidity credit facility and the minimum reserve system.

Through its market operations, the Bank of Finland can on its own iniative exert an immediate impact on banks' liquidity, short-term market rates and the exchange rate. Money market operations are usually conducted via tenders. Changes in the tender rate have immediate effects on money market rates and through them on banks' lending and deposit rates. The Bank of Finland can also affect the exchange rate when this is considered appropriate.

The liquidity credit facility consists of liquidity credit granted by the Bank of Finland when needed and deposits of excess reserves at the Bank. The main function of this facility in respect of an individual bank is to safeguard its liquidity in the event of an unexpected change in liquidity conditions. The rates of interest on liquidity credit and excess reserves, which are decided by the central bank, usually form the upper and lower limits for the shortest market rates.

The minimum reserve requirement is used to affect both the demand for central bank financing and banks' lending possibilities. Because required reserves held at the central bank do not bear interest, the system also supports the central bank's profitability. Fulfilment of reserve requirements on the basis of averaging facilitates banks' management of payment transactions.

Banks wishing to participate in the Bank of Finland's money market operations and to gain access to the liquidity credit facility are required to have a current account at the Bank of Finland. By means of a current account, a bank is able to effect payment transactions with the Bank of Finland and other current account holders in a safe, efficient manner.

The base rate, which is set by the Bank of Finland, was formerly an important reference rate. It is however being gradually superseded by market rates and has hardly any practical importance in the determination of new lending and borrowing rates.

Market operations

The Bank of Finland affects interest rates and exchange rates by means of market operations, ie by dealing in securities or foreign exchange assets with its selected counterparties.

Money market operations can be carried out in the form of either bilateral money market transactions or tenders. Tenders, in which the Bank of Finland lends money to the banks, are carried out via repurchase (repo) transactions. In order to drain liquidity from the banking system, ie collect deposits from banks, the Bank of Finland generally sells its own CDs via tenders.

In a fixed-rate tender, the Bank of Finland announces the tender rate in advance and the banks submit bids for the volumes they wish to transact. In a variable-rate tender, banks bid by both rate and volume, and the Bank of Finland's tender rate becomes the weighted average of accepted bids. The Bank of Finland applies a two-week maturity in its tenders. The settlement lag for tender-related payments is one banking day, ie payments are settled on the banking day following the trade day. Short-term market rates move in line with the tender rate. Since 3 December 1998 the tender rate has been 3.0 per cent.

The Bank of Finland may accept as money market counterparties credit institutions that are subject to minimum reserve requirements and which the Bank of Finland considers to be otherwise qualified to operate as counterparties. A counterparty is required to have a current account at the Bank of Finland and adequate technical facilities and to be an active and important money market participant. Counterparties in outright bilateral trades are also required to act as market makers[1] for money market instruments and to observe the money market rules and code of conduct. At its discretion, the Bank of Finland may also accept as counterparties market participants that are not subject to minimum reserve requirements.

The following banks have been accepted as counterparties for money market operations:

Aktia Savings Bank Ltd
Bank of Åland Ltd
Den Danske Bank Helsinki Branch
Leonia Bank plc
Merita Bank Ltd
Okobank
S E B Helsinki Branch
Svenska Handelsbanken AB,
  Branch Operation in Finland
Unibank A.S. Helsinki Branch

Normally, the instruments accepted for the Bank of Finland's outright money market transactions are Treasury bills and Bank of Finland CDs. In special cases, other money market instruments can be approved for use in outright transactions.

Acceptable underlying assets for repo transactions comprise Bank of Finland CDs, benchmark government bonds, Treasury bills, notes issued by Asset Management Company Arsenal, and CDs issued by banks that operate as money market counterparties.

In repo transactions, haircuts are set according to issuer and maturity as follows:

[1] Functioning as a market maker means that the counterparty is able to give binding buy/sell quotes on the securities or foreign currencies in question.

Issuer		Short-term 12 months or less	Long-term over 12 months
Bank of Finland	CDs	0 %	
Government	Treasury bills	0 %	
	Benchmark government bonds	0 %	5 %
Arsenal	Notes	5 %	
Banks	CDs	5 %	

The Bank of Finland conducts foreign exchange operations with the banks primarily when it wants to influence the exchange rate. The Bank attempts to even out wide fluctuations in the exchange rate and, in the context of the ERM, it is responsible for keeping the markka's exchange value against other ERM currencies within the allowed ±15 per cent fluctuation margins. In addition, the Bank of Finland may convert currencies that the central government has borrowed from abroad into markkaa and sell foreign exchange to the central government as needed to service loans.

The Bank of Finland requires that its counterparties in foreign exchange operations act as market makers for the Finnish markka. The following banks have been accepted as counterparties for outright foreign exchange operations:

Leonia Bank plc
Merita Bank Ltd
Okobank
S E B Helsinki Branch
Svenska Handelsbanken AB,
Branch Operation in Finland

Liquidity credit facility

Upon application, the Bank of Finland may grant access to the liquidity credit facility to any credit institution that is subject to the minimum reserve requirement and has a current account at the Bank of Finland. The facility enables the credit institution to obtain liquidity credit or accrue interest on its excess reserve deposits at the Bank of Finland.

Liquidity credit must be fully collateralized and the applicable interest rate is tied to the Bank of Finland's tender rate. Since 3 December 1998 the rate on liquidity credit has been 5.0 per cent, ie the margin vs the tender rate is 2 percentage points. The maturity for liquidity credit may be 1, 7, 14, 21 or 28 days. The maturity and other terms and conditions are decided by the Bank of Finland. Since the start of November 1997, the maturity on liquidity credit has been one day.

If the monthly average of a bank's daily current account balances exceeds the bank's reserve requirement, the bank is considered to have excess reserves. The Bank of Finland may separately decide to pay interest on excess reserves; since 3 December 1998 the rate has been 1.0 per cent.

The following banks have been granted access to the Bank of Finland's liquidity credit facility:
Aktia Savings Bank Ltd
Bank of Åland Ltd
Citibank International plc Finland Branch
Crédit Agricole Indosuez Helsinki Branch
Den Danske Bank Helsinki Branch
Leonia Bank plc
Mandatum Bank Ltd
Merita Bank Ltd
Okobank
S E B Helsinki Branch
Svenska Handelsbanken AB,
Branch Operation in Finland
Skopbank
Unibank A.S. Helsinki Branch

Minimum reserve system

By virtue of the Act on the Bank of Finland, a deposit bank or branch of a foreign credit institution which carries on deposit banking activities in Finland must hold non-interest-bearing reserves at the Bank of Finland. The maximum reserve requirement is 5 per cent of the mandatory reserve holder's liabilities. The reserve requirement is calculated against the reserve base as at the last day of each calendar month. The reserve requirement based on the reserve base effective at the end of a given month must be met during the second calendar month following such effective date. Thus the lag between the effective date of the reserve base and the end of the corresponding reserve maintenance period is about 60 days.

The reserve requirement is graded according to the composition of a bank's funding so that the more liquid an item, the larger the reserve requirement. The reserve requirement on deposits payable on demand (ie liquid deposits) is 2 per cent, on other deposits 1.5 per cent and on other items 1 per cent. At the end of September 1998, the sum total of required reserves was FIM 7.1 billion and the weighted average reserve requirement 1.6 per cent.

A bank with a current account at the Bank of Finland can meet its reserve requirements by maintaining the monthly average of its daily balances at least as high as the minimum reserve requirement. Thus banks may use funds in their current accounts for effecting payments so long as the average monthly balances meet their respective reserve requirements on the last banking day of each month. Banks that do not have a current account at the Bank of Finland or use another bank as their central financial institution deposit their reserves in special minimum reserve accounts at the Bank of Finland.

The minimum reserve requirement applies to the following banks:
Aktia Savings Bank Ltd
Bank of Åland Ltd
Citibank International plc Finland Branch
Crédit Agricole Indosuez Helsinki Branch
Den Danske Bank Helsinki Branch
Gyllenberg Private Bank Oy
Leonia Bank plc
Mandatum Bank Ltd
Merita Bank Ltd
Okobank
Okopankki Oy, an Okobank subsidiary
OP-Homebank Ltd
S E B Helsinki Branch
Skopbank
Svenska Handelsbanken AB,
Branch Operation in Finland
Unibank A.S. Helsinki Branch
Other cooperative banks and savings banks

Current account system

The Bank of Finland's current account (BoF-RTGS) system is an essential part of the payment and clearing system in Finland. Payments effected in the system can be divided into three main types: (1) business transactions between the Bank of Finland and the banks, ie payments related to monetary policy and maintenance of the money supply, (2) interbank payments and (3) payments related to clearing and settlement systems, including cover for interbank settlement of trades effected via the Finnish Central Securities Depository.

Upon application, the Bank of Finland may open a current account for any Finnish or foreign credit institution operating in Finland that is subject to minimum reserve requirements and which fulfils certain other requirements. The credit institution must be subject to supervision by the Financial Supervision Authority or to other comparable public supervision. It must meet the capital adequacy requirements laid down in the Credit Institutions Act and its own funds must amount to at least FIM 30 million. For special reasons, the Bank of Finland may at its discretion open current accounts for other entities participating in the financial markets.

Upon application, the Bank of Finland may also grant an intraday credit limit on the current account of a credit institution subject to minimum reserve requirements, if such account holder provides the Bank of Finland full collateral for the credit limit in accord with the Bank's guidelines.

Current account holders have workstations linked to the Bank of Finland's current account data base via a data communications network. Current account holders themselves effect payments to other current account holders via their workstations.

The following entities have a current account at the Bank of Finland:

Aktia Savings Bank Ltd
Asset Management Company Arsenal Ltd
Bank of Åland Ltd
Citibank International plc Finland Branch
Crédit Agricole Indosuez Helsinki Branch
Den Danske Bank Helsinki Branch
Finnish Central Securities Depository Ltd
Gyllenberg Private Bank Oy
HEX Oy, Helsinki Securities and Derivatives Exchange, Clearing House
Leonia Bank plc
Mandatum Bank Ltd
Merita Bank Ltd
Okobank
S E B Helsinki Branch
Skopbank
State Treasury
Svenska Handelsbanken AB, Branch Operation in Finland
Unibank A.S. Helsinki Branch

Base rate

The Board of the Bank of Finland decides on the Bank of Finland's base rate. The base rate is used as a market reference rate. About 2.7 per cent of outstanding deposits and 10.1 per cent of lending is tied to the base rate, but only 0.5 per cent of new lending is tied to it (September 1998). As from 15 December 1998, the base rate will be 3.5 per cent.

Finland in brief

Land, climate and population

Finland covers an area of more than 338 000 square kilometres. The total area is slowly increasing because of the steady uplift of the land since the last glacial era. The country shares frontiers with Sweden in the west, Norway in the north and Russia in the east and has a coastline bordered by the Baltic Sea in the south and west. Agricultural land accounts for 8 % of the total area, forest and other wooded land for 68 % and inland waters for 10 %. Located between latitudes 60° and 70° north, Finland has warm summers and cold winters. Helsinki on the south coast has an average maximum temperature of 21° C (70° F) in July and –3° C (25° F) in February.

Finland has a population of 5 147 349 (31 December 1997) and an average population density of 17 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 539 363 inhabitants, Espoo (Esbo) 200 834, Tampere (Tammerfors) 188 726, Vantaa (Vanda) 171 297 and Turku (Åbo) 168 772.

There are two official languages: 93 % of the population speaks Finnish as its mother tongue and 5.7 % Swedish. There is a small Lapp population in the north. Finnish is a member of the small Finno-Ugrian group of languages, which also includes Estonian and Hungarian.

Form of government

Finland is a parliamentary democracy with a republican constitution. From the twelfth century to 1809 Finland was part of the Kingdom of Sweden. In 1809, Finland was annexed to Russia as an autonomous Grand Duchy with the Tsar as Grand Duke. On 6 December 1917 Finland declared her independence. The republican constitution adopted in 1919 remains essentially unchanged today.

The legislative power of the country is exercised by Parliament and the President of the Republic. The supreme executive power is vested in the President, who is elected for a period of six years. The President for the current term, 1 March 1994 to 1 March 2000, is Mr Martti Ahtisaari.

Parliament, comprising 200 members, is elected by universal suffrage for a period of four years. Following the parliamentary elections of 1995, the seats of the various parties in Parliament are distributed as follows:

Social Democratic Party 63; Centre Party 44; National Coalition Party 39; Left Wing Alliance 22; Swedish People's Party 12; Green League 9; Christian League 7; Progressive Finnish Party 2; Rural Party 1; and Ecological Party 1.

Of the 18 ministerial posts in the present Government appointed in April 1995, 7 are held by the Social Democratic Party, 5 by the National Coalition Party, 2 by the Left Wing Alliance, 2 by the Swedish People's Party, 1 by the Green League and 1 by an expert with no party affiliation. The Prime Minister is Mr Paavo Lipponen of the Social Democratic Party.

Finland is divided into 452 self-governing municipalities. Members of the municipal council are elected by universal suffrage for a period of four years.

International relations

Finland became a member of the BIS in 1930, the IMF in 1948, the IBRD in 1948, GATT in 1950, the UN in 1955, the Nordic Council in 1955, the IFC in 1956, IDA in 1960, EFTA in 1961, the ADB in 1966, the OECD in 1969, the IDB in 1977, the AfDB in 1982, the MIGA in 1988, the Council of Europe in 1989, the EBRD in 1991 and the EU in 1995.

Citizens of the five Nordic countries, Denmark, Finland, Iceland, Norway and Sweden, have enjoyed a common labour market, a passport union and reciprocal social security benefits since the mid-1950s.

Having abolished most quantitative restrictions on foreign trade in 1957, Finland first took part in European free trade arrangements under the auspices of EFTA in 1961. Imports from the USSR were also progressively freed from customs duties. Finland's free trade agreement with the EEC entered into force in 1974 and agreements for the removal of trade barriers were concluded with several eastern European countries as well. The agreement on the European Economic Area (EEA) between the member countries of EFTA and the European Union came into effect at the beginning of 1994. Finland became a member of the European Union on 1 January 1995. Finland and ten other EU countries will proceed to Stage Three of EMU in 1999.

The economy

Output and employment. Of the gross domestic product of FIM 538 billion in basic values in 1997, 2 % was generated in agriculture and fishing, 3 % in forestry, 27 % in industry, 6 % in construction, 11 % in trade, restaurants and hotels, 9 % in transport and communications, 3 % in finance and insurance, 22 % in other private services and 18 % by producers of government services. Of total employment of 2.2 million persons in 1997, 7.0 % were engaged in primary production, 27.4 % in industry and construction and 65.6 % in services.

In 1997, expenditure on the gross domestic product in purchasers' values amounted to FIM 622 billion and was distributed as follows: net exports 9 % (exports 40 %, imports –31 %), gross fixed capital formation 17 %, private consumption 53 % and government consumption 21 %. Finland's tax ratio (gross taxes including compulsory employment pension contributions relative to GDP) was 47.0 per cent, which is somewhat below the average for the Nordic countries.

Average annual (compounded) growth of real GDP was 4.7 % in the period 1950–59, 5.0 % in 1960–69, 3.7 % in 1970–79, 3.7 % in 1980–89 and 3.6 % in 1950–96. Finland's GDP per capita in 1997 was USD 23 302.

Foreign trade. EU countries absorb the bulk of Finnish merchandise exports. In 1993–1997 their average share was 51.7 %. Over the same period, Finland's exports to other European countries (including Russia) accounted for 22.1 % and to the rest of the world for 26.2 %. The regional distribution of Finland's merchandise imports in the same period has been quite similar to that of exports: EU countries accounted for 53.8 %, other European countries for 22.3 % and the rest of the world for 24.0 %.

In 1997, the share of forest industry products in total merchandise exports was 30.8 %, the share of metal and engineering products 43.3 % and the share of other goods 25.9 %. Raw materials and intermediate goods (incl. crude oil) accounted for 60.9 % of merchandise imports, fuels for 4.4 %, investment goods for 15 % and consumption goods for 21.9 %.

Forest resources. Finland has fairly abundant forest resources but only limited amounts of other raw materials. The growing stock comprises 1 937 million cubic metres, of which 46 % is pine, 36 % spruce, 15 % birch and 3 % other broad-leaved species.

According to the latest National Forest Inventory (1989–1994), the annual volume increment is about 75.4 million cubic metres. During the same time period, the average annual drain has been about 55 million cubic metres.

Finance and banking

Currency. Finland has had its own monetary system since 1865. The currency unit is the markka (plural: markkaa), abbreviation FIM, which is divided into 100 penniä (singular: penni). From 1 November 1977 to 7 June 1991 the external value of the markka was officially expressed in terms of a trade-weighted currency index, which was permitted to fluctuate within a prescribed range (from 30 November 1988 the range was 6 percentage points). From 7 June 1991 to 7 September 1992, the markka was pegged to the European Currency Unit, the ECU. The fluctuation margins and the midpoint were set so as to correspond to the fluctuation margins and midpoint of the old currency index. The midpoint was first 4.87580 (FIM/ECU). Owing to the devaluation of the markka on 15 November 1991, the midpoint was increased to 5.55841 and the fluctuation limits to 5.39166 and 5.72516. On 8 September 1992, the fluctuation limits of the markka were abandoned and the markka was allowed to float. On 14 October 1996, the markka was joined to the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) at the central rate of 5.80661 per ECU. As from 16 March 1998 the ECU central rate is FIM 6.01125.

The Central Bank. The two new laws adopted in 1997 and 1998 make Finnish legislation compatible with the requirements of the Treaty establishing the European Community and the Statute of the European System of Central Banks and the European Central Bank. The latter law, the new Act on the Bank of Finland, integrates the Bank of Finland into the ESCB once Finland joins the euro area. In performing the tasks of the ESCB, the Bank of Finland will act in accord with guidelines and instructions issued by the ECB. Under the Treaty, the primary objective on the Bank of Finland is to maintain price stability. The new Act did not change the division of responsibilities between the Parliamentary Supervisory Council and the Board. The tasks of the Council are connected with supervision of the Bank's administration and operations, administrative decisions and certain other responsibilities. The Board of the Bank of Finland comprises the Chairman (Governor) and a maximum of five (currently three) other members, all of whom are appointed by the President of the Republic on a proposal of the Council. The Chairman of the Board is appointed for a seven-year term and the other members of the board each for a five-year term. The Bank of Finland has a head office in Helsinki and 4 branch offices in other towns.

Other banks (31 Dec 1997). Finland has three major groups of deposit banks with a total of 1 242 offices. There are two big commercial banks with national branch networks and five smaller ones. The commercial banks have a total of 10 foreign branches, subsidiaries and associate banks and 16 representative offices abroad. There are 40 savings banks and 294 cooperative banks, both with extensive branch networks. In addition, 6 foreign banks have branches and 7 foreign banks have representative offices in Finland.

Financial markets. Of the total stock of FIM 690 billion in outstanding domestic credit at end-June 1998, 51 % was accounted for by deposit banks, 6 % by insurance companies, 24 % by pension insurance institutions, 9 % by other credit institutions, and 10 % by state and local authorities and social security funds.

In the money market, 76 % of the instruments, which totalled about FIM 136 billion at end-September 1998, were accounted for bank certificates of deposit (including central bank paper). Other negotiable money market instruments consist of Treasury bills, commercial paper and local authority paper.

At end-September 1998, there are 89 listed companies on the official list, 29 on the OTC list and 11 on the brokers list for the HEX, Helsinki Exchanges. Total market capitalization for the official list was FIM 489 billion, the OTC list FIM 4 billion and the brokers list FIM 6 billion at end-September 1998. Domestic bonds and debentures in circulation at end-September 1998 totalled FIM 308 billion; government bonds comprised 78 % of the total. Turnover on the Helsinki stock exchange amounted to FIM 187 billion in 1997. In January–September 1998 share turnover amounted to FIM 209 billion.

1. The balance sheet of the Bank of Finland S2
1.1 The balance sheet of the Bank of Finland S2
1.2 Time series for the balance sheet items of the Bank of Finland S3

2. The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position S4
2.1 The Bank of Finland's minimum reserve system and standing facilities S4
2.2 The Bank of Finland's money market transactions S4
2.3 The Bank of Finland's transactions in foreign currencies and the stock of reserve assets S5
2.4 Forward exchange contracts S5

3. Rates of interest S6
3.1 Money market rates and rates applied by the Bank of Finland S6
3.2 The Bank of Finland's liquidity facility S6
3.3 Weighted Eurorates and commercial ECU interest rate S6
3.4 Rates of interest applied by banks S7
3.5 Yields on bonds and shares S7

4. Rates of exchange S8
4.1 Middle rates S8
4.2 Markka value of the ECU and currency indices S9
4.3 Deviations of ERM currencies' markka rates from central rates S9

5. Financial markets and money supply S10
5.1 Bank funding from the public S10
5.2 Bank lending to the public S10
5.3 Money supply S11
5.4 Liabilities and assets of the central government S11
5.5 Markka bond market S12
a) Issues S12
b) Stock S12
c) Turnover S13
5.6 Helsinki Stock Exchange S13

6. Balance of payments, foreign liabilities and assets S14
6.1 Current account S14
6.2 Capital and financial account S15
6.3 Finland's international investment position S16
6.4 Finland's net international investment position (liabilities less assets), by sector S17

7. Foreign trade S18
7.1 Exports, imports and the trade balance S18
7.2 Foreign trade: indices of volume, prices and terms of trade S18
7.3 Foreign trade by main groups S18
7.4 Foreign trade by regions and countries S19

8. Domestic economic developments S20
8.1 Supply and use of resources S20
8.2 Volume of industrial production S20
8.3 Indicators of domestic supply and demand S21
8.4 Wages and prices S22
8.5 Labour, employment and unemployment S23
8.6 Central government finances: revenue, expenditure and financial balance S24

Notes and explanations to the statistical section S25

1. The balance sheet of the Bank of Finland

1.1 The balance sheet of the Bank of Finland, mill. FIM

	1997	1998			
	31 Dec	6 Nov	13 Nov	23 Nov	30 Nov
ASSETS					
Reserve assets	51 455	48 117	51 509	51 874	51 713
Gold	1 742	1 742	1 742	1 742	1 742
Special drawing rights	1 772	1 290	1 328	1 248	1 258
IMF reserve tranche	3 036	3 995	3 995	4 019	4 050
ECU-claim on the European Monetary Insitute	4 078	2 608	2 613	2 612	2 614
Foreign exchange assets	40 827	38 482	41 831	42 252	42 049
Other foreign claims	3 342	2 614	2 615	2 618	2 618
Markka subscription to Finland´s quota in the IMF	3 281	2 198	2 198	2 201	2 201
European Central Bank capital share[1]	61	416	417	417	417
Claims on financial institutions	2 951	2 082	2 082	84	84
Liquidity credits	–	–	–	–	–
Securities with repurchase commitments	–	1 999	1 999	–	–
Term credits	–	–	–	–	–
Bonds	114	65	65	65	65
Other	2 837	19	19	19	19
Claims on the public sector	2 015	2 045	2 047	2 056	2 061
Treasury bills	–	–	–	–	–
Bonds	–	–	–	–	–
Total coinage	2 015	2 045	2 047	2 056	2 061
Other	–	–	–	–	–
Claims on corporations	1 762	1 612	1 481	1 481	1 481
Financing of domestic deliveries (KTR)	26	6	6	6	6
Other	1 736	1 606	1 475	1 475	1 475
Other assets	635	642	653	533	537
Accrued items	528	531	540	422	428
Other	107	111	113	111	109
Valuation account	–	–	–	–	–
Total	62 159	57 111	60 387	58 646	58 495
LIABILITIES					
Foreign liabilities	4 911	4 022	4 022	4 186	4 240
Allocations of special drawing rights	1 046	1 011	1 011	1 018	1 025
IMF markka accounts	3 281	2 198	2 198	2 201	2 201
Other	584	814	814	967	1 013
Notes and coin in circulation	17 817	16 737	16 689	16 621	16 749
Notes	15 923	14 838	14 787	14 715	14 839
Coin	1 894	1 899	1 903	1 906	1 910
Certificates of deposit	10 500	12 500	9 550	10 250	14 000
Liabilities to financial institutions	10 681	5 548	11 658	8 799	4 763
Reserve deposits	7 911	5 548	11 658	8 799	4 762
Term deposits	–	–	–	–	–
Other	2 770	0	1	0	1
Liabilities to the public sector	–	–	–	–	–
Current accounts	–	–	–	–	–
Other	–	–	–	–	–
Liabilities to corporations	32	8	8	8	8
Deposits for investment and ship purchase	32	8	8	8	8
Other	–	–	–	–	–
Other liabilities	55	171	79	67	60
Accrued items	23	123	37	30	7
Other	32	48	42	37	53
Valuation account	258	220	475	811	769
Provisions	12 140	12 140	12 140	12 140	12 140
Pension provision	1 601	1 601	1 601	1 601	1 601
Other	10 540	10 540	10 540	10 540	10 540
Capital accounts	5 764	5 764	5 764	5 764	5 764
Primary capital	5 000	5 000	5 000	5 000	5 000
Reserve fund	764	764	764	764	764
Net earnings	–	–	–	–	–
Total	62 159	57 111	60 387	58 646	58 495

[1] Until 1 July 1998 Share in the European Monetary Institute.

1.2 Time series for the balance sheet items of the Bank of Finland, *mill. FIM*

End of period	Foreign sector								Public sector		
	Gold	Special drawing rights	IMF reserve tranche	ECU-claim on the European Monetary Institute	Foreign exchange assets	Reserve assets (1+2+3 +4+5)	Other claims, net	Net claims (6+7)	Claims	Liabil-ities	Net claims (9–10)
	1	2	3	4	5	6	7	8	9	10	11
1993	2 180	664	1 747	.	28 882	33 473	–1 324	32 148	1 788	784	1 004
1994	2 180	1 537	1 354	.	47 672	52 743	–1 114	51 629	1 806	93	1 713
1995	1 742	1 569	1 685	3 363	40 506	48 865	–2 082	46 783	1 882	75	1 807
1996	1 742	1 344	1 953	2 541	28 817	36 397	–1 826	34 571	1 906	–	1 906
1997	1 742	1 772	3 036	4 078	40 827	51 455	–1 569	49 886	2 015	–	2 015
1997											
Nov	1 742	1 234	2 271	4 071	41 920	51 238	–2 256	48 982	1 955	–	1 955
Dec	1 742	1 772	3 036	4 078	40 827	51 455	–1 569	49 886	2 015	–	2 015
1998											
Jan	1 742	1 323	3 065	3 310	40 268	49 709	–1 389	48 320	2 019	–	2 019
Feb	1 742	1 230	3 389	3 318	38 830	48 510	–1 413	47 097	2 020	–	2 020
Mar	1 742	1 680	3 399	3 334	34 412	44 567	–1 362	43 205	2 017	–	2 017
Apr	1 742	1 558	3 351	2 727	37 034	46 414	–1 611	44 803	2 019	–	2 019
May	1 742	1 203	3 541	2 721	39 418	48 626	–1 414	47 212	2 024	–	2 024
Jun	1 742	1 714	3 588	2 735	42 171	51 950	–1 472	50 478	2 026	–	2 026
Jul	1 742	1 664	3 521	2 917	42 910	52 753	–1 049	51 704	2 026	–	2 026
Aug	1 742	1 600	3 538	2 923	42 372	52 175	–1 151	51 024	2 026	–	2 026
Sep	1 742	1 726	3 970	2 912	35 802	46 152	–1 158	44 994	2 033	–	2 033
Oct	1 742	1 357	3 999	2 610	37 433	47 142	–1 404	45 738	2 039	–	2 039
Nov	1 742	1 258	4 050	2 614	42 049	51 713	–1 622	50 091	2 061	–	2 061

End of period	Domestic financial sector				Corporate sector				
	Term claims on deposit banks, net	Reserve deposits of deposit banks	Other claims on financial institu-tions, net	Net claims (12+13+ 14)	Claims in the form of special financing	Special deposits and other items, net	Net claims (16+17)	Notes and coin in circu-lation	Out-standing CDs issued by the Bank of Finland
	12	13	14	15	16	17	18	19	20
1993	7 337	–6 398	–463	476	496	720	1 216	14 994	14 837
1994	1 480	–6 526	–347	–5 392	316	1 285	1 601	14 315	35 236
1995	7 076	–15 676	655	–7 945	185	1 706	1 891	15 611	27 090
1996	11 626	–6 829	372	5 169	70	1 623	1 692	16 891	15 530
1997	–	–7 911	181	–7 730	26	1 704	1 730	17 817	10 500
1997									
Nov	4 411	–11 612	184	–7 017	26	1 684	1 710	16 381	12 200
Dec	–	–7 911	181	–7 730	26	1 704	1 730	17 817	10 500
1998									
Jan	1 929	–5 642	157	–3 556	26	1 713	1 739	16 416	13 740
Feb	3 648	–10 365	155	–6 562	21	1 715	1 736	16 274	9 360
Mar	–	–8 417	153	–8 264	18	1 718	1 736	16 190	3 100
Apr	–	–6 255	132	–6 123	14	1 723	1 737	16 845	6 900
May	1 962	–5 089	132	–2 995	14	1 593	1 607	16 909	12 820
Jun	5 286	–8 326	117	–2 923	14	1 594	1 608	16 932	15 350
Jul	2 711	–6 131	116	–3 304	14	1 594	1 608	17 178	16 900
Aug	–	–11 710	116	–11 594	9	1 596	1 605	17 047	7 800
Sep	–	–5 701	104	–5 597	6	1 597	1 603	16 634	9 110
Oct	–	–5 636	83	–5 553	6	1 598	1 604	16 735	9 450
Nov	–	–4 762	84	–4 678	6	1 467	1 473	16 749	14 000

2. The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position

2.1 The Bank of Finland's minimum reserve system and standing facilities

		Reserve requirement			Required reserves [1], mill. FIM	Excess reserves, mill. FIM	Total reserves, mill. FIM (4+5)	Liquidity credits, mill. FIM
		On deposits payable on demand, %	On other deposits, %	On other items, %				
		1	2	3	4	5	6	7
1993		2.0	1.5	1.0	6 398	.	.	440
1994		2.0	1.5	1.0	6 526	.	.	14
1995	I–IX	2.0	1.5	1.0	6 557	.	.	123
	X–XII	2.0	1.5	1.0	6 530	616	7 146	37
1996		2.0	1.5	1.0	6 652	440	7 092	121
1997		2.0	1.5	1.0	6 717	747	7 464	1
1997								
Nov		2.0	1.5	1.0	6 911	892	7 803	–
Dec		2.0	1.5	1.0	6 999	310	7 309	–
1998								
Jan		2.0	1.5	1.0	6 995	321	7 317	–
Feb		2.0	1.5	1.0	6 947	147	7 095	–
Mar		2.0	1.5	1.0	6 947	895	7 842	0
Apr		2.0	1.5	1.0	6 866	198	7 065	–
May		2.0	1.5	1.0	6 834	1 197	8 031	3
Jun		2.0	1.5	1.0	6 918	179	7 098	–
Jul		2.0	1.5	1.0	6 985	115	7 100	–
Aug		2.0	1.5	1.0	7 015	293	7 308	–
Sep		2.0	1.5	1.0	7 053	547	7 600	0
Oct		2.0	1.5	1.0	7 231	269	7 501	0
Nov		2.0	1.5	1.0	7 115	724	7 839	–

[1] As of 2 October 1995, the minimum reserve requirement is fulfilled on an averaging basis; until 2 October 1995, end of month figures.

2.2 The Bank of Finland's money market transactions, *mill. FIM*

During period	Purchases of money market instruments	Sales of money market instruments	Matured money market instruments, net	Money market transactions, net (1–2–3)
	1	2	3	4
1993	86 521	146 899	–50 486	–9 892
1994	35 540	351 820	–295 165	–21 115
1995	50 435	434 810	–393 930	9 555
1996	94 080	250 980	–190 562	33 662
1997	128 220	422 500	–294 770	490
1997				
Nov	11 400	15 700	–18 480	14 180
Dec	0	22 430	–26 110	3 680
1998				
Jan	2 000	30 040	–27 770	–270
Feb	4 280	23 540	–19 260	0
Mar	0	7 000	–9 610	2 610
Apr	0	10 400	–7 850	–2 550
May	2 000	17 870	–10 650	–5 220
Jun	5 350	25 365	–20 365	350
Jul	3 750	37 300	–29 970	–3 580
Aug	0	21 800	–29 180	7 380
Sep	0	21 780	–20 520	–1 260
Oct	6 000	22 160	–16 390	230
Nov	0	23 550	–17 000	–6 550

2.3 The Bank of Finland's transactions in foreign currencies and the stock of reserve assets, *mill FIM*

During period	Intervention in the foreign exchange market: Spot purchases	Intervention in the foreign exchange market: Spot sales	Intervention in the foreign exchange market: Forward exchange intervention = change in forward exchange position	Spot transactions related to forward contracts, net	Central government's foreign exchange transactions, net	Reserve assets (end of period): mill. FIM	Reserve assets (end of period): mill. USD
	1	2	3	4	5	6	7
1993	25 120	–45 080	7 460	–6 910	33 240	29 517	5 628
1994	20 930	–12 900	9 060	–8 930	24 660	33 473	5 787
1995	4 910	–5 470	–6 170	9 170	–10 135	52 743	11 120
1996	7 360	–7 320	–	–	–13 868	48 865	11 211
1997	47 620	–1 470	–	4 310	–37 540	36 397	7 838
1997							
Nov	–	–	–1 560	1 560	–15 300	51 238	9 602
Dec	–	–	–	–	–610	51 455	9 492
1998							
Jan	–	–	–	–	–2 730	49 709	8 974
Feb	–	–	–	–	–1 410	48 510	8 825
Mar	5 330	–	2 800	–2 780	–6 590	44 567	7 950
Apr	4 860	–	–620	540	–1 280	46 414	8 529
May	–	–	7 040	–6 980	8 250	48 626	8 970
Jun	–	–	–3 730	3 790	–130	51 950	9 458
Jul	–	–	–2 510	2 470	–1 200	52 753	9 743
Aug	–	–530	–20	–	–360	52 175	9 705
Sep	–	–3 890	–160	–	–820	46 152	9 052
Oct	–	–	–1 290	1 210	–670	47 142	9 372
Nov						51 713	9 962

2.4 Forward exchange contracts between Finnish markka and other currencies, *mill. FIM*

Stock at end of period	Finnish banks' forward contracts: With Finnish customers (excl. Finnish banks): Currency purchases from Finnish customers	Currency sales to Finnish customers	Net (1–2)	With foreign customers: Currency purchases from foreign customers	Currency sales to foreign customers	Net (4–5)	Total: Net (3+6)	Non–residents' forward contracts with Finnish customers (excl. Finnish banks): Currency purchases from Finnish customers	Currency sales to Finnish customers	Net (8–9)	The Bank of Finland's forward contracts: Net currency sales
	1	2	3	4	5	6	7	8	9	10	11
1993	38 373	23 721	14 652	14 346	21 895	–7 548	7 104	11 632	2 173	9 459	1 939
1994	51 096	22 093	29 003	19 236	32 791	–13 555	15 448	18 372	4 780	13 592	–6 080
1995	60 280	19 095	41 185	31 837	48 906	–17 069	24 116	12 829	6 871	5 957	–
1996	53 520	21 793	31 726	44 068	72 021	–27 953	3 773	15 871	6 908	8 963	–
1997	66 649	37 507	29 142	105 128	127 793	–22 665	6 477	23 490	14 552	8 938	–
1997											
Oct	68 258	37 917	30 340	92 393	116 191	–23 798	6 542	24 034	19 297	4 737	–1 578
Nov	68 813	36 778	32 035	93 566	115 303	–21 737	10 298	28 528	17 234	11 294	–
Dec	66 649	37 507	29 142	105 128	127 793	–22 665	6 477	23 490	14 552	8 938	–
1998											
Jan	66 113	32 546	33 568	95 925	116 620	–20 695	12 873	19 041	7 592	11 449	–
Feb	70 214	32 074	38 140	91 570	118 695	–27 125	11 015	22 024	6 215	15 809	–
Mar	67 157	33 100	34 057	96 525	121 046	–24 521	9 536	19 762	6 366	13 396	–2 766
Apr	61 717	36 202	25 516	90 097	109 915	–19 818	5 698	22 235	5 892	16 344	–2 211
May	60 290	29 129	31 161	93 234	112 666	–19 432	11 729	21 843	5 825	16 018	–9 150
Jun	60 173	30 487	29 686	81 673	102 646	–20 972	8 714	21 293	4 791	16 502	–5 382
Jul	58 821	28 217	30 604	83 545	104 528	–20 982	9 622	21 841	5 621	16 220	–2 981
Aug	60 485	27 303	33 182	83 161	111 094	–27 933	5 249	21 370	6 375	14 995	–2 999
Sep	56 089	27 779	28 309	78 015	101 210	–23 196	5 113	20 076	5 979	14 097	–2 999
Oct	54 507	26 789	27 717	74 282	96 598	–22 316	5 401	20 452	6 176	14 276	–1 620

3. Rates of interest

3.1 Money market rates and rates applied by the Bank of Finland, *per cent*

Average of daily observations	Interbank overnight rate	HELIBOR 1 month	HELIBOR 3 months	HELIBOR 6 months	HELIBOR 12 months	Bank of Finland rates: Liquidity credit rate	Bank of Finland rates: Excess-reserve rate[1]	Bank of Finland rates: Base rate
	1	2	3	4	5	6	7	8
1993	7.71	7.85	7.73	7.59	7.47	8.95	4.95	6.85
1994	4.38	5.11	5.35	5.78	6.33	7.11	3.11	5.27
1995	5.26	5.63	5.76	5.97	6.34	7.63	3.63	5.20
1996	3.66	3.58	3.63	3.74	3.99	5.57	1.57	4.38
1997	2.87	3.10	3.23	3.41	3.69	5.07	1.07	4.00
1997								
Nov	2.90	3.35	3.65	4.00	4.32	5.25	1.25	4.00
Dec	3.20	3.31	3.60	3.87	4.18	5.25	1.25	4.00
1998								
Jan	2.80	3.30	3.48	3.63	3.86	5.25	1.25	4.00
Feb	3.18	3.29	3.42	3.56	3.74	5.25	1.25	4.00
Mar	3.10	3.36	3.47	3.58	3.76	5.31	1.31	4.00
Apr	3.30	3.50	3.63	3.75	3.93	5.40	1.40	4.00
May	3.20	3.57	3.75	3.86	4.04	5.40	1.40	4.00
Jun	3.48	3.54	3.73	3.83	3.99	5.40	1.40	4.00
Jul	3.51	3.51	3.67	3.76	3.92	5.40	1.40	4.00
Aug	3.56	3.51	3.61	3.70	3.83	5.40	1.40	4.00
Sep	2.95	3.50	3.54	3.59	3.66	5.40	1.40	4.00
Oct	3.75	3.52	3.54	3.54	3.53	5.40	1.40	4.00
Nov	3.13	3.57	3.61	3.58	3.54	5.40	1.40	4.00

[1] Call money deposit rate until 2 October 1995.

3.2 The Bank of Finland's liquidity facility

	The Bank of Finland's tender rate, %
	1
1993	7.87
1994	5.11
1995	5.63
1996	3.57
1997	3.07
1997	
Nov	3.25
Dec	3.25
1998	
Jan	3.25
Feb	3.25
Mar	3.31
Apr	3.40
May	3.40
Jun	3.40
Jul	3.40
Aug	3.40
Sep	3.40
Oct	3.40
Nov	3.40
13.3.1996	3.75
14.6.1996	3.60
5.7.1996	3.50
23.8.1996	3.25
18.9.1996	3.10
9.10.1996	3.00
15.9.1997	3.25
19.3.1998	3.40
3.12.1998	3.00

	Liquidity credit: interest rate margin, %-points	Liquidity credit: maturity, days	Call money deposits: interest rate margin, %-points	Excess-reserve rate
	2	3	4	5
1993	+2.00	7	– 2.00	.
1994	+2.00	7	– 2.00	.
1995	+2.00	7	.	2.25
1996	+2.00	7	.	1.00
1997	+2.00	1	.	1.25
1997				
Nov	+2.00	1	.	1.25
Dec	+2.00	1	.	1.25
1998				
Jan	+2.00	1	.	1.25
Feb	+2.00	1	.	1.25
Mar	+2.00	1	.	1.40
Apr	+2.00	1	.	1.40
May	+2.00	1	.	1.40
Jun	+2.00	1	.	1.40
Jul	+2.00	1	.	1.40
Aug	+2.00	1	.	1.40
Sep	+2.00	1	.	1.40
Oct	+2.00	1	.	1.40
Nov	+2.00	1	.	1.40
13.3.1996				1.75
14.6.1996				1.60
5.7.1996				1.50
23.8.1996				1.25
18.9.1996				1.10
9.10.1996				1.00
15.9.1997				1.25
19.3.1998				1.40
3.12.1998				1.00

3.3 Weighted Eurorates and commercial ECU interest rate, *per cent*

Average of daily observations	ECU, 3 months	3 currencies, 3 months	Commercial ECU, 3 months
	1	2	3
1993	8.0	5.9	8.1
1994	5.9	5.2	6.1
1995	5.9	5.2	6.0
1996	4.4	4.3	4.4
1997	4.3	4.4	4.3
1997			
Nov	4.6	4.8	4.6
Dec	4.5	4.8	4.5
1998			
Jan	4.4	4.6	4.3
Feb	4.4	4.6	4.4
Mar	4.3	4.6	4.3
Apr	4.3	4.6	4.3
May	4.3	4.6	4.3
Jun	4.3	4.6	4.3
Jul	4.3	4.6	4.2
Aug	4.3	4.6	4.2
Sep	4.2	4.5	4.2
Oct	4.1	4.4	4.1
Nov	4.1	4.5	3.9

3.4 Rates of interest applied by banks, *per cent*

Average for period	Lending: New credits: Cheque account and postal giro credits	Lending: New credits: Bills of ex-change	Lending: New credits: Loans	Lending: New credits: New lending, total	Lending: Average lending rate	Lending: Of which: Commercial banks	Markka deposits and other markka funding: 24-month tax-exempt deposits[1]	36-month tax-exempt deposits[1]	Other tax-exempt deposits, max. rate of interest[1]	Average rate of interest on deposits	Average rate of interest on other funding	Average rate of interest on markka funding
	1	2	3	4	5	6	7	8	9	10	11	12
1993	9.69	13.55	9.40	9.75	10.20	9.92	3.50	4.50	2.00	4.78	8.86	6.15
1994	7.32	11.55	7.13	7.35	8.18	7.91	3.25	4.25	2.00	2.99	5.96	4.01
1995	7.85	11.33	7.30	7.46	8.04	7.75	2.75	3.75	2.00	3.13	6.29	4.08
1996	5.61	9.61	5.31	5.43	6.49	6.15	2.00	3.00	2.00	2.15	4.31	2.78
1997	4.83	9.66	4.73	4.81	5.64	5.29	.	.	2.00	1.47	..	..
1997												
Oct	4.08	9.70	4.95	4.97	5.61	5.27	2.00	.	2.00	1.44	..	..
Nov	6.06	9.52	4.98	5.08	5.67	5.35	2.00	.	2.00	1.43	..	..
Dec	6.07	9.21	4.74	4.83	5.74	5.43	.	.	2.00	1.44	..	..
1998												
Jan	4.54	9.58	4.75	4.80	5.71	5.41	.	.	2.00	1.44	..	..
Feb	5.43	9.26	4.75	4.84	5.71	5.40	.	.	2.00	1.43	..	..
Mar	5.91	9.23	4.74	4.83	5.60	5.34	.	.	2.00	1.37	..	..
Apr	5.81	9.21	4.82	4.89	5.60	5.34	.	.	2.00	1.37	..	..
May	6.28	9.09	4.91	4.98	5.60	5.34	.	.	2.00	1.35	..	..
Jun	6.00	9.12	4.86	4.93	5.61	5.36	.	.	2.00	1.37	..	..
Jul	5.46	9.32	4.73	4.79	5.61	5.36	.	.	2.00	1.37	..	..
Aug	5.94	9.22	4.83	4.90	5.58	5.32	.	.	2.00	1.37	..	..
Sep	4.89	9.06	4.54	4.59	5.52	5.25	.	.	2.00	1.37	..	..
Oct	5.93	9.12	4.70	4.76	5.48	5.22	.	.	2.00	1.37	..	..

[1] End of period.

3.5 Yields on bonds and shares, *per cent*

Period	Bonds: Reference rates calculated by the Bank of Finland: 3 years	Bonds: Reference rates calculated by the Bank of Finland: 5 years	Bonds: Taxable government bonds: 5 years	Bonds: Taxable government bonds: 10 years	Shares: Share yield
	1	2	3	4	5
1993	8.5	8.9	8.2	8.8	1.2
1994	8.5	9.3	8.4	9.1	1.0
1995	8.2	8.9	7.9	8.8	2.4
1996	5.8	6.8	6.0	7.1	2.1
1997	5.0	5.7	4.9	6.0	2.0
1997					
Oct	5.3	5.9	5.1	5.7	1.9
Nov	5.4	5.9	5.1	5.8	2.0
Dec	5.2	5.8	4.8	5.6	2.0
1998					
Jan	5.0	5.5	4.6	5.3	1.8
Feb	4.9	5.4	4.5	5.2	2.0
Mar	4.9	5.4	4.4	5.0	2.5
Apr	4.9	5.4	4.5	5.0	2.4
May	4.9	5.5	4.6	5.1	2.4
Jun	4.9	5.4	4.5	5.0	2.5
Jul	4.8	5.2	4.6	4.9	2.5
Aug	4.6	4.9	4.4	4.7	2.9
Sep	4.3	4.6	4.1	4.4	3.2
Oct	4.0	4.3	4.0	4.4	3.6

4. Rates of exchange

4.1 Middle rates, FIM

Average of daily quotations	New York 1 USD	Montreal 1 CAD	London 1 GBP	Dublin 1 IEP	Stockholm 1 SEK	Oslo 1 NOK	Copenhagen 1 DKK	Reykjavik 1 ISK	Frankfurt am Main 1 DEM	Amsterdam 1 NLG	Brussels 1 BEF	Zurich 1 CHF
	1	2	3	4	5	6	7	8	9	10	11	12
1993	5.7189	4.434	8.582	8.371	0.7350	0.8059	0.8822	0.0846	3.4584	3.0787	0.1655	3.8706
1994	5.2184	3.824	7.982	7.799	0.6758	0.7393	0.8207	0.0745	3.2169	2.8684	0.1561	3.8179
1995	4.3658	3.181	6.891	6.999	0.6123	0.6889	0.7790	0.0674	3.0471	2.7202	0.1481	3.6941
1996	4.5905	3.367	7.164	7.345	0.6847	0.7111	0.7921	0.0689	3.0530	2.7247	0.1484	3.7211
1997	5.1944	3.753	8.506	7.871	0.6799	0.7339	0.7859	0.0732	2.9939	2.6603	0.1451	3.5785
1997												
Nov	5.2205	3.696	8.809	7.844	0.6902	0.7395	0.7916	0.0735	3.0130	2.6731	0.1461	3.7093
Dec	5.3714	3.768	8.925	7.830	0.6899	0.7413	0.7934	0.0749	3.0220	2.6817	0.1465	3.7327
1998												
Jan	5.4948	3.815	8.988	7.599	0.6858	0.7333	0.7946	0.0755	3.0268	2.6859	0.1467	3.7261
Feb	5.5022	3.835	9.018	7.573	0.6812	0.7282	0.7958	0.0760	3.0328	2.6908	0.1470	3.7570
Mar	5.5420	3.913	9.203	7.584	0.6956	0.7311	0.7962	0.0764	3.0348	2.6927	0.1471	3.7242
Apr	5.5063	3.854	9.205	7.651	0.7039	0.7312	0.7960	0.0764	3.0356	2.6957	0.1471	3.6565
May	5.3917	3.732	8.830	7.650	0.7009	0.7242	0.7975	0.0756	3.0391	2.6970	0.1473	3.6485
Jun	5.4430	3.717	8.973	7.659	0.6891	0.7192	0.7979	0.0763	3.0394	2.6966	0.1473	3.6460
Jul	5.4649	3.681	8.984	7.645	0.6841	0.7168	0.7977	0.0764	3.0396	2.6966	0.1474	3.6101
Aug	5.4365	3.548	8.879	7.636	0.6690	0.7053	0.7984	0.0758	3.0411	2.6967	0.1475	3.6388
Sep	5.1834	3.406	8.707	7.617	0.6562	0.6843	0.7991	0.0739	3.0437	2.6980	0.1475	3.6966
Oct	4.9828	3.232	8.444	7.585	0.6353	0.6709	0.8002	0.0728	3.0427	2.6981	0.1475	3.7271
Nov	5.1106	3.318	8.491	7.562	0.6396	0.6862	0.7997	0.0730	3.0407	2.6968	0.1474	3.6949

Average of daily quotations	Paris 1 FRF	Rome 1 ITL	Vienna 1 ATS	Lisbon 1 PTE	Madrid 1 ESP	Athens 1 GRD	Tallinn 1 EEK	Tokyo 1 JPY	Melbourne 1 AUD	Seoul 1 KRW	ECU Commercial 1 XEU	SDR 1 XDR
	13	14	15	16	17	18	19	20	21	22	23	24
1993	1.0096	0.00364	0.4916	0.0356	0.0451	0.025	0.4323	0.05168	3.885	.	6.685	7.98671
1994	0.9406	0.00324	0.4573	0.0314	0.0390	0.0215	0.4021	0.05106	3.814	.	6.175	7.46629
1995	0.8748	0.00268	0.4331	0.0291	0.0350	0.0189	0.3809	0.04663	3.238	.	5.644	6.61879
1996	0.8978	0.00298	0.4340	0.0298	0.0363	0.0191	0.3816	0.04225	3.593	.	5.751	6.66357
1997	0.8894	0.00305	0.4255	0.0296	0.0355	0.0190	0.3742	0.04303	3.859	.	5.864	7.14420
1997												
Nov	0.9000	0.00308	0.4281	0.0295	0.0357	0.0192	0.3766	0.04172	3.630	0.00507	5.961	7.17348
Dec	0.9028	0.00308	0.4295	0.0296	0.0357	0.0192	0.3777	0.04152	3.562	0.00368	5.980	7.27353
1998												
Jan	0.9038	0.00308	0.4303	0.0296	0.0357	0.0192	0.3784	0.04253	3.611	0.00325	5.978	7.38238
Feb	0.9048	0.00307	0.4311	0.0296	0.0358	0.0192	0.3791	0.04377	3.711	0.00340	5.989	7.42807
Mar	0.9053	0.00308	0.4314	0.0297	0.0358	0.0182	0.3794	0.04298	3.712	0.00373	6.018	7.44954
Apr	0.9055	0.00307	0.4315	0.0296	0.0357	0.0174	0.3794	0.04169	3.592	0.00397	6.017	7.39411
May	0.9063	0.00308	0.4319	0.0297	0.0358	0.0176	0.3799	0.03995	3.396	0.00385	5.986	7.24735
Jun	0.9066	0.00309	0.4320	0.0297	0.0358	0.0179	0.3799	0.03873	3.283	0.00390	6.003	7.25578
Jul	0.9067	0.00308	0.4321	0.0297	0.0358	0.0182	0.3799	0.03887	3.378	0.00423	6.007	7.27034
Aug	0.9071	0.00308	0.4322	0.0297	0.0358	0.0181	0.3802	0.03759	3.208	0.00414	5.998	7.21242
Sep	0.9077	0.00308	0.4325	0.0297	0.0358	0.0177	0.3805	0.03855	3.050	0.00378	5.986	7.07388
Oct	0.9074	0.00308	0.4325	0.0297	0.0358	0.0177	0.3803	0.04129	3.080	0.00372	5.994	7.00855
Nov	0.9068	0.00307	0.4322	0.0297	0.0358	0.0181	0.3801	0.04248	3.242	0.00396	5.978	7.11326

4.2 Markka value of the ECU and currency indices

Average of daily observations	Markka value of the ECU FIM/ECU	Currency indices, 1982=100	
		Trade-weighted currency index	Payments currency index
	1	2	3
1993	6.69420	132.4	136.0
1994	6.19108	123.2	125.5
1995	5.70936	111.6	111.6
1996	5.83028	115.3	115.8
1997	5.88125	118.4	122.6
1997			
Nov	5.94676	119.4	124.0
Dec	5.97130	119.5	125.8
1998			
Jan	5.98008	120.1	127.1
Feb	5.98982	120.4	127.3
Mar	6.00921	121.3	128.1
Apr	6.00867	121.2	127.7
May	5.98172	119.9	126.0
Jun	5.99629	119.6	126.4
Jul	5.99793	119.6	126.6
Aug	5.99022	118.6	125.8
Sep	5.97723	117.3	122.9
Oct	5.95189	116.0	120.3
Nov	5.95293	116.9	121.9

4.3 Deviations of ERM currencies' markka rates from central rates, *per cent*

Average of daily observations	ECU	DEM	FRF	NLG	DKK	BEF	ESP	ATS	PTE	IEP	ITL	GRD
Central rate as of 16 Mar 1998	6.01125	3.04001	0.906420	2.69806	0.796976	0.147391	0.0357345	0.432094	0.0296571	7.54951	0.00307071	0.0168382
	1	2	3	4	5	6	7	8	9	10	11	12
1995	–1.69	0.23	–3.48	0.82	–2.25	0.49	–2.02	0.24	–1.84	–4.52	..	..
1996	0.30	0.43	–0.95	0.99	–0.61	0.65	1.49	0.44	0.40	0.21	–3.07	..
1997	0.46	–1.52	–1.88	–1.40	–1.39	–1.56	–0.78	–1.53	–0.12	7.38	–0.72	..
1997												
Nov	1.58	–0.89	–0.71	–0.92	–0.67	–0.89	–0.18	–0.92	–0.46	7.02	0.14	..
Dec	2.00	–0.59	–0.40	–0.61	–0.45	–0.62	0.03	–0.59	–0.26	6.83	0.40	..
1998												
Jan	2.15	–0.43	–0.28	–0.45	–0.29	–0.45	–0.07	–0.42	–0.21	3.68	0.16	..
Feb	2.32	–0.24	–0.18	–0.27	–0.15	–0.30	0.13	–0.24	–0.14	3.32	0.09	..
Mar	1.18	–0.17	–0.12	–0.20	–0.10	–0.19	0.17	–0.17	–0.01	1.81	0.36	..
Apr	–0.04	–0.15	–0.10	–0.09	–0.12	–0.18	0.02	–0.15	–0.14	1.35	0.06	3.46
May	–0.49	–0.03	–0.01	–0.04	0.07	–0.06	0.18	–0.04	0.13	1.33	0.30	4.31
Jun	–0.25	–0.02	0.02	–0.05	0.12	–0.04	0.17	–0.03	0.13	1.46	0.55	6.36
Jul	–0.22	–0.01	0.03	–0.06	0.09	0.00	0.20	0.00	0.12	1.26	0.39	8.32
Aug	–0.35	0.04	0.08	–0.05	0.17	0.04	0.21	0.03	0.18	1.15	0.30	7.30
Sep	–0.57	0.12	0.14	0.00	0.27	0.09	0.20	0.10	0.14	0.90	0.30	5.12
Oct	–0.99	0.09	0.11	0.00	0.40	0.05	0.21	0.09	0.05	0.46	0.15	5.04
Nov	–0.97	0.02	0.04	–0.05	0.35	0.01	0.08	0.02	0.00	0.16	0.02	7.38

5. Financial markets and money supply

5.1 Bank funding from the public, mill. FIM

End of period	Tax-exempt				Subject to withholding tax			Other taxable			Markka deposits, total	Foreign currency deposits	Other markka funding	Total funding
	Cheque and trans-actions accounts	Time deposits	Other deposits	Total (1+2+3)	Cheque and trans-actions accounts	Other deposits	Total (5+6)	Cheque and trans-actions accounts	Other deposits	Total (8+9)	(4+7+10)			(11+12+13)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	88 881	66 361	1 457	156 699	10 360	51 943	62 303	32 098	17 664	49 762	268 764	15 788	62 599	347 151
1994	96 796	63 329	1 895	162 021	9 467	47 908	57 375	37 279	18 739	56 018	275 414	13 332	58 067	346 813
1995	106 997	63 599	2 611	173 207	10 916	45 529	56 445	45 558	16 163	61 721	291 373	14 843	50 675	356 891
1996	132 113	29 672	27 140	188 926	10 746	25 207	35 953	48 329	10 438	58 767	283 646	12 495	55 046	351 187
1997*	140 891	46 976	19 119	206 985	7 883	14 446	22 329	52 472	9 293	61 765	291 079	12 272	74 141	377 491
1997*														
Oct	136 104	51 855	16 358	204 316	8 482	14 108	22 590	51 018	9 275	60 293	287 199	12 278	82 490	381 967
Nov	138 140	50 930	16 516	205 586	7 798	14 083	21 881	51 174	9 123	60 297	287 765	12 101	66 002	365 868
Dec	141 197	46 998	19 119	207 313	7 883	14 452	22 335	52 478	9 293	61 771	291 418	12 293	74 140	377 852
1998*														
Jan	142 456	48 794	18 294	209 544	7 817	14 155	21 972	51 564	9 591	61 155	292 671	11 571	74 295	378 537
Feb	141 697	48 569	18 784	209 049	6 456	13 734	20 190	49 261	9 480	58 741	287 981	10 982	74 473	373 436
Mar	140 679	48 734	19 424	208 837	6 422	13 491	19 913	54 335	9 497	63 832	292 582	10 297	76 224	379 102
Apr	142 089	48 617	20 140	210 846	6 424	13 509	19 934	51 679	9 544	61 223	292 003	10 579	70 349	372 931
May	143 063	48 457	20 840	212 360	6 498	13 208	19 706	52 621	9 694	62 315	294 381	11 421	80 936	386 738
Jun	142 581	48 242	21 236	212 058	6 214	13 253	19 467	55 707	9 627	65 334	296 859	10 330	68 855	376 044
Jul	142 891	49 193	20 509	212 593	6 190	13 192	19 382	53 053	9 699	62 752	294 727	11 838	65 501	372 066
Aug	142 424	49 180	20 813	212 418	6 115	12 933	19 047	54 823	9 576	64 400	295 865	10 754	61 281	367 900
Sep	142 158	49 277	21 340	212 774	6 142	12 828	18 969	56 411	9 384	65 795	297 539	10 107	58 673	366 319
Oct	143 538	49 511	21 888	214 937	6 321	12 515	18 837	53 080	9 371	62 452	296 225	10 305	68 533	375 063

5.2 Bank lending to the public, mill. FIM

End of period	Non-financial corporations	Financial and insurance institutions (excl. banks)	General government (excl. central government)	Non-profit institutions	Households	Foreign sector	Markka-lending, total (1+2+3+4 4+5+6)	Foreign currency lending	Total lending (7+8)
	1	2	3	4	5	6	7	8	9
1993	83 285	9 304	4 036	12 802	171 540	103	281 070	69 819	350 889
1994	81 130	11 121	3 367	13 016	162 913	124	271 670	47 078	318 748
1995	78 601	13 045	2 918	12 645	155 990	253	263 452	33 124	296 575
1996	82 894	18 554	3 052	13 088	152 594	119	270 301	24 130	294 430
1997*	77 351	21 257	3 241	13 453	155 388	.	270 691	16 252	286 943
1997*									
Oct	78 392	20 566	3 055	13 573	155 567	.	271 151	18 314	289 465
Nov	76 557	21 218	3 215	13 709	156 005	.	270 703	16 928	287 630
Dec	77 351	21 257	3 241	13 453	155 391	.	270 693	16 246	286 939
1998*									
Jan	77 916	21 485	3 240	13 152	155 347	.	271 140	16 352	287 492
Feb	78 339	22 196	3 450	13 166	155 873	.	273 024	17 431	290 455
Mar	77 948	22 033	3 422	13 278	156 561	.	273 242	17 569	290 812
Apr	78 706	22 529	3 533	13 327	157 416	.	275 511	20 317	295 828
May	79 401	23 107	3 678	13 533	159 048	.	278 767	19 879	298 646
Jun	81 560	23 258	3 462	13 603	160 359	.	282 242	19 230	301 472
Jul	83 005	23 982	3 400	13 740	161 980	.	286 108	16 893	303 001
Aug	82 983	24 037	3 397	13 896	164 065	.	288 377	16 762	305 139
Sep	85 465	24 660	3 500	14 096	165 787	.	293 509	16 299	309 809
Oct	85 614	25 052	3 464	14 493	167 653	.	296 276	16 366	312 642

5.3 Money supply, *mill. FIM*

End of period	Foreign assets, net	Domestic credit			Other items, net	Monetary aggregates		
		Net claims on the central government	Claims on the public	Total (2+3)		M_1	M_2 (1+4+5)	M_3
	1	2	3	4	5	6	7	8
1993	–25 989	1 848	403 742	405 589	–100 006	141 759	279 595	322 408
1994	12 844	6 092	365 712	371 804	–97 953	154 357	286 696	328 509
1995	25 481	19 837	353 340	373 177	–94 870	175 921	303 788	329 820
1996	40 638	12 821	350 230	363 052	–106 399	204 834	297 291	325 473
1997*	69 620	12 184	339 143	351 327	–115 351	215 763	305 596	353 735
1997*								
Oct	83 239	5 621	342 934	348 555	–130 718	209 482	301 077	353 981
Nov	71 173	9 482	340 584	350 067	–119 399	211 188	301 841	345 743
Dec	69 620	12 184	339 143	351 327	–115 011	216 074	305 936	354 075
1998*								
Jan	65 857	11 714	339 957	351 671	–110 810	215 883	306 718	363 671
Feb	61 892	8 967	342 763	351 729	–111 625	211 429	301 996	356 204
Mar	56 229	15 201	342 135	357 337	–107 390	215 030	306 176	365 046
Apr	53 956	16 845	346 736	363 581	–111 195	214 532	306 343	361 023
May	64 672	11 399	349 423	360 821	–116 701	216 594	308 793	367 202
Jun	72 301	4 511	350 640	355 151	–116 435	218 659	311 017	356 391
Jul	65 063	11 063	351 653	362 716	–118 387	216 799	309 392	355 798
Aug	75 120	13 502	353 701	367 203	–132 229	217 592	310 094	353 203
Sep	62 904	17 525	351 221	368 746	–120 003	218 817	311 647	357 268
Oct	..	..	..	..	..	217 435	310 721	355 424

5.4 Liabilities and assets of the central government, *mill. FIM*

End of period	Foreign currency–denominated debt			Markka–denominated debt					Central govern-ment debt (3+8)	Out-standing lending	Cash funds
	Bonds	Other debt	Total (1+2)	Public bonds	Other long–term liabilities	Treasury notes and bills	Miscella-neous items	Total (4+5+6+7)			
	1	2	3	4	5	6	7	8	9	10	11
1993	142 824	12 753	155 577	71 082	16 060	22 824	–9 700	100 266	255 843	66 439	36 487
1994	160 587	15 975	176 562	93 008	17 100	33 153	–12 300	130 961	307 523	67 658	43 012
1995	158 545	13 756	172 301	143 948	17 492	37 864	–12 300	187 004	359 305	66 629	41 878
1996	158 847	16 161	175 008	177 700	17 187	37 620	–12 300	220 479	395 487	63 842	38 369
1997	142 717	25 839	168 556	214 876	16 545	30 388	–12 300	249 745	418 301	64 564	33 868
1997											
Nov	141 898	25 597	167 495	216 455	16 557	34 458	–12 300	255 396	422 891	65 837	42 539
Dec	142 717	25 839	168 556	214 876	16 545	30 388	–12 300	249 745	418 301	64 564	33 868
1998											
Jan	143 626	26 312	169 938	214 642	16 545	31 081	–12 300	250 164	420 102	64 989	..
Feb	143 776	26 265	170 041	217 195	16 545	25 712	–12 300	247 349	417 390	65 295	..
Mar	137 141	26 233	163 374	218 647	16 494	27 949	–12 300	250 987	414 361	65 924	..
Apr	132 022	25 735	157 757	220 246	16 310	24 755	–12 300	249 168	406 925	66 097	..
May	140 798	24 581	165 379	221 126	16 239	20 142	–12 300	245 435	410 814	65 937	..
Jun	141 919	24 942	166 861	231 777	15 651	20 489	–12 300	255 904	422 765	65 936	..
Jul	137 248	24 681	161 929	231 748	15 644	21 608	–12 417	256 910	418 839	66 265	..
Aug	137 754	24 766	162 520	238 147	15 644	23 396	–12 417	265 097	427 617	66 567	..
Sep	136 296	24 278	160 574	240 451	15 644	20 529	–12 417	264 523	425 097	64 912	..
Oct	133 889	25 013	158 902	245 829	15 644	19 573	–12 417	268 945	427 847	64 907	..
Nov	132 069	26 564	158 633	245 521	15 634	18 448	–12 417	267 433	426 066	..	..

5.5 Markka bond market
A) Issues, *mill. FIM*

During period	Corpo-rations	Financial institutions	Central government	Local government	Others	Total (1+2+3+4+5)
	1	2	3	4	5	6
1993	11 691	10 481	36 512	2 235	63	60 981
1994	4 053	9 899	31 553	593	–	46 099
1995	643	4 487	66 557	26	–	71 713
1996	3 213	9 074	62 139	20	–	74 447
1997*	2 383	7 041	57 165	–	–	66 589
1997*						
Oct	1	387	7 424	–	–	7 812
Nov	553	1 210	6 393	–	–	8 156
Dec	60	1 112	–	–	–	1 172
1998*						
Jan	–	714	14 651	–	–	15 365
Feb	401	1 763	4 032	–	–	6 196
Mar	491	825	6 505	–	–	7 821
Apr	1 001	875	3 392	–	–	5 268
May	220	877	2 430	–	–	3 528
Jun	422	376	10 842	–	–	11 640
Jul	–	10	–	–	–	10
Aug	–	400	6 492	–	–	6 892
Sep	–	500	3 314	–	–	3 814
Oct	215	631	11 268	–	–	12 114

B) Stock, *mill. FIM*

End of period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corpo-rations	Financial institutions	Central government	Local government	Others	Public issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1993	32 459	73 893	73 682	6 884	2 009	119 552	10 391	58 984	188 927
1994	30 179	66 467	94 865	6 981	953	141 935	7 581	49 929	199 445
1995	26 480	55 223	145 177	5 814	357	186 799	5 034	41 218	233 051
1996	25 266	44 849	179 419	4 362	100	220 037	2 956	31 003	253 996
1997*	23 327	41 046	216 215	3 648	84	258 481	1 345	24 494	284 320
1997*									
Oct	23 433	40 545	211 426	3 910	88	252 212	1 366	25 824	279 402
Nov	23 709	41 138	217 794	3 860	86	259 724	1 349	25 514	286 587
Dec	23 327	41 046	216 215	3 648	84	258 481	1 345	24 494	284 320
1998*									
Jan	22 774	43 700	215 980	3 632	84	261 271	1 131	23 768	286 170
Feb	23 012	44 944	218 534	3 489	84	265 528	1 003	23 532	290 063
Mar	23 341	42 322	219 982	3 483	82	265 134	845	23 231	289 210
Apr	24 228	42 654	221 344	3 470	82	268 427	837	22 514	291 778
May	23 838	43 282	222 225	3 470	81	270 136	743	22 017	292 896
Jun	21 591	42 002	232 875	3 464	80	279 616	736	19 660	300 012
Jul	21 153	41 961	232 847	3 464	80	279 581	734	19 190	299 505
Aug	21 098	42 074	239 246	3 446	80	286 282	656	19 006	305 944
Sep	21 067	41 843	241 550	3 440	79	288 457	563	18 959	307 979
Oct	21 107	42 030	246 928	3 440	76	294 188	508	18 885	313 581

C) Turnover, *mill. FIM*

During period	Primary dealers' transactions in benchmark government bonds		
	Purchases from other primary dealers	Purchases from customers	Sales to customers
	1	2	3
1993	42 945	95 647	117 489
1994	173 096	150 908	176 647
1995	133 357	190 069	215 879
1996	201 528	222 584	242 310
1997	258 634	264 994	291 056
1997			
Nov	17 106	19 655	19 411
Dec	21 198	16 515	16 656
1998			
Jan	22 397	23 508	25 746
Feb	12 826	15 971	16 099
Mar	17 211	22 000	23 870
Apr	14 448	15 315	18 415
May	12 010	14 332	14 337
Jun	11 048	10 520	12 932
Jul	14 767	16 204	16 980
Aug	39 894	28 539	32 104
Sep	62 286	33 882	30 915
Oct	53 444	33 539	35 490
Nov	27 509	20 954	21 138

5.6 Helsinki Stock Exchange

Average of daily observations	Share prices										Turnover[1], mill. FIM		
	HEX index (28 Dec 1990=1000)												
	All-share index	Banks and finance	Insurance	Trade	Construction	Forest industries	Metal and engineering	Telecommunications and electronics	Chemicals	Conglomerates	Shares and subscription rights	Bonds and debentures	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	1 240	608	644	–	–	1 695	1 749	–	–	1 751	46 337	59 977	106 314
1994	1 847	719	802	–	–	2 284	2 675	–	–	3 068	68 671	2 147	70 818
1995	1 918	500	638	–	–	2 062	2 255	–	–	4 251	83 019	1 075	84 094
1996	2 032	460	820	–	–	2 040	2 564	–	–	5 681	101 265	541	101 806
1997	3 207	822	1 576	2 255	1 006	2 712	3 408	1 416	900	7 477	186 088	488	186 576
1997													
Nov	3 448	1 022	1 925	2 279	946	2 737	3 231	1 631	901	7 593	15 163	27	15 190
Dec	3 303	1 080	2 105	2 370	926	2 508	3 065	1 449	900	7 757	17 764	53	17 817
1998													
Jan	3 430	1 136	2 128	2 526	956	2 589	3 045	1 499	933	8 324	15 485	53	15 538
Feb	3 851	1 190	2 418	2 639	1 005	2 886	3 167	1 804	988	9 848	20 050	43	20 093
Mar	4 249	1 270	2 570	2 759	1 009	3 278	3 393	2 085	1 054	10 813	24 260	173	24 433
Apr	4 705	1 393	2 957	2 876	1 073	3 460	3 506	2 450	1 135	11 614	25 985	38	26 023
May	4 925	1 344	3 024	2 832	1 145	3 673	3 748	2 632	1 121	11 547	18 303	21	18 324
Jun	4 823	1 335	2 838	2 825	1 208	3 427	3 642	2 624	1 113	10 804	27 508	10	27 518
Jul	5 317	1 430	3 263	2 741	1 145	3 293	3 662	3 272	1 112	10 979	27 302	11	27 313
Aug	4 880	1 239	2 733	2 582	1 020	2 767	3 281	3 117	1 110	10 004	22 544	8	22 552
Sep	4 265	1 003	1 959	2 266	816	2 544	2 693	2 891	879	7 975	24 911	8	24 919
Oct	4 020	978	1 738	2 183	643	2 472	2 279	2 792	833	7 053	29 210	..	..
Nov	4 616	1 086	2 011	2 227	664	2 772	2 350	3 416	888	7 425	29 998	..	..

[1] During period.

6. Balance of payments, foreign assets and liabilities

6.1 Current account, mill. FIM

During period	Exports of goods, fob	Transport receipts	Travel receipts	Other services receipts	Services receipts, total (2+3+4)	Exports of goods and services (1+5)	Investment income	Transfers and other income	Current account receipts (6+7+8)	Imports of goods, cif	Transport expenditure	Travel expenditure	Other services expenditure
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	132 550	10 430	7 079	9 379	26 888	159 438	6 137	6 506	172 080	101 559	5 646	9 237	17 008
1994	152 022	11 385	7 314	11 808	30 508	182 530	9 617	4 919	197 067	118 684	5 862	8 697	16 800
1995	172 820	11 900	7 536	14 986	34 422	207 242	12 929	8 596	228 767	125 450	6 029	10 450	19 150
1996*	182 436	12 400	8 778	15 315	36 492	218 928	15 375	7 698	242 002	138 110	5 545	10 979	16 921
1997*	208 765	13 145	10 172	15 597	38 913	247 678	21 632	8 707	278 017	157 170	6 423	11 762	17 277
1996*													
I	42 631	2 995	2 037	3 473	8 505	51 136	4 242	1 446	56 824	33 496	1 386	2 720	4 299
II	48 126	3 127	2 233	3 729	9 089	57 215	4 511	2 076	63 802	34 520	1 371	2 783	4 088
III	41 925	3 251	2 425	4 158	9 833	51 758	3 110	1 339	56 206	31 990	1 406	2 676	3 994
IV	49 754	3 026	2 084	3 955	9 066	58 820	3 512	2 837	65 169	38 102	1 382	2 801	4 540
1997*													
I	46 239	3 216	2 000	3 274	8 490	54 728	4 526	1 913	61 168	35 832	1 548	2 536	4 282
II	52 517	3 296	2 570	4 040	9 905	62 422	6 203	2 087	70 713	39 597	1 655	3 025	4 348
III	52 522	3 297	3 021	4 052	10 370	62 892	5 283	1 652	69 828	38 483	1 627	3 015	3 997
IV	57 487	3 336	2 581	4 231	10 148	67 635	5 619	3 055	76 309	43 258	1 593	3 186	4 650
1998*													
I	57 526	3 576	2 853	3 964	10 393	67 919	4 850	2 035	74 803	42 844	1 689	2 927	4 608
II	57 797	3 593	2 420	3 759	9 772	67 569	6 151	1 689	75 408	42 370	1 826	2 944	4 673
III	53 443	3 531	2 977	3 562	10 069	63 512	6 001	2 441	71 954	40 260	1 736	3 422	3 732

During period	Services expenditure, total (11+12+13)	Imports of goods and services (10+14)	Investment expenditure	Transfers and other expenditure	Current account expenditure (15+16+17)	Trade account (1–10)	Transport (2–11)	Travel (3–12)	Other services (4–13)	Services account (20+21+22)	Goods and services account (19+23)	Investment income, net (7–16)	Transfers and others, net (8–17)	Current account (24+25+26)=(9–18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1993	31 891	133 450	34 580	10 390	178 421	30 991	4 784	–2 159	–7 629	–5 004	25 988	–28 443	–3 885	–6 340
1994	31 359	150 043	31 801	8 596	190 440	33 339	5 523	–1 382	–4 992	–851	32 487	–22 184	–3 676	6 627
1995	35 629	161 080	32 529	12 627	206 237	47 370	5 870	–2 914	–4 164	–1 207	46 162	–19 600	–4 032	22 531
1996*	33 444	171 554	32 900	14 520	218 974	44 326	6 855	–2 201	–1 606	3 048	47 374	–17 525	–6 821	23 027
1997*	35 462	192 632	35 252	15 154	243 038	51 595	6 722	–1 591	–1 680	3 451	55 046	–13 620	–6 447	34 979
1996*														
I	8 405	41 902	8 529	4 010	54 441	9 135	1 609	–683	–827	99	9 234	–4 287	–2 563	2 384
II	8 241	42 762	10 773	3 862	57 396	13 606	1 756	–550	–358	848	14 453	–6 262	–1 786	6 406
III	8 075	40 066	6 556	3 055	49 677	9 935	1 845	–251	164	1 758	11 692	–3 447	–1 716	6 529
IV	8 723	46 825	7 042	3 593	57 460	11 652	1 645	–717	–585	343	11 994	–3 530	–756	7 709
1997*														
I	8 366	44 198	8 779	4 497	57 475	10 407	1 667	–536	–1 008	123	10 530	–4 253	–2 584	3 693
II	9 028	48 625	11 216	3 283	63 123	12 920	1 640	–455	–308	877	13 798	–5 012	–1 195	7 590
III	8 639	47 122	7 499	3 788	58 409	14 039	1 670	5	55	1 730	15 770	–2 216	–2 135	11 419
IV	9 429	52 687	7 757	3 587	64 031	14 229	1 744	–605	–419	720	14 949	–2 138	–532	12 278
1998*														
I	9 224	52 068	10 003	4 794	66 865	14 682	1 887	–74	–644	1 169	15 851	–5 153	–2 760	7 938
II	9 444	51 813	13 010	3 519	68 342	15 427	1 767	–524	–914	329	15 756	–6 859	–1 830	7 066
III	8 890	49 150	8 191	3 301	60 642	13 183	1 795	–445	–171	1 179	14 362	–2 190	–860	11 312

6.2 Capital and financial account, *mill. FIM*

During period	Capital account, imports of capital	Financial account											
		Direct investment in Finland	Portfolio investment in Finland						Other investment in Finland				Total (2+8+12)
			Shares	Bonds	Of which: markka denominated bonds	Money market instruments	Financial derivatives	Total (3+4+6+7)	Trade credits	Loans	Other capital	Total (9+10+11)	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	0	4 945	12 748	30 353	3 616	–4 382	..	38 719	4 467	5 457	–29 801	–19 877	23 787
1994	0	8 240	13 400	21 977	–5 783	–2 134	59	33 302	3 107	647	–1 392	2 361	43 903
1995	487	4 642	8 734	–17 868	–3 634	1 421	2 588	–5 125	–1 216	–6 985	8 376	176	–307
1996*	596	5 093	8 937	–4 624	6 250	1 016	1 501	6 830	–3 383	12 737	187	9 540	21 463
1997*	1 296	10 975	20 774	–4 259	17 137	2 776	616	19 907	–616	10 529	6 315	16 229	47 110
1996*													
I	0	1 759	1 216	2 635	1 155	502	1 119	5 472	–3 416	4 632	–552	665	7 895
II	0	486	6 143	–5 184	2 516	363	754	2 076	–735	4 717	–3 119	863	3 425
III	0	2 522	374	–4 841	277	–254	–180	–4 902	–42	2 516	6 484	8 957	6 576
IV	596	326	1 204	2 766	2 303	406	–192	4 185	809	872	–2 627	–945	3 566
1997*													
I	0	2 549	5 121	4 126	952	2 197	–94	11 349	–822	6 608	16 464	22 250	36 148
II	450	4 170	7 579	5 234	9 562	–1 751	28	11 091	–1 731	3 193	–7 150	–5 688	9 573
III	0	734	3 460	2 790	9 959	–2 252	438	4 435	865	5 016	3 438	9 319	14 489
IV	846	3 522	4 614	–16 410	–3 336	4 582	245	–6 969	1 071	–4 287	–6 437	–9 653	–13 099
1998*													
I	66	2 905	5 064	–8 943	1 095	–2 752	–226	–6 857	490	470	4 926	5 886	1 934
II	4	50 482	10 478	12 101	6 633	–1 777	–851	19 950	–717	334	–4 659	–5 041	65 391
III	0	3 145	–1 023	–9 253	–5 832	–399	–2 008	–12 683	–567	1 813	8 098	9 344	–193

During period	Capital account, exports of capital	Financial account												Errors and omissions
		Direct investment abroad	Portfolio investment abroad					Other investment abroad				Total (15+20+24)	Change in central bank's reserve assets (increase –)	
			Shares	Bonds	Money market instruments	Financial derivatives	Total (16+17+18+19)	Trade credits	Loans	Other capital	Total (21+22+23)			
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1993	0	8 050	873	767	1 932	..	3 571	1 923	–839	9 576	10 660	22 282	–1 219	6 055
1994	0	22 447	434	–4 294	–855	–279	–4 994	1 213	–7 460	9 762	3 516	20 968	–25 504	–4 058
1995	206	6 539	892	3 685	–5 492	–168	–1 084	3 839	–2 712	11 750	12 877	18 332	1 480	–5 652
1996*	340	16 516	3 386	15 455	364	–172	19 033	982	4 523	15 945	21 449	56 999	14 075	–1 822
1997*	0	27 449	8 764	15 116	–628	371	23 624	3 929	6 737	2 985	13 651	64 724	–10 788	–7 874
1996*														
I	61	5 508	567	4 019	2 424	–26	6 983	–670	2 416	6 458	8 205	20 696	7 254	3 224
II	0	6 798	1 041	3 041	162	71	4 315	779	–2 064	4 834	3 549	14 662	8 457	–3 626
III	0	3 793	728	4 179	–2 457	–51	2 399	–792	1 565	1 945	2 718	8 910	–1 132	–3 065
IV	279	417	1 050	4 216	235	–166	5 336	1 665	2 606	2 708	6 979	12 731	–505	1 645
1997*														
I	0	3 130	1 791	6 595	4 286	13	12 685	918	3 244	–3 360	802	16 617	–22 134	–1 090
II	0	8 276	2 420	5 264	–2 783	275	5 176	189	1 127	7 390	8 706	22 158	3 031	1 515
III	0	4 335	1 603	541	–2 975	52	–778	968	14 562	4 869	20 399	23 956	–2 968	1 016
IV	0	11 708	2 951	2 716	844	31	6 541	1 854	–12 196	–5 914	–16 256	1 993	11 283	–9 315
1998*														
I	0	12 714	2 632	1 291	–1 101	–199	2 623	1 286	5 901	–8 304	–1 117	14 220	7 878	–3 596
II	0	55 671	2 698	1 880	–142	–36	4 400	466	–3 574	1 620	–1 487	58 584	–8 330	–5 547
III	0	5 094	1 862	4 262	24	–116	6 032	1 871	4 112	–2 394	3 589	14 715	3 631	–35

6.3 *Finland's international investment position,* mill. FIM

Position at end of period	Assets											
	Direct investment abroad	Portfolio investment					Other investment					Total assets (1+6+11)
		Shares	Bonds	Money market instruments	Financial derivatives	Total (2+3+4+5)	Trade credits	Loans	Currency and deposits	Other	Total (7+8+9+10)	
	1	2	3	4	5	6	7	8	9	10	11	12
1993	53 090	1 783	10 709	11 030	447	23 968	26 256	35 981	5 799	91 127	159 162	236 221
1994	59 451	1 984	5 109	9 115	488	16 696	25 500	24 847	8 257	109 847	168 451	244 598
1995	65 350	3 216	9 619	2 736	177	15 748	28 358	20 381	7 290	115 543	171 571	252 669
1996*	82 038	7 260	25 077	3 478	–21	35 793	29 929	25 438	5 895	124 541	185 803	303 634
1997*	110 026	17 542	42 386	3 222	1 404	64 554	30 369	34 204	6 949	148 881	220 403	394 982
1996*												
I	73 551	3 984	14 063	5 670	169	23 886	27 980	23 594	5 435	121 308	178 317	275 754
II	79 164	4 999	16 834	5 842	93	27 768	28 892	21 499	5 523	118 075	173 989	280 922
III	81 377	5 835	20 620	3 176	48	29 679	27 902	22 873	6 488	119 349	176 612	287 668
IV	82 038	7 260	25 077	3 478	–21	35 793	29 929	25 438	5 895	124 541	185 803	303 634
1997*												
I	84 890	9 701	32 595	7 672	171	50 139	26 391	29 406	5 732	147 414	208 942	343 971
II	93 939	13 148	39 010	5 156	610	57 924	26 976	31 175	6 689	155 502	220 341	372 204
III	98 420	15 188	39 750	2 316	813	58 066	28 099	45 983	5 149	165 778	245 009	401 495
IV	110 026	17 542	42 386	3 222	1 404	64 554	30 369	34 204	6 949	148 881	220 403	394 982
1998*												
I	124 467	22 787	45 083	2 182	1 381	71 432	32 086	40 292	7 585	134 721	214 684	410 584
II	143 390	25 229	46 250	2 016	1 452	74 947	32 365	36 379	6 629	143 800	219 173	437 509
III	144 127	22 154	49 193	1 963	1 107	74 416	33 345	39 453	6 083	133 609	212 490	431 033

Position at end of period	Liabilities												
	Direct investment in Finland	Portfolio investment						Other investment					Total liabilities (13+19+24)
		Shares	Bonds	Of which: markka denominated bonds	Money market instruments	Financial derivatives	Total (14+15+17+18)	Trade credits	Loans	Currency and deposits	Other	Total (20+21+22+23)	
	13	14	15	16	17	18	19	20	21	22	23	24	25
1993	24 391	30 375	266 269	27 402	14 995	–6 103	305 536	18 206	90 825	4 025	54 188	167 243	497 170
1994	31 846	60 558	258 823	22 285	10 309	–5 179	324 511	19 852	82 649	3 430	46 566	152 498	508 855
1995	36 894	63 746	228 676	19 638	10 099	1 545	304 066	18 540	69 249	2 568	53 557	143 914	484 874
1996*	40 854	108 932	229 919	26 284	10 888	3 358	353 097	14 863	83 295	1 733	55 279	155 170	549 120
1997*	51 658	172 393	243 731	45 169	14 110	5 401	435 635	14 043	98 066	2 760	64 258	179 128	666 422
1996*													
I	38 422	68 674	241 085	20 699	11 192	2 195	323 146	14 873	77 934	1 518	55 412	149 737	511 305
II	38 616	80 962	234 317	23 855	11 126	2 833	329 239	14 214	81 836	1 939	51 588	149 577	517 431
III	40 808	91 198	225 308	23 656	11 286	2 651	330 443	13 940	82 365	1 742	57 734	155 781	527 032
IV	40 854	108 932	229 919	26 284	10 888	3 358	353 097	14 863	83 295	1 733	55 279	155 170	549 120
1997*													
I	43 320	129 824	240 590	27 538	13 258	2 451	386 123	13 794	90 723	2 624	72 506	179 647	609 090
II	47 448	162 713	254 004	37 495	11 813	696	429 226	12 092	97 073	2 870	66 344	178 379	655 054
III	48 101	201 959	257 986	47 881	9 267	2 312	471 524	12 976	102 146	2 737	69 899	187 758	707 384
IV	51 658	172 393	243 731	45 169	14 110	5 401	435 635	14 043	98 066	2 760	64 258	179 128	666 422
1998*													
I	54 578	246 199	239 267	46 407	11 033	5 024	501 523	14 510	99 925	3 097	69 817	187 349	743 451
II	73 171	319 437	246 792	52 640	9 829	5 476	581 534	13 797	98 987	3 034	64 627	180 445	835 150
III	76 241	276 593	230 960	46 813	8 755	4 385	520 694	13 199	97 815	3 523	70 371	184 908	781 842

6.4 Finland's net international investment position (assets less liabilities)[1], by sector, mill. FIM

Position at end of period	Corporate sector	House-holds and nonprofit institutions	Banks	Bank of Finland	Other financial institutions	Central govern-ment	Local govern-ment	Net (1+2+3+4+5+6+7)	Net interest and dividend expenditure	Net interest and dividend expenditure in relation to current account receipts, %
	1	2	3	4	5	6	7	8	9	10
1993	–54 315	3 436	–45 658	33 279	–29 737	–164 892	–3 062	–260 949	21 897	12.7
1994	–82 428	3 503	–33 800	52 606	–21 931	–179 113	–3 093	–264 257	20 296	10.3
1995	–72 374	2 293	–18 970	47 708	–13 297	–174 481	–3 085	–232 205	17 490	7.6
1996*	–107 386	1 409	12 904	35 522	–1 785	–183 703	–2 448	–245 486	16 477	6.8
1997*	–154 108	2 670	10 657	50 931	8 811	–187 896	–2 503	–271 439	15 563	5.6
1996*										
I	–75 341	2 643	–4 613	42 679	–9 630	–188 118	–3 169	–235 550	4 025	7.1
II	–83 471	2 736	4 569	33 647	–5 689	–185 184	–3 118	–236 510	6 000	9.4
III	–92 233	1 219	3 932	34 482	–1 893	–182 336	–2 535	–239 364	3 185	5.7
IV	–107 386	1 409	12 904	35 522	–1 785	–183 703	–2 448	–245 486	3 268	5.0
1997*										
I	–130 982	1 709	–6 381	59 120	2 815	–189 002	–2 396	–265 118	4 739	7.7
II	–160 171	1 862	10 969	58 737	7 100	–198 950	–2 396	–282 850	5 498	7.8
III	–192 642	2 417	20 128	61 333	7 978	–202 647	–2 456	–305 888	2 702	3.9
IV	–154 108	2 670	10 657	50 931	8 811	–187 896	–2 503	–271 439	2 623	3.4
1998*										
I	–210 360	2 986	975	44 268	11 433	–179 872	–2 297	–332 867	3 441	4.6
II	–279 470	3 425	4 580	51 524	14 556	–189 875	–2 380	–397 641	8 167	10.8
III	–242 213	1 670	3 816	45 995	19 960	–177 738	–2 299	–350 809	3 028	4.2

[1] Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

7. Foreign trade

7.1 Exports, imports and the trade balance, *mill. FIM*

During period	Exports, fob	Imports, cif	Balance (1–2)
	1	2	3
1993	134 114	103 165	30 949
1994	154 164	120 612	33 552
1995	176 021	128 556	47 465
1996	186 336	141 720	44 616
1997*	211 696	159 190	52 506
1997*			
Sep	18 964	14 857	4 107
Oct	20 811	15 272	5 539
Nov	19 630	14 142	5 488
Dec	18 055	14 795	3 260
1998*			
Jan	17 968	13 268	4 700
Feb	20 258	14 015	6 243
Mar	20 335	16 554	3 782
Apr	20 772	14 666	6 107
May	18 589	14 728	3 861
Jun	19 468	13 921	5 547
Jul	18 342	13 197	5 145
Aug	16 567	13 453	3 115
Sep	19 400	14 300	5 100

7.2 Foreign trade: indices of volume, prices and terms of trade, *1990=100*

Period	Volume (seasonally adjusted)		Prices		Terms of trade
	Exports	Imports	Exports	Imports	
	1	2	3	4	5
1993	120.6	83.6	109.7	119.6	91.7
1994	136.5	98.0	111.4	119.3	93.3
1995	145.7	104.6	119.2	119.2	100.0
1996	153.1	113.5	120.2	121.1	99.3
1997*	177.4	126.1	117.7	122.4	96.2
1997*					
Sep	188.2	139.0	118.7	123.3	96.3
Oct	194.4	136.0	120.7	123.8	97.5
Nov	182.5	129.8	120.1	123.2	97.5
Dec	180.2	136.2	120.7	122.5	98.5
1998*					
Jan	185.0	135.6	120.2	121.4	99.0
Feb	202.7	139.1	120.4	120.7	99.8
Mar	196.6	151.0	120.1	120.2	99.9
Apr	198.8	136.5	118.9	120.7	98.5
May	183.6	140.7	119.0	120.3	98.9
Jun	192.8	139.2	118.8	118.5	100.3
Jul	190.4	140.4	118.4	118.3	100.1
Aug	182.1	140.8	117.7	117.5	100.2
Sep	195.1	141.7	117.1	116.4	100.6

7.3 Foreign trade by main groups, *mill. FIM*

During period	Exports by industries, fob					Imports by use of goods, cif				
	Wood industry products	Paper industry products	Chemical industry products	Metal and engineering industry products	Other goods	Raw materials (excl. crude oil)	Crude oil, fuels and lubricants	Finished goods: Investment goods	Finished goods: Consumer goods	Other goods
	1	2	3	4	5	6	7	8	9	10
1993	10 910	37 430	14 205	48 158	23 411	54 792	10 904	15 396	21 066	1 007
1994	14 198	41 249	15 725	55 895	27 097	66 156	11 687	17 227	24 684	858
1995	13 451	48 754	15 877	69 336	28 603	71 397	9 685	19 660	25 514	2 300
1996	12 688	44 602	18 482	78 969	31 595	72 970	12 944	22 004	30 897	2 905
1997*	15 423	49 674	20 743	91 757	34 099	84 129	12 886	23 904	34 899	3 372
1997*										
Aug	934	4 333	1 741	6 752	2 695	6 896	767	1 732	2 662	197
Sep	1 456	4 437	1 700	8 197	3 174	7 696	1 061	2 326	3 192	582
Oct	1 673	4 846	2 024	8 980	3 289	7 865	1 350	2 486	3 394	177
Nov	1 398	4 285	1 907	9 029	3 011	7 530	1 140	2 321	2 921	230
Dec	1 268	4 299	1 695	8 087	2 706	7 167	1 540	2 613	3 087	388
1998*										
Jan	1 155	4 601	1 770	7 448	2 993	6 836	1 269	2 101	2 881	181
Feb	1 281	4 527	1 599	9 975	2 875	7 652	801	2 044	3 307	211
Mar	1 418	4 936	1 948	8 809	3 225	9 044	829	2 802	3 629	250
Apr	1 405	4 954	2 047	9 399	2 967	7 868	867	2 302	3 328	301
May	1 406	4 762	1 795	7 819	2 807	8 092	1 120	2 283	2 946	287
Jun	1 395	4 382	1 934	8 725	3 032	7 528	577	2 437	3 093	286
Jul	1 042	4 645	1 886	8 227	2 542	6 840	896	2 120	3 119	222
Aug	981	4 365	1 561	7 024	2 636	7 311	779	1 932	3 198	233

7.4 Foreign trade by regions and countries

Region and country	Exports, fob				Imports, cif			
	1997*		Sep 1997 – Aug 1998		1997*		Sep 1997 – Aug 1998	
	Mill. FIM	Percentage share	Mill. FIM	12-month change calculated from 12-month moving total	Mill. FIM	Percentage share	Mill. FIM	12-month change calculated from 12-month moving total
	1	2	3	4	5	6	7	8
European Union[1]	113 179	53.2	124 087	15.2	95 415	59.3	102 811	13.4
Austria	2 006	0.9	2 588	42.2	1 695	1.1	1 822	14.7
Belgium and Luxembourg	4 920	2.3	5 584	19.3	4 056	2.5	4 491	9.0
Denmark	6 544	3.1	6 440	3.2	5 469	3.4	6 145	18.9
France	9 020	4.2	11 147	32.4	7 749	4.8	8 515	16.9
Germany	23 440	11.0	25 785	14.6	23 400	14.5	25 434	12.5
Greece	1 245	0.6	2 339	118.6	399	0.2	373	0.1
Ireland	1 745	0.8	1 679	16.6	1 455	0.9	1 579	24.1
Italy	6 334	3.0	8 085	39.0	6 471	4.0	7 237	19.4
Netherlands	8 769	4.1	9 472	14.2	6 478	4.0	7 388	30.9
Portugal	1 200	0.6	1 273	16.5	1 225	0.8	1 073	–9.3
Spain	4 626	2.2	5 404	23.6	2 273	1.4	2 814	30.6
Sweden	20 926	9.8	21 527	5.3	19 470	12.1	20 613	12.6
United Kingdom	21 313	10.0	21 622	5.7	12 589	7.8	12 632	1.7
Rest of Europe	42 868	20.1	48 685	26.4	27 681	17.2	28 700	7.1
Of which:								
Estonia	6 759	3.2	7 585	25.5	2 189	1.4	2 518	26.9
Norway	6 230	2.9	7 394	24.4	5 905	3.7	6 527	6.7
Poland	3 774	1.8	4 029	15.0	1 797	1.1	1 571	–8.9
Russia	15 529	7.3	17 308	30.3	12 532	7.8	12 213	1.4
Switzerland	2 086	1.0	2 428	19.0	2 673	1.7	2 796	10.0
Non-European industrialized countries[2]	23 933	11.2	24 237	1.5	22 559	14.0	25 196	20.3
Of which:								
Australia	2 677	1.3	2 358	–6.3	1 020	0.6	1 066	–6.4
Japan	4 033	1.9	3 641	–14.8	8 596	5.3	9 366	16.6
U.S.A	14 783	6.9	16 096	6.9	11 807	7.3	13 813	29.1
Dynamic Asian economies[3]	16 782	7.9	16 533	8.7	7 322	4.5	8 384	21.7
Of which:								
China	3 807	1.8	6 261	100.1	2 868	1.8	3 082	19.4
Hong Kong	3 957	1.9	4 132	31.5	635	0.4	892	36.6
South Korea	2 459	1.2	1 854	–27.9	706	0.4	940	29.0
Other countries	16 079	7.6	16 219	1.4	8 020	5.0	7 776	2.0
Total	212 840	100.0	229 761	14.1	160 996	100.0	172 866	13.0
Of which:								
Africa	3 339	1.6	4 032	48.2	1 379	0.9	1 430	29.1
Asia	29 947	14.1	27 752	–5.4	18 899	11.7	20 306	13.2
Central and South America	3 569	1.7	4 407	78.5	3 517	2.2	3 572	31.4
North America	16 839	7.9	17 896	6.8	12 861	8.0	14 660	25.2
Europe	156 047	73.3	172 772	18.2	123 096	76.5	131 510	11.9
Oceania	3 100	1.5	2 742	–4.3	1 242	0.8	1 286	–9.6

[1] Including exports / imports to EU unspecified by country.
[2] Australia, Canada, Japan, New Zealand, United States.
[3] China, Hong Kong, Malaysia, Singapore, South Korea, Taiwan, Thailand.

8. Domestic economic developments

8.1 Supply and use of resources, *mill. FIM, 1990 prices (seasonally adjusted figures)*

Period	Consumption expenditure		Fixed investment		Change in stocks, incl. statistical discrepancy	Domestic demand (1+2+3+4+5)	Exports	Imports	GDP (6+7–8)
	Private	Public	Private	Public					
	1	2	3	4	5	6	7	8	9
1993	240 177	103 028	60 638	13 890	10 221	427 954	142 459	113 842	456 571
1994	244 761	102 728	60 543	14 107	22 236	444 375	161 376	128 411	477 340
1995	255 968	104 645	69 718	13 338	20 568	464 237	174 580	137 327	501 490
1996	264 872	108 197	74 721	14 827	14 956	477 573	185 360	143 611	519 322
1997	273 700	108 995	84 629	15 822	16 903	500 049	209 172	158 689	550 532
1996									
I	65 886	26 706	18 315	3 582	5 294	119 783	44 040	36 200	127 623
II	65 504	27 028	18 168	3 667	2 371	116 738	46 209	35 048	127 899
III	66 267	27 153	19 090	3 778	3 709	119 997	46 309	35 322	130 984
IV	67 215	27 310	19 148	3 800	3 582	121 055	48 802	37 041	132 816
1997									
I	67 501	26 913	19 172	3 847	4 347	121 780	48 703	37 413	133 070
II	67 883	27 233	21 049	4 063	5 312	125 540	51 427	39 762	137 205
III	68 692	27 398	22 077	4 007	3 096	125 270	54 718	40 659	139 329
IV	69 624	27 451	22 331	3 905	4 148	127 459	54 324	40 855	140 928
1998*									
I	69 732	27 393	22 010	3 709	4 850	127 694	58 280	43 715	142 259
II	70 819	27 639	22 506	3 946	6 792	131 702	54 260	42 190	143 772

8.2 Volume of industrial production, *1995=100 (seasonally adjusted figures)*

Period	Total Industry (100.0)	Mining and quarrying (1.1)	Manu-facturing (90.0)	Wood and paper industry (23.5)	Metal industry (36.2)	Other manu-facturing (30.3)	Energy (8.9)
	1	2	3	4	5	6	7
1993	84.9	90.2	83.7	89.2	72.6	92.5	96.0
1994	94.2	102.0	93.4	99.5	85.1	98.4	101.6
1995	100.1	99.3	100.1	100.0	100.2	100.0	100.0
1996	103.8	100.7	103.3	97.0	107.4	103.5	109.1
1997*	113.2	123.5	113.5	110.9	120.0	107.2	109.0
1997*							
Sep	115.5	125.6	116.2	111.1	120.0	106.5	105.8
Oct	119.9	137.0	120.4	113.8	124.2	108.3	109.2
Nov	118.1	135.5	118.5	118.5	124.9	110.0	111.4
Dec	121.7	128.3	122.8	120.1	131.4	112.4	112.0
1998*							
Jan	119.0	114.1	120.3	114.7	130.8	110.4	106.8
Feb	120.1	115.7	121.1	116.6	131.8	110.2	110.8
Mar	121.3	118.7	122.1	116.1	134.6	109.7	113.8
Apr	122.5	122.5	123.6	118.3	135.7	111.4	111.7
May	122.9	109.1	124.4	120.7	136.4	111.4	108.8
Jun	118.7	67.1	120.3	111.4	132.8	109.9	111.3
Jul	124.8	67.9	127.9	116.0	149.0	111.5	110.5
Aug	121.6	52.0	124.3	119.2	138.5	110.8	107.3
Sep	122.3	77.5	124.5	113.6	145.1	109.6	105.9

8.3 *Indicators of domestic supply and demand,* *1990=100 (seasonally adjusted figures)*

Period	Volume of wholesale trade	Volume of retail trade	Volume of construction of buildings	Of which:		Imports of investment goods	Monthly GDP indicator
				Residential buildings	Industrial buildings		
	1	2	3	4	5	6	7
1993	68.5	78.1	46.9	47.2	35.6	72.9	89.8
1994	73.0	79.7	42.2	45.1	35.2	84.4	93.7
1995	76.2	82.6	42.0	41.1	49.9	88.5	97.8
1996	77.8	86.0	43.5	38.8	52.0	106.2	100.7
1997*	82.7	89.2	53.4	53.4	63.0	118.8	106.6
1997*							
Sep	93.2	81.1	55.4	54.3	66.0	128.1	107.6
Oct	93.9	80.9	56.8	55.6	66.6	132.4	108.6
Nov	93.1	82.4	58.1	56.6	67.0	117.7	109.1
Dec	95.3	83.5	58.7	58.2	66.5	130.2	110.3
1998*							
Jan	95.2	82.4	59.4	58.6	67.6	120.8	109.0
Feb	95.4	84.0	59.2	58.3	65.9	132.4	110.1
Mar	95.5	85.7	59.3	58.0	65.7	136.5	112.2
Apr	96.8	84.7	58.9	58.6	65.0	127.4	111.8
May	96.6	84.9	57.6	57.9	63.1	122.3	112.9
Jun	97.7	85.1	59.0	58.7	65.4	134.4	111.3
Jul	98.5	86.5	60.2	59.4	65.3	133.2	112.6
Aug	100.0	87.6	60.1	58.8	66.8	132.5	112.0
Sep	..	..	61.0	59.5	67.0	..	113.1

8.4 Wages and prices, 1990=100

Period	Index of wage and salary earnings	By sectors: Private	By sectors: Of which: Manufacturing (SIC 3)	By sectors: Public	Consumer price index	Indicator of underlying inflation	Basic price index for domestic supply	By origin: Domestic goods	By origin: Imported goods	Producer price index for manufacturing	By marketing area: Exported goods	By marketing area: Home market goods	Building cost index
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	109.2	108.8	110.0	110.1	109.7	109.9	104.8	100.8	119.3	105.5	109.2	103.9	100.7
1994	111.4	111.6	115.0	111.1	110.9	111.4	106.2	102.8	118.7	107.1	110.2	105.8	102.2
1995	116.6	117.4	123.1	114.7	112.0	111.3	106.9	103.8	118.5	110.8	118.0	107.7	103.5
1996	121.2	122.0	127.8	119.3	112.6	111.4	105.9	102.0	120.1	110.9	118.5	107.6	102.7
1997	123.7	124.4	130.8	122.0	114.0	112.3	107.6	104.0	120.9	111.4	116.8	109.1	105.2
1997													
Oct	..	..	..	..	114.9	113.1	108.7	105.0	122.3	113.0	119.8	110.0	106.3
Nov	..	..	..	..	114.8	112.9	108.5	104.9	121.7	112.8	119.2	110.0	106.2
Dec					114.8	113.0	108.2	104.8	121.0	112.8	119.9	109.7	106.3
1997													
II	123.6	124.4	130.9	121.7	114.0	112.2	107.1	103.6	120.2	110.7	115.3	108.7	104.8
III	123.8	124.6	131.3	121.9	114.4	112.5	108.2	104.5	122.0	112.0	117.2	109.7	105.9
IV	124.2	125.3	132.3	121.9	114.9	113.0	108.5	104.9	121.7	112.9	119.6	109.9	106.3
1998													
Jan	..	..	..	..	115.0	112.7	107.5	104.2	119.9	112.0	119.4	108.9	106.6
Feb	..	..	..	..	114.9	112.7	107.1	103.9	119.3	112.0	119.5	108.5	106.6
Mar	..	..	..	..	115.2	112.9	107.0	103.9	118.8	111.9	119.4	108.6	107.0
Apr	..	..	..	..	115.7	113.4	106.9	103.6	119.2	111.3	118.2	108.4	107.4
May	..	..	..	..	115.7	113.6	106.9	103.7	118.8	111.3	118.2	108.4	107.7
Jun	..	..	..	..	115.9	113.9	106.4	103.6	117.1	111.1	118.0	108.1	107.9
Jul	..	..	..	..	115.6	113.5	106.3	103.6	116.9	110.8	117.7	107.9	108.0
Aug	..	..	..	..	115.8	113.6	106.0	103.5	116.0	110.3	116.9	107.5	108.1
Sep	..	..	..	..	116.1	113.8	105.8	103.6	115.0	109.8	116.3	107.1	108.1
Oct	..	..	..	..	116.1	..	105.0	103.1	113.5	108.6	114.8	106.2	108.1
1998[1]													
I	127.7	128.8	135.7	125.3	115.0	112.7	107.2	104.0	119.3	112.0	119.4	108.7	106.7
II	128.0	129.1	136.0	125.5	115.8	113.6	106.7	103.6	118.4	111.2	118.1	108.3	107.7

[1] Preliminary figures for columns 1–4.

8.5 Labour, employment and unemployment *(seasonally adjusted figures)*

Period	Labour force partici-pation rate among 15–74 year olds	Labour force	Total employ-ment (4+5) = (6+7+8)	By industrial status		By industry			Unem-ployed	Unem-ploy-ment rate
				Self-employed	Wage and salary earners	Agri-culture, forestry and fishing	Mining, manufac-turing and energy supply	Other industries		
	%	1000 persons								%
	1	2	3	4	5	6	7	8	9	10
1993	65.3	2 484	2 041	312	1 729	173	424	1 444	444	17.9
1994	64.8	2 480	2 024	312	1 712	167	426	1 430	456	18.4
1995	65.1	2 497	2 068	304	1 764	158	456	1 454	430	17.2
1996	65.0	2 503	2 096	302	1 794	148	459	1 489	408	16.3
1997*	64.3	2 484	2 170	323	1 846	153	463	1 553	314	12.6
1997*										
Oct	64.0	2 470	2 176	327	1 849	155	461	1 559	295	11.9
Nov	64.2	2 486	2 192	332	1 860	147	463	1 582	294	11.8
Dec	64.8	2 511	2 211	329	1 882	149	472	1 589	300	11.9
1998*										
Jan	64.3	2 484	2 196	313	1 883	143	464	1 589	288	11.6
Feb	64.6	2 502	2 205	321	1 884	148	475	1 583	296	11.8
Mar	64.4	2 495	2 193	307	1 886	143	461	1 589	303	12.1
Apr	64.3	2 491	2 196	306	1 890	145	466	1 585	295	11.8
May	65.0	2 527	2 223	316	1 907	138	490	1 595	304	12.0
Jun	64.7	2 513	2 221	319	1 902	143	463	1 615	292	11.7
Jul	64.7	2 511	2 224	317	1 907	138	467	1 620	287	11.5
Aug	64.9	2 521	2 240	317	1 923	144	502	1 594	281	11.2
Sep	64.8	2 511	2 238	327	1 911	146	481	1 611	273	10.8
Oct	64.7	2 508	2 238	317	1 922	139	461	1 639	269	10.7

8.6 *Central government finances: revenue, expenditure and financial balance,*

mill FIM, cash flow basis

During period	Revenue							Expenditure			
	Direct taxes	Indirect taxes	Other taxes and similar revenue	Other revenue	Revenue before financial transactions (1+2+3+4)	Redemp–tions of loans granted by the state	Revenue before borrowing (5+6)	Consump–tion	Trans–fers and subsidies	Of which: Local govern–ment	Of which: Other domestic sectors
	1	2	3	4	5	6	7	8	9	10	11
1993	31 667	67 291	1 443	28 823	129 224	7 366	136 593	46 880	108 608	42 720	63 535
1994	34 588	68 124	1 792	24 095	128 599	7 308	135 900	48 750	108 155	40 388	65 519
1995	40 092	66 902	1 720	35 837	144 550	7 923	152 473	51 446	113 644	39 481	67 514
1996	48 357	73 943	1 947	39 778	164 024	9 893	173 918	53 696	110 039	33 199	69 533
1997	52 548	78 273	3 686	38 716	173 223	8 413	181 637	54 596	101 948	30 133	64 125
1997											
Oct	3 744	6 392	1 407	1 839	13 382	506	13 888	4 037	9 934	2 409	6 971
Nov	5 733	6 835	201	5 057	17 826	878	18 704	4 616	7 271	2 501	4 507
Dec	4 143	6 770	251	5 918	17 082	28	17 110	6 451	11 394	2 502	8 542
1998											
Jan	3 236	7 632	409	3 000	14 277	80	14 358	5 343	11 871	3 887	5 783
Feb	4 909	7 571	1 264	3 708	17 452	72	17 524	4 035	8 339	3 309	4 607
Mar	4 810	7 442	222	4 527	17 001	3 783	20 783	5 161	6 240	264	5 527
Apr	4 254	5 638	244	4 150	14 286	337	14 623	3 658	8 249	2 570	5 174
May	8 445	6 816	227	2 357	17 845	629	18 475	3 122	7 915	2 648	4 828
Jun	4 112	6 702	265	2 680	13 759	577	14 336	5 603	8 867	2 301	5 954
Jul	5 036	6 915	326	1 680	13 957	189	14 145	5 452	7 725	2 447	4 636
Aug	4 861	7 418	692	2 284	15 255	227	15 482	3 891	7 486	2 157	4 779
Sep	4 385	7 083	214	1 621	13 303	2 330	15 633	4 653	8 828	2 548	5 659
Oct	4 396	7 070	272	3 693	15 431	648	16 080	4 466	8 979	2 255	6 019

During period	Expenditure					Financial balance			
	Fixed invest–ment	Other expendi–ture	Expenditure before financial transactions (8+9+12+13)	Lending and other financial investment	Expenditure before redemptions of state debt (14+15)	Revenue surplus (5–14)	Net borrowing requirement (7–16)	Net borrowing	Cash surplus (18+19)
	12	13	14	15	16	17	18	19	20
1993	4 306	18 076	177 870	19 753	197 623	–48 646	–61 030	84 036	23 009
1994	3 737	22 281	182 923	17 886	200 760	–54 324	–64 860	73 193	8 336
1995	3 208	26 336	194 635	16 765	211 399	–50 085	–58 926	54 071	–4 854
1996	3 325	29 911	196 972	13 756	210 747	–32 947	–36 828	33 845	–2 983
1997	3 317	24 636	184 497	10 542	195 037	–11 274	–13 400	10 371	–3 028
1997									
Oct	297	1 957	16 225	682	16 906	–2 843	–3 018	–3 021	–6 039
Nov	234	734	12 855	589	13 444	4 971	5 260	–3 608	1 651
Dec	590	579	19 014	–286	18 730	–1 932	–1 620	–5 652	–7 271
1998									
Jan	217	3 658	21 089	587	21 676	–6 812	–7 318	417	–6 901
Feb	203	1 165	13 742	453	14 196	3 710	3 328	–2 821	507
Mar	169	7 033	18 603	4 456	23 059	–1 602	–2 276	–3 653	–5 928
Apr	223	5 472	17 602	522	18 124	–3 316	–3 501	–5 358	–8 859
May	265	2 013	13 315	508	13 822	4 530	4 653	5 713	10 366
Jun	262	2 117	16 849	606	17 455	–3 090	–3 119	11 215	8 096
Jul	280	1 108	14 565	767	15 331	–608	–1 186	–793	–1 979
Aug	278	678	12 333	562	12 895	2 922	2 587	8 187	10 774
Sep	306	5 359	19 146	807	19 952	–5 843	–4 319	54	–4 265
Oct	336	1 975	15 756	705	16 462	–325	–382	–1 445	–1 827

Notes and explanations to the statistical section

General

Source
Unless otherwise stated, the source or compiler of figures is the Bank of Finland.

Symbols used

*	Preliminary
r	Revised
0	Less than half the final digit shown
.	Logically impossible
..	Data not available
–	Nil
S	Affected by strike
_	Break in series

Owing to rounding of figures, the sum of the individual items in the tables may differ from the total shown.

Notes and explanations to tables

1 The balance sheet of the Bank of Finland

Table 1.2 *Domestic financial sector.* Term claims on deposit banks, net (Column 12) = bank certificates of deposit held by the Bank of Finland + securities with repurchase commitments + term credits – term deposits. Other claims on financial institutions, net (Column 14) = till-money credits to deposit banks (until May 1993) + bonds + other claims on financial institutions + liquidity credits – call money deposits (until September 1995) – other liabilities to financial institutions.

2 The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position

Table 2.1 From 2 October 1995, banks fulfil their minimum reserve requirement as a monthly average of deposits. From October 1995, the requirement and deposits are shown for the month during which the requirement is to be fulfilled. Before deposits were shown for the previous month, because deposits were matched with the requirement on the last banking day of that month. The requirement is determined on the basis of the reserve base two months earlier (up to September 1995 one month earlier). The reserve base was changed on 31 March 1995 to comply with the new balance sheet format. Liquidity credits (Column 7): see explanations, Table 3.2.

Table 2.2 Money market instruments are the instruments used by the Bank of Finland in its money market operations. Matured money market instruments, net, comprise both instruments purchased and sold. Money market transactions are recorded according to trade dates.

Table 2.3 Foreign exchange transactions are recorded according to trade dates. In addition to spot transactions (Columns 1, 2, 4 and 5) the Bank of Finland's foreign exchange reserves are affected by interest payment and by changes in both the prices of securities and exchange rates. Spot transactions related to forward contracts (Column 4) refer to the combined effects on the foreign exchange reserves of forward transactions in the form of swaps and maturing forward transactions. The central government's foreign exchange transactions (Column 5) comprise transactions related to drawings and redemptions of government loans and associated interest payments.

Table 2.4 The markka value of forward contracts is given.

3 Rates of interest

Table 3.1 The interbank overnight rate (Column 1) is weighted using amounts of interbank deposits as weights. Since 1 June 1995, HELIBOR rates (Helsinki Interbank Offered Rate) (Columns 2–5) have been calculated on the basis of the bid rates (offered rates for funds) quoted for their own certificates of deposit by all the banks that have been accepted by the Bank of Finland as counterparties in money market operations. An additional condition is that a bank gives regular quotations. The highest and lowest rates quoted for each maturity are omitted and an arithmetic average calculated for the remaining rates. The quotations are taken daily at 1 p.m.

Table 3.2 The Bank of Finland's tender rate (Column 1) is determined in tenders held by the Bank of Finland, in which the banks are asked to make bids or offers for money market instruments with a maturity of one month. The tender rate is the weighted average of accepted bids or offers, expressed as a simple annual interest rate. If, when requesting bids or offers, the Bank of Finland announces an acceptable interest rate (fixed-rate tender), the tender rate is the same as the rate announced by the Bank. The monthly and annual values for the tender rate are the arithmetic means of calendar day figures.

Credit institutions which are subject to the minimum reserve requirement and maintain a current account with the Bank of Finland may obtain liquidity credit to cover overdrafts and to fulfil their minimum reserve requirement. They can obtain liquidity credit with a maturity of 1 day, 7 days, 14 days, 21 days or 28 days. The maturity of liquidity credit is determined by the Bank of Finland. The rate of interest on liquidity credit is obtained by adding together the Bank of Finland's tender rate and the interest rate margin for liquidity credit. The call money deposit rate in use prior to October 1995 was obtained by subtracting the interest rate margin for call money deposits from the Bank of Finland's tender rate. Since 2 October 1995, the monthly average of a bank's call money deposits exceeding the minimum reserve requirement has been treated as excess reserve. The interest rate paid on excess reserves is determined separately by the Bank of Finland. The values for maturity and interest rate margins are the last values recorded in each period.

Table 3.3 The rates shown are based on the lending rates quoted for the respective currencies in the Euromarket. ECU (Column 1): the weights of the ECU basket. 3 currencies (Column 2): DEM 60, USD 30 and GBP 10 per cent.

Table 3.4 *Lending.* New credits (Columns 1–4): rates of interest on new credits drawn during the month are average monthly rates weighted by loan amounts. Annual rates are arithmetic average of monthly observations until 1987 after which they are weighted by loan amounts. Average lending rates (Columns 5 and 6) are all weighted by loan amounts. As from January 1989, the loans of Postipankki Ltd have been included in the commercial banks' outstanding stock of loans. *Deposits*. 24-month and 36-month tax-exempt deposits (Columns 7 and 8): from May (September) 1992, 24-month (36-month) deposits are tax-exempt if they carry a rate of interest which is at most the Bank of Finland's base rate less two percentage points (one percentage point). In the period from January 1989 to April 1992, 24-month deposits (Column 7) were tax-exempt if they carried a rate of interest which was at most the Bank of Finland's base rate less one percentage point. Other tax-exempt deposits (Column 9): in the period from January 1989 to April 1992, deposits other than 24-month deposits were tax-exempt if they carried a rate of interest which was at most the Bank of Finland's base rate less 4 percentage points. From May 1992, deposits other than 24-month or 36-month deposits are tax-exempt if they carry a maximum rate of interest as prescribed by law. The maximum rate was first set at 4.5 per cent. From May 1993 until November 1993 it was 2.5 per cent and thereafter 2.0 per cent. All markka deposits (Column 10): the stock of deposits comprises all markka deposits by the public. The monthly and annual average rates of interest are weighted by deposit amounts. Other funding (Column 11): CDs outstanding + promissory notes + bonds. The average rate of interest is weighted by amounts. Total markka funding (Column 12); markka deposits by the public + banks' other markka funding. The rate of interest is weighted by amounts.

Table 3.5 Reference rates (Columns 1 and 2) are calculated by the Bank of Finland as the monthly averages of the offered rates for taxable, fixed-rate bonds quoted daily by the five largest banks. The yields on five-year and ten-year government bonds (Columns 3 and 4) are calculated by the Bank of Finland as averages of the bid rates quoted daily by the primary dealers. As from 1 July 1998 the five-year yield is based on quotations for a fixed-rate bullet serial bond (1/93, 15 March 1993 – 15 March 2004). As from 24 November 1997 the ten-year yield is based on quotations for a fixed-rate bullet serial bond (1/97, 25 April 1997–2008). The share yield (Column 5) is the weighted effective yield on shares quoted on the Helsinki Stock Exchange. Source: Statistics Finland.

4 Rates of exchange

Table 4.2 FIM/ECU (Column 1): The markka value of the ECU is calculated as the sum of the dollar amounts of the currencies in the ECU valued at current market rates quoted daily at noon Finnish time. The markka was floated on 8 September 1992, continuing until 14 October 1996, when it was joined to the EU's Exchange Rate Mechanism (ERM) at the central rate of 5.80661 per ECU. As from 16 March 1998 the ECU central rate is FIM 6.01125. Trade-weighted currency index (Column 2): The weights are moving averages of the shares of (currently) 16 countries in Finland's foreign merchandise trade (only convertible currencies are included). The payments currency index (Column 3): The weights are moving averages of shares of payments currencies (16 convertible currencies) in Finland's foreign trade.

Table 4.3 The table shows the deviations of the markka's market exchange rate (markka value of the foreign currency) as a percentage of the ERM central rate for each currency. A plus (+) indicates that the markka is weaker than its central rate value against the other currency; the intervention limit is (central rate) +16.121 per cent. A minus (–) indicates that the markka is stronger than its central rate value against the other currency; the intervention limit is (central rate) –13.881 per cent.

5 Financial markets and money supply

Table 5.1 The public comprises all entities except the central government, deposit banks and the Bank of Finland. Markka deposits are classified according to tax treatment. The tax status (exempt vs subject to withholding tax) of deposits held by households and estates is determined by the rate of interest. Time deposits that are tax-exempt under income tax law (maximum interest rate: 2 per cent) were transferred in connection with a statistical revision from other deposits (column 3) to time deposits (column 2) at the start of 1997. The remaining traditional 24- and 36-month tax-exempt deposits matured in 1996 and 1997 as the law on deposits tax relief expired. The withholding tax is a final tax collected at source by banks in connection with the payment of interest. Deposits under 'Other taxable' (columns 8–10) are held by entities other than households and estates, ie mostly by enterprises and local governments, and interest earned on them is taxed as ordinary income. Other markka funding (column 13) comprises CDs issued by banks, money market promissory notes and repo sales. The figures for bank CDs include only CDs held by entities other than banks, the Bank of Finland and the central government.

Table 5.2 The public comprises all entities except the central government, deposit banks and the Bank of Finland. Loans granted from central government funds are not included in markka lending. Banks' markka lending to the foreign sector (column 6) comprises foreign economic units located in Finland, eg foreign embassies, consulates and units of international organizations. As from 1 Jan 1997 lending to these entities is no longer included in domestic lending, pursuant to the new classification of institutional sectors. The breaks in series at end-1996 are due to the statistical revision. Since the revision, these columns do not include lending by foreign branches of Finnish deposit banks nor do columns 1–7 and 9 any longer include bonds, debentures and other bearer instruments held by banks and classified as investment assets.

Table 5.3 Foreign assets, net (Column 1) = the Bank of Finland's foreign claims + banks' foreign claims (incl. foreign claims of banks' foreign branches) – the Bank of Finland's foreign liabilities – banks' foreign liabilities (incl. foreign liabilities of banks' foreign branches). *Domestic credit.* Net claims on the central government (Column 2) = the Bank of Finland's claims on the central government + banks' claims on the central government – the central government's deposits with the Bank of Finland and Postipankki – loans granted from state funds through banks. Claims on the public (incl. local government), (Column 3) = the Bank of Finland's claims on the private sector + banks' claims on the private sector (loans to the public, bonds and debentures (excl. government bonds and bank debentures), claims on other financial institutions, shares held by banks). Other items, net (Column 5) = capital accounts and other items of the Bank of Finland (incl. private sector time deposits with the Bank of Finland) + capital accounts of deposit banks + unclassified assets and liabilities of deposit banks, net (bank debentures, bank CDs held by the public, other market funding and foreign currency deposits by the public). M_1 (Column 6) = currency in circulation – banks' till money + markka cheque and postal giro account deposits and transactions account deposits held by the public. M_2 (Column 7) = M_1 + quasi-money (markka time deposits held by the public, excl. deposits with the Bank of Finland). M_3 (Column 8) = M_2 + bank CDs held by the public.

Table 5.4 Source: State Treasury Office. Other foreign currency-denominated debt (Column 2) consists of other bonds and debentures and long-term promissory notes. Other bonds and debentures are so-called private placings; long-term promissory notes are bank loans. Miscellaneous items (Column 7) consist of two minus items, the liability to the State Pension Fund and the liability to the State Fund for Nuclear Waste Disposal, which are intragovernmental debts. In the September 1997 issue of the Bulletin, columns 7, 8 and 9 were retroactively revised for the whole period shown. Outstanding lending (Column 10) comprises the stock of loans granted from the central government budget and from extra-budgetary funds. Cash funds (Column 11) comprise the cash funds held in central government accounting offices, funds held in cheque and postal giro accounts, as well as placements of central government cash funds. The main part of the latter is reserved for covering transferable allocations budgeted in previous years.

Table 5.5 Sources: Table A: Financial Supervision from the beginning of 1994. Table B: Statistics Finland. Table C: Finnish Central Securities Depository from 1 August 1997. Tables A and B include markka-denominated bonds issued by Finnish issuers in Finland and abroad as well as those issued by foreign issuers in Finland. As from 15 January 1997 the following act as primary dealers: Alfred Berg Finland, Den Danske Bank, Evli Fixed Income Securities, Goldman Sachs International, Merita Bank, Okobank, Postipankki, Skandinaviska Enskilda Banken, Svenska Handelsbanken AB (publ) and Unibank A/S. Customers include all parties other than primary dealers.

Table 5.6 Source: The Helsinki Stock Exchange. The table has been expanded to take into account the change in the Helsinki Stock Exchange classification of listed companies as from the start of 1997. Column 3 now includes only insurance.

6 Balance of payments, foreign assets and liabilities

Table 6.1 The figures for the trade and goods and services accounts are compiled in accordance with the System of National Accounts. The figures for investment income and expenditure (Columns 7 and 16) include reinvested earnings on direct investment. Preliminary data on reinvested earnings in the previous year have been included in the current account figures (the annual figure is divided evenly between quarterly figures).

Tables 6.2–6.4 Since the beginning of 1994, the former capital account of Finland's balance of payments has been compiled according to the IMF's new recommendations (IMF Balance of Payments Manual, Fifth Edition, 1993).

Table 6.2 The capital account (Columns 1 and 14) reflects unrequited capital transfers such as forgiven debts and aid from EU funds.

In the financial account financial derivatives include payments arising from currency and interest rate swaps related to loans, ie outstanding loans are recorded according to the original loan contract. Medium-term notes (MTNs) are included under bonds (Columns 4 and 17). The category other investment (Columns 9–12 and 21–24) covers transactions related to trade credits, loans, currency and deposits and other assets and liabilities. Transactions in assets and liabilities related to short- and long-term supplier credits and advance payments related to imports and exports are recorded under trade credits (Columns 9 and 21). The item 'Other capital' (Columns 11 and 23) includes transactions in currency and deposits and short- and long-term assets and liabilities of different sectors not covered by any of the items above. In addition, this category includes changes in the central government's subscriptions to and quotas in international organizations as well as transactions in the Bank of Finland's short- and long-term assets and liabilities (excl. reserve items). The most important sub-item under the item 'other capital' comprises banks' other short-term assets and liabilities (in practice interbank deposits). The central bank's reserve assets (Column 26) comprise gold, special drawing rights (SDRs), the reserve position in the IMF, ECU-claim on the ECB and foreign exchange assets. A negative figure implies an increase in reserves.

Table 6.3 The data are classified as in Table 6.2. The items have been translated into markkaa using the spot rates for each date; thus the figures include the impact of changes in exchange rates.

Table 6.4 This contains data on Finland's net international investment position (assets less liabilities) classified by sector.

As of January 1998, Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

7 Foreign trade

Source: The National Board of Customs (except for table 7.2). All tables refer to foreign trade in goods.

Table 7.2 The volume indices (Columns 1 and 2) are calculated from the export and the import values, deflated by the price indices (Columns 3 and 4). Deflation and seasonal adjustments are carried out by the Bank of Finland. The export and the import price indices are provided by Statistics Finland. The terms of trade (Column 5) is the ratio of the export price index to the import price index, multiplied by 100.

Table 7.4 In addition to all EU countries, those countries are listed whose shares of Finland's exports are at least 1 per cent.

8 Domestic economic developments

Tables 8.1 – 8.5 Source: Statistics Finland. Seasonal adjustment for tables 8.1 and 8.2 is provided by Statistics Finland, for tables 8.3 and 8.5 by the Bank of Finland.

Table 8.2 Volume index of industrial production has been revised. The new base year is 1995 = 100. Industrial classification has also been slightly revised. The indices are adjusted for the number of working days in each month. This causes small differences in the annual averages from the corresponding unadjusted figures.

Table 8.3 The indices of wholesale and retail trade (Columns 1 and 2) are seasonally adjusted by Statistics Finland. The monthly GDP indicator (Column 7) is a weighted index of 11 readily available output indicators for various industries.

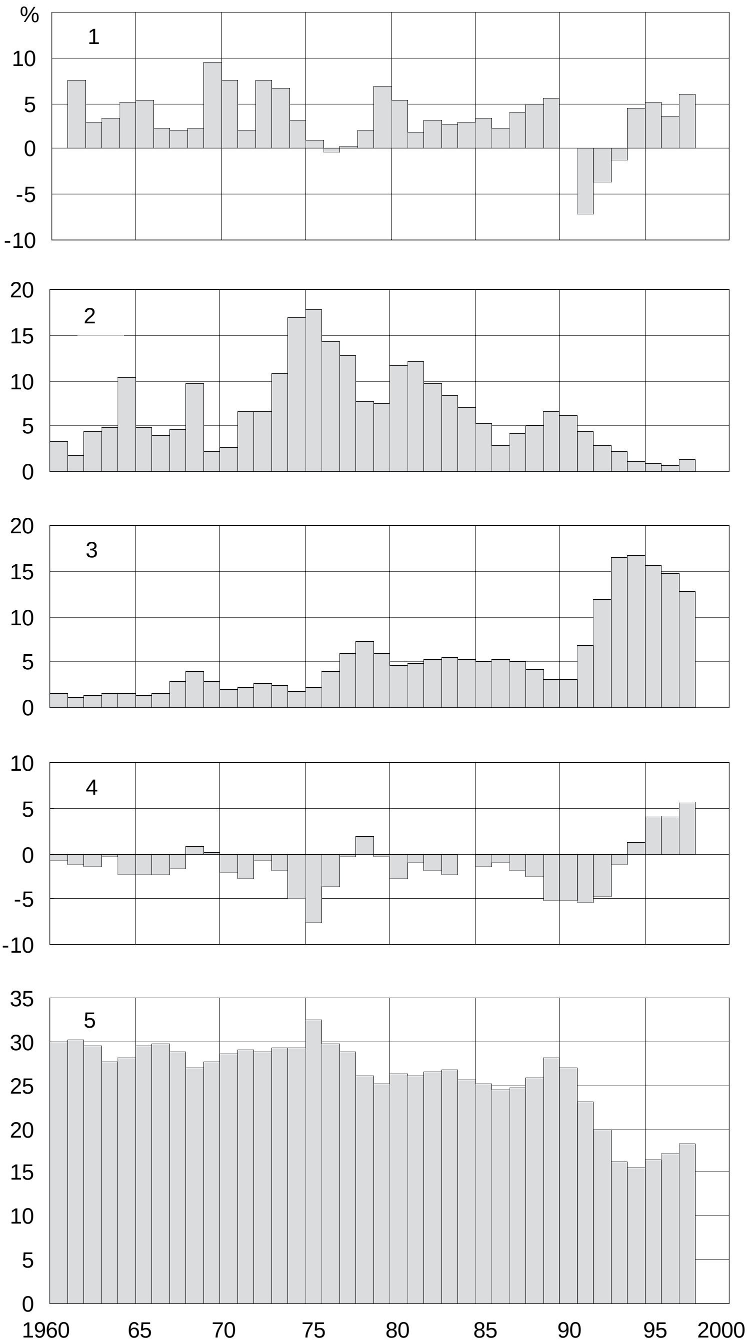
Table 8.4 The indicator of underlying inflation (Column 6) is the consumer price index from which the effect of indirect taxes, subsidies and housing-related capital costs (house prices and mortgage interest payments) has been removed (see the article by Pentti Pikkarainen and Timo Tyrväinen in the June – July 1993 issue of the Bulletin). Statistics Finland calculates the indicator and publishes it together with the consumer price index on the 15th of every month (or the next business day). It is lagged by one month in comparison with the consumer price index.

Table 8.5 Starting with 1997, all the data in the table are consistent with EU standards. All data will be revised as from the beginning of 1998 and will be available later. Therefore there is presently a discontinuity in the series.

Table 8.6 Source: Ministry of Finance.

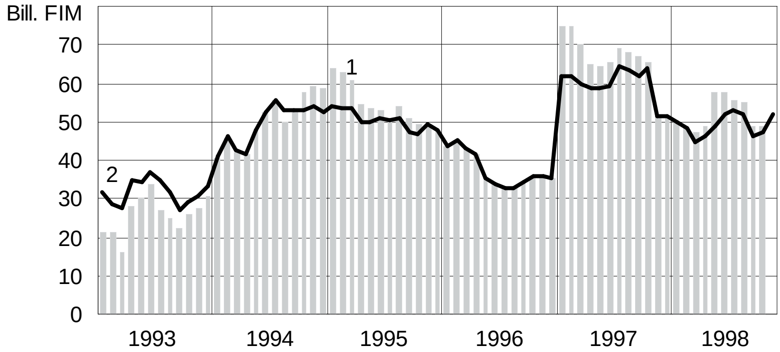
1. Long-term indicators S30
2. The Bank of Finland’s foreign exchange reserves and forward position S31
3. Forward market S31
4. Interest rates set by the Bank of Finland S31
5. Banks’ liquidity position at the Bank of Finland S32
6. Liquidity management interest rates S32
7. HELIBOR interest rates, daily S32
8. HELIBOR interest rates, monthly S33
9. Bond yields S33
10. Differential between Finnish and German interest rates S33
11. Differential between German and selected EU-countries’ 10-year interest rates S34
12. ERM exchange rates: deviation from DEM central parity S34
13. ERM exchange rates: deviation from DEM central parity S34
14. Bank of Finland currency index and markka value of the ECU S35
15. Daily spot rates for the markka against the Deutschemark and US dollar S35
16. Daily spot rates for the markka against the pound sterling and Swedish krona S35
17. Monthly spot rates for the markka against the Deutschemark and US dollar S36
18. Monthly spot rates for the markka against the pound sterling and Swedish krona S36
19. Banks’ markka lending rates and markka funding rates S36
20. Bank funding from the public S37
21. Bank lending to the public S37
22. Money supply S37
23. Current account S38
24. Balance of payments S39
25. Net interest and dividend expenditure S40
26. Finland’s net international investment position S40
27. Share market S40
28. Foreign trade S41
29. Foreign trade: prices and terms of trade S41
30. Finland’s export performance S41
31. Production S42
32. Fixed investment S42
33. Employment and the unemployment rate S43
34. Prices and wages S43
35. Central government finances S44
36. Central government debt S44

1. Long-term indicators



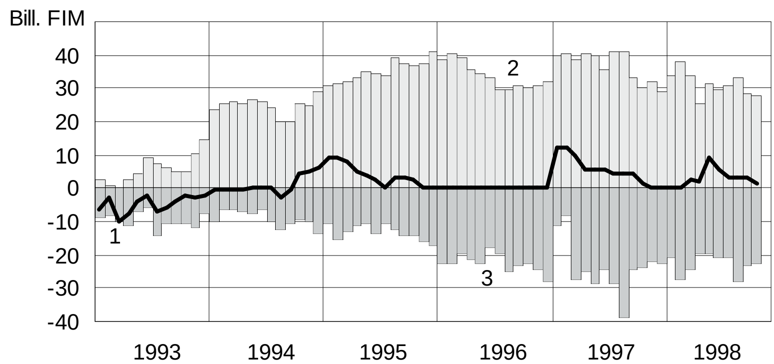
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

2. The Bank of Finland's foreign exchange reserves and forward position



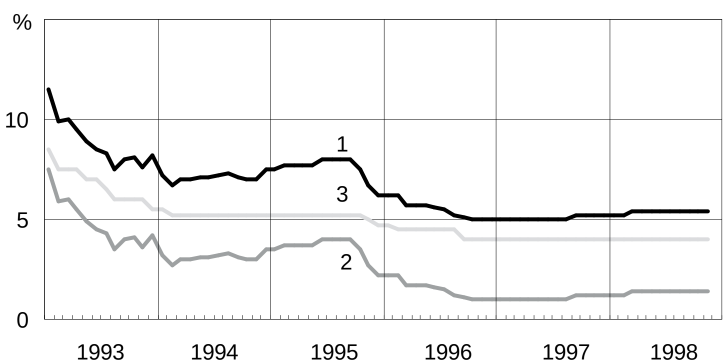
1. Foreign exchange reserves plus forward position
2. Foreign exchange reserves

3. Forward market



1. Forward exchange purchased by the Bank of Finland
2. Forward exchange sold to banks by domestic customers
3. Forward exchange sold to banks by foreign customers

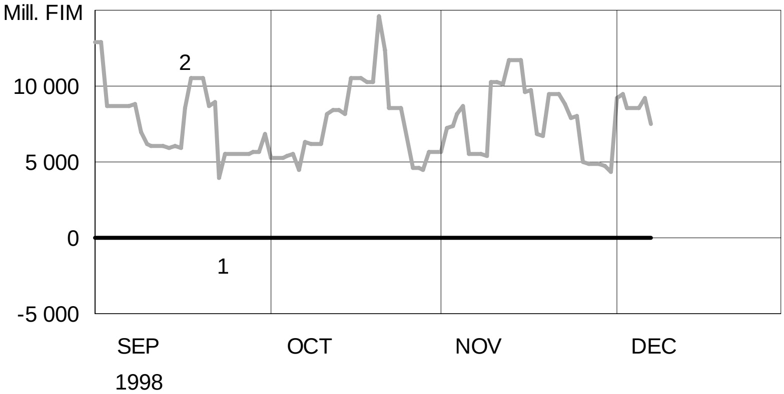
4. Rates of interest set by the Bank of Finland



1. Liquidity credit rate (up to 2 July 1992 call money credit rate)
2. Excess-reserve rate (call money deposit rate until 2 October 1995)
3. Base rate

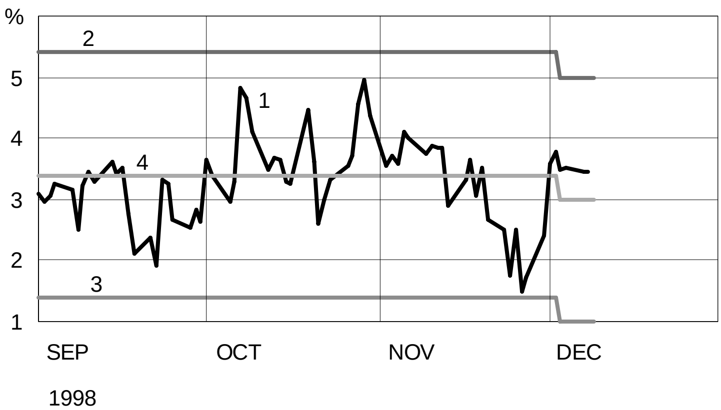
End-of-month observations

5. Banks' liquidity position at the Bank of Finland



1. Liquidity credits (–)
2. Reserve deposits

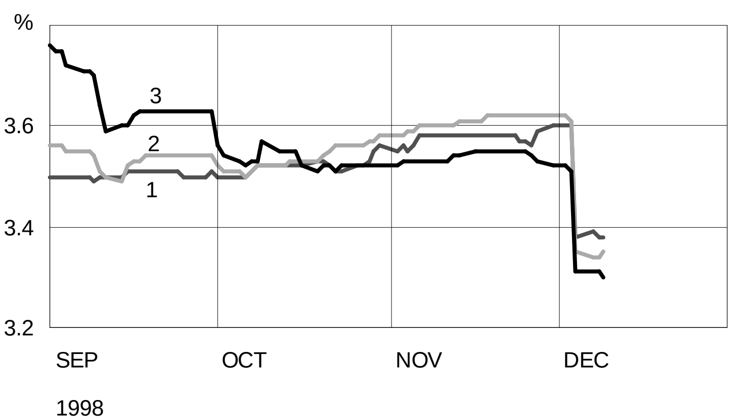
6. Liquidity management interest rates



1. Inter-bank overnight rate
2. Liquidity credit rate
3. Excess-reserve rate
4. Tender rate

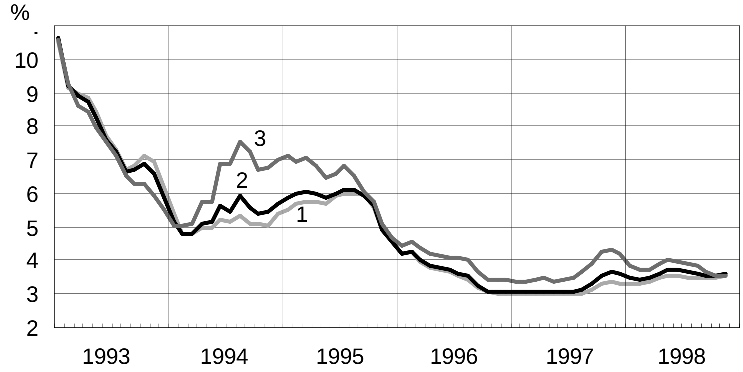
Daily observations

7. HELIBOR rates of interest, daily



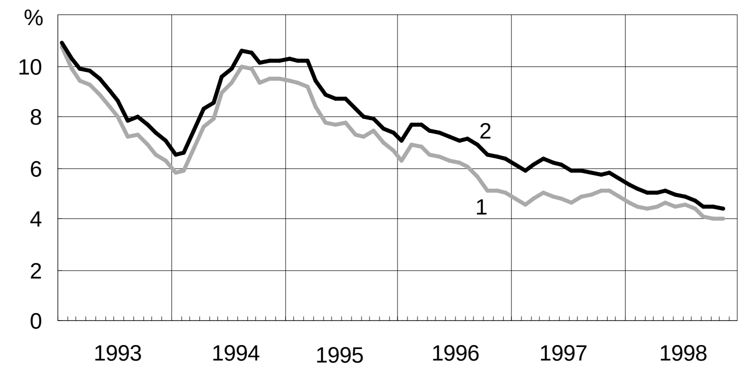
1. 1-month HELIBOR
2. 3-month HELIBOR
3. 12-month HELIBOR

8. HELIBOR interest rates, monthly



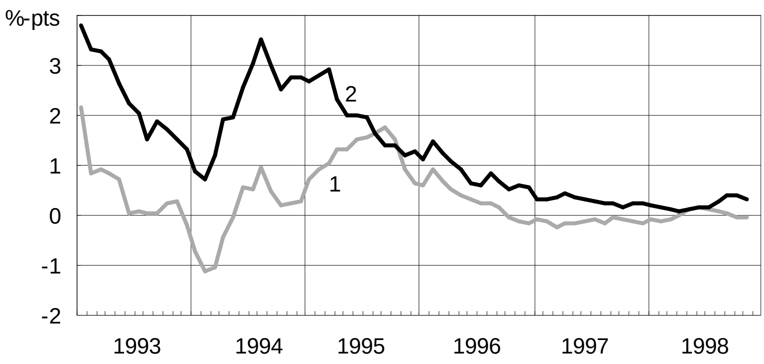
1. 1-month HELIBOR
2. 3-month HELIBOR
3. 12-month HELIBOR

9. Bond yields



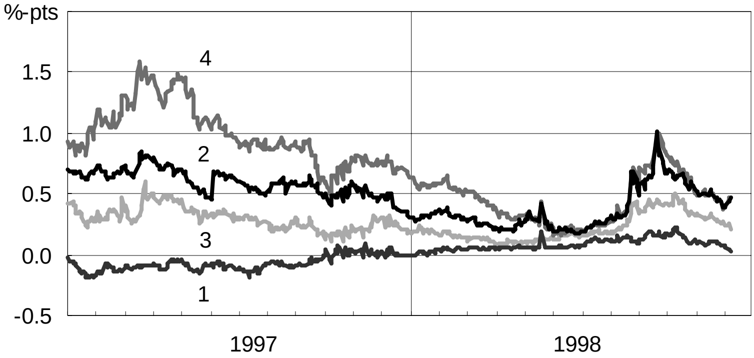
1. Yield on 5-year government bonds
2. Yield on 10-year government bonds

10. Differential between Finnish and German interest rates



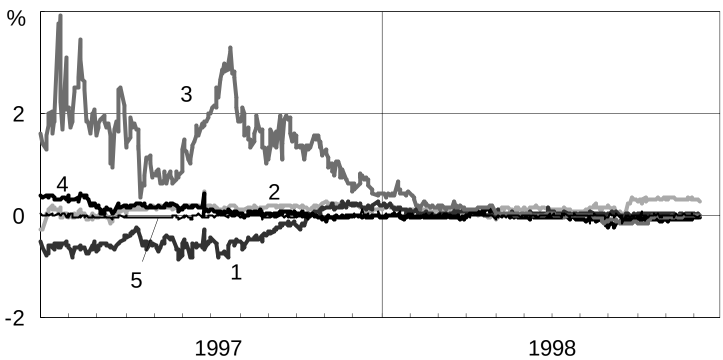
1. 3-month HELIBOR minus 3-month DEM eurorate
2. 10-year Finnish government bond yield minus 10-year German government bond yield

11. Differential between German and selected EU-countries' 10-year interest rates



1. France
2. Denmark
3. Finland
4. Sweden

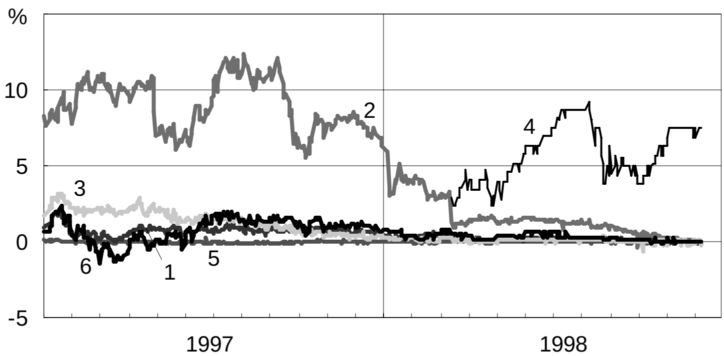
12. ERM exchange rates: deviation from DEM central parity



1. FRF
2. DKK
3. FIM
4. NLG
5. ATS

Rising curve means appreciation against the DEM

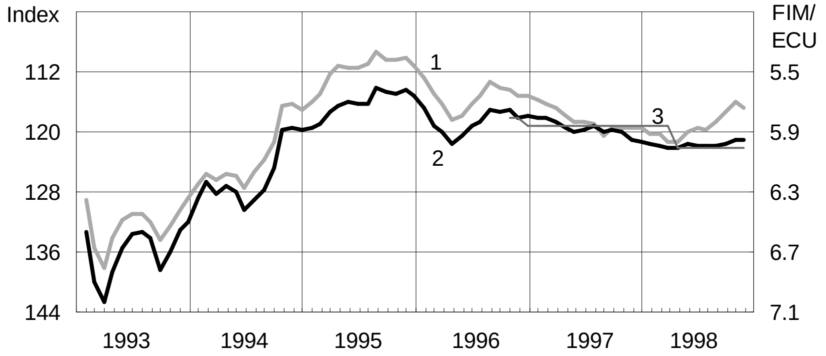
13. ERM exchange rates: deviation from DEM central parity



1. ESP
2. PTE
3. IEP
4. GRD
5. BEF
6. ITL

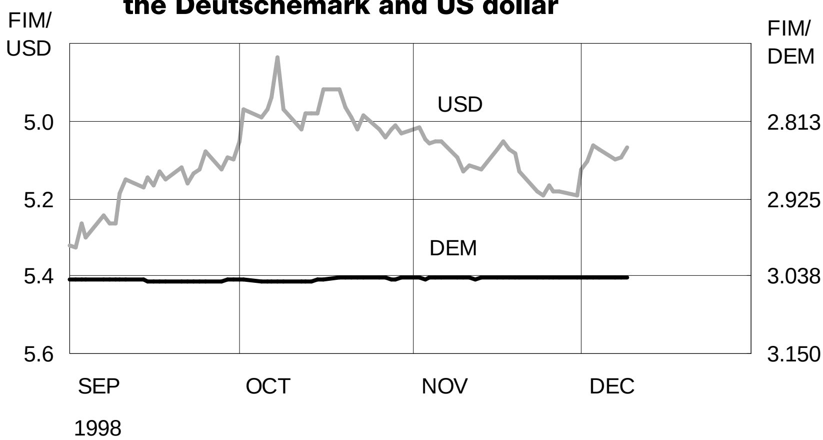
Rising curve means appreciation against the DEM

14. Bank of Finland currency index and markka value of the ECU



1. Bank of Finland currency index, 1982 = 100 (left scale)
2. Markka value of the ECU from 7 June 1991 (right scale)
3. ECU central rate from 14 October 1996 (right scale)

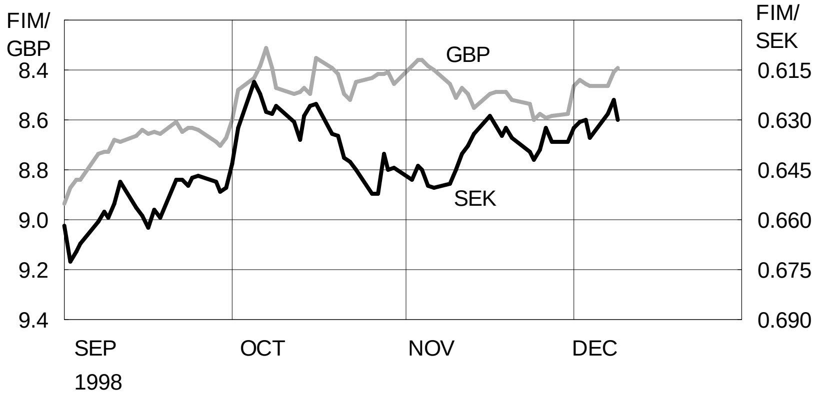
15. Daily spot rates for the markka against the Deutschemark and US dollar



Middle rates

DEM = right scale
USD = left scale

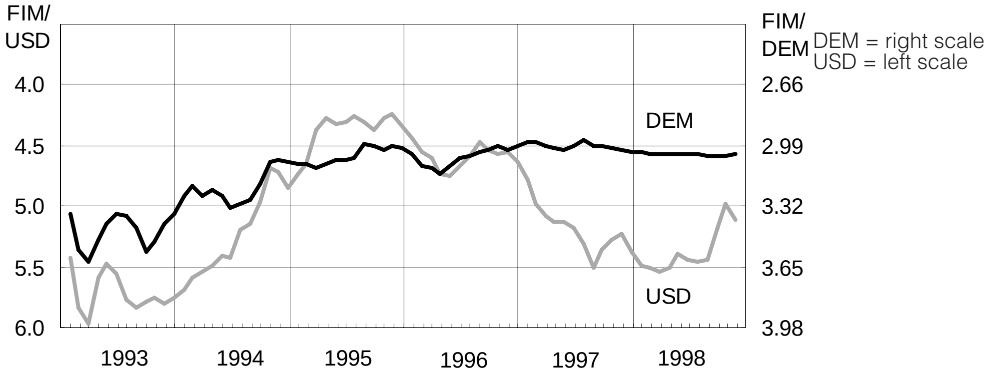
16. Daily spot rates for the markka against the pound sterling and Swedish krona



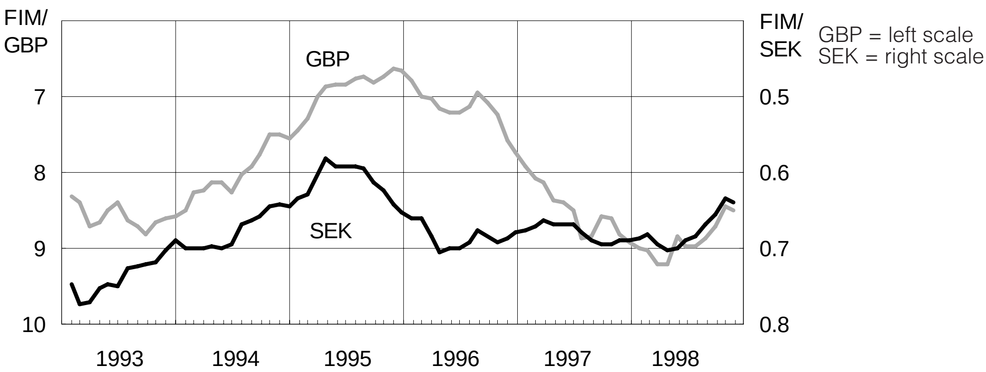
Middle rates

GBP = left scale
SEK = right scale

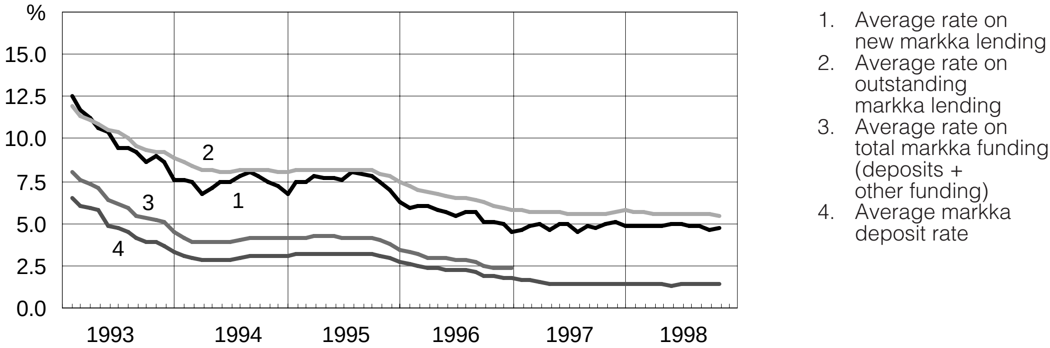
17. Monthly spot rates for the markka against the Deutschemark and US dollar



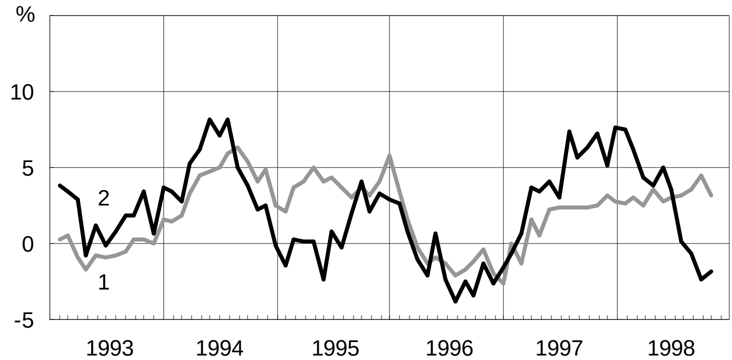
18. Monthly spot rates for the markka against the pound sterling and Swedish krona



19. Banks' markka lending rates and markka funding rates



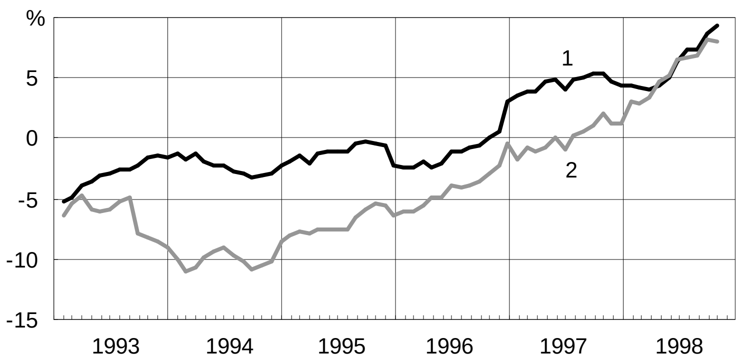
20. Bank funding from the public



1. Markka deposits
2. Total funding

Change from the corresponding month of the previous year, per cent

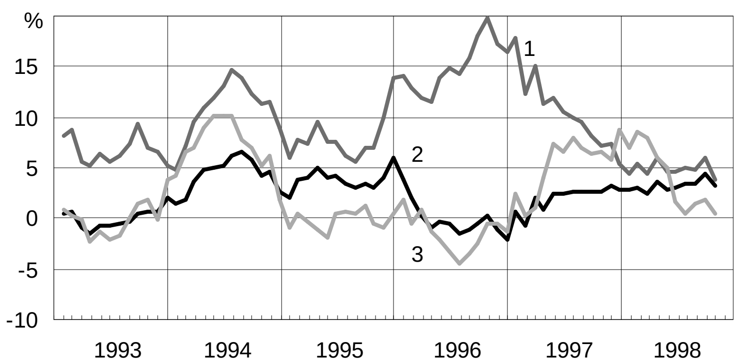
21. Bank lending to the public



1. Markka lending
2. Total lending

Change from the corresponding month of the previous year, per cent

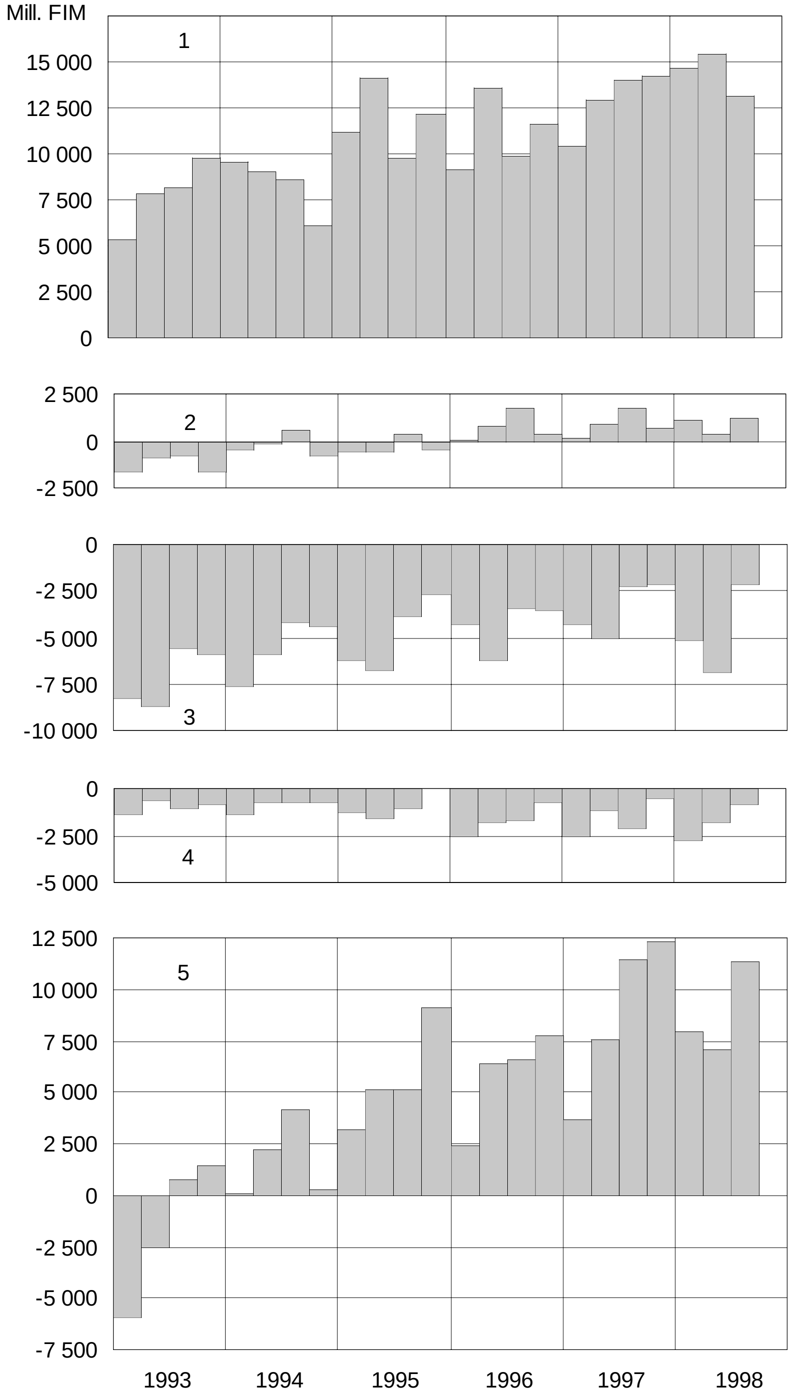
22. Money supply



1. Narrow money (M1)
2. Broad money (M2)
3. M2 + bank CDs held by the public (M3)

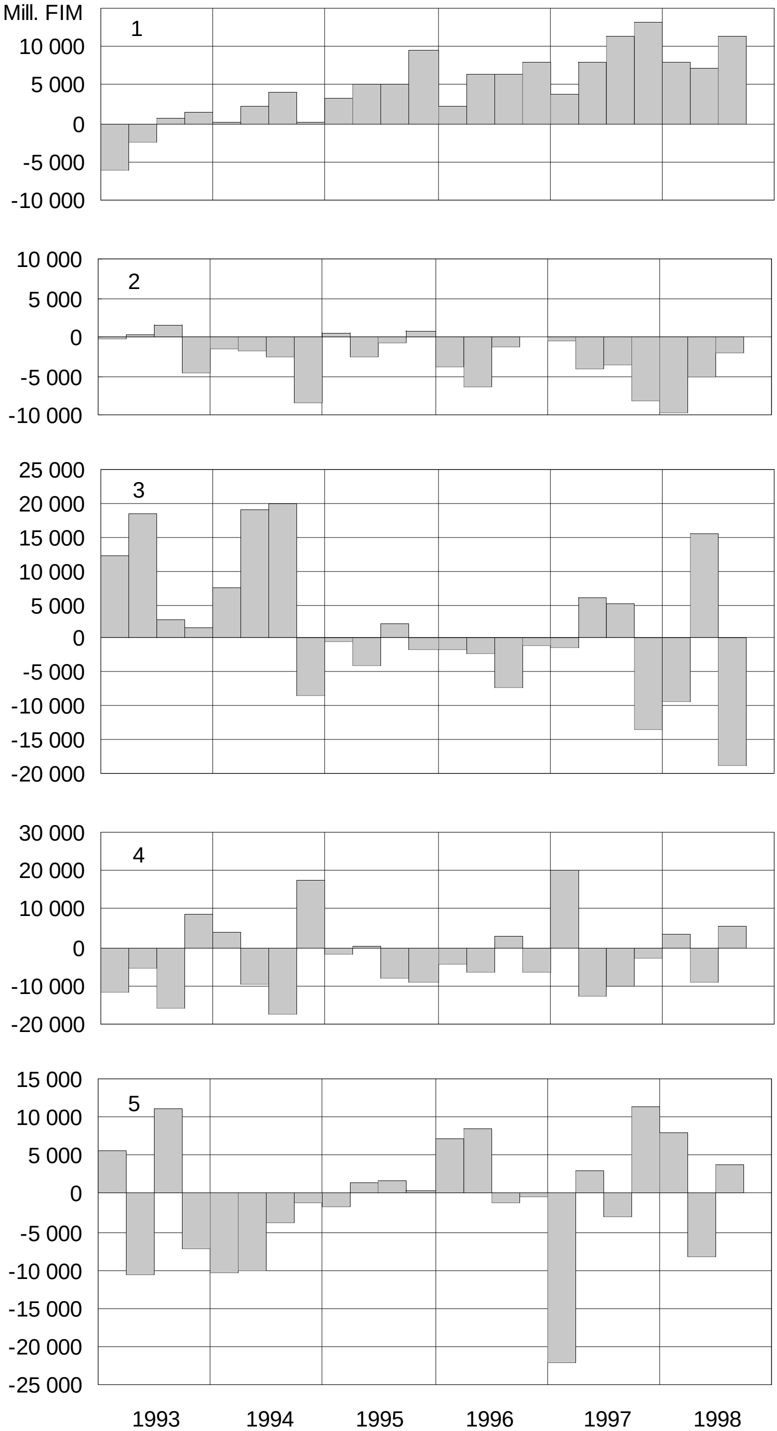
Change from the corresponding month of the previous year, per cent

23. Current account



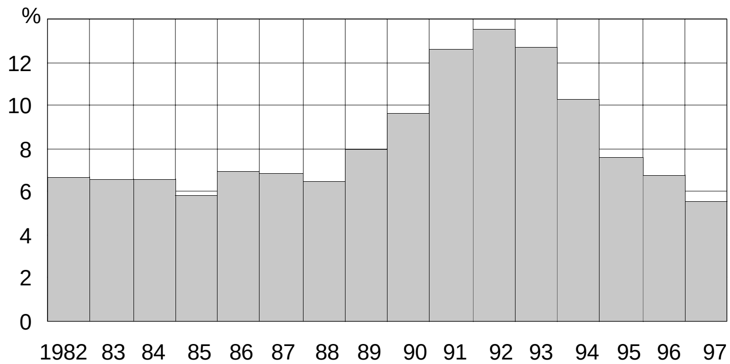
1. Trade account
2. Services account
3. Investment income account
4. Unrequited transfers account and other items, net
5. Current account

24. Balance of payments



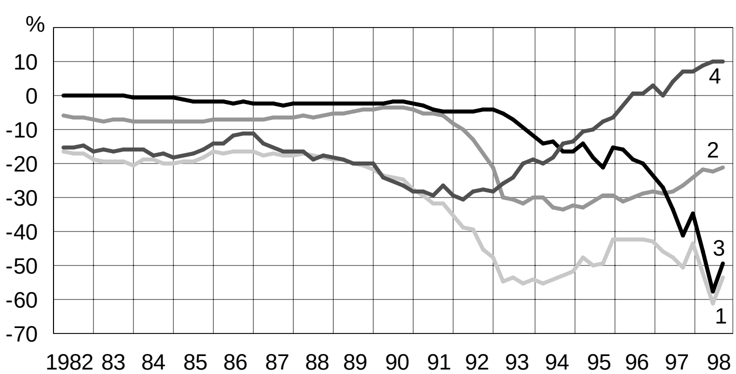
1. Current and capital account
2. Direct investment
3. Portfolio investment
4. Other investment
5. Change in central bank's reserve assets (increase = –)

25. Net interest and dividend expenditure



As per cent of current account receipts

26. Finland's net international investment position

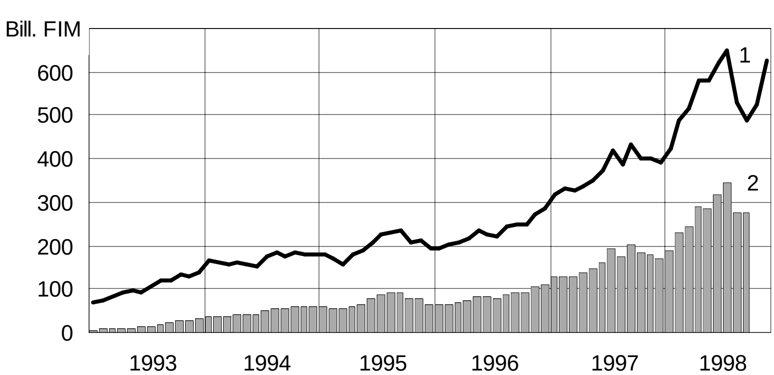


As a per cent of GDP

1. Total NIIP
2. Central government (in foreign currencies)
3. Government and other markka-denominated securities
4. Other, net (excl. Bank of Finland's foreign reserve assets)

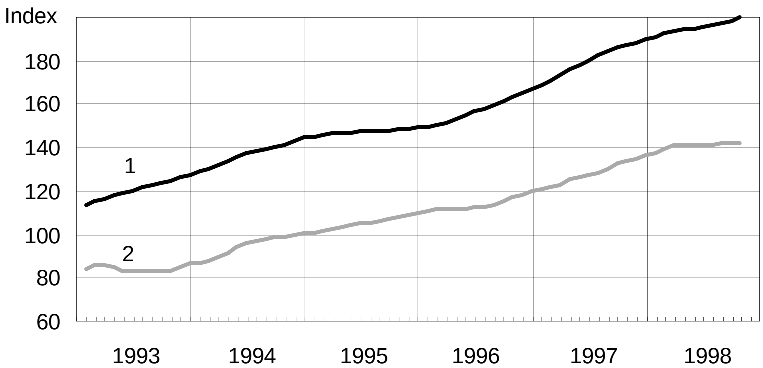
Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

27. Share market



1. Market capitalization of listed shares
2. Non-residents' holdings of Finnish shares

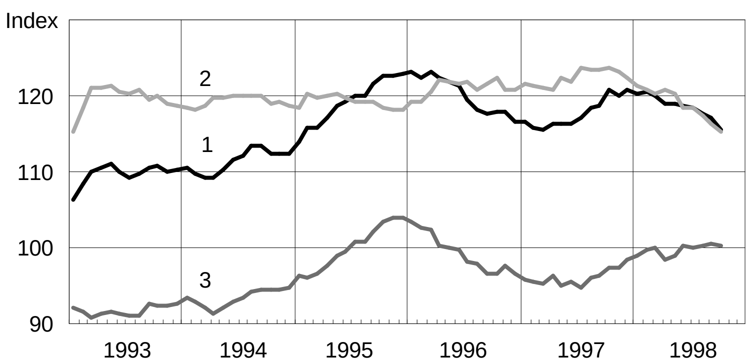
28. Foreign trade



1. Exports of goods
2. Imports of goods

Volume index, 1990 = 100, trend

29. Foreign trade: prices and terms of trade



1. Export prices
2. Import prices
3. Terms of trade

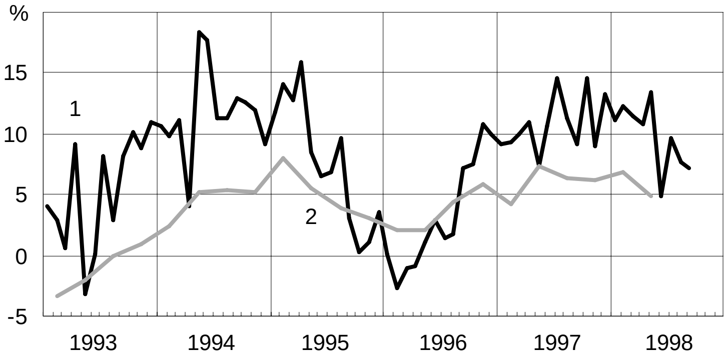
Index 1990 = 100

30. Finland's export performance

1. Value of exports to OECD countries in relation to imports of OECD countries
2. Volume of exports to OECD countries in relation to imports of OECD countries

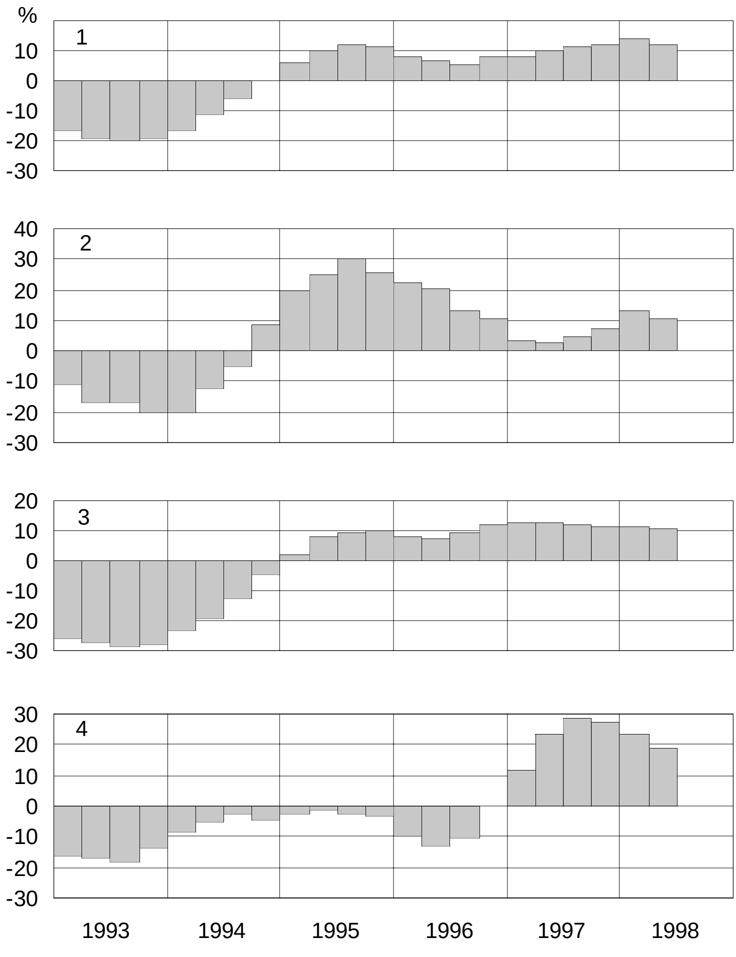
1980 = 100

31. Production



1. Industrial production, change in volume from the corresponding month of the previous year, per cent
2. GDP, change in volume from the corresponding quarter of the previous year, per cent

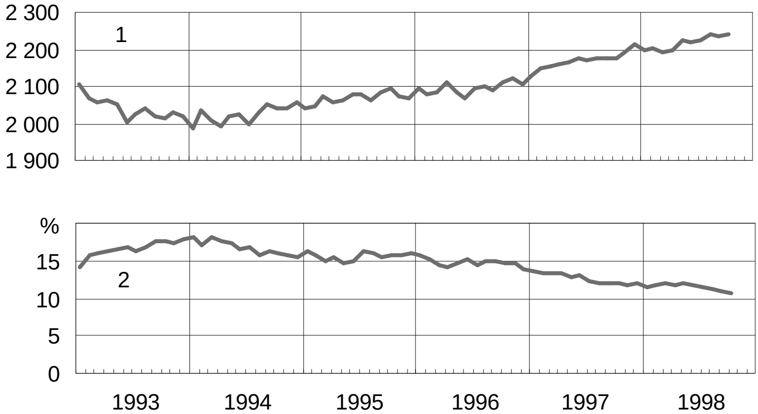
32. Fixed investment



1. Total fixed investment
2. Investment in machinery and equipment
3. Building investment, excl. residential buildings
4. Residential buildings

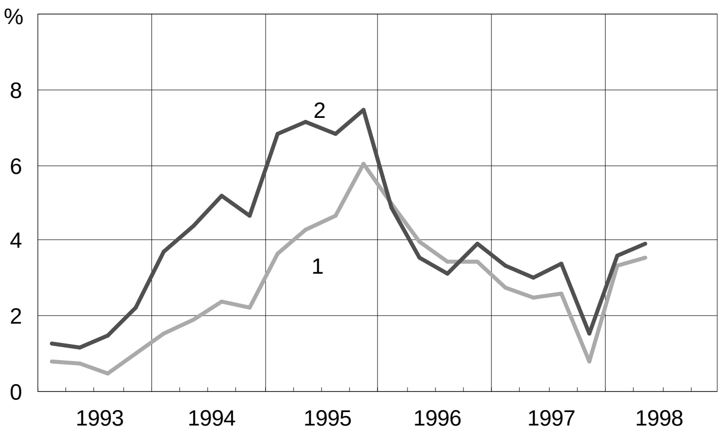
Four-quarter volume change calculated from four-quarter moving totals and plotted at the last quarter, per cent

33. Employment and the unemployment rate



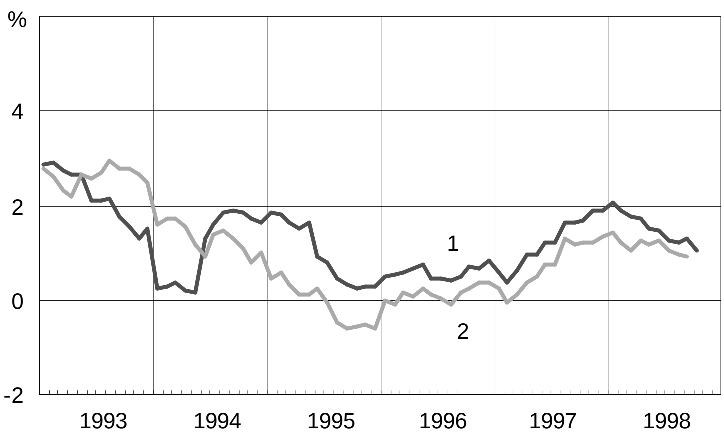
1. Employment, 1000 persons
2. Unemployment rate, per cent

34. Prices and wages



1. Index of wage and salary earnings, all wage and salary earners
2. Index of wage and salary earnings, manufacturing workers

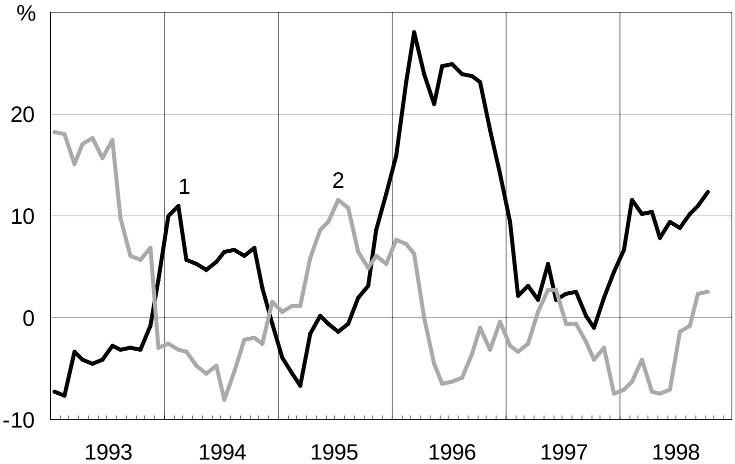
Change from the corresponding quarter of the previous year, per cent



1. Consumer price index
2. Indicator of underlying inflation

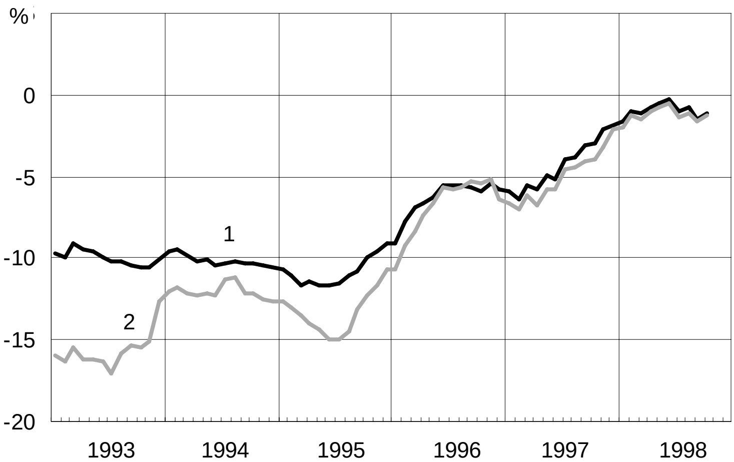
Change from the corresponding month of the previous year, per cent

35. Central government finances



1. Revenue excl. borrowing
2. Expenditure excl. redemptions of central government debt

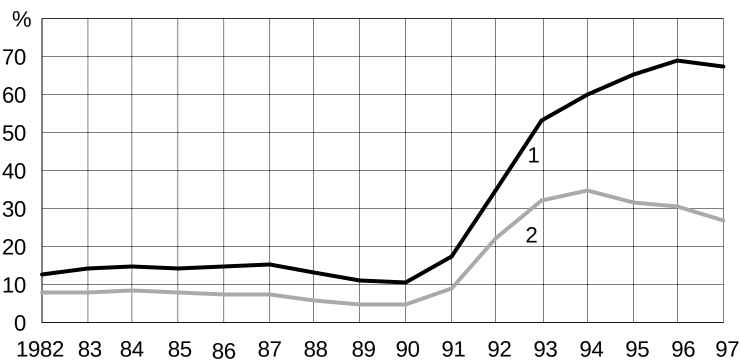
12-month changes calculated from 12-month moving totals and plotted at the last month , per cent



1. Revenue surplus (revenue less expenditure excl. financial transactions) (surplus = +)
2. Net borrowing requirement (net borrowing = –)

12-month moving total as a percentage of GDP, plotted at the last month

36. Central government debt



1. Total debt
2. Of which: foreign currency-denominated debt

As a percentage of GDP

BANK OF FINLAND

24 September 1998

THE PARLIAMENTARY SUPERVISORY COUNCIL

ILKKA KANERVA, Chairman
JOHANNES KOSKINEN, Vice Chairman
OLAVI ALA-NISSILÄ
KIMMO SASI
TUULIKKI HÄMÄLÄINEN
MAURI PEKKARINEN
VIRPA PUISTO
MARTTI KORHONEN
ANNELI JÄÄTTEENMÄKI

ANTON MÄKELÄ, Secretary to the Parliamentary Supervisory Council

THE BOARD

MATTI VANHALA, Governor
ESKO OLLILA, Deputy Governor
MATTI LOUEKOSKI
MATTI KORHONEN

HEIKKI T. HÄMÄLÄINEN, Secretary to the Board

DIRECTOR

PENTTI KOIVIKKO

DEPARTMENTS AND OTHER UNITS

Accounting ESA OJANEN, in addition to own duties

Administration ESA OJANEN

Communications ANTTI JUUSELA

Economics ANTTI SUVANTO

Financial Markets HEIKKI KOSKENKYLÄ,
Adviser to the Board: RALF PAULI

Information Services MARTTI LEHTONEN

Information Technology PERTTI SIMOLA

Internal Audit TAINA KIVELÄ

International Secretariat KJELL PETER SÖDERLUND

Legal Affairs ARNO LINDGREN

Management Secretarial Staff HEIKKI T. HÄMÄLÄINEN

Market Operations MARKUS FOGELHOLM

Monetary Policy PENTTI PIKKARAINEN,
Adviser to the Board: KARI PUUMANEN

Organization and Management Development
ESA OJANEN, in addition to own duties

Payment Instruments URPO LEVO

Payments and Settlement RAIMO HYVÄRINEN

Personnel AURA LAENTO,
Adviser to the Board: ANTON MÄKELÄ

Publication and Language Services ANTERO ARIMO

Research JUHA TARKKA,
Adviser to the Board: DAVID MAYES

Security JYRKI AHVONEN

Institute for Economies in Transition PEKKA SUTELA

BRANCH OFFICES

Kuopio, Oulu, Tampere, Turku

FINANCIAL SUPERVISION AUTHORITY

(functions as an independent body in connection with the Bank of Finland; it has its own organization chart)

KAARLO JÄNNÄRI, Director General