

# BULLETIN

## December 1995 Vol. 69 No. 12

Economic developments, inflation and monetary policy

Wages, taxes and employment n Finland

CONT	ENTS CONTRACTOR OF CONTRACTOR	
Economic monetary	c developments, inflation and policy	3
Wages, ta	axes and employment in Finland	
by Timo T	yrväinen	9
Item:	EU commemorative coin	13
Measures	concerning monetary and	
foreign ex	change policy and the financial markets	15
Finland in	brief	16
Statistics	List of tables on page	S1
Charts • L	ist of charts on page	S29

#### 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

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Bulletin 12 • 95

Bank of Finland Bulletin Index to Vol. 69, 1995 Articles and Items

#### No. 1 Statement on the occasion of the closing of the accounts for 1994 by Sirkka Hämäläinen

#### Government debt and the structure of the secondary market by Helvi Kinnunen and Pertti Pylkkönen

The Bank of Finland's investment inquiry Commemorative coin for the centenary of the birth of A.I. Virtanen Death of Dr Klaus Waris Publication of the Bank of Finland

#### No. 2 The Finnish money market from the mid-1980s to the present day by Harri Lahdenperä

#### First years of economic transition in the Baltics by Pekka Sutela

Budget for 1995 approved Merger of Kansallis-Osake-Pankki and Union Bank of Finland

#### No. 3 Inflation expectations in Finnish survey data by Mika Kuismanen and Mikko Spolander

#### Recent developments in the Finnish financial derivatives markets by Kimmo Virolainen

Finland's balance of payments in 1994 Direct investment capital flows in 1994 Portfolio investment in Finland's balance of payments in 1994

#### No. 4 Economic developments, inflation and monetary policy

#### The financial performance, balance sheet structure and solvency of Finnish deposit banks in 1994 by Kjell Hemberg and Helkki Solttila

1995 parliamentary elections The new Government Publications of the Bank of Finland

#### No. 5 Finnish credit institutions in a changing environment by Jyrki Laakso

#### The Bank of Finland real-time gross settlement system by Jyri Marviala and Marianne Palva

Long-term reference rates HELIBOR rates

#### Nos. 6–7 Economic developments, inflation and monetary policy

#### Mutual funds in Finland by Mikko Niskanen and Pertti Pylkkönen

Counterparties in the Bank of Finland's money market operations and the instruments employed Survey on the financing conditions in the service industries

#### No. 8 The role of monetary indicators in the design of monetary policy by Pentti Pikkarainen and Antti Ripatti

## The condition of Nordic banks and future prospects post-crisis by Helkki Koskenkylä

#### Insurance companies in the Finnish financial markets by Tapani Myllymäki

The Bank of Finland's investment inquiry Supplementary budget

#### No. 9 Economic developments, inflation and monetary policy

#### Regulating the global financial market by Kalevi Sorsa

Publications of the Bank of Finland

#### No. 10 Recent changes In monetary policy instruments by Harri Hasko and Mikko Kulsma

#### Public finances: recent trends and prospects by Martti Lehtonen

#### Finland's convergence programme by Johnny Åkerholm

Incomes policy agreement Survey on foreign exchange and derivatives markets, spring 1995

#### No. 11 Investment activity in Finland by Mika Tujula

## Finnish companies strengthen their balance sheets by Juhani Huttunen and Jukka Vesala

The Government's employment programme for 1996–1999 Supplementary budgets Direct investment in 1994 Commemorative coin for the 50th anniversary of the founding of the United Nations

#### No. 12 Economic developments, Inflation and monetary policy

#### Wages, taxes and employment in Finland by Timo Tyrväinen

EU commemorative coin

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## **Economic developments, inflation and monetary policy**

inland's economy has continued to perform favourably despite a modest deceleration in the growth of output. During the autumn, the budget and wage outcomes, together with the employment programme, have increased the credibility of economic policy. The positive reception given to Finland's convergence programme at the meeting of EU economics and finance ministers (ECOFIN) also helped to increase the credibility of Finland's economic policy.

Inflationary pressures have remained subdued. Import prices are continuing to decline because of the markka's stability and declining world prices for certain product groups. The reduction in indirect labour costs entailed in the employment programme has a constraining effect on domestic inflation. Moreover, as the moderate trend in wages becomes more visible, there is a further alleviating impact on price pressures.

As a logical follow-up to the reduced inflationary pressures and economic policy measures taken thus far, the Bank of Finland lowered its monetary benchmark interest rate in October–November. The tender rate was cut three times, by a combined amount of 1.25 percentage points, to 4.75 per cent. Short-term interest rate differentials vis-à-vis the strong European currencies narrowed to the level that prevailed at the beginning of the year.

#### **Output growth levels off**

It appears that the economy has passed through the peak-growth phase of the current cycle. Based on the monthly indicator of total output, GDP posted only a slight increase in July–September compared to the second quarter. Compared to the corresponding periods in 1994, output increased by 3.1 per cent in the third quarter and 5.4 per cent in the first half. In July–September manufacturing output increased by 8.1 per cent as compared to the same period a year ago. Seasonally-adjusted output growth in the metal and engineering industries came to a halt during the summer months. Output volume in the forest industry has remained at about the same level all year. Data for the summer however paint an overly pessimistic picture of the economy.

The deceleration in the growth of manufacturing is partly due to capacity constraints which have hindered the expansion of production. The rate of capacity utilization has been high, especially in the paper and metal and engineering industries. According to the Confederation of Finnish Industry and Employers survey of business confidence, about one-third of the firms in the metal and engineering industries were experiencing capacity constraints. The Confederation of Finnish Industry and Employers reports that the possibility of expanding output will improve in the coming months as new production capacity comes on stream in the metal and engineering industries.

The outlook for manufacturing has become more cautious. Expectations of a further improvement in economic conditions have generally dissipated. The outlook for exports however is still positive, and profitability is expected to continue to improve. For the forest industry, both output and exports are forecast to remain stable in the coming months, at about the same level as in the autumn. The metal and engineering industries, by contrast, are expected to see another slight improvement in conditions.

The growth in private consumption has been picking up gradually since the latter half of 1993 when households began to regain confidence in an improving economy. The latest figures on retail sales show that consumption growth has slowed since the beginning of the year. Households have been cautious in spending decisions. The willingness to take on debt is at a low level, as can be seen *inter alia* in the fact that automobile sales are still slack despite the pick-up in the economy. The outlook for consumption is bolstered by wage increases and tax refunds, which together with a stable price level could spur consumption growth as the year comes to a close.

Investment has not yet generated significant multiplier effects on the economy. The bulk of investment funds has gone into machinery and equipment, which are to a large extent imported from abroad, and there are still no signs of an end to the construction recession.

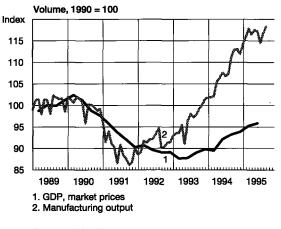
#### Dichotomous economic performance continues

The volume of merchandise exports was 5.7 per cent higher in July-September than in the corresponding period a year ago. As compared to the

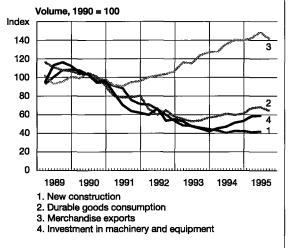
#### Chart 1.

#### Indicators of output and demand

#### Gross domestic product and manufacturing output



#### **Demand indicators**



previous quarter however exports declined, owing mainly to the absence of ship deliveries in the third guarter. The positive trend in Finnish exports has been enhanced by the fact that international growth has focused on machinery and equipment investment in the manufacturing sector. This is reflected in the robust growth in metal and engineering exports. The situation in the forest industries is somewhat unclear. The mechanical forest industry has been in a recession for some time, as seen in the decline in prices on world markets. Nonetheless, the prices of sawn goods reversed their downward trend in August and moved up slightly in September-October. Exports of pulp and paper products have slowed because producers have restricted supply in an attempt to prevent price reductions.

Growth of the Finnish economy has continued to be largely export-driven (Chart 1). In the domestic sector, growth has remained sluggish because of the recession in the construction industry. In the labour markets, this can be seen in the slow pace of the improvement. In August–September the unemployment rate fell largely because of a reduction in the supply of labour. In October the number of employed increased only slightly and the unemployment rate remained unchanged from September. According to the workforce survey, the number of unemployed was 409 000 and the seasonally-adjusted unemployment rate was 16.8 per cent.

#### The balance of payments remains strong as central government deficit declines

The current account has remained strong. The deficit posted in October was largely due to temporary factors. In January–October the trade balance posted a surplus of FIM 33.4 billion, to which the contribution of a nearly 10 per cent improvement in the terms of trade was significant. The deficits on the services and investment income accounts have decreased substantially.

The central government's net borrowing requirement, as measured by the 12-month moving total, declined from about FIM 80 billion in early summer to FIM 71 billion in September 1995. The government's financial balance is expected to improve further as the year comes to a close and several exceptional timing factors fall out of the picture. The Ministry of Finance has estimated that the net borrowing reguirement for 1995 will amount to FIM 67 billion, ie about the same as in 1994. However, the so-called primary net borrowing requirement (net borrowing requirement less the central government's net interest expenditures, bank support and net costs of EU membership) could decline by nearly one-third this year. In the draft budget, the net borrowing requirement for 1996 is estimated to decline to about FIM 41 billion

In October the Government decided on certain measures aimed at alleviating unemployment. The objective of the employment programme is to reduce unemployment by one-half, to 8–9 per cent, by 1999. The estimated effect of the proposed measures on the central government's financial balance is less than FIM 0.5 billion for 1996 and FIM 1.6 billion per year on average over the period 1997–1999.

#### The price level has remained stable

Indices that measure consumer price inflation remained almost unchanged during August–October. The 12-month rate of change in consumer prices has slowed from nearly 2 per cent at the beginning of the year to less than 0.5 per cent (Chart 2). In October the 12-month change was 0.3 per cent. The indicator of underlying inflation remained in July–September at about its average level for the previous quarter. The 12-month change in the indicator has been negative as from July; the change in September was -0.6 per cent.

International inflation has been lower than expected, which has eased the pressure on import prices. In October the import price index was 0.4 per cent lower than in October 1994. The decline in food prices has continued even after the direct price effects of EU membership were fully realized. Food prices turned down again, after having remained stable during the summer months, and in October food prices were 3 per cent lower than in July. The changed market situation in the Finnish food industry is reflected in the fact that according to the Confederation of Industry and Employers survey of business confidence, the food industry expects the price decline to continue in the near future.

In accordance with the 2-year wage settlement agreed in the autumn, negotiated wages go up by 2 per cent on average in November and almost 2 per cent in October 1996. The extremely moderate agreed rise in labour costs will be further restrained by reductions in unemployment insurance premiums that are included in the Government's employment programme. The reductions will amount to about 1½ percentage points and will be effective from the beginning of 1996.

Because of sluggish demand, housing prices have continued to decline. For the country as a whole, the decline in July–September was 1.9 per cent compared to the previous quarter. In the Greater Helsinki area, housing prices continued to decline in October. Stumpage (standing timber) prices have also been falling since the beginning of summer, in July–September by 3.3 per cent compared to the second quarter of this year.

Inflation expectations have continued to recede. According to the survey of business confidence, prices in several sectors are expected to decline in the near future. Price rises are expected mainly in the forest and construction industries. The survey signalled cost increases only in the forest and consumer goods industries.

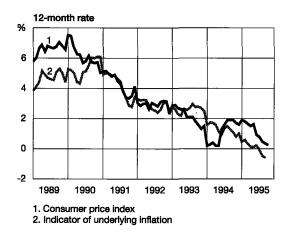
The pick-up in underlying inflation that was expected for next year could be more subdued than was estimated in the previous article. The 12-month rate of underlying inflation is now forecast to remain very modest until the end of 1995 (Chart 2). It is then expected to accelerate to nearly 2 per cent by the end of next year. In the light of current information, it seems that inflation pressures will be relatively subdued again in 1997.

## Pressures in the international currency markets

At the end of September, the international currency markets were in an uneasy state. The depreciation of the dollar and discussions about the EMU caused some disturbance, especially in the European money and currency markets. In October calm was restored to the markets, but in November condi-

#### Chart 2.

Inflation



tions again became somewhat disturbed, largely because of a re-kindling of problems in Mexico and uncertainty regarding the US debt limit and budget. In the latter half of November the US dollar strengthened significantly when an agreement in principle was reached on the budget issue.

As a result of the weakening of the dollar in late September, the currencies of several EU countries depreciated against the Deutschmark. The hardest hit currencies were those that had been under pressure already in the spring. Spain and Italy were also faced with economic policy problems, and in France the situation developed into a full-blown policy crisis. The new French Government encountered credibility problems regarding its economic policy. The central bank was obliged to tighten monetary policy because of a sharp fall in the value of the franc. In October the central bank lowered interest rates as market conditions calmed down. In mid-November central bank rates were lowered again as the Government announced its programme of spending cuts in social security. The public sector savings programme led to a strike at the beginning of December, but this has not led to any turbulence in the money and foreign exchange markets.

In Sweden the external value of the krona and interest rates have fluctuated widely this year. In the autumn, confidence in economic policy increased substantially. The krona has appreciated significantly and long-term interest rates have come down. For instance, in November the krona reached its strongest level, vis-à-vis the ECU, since the beginning of 1994.

#### The markka remains stable

In the domestic money and currency markets, interest centred on the wage negotiations in August– September. The markets were firmly confident that a moderate settlement was imminent, as reflected in falling interest rates and the markka's stable external value. On the day the wage agreement was signed, the markka appreciated by several penniä against the major currencies. The longest-term (12-month) HELIBOR rate and the shortest-term (2-year) bond yield declined the most, by 0.2 percentage point.

The external value of the markka remained stable in the period October–November, during which the tender rate was being lowered. The cuts were expected by the markets and were viewed as being supportive of the favourable performance of the economy.

The markka's exchange rate against the Deutschmark remained close to 3:1. According to the trade-weighted index, the markka's external value is presently stronger than it was just before the markka was floated in September 1992. The strengthening of the Swedish krona has also been reflected in its markka value, which has now reached 65 penniä, ie 5 penniä more than at the beginning of September. Against the dollar, the markka appreciated 2.5 per cent in September–November.

The Bank of Finland's foreign exchange reserves declined in September–November by FIM 1.2 billion, largely due to central government amortizations of foreign currency-denominated loans. At

## Short-term (3-month) market interest rates, per cent

	31 July 30		30 November	
Germany France Belgium UK Italy Denmark Sweden USA Finland	4.6 6.2 4.6 10.9 6.4 9.2 5.9 6.1	4.1 6.4 4.3 6.8 10.7 5.8 9.0 6.0 6.0	3.9 6.4 3.9 6.6 10.6 5.2 8.9 5.9 4.7	

#### Long-term market interest rates, per cent

	31 July	30 September	30 November
Germany	6.8	6.7	6.2
France	7.4	7.5	6.9
Belgium	7.3	7.1	6.7
UK	8.2	8.1	7.6
Italy	12.1	11.9	11.5
Denmark	8.3	8.0	7.3
Sweden	10.4	9.5	8.7
USA	6.5	6.3	5.8
Finland	8.6	8.1	7.3

the end of November, the foreign exchange reserves stood at FIM 50.5 billion.

#### Long-term rates have fallen by more than two percentage points since April

The credibility of the Government's new economic programme, the positive tone of the economy and the decline in international interest rates pushed long-term interest rates down by 2.8 percentage points during the period April–November. During the same period, Finnish long-term rates declined by more than was the case in many of the other EU countries. For instance, in April–November the German long-term rate declined by 0.9 percentage point, the Danish rate by 1.6 percentage point. Owing to domestic factors, the longest-term interest rate has declined by almost 2 percentage points relative to the German long-term rate.

The longest-term (8.5-year) interest rate is now about 7.3 per cent, ie slightly below the Danish long-term rate and slightly above the French rate (Table). The longest-term rate is however presently about 1.1 percentage points higher than at the end of January 1994, before the sharp rise in international interest rates.

At the end of September movements in international interest rates boosted long-term market rates. Discussion concerning the EMU and the rise in US long-term rates also pushed up Finnish rates, even though wage negotiations were making favourable progress. In October–November longterm rates returned to their level of mid-September. The cuts in the tender rate had virtually no effect on the longest-term market rates.

#### HELIBOR rates reflect strong expectations of a decline in interest rates

The longest-term (12-month) HELIBOR rate followed the downward trend in long-term rates over the period April–November and is now 2.3 percentage points lower than at the beginning of April. The shortest-term HELIBOR rate, which is strongly influenced by the tender rate, declined in April– November by about 1 percentage point, ie closely in line with the change in the tender rate (Chart 3).

Because long-term interest rates have declined faster than short-term rates, the yield curve has flattened to some extent. The spread between the longest-term (8.5-year) bond yield and the 3-month interest rate has narrowed since the spring from about 4 percentage points to 2.6 percentage points (Chart 4). In Germany the spread between the 10year bond yield and the 3-month interest rate is 2.3 percentage points, ie slightly narrower than in Finland. The German long-term yield is high in light of short-term rates and inflation expectations for the economy. One reason for this is speculation concerning the future European currency, which in the minds of investors might be weaker than the present Deutschmark. Investors' interest in the longestterm DEM bonds has diminished recently.

Expectations of a cut in the tender rate strengthened in the early autumn when the likelihood of a moderate pay settlement increased. Particularly in mid-September, expectations of a rate cut were strongly reflected in the shortest-term (1–6 months) HELIBOR rates, which dropped below the tender rate. For a time, the yield curve for short-term market rates was inverted.

In October expectations of a cut in the tender rate quickly regained momentum. The shortestterm (1–6 months) market rates dropped below the tender rate, and forward rate agreements signalled that the 3-month rate would decline during the following months. With respect to HELIBOR rates, the yield curve was nearly flat in October. The yields on shorter-term bonds declined to about the same extent as the HELIBOR rates.

Even after the second cut in the tender rate at the beginning of November, the markets continued to hold strong expectations of a further lowering of interest rates. In mid-November the shortest-term HELIBOR rates were again lower than the tender rate and forward rate agreements continued to reflect an expected decline in interest rates.

The tender rate was lowered for the third time in mid-November, in response not only to favourable economic fundamentals but also to the markets' increased confidence in Finland's economy and economic policy. Lower market interest rates in other European countries also argued for the cut in the tender rate, and after the cut the markets continued to display a healthy tone.

Owing to the low level of market interest rates and the subdued outlook for inflation, the base rate was also lowered two times, altogether by 0.5 percentage point. The first cut in the base rate came in connection with the October reduction in the tender rate and the second cut came at the end of November. From 15 December, the base rate will be 4.75 per cent. Because of the rate cuts, the banks also reduced their own prime rates in the autumn, and these rates now range from 5.75 per cent to 6.75 per cent.

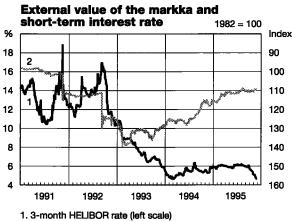
In the autumn the Bank of Finland revised its minimum reserve system so that from October 1995 the minimum reserve requirement is met on the basis of monthly averages. Based on two months of experience, it can be said that the revised system has performed as expected.

#### Loan demand continues to be slack

There are no visible signs of a pick-up in bank lending. For several months, the outstanding amount of bank lending has stood at FIM 264 billion. The excess of deposits over lending stock currently amounts to about FIM 17 billion.

Companies' demand for bank loans continues to be slack, and the volume of share issues

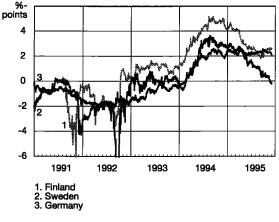
#### Chart 3.



2. Trade-weighted currency index (right scale)

#### Chart 4.

Spreads between 10-year and 3-month interest rates in different countries



has also decreased from last year. In January– September companies' share issues on the Helsinki Stock Exchange amounted to less than FIM 2 billion compared to FIM 10 billion last year. Again using January–September for comparative purposes, companies' bond issues amounted to less than FIM 1 billion this year as against almost FIM 4 billion in 1994 and about FIM 10 billion in 1993. According to different surveys, companies are financing their investments out of profits.

Growth of both the narrow money stock (M1) and the broad money stock (M2) have been fairly stable during the last half year. Narrow money has grown at a rate of some 7 per cent and broad money by some 3.5 per cent. Fluctuations in the broadest monetary aggregate (M3) are influenced by the public's holdings of certificates of deposit.

#### Preconditions for price stability improving

The inflation outlook is very favourable. As the year comes to a close, changes in the indicator of underlying inflation will remain small. It is forecast that in 1996 the 12-month change in the indicator will increase to about 2 per cent at most and that in 1997 it will decline slightly. It is however possible that food prices will continue to decline over a fairly long period, which together with decelerating growth may keep the inflation rate lower than the present forecast. Besides inflation, the other key barometers of economic performance that have developed favourably are the balance of payments and central government finances. Now that the measures included last spring in the Government's economic programme have been put into effect, the economy is well positioned for another favourable performance next year.

The domestic factor causing the greatest concern is the painfully slow decline in unemployment. The Government's employment programme should however have a favourable effect on employment. One of the reasons for the weakness of domestic demand has been the high real interest rate. However, continued stability in inflation and effective economic policies are reducing the uncertainty over future developments and setting the stage for a decline in the real interest rate and a recovery in the domestic markets.

8 December 1995

his article<sup>1</sup> discusses the determination of wages and employment in Finland. Given the country's very high level of unemployment, this is an issue of major importance today. The focus of interest is on the impact of taxes on equilibrium in the labour market, particularly those taxes that influence the 'wedge', ie the amount by which the employer's real labour cost exceeds the employee's real take-home pay.

According to the evidence, taxes affect wage developments in Finland. The rule of thumb is that about half of any tightening of taxation persists in the form of higher labour costs while the other half reduces employees' real take-home pay.

A lasting increase in labour costs leads to a fall in employment and a rise in 'equilibrium unemployment'. The long-run effect is the same no matter whether taxes are collected in the form of income taxes, indirect taxes or social security contributions. Thus, shifting from one form of taxing labour to another does not offer a long-term solution to the unemployment problem.

Since the early 1980s, higher taxes seem to have led to an increase of almost 10 per cent in real labour costs in Finland. This has reduced private sector employment by several per cent.

#### How to investigate wage setting in a unionized labour market?

There are two important institutional features of the Finnish labour market which should be taken into account when modelling wage setting. The first concerns the role of trade unions. In the mid-1960s, the unionization rate was 33 per cent; ten years later it was almost 80 per cent and it subsequently rose further. In contrast to many other countries, union membership has not declined in Finland even during the past few years.

In the economic literature, interest in the role and behaviour of trade unions has long traditions. Broadly speaking, the early literature of the 1940s concluded that unions could be thought of as bodies which maximize the welfare of their members. This presumption carries over to the research discussed in this article. by **Timo Tyrväinen**, Dr Soc Sc (Econ) Economics Department Bank of Finland

The second institutional feature typical of Finland is that, in recent decades, collective wage bargaining has played a vital role in the wage-setting process. The wage settlement procedure is highly centralized and synchronized. Indeed, even non-unionized workers have been covered by collective agreements since 1971, as non-organized employers are also required to implement comprehensive settlements. An agreement is binding for the whole industry if it covers more than 50 per cent of the employees in that industry.

In Finland, the period 1964–1996 saw only six years when no central agreement was reached (for more details, see Tyrväinen, 1989). In these six years, settlements were concluded at industry level. So, any analysis of the Finnish labour market must take into account the role of collective bargaining.

But how to analyze bargaining between two parties, ie employers and employees? One possibility is to apply the tools provided by game theory. Developments in game theory during the late 1970s and early 1980s, in particular, introduced a theoretically well-defined way to link the analysis of union behaviour and the analysis of wage setting. Bargaining models indicate how an equilibrium between the contradicting interests of firms and unions can be defined.

The wage-employment equilibrium is defined by variables influencing profits, on the one hand, and the welfare of the union, on the other. In addition, a role is played by factors which define the welfare of the parties in the event that an agreement is not reached. Finally, the relative bargaining power of unions matters.

The resulting equilibrium is a state from which no party has an incentive to depart once this state has been achieved. In this equilibrium, a long-run relationship between wages and (un)employment holds. If this relationship does not imply full employment, an 'unemployment equilibrium' prevails.

Analysis of the wage-employment equilibrium is of particular importance in a country suffering from massive unemployment. But how does one find out where the equilibrium lies? How can one investigate its determinants empirically?

It was only in the latter half of the 1980s that econometricians and statisticians found ways to

<sup>&</sup>lt;sup>1</sup> The article summarizes the analysis and results of the author's doctoral thesis Wage Determination, Taxes, and Employment: Evidence from Finland.

consider long-run relationships and the related equilibrium in an empirically satisfactory fashion. The important advances made in econometrics are due to the investigation of such issues as cointegration and error correction. The resulting estimation techniques have been applied in the research reported in this article<sup>2</sup>.

#### The 'wedge' and 'real wage resistance'

In the theoretical set-up discussed above, taxes that may influence equilibrium in the labour market can be summarized by one term, the 'tax wedge'. The 'tax wedge' is the most important element of the 'wedge', which is the difference between the real labour cost paid by the firm and real take-home pay, the latter being of importance for the union. 'Real wage resistance' occurs if real labour costs rise as a result of higher taxes and other components of the wedge.

The wedge consists of 1) income taxes (including employees' social security contributions), 2) payroll taxes and 3) the 'price wedge', ie the difference between consumer prices and producer prices. The price wedge contains indirect taxes. In addition, it is influenced by the relative import price of consumer goods (weighted by the import share) and possibly by profit margins in the trade sector.

Empirical analysis of real wage resistance seeks to find out whether changes in the wedge have had an impact on labour costs. Whether these effects are temporary or persistent is also a matter of empirical evidence. If they turn out to be persistent, they lead to a shift in the level of equilibrium (un)employment.

The OECD Jobs Study: Evidence and Explanations reviews international evidence on real wage resistance. Numerous studies have revealed long-run effects of taxes on labour costs. A crosscountry analysis by Symons & Robertson (1990) indicates, however, that in the long run the wedge is fully borne by labour. This is in spite of substantial 'short-run' effects which are guite long-lasting: on average, for 16 OECD countries, a 1 per cent rise in the wedge induces an immediate rise in labour costs of 1/2 per cent, and nearly half of this effect remains after 5 years. Given other lags in the system, this implies that a change in the wedge can have a significant impact on employment for at least a decade. Layard et al. (1991) refer to these long lags and suggest that researchers who have considered the effects as 'permanent' may have had difficulties in discriminating between permanent and temporary effects.

Thus, the most one can say is that there is a large body of evidence showing that taxes have

long-lasting effects on product wages, and hence on equilibrium in the economy, via real wage resistance. On the other hand, the distinction between the long run and the short run (or equilibrium and adjustment) has been adequately addressed in only a very small part of the research carried out in the 1970s or 1980s. As indicated above, methods which can be presumed to perform better in this respect are fairly new.

#### Higher taxes have led to a higher equilibrium unemployment rate in Finland

The reason for the special interest in real wage resistance is obvious (see Chart). In Finland, the wedge is very large by international standards. In addition, the increase in the wedge has been so large that, if real wage resistance occurs, its impact on (un)employment must be of major order.

As can been seen in the chart, the wedge has increased in a more or less trendwise manner in Finland over the past 20 years. This is despite the fact that the various components of the wedge have moved in opposite directions in some years. Let us consider briefly the three components of the wedge.

Employers' social security contributions have increased substantially over the observation period. In most years, this has reflected legislative actions taken to improve social security and pension schemes in Finland. In recent years, however, contribution rates have been raised to finance the cost of rising unemployment.

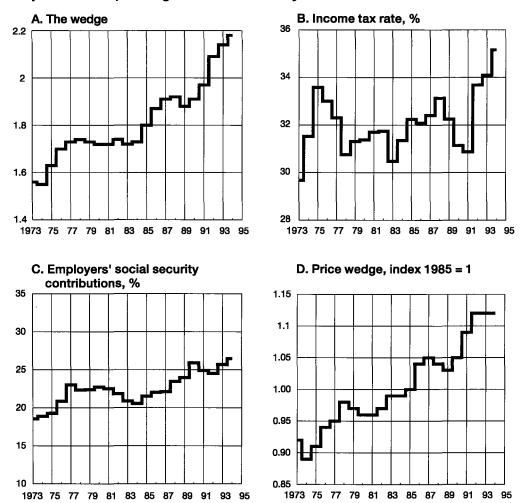
There has been considerable variation in the average income tax. In the 1970s, this was because inflation adjustments in tax scales were not always consistent with the prevailing inflation rate. The reduction in the average income tax rate at the end of the 1980s seems to be due to the Government's plans to ease taxation of incomes. During the recession of the early 1990s, budgetary problems, aggravated by rising unemployment, led to a sharp tightening in income taxation.

As can be seen from the chart, the rise in the price wedge is very large. The tightening of indirect taxation throughout the period examined has been an important contributory factor to this development. Another major factor is that prices of consumer goods imported into Finland have tended to rise more than prices of goods produced in Finland, not only those sold in the home market but those going for export, in particular. Thus, the recent rise in the price wedge is also due to the excessive depreciation of the markka<sup>3</sup> in 1991–1993.

<sup>&</sup>lt;sup>2</sup> Engle & Granger (1987) introduced a two-stage procedure for estimation. In the set-up more recently proposed by Johansen (1988, 1991), long-run relationships and related dynamic error correction equations are estimated simultaneously. In this procedure, time-invariant equilibrium relationships are distinguished from dynamic short-run variation. The Johansen procedure was applied in generating the results discussed in this article.

<sup>&</sup>lt;sup>3</sup> A market-induced devaluation of the Finnish markka took place in November 1991. In September 1992, the markka was floated as a result of the turmoil in the European currency markets. In March 1993, the markka was almost 40 per cent weaker vis-à-vis the ECU than 18 months earlier. Since then, the markka has appreciated considerably.

#### Chart.



### The wedge and its components in Finland, 1965 - 1994: private sector, excl. agriculture and forestry

The aggregate wedge, A, is influenced by B, the (average) income tax rate  $\tau_a$  of a representative (average) wage earner, C, the employers' social security contribution rate, s, and D, the ratio of the private consumption deflator, PC, and producer prices, P, according to the formula: (REAL LABOUR COST)/(REAL TAKE-HOME PAY) = WEDGE = (1+s)PC/P(1- $\tau_a$ ).

The study on which this article is based provides evidence showing that real wage resistance has been in operation in Finland. Wages and employment adjust towards an equilibrium determined by prices, productivity and taxation. In this state, the labour market parties are 'satisfied' with the outcome in the sense that they do not alter their behaviour. Consequently, not even a high rate of unemployment necessarily leads to a downward adjustment of wages.

Contract wages, normally for 1-2 years ahead, are set in collective agreements. Any other wage changes occurring during the agreement period are the result of wage drift. Wage drift only partly reflects developments which are purely market-determined. A large part of wage drift arises from negotiations between local unions and firms. Wage drift adjusts real wages towards the equilibrium state described above while collective agreements are in effect.

As already indicated, the key taxes are those determining the amount by which the employer's real labour cost exceeds the employee's real takehome pay.

Thus, the tax wedge affects the development of wages. A lasting increase in labour costs leads to a fall in employment and a rise in 'equilibrium unemployment'. The rule of thumb is that about half of any tightening of taxation persists in the form of higher labour costs; the other half reduces employees' real take-home pay.

According to the evidence, the long-run effect is the same no matter whether taxes are levied in the form of income taxes, indirect taxes or social security contributions. In other words, wages react in the same way to a cut in purchasing power which is due to, say, a one percentage point increase in income tax as they do to a cut which is due to a one percentage point increase in value-added tax.

Consequently, shifting from one form of taxing labour to another does not offer a long-term solution. If the aim is to reduce the harmful effects of taxation on unemployment, then the overall level of taxes on labour should be lowered.

As far as tax effects on employment are concerned, Finland is not necessarily an exception. Drawing from Tyrväinen (1995a), OECD (1994) presents results for 10 OECD economies. Signs of real wage resistance were discovered in all the economies examined, although it differed in degree across countries.

Given the presence of real wage resistance, an important message for economic policy is that taxation should not be considered in isolation from the labour market. Taxes influence both wages and employment. As higher taxes are not fully absorbed

by changes in nominal wages, lower employment results. This outcome represents an increase in the equilibrium unemployment rate.

Particularly in the Nordic countries, with their exceptionally high tax rates, this is a matter of vital importance. It is worth noting that according to eg the OECD Jobs Study, it was merely the growth in public employment that helped these countries to keep unemployment in check during the 1970s and 1980s.

Since the early 1980s, higher taxes seem to have led to an increase in real labour costs amounting to almost 10 per cent in Finland. This has reduced employment in the private sector by several per cent.

As the effects of taxation are not felt immediately and the most recent tightening of taxation took place in 1993-1994, the harmful effects of taxation are likely to add to wage pressures over the next few years. Although the current high level of unemployment will evidently dampen this inflationary pressure, the impact of compensatory claims will tend ceteris paribus to impede the improvement in employment. When a comprehensive wage contract is in effect, wage drift acts as the channel through which such inflationary pressure could materialize. The best way to prevent this would be to reduce the size of the tax wedge within the room created by cuts in public spending. In its recent decisions, the Finnish Government has taken the first steps in this direction.

6 December 1995

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#### EU commemorative coin

To commemorate Finland's accession to the European Union, the Mint of Finland Ltd has struck a coin in the denomination of 10 markkaa.

The obverse of the commemorative coin features a flying swan and the 12 stars of the EU and bears the inscriptions 'EU 1995' and 'Suomi Finland'. The reverse of the coin is the same as the reverse of the 10 markka coin that has been in circulation since November 1993. The obverse of the coin was designed by the sculptor Pertti Mäkinen and the reverse by Antti Neuvonen. The 10 markka coin has a dual-metal construction, with a centre of aluminium-bronze and an outer ring of cupro-nickel, and weighs 8.8 grammes. The issue has been limited to 500 000 coins.

The coin is also being minted with a centre of gold and an outer ring of silver. The gold content of the centre is 584 o/oo and the silver content of the outer ring 925 o/oo. On the obverse of the coin are the chemical symbols for gold and silver, Au and Ag. The coin weighs 12.2 grammes. Both types of the coin have a diameter of 27.25 mm.

The coin was issued on 28 November 1995 and is legal tender. Foreign sales are handled by the commercial banks and the Mint of Finland Ltd.





## and the financial markets

#### 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.

#### MARCH

Increase in the capital of Asset Management Company Arsenal Ltd. On 23 March, the Government decides to raise the share capital of Asset Management Company Arsenal Ltd by FIM 8 billion. The capital injection is necessary to cover losses incurred during the year.

#### APRIL

**Long-term reference rates.** On 21 April, the Bank of Finland recommends that the three- and fiveyear reference rates calculated by it should no longer be used as reference rates for new loans.

#### JUNE

**HELIBOR rates.** As from 1 June, the method of calculating the HELIBOR rates is revised. As a rule, all the banks which have been accepted by the Bank of Finland as counterparties in its money market operations are taken into account in the calculation; the highest and lowest rates quoted for each maturity are omitted.

Counterparties in the Bank of Finland's money market operations and the instruments employed. On 1 June, the Bank of Finland revises the criteria applied in the selection of counterparties for its money market operations and accords priority status to risk-free securities. Weekly repo auctions discontinued. On 1 June, the Bank of Finland discontinues the weekly tenders (repo auctions) which it arranges for market makers in benchmark government bonds. Skopbank to be sold to Svenska Handelsbanken. On the proposal of the Government Guarantee Fund, the Government approves, on 2 June, an arrangement whereby the sound parts of Skopbank will be sold to the Swedish bank Svenska Handelsbanken. The deal involves mainly the parent bank Skopbank's good loans and

guarantees as well as the share capital of Industrialization Fund of Finland Ltd and SKOP Finance Ltd., which are part of the Skopbank group. Also included in the deal are Skopbank subsidiaries Finnish Real Estate Bank Ltd and the credit card company Aktiiviraha Oy. **Tender rate**. On 9 June, the Bank of Finland raises its tender rate from 5.75 per cent to 6.00 per cent.

#### OCTOBER

**The minimum reserve system**. The Bank of Finland decides to revise the banks' minimum reserve system as from 2 October so that the minimum reserve requirement is henceforth based on a monthly average.

**Tender rate.** On 5 October, the Bank of Finland lowers its tender rate from 6.0 per cent to 5.5 per cent. In addition, the interest rate on banks' excess reserves is cut from 4.0 per cent to 3.5 per cent.

#### NOVEMBER

**Base rate.** The Parliamentary Supervisory Board lowers the Bank of Finland's base rate from 5.25 per cent to 5.00 per cent with effect from 1 November.

**Tender rate**. The Bank of Finland lowers its tender rate from 5.5 per cent to 5.0 per cent on 1 November and from 5.0 per cent to 4.75 per cent on 20 November. In addition, the interest rate on banks' excess reserves is cut from 3.5 per cent to 3.0 per cent on 1 November and from 3.0 per cent to 2.75 per cent on 20 November.

The Savings Bank of Finland – SBF and Siltapankki become asset management companies. The Ministry of Finance revokes the authorization of the Savings Bank of Finland and Siltapankki as from 30 November 1995. In addition, Siltapankki is transferred to the Arsenal Group.

#### DECEMBER

**Base rate.** The Parliamentary Supervisory Board lowers the Bank of Finland's base rate from 5.00 per cent to 4.75 per cent with effect from 15 December 1995.

## 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 516 100 inhabitants, Espoo (Esbo) 186 600, Tampere (Tammerfors) 179 300, Vantaa (Vanda) 164 600 and Turku (Åbo) 162 300.

There are two official languages: 93.1 % of the population speaks Finnish as its mother tongue and 5.8 % Swedish. There is a small Lapp population in the north. Finnish is a member of the small Finno-Ugrian group of languages, which also includes Estonian and Hungarian.

#### Form of government

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

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

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

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

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

Finland is divided into 455 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 444 billion in basic values in 1994, 3 % was generated in agriculture and fishing, 3 % in forestry, 25 % in industry, 5 % in construction, 11 % in trade, restaurants and hotels, 9 % in transport and communications, 3 % in finance and insurance, 21 % in other private services and 20 % by producers of government services. Of total employment of 2.0 million persons in 1994, 8 % were engaged in primary production, 27 % in industry and construction and 65 % in services.

In 1994, expenditure on the gross domestic product in purchasers' values amounted to FIM 508 billion and was distributed as follows: net exports 6 % (exports 35.7 %, imports -29.5 %), gross fixed capital formation 14 %, private consumption 56 % and government consumption 22 %. 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 1950–94. Finland's GDP per capita in 1994 was USD 19 100.

**Foreign trade.** OECD countries absorb the bulk of Finnish merchandise exports. In 1990–94, their share was, on average, 78.3 %, of which the share of EC countries was 48.8 percentage points and that of EFTA countries 18.8 percentage points. Over the same period, Finland's exports to East European countries (including the Soviet Union/Russia) accounted for 9.9 % and the rest of the world for 11.8 %. The regional distribution of Finland's merchandise imports has been quite similar to that of exports.

In 1994, the share of forest industry products in total merchandise exports was 36 %, the share of metal and engineering products 44 % and the share of other goods 20 %. Raw materials and intermediate goods (incl. crude oil) accounted for 60 % of merchandise imports, fuels for 5 %, investment goods for 14 % 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 1 910 million cubic metres, of which 45 % is pine, 37 % spruce and 18 % broad-leaved species, chiefly birch.

The annual growth increment totals 78 million cubic metres and the total drain was about 62 million cubic metres in 1994.

**Energy.** In 1994, gross consumption of primary energy amounted to 31.6 Mtoe, of which industry accounted for 46 %, heating for 22 %, transportation for 13 % and other purposes for 19 %. The sources of primary energy in 1993 were as follows: oil 28 %, coal 13 %, nuclear power 14 %, hydro-electric power, peat and other indigenous sources 31 %, others 14 %. Compared internationally (1993), Finland's consumption of 5.7 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 41 %, as compared with 62 % in western Europe on average.

#### 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 December1994). Finland has three major groups of deposit banks with a total of about 2 149 offices. There are three big commercial banks with national branch networks and ten smaller ones. The commercial banks have a total of 27 foreign branches, subsidiaries and associate banks and 31 representative offices abroad. There are 40 savings banks and 302 cooperative banks with their own extensive branch networks. In addition, foreign banks have four branches and eight representative offices in Finland.

**Financial market.** Of the total stock of FIM 683 billion in outstanding domestic credit at the end of September 1994, 53 % was provided by deposit banks, 23 % by insurance companies, 5 % by other private credit institutions, 7 % by public financial institutions and 12 % 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, 77 % of the instruments, which totalled approximately FIM 174 billion at end-1994, were bank certificates of deposit (including central bank paper). Other negotiable money market instruments consist of Treasury bills, commercial paper and local authority paper.

There are 66 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 181 billion (at end-1994). Domestic bonds and debentures in circulation at end-1994 totalled FIM 200 billion; government bonds made up 47 % of the total. Turnover on the Stock Exchange in 1994 amounted to FIM 71 billion; the share of shares and subscription rights in the total was approximately 97 %. ·

1.1	e balance sheet of the Bank of Finland 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
in 2.1 2.2 2.3 2.4	<ul> <li>e Bank of Finland's operations</li> <li>the money and foreign exchange markets</li> <li>d the banks' forward exchange position</li> <li>Banks' liquidity position at the Bank of Finland</li> <li>The Bank of Finland's minimum reserve system</li> <li>The Bank of Finland's money market transactions</li> <li>The Bank of Finland's transactions</li> <li>in convertible currencies</li> <li>Forward exchange contracts</li> </ul>	S4 S4 S4 S4 S5 S5
	tes of interest Money market rates and rates applied	S6
3.2 3.3 3.4	by the Bank of Finland The Bank of Finland's liquidity facility Weighted Eurorates and commercial ECU interest rate Rates of interest applied by banks Yields on bonds and shares	S6 S6 S6 S7 S7
4.1	t <b>es of exchange</b> Middle rates 2 Markka value of the ECU and currency indices	S8 S8 S9
5.1 5.2 5.3 5.4 5.5	her domestic financingBank funding from the publicBank lending to the publicMoney supply and monetary aggregatesLiabilities and assets of the central governmentMarkka bond marketa) Issuesb) Stockc) Turnoverb) Helsinki Stock Exchange	S10 S10 S11 S11 S12 S12 S12 S13 S13
	lance of payments, foreign liabilitles d assets	S14
6.1 6.2 6.3	Current account Capital and financial account Finland's international investment position	S14 S15 S16
6.4	Finland's net international investment position (liabilities less assets), by sector	S17
7.1	<b>reign trade</b> Exports, imports and the trade balance Proreign trade: indices of volume, unit value and	S18 S18
7.3 7.4	terms of trade 5 Foreign trade by main groups	S18 S18 S19
8.1 8.2 8.3 8.4 8.5		S20 S20 S21 S22 S23 S23
Notes	and explanations to the statistical section Bulletin 12 • 95	S25 <b>S1</b>

#### Bulletin 12 • 95

#### 1. The balance sheet of the Bank of Finland

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

	1994		199	95	
<u> </u>	31 Dec.	8 Nov.	15 Nov.	23 Nov.	30 Nov.
ASSETS			10.000		
Gold and foreign currency claims	52 743	47 576	48 303	50 354	50 503
Gold	2 180	1 742	1 742	1 742	1 742
Special drawing rights	1 537	1 366	1 406	1 410	1 421
IMF reserve tranche	1 354	1 661	1 667 3 286	1 653 3 288	1 666 3 279
ECU-claim on the European Monetary Institute	47 672	3 308 39 498	40 202	42 261	42 396
Foreign currency claims Other foreign claims	47672	4 063	40 202	42 261	42 390
Markka subscription to Finland's quota in the IMI		4 003	4 003	4 003	4 003
Share in the European Monetary Institute	4 595	4 000	4 000 57	4 000	4 000
Claims on financial institutions	2 520	8 674	6 958	6 958	6 395
Liquidity credits	2 520	482	0 300	0.300	0.000
Certificates of deposit	443		_	_	_
Securities with repurchase commitments	1 037	7 195	5 964	5 964	5 409
Term credits	1001	7 100			0 100
Bonds	802	484	481	481	473
Other claims on financial institutions	238	513	513	513	513
Claims on the public sector	1 806	1 801	1 802	1 804	1 819
Treasury bills		-	- USE	-	
Total coinage	1 806	1 801	1 802	1 804	1 819
Claims on corporations	3 149	2 901	2 896	2 893	2 892
Financing of domestic deliveries (KTR)	316	201	196	192	192
Other claims on corporations	2 833	2 701	2 701	2 701	2 701
Other assets	6 524	5 528	5 516	5 565	5 599
Loans for stabilizing the money market	4 532	4 532	4 532	4 532	4 532
Accrued items	1 832	851	832	879	915
Other assets	159	144	153	155	152
Valuation account	_	2 054	2 391	2 230	2 144
Capitalized expenditures and losses			2001		
due to safeguarding the stability					
of the money market	1 400	1 400	1 400	1 400	1 400
	otal 72 737	73 997	73 330	75 267	74 816
LIABILITIES					
Foreign currency liabilities	130	1 188	1 188	1 264	1 263
Other foreign liabilities	5 579	4 910	4 913	4 906	4 913
IMF markka accounts	4 595	4 006	4 006	4 006	4 006
Allocations of special drawing rights	985	904	907	900	906
Other foreign liabilities	_	_	_	-	_
Notes and coin in circulation	14 315	14 168	14 115	14 231	14 321
Notes	12 675	12 476	12 422	12 537	12 620
Coin	1 640	1 692	1 692	1 694	1 701
Certificates of deposit	35 236	37 135	36 421	39 554	38 082
Liabilities to financial institutions	7 912	7 588	7 697	6 342	7 286
Minimum reserve deposits	6 526	7 313	7 422	6 067	7 011
Call money deposits	1 387	_	-	-	-
Term deposits	_	_	-	-	-
Other liabilities to financial institutions	-	275	275	275	275
Liabilities to the public sector	93	77	76	75	75
Cheque accounts	0	0	0	0	0
Deposits of the Government Guarantee Fund	93	76	76	75	75
Other liabilities to the public sector	_	-	-	_	-
Liabilities to corporations	1 548	1 099	1 095	1 080	1 070
Deposits for investment and ship purchase	1 548	1 099	1 095	1 080	1 070
Other liabilities	461	370	364	354	345
Accrued items	437	329	329	321	305
Other liabilities	24	41	35	33	40
Valuation account	_	_	-	-	-
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	-	_	_	_	_
	otal 72 737	73 997	73 330	75 267	74 816
S9 Bulletin 12 a 95					

End of period				Foreigr	sector				F	Public sect	tor
	Gold	Special drawing rights	IMF reserve tranche	ECU-claim on the European Monetary Institute	Foreign currency claims	Foreign exchange reserves (1+2+3 +4+5)	Other claims, net	Net claims (6+7)	Claims	Liabil- ities	Net claims (9–10)
	1	2	3	4	5	6	7	8	9	10	11
1990	2 180	791	783		33 478	37 232	-1 273	35 960	1 314	1 321	-7
1991	2 180	932	1 136		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	2 446	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	-1 114	51 629	1 806	93	1 713
1994											
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	–1 114	51 629	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
March	1 742	1 616	1 329	3 619	45 185	53 492	-1 149	52 343	1 763	68	1 695
April	1 742	1 295	1 290	3 460	42 535	50 321	-1 583	48 738	1 773	101	1 672
May	1 742	1 028	1 437	3 481	42 847	50 536	-1 644	48 892	1 772	194	1 578
June	1 742	1 278	1 425	3 477	43 484	51 407	-1 617	49 790	1 793	554	1 239
July	1 742	1 383	1 518	3 361	43 659	51 662	-1 945	49 717	1 797	53	1 744
Aug.	1 742	1 275	1 584	3 333	43 816	51 750	-1 902	49 848	1 804	56	1 748
Sept.	1 742	1 457	1 579	3 323	40 294	48 395	-1 829	46 566	1 797	76	1 721
Oct.	1 742	1 385	1 671	3 315	39 624	47 738	-1 954	45 784	1 801	76	1 725
Nov.	1 742	1 421	1 666	3 279	42 396	50 503	-2 113	48 390	1 819	75	1 744

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

End of		Dome	stic financial se	ector		(	Corporate sec			
period -	Term claims on deposit banks, net	Liquidity position of deposit banks'	Minimum reserve deposits of deposit banks <sup>1</sup>	Other claims on financial institu- tions, net	Net claims <sup>2</sup> (12+13+ 14+15)	Claims in the form of special financing	Special deposits and other items, net	Net claims (17+18)	Notes and coin in circu- lation	Out- standing CDs issued by the Bank of Finland
	12	13	14	15	16	17	18	19	20	21
1990	9 411	- 418	-17 401	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	1 216	14 994	14 837
1994	1 480	-1 387	-6 526	1 040	-5 392	316	1 285	1 601	14 315	35 236
1994										
Nov.	492	-2 026	-6 674	1 094	-7 113	331	1 222	1 553	13 776	34 406
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	36 282
Feb.	2 328	1 618	-6 521	947	-4 863	295	1 447	1 742	14 087	36 943
March	2 701	-1 048	-6 516	937	-3 926	285	1 501	1 786	13 846	37 991
April	2 922	-1 124	-6 798	906	-4 094	273	1 561	1 834	14 121	35 448
May	2 242	- 794	-6 523	886	-4 189	259	1 599	1 858	14 270	34 742
June	3 019	- 707	-6 646	852	-3 482	244	1 638	1 882	14 374	35 555
July	3 425	- 525	-6 765	829	-3 037	235	1 653	1 888	14 544	36 982
Aug.	3 053	- 624	-6 574	823	-3 322	224	1 669	1 893	14 325	36 809
Sept.	6 261	<u> </u>	<u>6 557</u>	779	<u> </u>	217	1 692	1 909	14 229	37 321
Oct.	6 178	-5 768	-5 768	728	1 138	202	1 752	1 954	14 129	37 596
Nov.	5 409	-7 011	-7 011	711	- 891	192	1 631	1 823	14 321	38 082

<sup>1</sup> From October 1995, the liquidity position of deposit banks largely consists of minimum reserve deposits (see also Table 2.1). <sup>2</sup> From October 1995, net claims is the sum of columns 12, 13 and 15.

## 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 2.2 The Bank of Finland's minimum reserve system

al the dank of Finiand, mill FM											
Average of daily	Minimum	Call	Liquidity	Liquidity position,	End		Reserve re	quirement		Minimum	Excess reserves,
	deposits	reserve money deposits deposits			period	On deposits repayable	On other deposits,	On other items,	Mill. FIM	deposits, mill. FIM <sup>1</sup>	mill. FIM <sup>1</sup> (5–4)
	1	2	3	4		on demand, %	%	%	_		
1990		806	132	674		1	2	3	4	5	6
1991 1992 1993 1994		881 2 103 831 1 393	985 437 425 10	- 103 1 666 407 1 383	1993 1994	2.0 2.0	1.5 1.5	1.0 1.0	6398 6526	6398 6526	
1994 Nov. Dec.	:	2 038 1 160	0	2 038 1 160	1994 Nov. Dec.	2.0 2.0	1.5 1.5	1.0 1.0	6674 6526	6674 6526	:
	6 736 6 632	1 196 1 210 1 750 853 833 607 803 873 1 067	0 4 0 2 30 204 922 0 110	1 196 1 206 1 750 853 831 577 803 669 146 6 736 6 522	1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	6511 6521 6516 6798 6523 6646 6765 6574 6557 6557 6557	6511 6521 6516 6798 6523 6646 6765 6574 <u>6557</u> 6697 6741	

<sup>1</sup> Daily averages as from 2 October 1995.

2.3 The Bank of Finland's money market transactions, mi	II. FIM
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During period	Purchases of money market instruments	Sales of money market instruments	Matured money market instruments, net	Money market transactions, net (1–2–3)
	1	2	3	4
1990 1991 1992 1993 1994	163 326 109 568 76 230 86 521 35 540	26 379 30 380 137 940 146 899 351 820	160 797 81 969 60 417 50 486 295 165	-23 850 -2 781 -1 293 -9 892 -21 115
1994 Nov. Dec.	1 630 1 470	35 210 34 680	-34 400 -34 790	820 1 580
1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	2 580 3 490 4 260 2 400 3 710 3 060 3 385 3 040 9 350 5 380 4 680	36 050 36 940 34 970 32 780 35 556 36 980 36 810 37 350 37 610 34 843	-31 590 -34 710 -35 360 -35 680 -28 590 -32 401 -32 530 -33 550 -33 740 -28 110 -15 540	-1 880 1 260 - 820 3 110 - 480 -95 -1 065 - 220 5 740 -4 120 -3 020

During period	Intervention in	the foreign exc	Spot transactions	Central		
penoa	Spot purchases	Spot sales	Forward exchange intervention = change in forward exchange position	related to forward contracts, net	government's foreign exchange transactions, net	
	1	2	3	4	5	
1991 1992 1993 1994	35 120 20 050 25 120 20 930	69 940 70 640 45 080 12 900	-14 820 -1 650 7 460 9 060	12 820 390 6 910 8 930	12 260 45 060 33 240 24 660	
1994 Oct. Nov. Dec.	5 110 210 1 750	- 220 - 520 - 300	5 070 770 870	5 090 530 1 120	2 280 60 - 960	
1995 Jan. Feb. March April May June July Aug. Sept. Oct.	- 400 - 4 000 450 -	- 190 -90 -1 440 - - - - 780 -1 970 - 180	3 290 - 280 -1 710 -2 650 -1 230 -1 120 -2 470 3 510 - 100 - 830	-3 260 -90 1 350 6 290 1 300 1 110 2 450 -3 410 -3 60	4 360 720 -50 -6 010 -1 040 - 813 -2 072 -70 -2 640 - 330	

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

2.5 Forward exchange contracts between Finnish markkaa and other currencies, mill. FIM

Stock at end			Finni	sh banks' forw	ard contracts				idents' forwa ts with Finnis		The Bank of Finland's
of period		Finnish custor Finnish banks		With	foreign custo	mers	Total	customers (excl. Finnish banks)			forward contracts
	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net (1-2)	Currency purchases from foreign customers	Currency sales to foreign customers	Net (4–5)	Net (3+6)	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net (8-9)	Net currency sales
	1	2	3	4	5	6	7	8	9	10	11
1990 1991 1992 1993 1994	11 609 33 004 39 195 38 373 51 096	4 979 36 352 32 939 23 721 22 093	6 631 -3 348 6 256 14 652 29 003	21 179 40 056 21 142 14 346 19 236	11 079 37 505 32 339 21 895 32 791	10 100 2 550 -11 197 -7 548 -13 555	16 731 - 798 -4 941 7 104 15 448	237 1 404 1 614 11 632 18 372	55 645 1 929 2 173 4 780	183 759 - 315 9 459 13 592	8 953 7 133 1 939
1994 Oct. Nov. Dec.	44 821 46 460 51 096	19 418 21 508 22 093	25 403 24 952 29 003	20 662 18 515 19 236	30 252 28 808 32 791	-9 589 -10 293 -13 555	15 814 14 659 15 448	14 945 16 058 18 372	2 659 4 036 4 780	12 286 12 023 13 592	-5 075
1995 Jan. Feb. March April May June July Aug. Sept. Oct.	53 808 54 500 57 611 57 779 59 058 56 010 54 311 58 236 58 838 56 689	22 928 23 006 25 712 24 331 24 236 21 745 20 649 19 237 21 341 20 187	30 880 31 494 31 899 33 447 34 822 34 265 33 662 39 000 37 497 36 503	21 342 21 161 23 283 22 063 23 178 22 744 22 825 24 721 23 891 25 509	31 748 36 433 36 466 33 135 38 76 36 052 33 288 37 101 38 339 39 525	-10 407 -15 273 -13 182 -11 073 -10 698 -13 308 -10 463 -12 379 -14 448 -14 015	20 473 16 221 18 717 22 374 24 124 20 957 23 199 26 621 23 049 22 488	19 972 20 618 20 806 19 221 17 363 17 184 16 028 16 288 13 840 14 986	4 698 3 533 4 775 5 194 5 967 5 360 4 688 5 142 6 002 6 228	15 274 17 086 16 030 14 027 11 395 11 824 11 340 11 146 7 838 8 758	-9 485 -8 055 -4 909 -3 562 -2 461 -3 416 -3 416

#### 3. Rates of interest

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

Average of	Interbank		HELIE	BOR			Bank of Finland ra	ates
daily observations	overnight rate	1 month	3 months	6 months	12 months	Liquidity credit rate <sup>1</sup>	Excess-reserve rate <sup>2</sup>	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 Nov. Dec.	4.30 4.57	5.07 5.41	5.43 5.70	6.05 6.18	6.79 7.02	7.06 7.38	3.06 3.38	5.25 5.25
1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	4.43 5.27 4.66 5.00 5.06 5.77 5.40 6.20 5.61 4.90	5.50 5.71 5.78 5.75 5.72 5.93 5.97 5.99 5.97 5.58 4.90	5.85 5.99 6.06 5.97 5.87 6.02 6.13 6.08 5.95 5.61 4.93	6.32 6.32 6.48 6.31 6.06 6.21 6.40 6.25 5.97 5.65 4.99	7.14 6.97 7.07 6.82 6.45 6.57 6.80 6.56 6.04 5.76 5.11	7.50 7.66 7.75 7.75 7.93 8.00 8.00 8.00 7.57 6.90	3.50 3.66 3.75 3.75 3.75 3.93 4.00 4.00 4.00 3.57 2.90	5.25 5.25 5.25 5.25 5.25 5.25 5.25 5.25

<sup>1</sup> Call money credit rate until 2 July 1992. <sup>2</sup> Call money deposit rate until 2 October 1995.

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

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

	The Bank of Finland's tender rate, %		Liquidity credit: interest rate margin		Call money deposits: interest rate margin,	Excess- reserve rate	Average of daily obser- vations	ECU	3 currencies	Commercial ECU
	1410, 70		%-points	, aayo	%-points		Tations	3 months		
	1		2	3	4	5		1	2	3
1992 <sup>1</sup>	13.85	1992	+1.00	7	-3.00		1990	10.5	9.1	10.4
1993	7.87	1993	+2.00	7	-2.00		1991	10.1	8.5	9.9
1994	5.11	1994	+2.00	7	-2.00		1992	10.4	7.8	10.6
							1993	8.0	6.0	8.1
1994		1994					1994	5.9	5.2	6.1
Nov.	5.06	Nov.	+2.00	7	-2.00					
Dec.	5.38	Dec.	+2.00	7	2.00		1994			
							Nov.	5.8	'5.5	5.9
995		1995					Dec.	6.1	5.8	6.3
lan.	5.50	Jan.	+2.00	7	-2.00					
eb.	5.66	Feb.	+2.00	7	-2.00		1995			
March	5.75	March	+2.00	7	2.00		Jan.	6.0	5.6	6.3
April	5.75	April	+2.00	7	-2.00		Feb.	6.0	5.6	6.1
May	5.75	May	+2.00	7	-2.00		March	6.7	5.6	6.9
lune	5.93	June	+2.00	7	-2.00		April	6.3	5.3	6.4
July	6.00	July	+2.00	7	-2.00		May	6.2	5.2	6.3
Aug.	6.00	Aug.	+2.00	7	-2.00	•	June	6.1	5.2	6.2
Sept.	6.00	Sept.	+2.00	7	-2.00	•	July	5.9	5.2	6.1
Oct.	5.57	Oct.	+2.00	7			Aug.	5.7	5.1	5.9
lov.	4.90	Nov.	+2.00	7	•	3.50	Sept.	5.6	4.9	5.6
8.12.1994	5.01	02.10.199	95			4.00	Oct.	5.7	4.9	5.8
09.12.1994	5.50	05.10.199	95			3.50	Nov.	5.5	4.8	5.5
9.12.1994	5.55	01.11.199				3.00				
4.01.1995	5.50 5.75	20.11.199	50			2.75				
9.06.1995	6.00									
5.10.1995	5.50									
0.11.1995	5.00 4.75									

<sup>1</sup> July–December.

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

Average		Lending							Markka deposits and other markka funding					
for period		New c	redits		Average	Of which:	24- month	36- month	Other	Average rate of	Average rate of	Average rate of		
	Cheque account and postal giro credits	Bills of ex- change	Loans	New lending, total	lending rate	Com- mercial banks	tax- exempt deposits <sup>1</sup>	tax- exempt deposits <sup>1</sup>	tax- exempt deposits, max. rate of interest <sup>1</sup>	interest on deposits	interest on other funding	interest on markka funding		
	1	2	3	4	5	6	7	8	9	10	11	12		
1990 1991 1992 1993 1994	13.24 13.63 14.04 9.69 7.32	15.62 15.88 15.86 13.55 11.55	13.33 13.40 13.32 9.40 7.13	13.85 13.84 13.75 9.75 7.35	11.84 12.08 12.46 10.20 8.18	11.61 11.80 12.13 9.92 7.91	7.50 7.50 7.50 3.50 3.25	8.50 4.50 4.25	4.50 4.50 2.00 2.00	6.43 7.10 7.41 4.78 2.99	13.55 13.22 12.84 8.86 5.96	8.41 8.97 9.14 6.15 4.01		
1994 Oct. Nov. Dec.	8.26 7.75 7.62	11.61 11.72 10.69	7.28 7.01 6.44	7.49 7.21 6.71	8.15 8.09 8.05	7.91 7.83 7.76	3.25 3.25 3.25	4.25 4.25 4.25	2.00 2.00 2.00	3.05 3.04 3.11	6.10 6.09 6.17	4.10 4.08 4.10		
1995 Jan. Feb. March April May June July Aug. Sept. Oct.	7.79 8.46 8.40 7.80 8.15 8.13 9.68 8.98 8.98 8.46 7.73	11.55 11.54 11.58 11.39 11.52 11.61 11.63 11.58 11.63 11.56	7.22 7.29 7.62 7.54 7.54 7.43 7.81 7.80 7.65 7.28	7.40 7.50 7.68 7.71 7.60 8.00 7.98 7.83 7.43	8.11 8.16 8.17 8.16 8.14 8.14 8.14 8.10 7.98	7.84 7.83 7.89 7.90 7.89 7.85 7.87 7.84 7.82 7.68	3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25	4.25 4.25 4.25 4.25 4.25 4.25 4.25 4.25	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	3.15 3.17 3.22 3.23 3.23 3.21 3.22 3.21 3.20 3.09	6.27 6.33 6.41 6.45 6.53 6.54 6.52 6.35 6.19	4.18 4.22 4.23 4.23 4.13 4.15 4.16 4.14 4.03		

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

Period	· · · · · · · · · · · · · · · · · · ·	8	londs		Shares
	Reference rat by the Bank of	tes calculated of Finland	Taxal gover	ble mment bonds	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 1992 1993 1994	12.3 13.1 8.5 8.5	12.2 13.0 8.9 9.3	11.8 12.0 8.2 8.4	11.5 8.8 9.0	3.9 3.1 1.8 1.4
1994 Oct. Nov. Dec.	9.5 9.6 9.6	10.5 10.5 10.5	9.4 9.5 9.5	10.1 10.2 10.2	1.5 1.5 1.7
1995 Jan. Feb. March April May June June July	9.5 9.3 9.2 8.7 8.2 8.3 8.5	10.3 10.2 10.1 9.4 8.9 8.9 9.0	9.4 9.3 9.2 8.4 7.8 7.7 7.8	10.2 10.2 10.2 9.4 8.8 8.7 8.7 8.7	1.3 1.5 2.3 2.6 3.3 3.1 2.8
Aug. Sept. Oct.	8.5 8.1 7.6 7.4	9.0 8.6 8.1 8.0	7.8 7.3 7.2 7.5	8.7 8.3 8.0 7.9	2.8 2.7 2.6 2.9

#### 3.5 Yields on bonds and shares, per cent

## 4. Rates of exchange 4.1 Middle rates, FIM

Average of daily	New York	Montreal	London	Dublin	Stock- holm	Oslo	Copen- hagen	Reykja- vik	Frankfurt am Main	Amster- dam	Brussels	Zurich
quo- tations	1 USD	1 CAD	1 GBP	1 IEP	1 SEK	1 NOK	1 DKK	1 ISK	1 DEM	1 NLG	1 BEF	1 CHF
	1	2	3	4	5	6	7	8	9	10	11	12
1990 1991 1992 1993 1994	3.8233 4.0457 4.4835 5.7189 5.2184	3.277 3.533 3.706 4.434 3.824	6.808 7.131 7.875 8.582 7.982	6.325 6.511 7.636 8.371 7.799	0.6459 0.6684 0.7714 0.7350 0.6758	0.6110 0.6236 0.7222 0.8059 0.7393	0.6181 0.6322 0.7444 0.8822 0.8207	0.0656 0.0684 0.0778 0.0846 0.0745	2.3664 2.4380 2.8769 3.4584 3.2169	2.1002 2.1634 2.5552 3.0787 2.8684	0.1145 0.1184 0.1397 0.1655 0.1561	2.7576 2.8208 3.2000 3.8706 3.8179
1994 Nov. Dec.	4.7172 4.8455	3.458 3.488	7.500 7.554	7.385 7.435	0.6418 0.6447	0.7015 0.7068	0.7833 0.7864	0.0699 0.0704	3.0659 3.0823	2.7353 2.7528	0.1490 0.1499	3.6448 3.6450
1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	4.7358 4.6433 4.3769 4.2650 4.3155 4.2983 4.2488 4.3000 4.3717 4.2696 4.2400	3.352 3.315 3.111 3.096 3.172 3.120 3.121 3.173 3.240 3.174 3.134	7.458 7.300 7.004 6.862 6.854 6.853 6.776 6.743 6.810 6.738 6.629	7.375 7.256 6.993 6.948 6.999 7.004 6.968 6.902 6.953 6.890 6.814	0.6344 0.6288 0.6021 0.5919 0.5920 0.5917 0.5949 0.6127 0.6248 0.6427	0.7071 0.7041 0.6979 0.6889 0.6889 0.6891 0.6882 0.6784 0.6829 0.6845 0.6785	0.7851 0.7832 0.7770 0.7855 0.7832 0.7858 0.7852 0.7680 0.7710 0.7776 0.7724	0.0698 0.0697 0.0680 0.0676 0.0673 0.0678 0.06674 0.0666 0.0665 0.0661 0.0656	3.0930 3.0913 3.1138 3.0947 3.0663 3.0668 3.0587 2.9773 2.9902 3.0188 2.9934	2.7591 2.7576 2.7768 2.7641 2.7390 2.7406 2.7305 2.6583 2.6693 2.6953 2.6724	0.1501 0.1509 0.1505 0.1490 0.1493 0.1488 0.1488 0.1448 0.1454 0.1456	3.6782 3.6526 3.7378 3.7580 3.6980 3.7104 3.6755 3.5959 3.6750 3.7265 3.7109

Average of daily	Paris	Rome	Vienna	Lisbon	Madrid	Athens	Tallinn	Tokyo	Mel- bourne	ECU Commer- cial	SDR
quo- tations	1 FRF	1 ITL	1 ATS	1 PTE	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 1991 1992 1993 1994	0.7024 0.7169 0.8486 1.0096 0.9406	0.00319 0.00326 0.00364 0.00364 0.00324	0.3363 0.3464 0.4088 0.4916 0.4573	0.0268 0.0280 0.0332 0.0356 0.0314	0.0375 0.0389 0.0438 0.0451 0.0390	0.022 0.024 0.025 0.021	0.4060 0.4323 0.4021	0.02647 0.03008 0.03546 0.05168 0.05106	2.988 3.152 3.289 3.885 3.814	4.864 5.003 5.798 6.685 6.175	5.18322 5.52771 6.31546 7.98641 7.46629
1994 Nov. Dec.	0.8930 0.8949	0.00298 0.00297	0.4355 0.4379	0.0300 0.0301	0.0368 0.0366	0.0199 0.0199	0.3832 0.3853	0.04813 0.04838	3.559 3.752	5.838 5.874	6.93950 7.03528
1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	0.8946 0.8889 0.8790 0.8814 0.8670 0.8736 0.8788 0.8654 0.8654 0.8643 0.8643 0.8677	0.00294 0.00287 0.00259 0.00261 0.00262 0.00264 0.00264 0.00268 0.00271 0.00266 0.00266	0.4396 0.4393 0.4424 0.4398 0.4360 0.4362 0.4349 0.4234 0.4251 0.4290 0.4255	0.0300 0.0299 0.0296 0.0293 0.0291 0.0291 0.0291 0.0287 0.0287 0.0287	0.0357 0.0356 0.0341 0.0343 0.0350 0.0355 0.0349 0.0348 0.0349 0.0348	0.0199 0.0197 0.0192 0.0190 0.0189 0.0189 0.0185 0.0185 0.0186 0.0184 0.0181	0.3866 0.3864 0.3892 0.3868 0.3833 0.3833 0.3823 0.3722 0.3738 0.3773 0.3742	0.04752 0.04725 0.04833 0.05101 0.05078 0.05083 0.04871 0.04547 0.04353 0.04242 0.04162	3.625 3.460 3.216 3.139 3.143 3.094 3.088 3.186 3.298 3.237 3.160	5.859 5.811 5.700 5.671 5.665 5.662 5.569 5.580 5.546 5.546 5.496	$\begin{array}{c} 6.94337\\ 6.86328\\ 6.72357\\ 6.71986\\ 6.72395\\ 6.72042\\ 6.61807\\ 6.49492\\ 6.40629\\ 6.39697\\ 6.33703 \end{array}$

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

Average	Markka value	Cu	mency indices, 1982=	100
of daily observa- tions	of the ECU FIM/ECU	Trade-weighted currency index	Payments currency index	MERM index
	1	2	3	4
1990 1991 1992 1993 1994	4.85697 5.00580 5.80140 6.69420 6.19108	97.3 101.4 116.4 132.4 123.2	96.8 101.4 115.7 136.0 125.5	97.3 102.8 117.3 141.8 131.8
1994 Nov. Dec.	5.86886 5.89101	116.3 117.0	116.9 118.4	122.9 124.2
1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	5.87972 5.84352 5.76731 5.72937 5.70402 5.71859 5.71263 5.60862 5.6392 5.64587 5.61404	115.9 114.9 112.4 111.2 111.3 111.5 110.9 109.4 110.3 110.4 110.0	117.1 115.8 112.3 110.5 110.9 110.8 110.1 109.4 110.6 110.0 109.5	122.6 121.3 118.2 117.4 118.0 117.9 116.7 115.2 115.6 114.6 114.0

## 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 deposits, total (1+2+3+4)	Foreign currency deposits	Total deposits (5+6)	Other funding	Total funding (7+8)
	1	2	3	4	5	6	7	8	9
1990 1991 1992 1993 1994	30 953 33 619 34 832 36 379 41 200	96 176 86 442 88 526 92 357 99 691	124 930 122 126 114 771 112 413 108 922	25 19 615 21 218 21 766 19 838	2 058 261 802 259 347 262 915 269 650	6 818 13 151 14 626 14 883 12 774	258 876 274 953 273 973 277 798 282 424	38 835 52 760 65 557 63 173 44 228	297 711 327 713 339 530 340 971 326 651
1994 July Aug. Sept. Oct. Nov. Dec.	43 391 44 503 40 588 41 393 42 319 41 200	98 775 97 970 97 976 98 519 98 059 99 691	106 511 107 529 107 427 107 168 107 511 108 922	21 391 20 969 20 722 20 272 20 141 19 838	270 067 270 970 266 712 267 352 268 030 269 650	16 517 14 957 12 839 14 479 11 895 12 774	286 584 285 927 279 551 281 832 279 925 282 424	70 634 64 382 56 424 52 354 46 810 44 228	357 218 350 309 335 974 334 186 326 735 326 651
1995 Jan. Feb. March April May June July	41 912 42 583 43 698 45 487 45 373 47 640 48 359	100 114 103 613 104 071 104 920 103 337 105 219 105 161	109 274 108 069 108 784 108 622 108 316 108 954 108 755	19 729 19 960 20 259 20 467 20 671 20 606 20 811	271 028 274 225 276 812 279 495 277 697 282 418 283 087	11 588 12 844 12 769 11 987 12 264 12 759 12 420	282 616 287 069 289 581 291 483 289 961 295 177 295 507	37 173 44 259 47 289 55 118 48 998 44 648 62 174	319 788 331 328 336 870 346 601 338 959 339 825 357 681

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

End of period	Cheque account and postal giro credits	Bills of exchange	Loans	Markka lending, total (1+2+3)	Foreign currency credit <del>s</del>	Total lending (4+5)
	1	2	3	4	5	6
1990 1991 1992 1993 1994	19 152 18 037 16 045 14 217 13 241	5 777 4 712 3 335 2 223 1 301	260 790 262 859 252 163 248 406 242 417	285 720 285 609 271 544 264 846 256 958	103 134 107 714 95 168 66 931 45 138	388 853 393 323 366 712 331 777 302 096
1994 July Aug. Sept. Oct. Nov. Dec.	14 061 13 859 14 068 13 583 13 274 13 241	1 733 1 680 1 642 1 594 1 522 1 301	245 591 244 474 243 874 244 191 244 044 242 417	261 386 260 013 259 584 259 368 258 840 256 958	56 128 53 977 51 258 47 775 46 902 45 138	317 513 313 990 310 842 307 143 305 742 302 096
1995 Jan. Feb. March April May June July	12 991 12 951 12 797 12 657 12 448 12 216 11 845	1 240 1 190 1 157 1 159 1 145 1 070 1 074	242 556 242 803 242 000 242 911 242 338 241 834 242 045	256 787 256 944 255 954 256 727 255 930 255 120 254 963	43 726 42 579 42 316 39 550 38 260 37 831 36 353	300 513 299 523 298 270 296 277 294 190 292 951 291 316

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

End of	Foreign		Domestic cred	lit	Other			
period	assets, net	Claims on the central government	Claims on the public	Total (2+3)	items, net	M <sub>1</sub>	M2 (1+4+5)	M3
	1	2	3	4	5	6	7	8
1990 1991 1992 1993 1994*	-82 881 -86 555 -68 099 -25 989 12 844	19 072 6 516 81 1 848 6 092	453 720 470 852 439 937 403 742 364 359	434 648 464 336 440 018 405 589 370 451	-85 385 102 540 -97 909 -100 006 96 600	141 524 130 644 134 829 141 759 154 357	266 383 275 241 274 011 279 595 286 696	291 045 310 924 310 733 322 408 328 509
1994* Oct. Nov. Dec.	12 826 12 535 12 844	3 250 3 611 6 092	370 923 369 603 364 359	374 174 373 214 370 451	-103 332 -101 461 -96 600	152 568 152 745 154 357	283 668 284 288 286 696	335 896 331 096 328 509
1995* Jan. Feb. March April May June July July Aug. Sept. Oct.	    	    	     	    		153 993 158 107 159 929 163 101 162 089 164 865 164 621 163 430 163 646 163 296	285 771 289 245 292 215 295 579 294 022 296 555 296 313 295 142 292 667 292 334	325 743 328 804 332 244 331 882 332 613 340 057 342 997 337 306 338 042 334 382

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

End of	Foreign curre	ency-denom	inated debt		Markka-de	nominated d	ebt	-	Total	Out-	Cash
period	Bonds	Other debt	<b>Total</b> (1+2)	Public bonds	Other long-term liabilities	Treasury notes and bills	Miscella- neous items	Total (4+5+6+7)	central govern- ment debt (3+8)	standing lending	funds
	1	2	3	4	5	6	7	8	9	10	11
1990 1991 1992 1993 1994	20 917 38 703 100 244 142 824 160 587	3 876 4 943 6 143 12 753 15 975	24 793 43 646 106 387 155 577 176 562	23 982 31 018 40 578 71 082 93 008	8 263 12 208 13 555 16 060 17 100	5 180 14 762 22 824 33 153		32 245 48 406 68 895 <u>109 966</u> 137 316	57 038 92 052 175 282 <u>265 543</u> 313 878	48 121 55 165 61 671 66 439 66 851	23 114 15 956 19 781 36 487 43 012
1994 Oct. Nov. Dec.	160 626 163 035 160 587	15 042 16 371 15 975	175 668 179 406 176 562	84 786 88 690 93 008	16 865 16 794 17 100	31 666 32 656 33 153	5 487 5 479 5 945	127 830 132 661 137 316	303 498 312 067 313 878	67 459 66 924 66 851	39 910 42 051 43 012
1995 Jan. Feb. March April May June July Aug. Sept. Oct.	167 765 165 516 166 342 163 779 164 510 164 086 160 563 159 404 159 093 158 207	16 137 15 884 17 306 14 335 14 515 14 555 14 555 14 192 13 799 13 532 14 100	183 902 181 400 183 648 178 114 179 025 178 641 174 755 173 203 172 625 172 307	96 649 105 442 115 230 119 148 121 943 122 461 122 953 129 417 134 142 134 673	17 080 17 080 17 053 16 433 16 399 15 788 15 781 17 531 17 530 17 530	38 658 37 320 38 990 41 596 40 535 36 529 35 526 34 804 31 525 34 287	-6 019 -6 039 -6 041 -5 599 -5 585 -5 587 -5 627 -5 649 -5 649 -5 692	146 368 153 803 165 232 171 578 173 292 169 191 168 633 176 111 177 552 180 798	330 270 335 203 348 880 349 692 352 317 347 832 343 388 349 314 350 177 353 105	67 186 67 382 67 593 68 109 67 767 68 114 67 947 67 971 68 426	52 460 54 954 47 978 47 895 43 954 32 648 30 029 31 864 35 250 32 117

#### 5.5 Markka bond market A) Issues. mill. FIM

During period	Corpo- rations	Financial institutions	Central government	Local government	Others	Total (1+2+3+4+5)
	1	2	3	4	5	6
1990 1991 1992 1993 1994*	4 640 7 277 6 984 11 691 4 053	17 891 25 737 15 043 10 481 9 899	4 420 11 073 12 965 36 512 31 553	490 1 320 2 674 2 235 593	1 007 - 4 63 -	28 447 45 407 37 671 60 981 46 099
1994* Oct. Nov. Dec.	400	1 042 891 663	3 044 4 137 4 525	- - -	- - -	4 087 5 428 5 187
1995* Jan. Feb. March April May June July Aug. Sept.	100 53 354 1 22 100 1 110	333 244 459 118 228 1 115 	5 109 9 230 10 543 3 943 3 852 2 329 505 6 796 9 752	26 - - - - - -		5 542 9 526 11 382 4 061 4 103 3 544 505 6 898 11 842

#### B) Stock, mill. FIM

During			By sector		Total (1+2+3+4+5)					
period	Corpo- rations	Financial institutions	Central	Local government	Others	Public	issues	Private placings	È '	
	Tauons	Institutions	government	<b>Ander week</b>		Taxable	Taxfree	placings	(6+7+8)	
	1	2	3	4	5	6	7	8	9	
1990 1991 1992 1993 1994*	23 522 26 632 26 624 32 459 30 179	59 756 76 701 82 153 73 893 66 467	28 812 35 195 44 005 73 682 94 865	1 756 2 766 5 238 6 884 6 981	1 298 3 726 3 358 2 009 953	52 273 76 346 89 382 119 552 141 935	22 970 18 096 13 918 10 391 7 581	39 902 50 578 58 078 58 984 49 929	115 145 145 020 161 378 188 927 199 445	
1994* Oct. Nov. Dec.	30 278 30 505 30 179	68 293 67 586 66 467	86 648 90 548 94 865	7 110 7 030 6 981	953 950 953	134 732 138 626 141 935	7 616 7 588 7 581	50 934 50 405 49 929	193 282 196 619 199 445	
1995* Jan. Feb. March April May June July Aug. Sept. Oct.	29 808 29 569 29 286 29 110 28 789 28 448 27 777 27 557 27 635 27 602	66 232 63 945 62 312 61 856 61 418 61 539 60 876 59 771 60 015 59 561	98 507 107 300 117 085 120 406 123 166 123 685 124 177 130 640 135 365 135 897	6 879 6 841 6 849 6 841 6 500 6 439 6 387 6 378 7 372 7 463	953 933 926 925 918 916 666 666 665 363	145 960 153 376 162 629 166 382 168 582 169 327 169 253 174 867 181 295 181 435	6 946 6 715 6 234 5 885 5 877 5 873 5 545 5 251 5 058	49 473 48 498 47 596 46 533 46 324 45 823 44 757 44 600 44 506 44 393	202 379 208 588 216 458 219 138 220 791 221 027 219 889 225 012 231 052 230 886	

#### C) Turnover, mill. FIM

During period	Interbank transactions	Transactions between banks and customers	Primary dealers' transactions in benchmark government bonds							
		and customers	Purchases from other primary dealers	Purchases from others	Sales to others					
	1	2	3	4	5					
1990 1991 1992 1993 1994	5 401 3 343 18 383 47 803 184 599	6 058 29 134 58 757 246 104 359 697	10 744 42 945 173 096	12 156 95 647 150 908	13 354 117 489 176 647					
1994 Nov. Dec.	12 351 7 842	24 444 17 304	11 742 7 531	9 818 6 784	13 363 9 281					
1995 Jan. Feb. March April May June June July Aug. Sept. Oct. Nov.	8 855 7 716 14 858 16 904 12 869 14 530 5 792 11 210 19 708 11 843 10 782	30 706 28 452 35 736 32 257 39 905 33 598 17 266 42 367 50 201 40 102 40 739	8 481 7 287 11 622 14 622 10 693 12 355 5 681 10 698 18 676 11 615 10 060	12 246 10 833 14 835 12 917 16 951 14 317 7 115 20 105 22 799 17 944 18 386	16 423 14 291 19 126 15 353 17 208 14 300 9 607 20 057 24 815 21 776 21 090					

#### 5.6 Helsinki Stock Exchange

Average			Tu	mover <sup>1</sup> , mill.	FIM					
of daily obser- vations			HEX index (2	8 Dec., 1990=	=1 000)			Shares and	Bonds	Total
Vations	All- share			ano sub- scrip-	and deben- tures					
	index	Banks and	Insurance and invest-	Manu- facturing		Of which:		tion rights	lures	
		finance	ment	lactoring	Forest industries	Metal and engineering	Conglom- erates	ngins		
	1	2	3	4	5	6	7	8	9	10
1990 1991 1992 1993 1994	1 332 962 772 1 240 1 847	1 263 901 425 608 719	1 185 898 467 644 802	1 376 1 003 943 1 601 2 464	1 436 1 075 1 123 1 695 2 284	1 282 1 076 1 206 1 749 2 675	1 474 1 021 890 1 751 3 068	15 521 6 339 10 277 46 337 68 671	4 550 1 315 15 377 59 977 2 147	20 071 7 655 25 654 106 314 70 818
1994 Nov. Dec.	1 908 1 832	604 576	694 640	2 617 2 524	2 207 2 128	2 568 2 375	3 672 3 589	5 629 5 100	102 70	5 731 5 170
1995 Jan. Feb. March April May June July Aug. Sept. Oct. Nov.	1 869 1 802 1 648 1 688 1 829 1 919 2 107 2 155 2 231 2 031 1 887	524 543 509 497 516 560 526 506 504 455 417	598 577 533 556 613 631 694 709 751 688 657	2 616 2 512 2 292 2 365 2 731 3 066 3 149 3 276 2 955 2 708	2 224 2 146 1 905 2 040 2 072 2 113 2 289 2 218 2 176 1 967 1 807	2 381 2 240 2 038 2 138 2 259 2 154 2 346 2 443 2 492 2 309 2 105	3 788 3 645 3 343 3 408 3 896 4 401 4 858 4 832 5 045 4 716 4 478	5 582 7 016 5 464 5 823 7 843 7 114 7 010 8 649 8 721 6 942	130 132 76 92 122 65 24 59 60 132	5 712 7 148 5 540 5 946 7 908 7 138 7 066 8 708 8 781 7 074

<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 receipts	Travel receipts	Other services receipts	Services receipts, total (2+3+4)	Exports of goods and services (1+5)	invest- ment income	Trans- fers and other income	Current account receipts (6+7+8)	Imports of goods, cif	Trans- port ex- pendi- ture	Travel ex- pendi- ture	Other services expendi- ture
	1	2	3	4	5	6	7	8	9	10	11	12	13
1990 1991 1992 1993 1994*	99 750 91 100 105 809 132 550 151 751	8 347 7 508 8 643 10 430 11 385	7 079	6 081 5 636 7 730 9 379 11 808	19 077 18 189 22 462 26 888 30 508	118 827 109 289 128 272 159 438 182 259	12 739 10 003 6 423 6 137 9 617	4 601 5 336 5 920 6 506 4 919	136 166 124 628 140 614 172 080 196 796	101 967 86 348 93 187 101 559 118 300	4 363 3 974 4 360 5 646 5 862	10 766 11 089 10 962 9 237 8 697	11 011 13 369 17 008
1993 1 11 111 111	31 016 32 625 32 116 36 793	2 366 2 646 2 832 2 586	1 763 2 203	2 778 2 281 2 102 2 218	6 495 6 690 7 138 6 565	37 511 39 315 39 253 43 358	1 862 1 753 1 250 1 271	1 470 1 756 1 584 1 695	40 844 42 824 42 088 46 324	25 715 24 818 23 992 27 034	1 303 1 351 1 473 1 520	2 401 2 276 2 242 2 319	4 445 4 015 4 206 4 341
1994*           V	34 382 38 486 37 322 41 561	2 663 2 902 3 092 2 728	1 860 2 230	2 839 2 649 2 960 3 360	7 026 7 411 8 282 7 788	41 408 45 897 45 604 49 349	1 764 2 802 2 027 3 025	1 289 1 190 1 180 1 260	44 462 49 889 48 811 53 634	24 767 29 458 28 743 35 332	1 295 1 455 1 549 1 563	1 998 2 151 2 256 2 291	4 213 3 967 3 899 4 721
1995*    1  1	40 688 45 298 40 500	2 729 3 044 3 337		4 016 3 648 3 681	8 269 8 606 9 262	48 957 53 904 49 762	3 527 3 734 2 980	1 611 1 608 2 193	54 095 59 245 54 935	29 055 32 591 32 100	1 479 1 565 1 643	2 340 2 653 2 703	4 741 4 662 3 957

During period	Services expendi- ture, total (11+12 +13)		invest- ment ex- pendi- ture	Trans- fers and other ex- pendi- ture	Current account expendi- ture (15+16 +17)	Trade account (1–10)	Trans- port (2–11)	Travel (312)	Other services (4–13)	Services account (20+21 +22)	Goods and services account (19+23)	Invest- ment income, net (7–16)	Trans- fers and others, net (8–17)	Current account (24+25 +26)= (9-18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1990 1991 1992 1993 1994*	26 074 28 690 31 891	126 599 112 421 121 878 133 450 149 659	28 674 30 424 34 580	10 229 10 347 10 390	162 680 151 325 162 649 178 421 190 056	4 752 12 622 30 991	3 534 4 283 4 784	-6 044 -4 873 -2 159	-5 374 -5 639 -7 629	-7 885 -6 228 -5 004	3 132 6 394	-28 443	-4 893 -4 428 -3 885	-26 696
1993 1 11 11 11	8 149 7 642 7 921 8 180	33 864 32 461 31 913 35 213	10 137 10 493 6 805 7 145	2 393 2 640	46 809 45 347 41 358 44 907	5 301 7 806 8 124 9 760	1 063 1 295 1 360 1 066	- 512 -39	-1 667 -1 735 -2 104 -2 123	- 952 - 783	3 648 6 854 7 341 8 145	-8 740	-1 055	-5 965 -2 523 730 1 417
1994*           V	7 506 7 573 7 704 8 575	32 274 37 031 36 447 43 907	9 423 8 733 6 246 7 399	1 959 1 971	44 380 47 722 44 664 53 289	9 614 9 028 8 580 6 230	1 4 4 7	- 291		- 480 - 162 578 - 787	9 134 8 866 9 157 5 443	-7 659 -5 930 -4 220 -4 375	- 791	82 2 167 4 147 344
1995*      	8 560 8 879 8 304	37 615 41 470 40 404	9 450 10 232 6 764	2 935	50 521 54 637 50 029	11 633 12 707 8 400	1 250 1 480 1 693	- 817 - 739 - 459	-1 014	- 291 - 273 958	11 342 12 434 9 358	-5 924 -6 498 -3 785		3 574 4 609 4 906

## 6.2 Capital and financial account, mill. FIM

During						In	nports of ca	pital					
period	Direct			Portfolio inv	restment				0	ther investn	nent		Total
	invest- ment in Finland	Shares	Bonds	Of which: markka denominat- ed bonds	Money market instru- ments	Finan- cial deriva- tives	Total (2+3+ 5+6)	Trade credits	Loans	Currency and deposits	Other	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 8 240	376 47 397 12 748 13 400	22 280 38 751 39 309 30 353 21 977	-5 312 3 616	- 923 -4 511 -1 791 -4 382 -1 565	   -65	21 733 34 287 37 915 38 719 33 748	1 156 -3 987 3 639 4 467 2 722	16 635 7 496 2 5 357 647	- 725 131 1 690 -5 347 - 232	17 307 -9 737 -17 415 -24 454 -1 160	34 372 -6 098 -12 084 -19 977 1 977	59 115 27 192 27 653 23 687 43 965
1993           V	439 927 631 2 948	1 405 1 515 6 529 3 300	15 542 16 269 2 267 –3 725	3 420 2 523	2 314 1 348 2 755 2 036	  	14 632 16 435 6 041 1 611	1 900 - 196 - 836 3 599	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
1994*           V	3 844 3 029 2 372 –1 005	4 389 2 404 5 181 1 426	4 669 5 341 16 528 -4 562	-3 808 783	-1 587 3 118 -2 253 - 843	31 268 - 383 20	7 501 11 132 19 073 –3 958	- 908 - 868 177 4 321	-3 980 1 312 -1 363 4 678	772 -1 748 964 - 220	6 687 -3 078 -5 534 765	2 572 -4 383 -5 756 9 544	13 917 9 778 15 689 4 581
1995*      	2 573 –1 177 84	392 3 466 3 580	150 -9 431 -2 161	-1 432 -3 556 1 275	1 976 724 1 378	184 633 843	-1 250 -6 056 3 640	-2 622 843 - 984	- 484 -3 266 -3 108	9 766 200	8 540 –1 369 –1 231	5 443 4 559 5 523	6 766 –11 792 –1 798

During						Exports	of capital						Errors	Change
period	Direct		Po	ortfolio inve	stment			Ю	her investm	ent		Total	and omis-	in central bank's
	invest- ment abroad	Shares	Bonds	Money market in- struments		Total (15+16+ 17+18)	Trade credits	Loans	Currency and deposits	Other	Total (20+21+ 22+23)	(14+ 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 8 050 22 447	2 - 369 46 873 -43	575 -3 32 767 -4 702	3 1 499 2 748 7 1 932	  - 276	1 748 1 128 3 115 3 571 -5 881	-1 565 - 726 3 634 1 923 2 435	2 953 2 341 3 409 - 839 -7 460	935 1 054 3 745 -6 063 1 856	-3 480 6 587 3 259 14 698 5 826	-1 157 9 256 14 048 9 720 2 657	10 944 9 883 13 790 21 341 19 224	6 240 2 012 -1 008 5 214 5 977	-15 417 7 375 9 180 -1 219 -25 504
1993           V	614 709 - 845 7 572	158 2 77 636	2 823 1 095 84 <sup>-1</sup> 120	5 - 972 3 975	  	2 404 -2 065 3 211 21	1 623 518 - 190 -28	- 726 - 185 -1 008 1 081	247 1 514	15 515 -3 766 9 514 -6 564-	14 896 3 186 9 829 -11 819	17 914 4 543 12 195 4 226	1 689 -1 437 2 577 2 385	5 586 10 684 11 019 7 141
1994*           V	5 401 4 808 4 897 7 341	43 68 18 0	- 662 -3 273 -1 173 407	3 -4 446 3 420	- 201 -27 -52 4	- 609 -7 814 - 824 3 367	-1 294 1 735 - 414 2 408	-1 849 -2 625 - 251 -2 734	2 612 - 460 - 268 -28	5 814 6 191 9 847 4 399	-6 345 4 841 8 914 -4 753	-1 553 1 835 12 987 5 955	-5 273 63 -2 928 2 162	-10 279 -10 172 -3 921 -1 132
1995*      	1 764 1 714 1 316	- 217 7 3		9 –2 244 9 –2 838 1 542	48 31 35	- 900 -2 929 385	929 2 369 608	-1 234 - 150 1 044		11 503 -7 437 2 836	9 025 -5 645 4 229	9 888 6 860 5 930	1 240 965 1 231	-1 691 1 288 1 592

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6.3 Finland's international inv	estment position, mill. FIM
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Position at end of			- <u></u> .	· <u> </u>		·	Liabilities				·		
end of	Direct			Portfolio in	vestment				0	ther invest	tment		Total liabilities
period	invest- ment in Finland	Shares	Bonds	Of which: markka denominat- ed bonds	Money market instru- ments	Finan- cial deriva- tives	Total (2+3+ 5+6)	Trade credits	Loans	Curren- cy and deposits	Other	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*	18 651 17 443 19 348 24 391 31 846	5 052 4 149 5 138 30 375 60 558	95 530 141 055 211 361 263 864 256 499	6 385 19 036 14 366 26 288 21 252	23 856 22 079 19 391 14 995 10 450	  6 103 6 877	124 438 167 283 235 889 303 131 320 630	13 915 9 532 13 305 18 206 20 527	51 937 68 892 78 330 93 124 84 826	7 969 8 555 11 880 4 025 3 430	89 662 84 036 78 804 54 188 46 566	171 015 182 320 169 543	355 741 437 557
1993 I II III IV	19 812 20 763 21 418 24 391	8 121 11 901 22 725 30 375	253 159 254 886 265 540 263 864	16 281 21 118 23 460 26 288	17 007 15 573 13 090 14 995	  6 103	278 287 282 360 301 355 303 131	15 193 14 897 14 091 18 206	96 786 93 408 95 327 93 124	13 276	76 093 67 494 61 106 54 188		506 573
1994*           V	27 918 30 846 33 010 31 846	39 079 42-719 56 036 60 558	266 672 269 689 269 901 256 499	28 950 22 831 24 895 21 252	12 244 15 286 11 909 10 450	8 855 8 809 7 591 6 877	309 140 318 885 330 255 320 630	16 230 16 277	87 372 88 589 81 907 84 826	4 724 2 964 3 752 3 430	58 746 55 420 47 152 46 566	167 958 163 203 149 088 155 350	505 016 512 934 512 353 507 826
1995* }    	34 300 33 083 33 137	53 488 79 430 93 020	252 618 241 326 230 971	20 319 16 939 19 116	7 222 5 965 7 644	7 563 8 304 1 975	305 765 318 418 329 660	17 830 18 641 17 610	81 170 77 377 70 943	3 369 2 580 2 364	53 433 51 169 49 344	155 801 149 767 140 262	495 866 501 267 503 058

Position		· · · · · · · · · · · · · · · · · · ·				Ass	iets					
at end of	Direct		Po	ortfolio invest	ment	_			Other invest	ment		Total
period	invest- ment abroad	Shares	Bonds	Money market instruments	Financial deri- vatives	Total (15+16+ 17+18)	Trade credits	Loans	Curren- cy and deposits	Other	Total (20+21+ 22+23)	assets (14+ 19+24)
	14	15	16	17	18	19	20	21	22	23	24	25
1990 1991 1992 1993 1994*	40 800 44 823 44 921 53 090 59 451	762 426 469 1 285 1 034	6 447 7 004 8 697 10 706 4 751	2 173 4 154 7 917 11 028 9 115	  446 487	9 383 11 584 17 083 23 465 15 388	16 549 16 388 21 389 26 350 26 678	24 825 28 504 35 251 35 981 24 847	5 726 7 647 12 665 5 701 7 055	65 754 72 498 76 647 88 579 106 465	112 854 125 037 145 952 156 611 165 046	163 037 181 444 207 955 233 166 239 885
1993          V	51 575 47 722 48 332 53 090	676 671 759 1 285	11 952 10 801 10 074 10 706	7 766 6 627 10 689 11 028	  446	20 394 18 099 21 522 23 465	23 664 23 888 23 857 26 350	36 976 34 148 34 208 35 981	12 275 12 159 13 929 5 701	92 392 97 321 98 044 88 579	165 307 167 516 170 039 156 611	237 277 233 337 239 893 233 166
1994*       11  V	54 424 58 238 58 314 59 451	1 236 1 146 1 055 1 034	9 576 5 953 4 311 4 751	10 910 6 338 6 087 9 115	622 550 561 487	22 343 13 987 12 014 15 388	24 718 26 392 24 682 26 678	32 788 29 981 28 350 24 847	8 107 7 449 6 955 7 055	90 621 105 988 112 579 106 465	156 234 169 811 172 566 165 046	233 001 242 036 242 894 239 885
1995* ¦    	59 709 60 651 61 601	672 680 710	5 485 5 597 4 965	5 768 2 807 3 291	156 114 199	12 081 9 198 9 164	27 297 29 456 28 630	22 668 22 142 22 983	4 985 4 602 5 568	115 389 105 086 104 338	170 339 161 286 161 518	242 129 231 135 232 284

Position at end of period	Corporate sector	Banks	Bank of Finland	Other financial institutions	Central government	Local government	Net (1+2+3+ 4+5+6)	Net interest and dividend expenditure	Net interest and dividend expenditure in relation to current account receipts, %
	1	2	3	4	5	6	7	8	9
1990 1991 1992 1993 1994*	34 853 28 483 30 501 51 382 78 640	110 111 107 434 82 343 45 658 34 022	-36 700 -34 046 -27 546 -33 279 -52 606	9 910 18 960 28 283 29 737 22 381	24 751 52 748 113 674 167 444 182 517	610 719 2 347 2 956 2 987	143 535 174 298 229 602 263 898 267 942	13 130 15 671 19 011 21 897 20 296	9.7 12.7 13.6 12.8 10.5
1993          V	35 201 37 584 45 851 51 382	65 514 61 511 44 622 45 658	-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	262 029 257 046 266 680 263 898	6 640 7 103 3 918 4 237	16.3 16.6 9.3 9.1
1994*           V	61 203 61 566 73 884 78 640	52 013 51 328 34 084 34 022	-42 504 -52 617 -52 998 -52 606	28 987 26 252 25 118 22 381	169 083 181 120 186 302 182 517	3 233 3 248 3 069 2 987	272 015 270 898 269 459 267 942	7 187 5 458 3 748 3 903	16.2 10.9 7.7 7.3
1995*      	70 091 90 848 99 533	23 473 27 199 19 699	-53 298 -50 742 -47 488	21 155 20 053 19 981	189 262 179 575 176 029	3 053 3 199 3 022	253 737 270 132 270 775	5 699 6 273 3 560	10.5 10.4 6.5

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

# **7. Foreign trade** 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

				un un	a conno o	<i>i a</i> uao, <i>i</i>	500-700		
During	Exports,	Imports,	Balance	Period	Vol	ume	Unit	value	Terms of trade
period	fob	cif	(1–2)		Exports	Imports	Exports	imports	of trade
	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	134 112	103 167	30 945	1993	147	109	172	163	106
1994*	153 859	120 200	33 659	1994*	166	130	175	158	111
1994*				1992					
Oct.	13 397	10 087	3 310	1992	117	102	163	142	115
	13 982	10 968		iv iv		116	171	154	111
Nov.			3 014	IV	133	110	17.1	104	111
Dec. <sup>1</sup>	14 713	14 757	-44	4000					
				1993	105	100	470	405	100
1995*1				I.	135	108	176	165	106
Jan.	13 713	8 811	4 903	H	143	105	174	165	105
Feb.	1 <b>1 8</b> 51	9 321	2 530	111	141	101	174	165	105
March	14 762	10 778	3 984	IV	165	116	170	161	105
April	14 368	10 001	4 367						
May	14 800	12 000	2 800	1994*					
June	16 300	10 800	5 500	1	155	107	170	161	106
July	12 600	9 600	3 000	il i	168	129	175	158	111
Aug.	13 300	11 300	2 000	ü	161	124	178	161	111
Sept.	14 600	11 200	3 400	iV	180	156	176	158	112
Oct.	14 100	12 900	1 200		100				
		000	. 200						

<sup>1</sup> See Notes and explanations to the statistical section.

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

During period		Exp	orts by indust	ries, fob			Impor	ts by use of g	oods, cif	
penoa	Wood	Paper	Chemical industry	Metal and	Other	Raw materials	Crude oil, fuels and	Finishe	ed goods	Other goods
	products	industry products	products	engineering industry products	goods	(excl. crude oil)	lubricants	Investment goods	Consumer goods	80008
	1	2	3	4	5	6	7	8	9	10
1990 1991 1992 1993 1994*	7 811 6 984 7 892 10 910 14 114	31 658 29 695 32 587 37 430 41 300	9 540 10 539 12 172 14 205 15 639	35 493 29 188 35 741 48 158 55 558	16 825 16 436 19 071 23 409 27 248	49 210 42 505 49 514 54 792 65 899	9 829 9 399 9 745 10 904 11 628	19 364 13 973 13 348 15 396 17 147	23 888 21 195 20 826 21 066 24 606	736 672 1 514 1 009 920
1994* April May June July Aug. Sept. Oct. Nov. Dec.	1 167 1 431 1 318 1 015 935 1 313 1 268 1 357 1 290	3 488 3 506 3 358 3 287 3 437 3 586 3 566 3 719 3 662	1 164 1 511 1 289 1 315 1 258 1 354 1 313 1 453 1 400	4 317 4 538 4 882 5 802 3 816 4 320 4 937 4 968 5 883	2 207 2 371 2 458 1 712 2 111 2 592 2 313 2 485 2 478	4 836 6 075 5 513 4 823 5 419 5 656 5 645 6 191 7 790	961 1 290 867 955 1 029 1 054 803 1 012 1 597	1 663 1 317 1 192 1 227 1 386 1 384 1 485 1 557 2 492	1 915 2 232 1 950 1 792 2 031 2 027 2 051 2 180 2 783	43 15 77 382 19 41 103 28 95
1995* Jan. Feb. March April	1 235 1 164 1 298 1 255	4 376 2 650 4 184 3 946	1 230 1 132 1 328 1 229	4 725 4 864 5 548 5 772	2 147 2 041 2 404 2 166	5 255 5 366 6 203 5 717	419 331 515 718	1 278 1 313 1 508 1 367	1 769 1 946 2 362 1 987	90 365 190 212

## 7.4 Foreign trade by regions and countries

Region and		Exp	orts, fob		Imports, cif			
country	199	4*	Jar	1995* nuary-April	19	994*	Ja	1995* nuary-April
	Mill. FIM	Percentage share	Mill, FIM	Percentage change from the corresponding period of the previous year	Mill. FIM	Percentage share	Mill. FIM	Percentage change from the corresponding period of the previous year
	1	2	3	4	5	6	7	8
All OECD countries OECD Europe Of which:	115 277 97 873	74.9 63.6	33 413	7.9	93 014 74 466	77.4 62.0	24 77 <del>6</del>	 12.4
Austria	1 597	1.0	669	35.2	1 347	1.1	488	23.7
Belgium and Luxembourg Denmark France Germany Italy Netherlands Norway Spain Sweden Switzerland United Kingdom	3 457 5 283 7 774 20 662 4 591 7 866 4 862 3 547 16 818 2 325 15 907	2.2 3.4 5.1 13.4 3.0 5.1 3.2 2.3 10.9 1.5 10.3	1 751 1 852 2 585 7 466 1 835 2 547 1 711 1 441 5 435 786 5 854	54.5 2.5 2.8 13.8 29.8 -2.7 12.6 29.6 6.6 6.7 19.1	3 284 3 661 4 902 17 713 4 660 4 339 5 745 1 576 12 522 2 105 10 004	2.7 3.0 4.1 14.7 3.9 3.6 4.8 1.3 10.4 8.3	$\begin{array}{c} 1 \ 256 \\ 1 \ 341 \\ 1 \ 705 \\ 6 \ 460 \\ 1 \ 633 \\ 1 \ 601 \\ 1 \ 505 \\ 532 \\ 4 \ 790 \\ 660 \\ 3 \ 154 \end{array}$	28.2 22.5 13.4 25.0 18.8 25.6 -11.2 -0.8 31.8 6.7 6.9
Other OECD Of which:	17 404	11.3			18 548	15.4		
Canada Japan United States	1 031 3 174 11 033	0.7 2.1 7.2	412 1 242 3 423	37.7 45.0 18.6	837 7 809 9 163	0.7 6.5 7.6	227 2 465 2 552	6.0 9.8 –14.7
Non-OECD European countries	18 428	12.0	5 738	8.6	14 970	12.5	4 212	23.4
Of which: Russia	7 994	5.2	2 353	-4.0	10 661	8.9	2 933	21.6
Other countries	20 154	13.1			12 216	10.2		
Of which: OPEC countries	2 446	1.6			590	0.5		
TOTAL	153 859	100.0	55 <b>6</b> 27	17.6	120 200	100.0	39 584	14.6
Of which: EC countries EFTA countries	71 489 25 725	46.5 16.7	32 662 2 550	15.0 11.0	52 447 21 812	43.6 18.1	24 311 2 172	24.0 8.0

## 8. Domestic economic developments

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

Period		sumption anditure	Fixe	d stment	Change in stocks, incl. statistical	Domestic demand (1+2+3+4+5)	Exports	Imports	GDP (6+7-8)
	Private	Public	Private	Public	discrepancy	(1+2+3+4+3)			
	1	2	3	4	5	6	7	8	9
1990 1991 1992 1993 1994*	269 754 260 031 247 363 240 177 244 493	108 535 111 256 108 799 103 028 102 385	121 858 93 722 75 338 60 638 60 362	17 286 17 243 16 899 13 890 12 519	5 769 -2 451 4 534 10 131 23 113	523 202 479 801 452 933 427 864 442 872	118 828 110 965 122 059 142 459 160 294	126 600 111 755 112 989 113 752 128 104	515 430 479 011 462 003 456 571 475 062
1993           V	60 204 59 522 59 781 60 670	25 936 25 852 25 778 25 462	15 788 15 515 14 723 14 612	3 632 3 413 3 577 3 268	2 687 1 215 3 149 3 080	108 247 105 517 107 008 107 092	34 729 34 401 36 280 37 049	30 014 26 799 28 534 28 405	112 962 113 119 114 754 115 736
1994*           V	61 172 60 280 61 050 61 991	25 404 25 563 25 502 25 916	14 290 14 602 15 565 15 905	3 284 3 220 3 046 2 969	2 106 5 981 6 661 8 365	106 256 109 646 111 824 115 146	37 769 39 963 41 059 41 503	28 714 30 916 32 755 35 719	115 311 118 693 120 128 120 930
1995*   	63 262 64 012	25 294 25 826	17 182 16 671	2 824 2 703	4 167 4 340	112 729 113 552	44 265 45 080	34 188 35 097	122 806 123 535

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

Period	Totai Industry	Mining and quarrying	Manu- facturing	Wood and paper industries	Metal and engineering industries	Other manu- facturing	Energy and water
	(100.0)	(1.3)	(89.6)	(16.8)	(31.3)	(41.5)	supply (9.1)
	1	2	3	4	5	6	7
1990 1991 1992 1993 1994*	100.2 91.2 92.4 97.4 107.9	99.8 91.3 88.4 86.1 96.1	100.2 89.9 91.4 96.4 107.4	100.1 91.5 94.6 104.5 115.5	100.4 85.6 91.1 99.7 118.4	100.1 92.6 90.2 90.8 95.8	100.0 103.6 103.0 107.9 114.3
1994* Sept. Oct. Nov. Dec.	111.4 112.5 112.5 111.8	106.1 93.4 95.3 91.3	111.3 112.9 113.1 111.9	117.0 117.8 116.3 120.1	129.4 129.9 132.0 129.0	97.2 98.1 98.1 96.5	115.6 112.3 110.0 112.9
1995* Jan. Feb. March April May June July Aug. Sept.	114.0 114.8 116.9 115.9 116.7 116.5 114.2 117.0 117.0	82.5 87.6 88.7 83.7 67.1 82.4 90.8 158.2 98.3	114.4 115.9 117.8 116.5 117.6 117.2 114.5 116.7 118.3	118.7 120.6 120.2 119.4 119.4 118.7 125.8 120.7 115.1	134.0 135.0 137.4 138.9 144.0 141.1 129.2 139.1 151.9	97.7 99.5 99.1 97.7 97.1 98.0 98.8 96.8 96.8	113.1 106.9 111.3 113.5 115.3 114.2 117.7 112.8 108.0

Period	Volume of wholesale	Volume of retail	Volume of construction		Of which:		Imports of investment	Monthly indicator
	trade	trade	of buildings	Residential buildings	Industrial buildings	Other buildings	goods	of GDP
	1	2	3	4	5	6	7	8
1990 1991 1992 1993 1994*	119.9 99.4 87.2 82.5 87.6	111.6 103.5 92.9 87.6 89.3	127.3 103.9 79.5 59.5 53.5	124.8 94.4 73.8 60.5 56.7	161.7 127.7 76.2 52.9 57.2	122.1 109.9 87.5 59.8 48.7	144.6 102.1 84.5 83.2 97.3	117.5 110.3 107.0 105.6 109.8
1994* Aug. Sept. Oct. Nov. Dec.	90.7 90.7 89.1 91.6 90.4	89.3 91.1 89.0 89.9 91.3	  	  	  	  	  	109.4 110.8 111.8 111.8 112.6
1994*         V	86.8 89.4 90.4	88.8 89.1 90.1	51.4 54.1 53.7	56.1 53.8 51.8	48.3 64.4 71.0	46.2 47.9 48.9	97.8 84.4 132.9	109.8 110.0 112.1
1995* Jan. Feb. March April May June July Aug.	90.2 91.0 90.1 87.7 91.6 89.8 90.5 95.4	92.8 93.3 91.5 92.2 94.1 92.7 87.8 90.6	•• •• •• •• ••	   	   	   	    	114.4 114.2 115.9 114.8 114.9 113.7 113.0 114.0
1995*   	90.4 89.7	92.5 93.0	52.5 53.3	54.5 55.2	79.3 95.7	42.2 40.7	 	114.8 114.4

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

### 8.4 Wages and prices, 1990=100

Period	Index		By sectors	3	Con-	Indica-	Basic	By	origin	Produc- er price	By mark	eting area	Building
	of wage and salary earnings	Private	Of which: Manufac- turing (SIC	Public	sumer price index	tor of under- lying infla- tion	price index for domestic supply	Domes- tic goods	Import- ed goods	index for manu- facturing	Export- ed goods	Home market goods	index
	1	2	3	4	5	6	7	8	9	10	11	12	13
1990 1991 1992 1993 1994 <sup>1</sup>	100.0 106.4 108.4 109.2 111.5	100.0 106.4 108.1 108.8 111.6	100.0 106.1 108.3 110.0 115.0	100.0 106.4 109.0 110.1 111.3	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	100.0 102.2 100.4 100.7 102.2
1994 Oct. Nov. Dec.	  	  	  	  	111.9 111.6 111.5	112.1 111.7 111.7	107.1 107.1 107.2	104.0 104.1 104.3	118.2 118.5 118.0	108.4 108.4 108.7	111.0 111.3 111.5	107.3 107.2 107.4	102.9 102.9 102.8
1994 <sup>1</sup>         V	111.2 111.5 112.5	111.3 111.7 112.9	114.6 115.3 116.9	111.1 111.3 112.0	110.6 111.6 111.7	111.3 111.7 111.8	105.9 106.8 107.1	102.3 103.4 104.1	119.3 119.4 118.2	106.4 108.1 108.5	109.1 111.6 111.3	105.2 106.5 107.3	101.9 102.3 102.9
1995 Jan. Feb. March April May June July Aug. Sept. Oct.	   	    	    	    	111.4 111.8 111.8 111.9 112.0 112.4 112.3 112.1 112.2 112.2	110.8 111.5 111.4 111.5 111.4 111.5 111.4 111.2 111.3 	107.0 107.5 108.0 108.3 108.1 107.8 105.8 106.0 105.9	104.1 104.2 104.4 105.2 105.2 104.9 102.4 102.7 102.7	117.8 119.5 119.1 119.2 119.5 119.1 118.5 118.5 118.4 117.7	109.1 109.5 109.4 110.1 110.8 110.8 110.9 111.1 111.8 112.1	113.2 114.7 114.6 116.0 117.6 117.9 118.7 118.9 120.4 121.3	107.3 107.2 107.1 107.5 107.8 107.8 107.6 107.8 108.1 108.1	103.2 103.6 103.5 103.7 103.6 103.5 103.6 103.6 103.7 103.4
1995 <sup>1</sup> I II	114.7 116.3	115.8 117.3	121.2 123.5	113.1 114.7	111.7 112.1	111.2 111.5	107.3 108.1	104.2 105.1	118.8 119.3	109.3 110.6	114.2 117.2	107.2 107.7	103.4 103.6

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

Period	Labour force	Labour force	Total employ-	By indu	strial status		By inc	lustry		Unem- ploved	Unem- ployment
	partici- pation rate among 15–74 year olds	force	employ- ment (4+5) = (6+7+8+9)	Self- employed	Wage and salary eamers	Agri- culture and forestry	Industry	Con- struction	Service industries	рюуец	rate
	%				· · · ·	1000 pers	ons				%
	1	2	3	4	5	6	7	8	9	10	11
1990 1991 1992 1993 1994	68.4 67.4 66.1 65.3 64.8	2 556 2 533 2 502 2 484 2 480	2 467 2 340 2 174 2 041 2 024	360 340 325 312 312	2 108 2 000 1 849 1 729 1 712	207 197 188 173 167	556 502 454 423 426	205 179 150 124 113	1 500 1 461 1 382 1 319 1 317	88 193 328 444 456	3.4 7.6 13.1 17.9 18.4
1994 Oct. Nov. Dec.	64.8 64.6 64.9	2 482 2 475 2 487	2 040 2 038 2 051	312 308 309	1 728 1 730 1 742	161 168 164	425 434 437	122 112 118	1 332 1 325 1 331	442 436 436	17.8 17.6 17.5
1995 Jan. Feb. March April May June July Aug. Sept. Oct.	64.8 64.9 65.3 65.5 65.3 65.6 64.8 65.1 65.4	2 483 2 473 2 489 2 505 2 513 2 505 2 519 2 488 2 499 2 512	2 044 2 048 2 069 2 067 2 068 2 073 2 079 2 065 2 078 2 089	299 292 297 312 304 300 313 306 312	1 744 1 757 1 772 1 774 1 756 1 769 1 779 1 752 1 771 1 777	162 164 160 165 163 149 161 160 153	444 435 453 456 454 468 468 452 453 492	123 119 124 123 114 122 119 120 119 121	1 314 1 330 1 333 1 328 1 334 1 325 1 343 1 343 1 342 1 346 1 323	439 424 419 438 445 432 439 422 421 423	17.7 17.2 16.8 17.5 17.7 17.2 17.4 17.0 16.8 16.8

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

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

mill FIM, cash flow basis

During period				Expenditure							
penod	Direct	Direct Indirect axes taxes	Other taxes and	Other revenue	Revenue	Redemp- tions of loans granted by the state	Revenue	Consump- tion	Trans- fers and	Of v	which:
	laxes		similar revenue		financial transactions (1+2+3+4)		borrowing (5+6)		subsidies	Local govern- ment	Other domestic sectors
	1	2	3	4	5	6	7	8	9	10	11
1990 1991 1992 1993 1994	42 611 41 054 34 312 31 667 34 588	77 364 73 251 69 541 67 291 68 124	953 1 136 1 512 1 443 1 792	18 423 19 182 21 251 28 823 24 095	139 351 134 624 126 616 129 224 128 599	4 260 4 442 5 054 7 366 7 308	143 611 139 069 131 669 136 593 135 900	41 535 45 085 49 291 46 880 48 750	81 190 101 220 105 184 108 608 108 155	37 646 42 297 42 990 42 720 40 388	40 313 55 160 59 180 63 535 65 519
1994 Sept. Oct. Nov. Dec.	2 671 2 736 2 632 3 490	5 289 5 834 5 608 5 710	127 101 72 113	1 489 1 243 1 956 3 766	9 576 9 914 10 268 13 079	81 228 975 484	9 658 10 141 11 243 13 563	3 866 3 859 4 013 7 273	8 399 11 109 8 368 7 912	3 147 3 138 3 164 3 648	5 182 7 867 5 009 3 942
1995 Jan. Feb. March April May June July Aug. Sept.	2 850 - 924 4 153 3 055 4 352 3 068 3 578 3 365 3 014	6 369 6 038 3 485 5 675 5 120 4 755 5 996 6 294 5 827	80 93 30 58 958 52 142 63	1 059 3 238 2 688 3 621 3 588 2 619 1 851 2 654 3 228	10 358 8 445 10 356 12 410 13 118 11 400 11 477 12 455 12 132	31 62 171 2 738 713 87 481 173 299	10 388 8 507 10 528 15 147 13 832 11 486 11 958 12 628 12 431	3 190 4 109 4 627 4 162 4 240 4 581 4 686 3 668 3 732	9 872 7 744 11 724 10 804 11 641 10 309 7 838 6 995 8 566	3 099 3 020 3 410 4 578 4 358 3 382 3 104 2 256 3 104	5 712 4 092 8 061 5 480 6 634 6 293 4 126 4 253 4 942

During			Expendit	tre	Financial balance					
pond	Fixed invest- ment	Other expendi- ture	Expenditure before financial transactions (8+9+12+13)	Lending and other financial investment	Expenditure before redemptions of state debt (14+15)	Revenue surplus (5–14)	Net borrowing requirement (7–16)	Net borrowing	Cash surplus (18+19)	
	12	13	14	15	16	17	18	19	20	
1990 1991 1992 1993 1994	5 962 5 370 5 042 4 306 3 737	4 927 6 368 8 499 18 076 22 358	133 614 158 044 168 016 177 870 183 000	9 319 13 328 35 501 19 753 17 886	142 934 171 372 203 516 197 623 200 760	5 737 -23 420 -41 400 -48 646 -54 401	678 -32 304 -71 847 -61 030 -64 860	1 201 25 659 70 691 84 036 73 193	1 879 -6 645 -1 155 23 009 8 336	
1994 Sept. Oct. Nov. Dec.	321 314 344 625	1 748 1 705 1 060 1 718	14 334 16 987 13 785 17 528	6 490 555 587 2 155	20 824 17 541 14 372 19 683	-4 758 -7 073 -3 517 -4 449	-11 166 -7 400 -3 129 -6 120	13 203 4 430 5 473 5 236	2 037 -2 969 2 344 - 884	
1995 Jan. Feb. March April May June July Aug. Sept.	180 244 187 158 218 262 258 223 227	4 018 1 367 3 601 2 007 1 445 3 222 1 361 784 3 574	17 260 13 464 20 139 17 131 17 544 18 374 14 143 11 670 16 099	407 647 443 7 292 2 454 2 487 707 468 814	17 668 14 111 20 583 24 423 19 999 20 861 14 851 12 140 16 913	6 902 5 019 9 783 4 721 4 426 -6 974 2 666 785 -3 967	-7 280 -5 604 -10 055 -9 276 -6 167 -9 375 -2 893 488 -4 482	13 669 9 435 12 242 2 225 1 719 -3 851 -1 344 5 741 1 450	6 389 3 832 2 186 -7 051 -4 448 -13 226 -4 236 6 230 -3 033	

## 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) = till-money 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 Minimum reserve deposits (Column 1): See

 explanations to Table 2.2. Liquidity credits (Column 3): see

 explanations to Table 3.2. Liquidity position, net (Column 4) is obtained by subtracting Column 3 from Column 1.

Table 2.2 From 2 October 1995, banks fulfil their minimum reserve requirement as a monthly average of deposits. From October 1995, the requirement and deposits are shown for the month during which the requirement is to be fulfilled. Before deposits were shown for the previous month, because deposits were matched with the requirement on the last banking day of that month. The requirement is determined on the basis of the reserve base two months earlier (up to September 1995 one month earlier). The reserve base was changed on 31 March 1995 to comply with the new balance sheet format.

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

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

Banks with access to central bank financing can obtain liquidity credit from the Bank of Finland to fulfil their minimum reserve requirement. They can obtain liquidity credit with a maturity of 1 day, 7 days, 14 days, 21 days or 28 days. The maturity of liquidity credit is determined by the Bank of Finland. The rate of interest on liquidity credit is obtained by adding together the Bank of Finland's tender rate and the interest rate margin for liquidity credit. The call money deposit rate in use prior to October 1995 was obtained by subtracting the interest rate margin for call money deposits from the Bank of Finland's tender rate. From 2 October 1995, the interest rate paid on excess reserves is determined separately by the Bank of Finland. 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 Euromarket. ECU (Column 1): the weights of the ECU basket. 3 currencies (Column 2): DEM 60, USD 30 and GBP 10 per cent.

**Table 3.4** *Lending.* New credits (Columns 1–4): rates of interest on new credits drawn during the month are average monthly rates weighted by loan amounts. Annual rates are arithmetic average of monthly observations until 1987 after which they are weighted by loan amounts. Average lending rates (Columns 5 and 6) are all weighted by

Bulletin 12 • 95

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 36month tax-exempt deposits (Columns 7 and 8): from May (September) 1992, 24-month (36-month) deposits are taxexempt if they carry a rate of interest which is at most the Bank of Finland's base rate less two percentage points (one percentage point). In the period from January 1989 to April 1992, 24-month deposits (Column 7) were taxexempt 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 peri-od 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. Trade-weighted 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 8) 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 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.  $M_2$  (Column 7) = M<sub>1</sub> + quasi-money (markka time deposits held by the public, excl. deposits with the Bank of Finland). M<sub>3</sub> (Column 8) = M, + 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 A: Financial Supervision from the beginning of 1994. 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 primary dealers and banks entitled to central bank financing. As from 14 July 1995 the following act as primary dealers: Alfred Berg Pankkiiriliike Oy, Evli Fixed Income Securities, Goldman Sachs International, Merita Bank, Okobank, Postipankki, Skandinaviska Enskilda Banken, Svenska Handelsbanken AB (publ), Branch Operation in Finland and Unibank A/S. Purchases from and sales to others (Colums 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. Bank of Finland releases data daily (page SPFI on Reuters and page 20981 on Telerate) on the trading in benchmark government bonds among primary dealers and between primary dealers and their customers.

Table 5.6 Source: The Helsinki Stock Exchange.

#### 6 Balance of payments, foreign liablittles 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 trade figures for 1995 have been estimated on the basis of a survey of firms carried out by the Bank of Finland. The official foreign trade statistics published by the Board of Customs are delayed owing to changes in statistical systems caused by Finland's entry into the EU. 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 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' (Columns 11 and 23) includes transactions in short- and long-term assets and liabilities of different sectors not covered by any of the items above. In addition, this category includes changes in the central government's subscriptions to and quotas in international organizations as well as transactions in the Bank of Finland's short- and long-term assets and liabilities (excl. reserve items). The most important sub-item under the item 'other' comprises banks' other short-term assets and liabilities (in practice interbank deposits). The central bank's reserve assets (Column 27) comprise gold, special drawing rights (SDRs), the reserve position in the IMF and convertible currency claims. A negative figure implies an increase in reserves.

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

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

#### 7 Foreign trade

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

**Table 7.1** The exceptionally large foreign trade figures for December 1994 are largely due to a one-off timing change in the compilation of foreign trade statistics caused by Finland's entry into the EU. This increased the value of imports by some FIM 3 billion and the value of exports by just under FIM 1 billion.

The trade figures for May–October 1995 have been estimated on the basis of a survey of firms carried out by the Bank of Finland. The official foreign trade statistics published by the Board of Customs are delayed owing to changes in statistical systems caused by Finland's entry into the EU.

**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 base-year figures, ie 100.0.

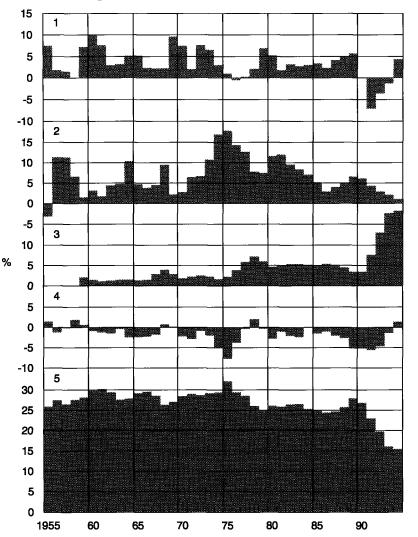
Table 8.3 The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various industries.

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.

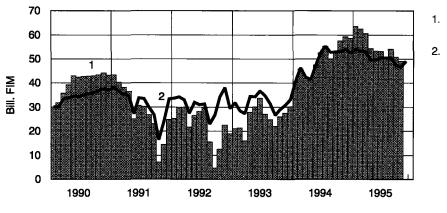
Table 8.6 Source: Ministry of Finance.

1.	Long-term indicators	S30
2.	The Bank of Finland's foreign exchange reserves and forward position	S31
З.	Forward market	S31
4.	Rates of interest set by the Bank of Finland	S31
5.	Banks' liquidity position with the Bank of Finland	S32
6.	Liquidity management interest rates	S32
7.	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
13.	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
21.	Net interest and dividend expenditure	S37
22.	Balance of payments	S38
23.	Finland's net international investment position	S38
24.	Foreign trade	S39
25.	Foreign trade: prices and terms of trade	S39
26.	Finland's export performance	S39
27.	Production	S40
28.	Fixed investment	S40
29.	Employment and the unemployment rate	S41
30.	Prices and wages	S41
31.	Central government finances	S42
32.	Central government debt	S42

1. Long-term indicators



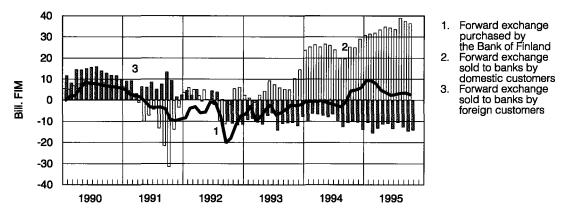
- GDP, change in volume from the previous year, per cent
   Consumer prices,
- 2. Consumer prices, change from the previous year, per cent
- Der cent
   Unemployment rate, per cent
   Current account,
- Current account, as a percentage of GDP
   Fixed investment,
  - as a percentage of GDP

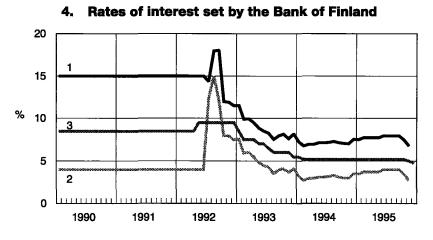


#### The Bank of Finland's foreign exchange reserves and forward position 2.



#### **Forward market** 3.



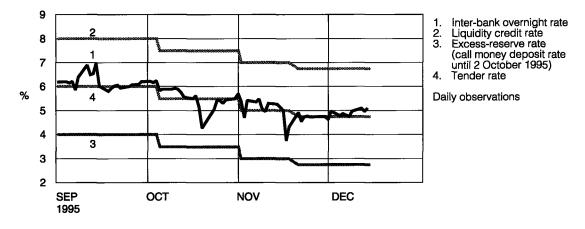


- 1. Liquidity credit rate (up to 2 July 1992 call money credit rate) Excess-reserve rate 2.
- (call money deposit rate until 2 October 1995)
- 3. Base rate

End-of-month observations

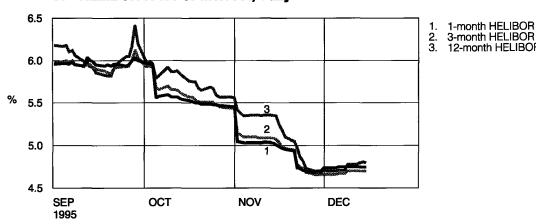


#### Liquidity management interest rates 6.

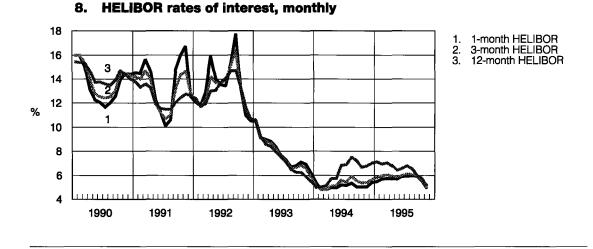


1-month HELIBOR

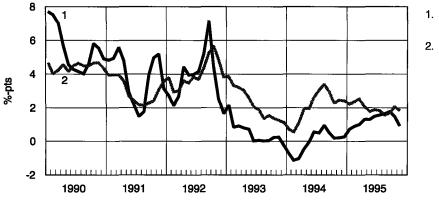
12-month HELIBOR



7. HELIBOR rates of interest, daily



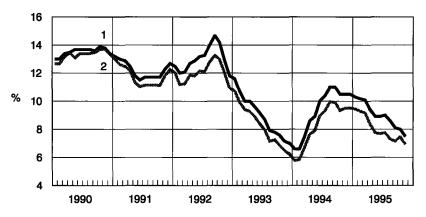
9. Differential between Finnish and German interest rates



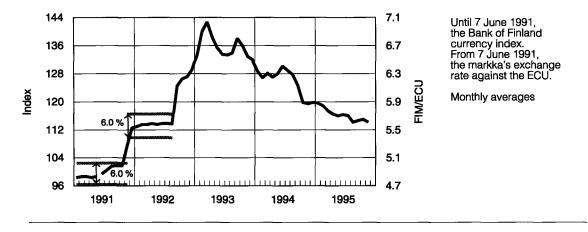
1. 3-month HELIBOR minus 3-month DEM eurorate

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



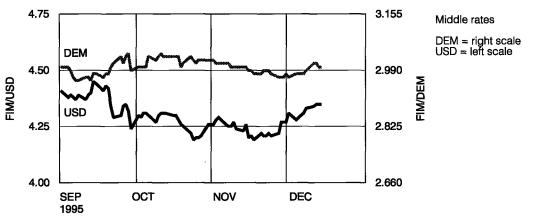


 Bank of Finland's 5-year reference rate
 Yield on (4–5 year) taxable government bonds

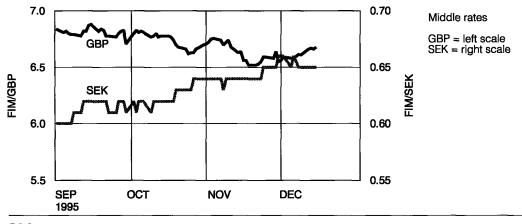


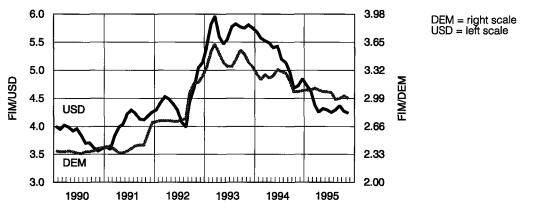
11. Bank of Finland currency index and the markka value of the ECU

12. Daily spot rates for the markka against the Deutschmark and the US dollar

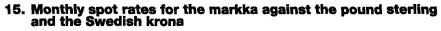


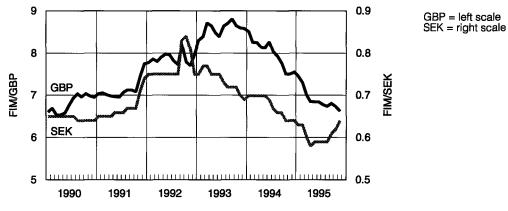




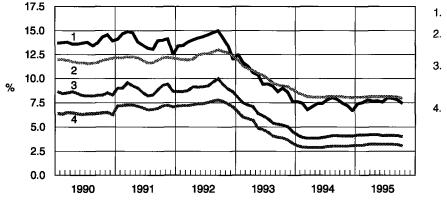


## 14. Monthly spot rates for the markka against the Deutschmark and the US dollar

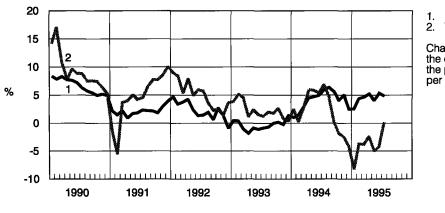




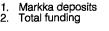




- Average rate on new markka lending
- Average rate on outstanding markka lending
- Average rate on total markka funding (deposits + other funding) Average markka
- deposit rate

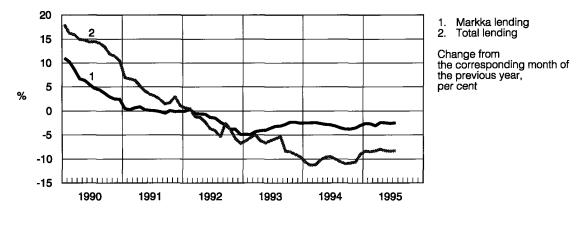


#### 17. Bank funding from the public

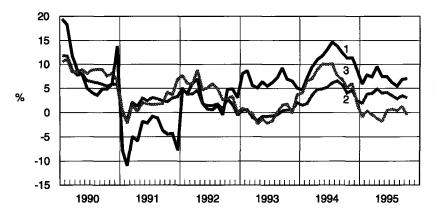


Change from the corresponding month of the previous year, per cent

#### 18. Bank lending to the public





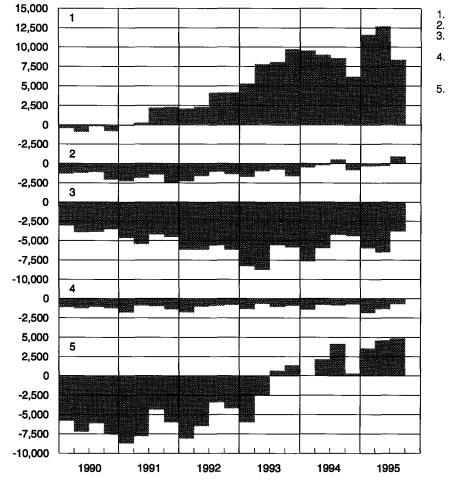


- Narrow money (M1) 1.
- 2. 3.
- Broad money (M2) M2 + bank CDs held by the public (M3)

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

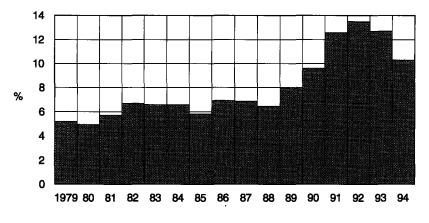
20. Current account

Mill. FIM



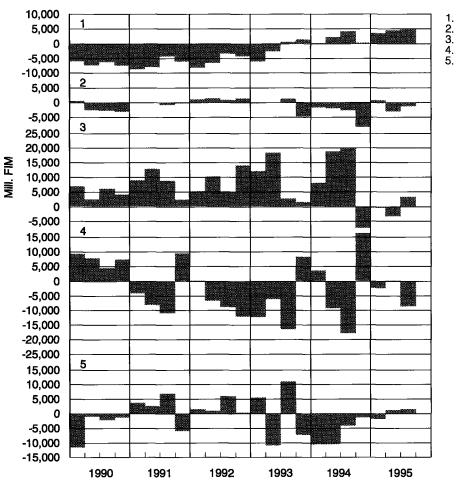
- 1. Trade account
- 2. Services account
- Investment income account
- Unrequited transfers account and other items, net
- 5. Current account

21. Net interest and dividend expenditure



#### As percentage of current account receipts

22. Balance of payments



1. Current account

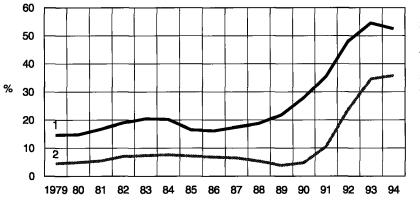
2. Direct investment

. Portfolio investment

Other investment

 Change in central bank's reserve assets (increase = ~)

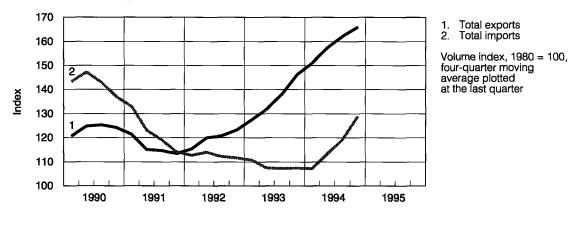




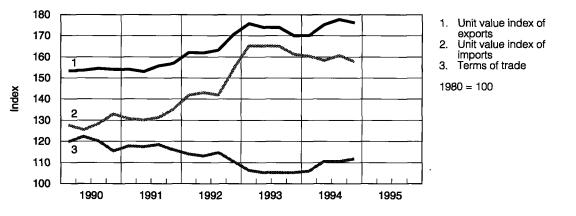
1. Total 2. Of which:

central government

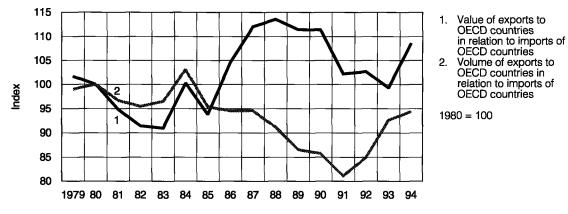
The stock of external liabilities minus the stock of external assets, as a percentage of GDP 24. Foreign trade



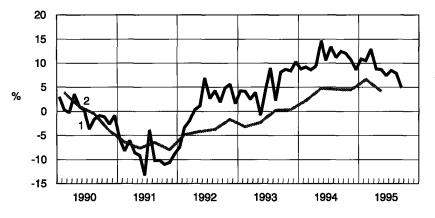
25. Foreign trade: prices and terms of trade







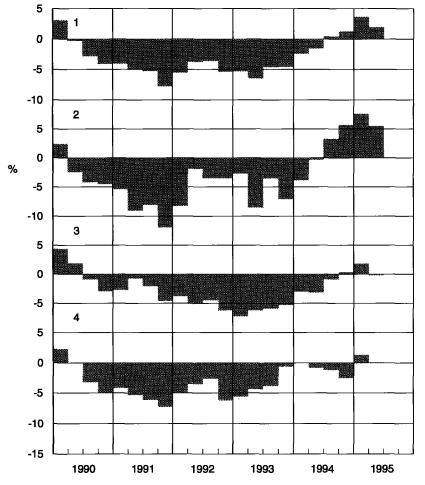




1. Industrial production, change in volume from the corresponding month of the previous year, per cent GDP,

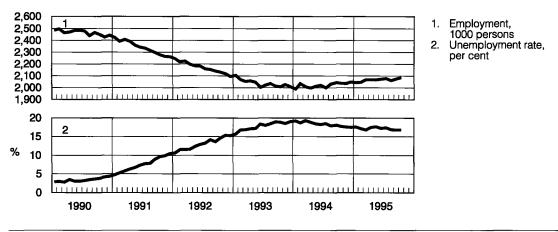
2. change in volume from the corresponding quarter of the previous year, per cent

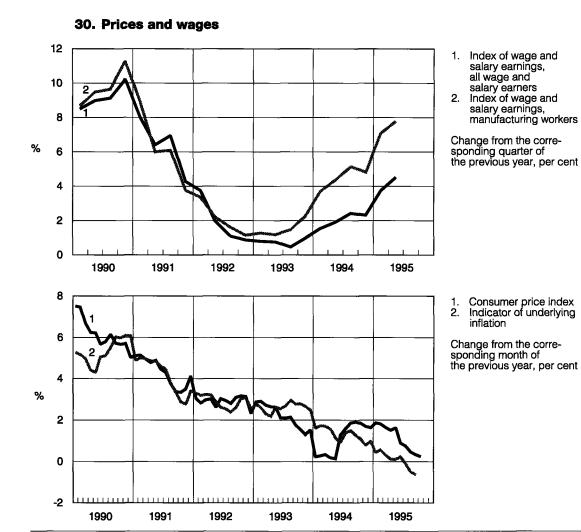
28. Fixed investment

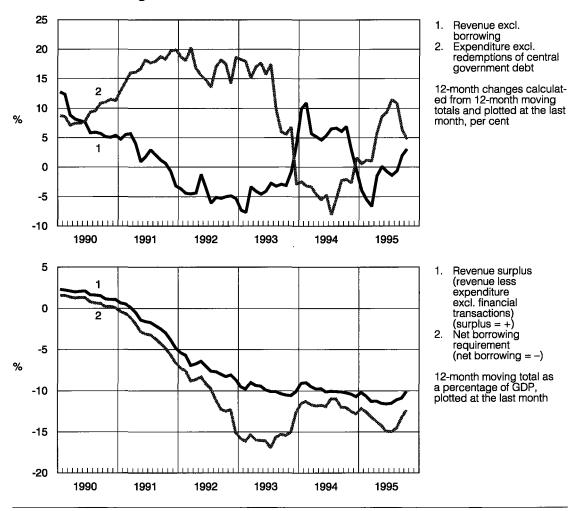


- Total fixed investment 1.
- Investment in machinery 2. and equipment
- Building investment, excl. residential З. buildings 4. Residential buildings

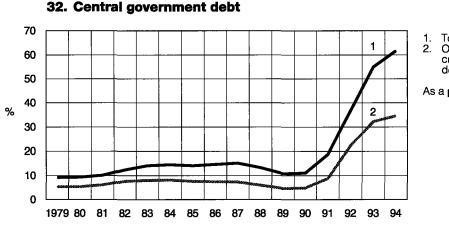
Volume changes calculated from four-quarter moving totals and plotted at the last quarter, per cent







#### **31. Central government finances**



- - Total debt Of which: foreign currency-denominated debt

As a percentage of GDP

#### THE PARLIAMENTARY SUPERVISORY BOARD

ILKKA KANERVA, Chairman MATTI PUHAKKA, Vice Chairman OLAVI ALA-NISSILÄ kimmo sasi Tuulikki hämäläinen Mauri pekkarinen JOHANNES KOSKINEN ESKO SEPPÄNEN ANNELI JÄÄTTEENMÄKI

#### 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 ANTTI SUVANTO

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 AURA LAENTO, 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 PEKKA SUTELA, ad. int.

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

#### **BRANCH OFFICES**

Kuopio, Oulu, Tampere, Turku

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VELI TARVAINEN, Managing Director