

# BULLETIN



Mor

Inflation Finnish Recent o

## <u>March 1995 Vol. 69 No. 3</u>

Inflation expectations in Finnish survey data

Recent developments in the Finnish financial derivatives markets

CONTENTS	
Inflation expectations in Finnish survey data by Mika Kuismanen and Mikko Spolander	3
Recent developments in the Finnish financial derivatives markets	
by Kimmo Virolainen	8
Items: Finland's balance of payments in 1994	
Direct investment capital flows in 1994	
Portfolio investment in Finland's balance of payments in 1994	13
Measures concerning monetary and foreign exchange policy and the financial markets	15
Finland in brief	16
Statistics • List of tables on page	S1

#### PUBLISHER

#### SUOMEN PANKKI **FINLANDS BANK**

P.O.Box 160, FIN-00101 HELSINKI, FINLAND

Telephone: National (90) 1831 International + 358 0 1831

Telex: 121224 SPFBFI Telefax: +358 0 174872 Cables: SUOMENPANKKI

#### **Editor-in-Chief** Sirkka Hämäläinen

#### Edited

by the Bank of Finland's Publication and Language Services

The contents of the Bulletin may be freely quoted, but due acknowledgement is requested.

ISSN 0784-6509

Printed by Libris Oy, Helsinki 1995

Electronic mail: X.400: S=PUBLICATIONS; A=MAILNET; P=BOFNET; C=FI Internet: PUBLICATIONS @ BOFNET.MAILNET.FI

Bulletin 3 • 95

## Inflation expectations in Finnish survey data<sup>1</sup>

he inflationary experience of many countries over the past decade has underlined the importance of expectations. As a result, inflation analysis has increasingly focused on the role of expectations in the inflation process and on how policies affect the formation of expectations. Consequently, the methods of testing the formation of these expectations have also gained in importance.

In principle, there are two methods of deriving data on inflation expectations. First, expectations can be deduced indirectly from other economic variables, for example, forward interest rates. Second, expectations can be taken directly from tendency surveys in which respondents (firms, consumers, households, experts etc) are asked about their expectations concerning, for example, the price level in a future period. In the latter case neither complex economic models nor numerous assumptions are needed.

In Finland, there are three regularly published surveys which include questions on *ex post* perceptions and/or *ex ante* expectations of the direction of change in the general price level or in the inflation rate. The surveys are conducted by Statistics Finland, the Confederation of Finnish Industry and Employers and the national daily newspaper Helsingin Sanomat.<sup>2</sup>

#### **Consumer survey of Statistics Finland**

The questionnaire used by Statistics Finland consists of four questions. In order to determine the degree of inflation awareness among consumers, respondents are first asked to indicate, in qualitative terms, whether the current level of consumer prices is much higher, somewhat higher, the same, somewhat lower or much lower as compared with twelve months ago. Next, they are given a limited number of intervals in percentage points and asked to choose the interval which, in their opinion,

<sup>1</sup> For a more technical analysis, see Kuismanen, M and Spolander, M (1994), Measuring Inflation Expectations in Finland – A Survey Data Approach, Bank of Finland Discussion Papers, 21/94.

<sup>2</sup> In addition, one of the leading commercial banks, Kansallis-Osake-Pankki, has been conducting a survey on an irregular basis once or twice a year since 1990. This survey consists of a sample of approximately 400 treasury managers, who are asked to give a point estimate of the rate of inflation over the next twelve months. by **Mika Kuismanen**, M Pol Sc and **Mikko Spolander**, M Sc (Econ) Economics Department Bank of Finland

includes the actual rate of price change for the past twelve months. Since May 1994, half of the respondents have been asked to give a point estimate of the perceived twelve-month percentage change in the rate of inflation.

Questions concerning expectations are constructed in the same way as those concerning perceptions except that the respondents are asked to consider consumer price changes over the next twelve months.

The first survey was carried out in November 1987. Up to May 1991, the surveys were conducted semiannually, in May and November. Since August 1991, the surveys have been conducted quarterly, in February, May, August and November.

## Business survey of the Confederation of Finnish Industry and Employers

The business survey conducted by the Confederation of Finnish Industry and Employers includes two questions concerning future price developments. The first survey was carried out in September 1984 and has subsequently been conducted quarterly in March, June, September and December. The sample consists of approximately 530 respondents representing the main manufacturing and construction industries. Nearly 140 similar surveys are conducted in more than 50 countries. In the European Union, the questionnaires have been harmonized and summarized results are published regularly.

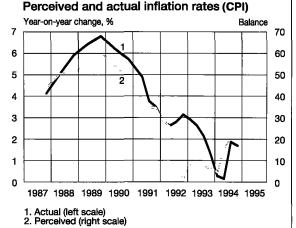
Up till December 1993, respondents in manufacturing firms were asked to indicate, in qualitative terms, whether they expected the rise in the general price level, ie inflation, to accelerate, remain unchanged or slow down in the next quarter as compared with the current quarter. They were also asked the same question concerning the quarter following the next quarter. 'Don't know' responses were not allowed.

This method of monitoring inflation expectations had two major drawbacks, which gave rise to misunderstandings and severely reduced the reliability and usefulness of the data.

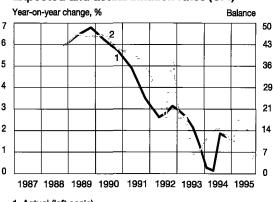
First, as the underlying price index was not explicitly defined, there was no way of knowing what the respondents' reference price index was. Although the pollster had the official consumer price index (CPI) in mind in formulating the questions, it was by no means clear that respondents had the

#### Chart 1.

#### **Statistics Finland survey**



Expected and actual inflation rates (CPI)



1. Actual (left scale)

2. Expected (right scale)

same index in mind when answering the questions. Respondents were presumably acting as manufacturers rather than consumers. They may well have been thinking of prices that were important in their own particular sector. In the case of manufacturing firms this might have meant eg producer prices, wholesale prices or export prices.

Second, respondents could not tell from the questions to what underlying period the rate of inflation referred. This meant that respondents could choose the period, eg quarter-on-quarter or yearon-year inflation. As a consequence, the interpretations of the questions and, hence, the periods chosen certainly differed among individual respondents. Since the questions were open to various interpretations, it was difficult to draw any firm conclusions concerning expectations about changes in the overall rate of inflation.

Because of these shortcomings, the questionnaire was revised in March 1994. Respondents are now asked whether they expect the rise in the rate of inflation, as measured by consumer prices, to be higher, the same or lower in the next quarter as compared with the present quarter and in the corresponding quarter of the following year as compared with the present quarter. Respondents are also provided with data on the actual year-on-year rate of inflation in the current period. 'Don't know' responses are still not allowed. The new question emphasizes the desired reference index (consumer prices) and the reference period for the inflation rate (year-on-year), thus mitigating the problems associated with the old question.

#### Consumer index survey of Helsingin Sanomat

In the survey conducted by the newspaper Helsingin Sanomat, respondents are asked to indicate, in qualitative terms, whether they expect prices to rise, remain the same or fall over the next six months. 'Don't know' responses are allowed.

The first survey was conducted in May 1980. Since January 1981, they have been conducted about once every six months, though the interval between successive surveys has not always been exactly six months<sup>3</sup>.

## Balance figures can be interpreted as inflation rates

In order to evaluate the forecasting value of the responses, the actual and expected time series data must be synchronized. For example, if respondents are asked to indicate how many per cent they expect consumer prices to change over the next twelve months, their answers must be compared with the actual year-on-year rate of inflation twelve months later. For example, in the Statistics Finland

<sup>&</sup>lt;sup>3</sup> Consumer index surveys have been carried out by Helsingin Sanomat 30 times as follows: May 1980; January, June 1981– 1984; January, June, December 1985; June 1986; January, June, December 1987; May, November 1988–1994.

survey, respondents were asked to give the expected year-on-year rate of inflation for May 1993 in May 1992. Hence, the actual year-on-year inflation rate had to be calculated for the same twelvemonth period, ie from May 1992 to May 1993.

It seems logical to expect that the shares of answers expecting the price level to rise, remain unchanged or fall depend on how much higher the price level is expected to be on average. If, for example, the rise in the price level is expected to be larger than before, some of respondents who previously expected prices to fall now expect them to remain unchanged, and some who previously expected prices to remain unchanged now expect them to increase. Thus, the number of respondents in each of these three categories depends on the relative size of the increase in the price level, ie on the rate of inflation, and each share is associated with a certain rate of inflation<sup>4</sup>.

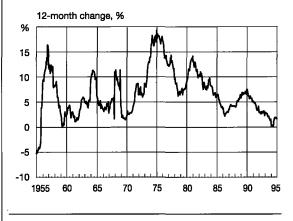
## Unlike firms, consumers seem to capture the trend

How well, then, do the surveys predict the future inflation rate? Let us look at the Statistics Finland data first. Chart 1 gives the perceived and expected observations and the respective actual rates of inflation. As can be seen in the upper panel of Chart 1, the respondents' perceptions followed the trend in the actual rate of inflation quite closely from the start of the survey until mid-1992. Since mid-1992, a large proportion of the respondents has been of the opinion that the consumer price level has stayed unchanged or has fallen even though the CPI rose by 2.9 per cent on average in 1992 and by 2.2 per cent in 1993. During the first half of 1994, the twelve-month increase in the CPI was at its lowest for 30 years (Chart 2). At the same time, the number of respondents who felt that consumer prices were at a higher level than twelve months earlier had increased.

One possible explanation for this is the changeover to value-added tax in June 1994. It seems that it was not until May 1994 that respondents realized that VAT would raise the price level in the near future. Evidently, some respondents had confused the dates and thought that VAT had already affected consumer prices. Studies in Finland and in other countries show that respondents are normally quite well aware of recent economic events that have had or might have an effect on consumer prices. Hence, the low balance figures after mid-1992 seem unreasonable. The markka's depreciation since its devaluation in November 1991 and floating in September 1992 clearly affected consumer prices and should have also affected respondents'

#### Chart 2.

#### Consumer price index



perceptions about the rate of inflation over the preceding twelve months.

The effects of the introduction of VAT and the markka's depreciation can also be discerned in the lower panel of Chart 1, which shows expectations. VAT should have already affected expectations in August 1993 and not in May 1994 as seems to have been the case. Apparently, respondents were not able to deal rationally with the possible effects of VAT beforehand. It was not until they realized the existence and magnitude of these effects that they revised both their perceptions and expectations.

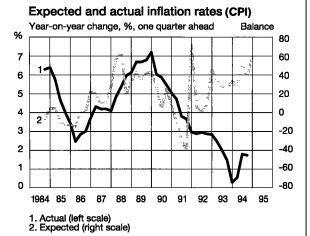
The effect of the devaluation in November 1991 is interesting. The November 1991 survey was conducted just after the devaluation. The possible effects of devaluation were the major issue in all the newspapers throughout the two-week survey period. On the basis of previous experience and experts' forecasts, respondents revised their expectations sharply upwards from the previous survey. At the risk of oversimplification, we can interpret perceptions and expectations in Chart 1 to mean that the respondents expected the twelve-month rate of inflation to accelerate from the prevailing rate of 3.5 per cent in November 1991 to 5.5 per cent in November 1992. When they realized that price changes were going to be much more moderate than they had envisaged, they revised their expectations downward to the original level in the February 1992 survey. Neither the floating of the markka in September 1992 nor the announcement of the 2 per cent inflation target by the Bank of Finland in February 1993 seems to have had any noticeable effect on respondents' expectations.

The sharp decline in the expected rate of inflation for the second half of 1995 is probably due to Finland's joining the EU. When Finland became a member of the EU at the beginning of this year, agricultural producer prices were lowered to the same level as producer prices in the EU. The reduction in producer prices and increasing import competition

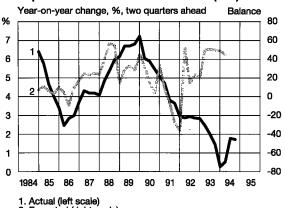
<sup>&</sup>lt;sup>4</sup> The results are normally presented as a balance figure, ie as a weighted balance of the proportions of respondents in each category. The categories 'higher' and 'lower' are weighted +1 and -1, respectively, and the categories 'no change' and 'don't know' are both weighted zero. In the Statistics Finland survey, the additional categories of 'somewhat higher' and 'somewhat lower' have the respective weights of +½ and -½.

#### Chart 3.

#### Confederation of Finnish Industry and Employers survey



Expected and actual inflation rates (CPI)



2. Expected (right scale)

are expected to be reflected quickly in consumer food prices. Consumers obviously expect these price reductions to be passed through into overall consumer prices in the course of this year. All in all, the balance figures seem to follow the trend quite closely.

Chart3 shows expectations data derived from the survey of the Confederation of Finnish Industry and Employers matched with actual year-on-year rates of inflation, as measured by the CPI. The balance figures reflect expectations about the next quarter compared with the current quarter and for the quarter after next compared with the next quarter.

The data do not seem to predict the inflation rate very well. In the 1980s, the fluctuations in the balance figures match the actual year-on-year rates of inflation to some extent. For the 1990s, however, the match is poor. Furthermore, the match becomes even poorer as the time horizon extends to two quarters ahead. The firms covered by the survey have evidently expected there to be a surge in inflation at any moment. They seem to have had great difficulty in adapting themselves to decelerating rates of inflation.

One reason for this might be the depreciation of the markka, which also disturbed the balance figures in the survey data of Statistics Finland. Furthermore, firms seem to have had consistently stronger inflationary expectations than consumers. There again, respondents in firms might have been thinking of wholesale, producer or export prices rather than consumer prices when they answered the questionnaire. If we take into account the various deficiencies and limited forecasting power of the balance figures, the usefulness of the Confederation of Finnish Industry and Employers' data seems questionable.

In Chart 4, the balance figures for the six-month expectations data derived from the Helsingin Sanomat survey are matched with the actual six-month percentage change in the CPI. As can be seen, the data capture the trends and the turning points guite well. There are two major expectation errors, the first in January 1982 and the second in November 1991. The reason for the January 1982 expectation error, as manifested in July 1982, is unclear. The second error is due to the devaluation of the markka in November 1991. As in the case of the Statistics Finland data, the respondents quickly revised their expectations when they realized that the rate of inflation was not, in fact, picking up. The expected consumer price effects of EU membership are also clearly discernible in Chart 4.

#### Inflation is expected to remain subdued in 1995

The final issue concerns the usefulness of survey data as an indicator of future consumer price inflation. Bearing in mind the ambiguities and deficiencies of the questionnaires, the answer is not clear. The track record of the survey conducted by the Confederation of Finnish Industry and Employers' is poor. In the Helsingin Sanomat survey, respondents only give predictions for six months ahead. By contrast, the survey conducted by the Statistics Finland is tolerable both as regards its track record and the forecast time horizon. With the passage of time, data on balance figures and point estimates will accumulate, and the Statistics Finland data should prove useful in assessing consumer price developments over the coming twelve months.

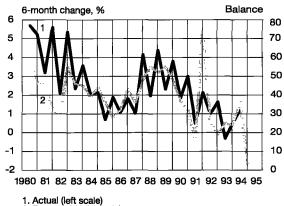
Looking at the inflation rates towards the end of this year, however, it is difficult to draw any firm conclusions on the basis of available survey data. Charts 1 and 4 do nevertheless point to the absence of inflation expectations. Falling consumer food prices and a stronger markka are expected to offset the pressures deriving from higher labour costs.

1 March 1995

#### Chart 4.

**Helsingin Sanomat survey** 





2. Expected (right scale)

### Recent developments in the Finnish financial derivatives markets<sup>1</sup>

ver the past ten years, the use of derivative instruments has increased substantially in international financial markets. Over-thecounter (OTC) markets operated by market participants have experienced particularly strong growth in recent years. The continued expansion in the use of derivative instruments is attributable to the growing need of market participants to hedge against various foreign exchange, interest rate, equity and commodity market risks. Derivatives markets offer a cheaper way of managing these risks than the corresponding cash markets. Other factors contributing to the strong growth of derivative trading include the globalization of investment, the securitization of banks' liabilities and rapid advances in information and telecommunications technology.

The development of Finnish derivatives markets has followed trends in international markets. However, trading in derivative products – with the exception of forward exchange contracts – did not start until fairly late in Finland because of the underdeveloped state of the country's financial markets. Moreover, the markets have grown more slowly than in many other countries with more developed financial markets. Developments in trading in derivative instruments have followed those in the markets for the underlying cash instruments.

Up to the mid-1980s, trading in derivative instruments was confined mainly to OTC forward exchange contracts offered by banks. Trading in derivative products based on shares started in 1987 along with the rapid expansion of the equity market and the commencement of operations by two derivatives exchanges in Finland. The Finnish Options Exchange (FOE) opened in autumn 1987 and the Finnish Options Market (FOM) in spring 1988. The year 1987 also saw the introduction of trading in forward rate agreements (FRAs) in the OTC market. As the Finnish financial markets are structured differently from those of many other countries, FRAs were initially based solely on certificates of deposit (CDs) issued by banks. Trading in interest rate derivatives based on benchmark government bonds did not start until 1994.

The OTC market accounts for a large share of the total volume of derivatives traded in Finland. by **Kimmo Virolainen**, Lic Sc (Econ) Financial Markets Department Bank of Finland

Currency and interest rate derivatives, in particular, are traded predominantly in the OTC market. By contrast, derivative contracts based on shares are traded only on exchanges but their share of the total volume of derivatives traded is minimal.

#### Trading in Finnish derivatives markets

#### **Derivatives exchanges**

In 1994, the volume of trading on Finland's two derivatives exchanges, the FOM and the FOE, grew markedly from the previous year, and the total number of contracts traded approached the peak levels of 1989 (Chart 1). Unlike on international derivatives exchanges, derivatives based on stock indices and shares have accounted for by far the largest share of turnover on the Finnish derivatives exchanges from the very beginning. Nevertheless, 1994 also witnessed a marked increase in the volumes of standardized currency and interest rate derivatives.

In the early 1990s, trading on the derivatives exchanges slackened in the wake of falling share prices and the general slowdown in economic activity. Low trading volumes led to specialization whereby trading in stock derivatives became concentrated on the FOM and trading in currency derivatives on the FOE. Over the past two years, however, competition between the derivatives exchanges for shares of the currency and interest rate derivatives business has intensified; in spite of this, trading in stock derivatives is still concentrated on the FOM. In 1994, stock index and stock derivatives accounted for some 93 per cent of total turnover on the FOM while currency derivatives accounted for some 71 per cent of total turnover on the FOE. It is also worth noting that turnover in interest rate derivatives on the FOM is based on benchmark government bonds<sup>2</sup> and that on the FOE mainly on bank CDs.

In 1994, the number of derivative contracts traded on the FOM passed the one million mark for the first time; this was more than twice the figure for 1993. FOX stock index derivatives were again the most traded product group on the FOM. However,

<sup>&</sup>lt;sup>1</sup> See also Pertti Pylkkönen, 'Derivatives markets in Finland', *Bank of Finland Bulletin*, April 1994, Vol. 68 No. 4.

<sup>&</sup>lt;sup>a</sup> Strictly speaking, the bulk of the transactions in markka-denominated bond forwards reported by the FOM consists of OTC trades which have been registered with the FOM's clearing house for clearing and collateral management.

the share of STOX options and futures has continued to grow and their combined turnover is already approaching that of index products. Turnover in interest rate derivatives consists entirely of markkadenominated bond forwards, the centralized clearing and settlement of which was begun by the FOM in spring 1994. Measured in terms of the number of contracts traded, the FOM's share of the total trading volume on Finnish derivatives exchanges was some 96 per cent in 1994.

In 1994, the bulk of trading in currency derivatives on the FOE was in DEM-based contracts while the bulk of trading in interest rate derivatives was in interest rate futures based on the three-month HELIBOR. The rise in short-term interest rates in the final months of the year led to a sharp increase in trading in these interest rate futures. Measured in terms of number of contracts options and futures were traded in roughly equal amounts on the FOE in 1994.

#### **OTC market**

In Finland, by far the largest part of trading in derivative instruments takes place on the OTC market. which is dominated by banks with a market share of 90 per cent. At the end of 1994, outstanding derivative contracts entered into by Finnish banks amounted to FIM 2048 billion measured in terms of notional principal amounts (Chart 2).3 This represents an increase of 28 per cent from one year earlier. Interest rate derivatives accounted for 60 per cent of the total outstanding amount and currency derivatives for 40 per cent. The share of stock derivatives is negligible. A breakdown by derivative instrument reveals that forward contracts, with a share of some 71 per cent, are by far the most widely traded product in Finnish derivatives markets (Chart 2 and Table 1). Thus, the bulk of derivative instruments consists of basic products which have been traded in the markets for a fairly long time.

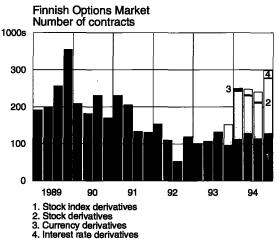
## Table 1. Derivative contracts entered into by<br/>banks, notional principal amounts<br/>outstanding on 31 December 1994,<br/>percentage breakdown

	Currency derivatives %	Interest rate derivatives %	All derivatives %
Forwards	84.9	62.0	71.1
Swaps	12.2	26.4	20.6
Futures	_	6.9	4.2
Options	2.9	4.7	4.1
TOTAL	100	100	100
Source: Financi	ial Supervision Auth	nority	

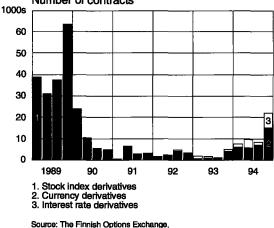
<sup>3</sup> It should be noted that these figures have not been adjusted for double counting, ie derivatives contracts between Finnish banks are included in them twice.

#### Chart 1.





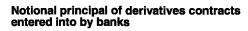
Source: The Finnish Options Market.

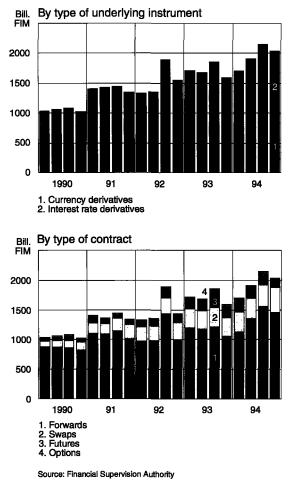


Finnish Options Exchange Number of contracts

As Chart 2 illustrates, growth in the outstanding amount of derivatives in 1994 was almost entirely attributable to the growth in the volume of FRAs. The increased popularity of FRAs can largely be explained by the increase in interest rate volatility during 1994. The majority of markka-denominated FRAs are still based on the most liquid part of the Finnish financial markets, ie on CDs issued by banks. The outstanding amount of these FRAs, which tends to fluctuate sharply, moved in the range of FIM 150-300 billion in the latter half of 1994. The outstanding amount of Treasury bills has traditionally been small in Finland, and so far hardly any derivative contracts based on them have been traded. A major innovation in the Finnish financial markets in 1994 was the launching of trading in for-

#### Chart 2.





ward contracts based on benchmark government bonds.

#### Bond forwards market

Trading in bond forwards started in Finland in January 1994 following the signing by the Bank of Finland and the primary dealers in the benchmark government bond market of a market making agreement for bond forwards on 20 January 1994. Initially, the only underlying asset was the serial government bond 2/92 (1997) but, in April 1994, another underlying asset was introduced, the serial government bond 1/93 (2004). Even though trading takes mainly place in the OTC market<sup>4</sup>, fixed settlement dates have been agreed on for bond forwards: the third Wednesday in March, June, September and December. The Bank of Finland determines the fixing rate on the fixing date for each bond forward, which is five business days prior to the settlement date. Two forward periods are quoted in the market at any one time, and the standard trading unit has been set at FIM 10 million. By the end of 1994, the number of primary dealers in the bond forwards market had risen to nine, following the signing in the autumn of the agreement on the code of conduct for primary dealers by Alfred Berg Finland and Handelsbanken Finland. The other primary dealers are Kansallis-Osake-Pankki, Okobank, Postipankki, Skopbank, Union Bank of Finland, Evli Fixed Income Securities and Unibørs Securities.

The outstanding notional principal amount of bond forwards fluctuates substantially over the contract period. Thus, for example, the outstanding notional principal stood at FIM 15.5 billion on 31 December 1994 as against FIM 46.9 billion at the end of November (Chart 3). The average outstanding notional principal of bond forwards was running in the region of FIM 30 billion in the latter half of 1994. This compares with outstanding benchmark government bonds totalling FIM 69.3 billion at the end of 1994. Trading between primary dealers accounted for just over half of total turnover in the bond forwards market; the corresponding share in the cash market for benchmark bonds was about one-third in 1994.

The bond forwards market was launched with the aim of improving liquidity in the market for benchmark government bonds, ie improving market participants' opportunities to adjust their positions quickly and at reasonable cost. The proportion of total turnover in the cash market accounted for by the two benchmark bonds serving as the underlying for bond forward contracts diminished soon after trading in forwards started. This was to be expected because the opening of a new, alternative market was bound to attract some business away from the cash market in the short term. Towards the end of 1994, the relative shares of the underlying benchmark bonds in total turnover in the cash market returned closer to their earlier levels.

A rough measure of liquidity can be obtained by examining the ratio of secondary market trading to the outstanding amount of the security concerned. Measured in this way, the benchmark government bonds underlying bond forwards were the most liquid in 1994 (Table 2). It should be noted, however, that the benchmark bond maturing in 2004 was clearly the most liquid bond even before trading in bond forwards based on it was initiated. On the other hand, in 1993, the liquidity of the benchmark bond maturing in 1997 did not differ

<sup>&</sup>lt;sup>4</sup> Both the FOM and FOE have included products corresponding to the standardized markka-denominated bond forwards traded in the OTC market in their product range.

significantly from other benchmark bonds but, in 1994, it seems to have improved distinctly after the opening of the bond forwards market. Consequently, the launching of trading in bond forwards can be judged to have improved the liquidity of the benchmark bonds selected as underlying instruments.

## Table 2. Benchmark government bonds: ratio of secondary market transactions to the outstanding amount⁵

	1993	1994
Serial bond 2/93 (1996)	-	9.4
Serial bond 2/92 (1997)	7.3	12.1
Serial bond 1/92 (1999)	7.2	8.1
Housing bond 1/92 (2002)	8.6	8.2
Serial bond 1/93 (2004)	15.3	16.8

Relatively more bond forward contracts have been entered into on the basis of the benchmark bond maturing in 1997; in general, turnover (notional amount) in the forward market exceeded turnover in the cash market for this bond in the second half of 1994. At annual level, turnover in forwards based on the bond maturing in 1997 accounted for 78 per cent of turnover in the cash market, while the corresponding figure for the benchmark bond maturing in 2004 was 51 per cent (April to December).

#### **Risks in the Finnish** derivatives markets

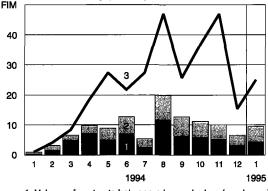
International derivatives markets have been overshadowed by the heavy losses incurred recently by some market participants in derivatives transactions. These events have led to heightened concern and uncertainty about the potential risks posed to the international financial system by the rapidly expanding derivatives markets.

The systemic risks typically referred to in connection with derivatives markets are the large volumes of derivatives transactions, concentration of derivatives business among a relatively small number of dealers, illiquidity of customized derivatives transactions, increased settlement risks, credit exposures undertaken by dealers and increased links between different market segments.<sup>6</sup>

By international standards, volumes of derivatives transactions have so far been relatively small in Finland. The level of concentration in derivatives

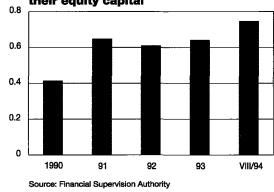
#### Chart 3.

Notional principal of bond forward contracts Bill. entered into by primary dealers



Volume of contracts between primary dealers (purchases)
 Volume of contracts with customers
 Amount outstanding at end of month

#### Chart 4.



Banks' credit exposures arising from derivatives contracts in relation to their equity capital

trading is, however, rather high in Finland since the five largest banks still accounted for some 90 per cent of all derivatives transactions carried out by banks in 1994. In spite of this, the credit exposures incurred by banks in derivatives trading have so far remained at a fairly reasonable level and are clearly below the banks' combined equity capital (Chart 4). In Sweden, for example, the corresponding ratio already exceeded 2.0 at the end of 1993.<sup>7</sup> In 1994, banks' derivatives-related credit risks did not increase as quickly as the volumes of transactions because the growth of volumes was mainly due to interest rate derivatives of short maturity, and the credit risks related to these are relatively small.

<sup>&</sup>lt;sup>5</sup> Transactions have been calculated in proportion to the average amount of benchmark bonds outstanding in the respective year. Both cash market transactions and bond forwards transactions have been included in secondary market transactions in serial bonds 2/92 (1997) and 1/93 (2004). The serial bond 2/93 (1996) was not accepted as a benchmark bond until June 1994; its turnover in the secondary market has been converted to annual turnover on the basis of its average monthly turnover.

<sup>&</sup>lt;sup>6</sup> See eg Group of Thirty, Derivatives: Practices and Principles, July 1993, or US General Accounting Office: Financial Derivatives, Actions Needed to Protect the Financial System, May 1994.

<sup>&</sup>lt;sup>7</sup> See, 'The Swedish derivatives market – size and systemic risks', Sveriges Riksbank, July 1994.

Interbank transactions account for a significant share of business in the derivatives markets in Finland. In addition, at the end of 1994, some 64 per cent of the counterparties to derivatives contracts entered into by banks were non-residents. This compares with some 73 per cent at the end of 1993. Thus the number of Finnish end-users in the market appears to be increasing. Nevertheless, the share of non-resident counterparties is likely to remain large in the future because, owing to the small size of the markets, Finnish banks cover a large proportion of their open positions arising from transactions with resident clients by entering into contracts with non-resident counterparties.

Settlement risks associated with trading in derivatives markets are at a fairly reasonable level since the largest trading volumes are still generated in the cash markets. Nevertheless. settlement risks related to OTC derivative transactions could be reduced further through centralized clearing of transactions and legally enforceable netting arrangements. In Finland, the FOM has provided centralized clearing services for OTC transactions in markka-denominated bond forwards since spring 1994. Centralized clearing of transactions permits multilateral netting of market participants' exposures and enhances collateral management. In 1994, markka-denominated bond forward contracts were cleared at the FOM to the value of some FIM 60 billion measured in terms of notional principal amounts. This represents some 56 per cent of total turnover in the bond forwards market.

In late 1994, the Helsinki Money Market Center also acquired the technical capacity for the centralized clearing of markka-denominated bond forwards. The introduction of this service has been delayed but the company aims to begin the centralized clearing of OTC bond forwards in spring 1995.

For the authorities, issues related to the derivatives markets have been gaining growing importance recently. In Finland, the derivatives activities of banks and securities firms are supervised by the Financial Supervision Authority. As part of its ongoing supervisory efforts, the Financial Supervision Authority is currently preparing a paper providing guidance on sound risk management of derivatives activities for use by Finnish credit institutions. It is hoped that these guidelines will facilitate further development of the institutions' internal risk management systems and thus promote stability in the financial system generally. International cooperation aimed at improving the functioning of derivatives markets and enhancing their supervision takes place under the auspices of international bodies such as the BIS and within the EU. The Bank of Finland and the Financial Supervision Authority participate actively with other Finnish authorities in this international cooperation.

#### **Future prospects**

Derivative trading volumes are likely to continue growing in Finland for some time to come. The rapid expansion of the export sector, in particular, is increasing the need of companies to use derivatives to hedge against risks arising from their business operations. The increased international volatility of bond markets suggests that trading in interest rate derivatives will remain brisk. In addition, it seems highly likely that derivatives based on government debt instruments will increase their share of the volume of interest rate derivatives traded in Finland because the central government's borrowing requirement will remain high over the next few years.

Mirroring international trends, trading in derivative instruments in Finland is likely to continue growing more rapidly in the OTC market than on the derivatives exchanges. However, the growth of trading on the latter cannot be expected to lag far behind as financial institutions operating as dealers in the OTC market will seek to use the derivatives exchanges to hedge their net exposures.

It is clear that competition in the provision of financial services will heighten in the years ahead both globally and within the EU, in particular. Consequently, the number of dealers participating in derivative trading in Finland is likely to grow as new foreign banks and Finnish and foreign securities firms expand their operations in the Finnish financial markets.

There are currently a number of projects in hand in Finland concerning the development of the infrastructure of the financial markets, some of which have a direct bearing on the functioning of the derivatives markets. These include plans for expanding the centralized clearing and settlement of OTC transactions, promoting repo transactions and securities lending and converting government bonds into book-entry securities.

2 March 1995

## ltems

#### Finland's balance of payments in 1994

**Current account.** Balance of payments data for 1994 point to an improvement in the external balance of the Finnish economy. According to preliminary data, the current account showed a surplus of FIM 5.6 billion in 1994 as against a deficit of FIM 4.7 billion in 1993.

Goods. Compiled on a balance of payments basis, the trade account posted a surplus of FIM 33.6 billion, which was some FIM 3 billion more than in 1993. The value of exports grew by15 per cent and the value of imports by 17 per cent. A change in statistical periods in the foreign trade statistics caused by Finland's entry into the EU increased the value of imports by some FIM 3 billion and the value of exports by just under FIM 1 billion in 1994.

Services. The deficit on the services account shrank to FIM 2.2 billion, as against FIM 4.9 billion in 1993. The surplus on the transport account increased by FIM 0.6 billion, and amounted to FIM 5.5 billion. There was a marked improvement in the travel account. The deficit on the other services account decreased by FIM 1.3 billion.

Investment income. Payments of investment income abroad amounted to FIM 31.0 billion, while receipts of investment income from abroad totalled FIM 8.7

#### Table. Finland's balance of payments in 1994

	1993 F	1994 IM mill.
Trade account (incl. adjustment items)	30 991	33 553
Services account	-4 894	-2 164
Investment income	-26 956	-22 306
Unrequited transfers and other items	-3 885	-3 506
CURRENT ACCOUNT	4 744	5 578
Direct investment	-4 592	-11 964
Portfolio investment	35 147	37 378
Loans	6 196	6 758
Trade credits	2 544	485
Other (incl. errors and omissions)	-33 332	-12 713
FOREIGN EXCHANGE RESERVES (increase –)	-1 219	-25 504

billion. The deficit on the investment income account was thus FIM 22.3 billion, a decrease of FIM 4.6 billion from 1993.

**Capital and financial account.** Net imports of capital amounted to FIM 19.9 billion in 1994. The central government imported capital totalling FIM 29.9 billion. Most of the central government's imports of capital occurred during the first part of the year.

Finnish direct investment abroad totalled FIM 19.7 billion in net terms. In the previous year, direct investment abroad had totalled FIM 9.5 billion. Foreign direct investment in Finland amounted to FIM 7.7 billion.

Net capital imports in the form of portfolio investment amounted to FIM 37.4 billion. Net sales of Finnish securities abroad amounted to FIM 31.4 billion, which was some FIM 7 billion less than in 1993. Other capital exports amounted to FIM 5.5 billion in net terms. The Bank of Finland's foreign exchange reserves increased by FIM 25.5 billion. At the end of the year, the foreign exchange reserves amounted to FIM 52.7 billion.

**Net international investment position.** At the end of 1994, Finland's net international investment position showed a debt of FIM 256.8 billion, which was equivalent to 50 per cent of GDP. Net foreign debt decreased by FIM 8.0 billion in the course of the year, of which was FIM 6.0 billion due to exchange rate changes and other valuation factors. The central government's share of net foreign debt was FIM 179.5 billion.

#### Direct investment capital flows in 1994

**Finnish direct investment abroad.** In 1994, Finnish companies exported capital to subsidiaries and associates abroad totalling FIM 21.2 billion in net terms (as against FIM 14.5 billion in 1993). Of this amount, investment in equity capital accounted for FIM 9.8 billion, drawings of loans for FIM 3.1 billion and redemptions of loans raised through foreign subsidiaries for FIM 8.3 billion.

When the sum of FIM 1.5 billion, the amount by which the retained earnings of Finnish-owned companies are estimated to have decreased in 1994, is deducted from the net outflow of equity and loan capital, there was a net direct investment capital outflow of FIM 19.7 billion in the balance of payments. This represents 3.8 per cent of GDP and 49 per cent of companies' fixed investment in Finland. Dividend and interest income from foreign subsidiaries and associates amounted to FIM 2.6 billion in net terms.

Eighty per cent of the net outflow of equity and loan capital went to EU countries (member states in 1994). The net export of capital by manufacturing companies totalled FIM 16.7 billion, the main capital-exporting sectors being the metal and engineering and the chemical industries.

**Foreign direct investment in Finland.** In 1994, foreign companies imported equity and loan capital to subsidiaries and associates in Finland totalling FIM 6.8 billion in net terms (as against FIM 4.8 billion in 1993). When to this amount is added the sum of FIM 0.9 billion, the amount by which the retained earnings of foreign companies in Finland are estimated to have increased in 1994, there was a net direct investment capital inflow of FIM 7.7 billion in the balance of payments in net terms. Dividend and interest payments to foreign investors amounted to FIM 1.3 billion in net terms.

Of the net direct investment inflow, 80 per cent came from the Nordic countries. Direct investment in manufacturing companies totalled FIM 5.2 billion.

## Portfolio investment in Finland's balance of payments in 1994

Net sales of Finnish securities abroad amounted to FIM 31.4 billion last year, which was some FIM 7 billion less than in 1993. Foreign investors continued to show interest in Finnish shares, whereas markkadenominated bonds were repurchased from abroad in net terms. At the end of the year, foreign investors held about FIM 80 billion worth of Finnish shares and markka-denominated bonds. Holdings of foreign securities by Finnish investors totalled FIM 5.8 billion. **Shares.** Finnish shares sold abroad directly in connection with new issues or through the secondary market totalled FIM 38.6 billion while repurchases totalled FIM 25.4 billion. Hence, there was net inflow of capital of FIM 13.2 billion, about the same amount as in 1993. At the end of the year, nonresidents held more than FIM 60 billion worth of Finnish shares. The doubling of the stock in the course of the year was in part due to the sharp rise in the prices of conglomerates' shares.

**Bonds.** Net sales of Finnish bonds abroad amounted to FIM 20.1 billion, which was some FIM 10 billion less than in the previous year. Only the central government and financial institutions issued bonds targeted at foreign investors. The central government raised FIM 39.2 billion in the international markets, which was some FIM 3 billion less than in 1993.

The rise in long-term rates of interest during the year was reflected in the secondary market for markka-denominated government bonds. For the year as a whole, sales of markka-denominated government bonds amounted to FIM 171 billion and repurchases to FIM 179.7 billion. Thus, repurchases exceeded sales by FIM 8.7 billion. At the end of the year, non-residents' holdings of markka-denominated bonds totalled FIM 19 billion, of which government bonds accounted for FIM 10.7 billion.

### Measures concerning monetary and foreign exchange policy and the financial markets

#### 1994

#### JANUARY

#### Commencement of trade in bond forwards.

In accordance with an agreement concluded between the Bank of Finland and the primary dealers, the latter begin trading in markka-denominated bond forward contracts on 24 January.

#### **FEBRUARY**

**Base rate.** The Parliamentary Supervisory Board lowers the Bank of Finland's base rate from 5.5 per cent to 5.25 per cent with effect from 1 February.

#### SEPTEMBER

Increase in the capital of the asset management company Arsenal Ltd. On 8 September, the Government decides to raise the share capital of the asset management company Arsenal Ltd by FIM 6 billion. The capital injection is necessary to cover losses incurred during the year.

#### NOVEMBER

Banks' access to the Bank of Finland's current account and liquidity credit facilities. At the beginning of November, the Bank of Finland modifies the conditions governing access by banks and other credit institutions to current account and liquidity credit facilities at the central bank. In addition, the partial collateralization requirement previously imposed on intraday credit limits is replaced by the requirement of full collateralization.

**Tax-exempt deposits**.On 18 November, Parliament approves an amendment of the law on the tax relief of deposits and bonds whereby the tax-exempt status of 24-month deposits is extended to apply to deposits made up to the end of 1995.

The Bank of Finland decides to sign the EMS agreement without entry into the ERM. On 23 November, the Bank of Finland decides to sign the agreements between the central banks of the EU member states on the European Monetary System (EMS) and Short-Term Monetary Support (STMS). The agreements will enter into force as of the date Finland's membership of the EU becomes effective. The Board of the Bank of Finland also decides to propose to the central banks of the EU member states that the existing bilateral swap agreements with EU central banks be terminated with effect from the date of entry into force of the EMS and STMS agreements.

#### DECEMBER

**Tender rate.** On 9 December, the Bank of Finland raises its tender rate from 5.0 per cent to 5.5 per cent. The tender rate serves as a benchmark for short-term money market rates.

**Support to Skopbank.** On 21 December, the Government grants capital support to Skopbank by purchasing preferred capital certificates issued by Skopbank to the total value of FIM 450 million.

#### 1995

#### **FEBRUARY**

**Tender rate.** On 10 February, the Bank of Finland raises its tender rate from 5.5 per cent to 5.75 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 69 % 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 22°C (72°F) in July and  $-4^{\circ}C$  (25°F) in February.

Finland has a population of 5 098 427 (31 December 1994) and an average population density of 16.6 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 509 500 inhabitants, Espoo (Esbo) 182 500, Tampere (Tammerfors) 176 600, Vantaa (Vanda) 161 400 and Turku (Åbo) 160 500.

There are two official languages: 93.4 % of the population speaks Finnish as its mother tongue and 5.9 % 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 1991, the seats of the various parties in Parliament are distributed as follows:

Centre Party 55; Social Democratic Party 48; National Coalition Party 40; Left-Wing Alliance 19; Swedish People's Party 12; The Greens 10; Christian League 8; Rural Party 7; and Liberal Party of Finland 1.

Of the 16 ministerial posts in the present Government appointed in April 1991, 8 are held by the Centre Party, 6 by the National Coalition Party and 2 by the Swedish People's Party. The Prime Minister is Mr Esko Aho of the Centre Party.

Finland is divided into 461 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.

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's negotiations to join the European Union were concluded in spring 1994. The accession treaty was signed in Corfu in June. In autumn 1994, a consultative referendum was held in which the majority of the voters (56.9%) were in favour of membership. The Finnish Parliament ratified the accession treaty in November. The accession treaty having been ratified by each Member State, Finland became a member of the European Union on 1 January 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.

Finland's development cooperation programmes channel assistance via international organizations and, bilaterally, to a number of African, Asian and Latin American countries.

#### The economy

**Output and employment.** Of the gross domestic product of FIM 418 billion in basic values in 1993, 3 % was generated in agriculture and fishing, 2 % in forestry, 26.5 % in industry, 4.5 % in construction, 11 % in trade, restaurants and hotels, 8.5 % in transport and communications, 4 % in finance and insurance, 20.5 % in other private services and 20 % by producers of government services. Of total employment of 2.0 million persons in 1993, 8 % were engaged in primary production, 27 % in industry and construction and 65 % in services.

In 1993, expenditure on the gross domestic product in purchasers' values amounted to FIM 479 billion and was distributed as follows: net exports 5.5 % (exports 33.3 %, imports –27.8 %), gross fixed capital formation 15 %, private consumption 56.5 % and government consumption 23.5 %. Finland's tax ratio (gross taxes including compulsory employment pension contributions relative to GDP) was 47 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 1950–93. Finland's GDP per capita in 1993 was USD 16 500.

Foreign trade. OECD countries absorb the bulk of Finnish merchandise exports. In 1989–93, their share was, on average, 78.5 %, of which the share of EC countries was 48.4 percentage points and that of EFTA countries 19.5 percentage points. Over the same period, Finland's exports to East European countries (including the Soviet Union/Russia) accounted for 12.6% and the rest of the world for 10.7%. The regional distribution of Finland's merchandise imports has been quite similar to that of exports.

In 1993, the share of forest industry products in total merchandise exports was 36 %, the share of metal and en-

gineering products 45 % and the share of other goods 19 %. Raw materials and intermediate goods (incl. crude oil) accounted for 59 % of merchandise imports, fuels for 5 %, investment goods for 15 % and consumption goods for 20 %.

**Forest resources.** Finland has fairly abundant forest resources, but only limited amounts of other raw materials. The growing stock comprises 1880 million cubic metres, of which 45 % is pine, 37 % spruce and 18 % broad-leaved species, chiefly birch.

The annual growth increment totals 79 million cubic metres and the total drain calculated on the basis of commercial fellings was 38 million cubic metres in 1993.

**Energy.** In 1993, gross consumption of primary energy amounted to 30 Mtoe, of which industry accounted for 45%, heating for 22%, transportation for 13% and other purposes for 20%. The sources of primary energy in 1993 were as follows: oil 28%, coal 11%, nuclear power 15%, hydro-electric power, peat and other indigenous sources 32%, others 14%. Compared internationally (1992), Finland's consumption of 5.6 toe (OECD definition) per capita was 1.7 times higher than the average in European OECD countries. The self-sufficiency rate (including nuclear power) in Finland was 42%, as compared with 61% in western European OPCD.

#### 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 Bank of Finland decided to temporarily abandon the limits of the fluctuation range and allow the markka to float. On 13 November 1992, the Government, on the basis of the amended Currency Act, authorized the Bank of Finland to float the markka for an indefinite period.

The Central Bank. The Bank of Finland (Suomen Pankki – Finlands Bank), founded in 1811, operates under the supervision of the Parliamentary Supervisory Board, the nine members of which are entrusted with overall supervision of the Bank and certain specific decisions such as fixing the Bank's base rate and the limits for other rates. The Governor and a maximum of five other Members of the Board are appointed by the President of the Republic. The Board manages all affairs not expressly entrusted to the Parliamentary Supervisory Board, including the terms of banks' central bank finance and open market operations in the money and foreign exchange market. The powers vested in the Bank and its independence of the Government make the Bank of Finland one of the world's stronger central banks. In practice, the Bank liaises closely with the Government, so as to coordinate economic policy. The Bank of Finland has a head office in Helsinki and 4 branch offices in other towns.

Other banks (31 December1993). Finland has three major groups of deposit banks with a total of about 2 640 offices. There are three big commercial banks with national branch networks and ten smaller ones, one of which is foreign-owned. The commercial banks haye a total of 32 foreign branches, subsidiaries and associate banks and 31 representative offices abroad. There are 40 savings banks and 304 cooperative banks with their own extensive branches and eight representative offices in Finland.

**Financial market.** Of the total stock of FIM 716 billion in outstanding domestic credit at the end of 1993, 54 % was provided by deposit banks, 21 % by insurance companies, 5 % by other private credit institutions, 8 % by public financial institutions and 11 % by the state, local authorities and social security funds. There are no quantitative restrictions or interest rate limitations on lending. Regulation of bank lending rates was progressively relaxed earlier in the 1980s and finally abolished in 1986.

In the money market, 80 % of the instruments, which totalled approximately FIM 189 billion at end-1993, were negotiable instruments such as bank certificates of deposit, commercial paper, Treasury notes and local authority paper. Funds raised through bank trust departments and non-negotiable bank debt instruments make up the bulk of non-negotiable instruments. In its open market operations, the Bank of Finland deals in bank certificates of deposit and also issues its own certificates of deposit.

There are 58 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 136 billion (at end-1993). Domestic bonds and debentures in circulation at end-1993 totalled FIM 190 billion; government bonds made up 39 % of the total. Turnover on the Stock Exchange in 1993 amounted to FIM 106 billion; the share of shares and subscription rights in the total was approximately 44 %.

: .

-



## Visiting Scholars Programme

#### BANK OF FINLAND

The Bank of Finland welcomes applications from foreign scholars for a post under the Bank's Visiting Scholars Programme at the Research Department during 1995. The department is willing to consider both short and longer-term (up to one year) visits.

A visiting scholar would be expected to conduct research on a subject mainly in the field of monetary / financial economics and policy. The research report could be published in the Bank's publication series. The scholar would also normally be expected to give comments and advice on other research work conducted at the Bank.

R emuneration for visiting scholars will be commensurate with the research experience of the selected applicant.

**P** ersons interested in applying are invited to write to the Head of the Research Department, enclosing a CV and specifying their academic and research background, suggestions for research topics and required salary.

The address is:

Research Department BANK OF FINLAND P.O.Box 160 FIN-00101 Helsinki, Finland •

#### STATISTICS

1. The balance sheet of the Bank of Finland 1.1 The balance sheet of the Bank of Finland	S2 S2
1.2 Time series for the balance sheet items of the Bank of Finland	S3
<ul> <li>2. The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position</li> <li>2.1 Banks' liquidity position at the Bank of Finland</li> <li>2.2 The Bank of Finland's minimum reserve system</li> <li>2.3 The Bank of Finland's money market transactions</li> <li>2.4 The Bank of Finland's transactions in convertible currencies</li> <li>2.5 Forward exchange contracts</li> </ul>	S4 S4 S4 S4 S5 S5
<ul> <li>3. Rates of interest</li> <li>3.1 Money market rates and rates applied by the Bank of Finland</li> <li>3.2 The Bank of Finland's liquidity facility</li> <li>3.3 Weighted Eurorates and commercial ECU interest rate</li> <li>3.4 Rates of interest applied by banks</li> <li>3.5 Yields on bonds and shares</li> </ul>	S6 S6 S6 S7 S7
<ul> <li>4. Rates of exchange</li> <li>4.1 Middle rates</li> <li>4.2 Markka value of the ECU and currency indices</li> </ul>	S8 S8 S9
<ul> <li>5. Other domestic financing</li> <li>5.1 Bank funding from the public</li> <li>5.2 Bank lending to the public</li> <li>5.3 Money supply and monetary aggregates</li> <li>5.4 Liabilities and assets of the central government</li> <li>5.5 Markka bond market <ul> <li>a) Issues</li> <li>b) Stock</li> <li>c) Turnover</li> </ul> </li> <li>5.6 Helsinki Stock Exchange</li> </ul>	S10 S10 S11 S11 S12 S12 S12 S13 S13
<ul> <li>6. Balance of payments, foreign liabilities and assets</li> <li>6.1 Current account</li> <li>6.2 Capital and financial account</li> <li>6.3 Finland's international investment position</li> <li>6.4 Finland's net international investment position (liabilities less assets), by sector</li> </ul>	S14 S14 S15 S16 S17
<ul> <li>7. Foreign trade</li> <li>7.1 Exports, imports and the trade balance</li> <li>7.2 Foreign trade: indices of volume, unit value and terms of trade</li> <li>7.3 Foreign trade by main groups</li> <li>7.4 Foreign trade by regions and countries</li> </ul>	S18 S18 S18 S18 S18 S19
<ul> <li>8. Domestic economic developments</li> <li>8.1 Supply and use of resources</li> <li>8.2 Volume of industrial production</li> <li>8.3 Indicators of domestic supply and demand</li> <li>8.4 Wages and prices</li> <li>8.5 Labour, employment and unemployment</li> <li>8.6 Central government finances: revenue, expenditure and financial balance</li> </ul>	S20 S20 S21 S22 S23 S23
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

	1994		199	5	
	31 Dec.	8 Feb.	15 Feb.	- 23 Feb.	28 Feb.
ASSETS		55.050			54.055
Gold and foreign currency claims	52 743	55 852	54 766	53 925	54 058
Gold	2 180	1 742	1 742	1742	1 742 1 775
Special drawing rights IMF reserve tranche	1 537 1 354	1 805 1 357	1 803 1 347	1 789 1 336	1 326
ECU-claim on the European Monetary Institute	1 3 3 4	3 648	3 627	3 604	3 606
Foreign currency claims	47 672	47 299	46 246	45 453	45 608
Other foreign daims	4 595	4 654	4 6 5 4	4 653	4 653
Markka subscription to Finland's quota in the IMF	4 595	4 595	4 595	4 595	4 595
Share in the European Monetary Institute	4 373	60	59	59	59
Claims on financial institutions	2 520	3 036	3 289	3 2 7 4	3 275
Liquidity credits	2 0 2 0	0.000	14	-	
Certificates of deposit	443	446	446	447	447
Securities with repurchase commitments	1 037	1 634	1 882	1 881	1 881
Term credits	-	_	-	-	_
Bonds	802	718	709	709	709
Other claims on financial institutions	238	238	238	238	238
Claims on the public sector	1 806	1 767	1 767	1 767	1 765
Treasury bills	_	_	_	_	_
Total coinage	1 806	1 767	1 767	1 767	1 765
Claims on corporations	3149	3140	3 1 3 4	3 128	3 1 28
Financing of domestic deliveries (KTR)	316	307	300	295	295
Other claims on corporations	2 833	2 833	2 833	2 833	2 833
Other assets	6 524	5 875	5 852	5 864	5 823
Loans for stabilizing the money market	4 532	4 532	4 532	4 532	4 532
Accrued items	1 832	1 191	1 167	1 179	1 1 1 3
Other assets	159	152	153	154	178
Valuation account	_	_	397	1028	877
Capitalized expenditures and losses					
due to safeguarding the stability					
of the money market	1 400	1 400	1 400	1 400	1 400
Total	72 737	75 724	75 259	75 041	74 980
LIABILITIES					
Foreign currency liabilities	130	677	682	654	638
Other foreign liabilities	5 579	5 582	5 575	5 567	5 559
IMF markka accounts	4 595	4 595	4 595	4 595	4 595
Allocations of special drawing rights	985	987	980	972	965
Other foreign liabilities	-	-	-	-	-
Notes and coin in circulation	14 315	14 880	14 692	14 269	14 087
Notes	12 675	13 255	13 063	1 <b>2 641</b>	12 451
Coin	1 640	1 625	1 629	1 629	1 635
Certificates of deposit	35 236	37 449	36 673	36 581	36 943
Liabilities to financial institutions	7912	6 706	8 043	8 250	8 1 3 8
Call money deposits	1 387	195	1532	1 738	1 618
Term deposits	_		_		-
Minimum reserve deposits	6 526	6511	6511	6 5 1 1	6 521
Other liabilities to financial institutions	_	. 0	_	0	_
Liabilities to the public sector	93	768	68	68	68
Cheque accounts	0	0	0	0	C
Deposits of the Government Guarantee Fund	93	768	68	68	68
Other liabilities to the public sector		_	_	-	
Liabilities to corporations	1 548	1 463	1 450	1 422	1 386
Deposits for investment and ship purchase	1 548	1 463	1 450	1 422	1 386
Other liabilities	461	481	615	767	700
Accrued items	437	452	592	740	676
Other liabilities	24	29	24	27	24
Valuation account	1 ( 22	256	-	·	1 / 00
Provisions	1 698	1 698	1 698	1 698	1 698
Pension provision	1 329	1 329	1 329	1 329	1 329
Other provisions	369	369	369	369	369
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 <b>Total</b>	- 72 737	_ 75 724	75 259		_ 74 980
S2 Bulletin 3 • 95	12/3/	/3/24	15 237	75041	74 700

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

End of period			Public sector								
pence _	Gold	Special drawing rights	iMF reserve trancho	ECU-claim on the European Monetary Institute	Foreign currency daims	Foreign exchange reserves (1+2+3+ 4+5)	Other claims, net	Net claims (6+7)	Claims	Liabil- itles	Net claims (9-10)
	1	2	3	4	5	6	7	8	9	10	11
1990	2180	791	783	_	33 478	37 232	- 1 273	35 960	1314	1 321	- 7
1991	2 180	932	1 1 36		29 381	33 629	- 424	33 204	1 375	3	1 372
1992	2 180	564	1 732		25 041	29 517	- 2 998	26 519	2 4 4 6	90	2 356
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	-1114	51 629	1 806	93	1 713
1994											
Feb.	2180	657	1 676		42 067	46 580	- 1 <b>298</b>	45 282	1 768	300	1 468
March	2180	661	1 688	-	38 117	42 646	- 1 257	41 389	1 793	251	1 542
April	2 180	650	1 597	-	37 197	41 623	- 1 229	40 394	1 828	39	1 789
May	2 180	654	1 591		43 303	47 728	- 1 207	46 521	1 827	61	1 766
June	2180	650	1 514		48 364	52 708	- 1 176	51 532	1819	526	1 293
July	2180	645	1 480		51 329	55 634	- 1 261	54 373	1 823	84	1 739
Aug.	2 180	636	1 447		48 794	53 058	- 1 249	51 809	1 817	71	1 746
Sept.	2 180	618	1 407		48 947	53 153	- 1 178	51 975	1 847	60	1 787
Oct.	2 180	1 249	1 338		48 610	53 377	- 1 139	52 238	1 864	115	1 749
Nov.	2 180	1 461	1 388		49 154	54 184	- 1 121	53 063	1 872	51	1 821
Dec.	2 180	1 537	1 354	•	47 672	52 743	-1114	51 <b>629</b>	1 806	93	1 713
1995											
Jan.	1 742	1 370	1 366	3 700	46 627	54 805	- 1 490	53 315	1 767	184	1 583
Feb.	1 742	1 775	1 326	3 606	45 608	54 058	- 1 544	52 514	1 765	68	1 697

End of period		Dom	estic financia	Cer	perate sector					
penoa	Term claims on deposit banks, not	Liquidity position of deposit banks'	Minimum reserve depesits of deposit banks <sup>*</sup>	Other claims on financial institu- tions, not	Not claims (12+13+ 14+15)	Claims in the form of special financing	Special deposits and other items, not	Net claims (17+18)	Notes and coin in cirtu- lation	Out- standing CDs issued by the Bank of Finland
	12	13	14	15	16	17	18	19	20	21
1990	9411	- 418	- 1 <b>7 401</b>	5 744	- 2 665	1 477	- 9 724	- 8 247	14 555	0
1991	11 882	- 2 206	- 10 361	5 531	4 846	1 086	- 6 854	- 5 768	14 528	8 880
1992	3 738	- 550	- 13 165	4 572	- 5 405	747	- 2 651	- 1 904	14 508	4 880
1993	7 337	- 1 802	- 6 398	1 339	476	496	720	1216	14 994	14 837
1 <b>994</b>	1 480	– 1 <b>387</b>	- 6 526	1 040	- 5 392	316	1 285	1 601	14 315	35 236
1994										
Feb.	1 802	- 426	- 6 346	1 250	- 3 720	466	950	1 416	13 855	26 290
March	3 842	- 1 <b>083</b>	- 6 276	1 241	- 2 276	449	1 003	1 452	14 194	23 435
April	2 093	- 483	- 6 411	1 220	- 3 581	431	1014	1 445	13 927	
May	3 208	- 485	- 6 360	1 197	- 2 441	413	1 034	1 447	14 164	
June	2 684	- 536	- 6 446	1 162	3 137	397	1 066	1 463	14 355	
July	2 488	- 796	- 6 467	1 126	- 3 649	386	1 081	1 467	14 176	
Aug.	4 557	2 252	- 6 602	1 120	- 3 177	374	1 104	1 478	13 922	
Sept.	3 485	- 1 421	- 6 550	1 173	- 3 313	360	1 124	1 484	13 906	
Oct.	1 829	- 945	- 7 029	1 1 1 1	- 5 034	345	1 186	1 531	13 900	
Nov.	492	- 2 026	- 6 674	1 094	- 7 1 1 3	331	1 222	1 553	13 776	
Dec.	1 480	- 1 387	- 6 526	1 040	- 5 392	316	1 285	1 601	14 315	35 236
1995										
Jan.	944	- 719	- 6 511	1 003	- 5 284	307	1 354	1 661	13 592	
Feb.	2 328	- 1 618	- 6 521	947	- 4 863	295	1 447	1 742	14 087	36 943

<sup>1</sup> Call money claims on deposit banks, net, until 2 July 1992.
 <sup>2</sup> Cash reserve deposits prior to 1 July 1993.

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

2.1 Banks' liquidity position at the Bank of Finland, mill. FIM 2.2 The Bank of Finland's minimum reserve system<sup>2</sup>

Average of	Cali	Liquidity	Liquidity	End of	Res	erve require	mont	Cash	Deposits
daily observations	money deposits	credits'	pesition, net <sup>1</sup> (1-2)	period	On liquid deposits, %	On other deposits, %	On domestic dobt capital, %	reserve require- ment, %	mill. FLM Total
	1	2	3		1	2	3	4	5
1990	806	132	674	1990				7.0	17 401
1991	881	985	- 103	1991				4.0	10 361
1992	2103	437	1 666	1992				5.0	13 165
1993	831	425	407	1993	2.0	1.5	1.0		6 398
1994	1 393	10	1 383	1994	2.0	1.5	1.0		6 526
1994				1994					
Feb.	767	0	767	Feb.	2.0	1.5	1.0		6 346
March	715	0	715	March	2.0	1.5	1.0		6 276
April	1 275	0	1 275	April	2.0	1.5	1.0		6411
May	891	16	875	May	2.0	1.5	1.0		6 360
June	1 821	0	1 821	June	2.0	1.5	1.0		6 4 4 6
July	1014	0	1014	July	2.0	1.5	1.0		6 467
Aug.	2 575	0	2 575	Avg.	2.0	1.5	1.0		6 602
Sept.	2 089	0	2 089	Sept.	2.0	1.5	1.0		6 550
Oct.	1 442	0	1 442	Oct.	2.0	1.5	1.0		7 029
Nov.	2 038	0	2 038	Nov.	2.0	1.5	1.0		6 674
Dec.	1 160	0	1160	Dec.	2.0	1.5	1.0	•	6 526
1995				1995					
Jan.	1 196	0	1 196	Jan.	2.0	1.5	1.0		6 5 1 1
Feb.	1 2 1 0	4	1 206	Feb.	2.0	1.5	1.0		6 521

Call money credits and call money position until 2 July 1992.

<sup>•</sup>Cash reserve system prior to 1 July 1993.

2.3 The Bank of Finland's money market transactic
---

During period	Purchases of money market instruments	Sales of money market instruments	Maturod money market instruments, not	Money market transactions, not (1-2-3)
	1	2	3	4
1990	163 326	26 379	160 797	- 23 850
1991	109 568	30 380	81 969	- 2 781
1992	76 230	137 940	- 60 417	- 1 <b>293</b>
1993	86 521	1 <b>46 899</b>	- 50 486	- 9 892
1994	35 540	351 820	- 295 165	- 21 115
1994				
Feb.	3 940	19 430	- 10 230	- 5 260
March	5 770	22 180	- 21 540	5 1 3 0
April	4 080	17 730	- 13 435	- 215
May	2 000	27 940	- 20 790	- 5 150
June	2 870	32 690	- 24 980	- 4 840
July	2 000	34 770	- 29 180	- 3 590
Avg.	5 140	35 040	– <b>32 970</b>	3 070
Sept.	590	36 860	- 33 510	- 2 760
Oct.	330	38 290	- 36 210	- 1 750
Nov.	1 630	35 210	- 34 400	820
Dec.	1 470	34 680	- 34 790	1 580
1995				
Jan.	2 580	36 050	<b>– 31 590</b>	- 1 880
Feb.	3 490	36 940	- 34 710	1 260

During poriod	Interventi	on in the foreign exch	Spot transactions	Central	
	Spot parchases	Spot sales	Forward exchange Intervention = change in forward exchange position	related to forward contracts, not	govornment's foreign exchange transactions, net
	1	2	3	4	5
1991	35 120	- 69 940	- 14 820	12 820	12 260
992	20 050	- 70 640	- 1 650	390	45 060
1993	25 120	- 45 080	7 460	- 6 910	33 240
1994	20 930	- 12 900	9 060	- 8 930	24 660
1994					
lan.	12 550	_	2 720	- 2 680	- 1 <b>49</b> 0
Feb.	1 310	- 750	- 270	280	4 670
March	-	- 2 200	-	-	- 1 800
April	-	-	330	- 330	- 700
May	-	- 920	110	- 110	6810
June	-	- 1 350	-	-	6 360
July	-	- 930	_	_	4 610
Avg.	-	- 4 270	– <b>2 960</b>	2 990	- 530
Sept.	-	- 1 440	2 420	- 2 340	5 350
Oct.	5110	- 220	5 070	- <b>5 09</b> 0	2 280
Nov.	210	- 520	770	- 530	60
Dec.	1 750	- 300	870	- 1 120	- 960
1995					
Jan.	-	-	3 290	- 3 260	4 1 4 0

#### 2.4 The Bank of Finland's transactions in convertible currencies, mill. FIM

#### 2.5 Forward exchange contracts, mill. FIM

Stock at end			Fis	nsish banks'	forward co	ntracts			Non-residents' forward contracts with Finnish			
of period		aish custom innish bank		With foreign customers			With the Total Bank of Finland		customors (excl. Finnish banks)			
	Currency purchases from Finnish customers	Currency sales to Finalsh customers	Net (1-2)	Currency purchases from foreign customers	Corrency sales to foreign customers	Net (4-5)	Not forward purchases from the Bank of Finland		Currency purchases from Finnish customers	Currency sales to Finnish customers	No? (9-10)	
	1	2	3	4	5	6	7	8	9	10	11	
1990	11 609	4 979	6 631	21 179	11 079	10 100	- 6 098	10 633	237	55	183	
1991	33 004		- 3 348	40 056	37 505	2 550	8 953	8 155	1 404	645	759	
1992	39 195	32 939	6 256	21 1 42	32 339	- 11 197	7 133	2 192	1 614	1 929	- 315	
1993	38 373	23 721	14 652	1 <b>4 346</b>	21 895	- 7 548	1 939	9 0 4 3	11 632	2 173	9 459	
1994	51 096	22 093	29 003	1 <b>9 236</b>	32 791	- 13 555	– <b>5 985</b>	9 463	18 372	4 780	13 592	
1994												
Jan.	43 162	19 298	23 864	13 803	23 618	- 9815	439	14 488	13 494	2 622	10872	
Feb.	41 288	16 030	25 258	17 043	23 240	- 6 197	489	19 550	14 542	2 903	11 639	
Marc	42 814	16519	26 295	18 003	24 476	- 6 473	489	20311	14 280	2 599	11 682	
April	40 494	15 128	25 366	15 807	22 872	- 7 065	135	18 436	16 236	4 104	12133	
May	40 529	13 887	26 643	17 151	25 046	- 7 894	0	18749	15 321	3 859	11 462	
June	41 191	15 124	26 067	18 939	25 421	- 6 481	0	19 586	15 155	4 417	10739	
July	40 536	16619	23 917	17 436	27 166	- 9 730	0	14 187	14 746	4 000	10746	
Aug.	39 846	19 930	19916	19 572	32 036	- 12 464	3 002	10 454	14 542	3 735	10807	
Sept.	40 197	20 368	19 829	18 637	29 261	- 10 624	671	9 876	14 177	3 389	10 788	
Oct.	44 821	19 418	25 403	20 662	30 252	- 9 589	- 4 436	11 378	14 945	2 659	12 286	
Nov.	46 460	21 508	24 952	18 515	28 808	- 10 293	- 4 980	9 6 7 9	16 058	4 0 3 6	12 023	
Dec.	51 096	22 093	29 003	19 236	32 791	- 13 555	- 5 985	9 463	18 372	4 780	13 592	
1995												
Jan.	53 808	22 928	30 880	21 342	31 748	- 10 407	_ <b>9 34</b> 1	11 132	19 972	4 698	15274	
									Bu	lletin 3 • 9	5	

**3. Rates of Interest** 3.1 Money market rates and rates applied by the Bank of Finland, percent

Average of daily ob- servations	interbank overnight rate		HEL	ibór			Bank of Finland rates			
		l month	3 months	6 months	12 months	Liquidity credit rate'	Call money deposit rate	Base rate		
	1	2	3	4	5	6	7	8		
1990 1991 1992 1993 1994	10.57 14.89 13.32 7.71 4.38	13.63 13.64 13.49 7.85 5.11	13.99 13.07 13.27 7.73 5.35	14.16 12.69 13.08 7.59 5.78	14.39 12.53 12.96 7.47 6.33	15.00 15.48 14.90 8.95 7.11	4.00 4.00 7.41 4.95 3.11	8.50 8.50 9.17 6.85 5.27		
1994										
Feb. March April May June July Aug. Sept. Oct. Nov. Dec.	4.52 4.39 4.31 4.29 3.93 4.61 3.91 4.07 4.10 4.30 4.57	4.82 4.82 5.01 4.97 5.20 5.17 5.35 5.07 5.07 5.07 5.07 5.07 5.41	4.82 4.80 5.13 5.14 5.61 5.46 5.96 5.57 5.39 5.43 5.70	4.88 4.88 5.43 5.46 6.24 6.13 6.77 6.36 5.82 6.05 6.18	5.05 5.12 5.75 5.78 6.86 6.91 7.54 7.25 6.69 6.79 7.02	6.84 6.76 6.97 7.18 7.17 7.32 7.13 7.08 7.06 7.38	2.84 2.76 2.99 3.18 3.17 3.32 3.13 3.08 3.08 3.06 3.38	5.25 5.25 5.25 5.25 5.25 5.25 5.25 5.25		
1995 Jan. Feb.	4.43 5.27	5.50 5.71	5.85 5.99	6.32 6.32	7.14 6.97	7.50 7.66	3.50 3.66	5.25 5.25		

<sup>1</sup> Call money credit rate until 2 July 1992.

#### 3.2 The Bank of Finland's liquidity facility

## 3.3 Weighted Eurorates and commercial ECU interest rate, percent

	The Bank of Finland's tender		Liquid- ity credit:	Liquid- ity credit:	Call money	Average of daily obser-	ECU	3 currencies	Commercial ECU
	tonder rate, %		crean: inter- est rate margin, %-points	crean: matur- ity, days	depos- its: intor- ost rato margin,	vutions	1	3	
1992' 1993 1994	<b>1</b> 13.85 7.87 5.11	1992 1993 1994	<b>2</b> +1.00 +2.00 +2.00	<b>3</b> 7 7 7 7	<b>4</b> - 3.00 - 2.00 - 2.00	1990 1991 1992 1993 1994	10.5 10.1 10.4 8.0 5.9	9.1 8.5 7.8 6.0 5.2	10.4 9.9 10.6 8.1 6.1
1994 Fob. March April May June Juny Aug. Sept. Oct. Nov. Doc.	4.84 4.76 4.99 4.97 5.18 5.17 5.32 5.13 5.08 5.06 5.38	1994 Feb. March April July July Aug. Sept. Oct. Nov. Dec.	+2.00 +2.00 +2.00 +2.00 +2.00 +2.00 +2.00 +2.00 +2.00 +2.00	77777777777777777777777777777777777777	- 2.00 - 2.00	1994 Feb. March April May June July Aug. Sept. Oct. Nov. Dec.	6.32 6.6.7 5.5.7 5.5.8 5.5.8 5.5.8 5.5.8 5.5.8 5.5.8 6.1	5.1 5.2 5.0 4.9 5.0 5.2 5.2 5.5 5.8	6.4 6.3 5.9 6.0 6.0 5.9 6.0 5.9 6.3
1995 Jan. Feb.	5.50 5.66	1995 Jan. Feb.	+2.00 +2.00	7 7	- 2.00 - 2.00	1 <b>995</b> Jan. Feb.	6.0 6.0	5.6 5.6	6.3 6.1
01 00 1004	5 5 50								

01.02.1995 5.50 10.02.1995 5.75

<sup>1</sup> July - December.

**\$6** Bulletin 3•95

3.4	Rates	of interest	applied b	by banks, perce	nt
-----	-------	-------------	-----------	-----------------	----

Average for			Londi	ing			Markka deposits and other markka funding						
ror pe- ried		Ne	w credi	hs .	Average lending	Of which:	24- month	36- month	Other tax-	Average rate of	Average rate of	Average rate of	
	Cheque account and post- al giro credits	ex-	Loans	New lending, total	rate	Com- mer- ciai banks	tax- exempt	tax- exempt deposits'	exempt deposits, max. rate of interest'	interest on	interest on other funding	interest on markka funding	
	1	2	3	4	5	6	7	8	9	10	11	12	
1990	13.24	15.62	13.33	13.85	11.84	11.61	7.50		4.50	6.43	13.55	8.41	
1991	13.63	15.88	13.40	13.84	12.08	11.80	7.50		4.50	7.10	13.22	8.97	
1992	14.04	15.86	13.32	13.75	12.46	12.13	7.50	8.50	4.50	7.41	12.84	9.14	
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	
1994													
Jan.	8.09	11.25	7.35	7.62	8.58	8.22	3.50	4.50	2.00	3.11	6.41	4.19	
Feb.	8.25	11.92	7.14	7.46	8.34	7.97	3.25	4.25	2.00	2.93	5.95	3.92	
March	4.99	11.73	6.73	6.78	8.17	7.79	3.25	4.25	2.00	2.88	5.77	3.85	
April	7.29	11.68	6.87	7.10	8.12	7.91	3.25	4.25	2.00	2.88	5.79	3.85	
May	7.63	11.66	7.18	7.43	8.08	7.87	3.25	4.25	2.00	2.88	5.67	3.86	
June	7.19	11.70	7.25	7.44	8.09	7.88	3.25	4.25	2.00	2.89	5.77	3.92	
July	8.25	11.76	7.58	7.86	8.14	7.90	3.25	4.25	2.00	3.01	5.85	4.03	
Aug.	8.37	11.80	7.81	8.04	8.20	7.97	3.25	4.25	2.00	3.05	5.98	4.11	
Sept.	7.61	11.75	7.66	7.86	8.19	7.96	3.25	4.25	2.00	3.04	5.99	4.11	
Oct.	8.26	11.61	7.28	7.49	8.15	7.91	3.25	4.25	2.00	3.05	6.10	4.10	
Nov.	7.75	11.72	7.01	7.21	8.09	7.83	3.25	4.25	2.00	3.04	6.09	4.08	
Dec.	7.62	10.69	6.44	6.71	8.05	7.76	3.25	4.25	2.00	3.11	6.17	4.10	
1995													
Jan.	7.79	11.55	7.22	7.40	8.11	7.84	3.25	4.25	2.00	3.15	6.27	4.18	
<sup>1</sup> End of r	period												

<sup>1</sup> End of period.

3.5	Yields on bonds and shares, percent
0.0	

Period		Eon	d		Shares
	Referen calcula the Bank o	ted by	gover	able mnent nds	Share yield
	3 years	5 years	5 years	10 years	
	1	2	3	4	5
1990	13.7	13.5	13.3		4.0
1991	12.3	12.2	11.8		3.9
1992	13.1	13.0	12.0	11.5'	3.1
1993	8.5	8.9	8.2	8.8	1.8
1994	8.5	9.3	8.4	9.0	1.4
1994					
Jan.	6.1	6.6	5.8	6.5	1.1
Feb.	6.1	6.6	5.9	6.6	1.1
March	6.6	7.5	6.7	7.5	1.2
April	7.7	8.6	7.6	8.3	1.4
May	7.9	8.9	7.9	8.5	1.4
June	9.1	10.0	9.0	9.5	1.5
Joly	9.7	10.4	9.3	9.9	1.5
Avg.	10.3	11.0	10.0	10.6	1.4
Sept.	10.2	11.0	9.9	10.5	1.4
Oct.	9.5	10.5	9.4	10.1	1.5
Nov.	9.6	10.5	9.5	10.2	1.5
Dec.	9.6	10.5	9.5	10.2	1.7
1995					
Jan.	9.5	10.3	9.4	10.2	1.3

<sup>1</sup> November and December only.

•

## 4. Rates of exchange4.1 Middle rates, FIM

Average of daily avo-	New York	Montreal	London	Dublin	Stockholm	Oslo	Copen- hagen	Frankfurt aM	Amster- dam	Brussels	Zurich	Paris
quo- tations	1 USD	1 CAD	1 GBP	1 IEP	1 <b>SEK</b>	1 NOK	1 DKK	1 DEM	1 NLG	1 BEF	1 CHF	1 FRF
	1	2	3	4	5	6	7	8	9	10	11	12
1990	3.8233	3.277	6.808	6.325	0.6459	0.6110	0.6181	2.3664	2.1002	0.1145	2.7576	0.7024
1991	4.0457	3.533	7.131	6.511	0.6684	0.6236	0.6322	2.4380	2.1634	0.1184	2.8208	0.7169
1992	4.4835	3,706	7.875	7.636	0.7714	0.7222	0.7444	2.8769	2.5552	0.1397	3.2000	0.8486
1993	5.7189	4.434	8.582	8.371	0.7350	0.8059	0.8822	3.4584	3.0787	0.1655	3.8706	1.0096
1994	5.2184	3.824	7.982	7.799	0.6758	0.7393	0.8207	3.2169	2.8684	0.1561	3.8179	0.9406
1994												
Feb.	5.5838	4.165	8.257	7.930	0.6992	0.7451	0.8245	3.2147	2.8669	0.1560	3.8297	0.9462
March	5.5326	4.057	8.248	7.932	0.6992	0.7530	0.8343	3.2688	2.9089	0.1586	3.8681	0.9591
April	5.4911	3.974	8.139	7.885	0.6965	0.7455	0.8246	3.2336	2.8795	0.1571	3.8174	0.9438
May	5.4072	3.918	8.134	7.956	0.7008	0.7529	0.8335	3.2629	2.9075	0.1585	3.8275	0.9531
June	5.4276	3.925	8.267	8.102	0.6945	0.7660	0.8486	3.3262	2.9676	0.1615	3.9399	0.9737
July	5.2014	3.762	8.036	7.939	0.6695	0.7573	0.8430	3.3120	2.9526	0.1607	3.9249	0.9666
Ávg.	5.1384	3.728	7.927	7.826	0.6640	0.7490	0.8310	3.2852	2.9259	0.1594	3.8980	0.9589
Sept.	4.9691	3.669	7.767	7.667	0.6591	0.7303	0.8128	3.2038	2.8578	0.1557	3.8447	0.9367
Oct.	4.6761	3.464	7.506	7.416	0.6440	0.7061	0.7855	3.0745	2.7443	0.1494	3.6959	0.8983
Nov.	4.7172	3,458	7.500	7.385	0.6418	0.7015	0.7833	3.0659	2.7353	0.1490	3.6448	0.8930
Dec.	4.8455	3.488	7.554	7.435	0.6447	0.7068	0.7864	3.0823	2.7528	0.1499	3.6450	0.8949
1995												
Jan.	4.7358	3.352	7.458	7.375	0.6344	0.7071	0.7851	3.0930	2.7591	0.1501	3.6782	0.8946
Feb.	4.6433	3.315	7.300	7.256	0.6288	0.7041	0.7832		2.7576	0.1501	3.6526	0.8889

Average of daily quo-	Rome	Vienna	Lisbon	Reykjavik	Madrid	Athens	Tellina	Tokyo	Mei- bourne	ECU Commor- cial	SDR
tations	1ITL	1 ATS	1 PTE	1 ISK	1 ESP	1 GRD	1 EEK	1 JPY	1 AUD	1 XEU	1 XDR
	13	14	15	16	17	18	19	20	21	22	23
1990	0.00319	0.3363	0.0268	0.0656	0.0375			0.02647	2.988	4.864	5.18322
1991	0.00326	0.3464	0.0280	0.0684	0.0389	0.022		0.03008	3.152	5.003	5.52771
1992	0.00364	0.4088	0.0332	0.0778	0.0438	0.024	0.4060	0.03546	3.289	5.798	6.31546
1993	0.00364	0.4916	0.0356	0.0846	0.0451	0.025	0.4323	0.05168	3.885	6.685	7.98641
1994	0.00324	0.4573	0.0314	0.0745	0.0390	0.021	0.4021	0.05106	3.814	6.175	7.46629
1994											
Feb.	0.00331	0.4573	0.0318	0.0764	0.0395	0.022	0.4018	0.05251	4.000	6.236	7.74733
March	0.00332	0.4647	0.0318	0.0767	0.0398	0.022	0.4086	0.05264	3.937	6.309	7.75651
April	0.00338	0.4597	0.0317	0.0761	0.0398	0.022	0.4042	0.05310	3.934	6.251	7.71250
May	0.00339	0.4639	0.0316	0.0762	0.0396	0.022	0.4079	0.05215	3.916	6.288	7.65245
June	0.00340	0.4729	0.0321	0.0772	0.0404	0.0221	0.4158	0.05281	3.981	6.398	7.74158
July	0.00332	0.4708	0.0322	0.0759	0.0401	0.0219	0.4140	0.05276	3.821	6.329	7.57829
Aug.	0.00325	0.4669	0.0322	0.0749	0.0396	0.0217	0.4107	0.05147	3.805	6.261	7.47292
Sept.	0.00317	0.4552	0.0314	0.0731	0.0386	0.0211	0.4005	0.05029	3.684	6.113	7.27337
Oct.	0.00302	0.4369	0.0301	0.0697	0.0370	0.0201	0.3843	0.04747	3.452	5.865	6.90651
Nov.	0.00298	0.4355	0.0300	0.0699	0.0368	0.0199	0.3832	0.04813	3.559	5.838	6.93950
Dec.	0.00297	0.4379	0.0301	0.0704	0.0366	0.0199	0.3853	0.04838	3.752	5.874	7.03528
1 <b>995</b>											
Jan.	0.00294	0.4396	0.0300	0.0698	0.0357	0.0199	0.3866	0.04752	3.625	5.859	6.94337
Feb.	0.00287	0.4393	0.0299	0.0697	0.0356	0.0197	0.3864	0.04725	3.460	5.811	6.86328

.

Average	Markka value of the ECU	Corre	ency Indices, 1982=1	00	
of daily observa- tions	PIM/ECU	Trado-weighted currency index	Paymonts currency index	MERM index	
	1	2	3	4	
1990	4.85697	97.3	96.8	97.3	
1991	5.00580	101.4	101.4	102.8	
1992	5.80140	116.4	115.7	117.3	
1993	6.69420	132.4	136.1	141.8	
1994	6.19108	123.2	125.8	131.8	
1994					
Feb.	6.23914	125.6	129.8	136.4	
March	6.31275	126.5	130.2	136.6	
April	6.25477	125.5	129.2	135.8	
May	6.29981	125.9	129.0	135.3	
June	6.41394	127.4	130.3	136.6	
July	6.35263	125.2	127.2	133.6	
Aug.	6.28705	123.8	125.8	131.9	
Sept.	6.13918	121.3	122.7	128.7	
Oct.	5.89314	116.5	11 <b>7.2</b>	122.6	
Nov.	5.86886	116.3	117.3	122.9	
Dec.	5.89101	117.0	118.8	124.2	
1995					
Jan.	5.87972	115.9	117.5	122.6	
Feb.	5.84352	114.9	116.2	121.3	

#### 4.2 Markka value of the ECU and currency indices

## 5. Other domestic financing 5.1 Bank funding from the public, mill. FIM

End of period	Cheque and giro deposits	Trans- action deposits	Time deposits	Other deposits	Markka doposits, total (1+2+3+4)	Foreign currency deposits	Totul deposits (5+6)	Other funding	Total fueding (7+8)
	1	2	3	4	5	6	7	8	9
1989	28 942	85 396	125 2	748	240 085	7 358	247 444	35 298	282 742
1990	30 953	96 176	124 9	230	252 058	6818	258 876	38 835	297 711
1991	33 619	86 442	122 126	19615	261 802	13 151	274 953	52 760	327 713
1992	34 832	88 526	114 771	21 218	259 347	14 626	273 973	65 557	339 530
1993	36 379	92 357	112 413	21 766	262 915	14 883	277 798	63 173	340 971
1993									
Nov.	36 098	87 692	109 769	21 451	255 010	15 799	270 809	64 128	334 937
Dec.	36 379	92 357	112 413	21 766	262 915	14 883	277 798	63 173	340 971
1994									
Jan.	38 657	94 042	108 694	22 740	264 133	14 050	278 183	70 115	348 298
Feb.	37 462	96 507	106 185	22 548	262 702	12 324	275 027	68 874	343 901
March	38 058	97 847	105 867	22 734	264 506	13 201	277 708	72 348	350 056
April	38 242	98 146	106 551	22 748	265 687	13 574	279 261	75 636	354 897
May	41 132	97 145	106 163	22 337	266 778	14 281	281 059	75 753	356 811
June	42 094	98 377	105 973	21 679	268 123	14 353	282 476	72 209	354 685
July	43 391	98 775	106 511	21 391	270 067	16517	286 584	70 634	357 218
Aug.	44 503	97 970	107 529	20 969	270 970	14 957	285 927	64 382	350 309
Sept.	40 588	97 976	107 427	20 722	266 712	12 839	279 551	69 158	348 709
Oct.	41 393	98 519	107 168	20 272	267 352	14 479	281 832	67 743	349 575
Nov.	42 319	98 059	107 511	20141	268 030	11 895	279 925	62 631	342 556

#### 5.2 Bank lending to the public, mill. FIM

End of period	Choque account and postal gire credits	Bills of exchange	Loans	Markka lending, total (1+2+3)	Foreign currency credits	Total Ionding (4+5)
	ī	2	3	4	5	6
1989	15 270	5 650	257 768	278 688	73 176	351 864
1990	19 152	5777	260 790	285 720	103 134	388 853
1991	18 037	4712	262 859	285 609	107 714	393 323
1992	16 045	3 335	252 163	271 544	95 168	366 712
1993	14 217	2 223	248 406	264 846	66 931	331 777
1993						
Nov.	14 872	2 664	250 554	268 090	73 810	341 899
Dec.	14 217	2 223	248 406	264 846	66 931	331 777
1994						
Jan.	14 081	2 248	247 259	263 587	64 220	327 807
Feb.	14 120	2 008	247 884	264 012	63 158	327 170
March	14 125	1 942	247 795	263 862	61 114	324 976
April	13 971	1 759	247 095	262 825	59 077	321 902
May	14 079	1 736	246 531	262 345	58 233	320 578
June	14 139	1 763	245 939	261 841	57 756	319 597
July	14 061	1 733	245 591	261 386	56 128	317 513
Aug.	13 859	1 680	244 474	260 013	53 977	313 990
Sept.	14 068	1 642	243 874	259 584	51 258	310 842
Oct.	13 583	1 594	244 191	259 368	47 775	307 143
Nov.	13 274	1 522	244 044	258 840	46 902	305 742

End of	Foreign		Domestic cre	dit	Other			
period	assets, net	Claims on the contral government	Claims on the public	Tetal (2+3)	— items, net	<b>M</b> ,	M <u>,</u> (1+4+5)	М,
	1	2	3	4	5	6	7	8
1990	- <b>82 88</b> 1	- 19 072	453 720	434 648	- 85 385	141 524	266 383	291 045
1991	- 86 555	- 6 5 1 6	470 852	464 336	- 102 540	130 644	275 241	310 924
1992	- 68 099	81	439 937	440 018	- 97 909	134 829	274 011	310 733
1993	- 25 989	1848	403 742	405 589	- 100 006	141 759	279 595	322 408
1994*	14 047	3 394	365 836	369 230	- 96 501	154 353	286 776	328 591
1994*								
Jan.	- 23 257	57	399 446	399 503	- <b>96 0</b> 11	145 301	280 234	328 482
Feb.	- 18 440	475	397 458	397 932	- 100 871	146 600	278 621	327 591
March	- 19 743	1 066	397 300	398 365	- 97 626	148 907	280 996	333 304
April	- 23 247	3 499	392 564	396 063	- 91 234	148 783	281 582	335 879
May	- 14 545	5 940	391 346	397 286	- 100 115	150 750	282 626	338 847
June	- 6 902	2 244	389 636	391 880	- 100 <b>49</b> 8	153 365	284 480	338 345
July	7 521	- 880	387 027	386 147	- 107 408	155 001	286 260	340 445
Aug.	4 260	655	383 389	384 044	- 101 500	154 836	286 804	336 027
Sept.	12 224	- 2 345	374 845	372 501	- 102 004	151 193	282 721	333 572
Oct.	12 826	3 250	370 923	374 174	- 103 332	152 568	283 668	335 896
Nov.	12 535	3611	369 603	373 214	- 101 461	152 745	284 288	331 096
Dec.	14 047	3 394	365 836	369 230	- <b>96 50</b> 1	154 353	286 776	328 591
1995*								
Jan.						153 970	285 767	325 740

#### 5.3 Money supply and monetary aggregates, mill. FIM

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

End of Period -	Foreign curre	oncy-denos	ninated deb	t	Marki	a-denomin	ated debt	I.	Total	Out-	Cash
period	Bonds	Other debt	Total (1+2)	Public bonds	Other Iong- term Ilabil- ities	Treasury notes and bills	Miscella- neous items	Total (4+5+6+7)	central govern- ment debt (3+8)	stand- ing londing	funds
	1	2	3	4	5	6	7	8	9	10	11
1990	20 917	3 876	24 793	23 982	8 263	_		32 245	57 038	48 121	23114
1991	38 703	4 943	43 646	31 018	12 208	5 180		48 406	92 052	55 165	15 956
1992	100 244	6143	106 387	40 578	13 555	14 762		68 895	175 282	61 671	19 781
1993	142 824	12 753	155 577	71 082	16 060	22 824			265 543	66 439	36 487
1994	160 587	15 975	176 562	93 008	17 100		- 5 945		313 878		
1994											
Jan.	140 312	10 565	150 877	72 215	18 260	19 629		110104	260 981	64 706	24 095
Feb.	148 138	9 990	158 128	74 481	18 260	19 391	- 5 524	106 608	264 736	65 008	31 679
March	147 889	9 894	157 783	75 083	18 230	19 182	- 5 409	107 086	264 869	65 686	20 834
April	146 940	10 891	157 831	76 001	17 541	18 625	- 5 384	106 943	264 774	65 807	18 547
May	156 684	11 106	167 790	76 282	17 442	19 704	- 5 379	108 049	275 839	66 000	22 405
June	163 930	11 658	175 588	77 129	16 901	24 915	- 5 410	113 535	289 123	65 006	30119
July	169 523	11 952	181 475	78 286	16 891	30 159	- 5 440	119 896	301 371	64 436	41 465
Äug.	165 170	11 698	176 868	79 587	16 870	28 551	- 5 485	119 523	296 391	64 697	37 525
Sept.	167 196	12111	179 307	82 349	16 865	31 514	- 5 455	125 273	304 580	65 078	41 848
Ođ.	160 626	15 042	175 668	84 786	16 865	31 666	- 5 487	127 830	303 498	65 253	39 910
Nov.	163 035	<b>16 37</b> 1	179 406	88 690	16 794	32 656	- 5 479	132 661	312 067	64 718	42 051
Dec.	160 587	15 975	176 562	93 008	17100	33 153	- 5 945	137 316	313 878		
1995											
Jan.	167 765	13 137	183 902	96 649	17 080	38 658	-6019	146 368	330 270		

#### 5.5 Markka bond market

A) Issues, mill. FIM

During period			By sector			8	n i	Total {1+2+3+4+5}	
heuren -	Corpo-	Financial	Contrai	Local government	Others	Pybl	ic issues	Private placinas	(1+2+3+4+5) = (6+7+8)
	ranyap		gerernment	government		Taxable	Tuxfree	- hreenda	(0+2+0)
	1	2	3	4	.5	6	7	8	9
1990	4 640	17 <b>891</b>	4 420	490	1 007	17 234	607	10 607	28 447
1991	7 277	25 737	11 073	1 320	_	30 160	_	15 247	45 407
1992	6 984	15 043	12 965	2 674	4	23 858		13812	37 671
1993*	11 <b>691</b>	10 481	36 512	2 235	63	49 973		11 456	60 981
1 <b>994</b> *	4 053	10156	31 553	593	-	46 356	-	-	46 356
1 <b>994</b> *									
Jan.	_	2 250	2 2 1 6	45	_	4 511	_	_	4 511
Feb.	560	96	2 359	280	_	3 295	_	_	3 295
March	2 311	733	2 555	190	-	5 789	_	_	5 789
April	100	510	942	_	_	1 552	_	_	1 552
May	181	1 270	1 348	30	_	2 829	_	_	2 829
June	500	160	2 673	48	_	3 380	_	_	3 380
July	2	207	1 171	_	-	1 380	_	_	1 380
Avg.	_	1 721	2 4 1 0		-	4 131	_	_	4 131
Sept.	_	356	4 173	_	_	4 530	_	-	4 530
Oct.	_	1 063	3 0 4 4	_	_	4 107	-	_	4 107
Nov.	400	930	4 137	_	_	5 466	_	-	5 466
Dec.	_	861	4 525	-	-	5 385	-		5 385
1995*									
Jan.	100	358	5 1 <b>09</b>	-	-	5 567	-	-	5 567

#### B) Stock, mill. FIM

End of period			By sector			By	type of log		Total
perioa	Corpo- rations	Financial institutions	Central	Local	Others	Public	lssues	Private placings	(1+2+3+4+5)
	ranoes		government	government		Taxable	Taxfree	process	(6+7+8)
	1	2	3	4	5	6	7	8	9
1990 1991 1992 1993* 1994* 1994*	23 522 26 632 26 617 32 996 30 180	59 756 76 701 82 319 74 372 66 724	28 812 35 195 44 005 73 682 94 866	1 756 2 766 5 237 6 894 6 981	1 298 3 726 3 358 2 009 948	52 273 76 346 89 534 120 571 142 188	22 970 18 096 13 917 10 391 7 582	39 902 50 578 58 085 58 991 49 929	115 145 145 020 161 536 189 953 199 699
IV	32 996	74 372	73 682	6 894	2 009	120 571	10 391	58 991	189 953
1994* [ ]] ]] ]] [V	34 235 33 236 31 117 30 180	72 084 71 920 70 899 66 724	77 676 78 990 84 211 94 866	7 255 7 297 7 134 6 981	1 007 964 963 948	126 390 130 760 135 008 142 188	8 898 8 584 7 848 7 582	56 969 53 063 51 468 49 929	192 258 192 407 194 324 199 699

#### C) Turnover, mill. FIM

During period	Interbank	Botween banks and customers		mary dealers ' transactions achmark government bond	
			Purchases from other primary dealers	Purchases from others	Sales to others
	1	2	3	4	5
1990	5 401	6 058			
1991	3 343	29 134			
1992	18 383	58 757	10 744	12 156	13 354
1993	47 803	246 104	42 945	95 647	117 489
1994	184 599	359 697	173 096	150 908	176 647
1994					
Feb.	14 921	42 809	12 427	16 883	1 <b>8 48</b> 5
March	35 674	60 298	32 256	28 635	28 693
April	25 078	39 647	23 300	17 241	1 <b>7 960</b>
May	10 772	21 650	9 731	8 753	1 <b>0 958</b>
June	14719	21 105	14 132	8 225	11 <b>496</b>
Juty	5 247	13 956	5 081	4 961	7 745
Aug.	23 000	22 271	22 791	10 728	10 <b>987</b>
Sept.	12 393	24 397	12 307	9 424	1 <b>3 922</b>
Oct.	13 514	29 003	13 361	12 045	14 624
Nov.	12 351	24 444	11 742	9818	13 363
Dec.	7 842	17 304	7 531	6 784	<b>9 28</b> 1
1995					
Jan.	8 855	30 706	8 481	12 246	16 423
Feb.	7716	28 452	7 287	10 833	14 291

#### 5.6 Helsinki Stock Exchange

Average					Share	prices				Tu	rnever', m	III. FIM
of daily obser-			HEX	index (28	Dec., 199	0=1000)				Shares	Bonds	Total
vations	All-	By own	ership		1	By industr	Y			and sub-	and deben-	
	share index	Ro- stricted	Non-	Banks and	insur-	Manu- factur-		Of which:		scrip- tion rights	tures	
		STRICTED	re- stricted	ana finance	ance and invest- ment	ing	Forest indus- tries	Metal and engi- neer- ring	Con- glom- erates	rigms		
	1	2	3	4	5	6	7	8	9	10	11	12
1990	1 332	1 324	1 393	1 263	1 185	1 376	1 436	1 282	1 474	15 521	4 550	20 071
1991	962	949	1 062	901	898	1 003	1 075	1 076	1 021	6 3 3 9	1 315	7 655
1992	772	759	868	425	467	943	1 123	1 206	890	10 277	15 377	25 654
1993	1 240			608	644	1 601	1 695	1 749	1 751	46 337	59 977	106 314
1 <b>994</b>	1 847			719	802	2 464	2 284	2 675	3 068	<b>68 67</b> 1	2 147	70 818
1994												
Feb.	1 917			942	1011	2 462	2 4 1 0	2 982	2 704	6 395	558	6 953
March	1 861			824	948	2 422	2 250	2 841	2 7 <del>9</del> 2	7 060	334	7 394
April	1 815			771	914	2 377	2 189	2 689	2818	4 849	107	4 956
Mary	1 839			749	862	2 427	2 207	2 723	2 891	4 035	71	4 105
June	1 708			676	726	2 271	2113	2 526	2 732	3719	49	3 768
July	1 776			688	727	2 377	2 253	2 503	2 987	3 891	99	3 990
Aug.	1877			647	759	2 536	2 405	2 742	3 185	6 594	134	6 728
Sept.	1 908			652	697	2 601	2 5 1 3	2 738	3 336	4 856	132	4 988
Oct.	1917			645	714	2612	2 351	2 657	3 512	7 761	216	7 977
Nov.	1 908			604	694	2617	2 207	2 568	3 672	5 629	102	5 731
Dec.	1 832			576	640	2 524	2 1 2 8	2 375	3 589	5 100	70	5 170
1995												
Jan.	1 869			524	598	2616	2 224	2 381	3 788	5 582	130	5712
Feb.	1 802			543	577	2 5 1 2	2 146	2 240	3 645	7 016	132	7 148

<sup>1</sup> During period.

## **6. Balance of payments, foreign liabilities and assets** 6.1 Current account, mill.FIM

During period	Exports of goods, fob	Trans- port roceipts	Travel receipts	Other services receipts	receipts, total	Exports of goods and services (1+5)		Trans- fors and other income	Current account receipts (6+7+8)	Imports of goods, cit	Trans- port ex- pendi- ture	Travel ex- pondi- turo	Other services ex- pendi- ture
	1	2	3	4	5	6	7	8	9	10	11	12	13
1990 1991 1992 1993* 1994* 1992 III	99 750 91 100 105 809 132 550 152 192 24 820	7 508 8 643 10 430 11 414	5 044 6 089 7 079 6 811	6 081 5 636 7 730 9 379 10 802	19 077 18 189 22 462 26 888 29 027 6 203	118 827 109 289 128 272 159 438 181 219 31 023	12 739 10 003 6 423 7 624 8 700	4 601 5 336 5 920 6 506 5 715 1 480	136 166 124 628 140 614 173 567 195 634 33 707	101 967 86 348 93 187 101 559 118 638 20 677	3 974 4 360 5 537	10 766 11 089 10 962 9 237 8 189 2 853	11 011 13 369 17 008 17 116
IV 1993* I II III	31 016 32 625 32 116	2 167 2 366 2 646	1 480 1 351 1 763	2 424 2 778 2 281 2 102	6 495 6 690 7 138	35 825 37 511 39 315 39 253	2 233 2 125 1 622	1 470 1 756 1 584	39 173 41 215 43 196 42 460	25 632 25 715 24 818 23 992	1 176 1 279 1 325	2 572 2 401 2 276 2 242	3 666 4 445 4 015
IV 1994* I II III IV	36 793 34 536 38 519 37 405 41 732	2 602 2 923 3 127	1 425 1 747 2 075	2 218 2 587 2 380 2 789 3 046	6 565 6 614 7 049 7 991 7 372	43 358 41 150 45 569 45 396 49 105	1 643 1 382 3 031 1 721 2 565	1 695 1 469 1 370 1 372 1 503	46 696 44 001 49 970 48 490 53 173	27 034 24 852 29 488 28 866 35 433	1 314 1 483	2 319 1 899 2 038 2 101 2 151	4 234

	Services expendi- ture, total (11+12 +13)		ment ex- pendi- ture		Current l account expen- diture (15+16 +17)	account		(3-12)	Other services (4-13)	Services account (20+21 +22)	Goods and servi- ces account (19+23)		fors	Current account (24+25 +26}= (9-18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1990 1991 1992 1993* 1994* 1992 III	26 074 28 690 31 782	126 599 112 421 121 878 133 341 149 827 27 891 33 045	30 424	10 229 10 347 10 390 9 222 2 402	162 680 151 325 162 649 178 311 190 056 37 058 43 309	- 2 218 4 752 12 622 30 991 33 554 4 143 4 122	3 534 4 283 4 893 5 530 1 204	- 6 044 - 4 873 - 2 159 - 1 378 - 895	- 5 374 - 5 639	- 7 885 - 6 228 - 4 894 - 2 162 - 1 011	- 3132 - 6394 - 26097 -	- 18 671 - 24 001 - 26 956	- 4 893 - 4 428 - 3 885 - 3 507 - 922	- 26 513 - 26 696 - 22 035 - 4 744 5 578 - 3 351 - 4 136
1993* i li lii IV		33 840 32 434 31 884 35 183	10 137 10 493 6 805 7 145	2 808 2 393 2 640	46 785 45 321 41 330 44 876	5 301 7 806 8 124 9 760		- 1 049 - 512 - 39	- 1 667 - 1 735 - 2 104 - 2 123	- 1 630 - 926 - 755	_,		- 1 338 - 637	- 5 570 - 2 124 1 131
1994* I II III IV	7 447 7 516 7 756 8 471	32 298 37 004 36 622 43 904	9 163 8 521 6 141 7 181	2 834 2 110 2 119 2 160	44 295 47 634 44 882 53 245	9 684 9 031 8 539 6 300	1 288 1 439 1 602 1 200	- 291 - 25	1 646 1 614 1 342 1 712	- 833 - 466 235 - 1 099	8 851 8 565 8 775 5 201	- 7 781 - 5 490 - 4 420 - 4 616	- 1 365 - 739 - 747 - 656	2 336 3 607

#### 6.2 Capital and financial account, mill. FIM

During period	Imports of capital												
penoa	Direct			Portfolio i	nvestmen	•			Other	investmen	nt		Total
	mest in Finland	Shares	Bonds	Of which: markka denomi- nated bonds	Monøy market Instru- ments	Finaz- cial deriva- tives	Tetal (2+3+ 5+6)	Trade credits	Loans	Curren- cy and deposits		Total (8+9+ 10+11)	(1+7+ 12)
	1	2	3	4	5	6	7	8	9	10	11	12	13
1990 1991 1992 1993* 1994*	3 010 - 997 1 822 4 945 7 703	376 47 397 12 748 13 206	22 280 38 751 39 309 30 353 20 075	1 440 11 786 - 5 312 3 616 - 7 681	- 923 - 4 511 - 1 791 - 4 382 - 1 507	   - 373	21 733 34 287 37 915 38 719 31 402	1 156 - 3 987 3 639 4 467 2 829	16 635 7 496 2 5 357 492		17 307 - 9 737 - 17 415 - 24 454 - 1 164	34 372 - 6 098 - 12 084 - 19 977 1 924	59 115 27 192 27 653 23 687 41 029
1 <b>992</b>      V	340 845	6 47		- 2 712 - 1 169	- 485 629	 	4 995 17 386	2 755 1 178	16 270	828 1110	648 - 13 544	4 248 10 986	9 583 7 244
1 <b>993*</b>           V	439 927 631 2 948	1 405 1 515 6 529 3 300	15 542 16 269 2 267 - 3 725	320 3 420 2 523 - 2 646	- 2 314 - 1 348 - 2 755 2 036	  	14 632 16 435 6 041 1 611		7 326 815 - 1 495 - 1 289	901 1 268 1 671 6 650	- 8 593 - 6 612 - 8 143 - 1 106	1 533 - 7 261 - 8 803 - 5 446	16 604 10 101 - 2 131 - 887
1 <b>994*</b> I II III IV	3 718 2 886 2 187 - 1 088	4 389 2 404 5 181 1 232	4 079 5 501 15 869 - 5 374	- 61 - 3 649 124 - 4 095	- 1 609 3 084 - 2 185 - 798		6 889 11 258 18 482 5 227	- 868	- 3 980 1 255 - 1 314 4 531	772 - 1 748 964 - 220	6 665 - 3 077 - 5 536 784	2 575 - 4 439 - 5 704 9 492	13 182 9 705 14 965 3 177

During		Exports of capital												Change
period	Direct		Portfa	lio invest	ment			Othe	r investme	ent		Total (14+	and omis-	in central bank's
	invest- ment abroad	Shares	Bonds	Money market instru- ments	Finan- cial deri- vative:	(15+16+	Trade credits	Loans	Curren- cy and depo- sits	Other	Total (20+21+ 22+23)	19+24)	sions	reserve assets (in- crease -)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1990 1991 1992 1993* 1994*	10 353 - 501 - 3 372 9 537 19 687	2 - 369 46 873 - 10	575 – 3 321 767 – 4 783	1 171 1 499 2 748 1 932 – 907		1 748 - 1 128 3 115 3 571 - 5 976	1 565 - 726 3 634 1 923 2 343	2 953 2 341 3 409 - 839 - 6 267	935 1 054 3 745 - 6 063 1 854	- 3 480 6 587 3 259 14 698 5 896	- 1 157 9 256 14 048 9 720 3 826	9 883 13 790 22 828	2 012 - 1 008 5 104	15 417 7 375 9 180 1 219 25 504
1 <b>992</b>      V	- 552 - 695	13 25	- 895 - 100	786 3 361	 	- 96 3 286	1 313 1 799	553 2 435	2 619 - 1 924	3 501 4 276	7 986 6 586	7 338 9 177	- 4 944 5 577	6 05 1 492
1 <b>993*</b> I III III IV	985 1 081 - 473 7 944	158 2 77 636	2 823 - 1 095 - 841 - 120	- 577 - 972 3 975 - 494		2 404 - 2 065 3 211 21	1 623 518 - 190 - - 28	– 185 – 1 008	1514	15 515 - 3 766 9 514 - 6 564	14 896 - 3 186 9 829 - 11 819	18 285 - 4 171 12 567 - 3 854	1 665 - 1 464 2 549 2 354	5 586 - 10 684 11 019 - 7 141
1 <b>994*</b> 1 11 111 111 IV	5 078 5 206 4 200 5 203		- 662 - 3 273 - 1 173 326	211 - 4 446 420 2 908	- 52	- 609 - - 7 814 - 824 3 271	1 742 - - 444	- 1 358	- 460 - 268	- 5 779 6 181 9 875 - 4 381	- 5 774 6 105 9 037 - 5 541	3 497	1 628	– 10 279 – 10 172 – 3 921 – 1 132

6.3 Finland's international investment position, mill. FIM

Position	Liabilities													
at end of	Direct			Portfolie is	vestmen	•			Othe	r investme	ta		Total	
period	invest- ment in Finland	Shares	Bonds	Of which maricka denomi- natod bonds	instru-	Finan- ciai deriva- tives	Tota! (2+3+ 5+6)	Trade credits	Loans	Curren- cy and depo- sits	Other	Total (8+9+ 10+11)	liabilities (1+7+12)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	
1990 1991 1992 1993* 1994*	18 651 17 443 19 348 24 391 31 473	5 052 4 149 5 138 30 375 60 558	95 530 141 055 211 361 265 610 256 005	6 385 19 036 14 366 26 288 19 012	23 856 22 079 19 391 14 995 10 466	  - 6 103 - 6 877	124 438 167 283 235 889 304 877 320 152	13 915 9 532 13 305 18 206 20 635	51 937 68 892 78 330 91 378 83 003	7 969 8 555 11 880 4 025 3 430	84 036 78 804 55 478		355 741	
1992 III IV	18 483 19 348	3 367 5 138	184 851 211 361	15 547 14 366	18 023 19 391		206 242 235 889	12 019 13 305	72 530 78 330	9942 11880			) 408 855 ) 437 557	
1993*           V	19 812 20 763 21 418 24 391	8 121 11 901 22 725 30 375	253 159 254 886 265 540 265 610	16 281 21 118 23 460 26 288	17 007 15 573 13 090 14 995	  – 6 103	278 287 282 360 301 355 304 877	15 193 14 897 14 091 18 206	96 786 93 408 95 327 91 378	13 135 11 461 13 276 4 025	67 494 61 106	187 260 183 799		
1994* I II III IV	27 616 30 514 32 606 31 473	39 079 42 719 56 036 60 558	265 290 271 376 269 909 256 005	25 822 22 182 23 157 19 012	12 244 15 286 11 909 10 466	- 8 809 - 7 591	307 758 320 572 330 263 320 152	17 142 16 256 16 309 20 635	85 626 86 786 80 153 83 003	4 724 2 964 3 752 3 430	56 729 48 447	162 735 148 661	502 914 513 821 511 530 506 610	

Position	Assets													
at	Direct		Portfoli	o investm	out	<u> </u>		Other	inve <del>sime</del> n	t		Total		
end of period	invest- ment abroad	Shares	<b>Bonds</b>	Money market instru- monts	Finan- cial deriva- tives	Totai (15+16+ 17+18)	Trade credits	Logas	Curren- cy and depo- sits	Other	Total (20+21+ 22+23)	assets (14+ 19+24)		
	14	15	16	17	18	19	20	21	22	23	24	25		
1990	40 800	762	6 447	2 173		9 383	16 549	24 825	5 726	65 754	112 854	163 037		
1991	44 823	426	7 004	4 154		11 584	16 388	28 504	7 647	72 498	125 037	181 444		
1992 1993*	44 921 54 577	469 1 285	8 697 10 706	7 917 11 028	 446	17 083 23 465	21 389 26 350	35 251 34 018	12 665	76 647 89 301	145 952 155 370	207 955 233 412		
1993* 1994*	54 577 69 601	1 1 1 2 9 5	4 681	9 070	446 487	23 465 15 367	26 350 26 431	24 077	5 701 7 055	107 254	164 817	233 412		
1992														
Itl	45 982	442	·8176	4 032		12 650	18 898	30 676	14 188	68 323	132 085	190718		
IV	<b>44 92</b> 1	469	8 697	7917		17 083	21 389	35 251	12 665	76 647	145 952	207 955		
1 <b>993</b> *														
I.	51 946	676	11 952	7 766	••	20 394	23 664	36 976	12 275	92 392	165 307	237 648		
	48 465	671	10 801	6 627		18 099	23 888	34 148	12 159	97 321	167 516	234 080		
  V	49 447 54 577	759 1 285	10 074 10 706	10 689 11 028	 446	21 522 23 465	23 857 26 350	34 208 34 018	13 929 5 701	98 044 89 301	170 039 155 370	241 008 233 412		
1994°														
1	59 112	1 296	9 576	10910	622	22 403	24 479	31 396	8 107	91 319	155 301	236 816		
Ĩ	64 465	1211	5 953	6 338	550	14 052	26 159	29 856	7 4 4 9	106 714	170 178	248 695		
	65 838	1116	4 311	6 087	561	12 075	24 435	28 350	6 955	113 275	173 016	250 929		
IV	69 601	1 1 2 9	4 681	9 070	487	15 367	26 431	24 077	7 055	107 254	164 817	249 786		

Position at end of period	Corporate sector	Banks	Bank of Finland	Other financial institutions	Central govern- ment	Local gover- ment	Net (1+2+3+ 4+5+6)	Net inter- est and dividend expendi- ture	Net inter- est and dividend expendi- ture in relation to current account roceipts,%
	1	2	3	4	5	6	7	8	9
1990 1991 1992 1993* 1994*	34 853 28 483 30 501 49 895 72 086	110 111 107 434 82 343 48 189 33 579	- 36 700 - 34 046 - 27 546 - 33 279 - 52 606	9 910 18 960 28 283 29 737 21 262	24 751 52 748 113 674 167 444 179 516	610 719 2 347 2 956 2 987	143 535 174 298 229 602 264 942 256 825	13 130 15 671 19 011 21 897 19 907	9.7 12.7 13.6 12.7 10.4
1992       V	30 741 30 501	83 775 82 343	– 16 715 – 27 546	24 364 28 283	94 016 113 674	1 958 2 347	218 138 229 602	4 314 4 926	12.8 12.6
1993*           V	34 830 36 841 44 736 49 895	65 514 61 511 44 622 48 189	- 27 782 - 37 288 - 27 318 - 33 279	29 660 27 269 27 224 29 737	156 500 165 160 173 332 167 444	2 937 2 810 2 967 2 956	261 658 256 303 265 565 264 942	6 640 7 103 3 918 4 237	16.1 16.4 9.2 9.1
1994* ¦         V	58 654 57 567 69 474 72 086	53 523 51 846 33 505 33 579	42 504 52 617 52 998 52 606	27 617 24 973 23 923 21 262	165 574 180 109 183 627 179 516	3 233 3 248 3 069 2 987	266 097 265 126 260 600 256 825	7 181 4 890 3 820 4 016	16.3 9.8 7.9 7.6

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

### **7. Foreign trade** 7.1 Exports, imports and

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

7.2 Foreign trade: indices of volume, unit value and terms of trade, 1980=100

During period	Exports, tob	Imports, cif	Balance	Period	Volu	Jime	Unit	value	Terms of trade
beuea	1049	cit	(1-2)		Exports	imports	Exports	Imports	
	1	2	3		1	2	3	4	5
1990	101 327	103 027	- 1 700	1990	125	138	154	128	120
1991	92 842	87 744	5 098	1991	114	115	154	131	118
1992	107 463	94 947	12 516	1992	124	112	164	145	113
1993*	133 927	103 078	30 945	1993	147	109	172	163	106
1994*	153 859	120 200	33 659	1 <b>994</b> *	166	130	175	158	111
1993*				1992					
Dec.	10 880	9 473	1 407		117	102	163	142	115
vec.	10 000	74/3	1 407	IV	133	116	171	154	111
1994*				1993					
Jan.	11 881	8 317	3 564	1	135	108	176	165	106
Feb.	10 908	7 416	3 492	-	143	105	174	165	105
March	12 124	9 515	2 609	111	141	101	174	165	105
April	12 343	9415	2 928	IV	165	116	170	161	105
May	13 366	10 929	2 437				., 0		
June	13 305	9 599	3 706	1994*					
July	13 131	9174	3 957		155	107	170	161	106
Aug.	11 557	9 883	1 674	ii ii	168	129	175	158	111
Sept.	13 165	10146	3 019		161	124	178	161	111
Oct.	13 397	10 085	3 312	IV III	180	156	176	158	112
Nov.	13 982	10 954	3 028					100	
Dec.	14 699	14 766	- 67						

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

During period		Export	: by indestri	es, fob		Imports by use of goods, cif						
P002	Wood industry	Paper industry	Chemical industry	Motal and ongineering	Other	Raw materials	Crude oil, fuels and	Finishe	d goods	Other goods		
	products	products	products	industry products	Boodz	(excl. crude oli)	lubricants	investment goods	Consumer goods	- geoas		
	Ĩ	2	3	4	5	6	7	8	9	10		
1990	7811	31 658	9 540	35 493	16 825	49 210	9 829	1 <b>9 364</b>	23 888	736		
1991	6 984	29 695	10 539	29 188	16 436	42 505	9 399	1 <b>3 973</b>	21 195	672		
1992	7 892	32 587	12 172	35 741	19 07 1	49 514	9 745	1 <b>3 348</b>	20 826	1 514		
1993*	10910	37 430	14 205	48 158	23 409	54 792	10 904	1 <b>5 396</b>	21 066	1 009		
1 <b>994</b> *	14 114	41 300	1 <b>5 639</b>	55 558	27 248	65 899	11 628	17 147	24 606	920		
1993*												
Dec.	968	2 963	1 074	3 799	2 076	5 027	1 099	1 356	1 895	96		
1994*												
Jan.	978	3 009	1 282	4 272	2 340	4 537	693	1 206	1 820	61		
Feb.	1 018	3 060	1 060	3 741	2 029	4 229	608	925	1 621	33		
March	1 026	3 623	1 248	4 061	2 166	5 198	752	1 314	2 206	45		
April	1 165	3 487	1 1 5 6	4 338	2 197	4 823	968	1 662	1 913	49		
May	1 431	3 506	1 51 1	4 538	2 380	6 075	1 290	1 317	2 232	15		
June	1 318	3 358	1 <b>289</b>	4 882	2 458	5 513	867	1 1 <b>92</b>	1 <b>950</b>	77		
July	1 015	3 287	1 315	5 802	1 712	4 823	955	1 227	1 <b>792</b>	377		
Avg.	935	3 437	1 258	3816	2 1 1 1	5 419	1 029	1 386	2 031	18		
Sept.	1 313	3 586	1 354	4 320	2 592	5 656	1 054	1 384	2 027	25		
Oct.	1 268	3 566	1 313	4 937	2 313	5 645	803	1 485	2 051	101		
Nov.	1 357	3 719	1 453	4 968	2 485	6 191	1 012	1 557	2 180	14		
Dec.	1 290	3 662	1 400	5 883	2 464	7 790	1 597	2 492	2 783	104		

## 7.4 Foreign trade by regions and countries

Region and country		Expor	ts, fob		Imports, cif					
	19	93 •	Janya	1994 * ry – December	1	993 *		994 * 7 – December		
	Mill. FIM	Percentage share	MİİI. FIM	Percentage change from the corro- sponding poriod of the previous year	Mill. FIM	Porcentage share	Mill. FIM	Percentage change from the corre- sponding period of the previous year		
	1	2	3	4	5	6	7	8		
All OECD countries	102 135	76.3	115 277	12.9	81 607	79.2	93 014	14.0		
OECD Europe	86 513	64.6	97 873	13.1	66 956	65.0	74 466	11.2		
Of which:	00010	01.0	// 0/0	10.1	00700	00.0	1.100			
Austria	1 427	1.1	1 597	11.9	1 179	1.1	1 347	14.3		
Belgium and	1 121							11.0		
Luxembourg	2 955	2.2	3 457	17.0	3 008	2.9	3 284	9.2		
Denmark	4 479	3.3	5 283		3 231	3.1	3 661	13.3		
France	7 1 1 4	5.3	7 774		4 716	4.6	4 902	3.9		
Germany	17 628	13.2	20 662	,	16 901	16.4	17 713	4.8		
Italy	4 350	3.2	4 591	5.5	3 811	3.7	4 660	22.3		
Netherlands	6 729	5.0	7 866		3 847	3.7	4 339	12.8		
Norway	4 277	3.2	4 862		5 010	4.9	5 745	14.7		
Spain	3 263	2.4	3 547		1 245	1.2	1 576	26.6		
Sweden	14 855	11.1	16 818		10 531	10.2	12 522	18.9		
Switzerland	2 1 1 1	1.6	2 325		2 044	2.0	2 105	3.0		
United Kingdom	14 020	10.5	15 907		9 160	8.9	10 004	9.2		
Other OECD Of which:	15 622	11.7	17 404	11.4	14 651	14.2	18 548	26.6		
Canada	1 075	0.8	1 031	- 4.0	724	0.7	837	15.7		
Japan	2 187	1.6	3 1 7 4		5 958	5.8	7 809	31.1		
United States	10 506	7.8	11 033		7 498	7.3	9 163	22.2		
Non-OECD Europed	an									
<b>countries</b> Of which:	12 679	9.5	18 428	45.3	11 207	10.9	14 970	33.6		
Russia	6 051	4.5	7 <b>9</b> 94	32.1	7 813	7.6	10 661	36.5		
Other countries Of which:	19113	14.3	20 153	5.4	1 <b>0 264</b>	10.0	12 215	19.0		
<b>OPEC</b> countries	3 266	2.4	2 446	- 25.1	542	0.5	590	9.0		
<b>TOTAL</b> Of which:	133 927	100.0	153 858	14.9	103 078	100.0	120 199	16.6		
EC countries EFTA countries	62 850 22 799	46.9 17.0	71 489 25 725		47 974 18 831	46.5 18.3	52 447 21 812	9.3 15.8		

# **8. Domestic economic developments** 8.1 Supply and use of resources, mill. FIM, 1990 prices (seasonally adjusted figures)

Period		mption nditure		inent	Change in stocks,	Domestic demand	Exports	Imports	GDP (6+7-8)
	Private	Public	Private	Public	incl. statistical discrepancy	(1+2+3+4+5)			
	1	2	3	4	5	6	7	8	9
1989	269 879	104 526	1 <b>29 90</b> 5	15 149	5 975	525 434	117 241	127 311	515 364
1990	269 754	108 535	121 858	17 286	5 769	523 202	118 828	126 600	515 430
1991	260 031	111 256	93 722	17 243	- 2 451	479 801	110 965	111 755	479 011
1992	247 363	108 799	75 338	16 899	4 534	452 933	122 059	112 989	462 003
1993*	237 793	103 004	61 105	13 959	10 064	425 925	142 459	113 752	454 632
1992									
	61 884	27 267	20 146	4 377	202	113 876	30 299	28 725	115 450
	61 470	27 118	18 088	4 076	979	111 731	30 636	27 580	114 787
IV	61 081	27 032	16 406	4 264	2 241	111 024	31 431	27 859	114 596
1993*									
	59 869	25 940	16015	3 642	2713	108 179	34 737	29 764	113 152
	<b>59 25</b> 1	25 836	15 363	3 442	1 252	105 144	34 514	27 041	112 617
	58 962	25 666	15013	3 539	3 272	106 452	36 320	28 565	114 207
IV	59 711	25 562	14714	3 336	2 827	106 150	36 888	28 382	114 656
1994*									
I	60 802	25 197	15 651	3 254	1 261	106 165	37 739	28 351	115 553
	60 013	25 075	16113	3 108	4 608	108 917	40 035	31 193	117 75 <b>9</b>
	60 423	24 879	16 825	3 005	5 757	110 889	40 873	32 372	119 390

8.2 Volume of industrial production, 1990=100 (seasonally adjusted figures)

Period	Total Industry	Mining and quarrying	Mane- focturing	Wood and paper industries	Metal and engineering industries	Other manu- facturing	Energy and water supply
	(100.0)	(1.3)	(89.6)	(16.8)	(31.3)	(41.5)	(9.1)
	1	2	3	4	5	6	7
1990	100.2	99.8	100.2	100.1	100.4	100.1	100.0
1991	91.2	91.3	89.9	91.5	85.6	92.6	103.6
1992	92.4	88.4	91.4	94.6	<b>91</b> .1	90.2	103.0
1993*	<b>97</b> .1	85.8	96.2	104.3	99.4	90.4	107.9
1994*	107.9	111.9	107.1	114.4	118.5	95.4	115.6
1993*							
Dec.	102.3	82.6	101.5	108.1	107.5	94.0	111.8
1994*							
Jan.	102.1	84.0	101.3	111.6	103.4	94.0	112.2
Feb.	102.9	80.0	101.5	109.6	108.8	93.1	118.5
March	103.1	91.9	102.1	111.8	111.6	88.5	115.9
April	105.1	100.7	104.4	112.7	111.3	95.7	114.5
May	108.0	101.6	106.0	114.3	115.9	96.4	116.3
June	107.9	120.7	107.1	115.3	116.1	96.7	118.0
July	108.5	182.1	106.6	117.3	113.5	96.7	114.7
Aug.	108.9	166.7	107.1	115.3	118.7	95.4	122.6
Sept.	111.3	123.8	110.9	116.1	129.7	96.5	117.5
Oct.	112.6	104.8	112.8	116.9	131.2	97.3	113.8
Nov.	112.5	99.9	112.8	115.0	133.7	97.5	110.7
Dec.	111.5	86.6	111.7	118.2	129.0	95.7	112.9

8.3 Indicators of domestic supply and demand, 1985=100 (seasonally adjusted figures)

Period	Volume of wholesale	Volume of retail	Volume of construction		Of which:	<u> </u>	imports of	Monthly indicator	
	trade	trade	of buildings	Residential buildings	Industrial buildings	Other buildings	goods	ef GDP	
	1	2	3	4	5	6	7	8	
1989	124.2	117.0	130.3	132.9	137.6	125.2	161.4	116.7	
1990	119.9	111.6	127.3	124.8	161.7	122.1	144.6	117.5	
1991	99.4	103.5	103.9	94.4	127.7	109.9	102.1	110.3	
1992	87.2	92.9	79.5	73.8	76.2	87.5	84.5	107.0	
1993*	82.5	87.6	59.5	60.5	52.9	59.8	83.2	105.5	
1993*									
Nov.	83.2	86.9						107.2	
Dec.	84.0	88.9	••					107.7	
1993*									
	83.0	85.6	59.3	56.0	47.8	59.3	60.7	105.1	
IV	82.6	87.3	56.7	55.2	61.5	51.4	<b>79</b> .1	106.8	
1994*									
Jan.	82.5	88.6		••				107.1	
Feb.	83.6	89.1						107.3	
March	83.9	92.5						108.9	
April	82.2	87.6						109.5	
May	89.4	90.9						110.5	
June	88.2	89.6						109.5	
July	85.7	85.0						109.6	
Aug.	92.5	88.9						110.0	
Sept.	90.4	91.1						110.6	
Oct.	87.3	87.6						111.8	
Nov.	92.6	89.9						111.6	
1 <b>994</b> *									
I	83.4	90.1	53.7	59.7	40.3	50.2	73.8	107.8	
11	86.6	89.4	48.1	54.9	42.2	44.8	97.8	109.8	
111	89.5	88.3	52.5	50.8	68.3	44.8	84.4	110.1	

Period	Index of wage and		By sectors	i	Con- sumor price	Indica- tor of under-	Basic price index	By	origin	Produc- er price index	By man ar		cost _ index
		Private ,	Of which: Manufac- twring (SIC 3)		index	lying infla- tion	for domostic supply	Domes- tic goods	lmport- ed goods	for manu- fac- turing	Export- ed goods	Home market goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1990 1991 1992 1993' 1994'	100.0 106.4 108.4 109.2 111.0	100.0 106.4 108.1 108.8 110.9	100.0 106.1 108.3 110.0 114.6	100.0 106.4 109.0 110.1 111.2	100.0 104.3 107.4 109.7 110.9	100.0 104.1 107.1 109.9 111.4	100.0 100.0 101.4 104.8 106.2	100.0 99.8 99.5 100.8 102.8	100.0 100.8 108.5 119.3 118.7	100.0 99.4 101.6 105.5 107.1	100.0 98.5 102.7 109.2 110.1	100.0 99.8 101.1 103.9 105.8	102.2 100.4 100.7
1993' IV	109.9	1 <b>09.6</b>	111.5	110.7	109.8	110.7	104.7	101.0	118.5	105.6	109.6	103.9	100.9
1994 Jam. Feb. Mardi April May June July Aug. Sept. Oct. Nov. Doc.				     	109.4 109.8 110.0 110.2 110.3 111.3 111.4 111.6 111.8 111.9 111.6 111.5	110.3 110.8 111.0 111.3 111.3 111.5 111.7 112.0 112.1 111.7 111.7	104.8 105.1 105.4 105.8 106.1 106.6 106.8 107.0 107.1 107.1	101.2 101.7 102.1 102.2 102.5 103.1 103.3 103.7 104.0 104.1 104.3	117.8 117.4 118.1 119.2 119.1 119.5 119.3 119.5 119.3 118.2 118.5 118.0	105.5 105.5 105.7 105.8 106.4 107.0 107.7 108.2 108.4 108.4 108.4 108.7	109.4 108.4 108.0 109.0 110.3 110.9 112.0 112.0 111.0 111.3 111.5	103.9 104.3 104.7 104.8 105.2 105.6 106.3 106.5 106.8 107.3 107.2 107.4	101.7 101.7
1 <b>994</b> ' I II III IV	110.4 110.9 111.1 111.5	110.3 110.9 111.0 111.6	113.1 114.4 114.9 116.0	110.9 111.0 111.2 111.6	109.7 110.6 111.6 111.7	110.7 111.3 111.7 111.8	105.1 105.9 106.8 107.1	101.6 102.3 103.4 104.1	117.8 119.3 119.4 118.2	105.6 106.4 108.1 108.5	108.6 109.1 111.6 111.3	104.3 105.2 106.5 107.3	101.6 101.9 102.3 102.9
1 <b>995</b> Jan.					111.4		107.0	104.1	117.8	109.1	113.2	107.3	103.2

8.4 Wages and prices, 1990=100

<sup>1</sup> Preliminary figures for columns 1–4.

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

Period	Labour force	Labour force	Total employ-	By indus	trial status		By is	dustry		Unem- ployed	Usem- ployment
	partici- pation rate among 15-74 year olds		ment (4+5) = (6+7+8+9)	Self- omployed	Wage and salary carners	Agri- culture and forestry	Industry	Con- struction	Service ind <del>ustries</del>		rate
	~~~				10	00 person	<b>.</b>				%
	1	2	3	4	5	6	7	8	9	10	11
1990	68.4	2 556	2 467	360	2 108	207	556	205	1 500	88	3.4
1991	67.4	2 533	2 340	340	2 000	197	502	179	1 461	193	7.6
1992	66.1	2 502	2174	325	1 849	188	454	150	1 382	328	13.1
1993	65.3	2 484	2 041	312	1 729	173	423	124	1 3 1 9	444	17.9
1994	64.8	2 480	2 0 2 4	312	1712	167	426	113	1 317	456	18.4
1994											
Jan.	64.7	2 467	1 993	345	1 648	171	409	114	1 300	474	19.2
Feb.	65.4	2 494	2 030	301	1 729	170	420	111	1 328	464	18.6
Marci	<b>h</b> 65.2	2 488	2014	315	1 699	166	422	109	1 316	474	19.1
April	64.7	2 470	2 002	313	1 689	165	420	112	1 305	468	19.0
May	64.9	2 483	· 2018	311	1 707	167	420	113	1 317	465	18.7
June	64.9	2 484	2 026	314	1712	173	423	108	1 323	458	18.4
July	64.6	2 472	2 009	302	1 707	164	423	118	1 304	463	18.7
Aug.	64.6	2 472	2 027	306	1 720	168	431	114	1 314	445	18.0
Sept.	65.0	2 491	2 041	312	1 729	171	440	114	1 315	450	18.1
Ođ.	64.8	2 481	2 040	303	1 737	160	435	119	1 326	441	17.8
Nov.	64.5	2 473	2 037	309	1 728	168	433	113	1 324	436	17.6
Dec.	64.8	2 483	2 048	311	1 738	164	437	118	1 329	434	17.5
1995											
Jan.	64.7	2 482	2 046	341	1 704	162	444	120	1 319	436	17.6

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

mill EIM	cash flow basis
TTMI. FIIVI.	cash now basis

During period				Revenu	e			Exponditure				
period	Direct taxes	Indirect taxes	Other taxes and similar	Other revenue	Rev- enve	Redemp- tions	before	Consump- tion	fors and	of	which:	
			similar Fevenye		before financial trans- actions (1+2+3+4)	of Icans granted by the state	borrowing (5+6)		sub - sidies	Local govern- mont	Other do- mostic sociors	
	1	2	3	4	5	6	7	8	9	10	11	
1989	39 397	76 458	471	15 <b>99</b> 0	132 316	3 926	136 241	35 082	72 008	33 244	35 715	
1990	42 61 1	77 364	953	18 423	139 351	4 260	143 611	41 535	81 190	37 646	40 313	
1991	41 054	73 251	1 136	19 182	134 624	4 4 4 2	139 069	45 085	101 220	42 297	55 160	
1992	34 312	69 541	1 512	21 251	126 616	5 054	131 669	49 291	105 184	42 990	59 180	
1993	31 667	67 291	1 443	28 823	129 224	7 366	136 593	46 880	108 608	42 720	63 535	
1993												
Nov.	2 736	5 757	147	2 672	11 312	2 638	13 952	3 708	9 371	3 437	5 820	
Dec.	2 078	6 543	115	5142	13 878	759	14 637	4 256	10 357	3 609	6318	
1994												
Jan.	2 827	6 024		1 857	10 775	27	10 802	3 699	9 936	3 1 1 8	6 609	
Feb.	2 757	5 500		1 770	10142	83	10 224	3 090	8 334	3 084	4 939	
March	3 774	4 727		2 283	10 884	2 382	13 265	4 097	9 474	3 521	5 820	
April	2 374	5 1 3 4	100	1 945	9 553	208	9 759	3 320	9 049	3 849	5 068	
May	2 567	5 970		2 717	11 352	241	11 592	3 633	8 999	3 684	5166	
June	2 786	5 511	524	1 977	10 798	1 503	12 300	4 654	9 930	3 725	6 028	
July	3 059	5 980		1 756	11 032	898	11 929	4 200	8 475	3 195	5 083	
Avg.	2 915	6 837		1 336	11 226	198	11 424	3 046	8 170	3115	4 806	
Sept.	2 671	5 289		1 489	9 576	81	9 658	3 866	8 399	3147	5 182	
Oct.	2 736	5 834		1 243	9914	228	10141	3 859	11109	3 1 3 8	7 867	
Nov.	2 632	5 608	72	1 956	10 268	975	11 243	4 013	8 368	3164	5 009	

During period			Expenditu	<b></b>			Financial	<u>balance</u>	
perioa	Fixed invest- ment	Other expendi- fure	Expenditure before financial transactions (8+9+ 12+13)	Lending and other financial investment	Expenditure before redemptions of state debt (14+15)	enue sur-	Net bor- rowing roquirement (7-16)	Net bor- rowing	Cash sur- plus (18+19)
	12	13	14	15	16	17	18	19	20
1989	8 393	5 343	120 826	7 566	128 390	11 490	7 851	- 4 009	3 842
1990	5 962	4 927	133 614	9319	142 934	5 737	678	1 201	1 879
1991	5 370	6 368	158 044	13 328	171 372	- 23 420	- 32 304	25 659	- 6 645
1992	5 042	8 499	168 016	35 501	203 516	- 41 400	- 71 <sup>.</sup> 847	70 691	- 1 155
1993	4 306	18 076	177 870	19 753	197 623	- 48 646	- 61 030	84 036	23 009
1993						•			
Nov.	349	771	14 199	767	14 966	- 2 887	- 1 014	1 230	216
Dec.	477	1 744	16 834	2 491	19 325	- 2 956	- 4 688	91	- 4 596
1994									
Jan.	187	3 336	17 158	545	17 703	- 6 383	- <b>6 90</b> 1	519	- 6 383
Feb.	224	1 202	12 850	631	13 482	- 2 708	- 3 258	7 659	4 402
March	245	3 1 2 0	16 936	3111	20 047	- 6 052	- 6 782	- 41	- 6 823
April	227	2 081	14 677	1 434	16112	- 5 124	- 6 353	789	- 5 563
May	257	1 438	14 327	717	15 045	- 2 975	- 3 453	9 209	5 756
June	342	2 424	17 350	663	18 013	- 6 552	- 5 713	13 429	7716
July	353	1 181	14 209	365	14 575	- 3 177	- 2 646	14 635	11 <b>990</b>
Aug.	298	1 216	12 730	633	13 363	- 1 504	- 1 939	- 1 348	- 3 287
Sept.	321	1 748	14 334	6 4 9 0	20 824	- 4 758	- 11 166	13 203	2 037
Oct.	314	1 705	16 987	555	17 541	- 7 073	- 7 400	4 4 3 0	- 2 969
Nov.	344	1 060	13 785	587	14 372	-3517	- 3 129	5 473	2 3 4 4

# 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. Liquidity position of deposit banks (Column 13): see explanation to Table 2.1. Other claims on financial institutions, net (Column 15) = tillmoney credits to deposit banks (until May 1993) + bonds + other claims on financial institutions – 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 Banks with access to central bank financing can make call money deposits with the Bank of Finland without limit. They can also obtain liquidity credit with a maturity of 1 day, 7 days, 14 days, 21 days or 28 days. The maturity is determined by the Bank of Finland.

Table 2.2 The minimum reserve requirement is reported for the month by the end of which the deposit must be made with the Bank of Finland. The requirement is determined on the basis of the reserve base for the previous month. No interest is paid on minimum reserve deposits. The cash reserve figures for 1989 include the additional deposit requirement of 1.1 per cent under the supplementary cash reserve agreement in force at the time, together with the corresponding non-interest-bearing deposits of FIM 3 159 million.

Table 2.3 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 2.4 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 2.5** 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. HELIBOR (<u>Helsinki Interbank Qffered Bate</u>) (Columns 2–5): The HELIBOR rate for each maturity is calculated by the Bank of Finland as the average of the offered rates for certificates of deposit quoted daily at 1 p.m. by the five largest banks.

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.

Banks with access to central bank financing can make call money deposits with the Bank of Finland without limit. In addition, they can obtain liquidity credit from the Bank of Finland 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 is obtained by subtracting the interest rate margin for call money deposits from the Bank of Finland's tender rate. The monthly and annual values for maturity and interest rate margins are the last values recorded in each month or year.

Table 3.3 The rates shown are based on the lending rates quoted for the respective currencies in the Euro-market. 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 de-

Bulletin 3 • 95 \$25

posits (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 6 May 1993 it has been 2.5 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. Yields on taxable government bonds (Columns 3 and 4) are calculated by the Bank of Finland in a similar fashion. Until January 1992, the yield on 5-year taxable government bonds (Column 3) was calculated on a bullet bond due on 15 March 1994 with a coupon rate of 13 per cent. From February 1992 onwards the yield is calculated on a bullet bond due on 15 January 1999 with a coupon rate of 11 per cent. Until June 1993, the yield on 10-year taxable government bonds (Column 4) is calculated on a housing bond (bullet) due on 15 March 2002 with a coupon rate of 10.75 per cent. From July 1993 onwards the yield is calculated on a bullet bond due on 15 March 2004 with a coupon rate of 9.50 per cent. 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, for which daily quotations at noon Finnish time are used. Since 8 September 1992 the markka has been floating. Tradeweighted currency index (Column 2): The weights are moving averages of the shares of (currently) 14 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 (14 convertible currencies) in Finland's foreign trade. The MERM index (Column 4): The weights are fixed 1977 weights computed on the basis of the IMF's world trade model; 14 currencies are included in this index.

#### 5 Other domestic financing

Table 5.1 Source: Statistics Finland. The public comprises households and non-profit institutions, enterprises (excl. financial institutions) and the local government sector. The table is based on new classifications of Statistics Finland applied since March 1991. Series before March 1991 have been reclassified by the Bank of Finland to conform with the present table, except for columns 3 and 4 where disaggregation was not possible and combined figures are shown. Time deposits (Column 3) consist of all fixed-term deposits. Other deposits (Column 4) include mainly investment accounts with no specific time-period. Other funding (Column comprises CDs, promissory notes and bonds. The figures for banks' holdings of CDs issued by other banks, as well as the CD holdings of the Bank of Finland and the central government have been netted out; netting out is done by the Bank of Finland. Hence, this column includes some

**\$26** Bulletin 3 • 95

liabilities held by entities not covered by the above definition of the public.

Table 5.2 Source: Statistics Finland. The public comprises households and non-profit institutions, enterprises (excl. financial institutions) and local government. Foreign currency credits (Column 5) are mainly granted by commercial banks and Postipankki.

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. Claims on the central government, net (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<sub>1</sub> (Column 6) = currency in circulation - banks' till money + markka cheque and postal giro account deposits and transactions account deposits held by the public. M<sub>2</sub> (Column 7) = M1 + quasi-money (markka time deposits held by the public, excl. deposits with the Bank of Finland). M<sub>3</sub> 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) include, inter alia, the liability for coinage (total coinage), promissory notes given to international financial organizations and, as a minus item, the liability to the State Pension Fund. 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 (for details, see the article "State Borrowing and Cash Management' by Pekka Laajanen and Pekka Saarinen in the August 1987 issue of the Bulletin). Transferable allocations amounted to FIM 8.1 billion at the end of 1988

Table 5.5 Source: Table B: Statistics Finland from the beginning of 1991. 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. Table C includes transactions in markka-denominated bonds outside the Helsinki Stock Exchange. Interbank transactions (Column 1) and transactions (purchases and sales) between banks and customers (Column 2) are transactions by the banks entitled to central bank financing. As from 5 September 1994 the following act as primary dealers: Evli Fixed Income Securities, Goldman Sachs International, Handelsbanken Finland, Kansallis-Osake-Pankki, Okobank, Postipankki, Skopbank, Union Bank of Finland and Unibors Securities. The primary dealers' quotes are published daily (page JVKD on Reuters). Purchases from and sales to others (Columns 4 and 5) consist of transactions in benchmark government bonds between primary dealers and other parties. Other parties refer to all parties that are not primary dealers.

Table 5.6 Source: The Helsinki Stock Exchange.

#### 6 Balance of payments, foreign liabilities and assets

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). As a result of the new classification, the contents of many of the items in the capital and financial account have been revised to some extent. In the same context, a number of other revisions and clarifications have been made. The main changes are listed below.

Table 6.2 Short-term foreign exchange transfers related to cash management flows between direct investors and their direct investment enterprises are classified as direct investment (Columns 1 and 14). Loans received by resident direct investors from group 'in-house' finance companies located abroad (intra-group loans) are also classified as direct investment (Column 14). Money market instruments are classified as portfolio investment (Columns 5 and 17). Premiums and margin payments arising from transactions in financial derivatives are included as a new item under portfolio investment (Columns 6 and 18). Financial derivatives also 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 3 and 16). The category other investment (Columns 8-12 and 20-24) 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 8 and 20). The item 'Other' (Col-umns 11 and 23) includes transactions in short- and longterm 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 subitem under the item 'other' comprises banks' other shortterm assets and liabilities (in practice interbank deposits). The central bank's reserve assets (Column 27) comprise gold, special drawings rights (SDRs), the reserve position in the IMF and convertible currency claims. A negative figure implies an increase in reservatives.

**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 (liabilities less assets) classified by sector.

#### 7 Foreign trade

Source: The National Board of Customs. All tables refer to foreign trade in goods.

**Table 7.2** The volume indices (Columns 1 and 2) are calculated according to the Paasche formula and the unit value indices (Columns 3 and 4) according to the Laspeyres formula. The terms of trade (Column 5) is the ratio of the export unit value index to the import unit value index multiplied by one hundred.

**Table 7.4** The regional and country grouping is based on the classification according to Finnish Official Statistics I A.

#### 8 Domestic economic developments

Tables 8.1–8.5 Source: Statistics Finland. Seasonal adjustment is carried out by the Bank of Finland.

Table 8.2 The indices of industrial production are adjusted for the number of working days in each month. This causes in small differences the annual averages from the corresponding unadjusted figures. For this reason the indices for 1990 also differ marginally from conventional baseyear figures, ie 100.0.

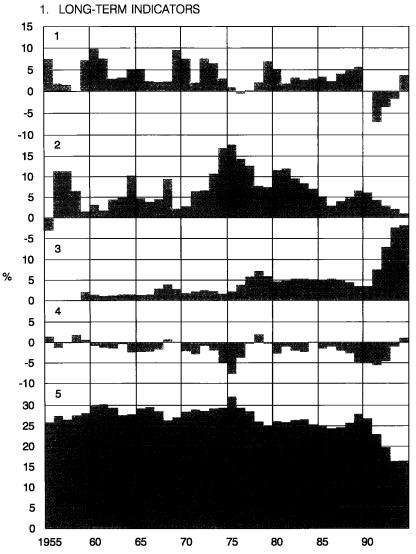
**Table 8.3** The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various industries.

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 8.6 Source: Ministry of Finance.

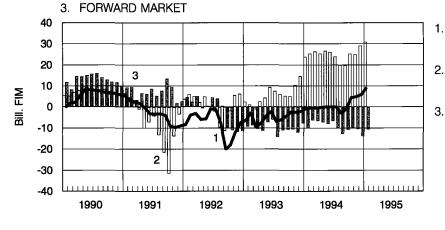
.

1.	Long-term indicators	S30
2.	The Bank of Finland's foreign exchange reserves and forward position	S31
3.	Forward market	S31
	Rates of interest set by the Bank of Finland	S31
	Banks' liquidity position with the Bank of Finland	S32
	Liquidity management interest rates	S32
	HELIBOR rates of interest, daily	S32
8.	HELIBOR rates of interest, monthly	S33
9.	Differential between Finnish and German interest rates	S33
10.	Yields on bonds	S33
11.	Bank of Finland currency index and the markka value of the ECU	S34
12.	Daily spot rates for the markka against the Deutschmark and the US dollar	S34
	Daily spot rates for the markka against the pound sterling and the Swedish krona	S34
14.	Monthly spot rates for the markka against the Deutschmark and the US dollar	S35
15.	Monthly spot rates for the markka against the pound sterling and the Swedish krona	S35
16.	Banks' markka lending rates and markka funding rates	S35
17.	Bank funding from the public	S36
18.	Bank lending to the public	S36
19.	Money supply	S36
20.	Current account	S37
	Net interest and dividend expenditure	S37
22.	Balance of payments	S38
	Finland's net international investment position	S38
	Foreign trade	S39
	Foreign trade: prices and terms of trade	S39
	Finland's export performance	S39
	Production	S40
	Fixed investment	S40
	Employment and the unemployment rate	S41
	Prices and wages	S41
	Central government finances	S42
32.	Central government debt	S42

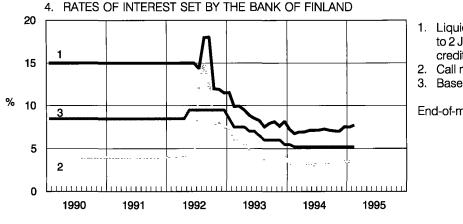


- 1. GDP, change in volume from the previous year, per cent
- 2. Consumer prices, change from the previous year, per cent
- 3. Unemployment rate, per cent
- 4. Current account, as a percentage of GDP
- 5. Fixed investment, as a percentage of GDP



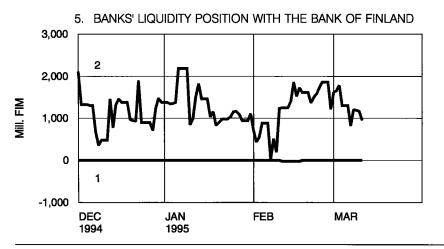


- 1. Forward exchange purchased by the Bank of Finland from banks
- 2. Forward exchange sold by domestic companies to banks
- 3. Forward exchange sold by foreign banks to banks

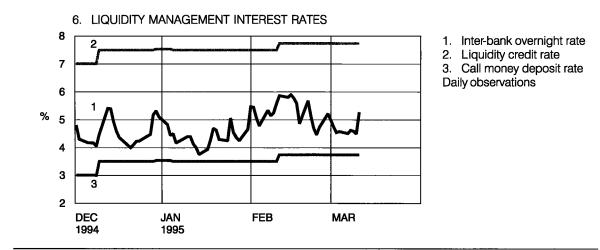


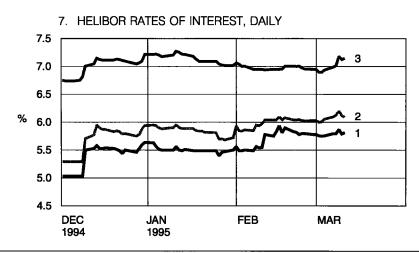
- 1. Liquidity credit rate (up to 2 July 1992 call money credit rate)
- 2. Call money deposit rate
- 3. Base rate

End-of-month observations

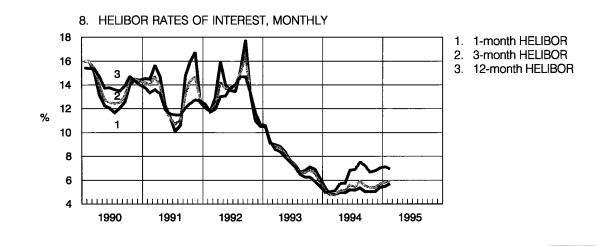


- 1. Liquidity credits (--)
- 2. Call money deposits

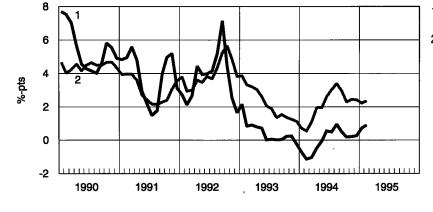




- 1. 1-month HELIBOR
- 2. 3-month HELIBOR
- 3. 12-month HELIBOR

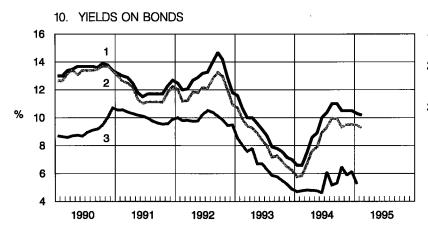


9. DIFFERENTIAL BETWEEN FINNISH AND GERMAN INTEREST RATES

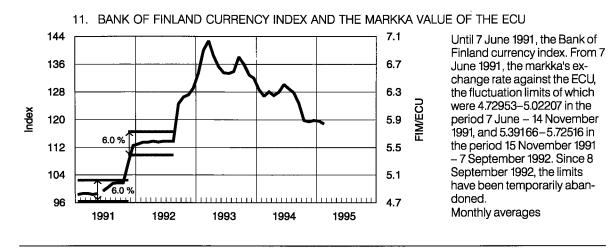


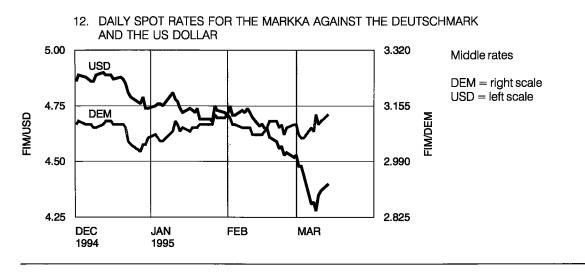
1. 3-month HELIBOR minus 3-month DEM eurorate

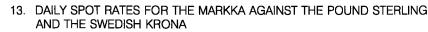
2. 5-year Finnish government bond yield *minus* 5-year German government bond yield

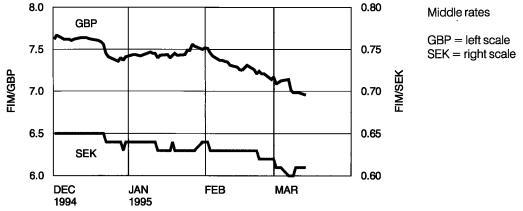


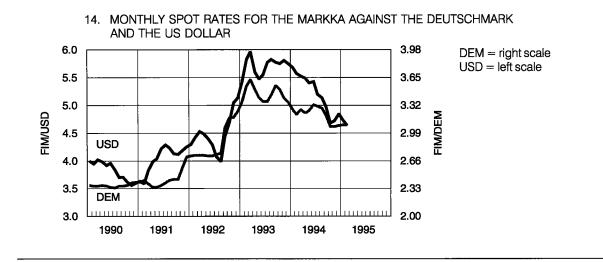
- 1. Bank of Finland's 5-year reference rate
- 2. Yield on (4–5 year) taxable government bonds
- 3. Yield on (4–5 year) taxfree government bonds



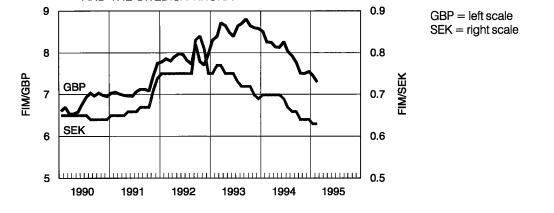


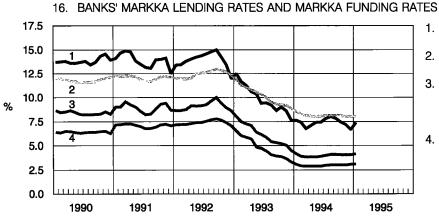




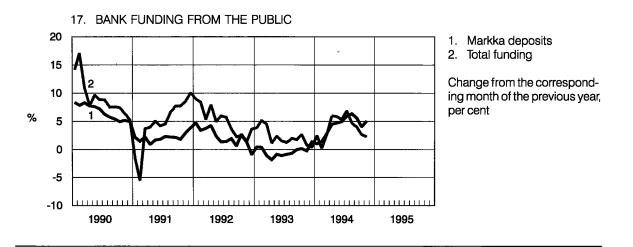


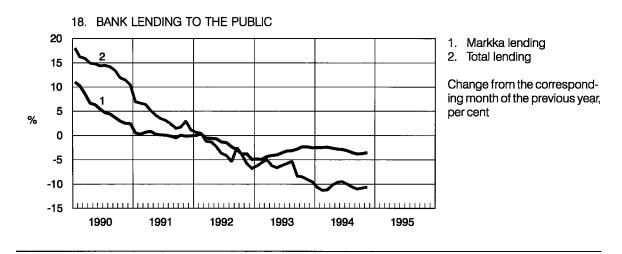
15. MONTHLY SPOT RATES FOR THE MARKKA AGAINST THE POUND STERLING AND THE SWEDISH KRONA

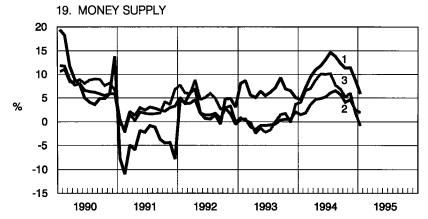




- 1. Average rate on new markka lending
- 2. Average rate on outstanding markka lending
- Average rate on total markka funding (deposits + other funding)
- 4. Average markka deposit rate

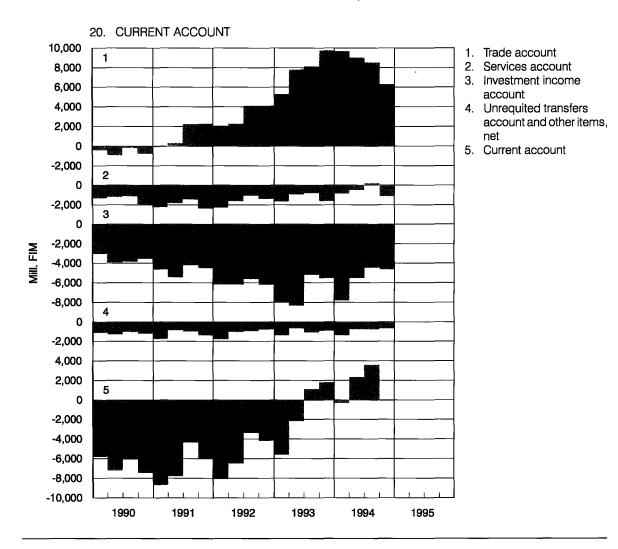


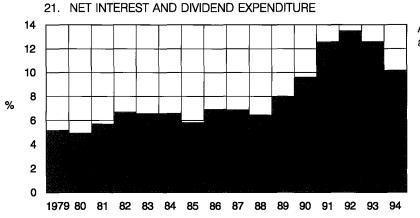




- 1. Narrow money (M1)
- 2. Broad money (M2)
- 3. M2 + bank CDs held by the public (M3)

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

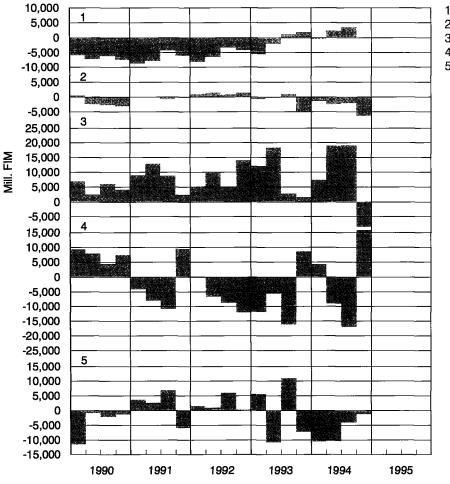




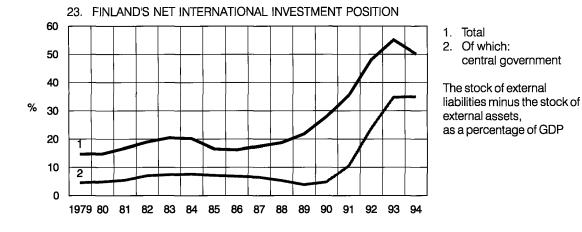
As a percentage of current account receipts

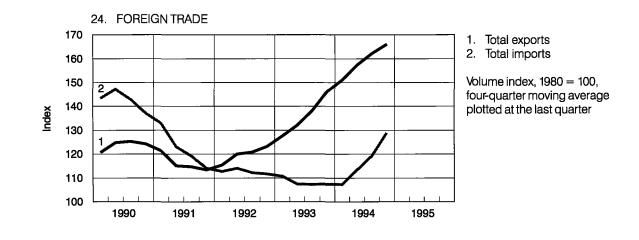
Bulletin 3 • 95 \$37

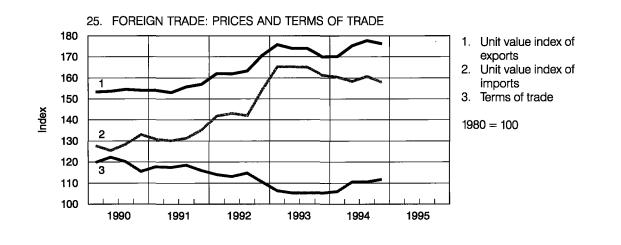
22. BALANCE OF PAYMENTS

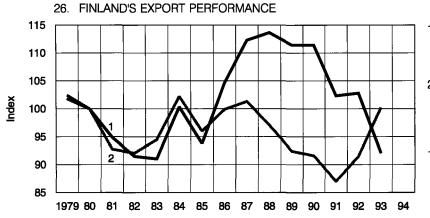


- 1. Current account
- 2. Direct investment
- 3. Portfolio investment
- 4. Other investment
- Change in central bank's reserve assets (increase = -)



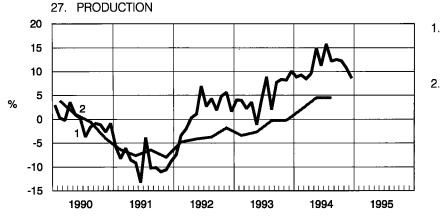




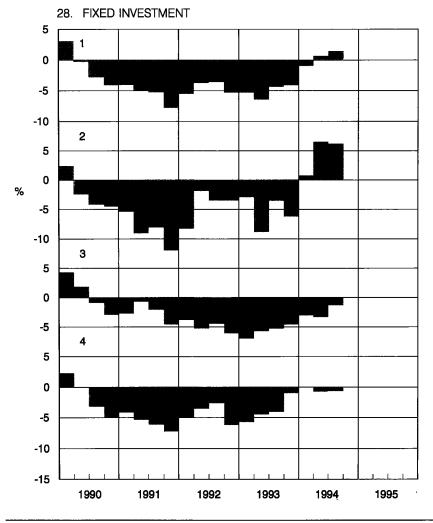


- 1. Value of exports to OECD countries in relation to imports of OECD countries
- 2. Volume of exports to OECD countries in relation to imports of OECD countries

1980 = 100

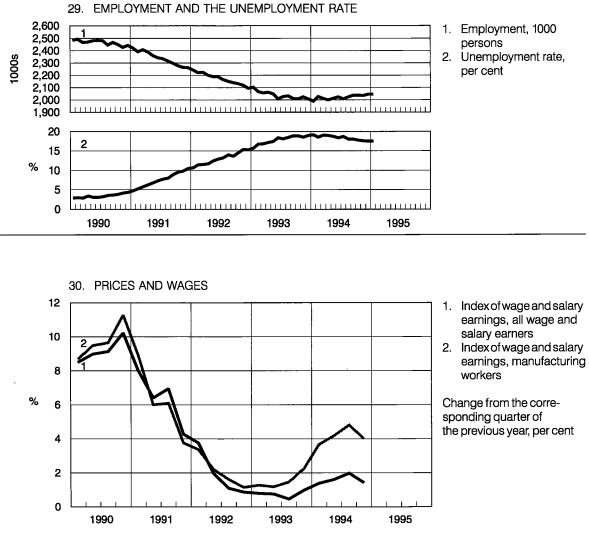


- 1. Industrial production, change in volume from the corresponding month of the previous year, per cent
- 2. GDP change in volume from the corresponding quarter of the previous year, per cent



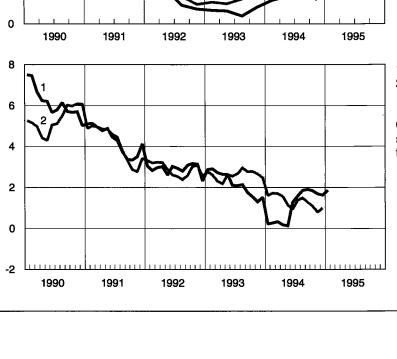
- 1. Total fixed investment
- 2. Investment in machinery and equipment
- 3. Building investment, excl. residential buildings
- 4. Residential buildings

Volume changes calculated from four-quarter moving totals and plotted at the last quarter, per cent



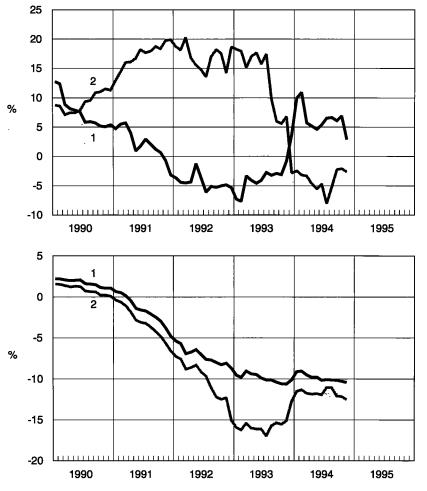
 Consumer price index
 Indicator of underlying inflation

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



%



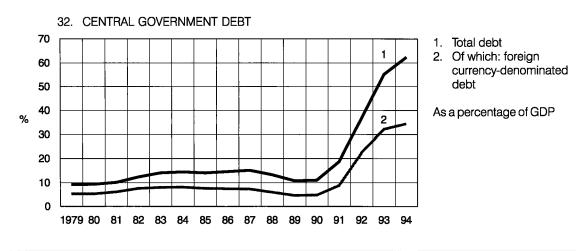


- 1. Revenue excl. borrowing
- 2. Expenditure excl. redemptions of central government debt

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

- 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



#### THE PARLIAMENTARY SUPERVISORY BOARD

PENTTI MÄKI-HAKOLA, Chairman JUSSI RANTA, Vice Chairman PAAVO VÄYRYNEN MAURI MIETTINEN TUULIKKI HÄMÄLÄINEN OLAVI ALA-NISSILÄ

#### JÖRN DONNER ESKO SEPPÄNEN TELLERVO RENKO

#### THE BOARD

SIRKKA HÄMÄLÄINEN, Chairman

HARRI HOLKERI

ESKO OLLILA

KALEVI SORSA

MATTI VANHALA

#### DIRECTOR

PENTTI KOIVIKKO

#### DEPARTMENTS AND OTHER UNITS

Accounting OSSI LEPPÄNEN Administration URPO LEVO Data Processing PERTTI SIMOLA Economics JOHNNY ÅKERHOLM Financial Markets KAARLO JÄNNÄRI, Advisers to the Board: HEIKKI KOSKENKYLÄ, PETER NYBERG, RALF PAULI Information ANTTI JUUSELA Internal Audit TIMO MÄNNISTÖ International Secretariat KJELL PETER SÖDERLUND Legal Affairs ARNO LINDGREN Market Operations MARKUS FOGELHOLM Monetary Policy PENTTI PIKKARAINEN Organization and Management Development PIRKKO POHJOISAHO-AARTI

Payments and Settlement RAIMO HYVÄRINEN

Payment Instruments ANTTI HEINONEN

Personnel RIITTA JOKINEN, Adviser to the Board: ANTON MÄKELÄ

Publication and Language Services ANTERO ARIMO

Research PEKKA ILMAKUNNAS, Adviser to the Board: KARI PUUMANEN

Security JYRKI AHVONEN Information Services ESA OJANEN Eastern European Economies KARI PEKONEN

Management Secretarial Staff HEIKKI T. HÄMÄLÄINEN, Secretary to the Parliamentary Supervisory Board and the Board of Management

#### **BRANCH OFFICES**

Kuopio, Oulu, Tampere, Turku

SETEC OY (security printing house fully owned by the Bank of Finland)

VELI TARVAINEN, Managing Director