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Demand for money in inflation-targeting monetary policy¹

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The demand for money generally plays an important role in the theoretical analysis of monetary policy. This stems from the fact that, for technical reasons, monetary policy is often modelled simply by the money supply. In most models, the demand for money determines equilibrium in the money market, ie the manner by which changes in the money stock are transformed via money demand into interest rate changes. However, in many countries monetary policy is actually conducted using an interest rate as an instrument or immediate objective of monetary policy.

There are a number of alternative approaches concerning the role of money in an economy in which an interest rate is used as a tool of monetary policy. In the Keynesian framework, the demand for money determines the aggregate amount of money held by economic agents, which is not (at least in the simple version of the model) reflected elsewhere in the economy. The price level is assumed to be predetermined in the Keynesian model. In the classical model, the situation is not as simple because the money stock plays a key role in determining the price level. In fact, it is precisely that the money stock determines the price level that makes the model classical. Hence only interest rate paths or interest rate rules that somehow limit money growth can determine unique finite price levels for the economy. A third, ie Wicksellian², view is essentially classical except that here money does not determine the price level. In a Wicksellian economy, the price level remains finite if the interest rate settles at the natural level, which corresponds to the marginal product of capital. This way of modelling inflation has recently been resurrected.

Dynamic stochastic general equilibrium approach

According to the consistency criteria of modern macroeconomics, the role of money in the monetary policy transmission mechanism should preferably be examined in a dynamic framework based on rationally behaving economic agents (households and firms) with given preferences and production technology. This modern macroeconomic approach excludes certain ad hoc approaches contemplated in European discussions of monetary policy. In the study summarized in this article, the theoretical framework is provided by a dynamic general equilibrium model in which money is assumed to provide households with liquidity services. Technically this is accomplished by including the real money stock as well as consumption in the household's utility function. The model is enriched by adding the assumption that altering money balances involves adjustment costs, ie that a household encounters a cost whenever it changes its money holdings. The corporate sector is marked by imperfect competition – specifically monopolistic competition – which corresponds eg to the situation facing many service providers. There is freedom of entry, with no barriers to the establishment of a firm. Instead of engaging in price competition, the firm tries to differentiate the products it sells from those of rivals and so achieve a monopolistic position in the market. Besides imperfect competition, it is assumed that the firm encounters a cost when it changes the price of a product or when an actual price differs from the profit-maximizing price. The model also assumes that cyclical fluctuations stem from changes in productivity and in the liquidity services provided by money, ie variables whose values are determined outside of the model.

Interest rate rule relies on productivity forecasts

The model is used to compare monetary policies in the case where the central bank aims at price stability using either the money stock or an interest rate as a policy instrument. One area in which the model sheds light is how the central bank can control inflation using an interest rate as a policy instrument. This can be done if interest rate settings are

¹ This article is based on the author's publication titled Demand for Money in Inflation-Targeting Monetary Policy, Bank of Finland, E:13.

² Such models have been presented eg by Woodford (1997, Doing without Money: Controlling Inflation in a Post-Monetary World, Review of Economic Dynamics, 1) and Reinhart (1991, The Design of an Interest Rate Rule with Staggered Contracting and Costly Transacting, Journal of Macroeconomics, 14). Implicitly, this view is also included in an article by Kerr and King (Limits on Interest Rate Rules in the IS Model, Federal Reserve Bank of Richmond Economic Quarterly, spring 1996).

based on expected productivity growth. The required speed and size of the reaction depends on the degree of competition and price stickiness in the economy as well as economic agents' patience. If the central bank knows the current values of the variables behind the dynamics of the economy when it sets the interest rate, it will be able to precisely hit its inflation target. However, this will not usually be the case and hence the central bank will usually have to act on the basis of inadequate data, ie it will have to rely on outdated information on productivity changes. Even so, the central bank will still be able to anchor inflation expectations, and inflation itself will fluctuate randomly around the target level. The model assumes that the central bank credibly commits to its announced inflation target. The study also includes an evaluation of the efficacy of an interest rate rule based on forecasted productivity. According to preliminary estimates, it appears that forecasting productivity could be problematic, at least if the forecast is based on the fairly simple model employed in the study.

Money carries information

The existence of adjustment costs associated with money holdings means that, in making money-holding decisions, an economic agent must take into account its future consumption as well as future levels of interest rates and prices. Hence the central bank can infer the expected values of these variables on the basis of changes in the money stock. The money stock then serves as an information variable. If the central bank can directly control the path of the money stock, ie use the money stock as a policy tool, it can in theory keep inflation precisely at the desired level, even without knowledge of current shocks to the economy. It should be emphasized that this model-based result depends on the existence of adjustment costs associated with money holdings as well as a knowledge of the related money demand parameters.

In choosing the monetary policy instrument, key criteria will include, on the one hand, the possibilities for estimating money demand parameters and the associated uncertainty and, on the other, the ability to forecast changes in aggregate productivity. Although the role of money as an information variable can be motivated by adjustment costs, money does not serve as an independent intermediate objective. Use of money as an intermediate objective will lead to precisely the same interest rate rule as will an inflation target.

Demand for M1 stable in Finland

The study also examines the stability of the parameters for money demand in Finland. The data comprises monthly observations on various measures of the Finnish money stock, consumer prices, total output, short-term money market rates and own-return on broad money over the period 1980 – 1995. The measures of money employed are nar-

row money (M1), which includes public holdings of coins, notes and transactions accounts (accessible by cheque or debit card) as well as the harmonized broad money stock (M3H), which includes M1, nearly all bank accounts, and public holdings of bank-issued CDs and bonds.

The empirical approach applied here differs from the mainstream European approach³ in that the empirical model is tied quite closely to the theoretical model. The problem with the mainstream empirical approach is that the estimated equations in these models are difficult to interpret as rational responses of economic agents to changes in the economic environment. On the other hand, many theoretical models have not been able to reproduce the observed lag structure for money demand.

The chosen theoretical approach is sufficiently rich to permit sophisticated short-run dependencies in the demand for money. Economic agents behave rationally in that their decisions are forward looking and their forecasts utilize all currently available information. This means that agents do not make systematic forecasting errors. The estimation method applied in the analysis, the generalized method of moments (GMM), specifically utilizes this assumption. The model is estimated using Finnish data. The results suggest that the theoretical model can be used as a basis for modelling the demand for narrow money but not the demand for broad money. The same conclusions apply to an examination of the stability of the parameters. The parameters of the demand for narrow money have remained stable over time whereas those for the broad harmonized money stock have definitely varied.

Robust empirical result

Application of the GMM benefits from the assumption that economic agents make use of all available information. Ex post expectations errors are thus not correlated with any information that is available at the time of decision. The estimation criterion in the GMM relies specifically on the moment condition, which can be tested in the case of over-identification. Another approach that incorporates rational expectations in model estimation is to rely on the solution of the dynamic equilibrium condition (Euler equation), specify the probability structures of the variables determined outside the model, and use the forecasts produced by the model to estimate economic agents' expectations. In this way, one can use the full information maximum likelihood method (FIML) for the estimation and apply the likelihood ratio test to the expectations hypothesis. If the stochastic process for the exogenous variables is correctly specified, the estimators will be fully efficient.

In this study changes in the variables determined outside the model are approximated using

³ See eg Empirical Economics special issue 'Money Demand in Europe' (Vol 23, 1998).

the vector autoregression model. When this is incorporated in the solution to the model, one obtains the closed form of the model, which is the basis for the maximum likelihood function. The parameters are estimated using the two above-described methods. Both the GMM and FIML parameter estimates are reasonable and their difference is negligible. However, there is a substantial difference in the degree of uncertainty attached to the estimates. The empirical analysis showed that expectations cannot be very precisely estimated and that the rational expectations hypothesis is rejected. This is not necessarily due to economic agents not forming their expectations rationally. It could be the result of measurement errors in the data or of problems in approximating expectations.

The final statistical findings are that the parameters for the demand for narrow money are stable over time and that the obtained parameter estimates do not depend on the estimation method. Thus Finnish monetary policy could have used interest rates or (if it could have been directly controlled) the narrow money stock as an instrument of monetary policy. By contrast, the use of changes in the harmonized broad money stock would have

been problematic. The analysis did not directly reveal the cause of the instability of the demand parameters. The parameter that turned out to be exceptional in magnitude and unstable was that for liquidity services provided by the money stock. This in turn may have been affected by the liberalization of the financial markets in the 1980s, which was reflected particularly in the development and deepening of the market for short-term money market paper. This is indicative of the great importance of changes in the financial markets for the stability of money demand parameters.

28 October 1998

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- Key words: demand for money, monetary policy transmission mechanism, money-in-the-utility-function, sticky prices, GMM, FIML

The crisis of the Russian financial system

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A tale of two economic policies

Following a prolonged economic crisis that has wiped out as much as 30–40 per cent of Russian GDP, the country clearly needs to get its economy restarted, not only to better enable satisfaction of citizens' basic needs but also to maintain social infrastructure and functions on a scale even remotely resembling what the populous is accustomed to. Within Russia, recent economic policy debate has become polarized into two opposing views. According to the first view, promoted by the political opposition and many leading academic economists, Russia inherited a huge and qualitatively world-class stock of productive capital from the USSR, which has since been neglected and privately exploited during the 1990s. This view has recently been adopted by the Primakov Government. It is proclaimed that now is the last chance to launch Russia on a path of growth by making better use of the existing productive capacity. The situation is similar to that of the Great Depression. What are needed are a state-lead growth campaign, an industrial policy that incorporates certain market controls, and an expanding money supply.

The attitude of prior Russian Governments during the period 1992–1998 has been quite different. The underlying if usually unspoken premise has been that the capital stock left by the USSR was smaller in amount, older, more worn out, more badly geographically mislocated and more misused in terms of producing the wrong kinds of goods than is sometimes understood. For this reason, the Russian economy needs to be essentially rebuilt and, as in most countries, the necessary investment should be financed primarily by domestic savings. The problem, in this view, is that financing needs for the public sector deficit have crowded out true productive investment via high real interest rates. As a result, the economic policy priority for the earlier Chernomyrdin and Kirienko Governments was to get interest rates down, primarily by attracting inflows of foreign capital.

The need to increase capacity utilization now appears to be the cornerstone of the economic thinking of Prime Minister Primakov's Government. It can nonetheless be argued that the view of earlier Governments – that of investment-based growth – was based on more realistic premises. If so, at-

tempts to boost aggregate demand in the absence of investment will not succeed in generating economic growth. But on the other hand, there is no doubt that the economic policies of prior Governments have also failed to lift Russia onto a path of sustainable investment-based economic growth. Real investment has truly collapsed. To understand why, and to better appreciate the policy outcomes of current and future Russian Governments, one must take a longer view.

Financial markets, economic development and Russia

Both economic theory and empirical research indicate that the financial system plays a crucial role in a country's economic development. Growth is largely based on investment, particularly investment in machinery and equipment. However, other factors are also important, viz human capital, infrastructure and what sociologists sometimes call 'social capital'. The latter refers to a functioning state, a vibrant civil society, popular trust, and an economic environment supportive of entrepreneurship. Many of the broader determinants are difficult to analyse, but the role of the financial sector is relatively straightforward: Financial intermediation is necessary for channelling domestic and foreign savings into productive investment; a set of financial instruments that encourage savings and enable risk diversification is essential; and a functioning payment system is a part of the basic economic infrastructure. While we do not have a clear, detailed conception of what constitutes an efficient financial system, there is ample evidence that financial deepening does contribute to efficiency and growth.

In this respect, the Soviet bequest was highly problematic. The Soviet economy consisted, on the one hand, of a largely demonetized state sector, where the role of money and banking was essentially passive. Only noncash payment means were used in this sector. On the other hand, households operated in a cash economy, where bank deposits – along with illegal holdings of foreign currencies – comprised the only exchangeable asset. The value of deposit savings was destroyed by the high inflation of the early 1990s.

In peculiar ways, these kinds of phenomena are still present in the Russian economy. Russia may

have become a market economy, but it is not a full-fledged monetary economy. First, the ratio of rouble-M2 to GDP is very low. At its highest, the ratio was about 17 per cent in 1997, after which it declined again to about 13 per cent in early 1998. Second, the separation of roubles into cash and noncash continues because enterprises are forbidden under present tax legislation to effect major transactions in cash. Third, the Russian economy is highly dollarized. Though estimates of cash-dollar holdings are very uncertain, the stock of US dollars in Russia, even before the current crisis, was at least equivalent to the rouble-M2 stock. Fourth, a key feature of the planned economy, ie that is was quantity-driven, has been carried over into the present heavy reliance on barter exchange. At least a half of industrial output – much more in many large enterprises – is based on bilateral and multilateral barter.

The new Russian economy has added its own anomalies to those from the Soviet era. One of these is the wide use of money surrogates, mostly promissory notes issued by federal and subnational authorities and by others. Unfortunately, we do not have a very complete picture of this phenomenon, which also has a loosening impact on the monetary unity of the Russian economic space. At least we do know that in 1997 some 40 per cent of federal tax receipts arrived in the form of various money surrogates and that the share is even higher in many regions. This reduces the effectiveness of fiscal policy. Second, it is common knowledge that certain payment arrears have become endemic. While interenterprise arrears can be likened to ordinary trade credits, wage arrears threaten the public welfare and may put social peace at risk. Tax arrears further weaken fiscal policy. The reasons for and consequences of different types of arrears are still less than perfectly understood. It seems that one crucial explanatory factor is the authorities' relentless attempts to maximize tax revenues.

Contrary to widely held opinion, the fundamental financial problem of the Russian government is not a shortage of revenue but rather an excess of expenditure commitments. Continuous attempts to increase revenue flows have led to numerous institutional deformities in the Russian economy. One could argue, with only slight exaggeration, that while textbook capitalist systems have developed in ways that serve shareholders' interests, the Russian economic system, to a large extent, is aimed at serving the fiscal interests of the state. Clearly this is self-defeating. It not only drives transactions abroad and into the second economy, but it also leads to barterization of the economy. With this level of barter exchange, enterprises have minimal cash flows, which makes it difficult to pay wages and taxes, or to save for investment.

Indeed, contrary to claims of earlier Russian governments, the prime hindrance to investment-based growth is not high real yields on government

securities but rather that the country is plagued by a low level of aggregate savings. Although official statistics show a household savings ratio of slightly more than 20 per cent of disposable income, analysts' calculations and surveys generally indicate a (much more credible) ratio of about 10 per cent. Hence, even if interest rates had been much lower, there would still have been very little room for investment. Of course, interest rates have generally been at lofty levels, owing to large budget deficits and, more recently, to financial uncertainty.

The Russian financial system

Russia's financial system is institutionally a mixture of the Continental and Anglo-American systems. Banks are universal but, until late 1997, there has also been a vibrant stock exchange. It is unclear which way the system would have developed absent the crisis. One should keep in mind that the pace of institutional change in the Russian economy has indeed been swift. The first proper banks are less than ten years old, and equity markets only came into being in the aftermath of the mass privatization drive of 1991–1992. While the economic situation in 1998 is in most respects much worse than in 1991–1992, one does find reason to hope that much of the institutional progress will survive the current crisis.

The most prominent feature of the Russian banking sector, even prior to the crisis, has been its small size. Total bank assets amounted to about 35 per cent of GDP in early 1998, whereas the corresponding figure for emerging market countries is generally close to 100 per cent or even higher. From the standpoint of financial intermediation, the only bank of any importance is Savings Bank (Sberbank), which is majority-owned by the central bank. Most Russian households do not hold any bank deposits, but of those that do, three out of four hold them at Sberbank, which is also the only bank whose deposits are insured. Simply put, Sberbank has used these savings to buy government securities in the secondary market. Thus the bulk of households' rouble savings have been used to finance the budget deficit.

In addition to Sberbank, the Russian banking industry includes a few proper commercial banks. Some of these are outgrowths of Soviet institutions, but most are newly established and form the backbone of the new Russian entrepreneurship. Moreover, there have been many small and very small banks. Though their numbers have declined from about 2500 to less than 1800, the consolidation of these miniature establishments has had no visible impact on the economy.

Even the largest Russian banks are small by international standards. Only a couple of them have made it to the list of the 500 largest banks in the world. Indeed, as total bank assets amount to only some 35 per cent of GDP, there are about 20 European banks that individually outweigh the

whole Russian banking sector. Bank Santander of Spain is one such bank, and ABN Amro is actually about two and a half times the size of the Russian banking sector. In the wake of mass privatization, particularly after implementation of the infamous shares-for-loans policy of 1995–1996, several of the larger Russian banks developed into core institutions of financial-industrial groups. A few of them seem to have attained a position of great importance in the economy, combining financial activities with significant ownership holdings in industry and also in the politically sensitive mass media.

The current banking crisis

The Russian banking sector has thus not been involved in what is commonly regarded in a market economy as core banking activity, ie the intermediation of savings into investment. Only Sberbank has been important in attracting savings, but these have not been channelled into investment. Most banks have had little or no saving deposits, and the stock of bank credit granted to the private sector has fluctuated around a very low level, from 5 to 10 per cent of GDP. Thus the current banking crisis does not threaten to have the same consequences that a financial crisis normally has in a market economy. In short, Russian banks are of too little importance to trigger a broad economic crisis. Even the core banks of financial-industrial groups have had very limited resources to invest in the real economy or little incentive to do so. There will be no credit crunch as a result of the banking crisis.

The broader consequences of the banking crisis are primarily fiscal. The deficit of the consolidated public sector (federal and subnational governments and off-budget funds) has fluctuated between 5 and 10 per cent of GDP, with no decline in sight. The bigger banks, in particular, held a large share of their assets in government securities, which, having lost their value, are now illiquid. This is also true of the central bank and Sberbank, which have accumulated most of these securities via the secondary markets. Several of the banks have raised foreign currency-denominated loans, most of which were presumably invested in rouble-denominated securities. Especially worrisome are reports that the banks also had huge volumes of forward currency contracts that proved to be extremely costly.

The government can no longer sell securities to the bigger Russian banks, at least not without first recapitalizing the banks. Because of rouble depreciation and the moratorium on debt servicing, foreign investors in Russian bond markets have lost most of their invested capital. The conditions for obtaining deficit financing from international financial institutions are not yet in place. Thus the government should either cut expenditure commitments drastically or resort to central bank financing. Only the first option could serve as a pillar of sustainable stabilization, but unfortunately it would seem to be politically impossible. That option is

also at odds with the above-mentioned currently prevailing economic thinking. Thus it seems highly likely that Russia is marching into a future of extremely high and variable inflation, with the well-known consequences – further declines in production and investment, demonetization, taxation by inflation etc.

The fiscal consequences of the crisis are accentuated by other bank-related factors. First, in the absence of a working treasury system, taxes are gathered via banks. Second, though most of the Russian economy is not based on roubles, a payment system is still needed to enable many of the basic markets to function. With the failure of the Russian banking system in August – September 1998, tax revenues have collapsed and the immobilization of markets is jeopardizing the performance of basic activities.

Resolution of the banking crisis

At the time of writing, the overall response to the crisis is still in the formative stages. The Government and central bank have long been politically incapacitated, and the reactions of the authorities have been slow and hesitant in coming. As reserves were running low, there was probably no alternative to currency floating and depreciation. It is an indicator of uncertainty and distrust that the markets have remained torpid for such a long time. The potential implications of the crisis have correspondingly worsened.

One of the first measures that was taken, ie the foreign debt moratorium, may prove highly deleterious, having caused an immediate further depletion of credibility. Access to foreign financing at acceptable terms will remain problematic for Russia for quite some time. Moreover, the domestic sector's propensity to save is being reduced by the crisis in spite of promises to insure savings. There is still no law on savings insurance and deposits are haemorrhaging. Reestablishing credibility will not be easy. The banking industry is also facing a major restructuring task. Several important mergers and some bankruptcies have been announced, the final impact of which will depend on possible future recapitalization measures. At best, the present medium-sized, politically-favoured banks – the bastions of crony capitalism – will give way to new and larger banks. At worst, measures will be taken that protect currently established interests and discriminate against smaller and foreign-owned banks. Under all reasonable scenarios, most of the small banks will disappear, and the emerging banking system will be much more concentrated than before. The degree of dependence on the state will remain high in the foreseeable future.

The Russian crisis is sometimes seen as a liquidity crisis, though the concept is somewhat fuzzy in the context of a highly dollarized economy. There are highly vocal calls for an increase in the money supply. The independence of the central bank is

under legislative attack. An increase in the money stock may be inevitable for fiscal reasons, as tax revenue has recently collapsed and there is a political commitment to expenditure increases. Attempts so far to inject liquidity into the banking system – by buying bank-held state securities, reducing reserve requirements and issuing credits – have generally failed to resuscitate the banking system and have tended to depress the rouble exchange rate. Thus there may be a fatal temptation to combine monetary expansion with increased controls, especially in the currency markets but also on banks in general. In Russia, few people trust that such controls would not turn into a self-feeding spiral of increased state involvement in the economy, quite possibly with dramatically negative consequences.

Implications for the future

After a long decline and a hesitant economic stabilization effort, Russia has again entered a period of economic decline. GDP is expected to fall by at least 6 per cent in each of the years 1998 and 1999. This is due to an inefficient economic system, the Asian connection and bad fundamentals. The last-mentioned comprise the deficit, bad policies (repeated political crises), and bad luck (eg lower energy prices). Important changes will be needed in all these areas if Russia is to come close to fulfilling the optimistic expectations held by many observers as they contemplated the vast the resources of the country. The impact of the Russian financial crisis on the real sector is smaller than one might conjecture because the economy is not a true monetary economy. This is the positive side of having a rudimentary market economy. But such an economy

is also inefficient and ill-equipped for economic growth.

For Russia, any medium- to long-run sustainable economic growth must be based on investment, the bulk of which must be domestically financed. The most serious consequence of the current financial crisis could be a further long-term decline in the Russian savings ratio, because of lost trust, lost income and lost stability. At the time of writing, Russia still did not have a consistent package of economic policies and there was much discussion of economic decline, controls and rationalization. In the immediate future, it is crucial to get the payment system working and to restore credibility so that the currency and securities markets can be reactivated. Over the longer period, Russia must become a monetary economy; the role of Sberbank must be reassessed; the independence of the central bank must be reinstated; economic stabilization must be restored; foreign banks must be allowed equal access to Russian markets; and the list goes on. The Russian banking system still has a long way to go before it can start to go forward.

30 September 1998

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- Key words: Russian financial system, economic development, economic policy, banking crisis

Measures concerning monetary and foreign exchange policy and the financial markets

1998

JANUARY

Finnish deposit guarantee scheme revised.

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

MARCH

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

APRIL

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



VISITING SCHOLARS PROGRAMME

BANK OF FINLAND

SUOMEN PANKKI • FINLANDS BANK

The Bank of Finland, the central bank, has 750 employees, some 30 of whom are involved in research. The Bank is located in Helsinki.

The Bank of Finland welcomes applications from foreign and Finnish scholars for a post under the Bank's Visiting Scholars Programme at the Research Department. Scholarships for six months are available for faculty or post-doctoral level research projects in two main research areas:

- (1) The modelling of monetary policy
- (2) The future of the financial services sector.

In the area of monetary policy modelling, we are especially interested in incorporating the analysis of credibility and policy uncertainty in applied models that could be used to analyze monetary policy in practice. The second area aims at illuminating the ongoing structural transformation of the global financial services industry, as driven by electronification and increased competition in particular. This area includes stability and other public policy aspects of the transformation.

A visiting scholar will be expected to conduct research based on a mutually agreed research plan. Articles stemming from the research are expected to be included in the Bank's Discussion Papers and may be published elsewhere as well.

A visiting scholar should normally also give a lecture at the Bank to an audience of economists on his or her research topic as well as interact with other researchers engaged in projects in the same area.

Remuneration for visiting scholars will be commensurate with their research experience.

Persons interested in applying are invited to send

- a brief research proposal concerning either of the two areas
- a CV specifying the applicant's academic and research background, with the names of two or three referees

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Finland in brief

Land, climate and population

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

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

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

Form of government

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

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

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

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

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

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

International relations

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

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

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

The economy

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

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

Average annual (compounded) growth of real GDP was 4.7 % in the period 1950-59, 5.0 % in 1960-69, 3.7 % in 1970-79, 3.7 % in 1980-89 and 3.6 % in 1990-96. Finland's GDP per capita in 1997 was USD 23 302.

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

exports: EU countries accounted for 53.8 %, other European countries for 22.3 % and the rest of the world for 24.0 %.

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

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

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

Finance and banking

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

The Central Bank. The two new laws adopted in 1997 and 1998 make Finnish legislation compatible with the requirements of the Treaty establishing the European Community and the Statute of the European System of Central Banks and the European Central Bank. The latter law, the new Act on the Bank of Finland, integrates the

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

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

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

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

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

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1. The balance sheet of the Bank of Finland

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

	1997		1998		
	31 Dec	8 Oct	15 Oct	23 Oct	30 Oct
ASSETS					
Reserve assets	51 455	46 039	47 350	47 008	47 142
Gold	1 742	1 742	1 742	1 742	1 742
Special drawing rights	1 772	1 708	1 728	1 384	1 357
IMF reserve tranche	3 036	3 930	3 976	4 000	3 999
ECU—claim on the European Monetary Institute	4 078	2 899	2 613	2 609	2 610
Foreign exchange assets	40 827	35 761	37 291	37 273	37 433
Other foreign claims	3 342	2 599	2 600	2 599	2 599
Markka subscription to Finland's quota in the IMF	3 281	2 183	2 183	2 183	2 183
European Central Bank capital share ¹	61	416	417	416	416
Claims on financial institutions	2 951	2 086	4 004	2 020	84
Liquidity credits	—	—	—	—	—
Securities with repurchase commitments	—	1 983	3 920	1 937	—
Term credits	—	—	—	—	—
Bonds	114	65	65	65	65
Other	2 837	39	19	19	19
Claims on the public sector	2 015	2 033	2 034	2 034	2 039
Treasury bills	—	—	—	—	—
Bonds	—	—	—	—	—
Total coinage	2 015	2 033	2 034	2 034	2 039
Other	—	—	—	—	—
Claims on corporations	1 762	1 612	1 612	1 612	1 612
Financing of domestic deliveries (KTR)	26	6	6	6	6
Other	1 736	1 606	1 606	1 606	1 606
Other assets	635	543	560	594	613
Accrued items	528	452	468	502	517
Other	107	91	92	91	96
Valuation account	—	—	—	—	—
Total	62 159	54 913	58 159	55 867	54 088
LIABILITIES					
Foreign liabilities	4 911	3 917	3 932	4 001	4 003
Allocations of special drawing rights	1 046	990	1 002	1 008	1 008
IMF markka accounts	3 281	2 183	2 183	2 183	2 183
Other	584	744	747	810	812
Notes and coin in circulation	17 817	16 799	16 716	16 730	16 735
Notes	15 923	14 897	14 815	14 830	14 837
Coin	1 894	1 902	1 901	1 900	1 899
Certificates of deposit	10 500	10 210	11 510	8 600	9 450
Liabilities to financial institutions	10 681	6 268	8 196	8 594	5 636
Reserve deposits	7 911	6 268	8 196	8 593	5 636
Term deposits	—	—	—	—	—
Other	2 770	0	0	1	1
Liabilities to the public sector	—	—	—	—	—
Current accounts	—	—	—	—	—
Other	—	—	—	—	—
Liabilities to corporations	32	9	9	9	8
Deposits for investment and ship purchase	32	9	9	9	8
Other	—	—	—	—	—
Other liabilities	55	651	180	172	174
Accrued items	23	604	144	130	133
Other	32	47	37	42	41
Valuation account	258	-846	-288	-143	176
Provisions	12 140	12 140	12 140	12 140	12 140
Pension provision	1 601	1 601	1 601	1 601	1 601
Other	10 540	10 540	10 540	10 540	10 540
Capital accounts	5 764	5 764	5 764	5 764	5 764
Primary capital	5 000	5 000	5 000	5 000	5 000
Reserve fund	764	764	764	764	764
Net earnings	—	—	—	—	—
Total	62 159	54 913	58 159	55 867	54 088

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

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

End of period	Foreign sector								Public sector		
	Gold	Special drawing rights	IMF reserve tranche	ECU-claim on the European Monetary Institute	Foreign exchange assets	Reserve assets (1+2+3+4+5)	Other claims, net	Net claims (6+7)	Claims	Liabilities	Net claims (9-10)
	1	2	3	4	5	6	7	8	9	10	11
1993	2 180	664	1 747	.	28 882	33 473	-1 324	32 148	1 788	784	1 004
1994	2 180	1 537	1 354	.	47 672	52 743	-1 114	51 629	1 806	93	1 713
1995	1 742	1 569	1 685	3 363	40 506	48 865	-2 082	46 783	1 882	75	1 807
1996	1 742	1 344	1 953	2 541	28 817	36 397	-1 826	34 571	1 906	-	1 906
1997	1 742	1 772	3 036	4 078	40 827	51 455	-1 569	49 886	2 015	-	2 015
1997											
Oct	1 742	1 489	2 068	4 031	54 754	64 085	-1 941	62 144	1 947	-	1 947
Nov	1 742	1 234	2 271	4 071	41 920	51 238	-2 256	48 982	1 955	-	1 955
Dec	1 742	1 772	3 036	4 078	40 827	51 455	-1 569	49 886	2 015	-	2 015
1998											
Jan	1 742	1 323	3 065	3 310	40 268	49 709	-1 389	48 320	2 019	-	2 019
Feb	1 742	1 230	3 389	3 318	38 830	48 510	-1 413	47 097	2 020	-	2 020
Mar	1 742	1 680	3 399	3 334	34 412	44 567	-1 362	43 205	2 017	-	2 017
Apr	1 742	1 558	3 351	2 727	37 034	46 414	-1 611	44 803	2 019	-	2 019
May	1 742	1 203	3 541	2 721	39 418	48 626	-1 414	47 212	2 024	-	2 024
Jun	1 742	1 714	3 588	2 735	42 171	51 950	-1 472	50 478	2 026	-	2 026
Jul	1 742	1 664	3 521	2 917	42 910	52 753	-1 049	51 704	2 026	-	2 026
Aug	1 742	1 600	3 538	2 923	42 372	52 175	-1 151	51 024	2 026	-	2 026
Sep	1 742	1 726	3 970	2 912	35 802	46 152	-1 158	44 994	2 033	-	2 033
Oct	1 742	1 357	3 999	2 610	37 433	47 142	-1 404	45 738	2 039	-	2 039

End of period	Domestic financial sector				Corporate sector				
	Term claims on deposit banks, net	Reserve deposits of deposit banks	Other claims on financial institutions, net	Net claims (12+13+14)	Claims in the form of special financing	Special deposits and other items, net	Net claims (16+17)	Notes and coin in circulation	Out-standing CDs issued by the Bank of Finland
	12	13	14	15	16	17	18	19	20
1993	7 337	-6 398	-463	476	496	720	1 216	14 994	14 837
1994	1 480	-6 526	-347	-5 392	316	1 285	1 601	14 315	35 236
1995	7 076	-15 676	655	-7 945	185	1 706	1 891	15 611	27 090
1996	11 626	-6 829	372	5 169	70	1 623	1 692	16 891	15 530
1997	-	-7 911	181	-7 730	26	1 704	1 730	17 817	10 500
1997									
Oct	15 103	-13 983	188	1 308	26	1 792	1 819	16 144	34 900
Nov	4 411	-11 612	184	-7 017	26	1 684	1 710	16 381	12 200
Dec	-	-7 911	181	-7 730	26	1 704	1 730	17 817	10 500
1998									
Jan	1 929	-5 642	157	-3 556	26	1 713	1 739	16 416	13 740
Feb	3 648	-10 365	155	-6 562	21	1 715	1 736	16 274	9 360
Mar	-	-8 417	153	-8 264	18	1 718	1 736	16 190	3 100
Apr	-	-6 255	132	-6 123	14	1 723	1 737	16 845	6 900
May	1 962	-5 089	132	-2 995	14	1 593	1 607	16 909	12 820
Jun	5 286	-8 326	117	-2 923	14	1 594	1 608	16 932	15 350
Jul	2 711	-6 131	116	-3 304	14	1 594	1 608	17 178	16 900
Aug	-	-11 710	116	-11 594	9	1 596	1 605	17 047	7 800
Sep	-	-5 701	104	-5 597	6	1 597	1 603	16 634	9 110
Oct	-	-5 636	83	-5 553	6	1 598	1 604	16 735	9 450

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

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

	Reserve requirement			Required reserves ¹ , mill. FIM	Excess reserves, mill. FIM	Total reserves, mill. FIM (4+5)	Liquidity credits, mill. FIM
	On deposits payable on demand, %	On other deposits, %	On other items, %				
	1	2	3	4	5	6	7
1993	2.0	1.5	1.0	6 398	.	.	440
1994	2.0	1.5	1.0	6 526	.	.	14
1995	2.0	1.5	1.0	6 557	.	.	123
I-IX	2.0	1.5	1.0	6 530	616	7 146	37
X-XII	2.0	1.5	1.0	6 652	440	7 092	121
1997	2.0	1.5	1.0	6 717	747	7 464	1
1997							
Oct	2.0	1.5	1.0	6 799	1 020	7 818	-
Nov	2.0	1.5	1.0	6 911	892	7 803	-
Dec	2.0	1.5	1.0	6 999	310	7 309	-
1998							
Jan	2.0	1.5	1.0	6 995	321	7 317	-
Feb	2.0	1.5	1.0	6 947	147	7 095	-
Mar	2.0	1.5	1.0	6 947	895	7 842	0
Apr	2.0	1.5	1.0	6 866	198	7 065	-
May	2.0	1.5	1.0	6 834	1 197	8 031	3
Jun	2.0	1.5	1.0	6 918	179	7 098	-
Jul	2.0	1.5	1.0	6 985	115	7 100	-
Aug	2.0	1.5	1.0	7 015	293	7 308	-
Sep	2.0	1.5	1.0	7 053	547	7 600	0
Oct	2.0	1.5	1.0	7 231	269	7 501	0

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

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

During period	Purchases of money market instruments	Sales of money market instruments	Matured money market instruments, net	Money market transactions, net (1-2-3)
	1	2	3	4
1993	86 521	146 899	-50 486	-9 892
1994	35 540	351 820	-295 165	-21 115
1995	50 435	434 810	-393 930	9 555
1996	94 080	250 980	-190 562	33 662
1997	128 220	422 500	-294 770	490
1997				
Oct	12 200	36 900	-28 830	4 130
Nov	11 400	15 700	-18 480	14 180
Dec	0	22 430	-26 110	3 680
1998				
Jan	2 000	30 040	-27 770	-270
Feb	4 280	23 540	-19 260	0
Mar	0	7 000	-9 610	2 610
Apr	0	10 400	-7 850	-2 550
May	2 000	17 870	-10 650	-5 220
Jun	5 350	25 365	-20 365	350
Jul	3 750	37 300	-29 970	-3 580
Aug	0	21 800	-29 180	7 380
Sep	0	21 780	-20 520	-1 260
Oct	6 000	22 160	-16 390	230

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

During period	Intervention in the foreign exchange market			Spot transactions related to forward contracts, net	Central government's foreign exchange transactions, net	Reserve assets (end of period)	
	Spot purchases	Spot sales	Forward exchange intervention = change in forward exchange position			mill. FIM	mill. USD
	1	2	3	4	5	6	7
1993	25 120	-45 080	7 460	-6 910	33 240	29 517	5 628
1994	20 930	-12 900	9 060	-8 930	24 660	33 473	5 787
1995	4 910	-5 470	-6 170	9 170	-10 135	52 743	11 120
1996	7 360	-7 320	-	-	-13 868	48 865	11 211
1997	47 620	-1 470	-	4 310	-37 540	36 397	7 838
1997							
Oct	-	-	-3 160	3 100	-800	64 085	12 342
Nov	-	-	-1 560	1 560	-15 300	51 238	9 602
Dec	-	-	-	-	-610	51 455	9 492
1998							
Jan	-	-	-	-	-2 730	49 709	8 974
Feb	-	-	-	-	-1 410	48 510	8 825
Mar	5 330	-	2 800	-2 780	-6 590	44 567	7 950
Apr	4 860	-	-620	-540	-1 280	46 414	8 529
May	-	-	7 040	-8 060	8 250	48 626	8 970
Jun	-	-	-3 730	-3 790	-130	51 950	9 458
Jul	-	-	-2 510	-5 230	-1 200	52 753	9 743
Aug	-	-530	-20	-3 260	-360	52 175	9 705
Sep	-	-3 890	-160	-	-820	46 152	9 052
Oct	-	-	-	-	-	47 142	9 372

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

Stock at end of period	Finnish banks' forward contracts						Non-residents' forward contracts with Finnish customers (excl. Finnish banks)			The Bank of Finland's forward contracts	
	With Finnish customers (excl. Finnish banks)			With foreign customers			Total	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net	Net currency sales
	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net	Currency purchases from foreign customers	Currency sales to foreign customers	Net					
	1	2	3	4	5	6	7	8	9	10	11
1993	38 373	23 721	14 652	14 346	21 895	-7 548	7 104	11 632	2 173	9 459	1 939
1994	51 096	22 093	29 003	19 236	32 791	-13 555	15 448	18 372	4 780	13 592	-6 080
1995	60 280	19 095	41 185	31 837	48 906	-17 069	24 116	12 829	6 871	5 957	-
1996	53 520	21 793	31 726	44 068	72 021	-27 953	3 773	15 871	6 908	8 963	-
1997	66 649	37 507	29 142	105 128	127 793	-22 665	6 477	23 490	14 552	8 938	-
1997											
Sep	69 721	36 411	33 310	68 654	93 287	-24 632	8 678	24 439	16 998	7 441	-4 690
Oct	68 258	37 917	30 340	92 393	116 191	-23 798	6 542	24 034	19 297	4 737	-1 578
Nov	68 813	36 778	32 035	93 566	115 303	-21 737	10 298	28 528	17 234	11 294	-
Dec	66 649	37 507	29 142	105 128	127 793	-22 665	6 477	23 490	14 552	8 938	-
1998											
Jan	66 113	32 546	33 568	95 925	116 620	-20 695	12 873	19 041	7 592	11 449	-
Feb	70 214	32 074	38 140	91 570	118 695	-27 125	11 015	22 024	6 215	15 809	-
Mar	67 157	33 100	34 057	96 525	121 046	-24 521	9 536	19 762	6 366	13 396	-2 766
Apr	61 717	36 202	25 516	90 097	109 915	-19 818	5 698	22 235	5 892	16 344	-2 211
May	60 290	29 129	31 161	93 234	112 666	-19 432	11 729	21 843	5 825	16 018	-9 150
Jun	60 173	30 487	29 686	81 673	102 646	-20 972	8 714	21 293	4 791	16 502	-5 382
Jul	58 821	28 217	30 604	83 545	104 528	-20 982	9 622	21 841	5 621	16 220	-2 981
Aug	60 485	27 303	33 182	83 161	111 094	-27 933	5 249	21 370	6 375	14 995	-2 999
Sep	56 089	27 779	28 309	78 015	101 210	-23 196	5 113	20 076	5 979	14 097	-2 999

3. Rates of interest

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

Average of daily observations	Interbank overnight rate	HELIBOR				Bank of Finland rates		
		1 month	3 months	6 months	12 months	Liquidity credit rate	Excess-reserve rate ¹	Base rate
		1	2	3	4	5	6	7	8
1993	7.71	7.85	7.73	7.59	7.47	8.95	4.95	6.85
1994	4.38	5.11	5.35	5.78	6.33	7.11	3.11	5.27
1995	5.26	5.63	5.76	5.97	6.34	7.63	3.63	5.20
1996	3.66	3.58	3.63	3.74	3.99	5.57	1.57	4.38
1997	2.87	3.10	3.23	3.41	3.69	5.07	1.07	4.00
1997								
Oct	2.75	3.29	3.57	3.91	4.26	5.25	1.25	4.00
Nov	2.90	3.35	3.65	4.00	4.32	5.25	1.25	4.00
Dec	3.20	3.31	3.60	3.87	4.18	5.25	1.25	4.00
1998								
Jan	2.80	3.30	3.48	3.63	3.86	5.25	1.25	4.00
Feb	3.18	3.29	3.42	3.56	3.74	5.25	1.25	4.00
Mar	3.10	3.36	3.47	3.58	3.76	5.31	1.31	4.00
Apr	3.30	3.50	3.63	3.75	3.93	5.40	1.40	4.00
May	3.20	3.57	3.75	3.86	4.04	5.40	1.40	4.00
Jun	3.48	3.54	3.73	3.83	3.99	5.40	1.40	4.00
Jul	3.51	3.51	3.67	3.76	3.92	5.40	1.40	4.00
Aug	3.56	3.51	3.61	3.70	3.83	5.40	1.40	4.00
Sep	2.95	3.50	3.54	3.59	3.66	5.40	1.40	4.00
Oct	3.75	3.52	3.54	3.54	3.53	5.40	1.40	4.00

¹ Call money deposit rate until 2 October 1995.

3.2 The Bank of Finland's liquidity facility

The Bank of Finland's tender rate, %	Liquidity credit: interest rate margin, %-points	Liquidity credit: maturity, days	Call money deposits: interest rate margin, %-points	Excess-reserve rate		
1	2	3	4	5		
1993	7.87	1993	+2.00	7	-2.00	.
1994	5.11	1994	+2.00	7	-2.00	.
1995	5.63	1995	+2.00	7	.	2.25
1996	3.57	1996	+2.00	7	.	1.00
1997	3.07	1997	+2.00	1	.	1.25
1997		1997				
Oct	3.25	Oct	+2.00	7	.	1.25
Nov	3.25	Nov	+2.00	1	.	1.25
Dec	3.25	Dec	+2.00	1	.	1.25
1998		1998				
Jan	3.25	Jan	+2.00	1	.	1.25
Feb	3.25	Feb	+2.00	1	.	1.25
Mar	3.31	Mar	+2.00	1	.	1.40
Apr	3.40	Apr	+2.00	1	.	1.40
May	3.40	May	+2.00	1	.	1.40
Jun	3.40	Jun	+2.00	1	.	1.40
Jul	3.40	Jul	+2.00	1	.	1.40
Aug	3.40	Aug	+2.00	1	.	1.40
Sep	3.40	Sep	+2.00	1	.	1.40
Oct	3.40	Oct	+2.00	1	.	1.40
13.3.1996	3.75	13.3.1996				1.75
14.6.1996	3.60	14.6.1996				1.60
5.7.1996	3.50	5.7.1996				1.50
23.8.1996	3.25	23.8.1996				1.25
18.9.1996	3.10	18.9.1996				1.10
9.10.1996	3.00	9.10.1996				1.00
15.9.1997	3.25	15.9.1997				1.25
19.3.1998	3.40	19.3.1998				1.40

3.3 Weighted Eurorates and commercial ECU interest rate, per cent

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

3.4 Rates of interest applied by banks, per cent

Average for period	Lending						Markka deposits and other markka funding					
	New credits				Average lending rate	Of which: Commercial banks	24-month tax-exempt deposits ¹	36-month tax-exempt deposits ¹	Other tax-exempt deposits, max. rate of interest ¹	Average rate of interest on deposits	Average rate of interest on other funding	Average rate of interest on markka funding
	Cheque account and postal giro credits	Bills of exchange	Loans	New lending, total								
	1	2	3	4	5	6	7	8	9	10	11	12
1993	9.69	13.55	9.40	9.75	10.20	9.92	3.50	4.50	2.00	4.78	8.86	6.15
1994	7.32	11.55	7.13	7.35	8.18	7.91	3.25	4.25	2.00	2.99	5.96	4.01
1995	7.85	11.33	7.30	7.46	8.04	7.75	2.75	3.75	2.00	3.13	6.29	4.08
1996	5.61	9.61	5.31	5.43	6.49	6.15	2.00	3.00	2.00	2.15	4.31	2.78
1997	4.83	9.66	4.73	4.81	5.64	5.29	.	.	2.00	1.47	..	..
1997												
Sep	4.99	9.42	4.69	4.77	5.57	5.22	2.00	.	2.00	1.42	..	..
Oct	4.08	9.70	4.95	4.97	5.61	5.27	2.00	.	2.00	1.44	..	..
Nov	6.06	9.52	4.98	5.08	5.67	5.35	2.00	.	2.00	1.43	..	..
Dec	6.07	9.21	4.74	4.83	5.74	5.43	.	.	2.00	1.44	..	..
1998												
Jan	4.54	9.58	4.75	4.80	5.71	5.41	.	.	2.00	1.44	..	..
Feb	5.43	9.26	4.75	4.84	5.71	5.40	.	.	2.00	1.43	..	..
Mar	5.91	9.23	4.74	4.83	5.60	5.34	.	.	2.00	1.37	..	..
Apr	5.81	9.21	4.82	4.89	5.60	5.34	.	.	2.00	1.37	..	..
May	6.28	9.09	4.91	4.98	5.60	5.34	.	.	2.00	1.35	..	..
Jun	6.00	9.12	4.86	4.93	5.61	5.36	.	.	2.00	1.37	..	..
Jul	5.46	9.32	4.73	4.79	5.61	5.36	.	.	2.00	1.37	..	..
Aug	5.94	9.22	4.83	4.90	5.58	5.32	.	.	2.00	1.37	..	..
Sep	4.89	9.06	4.54	4.59	5.52	5.25	.	.	2.00	1.37	..	..

¹ End of period.

3.5 Yields on bonds and shares, per cent

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

4. Rates of exchange

4.1 Middle rates, FIM

Average of daily quotations	New York	Montreal	London	Dublin	Stockholm	Oslo	Copenhagen	Reykjavik	Frankfurt am Main	Amsterdam	Brussels	Zurich
	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
1993	5.7189	4.434	8.582	8.371	0.7350	0.8059	0.8822	0.0846	3.4584	3.0787	0.1655	3.8706
1994	5.2184	3.824	7.982	7.799	0.6758	0.7393	0.8207	0.0745	3.2169	2.8684	0.1561	3.8179
1995	4.3658	3.181	6.891	6.999	0.6123	0.6889	0.7790	0.0674	3.0471	2.7202	0.1481	3.6941
1996	4.5905	3.367	7.164	7.345	0.6847	0.7111	0.7921	0.0689	3.0530	2.7247	0.1484	3.7211
1997	5.1944	3.753	8.506	7.871	0.6799	0.7339	0.7859	0.0732	2.9939	2.6603	0.1451	3.5785
1997												
Oct	5.2695	3.803	8.595	7.730	0.6958	0.7444	0.7874	0.0737	2.9981	2.6613	0.1454	3.6278
Nov	5.2205	3.696	8.809	7.844	0.6902	0.7395	0.7916	0.0735	3.0130	2.6731	0.1461	3.7093
Dec	5.3714	3.768	8.925	7.830	0.6899	0.7413	0.7934	0.0749	3.0220	2.6817	0.1465	3.7327
1998												
Jan	5.4948	3.815	8.988	7.599	0.6858	0.7333	0.7946	0.0755	3.0268	2.6859	0.1467	3.7261
Feb	5.5022	3.835	9.018	7.573	0.6812	0.7282	0.7958	0.0760	3.0328	2.6908	0.1470	3.7570
Mar	5.5420	3.913	9.203	7.584	0.6956	0.7311	0.7962	0.0764	3.0348	2.6927	0.1471	3.7242
Apr	5.5063	3.854	9.205	7.651	0.7039	0.7312	0.7960	0.0764	3.0356	2.6957	0.1471	3.6565
May	5.3917	3.732	8.830	7.650	0.7009	0.7242	0.7975	0.0756	3.0391	2.6970	0.1473	3.6485
Jun	5.4430	3.717	8.973	7.659	0.6891	0.7192	0.7979	0.0763	3.0394	2.6966	0.1473	3.6460
Jul	5.4649	3.681	8.984	7.645	0.6841	0.7168	0.7977	0.0764	3.0396	2.6966	0.1474	3.6101
Aug	5.4365	3.548	8.879	7.636	0.6690	0.7053	0.7984	0.0758	3.0411	2.6967	0.1475	3.6388
Sep	5.1834	3.406	8.707	7.617	0.6562	0.6843	0.7991	0.0739	3.0437	2.6980	0.1475	3.6966
Oct	4.9828	3.232	8.444	7.585	0.6353	0.6709	0.8002	0.0728	3.0427	2.6981	0.1475	3.7271

Average of daily quotations	Paris	Rome	Vienna	Lisbon	Madrid	Athens	Tallinn	Tokyo	Melbourne	Seoul	ECU Commercial	SDR
	1 FRF	1 ITL	1 ATS	1 PTE	1 ESP	1 GRD	1 EEK	1 JPY	1 AUD	1 KRW	1 XEU	1 XDR
	13	14	15	16	17	18	19	20	21	22	23	24
1993	1.0096	0.00364	0.4916	0.0356	0.0451	0.025	0.4323	0.05168	3.885	.	6.685	7.98671
1994	0.9406	0.00324	0.4573	0.0314	0.0390	0.0215	0.4021	0.05106	3.814	.	6.175	7.46629
1995	0.8748	0.00268	0.4331	0.0291	0.0350	0.0189	0.3809	0.04663	3.238	.	5.644	6.61879
1996	0.8978	0.00298	0.4340	0.0298	0.0363	0.0191	0.3816	0.04225	3.593	.	5.751	6.66357
1997	0.8894	0.00305	0.4255	0.0296	0.0355	0.0190	0.3742	0.04303	3.859	.	5.864	7.14420
1997												
Oct	0.8936	0.00306	0.4260	0.0294	0.0355	0.0190	0.3748	0.04355	3.800	0.00569	5.891	7.21962
Nov	0.9000	0.00308	0.4281	0.0295	0.0357	0.0192	0.3766	0.04172	3.630	0.00507	5.961	7.17348
Dec	0.9028	0.00308	0.4295	0.0296	0.0357	0.0192	0.3777	0.04152	3.562	0.00368	5.980	7.27353
1998												
Jan	0.9038	0.00308	0.4303	0.0296	0.0357	0.0192	0.3784	0.04253	3.611	0.00325	5.978	7.38238
Feb	0.9048	0.00307	0.4311	0.0296	0.0358	0.0192	0.3791	0.04377	3.711	0.00340	5.989	7.42807
Mar	0.9053	0.00308	0.4314	0.0297	0.0358	0.0182	0.3794	0.04298	3.712	0.00373	6.018	7.44954
Apr	0.9055	0.00307	0.4315	0.0296	0.0357	0.0174	0.3794	0.04169	3.592	0.00397	6.017	7.39411
May	0.9063	0.00308	0.4319	0.0297	0.0358	0.0176	0.3799	0.03995	3.396	0.00385	5.986	7.24735
Jun	0.9066	0.00309	0.4320	0.0297	0.0358	0.0179	0.3799	0.03873	3.283	0.00390	6.003	7.25578
Jul	0.9067	0.00308	0.4321	0.0297	0.0358	0.0182	0.3799	0.03887	3.378	0.00423	6.007	7.27034
Aug	0.9071	0.00308	0.4322	0.0297	0.0358	0.0181	0.3802	0.03759	3.208	0.00414	5.998	7.21242
Sep	0.9077	0.00308	0.4325	0.0297	0.0358	0.0177	0.3805	0.03855	3.050	0.00378	5.986	7.07388
Oct	0.9074	0.00308	0.4325	0.0297	0.0358	0.0177	0.3803	0.04129	3.080	0.00372	5.994	7.00855

4.2 Markka value of the ECU and currency indices

Average of daily observations	Markka value of the ECU FIM/ECU	Currency indices, 1982=100	
		Trade-weighted currency index	Payments currency index
	1	2	3
1993	6.69420	132.4	136.0
1994	6.19108	123.2	125.5
1995	5.70936	111.6	111.6
1996	5.83028	115.3	115.8
1997	5.88125	118.4	122.6
1997			
Oct	5.89974	119.4	124.2
Nov	5.94676	119.4	124.0
Dec	5.97130	119.5	125.8
1998			
Jan	5.98008	120.1	127.1
Feb	5.98982	120.4	127.3
Mar	6.00921	121.3	128.1
Apr	6.00867	121.2	127.7
May	5.98172	119.9	126.0
Jun	5.99629	119.6	126.4
Jul	5.99793	119.6	126.6
Aug	5.99022	118.6	125.8
Sep	5.97723	117.3	122.9
Oct	5.95189	116.0	120.3

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

Average of daily observations	ECU	DEM	FRF	NLG	DKK	BEF	ESP	ATS	PTE	IEP	ITL	GRD
Central rate as of												
16 Mar 1998	6.01125	3.04001	0.906420	2.69806	0.796976	0.147391	0.0357345	0.432094	0.0296571	7.54951	0.00307071	0.0168382
	1	2	3	4	5	6	7	8	9	10	11	12
1995	-1.69	0.23	-3.48	0.82	-2.25	0.49	-2.02	0.24	-1.84	-4.52	..	..
1996	0.30	0.43	-0.95	0.99	-0.61	0.65	1.49	0.44	0.40	0.21	-3.07	..
1997	0.46	-1.52	-1.88	-1.40	-1.39	-1.56	-0.78	-1.53	-0.12	7.38	-0.72	..
1997												
Oct	0.78	-1.38	-1.41	-1.36	-1.20	-1.38	-0.63	-1.40	-0.75	5.47	-0.29	..
Nov	1.58	-0.89	-0.71	-0.92	-0.67	-0.89	-0.18	-0.92	-0.46	7.02	0.14	..
Dec	2.00	-0.59	-0.40	-0.61	-0.45	-0.62	0.03	-0.59	-0.26	6.83	0.40	..
1998												
Jan	2.15	-0.43	-0.28	-0.45	-0.29	-0.45	-0.07	-0.42	-0.21	3.68	0.16	..
Feb	2.32	-0.24	-0.18	-0.27	-0.15	-0.30	0.13	-0.24	-0.14	3.32	0.09	..
Mar	1.18	-0.17	-0.12	-0.20	-0.10	-0.19	0.17	-0.17	-0.01	1.81	0.36	..
Apr	-0.04	-0.15	-0.10	-0.09	-0.12	-0.18	0.02	-0.15	-0.14	1.35	0.06	3.46
May	-0.49	-0.03	-0.01	-0.04	0.07	-0.06	0.18	-0.04	0.13	1.33	0.30	4.31
Jun	-0.25	-0.02	0.02	-0.05	0.12	-0.04	0.17	-0.03	0.13	1.46	0.55	6.36
Jul	-0.22	-0.01	0.03	-0.06	0.09	0.00	0.20	0.00	0.12	1.26	0.39	8.32
Aug	-0.35	0.04	0.08	-0.05	0.17	0.04	0.21	0.03	0.18	1.15	0.30	7.30
Sep	-0.57	0.12	0.14	0.00	0.27	0.09	0.20	0.10	0.14	0.90	0.30	5.12
Oct	-0.99	0.09	0.11	0.00	0.40	0.05	0.21	0.09	0.05	0.46	0.15	5.04

5. Financial markets and money supply

5.1 Bank funding from the public, mill. FIM

End of period	Tax-exempt			Subject to withholding tax			Other taxable			Markka deposits, total	Foreign currency deposits	Other markka funding	Total funding	
	Cheque and trans-actions accounts	Time deposits	Other deposits	Cheque and trans-actions accounts	Other deposits	Total	Cheque and trans-actions accounts	Other deposits	Total					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1993	88 881	66 361	1 457	156 699	10 360	51 943	62 303	32 098	17 664	49 762	268 764	15 788	62 599	347 151
1994	96 796	63 329	1 895	162 021	9 467	47 908	57 375	37 279	18 739	56 018	275 414	13 332	58 067	346 813
1995	106 997	63 599	2 611	173 207	10 916	45 529	56 445	45 558	16 163	61 721	291 373	14 843	50 675	356 891
1996	132 113	29 672	27 140	188 926	10 746	25 207	35 953	48 329	10 438	58 767	283 646	12 495	55 046	351 187
1997*	140 891	46 976	19 119	206 985	7 883	14 446	22 329	52 472	9 293	61 765	291 079	12 272	74 141	377 491
1997*														
Sep	135 206	53 811	14 845	203 862	8 277	14 167	22 443	49 347	9 239	58 587	284 892	12 468	77 982	375 342
Oct	136 104	51 855	16 358	204 316	8 482	14 108	22 590	51 018	9 275	60 293	287 199	12 278	82 490	381 967
Nov	138 140	50 930	16 516	205 586	7 798	14 083	21 881	51 174	9 123	60 297	287 765	12 101	66 002	365 868
Dec	141 197	46 998	19 119	207 313	7 883	14 452	22 335	52 478	9 293	61 771	291 418	12 293	74 140	377 852
1998*														
Jan	142 456	48 794	18 294	209 544	7 817	14 155	21 972	51 564	9 591	61 155	292 671	11 571	74 295	378 537
Feb	141 697	48 569	18 784	209 049	6 456	13 734	20 190	49 261	9 480	58 741	287 981	10 982	74 473	373 436
Mar	140 679	48 734	19 424	208 837	6 422	13 491	19 913	54 335	9 497	63 832	292 582	10 297	76 224	379 102
Apr	142 089	48 617	20 140	210 846	6 424	13 509	19 934	51 679	9 544	61 223	292 003	10 579	70 349	372 931
May	143 063	48 457	20 840	212 360	6 498	13 208	19 706	52 621	9 694	62 315	294 381	11 421	80 936	386 738
Jun	142 581	48 242	21 236	212 058	6 214	13 253	19 467	55 707	9 627	65 334	296 859	10 330	68 855	376 044
Jul	142 891	49 193	20 509	212 593	6 190	13 192	19 382	53 053	9 699	62 752	294 727	11 838	65 501	372 066
Aug	142 424	49 180	20 813	212 418	6 115	12 933	19 047	54 823	9 576	64 400	295 865	10 754	61 281	367 900
Sep	142 158	49 277	21 340	212 774	6 142	12 828	18 969	56 411	9 384	65 795	297 539	10 107	58 673	366 319

5.2 Bank lending to the public, mill. FIM

End of period	Non-financial corporations	Financial and insurance institutions (excl. banks)	General government (excl. central government)	Non-profit institutions	Households	Foreign sector	Markka-lending, total (1+2+3+4+5+6)	Foreign currency lending	Total lending (7+8)
	1	2	3	4	5	6	7	8	9
1993	83 285	9 304	4 036	12 802	171 540	103	281 070	69 819	350 889
1994	81 130	11 121	3 367	13 016	162 913	124	271 670	47 078	318 748
1995	78 601	13 045	2 918	12 645	155 990	253	263 452	33 124	296 575
1996	82 894	18 554	3 052	13 088	152 594	119	270 301	24 130	294 430
1997*	77 351	21 257	3 241	13 453	155 388	.	270 691	16 252	286 943
1997*									
Sep	78 597	19 613	3 071	13 617	155 003	.	269 900	16 378	286 278
Oct	78 392	20 566	3 055	13 573	155 567	.	271 151	18 314	289 465
Nov	76 557	21 218	3 215	13 709	156 005	.	270 703	16 928	287 630
Dec	77 351	21 257	3 241	13 453	155 391	.	270 693	16 246	286 939
1998*									
Jan	77 916	21 485	3 240	13 152	155 347	.	271 140	16 352	287 492
Feb	78 339	22 196	3 450	13 166	155 873	.	273 024	17 431	290 455
Mar	77 948	22 033	3 422	13 278	156 561	.	273 242	17 569	290 812
Apr	78 706	22 529	3 533	13 327	157 416	.	275 511	20 317	295 828
May	79 401	23 107	3 678	13 533	159 048	.	278 767	19 879	298 646
Jun	81 560	23 258	3 462	13 603	160 359	.	282 242	19 230	301 472
Jul	83 005	23 982	3 400	13 740	161 980	.	286 108	16 893	303 001
Aug	82 983	24 037	3 397	13 896	164 065	.	288 377	16 762	305 139
Sep	85 465	24 660	3 500	14 096	165 787	.	293 509	16 299	309 809

5.3 Money supply, mill. FIM

End of period	Foreign assets, net	Domestic credit			Other items, net	Monetary aggregates		
		Net claims on the central government	Claims on the public	Total (2+3)		M ₁	M ₂ (1+4+5)	M ₃
	1	2	3	4	5	6	7	8
1993	-25 989	1 848	403 742	405 589	-100 006	141 759	279 595	322 408
1994	12 844	6 092	365 712	371 804	-97 953	154 357	286 696	328 509
1995	25 481	19 837	353 340	373 177	-94 870	175 921	303 788	329 820
1996	40 638	12 821	350 230	363 052	-106 399	204 834	297 291	325 473
1997*	69 620	12 184	339 143	351 327	-115 351	215 763	305 596	353 735
1997*								
Sep	87 246	3 686	340 221	343 906	-132 758	206 332	298 394	350 813
Oct	83 239	5 621	342 934	348 555	-130 718	209 482	301 077	353 981
Nov	71 173	9 482	340 584	350 067	-119 399	211 188	301 841	345 743
Dec	69 620	12 184	339 143	351 327	-115 011	216 074	305 936	354 075
1998*								
Jan	65 857	11 714	339 957	351 671	-110 810	215 883	306 718	363 671
Feb	61 892	8 967	342 763	351 729	-111 625	211 429	301 996	356 204
Mar	56 229	15 201	342 135	357 337	-107 390	215 030	306 176	365 046
Apr	53 956	16 845	346 736	363 581	-111 195	214 532	306 343	361 023
May	64 672	11 399	349 423	360 821	-116 701	216 594	308 793	367 202
Jun	72 301	4 511	350 640	355 151	-116 435	218 659	311 017	356 391
Jul	65 063	11 063	351 653	362 716	-118 387	216 799	309 892	355 798
Aug	75 051	13 502	353 701	367 203	-132 160	217 592	310 094	353 203
Sep	..	..	..	..	..	218 817	311 647	357 268

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

End of period	Foreign currency-denominated debt			Markka-denominated debt				Total (4+5+6+7)	Central government debt (3+8)	Out-standing lending	Cash funds
	Bonds	Other debt	Total (1+2)	Public bonds	Other long-term liabilities	Treasury notes and bills	Miscellaneous items				
	1	2	3	4	5	6	7	8	9	10	11
1993	142 824	12 753	155 577	71 082	16 060	22 824	-9 700	100 266	255 843	66 439	36 487
1994	160 587	15 975	176 562	93 008	17 100	33 153	-12 300	130 961	307 523	67 658	43 012
1995	158 545	13 756	172 301	143 948	17 492	37 864	-12 300	187 004	359 305	66 629	41 878
1996	158 847	16 161	175 008	177 700	17 187	37 620	-12 300	220 479	395 487	63 842	38 369
1997	142 717	25 839	168 556	214 876	16 545	30 388	-12 300	249 745	418 301	64 564	33 868
1997											
Oct	154 826	25 462	180 288	204 172	16 573	34 599	-12 300	243 310	423 598	66 151	48 685
Nov	141 898	25 597	167 495	216 455	16 557	34 458	-12 300	255 396	422 891	65 837	42 539
Dec	142 717	25 839	168 556	214 876	16 545	30 388	-12 300	249 745	418 301	64 564	33 868
1998											
Jan	143 626	26 312	169 938	214 642	16 545	31 081	-12 300	250 164	420 102	64 989	..
Feb	143 776	26 265	170 041	217 195	16 545	25 712	-12 300	247 349	417 390	65 295	..
Mar	137 141	26 233	163 374	218 647	16 494	27 949	-12 300	250 987	414 361	65 924	..
Apr	132 022	25 735	157 757	220 246	16 310	24 755	-12 300	249 168	406 925	66 097	..
May	140 798	24 581	165 379	221 126	16 239	20 142	-12 300	245 435	410 814	65 937	..
Jun	141 919	24 942	166 861	231 777	15 651	20 489	-12 417	255 787	422 648	65 936	..
Jul	137 248	24 681	161 929	231 748	15 644	21 608	-12 417	256 910	418 839	66 265	..
Aug	137 754	24 766	162 520	238 147	15 644	23 396	-12 417	265 097	427 617	66 567	..
Sep	136 296	24 278	160 574	240 451	15 644	20 529	-12 417	264 523	425 097	64 912	..
Oct	133 889	25 013	158 902	245 829	15 644	19 573	-12 417	268 945	427 847	..	..

5.5 Markka bond market

A) Issues, mill. FIM

During period	Corporations	Financial institutions	Central government	Local government	Others	Total (1+2+3+4+5)
	1	2	3	4	5	6
1993	11 691	10 481	36 512	2 235	63	60 981
1994	4 053	9 899	31 553	593	–	46 099
1995	643	4 487	66 557	26	–	71 713
1996	3 213	9 074	62 139	20	–	74 447
1997*	2 383	7 041	57 165	–	–	66 589
1997*						
Sep	820	783	10 431	–	–	12 034
Oct	1	387	7 424	–	–	7 812
Nov	553	1 210	6 393	–	–	8 156
Dec	60	1 112	–	–	–	1 172
1998*						
Jan	–	714	14 651	–	–	15 365
Feb	401	1 763	4 032	–	–	6 196
Mar	491	825	6 505	–	–	7 821
Apr	1 001	875	3 392	–	–	5 268
May	220	877	2 430	–	–	3 528
Jun	422	376	10 842	–	–	11 640
Jul	–	10	–	–	–	10
Aug	–	400	6 492	–	–	6 892
Sep	–	500	3 314	–	–	3 814

B) Stock, mill. FIM

End of period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporations	Financial institutions	Central government	Local government	Others	Public issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1993	32 459	73 893	73 682	6 884	2 009	119 552	10 391	58 984	188 927
1994	30 179	66 467	94 865	6 981	953	141 935	7 581	49 929	199 445
1995	26 480	55 223	145 177	5 814	357	186 799	5 034	41 218	233 051
1996	25 266	44 849	179 419	4 362	100	220 037	2 956	31 003	253 996
1997*	23 327	41 046	216 215	3 648	84	258 481	1 345	24 494	284 320
1997*									
Sep	23 844	40 656	204 128	3 918	90	245 241	1 477	25 918	272 636
Oct	23 433	40 545	211 426	3 910	88	252 212	1 366	25 824	279 402
Nov	23 709	41 138	217 794	3 860	86	259 724	1 349	25 514	286 587
Dec	23 327	41 046	216 215	3 648	84	258 481	1 345	24 494	284 320
1998*									
Jan	22 774	43 700	215 980	3 632	84	261 271	1 131	23 768	286 170
Feb	23 012	44 944	218 534	3 489	84	265 528	1 003	23 532	290 063
Mar	23 341	42 322	219 982	3 483	82	265 134	845	23 231	289 210
Apr	24 228	42 654	221 344	3 470	82	268 427	837	22 514	291 778
May	23 838	43 282	222 225	3 470	81	270 136	743	22 017	292 896
Jun	21 591	42 002	232 875	3 464	80	279 616	736	19 660	300 012
Jul	21 153	41 961	232 847	3 464	80	279 581	734	19 190	299 505
Aug	21 098	42 074	239 246	3 446	80	286 282	656	19 006	305 944
Sep	21 067	41 843	241 550	3 440	79	288 457	563	18 959	307 979

C) Turnover, mill. FIM

During period	Primary dealers' transactions in benchmark government bonds		
	Purchases from other primary dealers	Purchases from customers	Sales to customers
	1	2	3
1993	42 945	95 647	117 489
1994	173 096	150 908	176 647
1995	133 357	190 069	215 879
1996	201 528	222 584	242 310
1997	258 634	264 994	291 056
1997			
Oct	40 705	33 503	31 670
Nov	17 106	19 655	19 411
Dec	21 198	16 515	16 656
1998			
Jan	22 397	23 508	25 746
Feb	12 826	15 971	16 099
Mar	17 211	22 000	23 870
Apr	14 448	15 315	18 415
May	12 010	14 332	14 337
Jun	11 048	10 520	12 932
Jul	14 767	16 204	16 980
Aug	39 894	28 539	32 104
Sep	62 286	33 882	30 915
Oct	53 444	33 539	35 490

5.6 Helsinki Stock Exchange

Average of daily observations	Share prices										Turnover ¹ , mill. FIM		
	HEX index (28 Dec 1990=1000)										Shares and subscriptions rights	Bonds and debentures	Total
	All-share index	Banks and finance	Insurance	Trade	Construction	Forest industries	Metal and engineering	Telecommunications and electronics	Chemicals	Conglomerates			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1993	1 240	608	644	-	-	1 695	1 749	-	-	1 751	46 337	59 977	106 314
1994	1 847	719	802	-	-	2 284	2 675	-	-	3 068	68 671	2 147	70 818
1995	1 918	500	638	-	-	2 062	2 255	-	-	4 251	83 019	1 075	84 094
1996	2 032	460	820	-	-	2 040	2 564	-	-	5 681	101 265	541	101 806
1997	3 207	822	1 576	2 255	1 006	2 712	3 408	1 416	900	7 477	186 088	488	186 576
1997													
Oct	3 733	1 016	1 921	2 268	994	3 204	3 607	1 833	926	7 689	24 739	33	24 772
Nov	3 448	1 022	1 925	2 279	946	2 737	3 231	1 631	901	7 593	15 163	27	15 190
Dec	3 303	1 080	2 105	2 370	926	2 508	3 065	1 449	900	7 757	17 764	53	17 817
1998													
Jan	3 430	1 136	2 128	2 526	956	2 589	3 045	1 499	933	8 324	15 485	53	15 538
Feb	3 851	1 190	2 418	2 639	1 005	2 886	3 167	1 804	988	9 848	20 050	43	20 093
Mar	4 249	1 270	2 570	2 759	1 009	3 278	3 393	2 085	1 054	10 813	24 260	173	24 433
Apr	4 705	1 393	2 957	2 876	1 073	3 460	3 506	2 450	1 135	11 614	25 985	38	26 023
May	4 925	1 344	3 024	2 832	1 145	3 673	3 748	2 632	1 121	11 547	18 303	21	18 324
Jun	4 823	1 335	2 838	2 825	1 208	3 427	3 642	2 624	1 113	10 804	27 508	10	27 518
Jul	5 317	1 430	3 263	2 741	1 145	3 293	3 662	3 272	1 112	10 979	27 302	11	27 313
Aug	4 880	1 239	2 733	2 582	1 020	2 767	3 281	3 117	1 110	10 004	22 544	8	22 552
Sep	4 265	1 003	1 959	2 266	816	2 544	2 693	2 891	879	7 975	24 911	8	24 919
Oct	4 020	978	1 738	2 183	643	2 472	2 279	2 792	833	7 053	29 210	..	..

¹ During period.

6. Balance of payments, foreign assets and liabilities

6.1 Current account, mill. FIM

During period	Exports of goods, fob	Transport receipts	Travel receipts	Other services receipts	Services receipts, total (2+3+4)	Exports of goods and services (1+5)	Investment income	Transfers and other income	Current account receipts (6+7+8)	Imports of goods, cif	Transport expenditure	Travel expenditure	Other services expenditure
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	132 550	10 430	7 079	9 379	26 888	159 438	6 137	6 506	172 080	101 559	5 646	9 237	17 008
1994	152 022	11 385	7 314	11 808	30 508	182 530	9 617	4 919	197 067	118 684	5 862	8 697	16 800
1995	172 820	11 900	7 536	14 986	34 422	207 242	12 929	8 596	228 767	125 450	6 029	10 450	19 150
1996*	182 436	12 400	8 778	15 315	36 492	218 928	15 375	7 698	242 002	138 110	5 545	10 979	16 921
1997*	208 765	13 145	10 172	15 597	38 913	247 678	21 632	8 707	278 017	157 170	6 423	11 762	17 277
1996*													
I	42 631	2 995	2 037	3 473	8 505	51 136	4 242	1 446	56 824	33 496	1 386	2 720	4 299
II	48 126	3 127	2 233	3 729	9 089	57 215	4 511	2 076	63 802	34 520	1 371	2 783	4 088
III	41 925	3 251	2 425	4 158	9 833	51 758	3 110	1 339	56 206	31 990	1 406	2 676	3 997
IV	49 754	3 026	2 084	3 955	9 066	58 820	3 512	2 837	65 169	38 102	1 382	2 801	4 540
1997*													
I	46 239	3 216	2 000	3 274	8 490	54 728	4 526	1 913	61 168	35 832	1 548	2 536	4 282
II	52 517	3 296	2 570	4 040	9 905	62 422	6 203	2 087	70 713	39 597	1 655	3 025	4 348
III	52 522	3 297	3 021	4 052	10 370	62 892	5 283	1 652	69 828	38 483	1 627	3 015	3 997
IV	57 487	3 336	2 581	4 231	10 148	67 635	5 619	3 055	76 309	43 258	1 593	3 186	4 650
1998*													
I	57 374	3 576	2 853	3 964	10 393	67 767	4 850	2 035	74 651	42 735	1 689	2 927	4 608
II	57 661	3 593	2 420	3 759	9 772	67 433	6 151	1 689	75 273	42 218	1 826	2 944	4 673
III	53 310	3 531	2 977	3 564	10 071	63 381	6 001	2 441	71 823	39 975	1 736	3 422	3 732

During period	Services expenditure, total (11+12 +13)	Imports of goods and services (10+14)	Investment expenditure	Transfers and other expenditure	Current account expenditure (15+16 +17)	Trade account (1-10)	Transport (2-11)	Travel (3-12)	Other services (4-13)	Services account (20+21 +22)	Goods and services account (19+23)	Investment income, net (7-16)	Transfers and others, net (8-17)	Current account (24+25 +26)= (9-18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1993	31 891	133 450	34 580	10 390	178 421	30 991	4 784	-2 159	-7 629	-5 004	25 988	-28 443	-3 885	-6 340
1994	31 359	150 043	31 801	8 596	190 440	33 339	5 523	-1 382	-4 992	-851	32 487	-22 184	-3 676	6 627
1995	35 629	161 080	32 529	12 627	206 237	47 370	5 870	-2 914	-4 164	-1 207	46 162	-19 600	-4 032	22 531
1996*	33 444	171 554	32 900	14 520	218 974	44 326	6 855	-2 201	-1 606	3 048	47 374	-17 525	-6 821	23 027
1997*	35 462	192 632	35 252	15 154	243 038	51 595	6 722	-1 591	-1 680	3 451	55 046	-13 620	-6 447	34 979
1996*														
I	8 405	41 902	8 529	4 010	54 441	9 135	1 609	-683	-827	99	9 234	-4 287	-2 563	2 384
II	8 241	42 762	10 773	3 862	57 396	13 606	1 756	-550	-358	848	14 453	-6 262	-1 786	6 406
III	8 075	40 066	6 556	3 055	49 677	9 935	1 845	-251	164	1 758	11 692	-3 447	-1 716	6 529
IV	8 723	46 825	7 042	3 593	57 460	11 652	1 645	-717	-585	343	11 994	-3 530	-756	7 709
1997*														
I	8 366	44 198	8 779	4 497	57 475	10 407	1 667	-536	-1 008	123	10 530	-4 253	-2 584	3 693
II	9 028	48 625	11 216	3 283	63 123	12 920	1 640	-455	-308	877	13 798	-5 012	-1 195	7 590
III	8 639	47 122	7 499	3 788	58 409	14 039	1 670	5	55	1 730	15 770	-2 216	-2 135	11 419
IV	9 429	52 687	7 757	3 587	64 031	14 229	1 744	-605	-419	720	14 949	-2 138	-532	12 278
1998*														
I	9 224	51 959	10 003	4 794	66 756	14 639	1 887	-74	-644	1 169	15 808	-5 153	-2 760	7 895
II	9 444	51 661	13 010	3 519	68 190	15 444	1 767	-524	-914	329	15 772	-6 859	-1 830	7 083
III	8 890	48 865	8 190	3 296	60 351	13 334	1 795	-445	-169	1 181	14 516	-2 189	-855	11 472

6.2 Capital and financial account, mill. FIM

During period	Capital account, imports of capital	Financial account											Total (2+8+12)
		Direct investment in Finland	Portfolio investment in Finland					Other investment in Finland					
			Shares	Bonds	Of which: markka-denominated bonds	Money market instruments	Financial derivatives	Total (3+4+6+7)	Trade credits	Loans	Other capital	Total (9+10+11)	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1993	0	4 945	12 748	30 353	3 616	-4 382	..	38 719	4 467	5 457	-29 801	-19 877	23 787
1994	0	8 240	13 400	21 977	-5 783	-2 134	59	33 302	3 107	647	-1 392	2 361	43 903
1995	487	4 642	8 734	-17 868	-3 634	1 421	2 588	-5 125	-1 216	-6 985	8 376	176	-307
1996*	596	5 093	8 937	-4 624	6 250	1 016	1 501	6 830	-3 383	12 737	187	9 540	21 463
1997*	1 296	10 975	20 774	-4 259	17 137	2 776	616	19 907	-616	10 529	6 315	16 229	47 110
1996*													
I	0	1 759	1 216	2 635	1 155	502	1 119	5 472	-3 416	4 632	-552	665	7 895
II	0	486	6 143	-5 184	2 516	363	754	2 076	-735	4 717	-3 119	863	3 425
III	0	2 522	374	-4 841	277	-254	-180	-4 902	-42	2 516	6 484	8 957	6 576
IV	596	326	1 204	2 766	2 303	406	-192	4 185	809	872	-2 627	-945	3 566
1997*													
I	0	2 549	5 121	4 126	952	2 197	-94	11 349	-822	6 608	16 464	22 250	36 148
II	450	4 170	7 579	5 234	9 562	-1 751	28	11 091	-1 731	3 193	-7 150	-5 688	9 573
III	0	734	3 460	2 790	9 959	-2 252	438	4 435	865	5 016	3 438	9 319	14 489
IV	846	3 522	4 614	-16 410	-3 336	4 582	245	-6 969	1 071	-4 287	-6 437	-9 653	-13 099
1998*													
I	66	2 905	5 064	-8 943	1 095	-2 752	-226	-6 857	490	470	4 926	5 886	1 934
II	4	50 482	10 478	12 101	6 633	-1 777	-851	19 950	-717	334	-4 659	-5 041	65 391
III	0	3 145	-1 023	-9 253	-5 832	-399	-2 008	-12 683	-224	-137	8 098	7 737	-1 801

During period	Capital account, exports of capital	Financial account											Errors and omissions	
		Direct investment abroad	Portfolio investment abroad					Other investment abroad				Total (15+20+24)		Change in central bank's reserve assets (increase -)
			Shares	Bonds	Money market instruments	Financial derivatives	Total (16+17+18+19)	Trade credits	Loans	Other capital	Total (21+22+23)			
14	15	16	17	18	19	20	21	22	23	24	25	26	27	
1993	0	8 050	873	767	1 932	..	3 571	1 923	-839	9 576	10 660	22 282	-1 219	6 055
1994	0	22 447	434	-4 294	-855	-279	-4 994	1 213	-7 460	9 762	3 516	20 968	-25 504	-4 058
1995	206	6 539	892	3 685	-5 492	-168	-1 084	3 839	-2 712	11 750	12 877	18 332	1 480	-5 652
1996*	340	16 516	3 386	15 455	364	-172	19 033	982	4 523	15 945	21 449	56 999	14 075	-1 822
1997*	0	27 449	8 764	15 116	-628	371	23 624	3 929	6 737	2 985	13 651	64 724	-10 788	-7 874
1996*														
I	61	5 508	567	4 019	2 424	-26	6 983	-670	2 416	6 458	8 205	20 696	7 254	3 224
II	0	6 798	1 041	3 041	162	71	4 315	779	-2 064	4 834	3 549	14 662	8 457	-3 626
III	0	3 793	728	4 179	-2 457	-51	2 399	-792	1 565	1 945	2 718	8 910	-1 132	-3 065
IV	279	417	1 050	4 216	235	-166	5 336	1 665	2 606	2 708	6 979	12 731	-505	1 645
1997*														
I	0	3 130	1 791	6 595	4 286	13	12 685	918	3 244	-3 360	802	16 617	-22 134	-1 090
II	0	8 276	2 420	5 264	-2 783	275	5 176	189	1 127	7 390	8 706	22 158	3 031	1 515
III	0	4 335	1 603	541	-2 975	52	-778	968	14 562	4 869	20 399	23 956	-2 968	1 016
IV	0	11 708	2 951	2 716	844	31	6 541	1 854	-12 196	-5 914	-16 256	1 993	11 283	-9 315
1998*														
I	0	12 714	2 632	1 291	-1 101	-199	2 623	1 286	5 901	-8 304	-1 117	14 220	7 878	-3 553
II	0	55 671	2 698	1 880	-142	-36	4 400	466	-3 574	1 620	-1 487	58 584	-8 330	-5 564
III	0	5 094	1 714	4 262	24	-116	5 884	1 871	4 112	-2 394	3 589	14 567	3 631	1 265

6.3 Finland's international investment position, mill. FIM

Position at end of period	Assets											Total assets (1+6+11)
	Direct investment abroad	Portfolio investment					Other investment					
		Shares	Bonds	Money market instruments	Financial derivatives	Total (2+3+4+5)	Trade credits	Loans	Currency and deposits	Other	Total (7+8+9+10)	
1	2	3	4	5	6	7	8	9	10	11	12	
1993	53 090	1 783	10 709	11 030	447	23 968	26 256	35 981	5 799	91 127	159 162	236 221
1994	59 451	1 984	5 109	9 115	488	16 696	25 500	24 847	8 257	109 847	168 451	244 598
1995	65 350	3 216	9 619	2 736	177	15 748	28 358	20 381	7 290	115 543	171 571	252 669
1996*	82 038	7 260	25 077	3 478	-21	35 793	29 929	25 438	5 895	124 541	185 803	303 634
1997*	110 026	17 542	42 386	3 222	1 404	64 554	30 369	34 204	6 949	148 881	220 403	394 982
1996*												
I	73 551	3 984	14 063	5 670	169	23 886	27 980	23 594	5 435	121 308	178 317	275 754
II	79 164	4 999	16 834	5 842	93	27 768	28 892	21 499	5 523	118 075	173 989	280 922
III	81 377	5 835	20 620	3 176	48	29 679	27 902	22 873	6 488	119 349	176 612	287 668
IV	82 038	7 260	25 077	3 478	-21	35 793	29 929	25 438	5 895	124 541	185 803	303 634
1997*												
I	84 890	9 701	32 595	7 672	171	50 139	26 391	29 406	5 732	147 414	208 942	343 971
II	93 939	13 148	39 010	5 156	610	57 924	26 976	31 175	6 689	155 502	220 341	372 204
III	98 420	15 188	39 750	2 316	813	58 066	28 099	45 983	5 149	165 778	245 009	401 495
IV	110 026	17 542	42 386	3 222	1 404	64 554	30 369	34 204	6 949	148 881	220 403	394 982
1998*												
I	124 467	22 787	45 083	2 182	1 381	71 432	32 086	40 292	7 585	134 721	214 684	410 584
II	143 390	25 229	46 250	2 016	1 452	74 947	32 365	36 379	6 629	143 800	219 173	437 509
III	144 127	22 006	49 193	1 963	1 107	74 268	33 345	39 453	6 083	133 609	212 490	430 885

Position at end of period	Liabilities												Total liabilities (13+19+24)
	Direct investment in Finland	Portfolio investment					Other investment						
		Shares	Bonds	Of which: markka denominated bonds	Money market instruments	Financial derivatives	Total (14+15+17+18)	Trade credits	Loans	Currency and deposits	Other	Total (20+21+22+23)	
13	14	15	16	17	18	19	20	21	22	23	24	25	
1993	24 391	30 375	266 269	27 402	14 995	-6 103	305 536	18 206	90 825	4 025	54 188	167 243	497 170
1994	31 846	60 558	258 823	22 285	10 309	-5 179	324 511	19 852	82 649	3 430	46 566	152 498	508 855
1995	36 894	63 746	228 676	19 638	10 099	1 545	304 066	18 540	69 249	2 568	53 557	143 914	484 874
1996*	40 854	108 932	229 919	26 284	10 888	3 358	353 097	14 863	83 295	1 733	55 279	155 170	549 120
1997*	51 658	172 393	243 731	45 169	14 110	5 401	435 635	14 043	98 066	2 760	64 258	179 128	666 422
1996*													
I	38 422	68 674	241 085	20 699	11 192	2 195	323 146	14 873	77 934	1 518	55 412	149 737	511 305
II	38 616	80 962	234 317	23 855	11 126	2 833	329 239	14 214	81 836	1 939	51 588	149 577	517 431
III	40 808	91 198	225 308	23 656	11 286	2 651	330 443	13 940	82 365	1 742	57 734	155 781	527 032
IV	40 854	108 932	229 919	26 284	10 888	3 358	353 097	14 863	83 295	1 733	55 279	155 170	549 120
1997*													
I	43 320	129 824	240 590	27 538	13 258	2 451	386 123	13 794	90 723	2 624	72 506	179 647	609 090
II	47 448	162 713	254 004	37 495	11 813	696	429 226	12 092	97 073	2 870	66 344	178 379	655 054
III	48 101	201 959	257 986	47 881	9 267	2 312	471 524	12 976	102 146	2 737	69 899	187 758	707 384
IV	51 658	172 393	243 731	45 169	14 110	5 401	435 635	14 043	98 066	2 760	64 258	179 128	666 422
1998*													
I	54 578	246 199	239 267	46 407	11 033	5 024	501 523	14 510	99 925	3 097	69 817	187 349	743 451
II	73 171	319 437	246 792	52 640	9 829	5 476	581 534	13 797	98 987	3 034	64 627	180 445	835 150
III	76 241	276 593	230 960	46 813	8 755	4 385	520 694	13 541	95 596	3 523	70 371	183 031	779 966

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

Position at end of period	Corporate sector	Households and nonprofit institutions	Banks	Bank of Finland	Other financial institutions	Central government	Local government	Net (1+2+3+4+5+6+7)	Net interest and dividend expenditure	Net interest and dividend expenditure in relation to current account receipts, %
	1	2	3	4	5	6	7	8	9	10
1993	-54 315	3 436	-45 658	33 279	-29 737	-164 892	-3 062	-260 949	21 897	12.7
1994	-82 428	3 503	-33 800	52 606	-21 931	-179 113	-3 093	-264 257	20 296	10.3
1995	-72 374	2 293	-18 970	47 708	-13 297	-174 481	-3 085	-232 205	17 490	7.6
1996*	-107 386	1 409	12 904	35 522	-1 785	-183 703	-2 448	-245 486	16 477	6.8
1997*	-154 108	2 670	10 657	50 931	8 811	-187 896	-2 503	-271 439	15 563	5.6
1996*										
I	-75 341	2 643	-4 613	42 679	-9 630	-188 118	-3 169	-235 550	4 025	7.1
II	-83 471	2 736	4 569	33 647	-5 689	-185 184	-3 118	-236 510	6 000	9.4
III	-92 233	1 219	3 932	34 482	-1 893	-182 336	-2 535	-239 364	3 185	5.7
IV	-107 386	1 409	12 904	35 522	-1 785	-183 703	-2 448	-245 486	3 268	5.0
1997*										
I	-130 982	1 709	-6 381	59 120	2 815	-189 002	-2 396	-265 118	4 739	7.7
II	-160 171	1 862	10 969	58 737	7 100	-198 950	-2 396	-282 850	5 498	7.8
III	-192 642	2 417	20 128	61 333	7 978	-202 647	-2 456	-305 888	2 702	3.9
IV	-154 108	2 670	10 657	50 931	8 811	-187 896	-2 503	-271 439	2 623	3.4
1998*										
I	-210 360	2 986	975	44 268	11 433	-179 872	-2 297	-332 867	3 441	4.6
II	-279 470	3 425	4 580	51 524	14 556	-189 875	-2 380	-397 641	8 167	10.9
III	-240 485	1 670	3 816	45 995	19 960	-177 738	-2 299	-349 080	3 027	4.2

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

7. Foreign trade

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

During period	Exports, fob	Imports, cif	Balance (1-2)
	1	2	3
1993	134 114	103 165	30 949
1994	154 164	120 612	33 552
1995	176 021	128 556	47 465
1996	186 336	141 720	44 616
1997*	211 696	159 190	52 506
1997*			
Aug	16 455	12 254	4 201
Sep	18 964	14 857	4 107
Oct	20 811	15 272	5 539
Nov	19 630	14 142	5 488
Dec	18 055	14 795	3 260
1998*			
Jan	18 010	13 254	4 756
Feb	20 273	14 009	6 264
Mar	20 332	16 534	3 798
Apr	20 778	14 640	6 138
May	18 604	14 680	3 924
Jun	19 459	13 839	5 620
Jul	18 243	13 045	5 198
Aug	16 517	13 303	3 214

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

Period	Volume (seasonally adjusted)		Prices		Terms of trade
	Exports	Imports	Exports	Imports	
	1	2	3	4	
1993	120.6	83.6	109.7	119.6	91.7
1994	136.5	98.0	111.4	119.3	93.3
1995	145.7	104.6	119.2	119.2	100.0
1996	153.1	113.5	120.2	121.1	99.3
1997*	177.4	126.1	117.7	122.4	96.2
1997*					
Aug	179.3	123.0	118.5	123.5	96.0
Sep	188.4	139.1	118.7	123.3	96.3
Oct	194.4	136.0	120.7	123.8	97.5
Nov	182.5	129.7	120.1	123.2	97.5
Dec	180.2	136.2	120.7	122.5	98.5
1998*					
Jan	185.4	135.5	120.2	121.4	99.0
Feb	202.8	139.0	120.4	120.7	99.8
Mar	196.5	150.7	120.1	120.2	99.9
Apr	198.8	136.2	118.9	120.7	98.5
May	183.7	140.2	119.0	120.3	98.9
Jun	192.7	138.4	118.8	118.5	100.3
Jul	189.5	139.0	118.4	118.3	100.1
Aug	181.6	139.4	117.7	117.5	100.2

7.3 Foreign trade by main groups, mill. FIM

During period	Exports by industries, fob					Imports by use of goods, cif				
	Wood industry products	Paper industry products	Chemical industry products	Metal and engineering industry products	Other goods	Raw materials (excl. crude oil)	Crude oil, fuels and lubricants	Finished goods		Other goods
								Investment goods	Consumer goods	
	1	2	3	4	5	6	7	8	9	10
1993	10 910	37 430	14 205	48 158	23 411	54 792	10 904	15 396	21 066	1 007
1994	14 198	41 249	15 725	55 895	27 097	66 156	11 687	17 227	24 684	858
1995	13 451	48 754	15 877	69 336	28 603	71 397	9 685	19 660	25 514	2 300
1996	12 688	44 602	18 482	78 969	31 595	72 970	12 944	22 004	30 897	2 905
1997*	15 423	49 674	20 743	91 757	34 099	84 129	12 886	23 904	34 899	3 372
1997*										
Jul	1 063	4 303	1 672	8 606	2 477	6 416	1 151	1 750	2 817	190
Aug	934	4 333	1 741	6 752	2 695	6 896	767	1 732	2 662	197
Sep	1 456	4 437	1 700	8 197	3 174	7 696	1 061	2 326	3 192	582
Oct	1 673	4 846	2 024	8 980	3 288	7 865	1 350	2 486	3 394	177
Nov	1 398	4 285	1 907	9 029	3 011	7 530	1 140	2 321	2 921	230
Dec	1 268	4 299	1 695	8 087	2 706	7 167	1 540	2 613	3 087	388
1998*										
Jan	1 155	4 601	1 770	7 448	3 036	6 807	1 269	2 094	2 877	207
Feb	1 281	4 527	1 599	9 976	2 890	7 632	801	2 038	3 300	238
Mar	1 418	4 936	1 947	8 804	3 227	9 026	829	2 792	3 611	276
Apr	1 405	4 953	2 047	9 416	2 957	7 831	867	2 298	3 318	326
May	1 406	4 761	1 793	7 809	2 835	8 066	1 120	2 273	2 931	290
Jun	1 394	4 381	1 933	8 725	3 026	7 506	575	2 429	3 068	261
Jul	1 021	4 642	1 873	8 157	2 550	6 737	895	2 076	3 088	249

7.4 Foreign trade by regions and countries

Region and country	Exports, fob				Imports, cif			
	1997*		Aug 1997 – Jul 1998		1997*		Aug 1997 – Jul 1998	
	Mill. FIM	Percentage share	Mill. FIM	12-month change calculated from 12-month moving total	Mill. FIM	Percentage share	Mill. FIM	12-month change calculated from 12-month moving total
	1	2	3	4	5	6	7	8
European Union¹	113 179	53.2	123 398	15.3	95 415	59.3	101 689	12.9
Austria	2 006	0.9	2 518	36.5	1 695	1.1	1 797	15.4
Belgium and Luxembourg	4 920	2.3	5 528	17.4	4 056	2.5	4 398	6.6
Denmark	6 544	3.1	6 567	8.0	5 469	3.4	5 991	16.6
France	9 020	4.2	10 959	31.0	7 749	4.8	8 527	19.8
Germany	23 440	11.0	25 610	14.2	23 400	14.5	25 218	12.7
Greece	1 245	0.6	2 332	114.8	399	0.2	376	2.1
Ireland	1 745	0.8	1 717	21.8	1 455	0.9	1 587	29.5
Italy	6 334	3.0	7 877	37.3	6 471	4.0	7 195	18.7
Netherlands	8 769	4.1	9 441	14.6	6 478	4.0	7 252	30.4
Portugal	1 200	0.6	1 323	24.2	1 225	0.8	1 058	-13.5
Spain	4 626	2.2	5 330	22.7	2 273	1.4	2 748	28.2
Sweden	20 926	9.8	21 342	4.1	19 470	12.1	20 404	12.6
United Kingdom	21 313	10.0	21 698	7.7	12 589	7.8	12 523	-0.5
Rest of Europe	42 868	20.1	48 284	27.8	27 681	17.2	28 542	7.4
Of which:								
Estonia	6 759	3.2	7 504	27.6	2 189	1.4	2 461	26.8
Norway	6 230	2.9	7 258	22.8	5 905	3.7	6 443	5.9
Poland	3 774	1.8	3 987	13.9	1 797	1.1	1 632	-0.1
Russia	15 529	7.3	17 344	34.9	12 532	7.8	12 209	1.6
Switzerland	2 086	1.0	2 373	18.1	2 673	1.7	2 769	9.7
Non-European industrialized countries²	23 933	11.2	24 578	3.7	22 559	14.0	24 898	21.2
Of which:								
Australia	2 677	1.3	2 399	-2.9	1 020	0.6	1 132	-1.8
Japan	4 033	1.9	3 741	-13.4	8 596	5.3	9 315	18.8
U.S.A.	14 783	6.9	16 135	6.8	11 807	7.3	13 314	25.3
Dynamic Asian economies³	16 782	7.9	16 773	11.4	7 322	4.5	8 157	18.6
Of which:								
China	3 807	1.8	5 898	81.9	2 868	1.8	3 040	22.1
Hong Kong	3 957	1.9	4 223	38.6	635	0.4	858	23.9
South Korea	2 459	1.2	1 917	-28.6	706	0.4	864	10.0
Other countries	16 080	7.6	16 581	5.8	8 020	5.0	8 034	9.2
Total	212 841	100.0	229 615	15.3	160 996	100.0	171 320	13.1
Of which:								
Africa	3 339	1.6	3 943	48.0	1 379	0.9	1 426	31.9
Asia	29 947	14.1	28 341	-2.3	18 899	11.7	20 140	14.2
Central and South America	3 569	1.7	4 305	63.6	3 517	2.2	3 548	33.5
North America	16 839	7.9	18 072	8.9	12 861	8.0	14 342	24.8
Europe	156 047	73.3	171 682	18.6	123 096	76.5	130 231	11.6
Oceania	3 100	1.5	2 801	-0.2	1 242	0.8	1 359	-5.1

¹Including exports / imports to EU unspecified by country.

²Australia, Canada, Japan, New Zealand, United States.

³China, Hong Kong, Malaysia, Singapore, South Korea, Taiwan, Thailand.

8. Domestic economic developments

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

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

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

Period	Total industry	Mining and quarrying	Manu- facturing	Wood and paper industry (23.5)	Metal industry (36.2)	Other manu- facturing (30.3)	Energy
	(100.0)	(1.1)	(90.0)	(23.5)	(36.2)	(30.3)	(8.9)
	1	2	3	4	5	6	7
1993	84.9	90.2	83.7	89.2	72.6	92.5	96.0
1994	94.2	102.0	93.4	99.5	85.1	98.4	101.6
1995	100.1	99.3	100.1	100.0	100.2	100.0	100.0
1996	103.8	100.7	103.3	97.0	107.4	103.5	109.1
1997*	113.2	123.5	113.5	110.9	120.0	107.2	109.0
1997*							
Aug	114.9	100.7	115.6	112.5	123.7	107.5	110.4
Sep	115.3	140.3	115.8	110.5	120.6	105.9	105.0
Oct	119.8	135.2	120.3	113.6	124.0	108.1	108.9
Nov	118.0	134.0	118.5	118.4	124.8	110.1	111.4
Dec	121.6	127.1	122.6	119.9	131.3	112.5	111.8
1998*							
Jan	118.5	113.2	119.7	114.6	129.6	110.3	106.8
Feb	119.6	115.2	120.6	116.5	130.7	110.0	110.9
Mar	121.2	118.2	122.0	116.1	134.3	109.7	113.9
Apr	122.7	121.9	123.8	118.4	136.0	111.6	111.9
May	122.9	108.2	124.5	121.0	136.2	111.7	109.0
Jun	118.9	66.3	120.6	111.7	132.9	110.1	111.7
Jul	124.8	67.0	128.0	116.5	148.2	111.6	110.9
Aug	121.5	50.9	124.4	119.7	137.6	111.1	107.8

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

Period	Volume of wholesale trade	Volume of retail trade	Volume of construction of buildings	Of which:		Imports of investment goods	Monthly GDP indicator
				Residential buildings	Industrial buildings		
	1	2	3	4	5	6	7
1993	68.5	78.1	46.9	47.2	35.6	72.9	89.8
1994	73.0	79.7	42.2	45.1	35.2	84.4	93.7
1995	76.2	82.6	42.0	41.1	49.9	88.5	97.8
1996	77.8	86.0	43.5	38.8	52.0	106.2	100.7
1997*	82.7	89.2	53.4	53.4	63.0	118.8	106.6
1997*							
Aug	93.5	80.5	53.5	52.7	66.4	109.9	106.7
Sep	93.2	81.0	55.3	54.3	66.0	128.1	107.8
Oct	93.9	80.9	56.8	55.5	66.6	132.4	108.5
Nov	93.1	82.5	58.1	56.5	67.0	117.6	109.1
Dec	95.3	83.5	58.7	58.3	66.4	130.2	110.4
1998*							
Jan	95.1	82.5	59.1	58.6	66.8	120.6	109.0
Feb	95.3	84.0	59.0	58.3	65.5	132.1	110.3
Mar	95.3	85.6	59.1	58.0	65.3	135.8	112.4
Apr	96.5	84.8	58.5	58.9	64.6	127.0	112.0
May	96.1	84.7	57.4	58.3	62.6	121.7	113.0
Jun	97.1	84.9	58.8	59.3	64.5	133.5	111.3
Jul	98.1	86.4	59.8	60.5	64.0	132.0	112.4
Aug	..	..	59.9	60.3	65.5	..	111.6

8.4 Wages and prices, 1990=100

Period	Index of wage and salary earnings	By sectors			Consumer price index	Indicator of underlying inflation	Basic price index for domestic supply	By origin		Producer price index for manufacturing	By marketing area		Building cost index
		Private	Of which: Manufacturing (SIC 3)	Public				Domestic goods	Imported goods		Exported goods	Home market goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	109.2	108.8	110.0	110.1	109.7	109.9	104.8	100.8	119.3	105.5	109.2	103.9	100.7
1994	111.4	111.6	115.0	111.1	110.9	111.4	106.2	102.8	118.7	107.1	110.2	105.8	102.2
1995	116.6	117.4	123.1	114.7	112.0	111.3	106.9	103.8	118.5	110.8	118.0	107.7	103.5
1996	121.2	122.0	127.8	119.3	112.6	111.4	105.9	102.0	120.1	110.9	118.5	107.6	102.7
1997	123.7	124.4	130.8	122.0	114.0	112.3	107.6	104.0	120.9	111.4	116.8	109.1	105.2
1997													
Sep	..	..	..	..	114.6	112.8	108.4	104.8	121.8	112.3	117.8	110.0	106.1
Oct	..	..	..	..	114.9	113.1	108.7	105.0	122.3	113.0	119.8	110.0	106.3
Nov	..	..	..	..	114.8	112.9	108.5	104.9	121.7	112.8	119.2	110.0	106.2
Dec	..	..	..	..	114.8	113.0	108.2	104.8	121.0	112.8	119.9	109.7	106.3
1997													
II	123.6	124.4	130.9	121.7	114.0	112.2	107.1	103.6	120.2	110.7	115.3	108.7	104.8
III	123.8	124.6	131.3	121.9	114.4	112.5	108.2	104.5	122.0	112.0	117.2	109.7	105.9
IV	124.2	125.3	132.3	121.9	114.9	113.0	108.5	104.9	121.7	112.9	119.6	109.9	106.3
1998													
Jan	..	..	..	..	115.0	112.7	107.5	104.2	119.9	112.0	119.4	108.9	106.6
Feb	..	..	..	..	114.9	112.7	107.1	103.9	119.3	112.0	119.5	108.5	106.6
Mar	..	..	..	..	115.2	112.9	107.0	103.9	118.8	111.9	119.4	108.6	107.0
Apr	..	..	..	..	115.7	113.4	106.9	103.6	119.2	111.3	118.2	108.4	107.4
May	..	..	..	..	115.7	113.6	106.9	103.7	118.8	111.3	118.2	108.4	107.7
Jun	..	..	..	..	115.9	113.9	106.4	103.6	117.1	111.1	118.0	108.1	107.9
Jul	..	..	..	..	115.6	113.5	106.3	103.6	116.9	110.8	117.7	107.9	108.0
Aug	..	..	..	..	115.8	113.6	106.0	103.5	116.0	110.3	116.9	107.5	108.1
Sep	..	..	..	..	116.1	..	105.8	103.6	115.0	109.8	116.3	107.1	108.1
1998 ¹													
I	127.7	128.8	135.7	125.3	115.0	112.7	107.2	104.0	119.3	112.0	119.4	108.7	106.7
II	128.0	129.1	136.0	125.5	115.8	113.6	106.7	103.6	118.4	111.2	118.1	108.3	107.7

¹ Preliminary figures for columns 1-4.

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

Period	Labour force participation rate among 15-74 year olds	Labour force	Total employment (4+5) = (6+7+8)	By industrial status			By industry		Unemployed	Unemployment rate
				Self-employed	Wage and salary earners	Agriculture, forestry and fishing	Mining, manufacturing and energy supply	Other industries		
%										
	1	2	3	4	5	6	7	8	9	10
1993	65.3	2 484	2 041	312	1 729	173	424	1 444	444	17.9
1994	64.8	2 480	2 024	312	1 712	167	426	1 430	456	18.4
1995	65.1	2 497	2 068	304	1 764	158	456	1 454	430	17.2
1996	<u>65.0</u>	<u>2 503</u>	<u>2 096</u>	<u>302</u>	<u>1 794</u>	<u>148</u>	<u>459</u>	<u>1 489</u>	<u>408</u>	<u>16.3</u>
1997*	64.3	2 484	2 170	323	1 846	153	463	1 553	314	12.6
1997*										
Sep	64.1	2 477	2 178	315	1 862	141	458	1 578	300	12.0
Oct	63.9	2 468	2 174	326	1 849	155	459	1 561	294	11.9
Nov	64.2	2 486	2 192	332	1 860	147	463	1 582	294	11.8
Dec	64.8	2 511	2 211	329	1 882	149	472	1 589	300	11.9
1998*										
Jan	64.3	2 484	2 196	313	1 883	144	464	1 588	288	11.6
Feb	64.6	2 501	2 205	321	1 884	147	474	1 583	296	11.8
Mar	64.4	2 495	2 193	307	1 886	144	461	1 588	303	12.1
Apr	64.3	2 490	2 196	306	1 890	145	466	1 585	295	11.7
May	65.0	2 528	2 223	316	1 907	138	490	1 595	304	12.0
Jun	64.7	2 513	2 222	319	1 902	143	464	1 614	292	11.7
Jul	64.7	2 512	2 225	317	1 907	138	467	1 619	288	11.5
Aug	64.9	2 522	2 240	317	1 923	143	502	1 595	282	11.2
Sep	64.8	2 513	2 239	328	1 911	146	482	1 610	274	10.9

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

mill FIM, cash flow basis

During period	Revenue							Expenditure				
	Direct taxes	Indirect taxes	Other taxes and similar revenue	Other revenue	Revenue before financial transactions (1+2+3+4)	Redemptions of loans granted by the state	Revenue before borrowing (5+6)	Consumption	Transfers and subsidies	Of which:		
										Local government	Other domestic sectors	
	1	2	3	4	5	6	7	8	9	10	11	
1993	31 667	67 291	1 443	28 823	129 224	7 366	136 593	46 880	108 608	42 720	63 535	
1994	34 588	68 124	1 792	24 095	128 599	7 308	135 900	48 750	108 155	40 388	65 519	
1995	40 092	66 902	1 720	35 837	144 550	7 923	152 473	51 446	113 644	39 481	67 514	
1996	48 357	73 943	1 947	39 778	164 024	9 893	173 918	53 696	110 039	33 199	69 533	
1997	52 548	78 273	3 686	38 716	173 223	8 413	181 637	54 596	101 948	30 133	64 125	
1997												
Sep	3 869	6 859	178	3 857	14 763	251	15 014	4 611	7 596	2 413	4 575	
Oct	3 744	6 392	1 407	1 839	13 382	506	13 888	4 037	9 934	2 409	6 971	
Nov	5 733	6 835	201	5 057	17 826	878	18 704	4 616	7 271	2 501	4 507	
Dec	4 143	6 770	251	5 918	17 082	28	17 110	6 451	11 394	2 502	8 542	
1998												
Jan	3 236	7 632	409	3 000	14 277	80	14 358	5 343	11 871	3 887	5 783	
Feb	4 909	7 571	1 264	3 708	17 452	72	17 524	4 035	8 339	3 309	4 607	
Mar	4 810	7 442	222	4 527	17 001	3 783	20 783	5 161	6 240	264	5 527	
Apr	4 254	5 638	244	4 150	14 286	337	14 623	3 658	8 249	2 570	5 174	
May	8 445	6 816	227	2 357	17 845	629	18 475	3 122	7 915	2 648	4 828	
Jun	4 112	6 702	265	2 680	13 759	577	14 336	5 603	8 867	2 301	5 954	
Jul	5 036	6 915	326	1 680	13 957	189	14 145	5 452	7 725	2 447	4 636	
Aug	4 861	7 418	692	2 284	15 255	227	15 482	3 891	7 486	2 157	4 779	
Sep	4 385	7 083	214	1 621	13 303	2 330	15 633	4 653	8 828	2 548	5 659	

During period	Expenditure					Financial balance			
	Fixed investment	Other expenditure	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)
1993	4 306	18 076	177 870	19 753	197 623	-48 646	-61 030	84 036	23 009
1994	3 737	22 281	182 923	17 886	200 760	-54 324	-64 860	73 193	8 336
1995	3 208	26 336	194 635	16 765	211 399	-50 085	-58 926	54 071	-4 854
1996	3 325	29 911	196 972	13 756	210 747	-32 947	-36 828	33 845	-2 983
1997	3 317	24 636	184 497	10 542	195 037	-11 274	-13 400	10 371	-3 028
1997									
Sep	326	2 860	15 393	641	16 034	-630	-1 020	8 777	7 757
Oct	297	1 957	16 225	682	16 906	-2 843	-3 018	-3 021	-6 039
Nov	234	734	12 855	589	13 444	4 971	5 260	-3 608	1 651
Dec	590	579	19 014	-286	18 730	-1 932	-1 620	-5 652	-7 271
1998									
Jan	217	3 658	21 089	587	21 676	-6 812	-7 318	417	-6 901
Feb	203	1 165	13 742	453	14 196	3 710	3 328	-2 821	507
Mar	169	7 033	18 603	4 456	23 059	-1 602	-2 276	-3 653	-5 928
Apr	223	5 472	17 602	522	18 124	-3 316	-3 501	-5 358	-8 859
May	265	2 013	13 315	508	13 822	4 530	4 653	5 713	10 366
Jun	262	2 117	16 849	606	17 455	-3 090	-3 119	11 215	8 096
Jul	280	1 108	14 565	767	15 331	-608	-1 186	-793	-1 979
Aug	278	678	12 333	562	12 895	2 922	2 587	8 187	10 774
Sep	306	5 359	19 146	807	19 952	-5 843	-4 319	54	-4 265

Notes and explanations to the statistical section

General

Source

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

Symbols used

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

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

Notes and explanations to tables

1 The balance sheet of the Bank of Finland

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

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

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

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

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

exchange reserves of forward transactions in the form of swaps and maturing forward transactions. The central government's foreign exchange transactions (Column 5) comprise transactions related to drawings and redemptions of government loans and associated interest payments.

Table 2.4 The markka value of forward contracts is given.

3 Rates of interest

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

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

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

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

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

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

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

4 Rates of exchange

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

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

5 Financial markets and money supply

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

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

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

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

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

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

6 Balance of payments, foreign assets and liabilities

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

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

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

In the financial account financial derivatives include payments arising from currency and interest rate swaps related to loans, ie outstanding loans are recorded according to the original loan contract. Medium-term notes (MTNs) are included under bonds (Columns 4 and 17). The category other investment (Columns 9–12 and 21–24) covers transactions related to trade credits, loans, currency and deposits and other assets and liabilities. Transactions in assets and liabilities related to short- and long-term supplier credits and advance payments related to imports and exports are recorded under trade credits (Columns 9 and 21). The item 'Other capital' (Columns 11 and 23) includes transactions in currency and deposits and short- and long-term assets and liabilities of different sectors not

covered by any of the items above. In addition, this category includes changes in the central government's subscriptions to and quotas in international organizations as well as transactions in the Bank of Finland's short- and long-term assets and liabilities (excl. reserve items). The most important sub-item under the item 'other capital' comprises banks' other short-term assets and liabilities (in practice interbank deposits). The central bank's reserve assets (Column 26) comprise gold, special drawing rights (SDRs), the reserve position in the IMF, ECU-claim on the ECB and foreign exchange assets. A negative figure implies an increase in reserves.

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

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

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

7 Foreign trade

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

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

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

8 Domestic economic developments

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

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

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

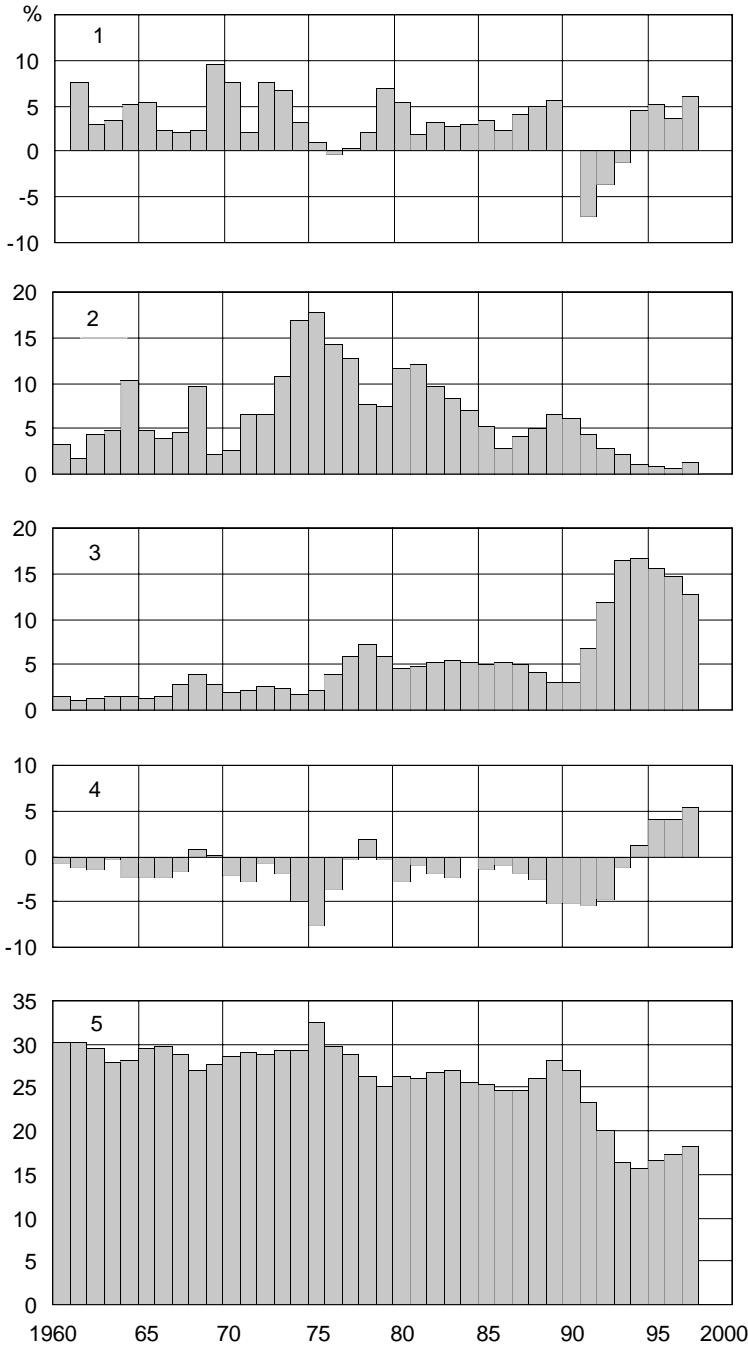
Table 8.4 The indicator of underlying inflation (Column 6) is the consumer price index from which the effect of indirect taxes, subsidies and housing-related capital costs (house prices and mortgage interest payments) has been removed (see the article by Pentti Pikkarainen and Timo Tyrväinen in the June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

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

Table 8.6 Source: Ministry of Finance.

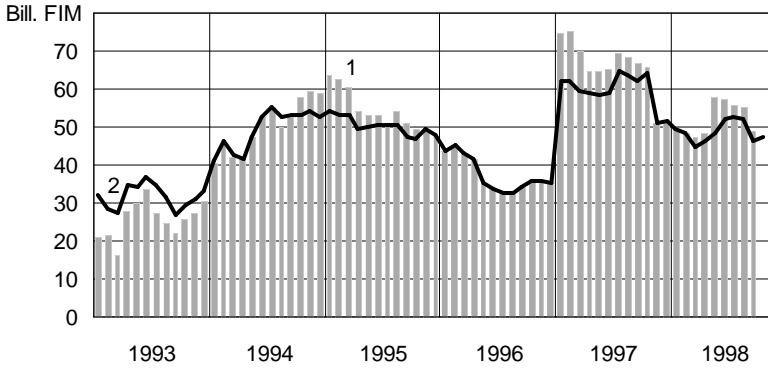
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1. Long-term indicators



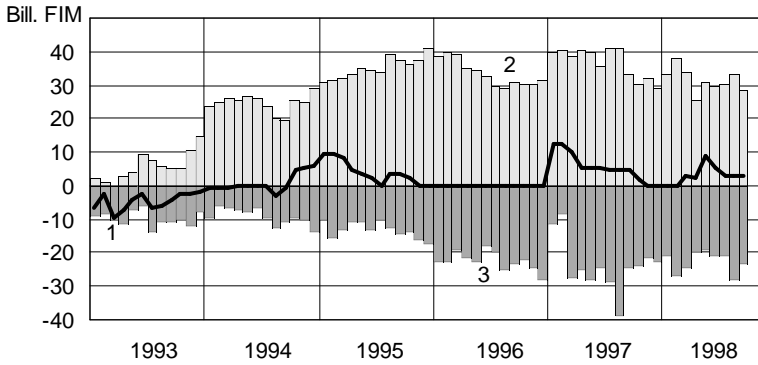
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

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



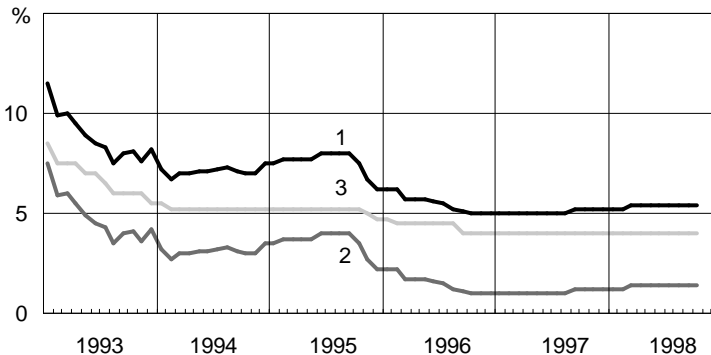
1. Foreign exchange reserves plus forward position
2. Foreign exchange reserves

3. Forward market



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

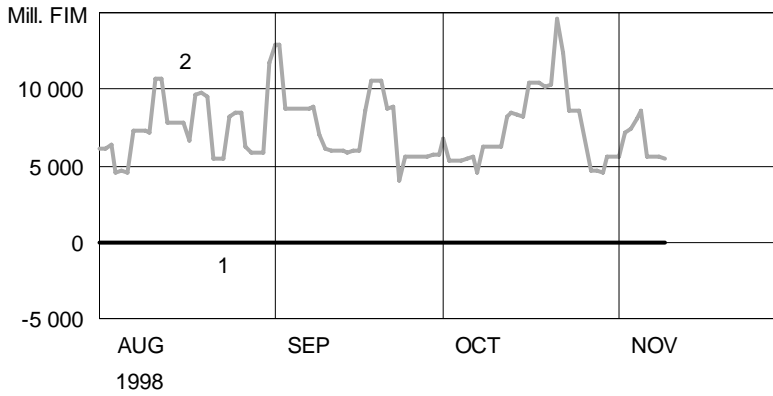
4. Rates of interest set by the Bank of Finland



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

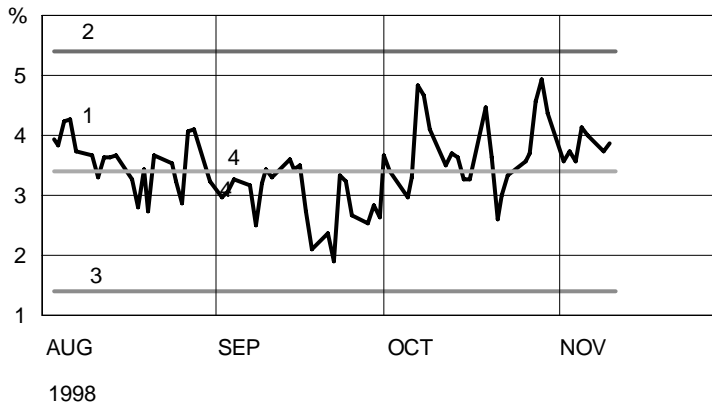
End-of-month observations

5. Banks' liquidity position at the Bank of Finland



1. Liquidity credits (-)
2. Reserve deposits

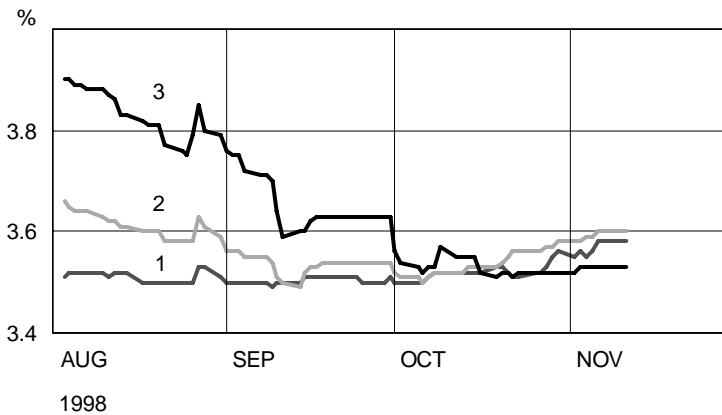
6. Liquidity management interest rates



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

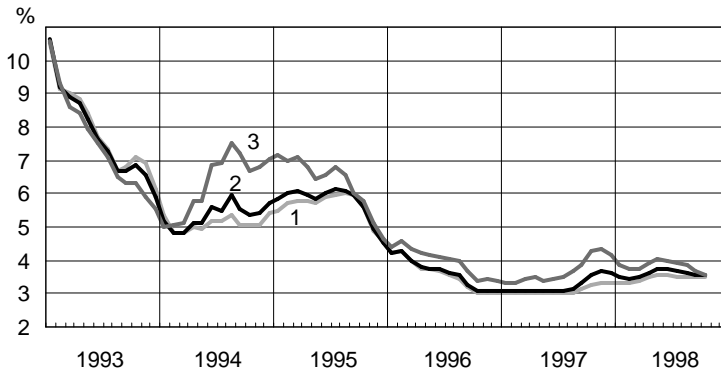
Daily observations

7. HELIBOR rates of interest, daily



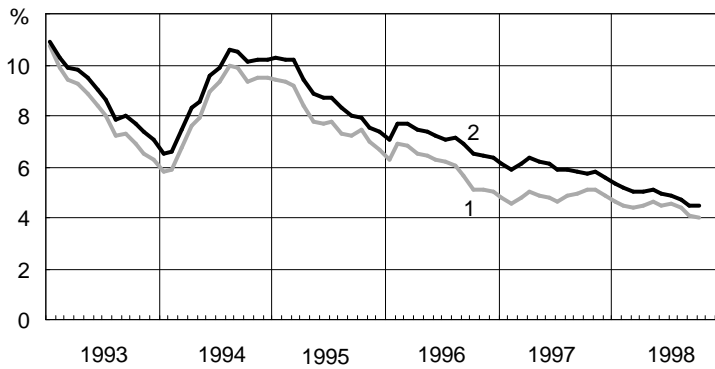
1. 1-month HELIBOR
2. 3-month HELIBOR
3. 12-month HELIBOR

8. HELIBOR interest rates, monthly



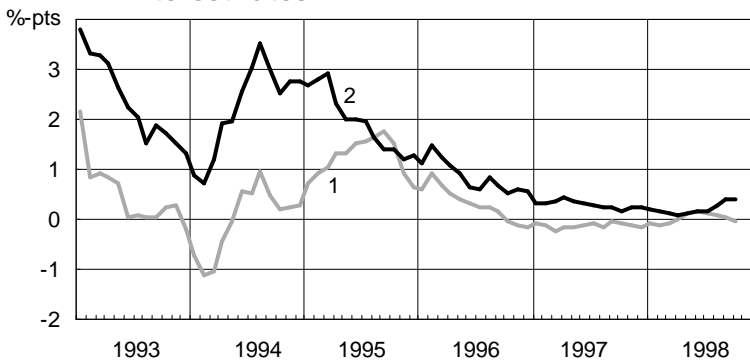
1. 1-month HELIBOR
2. 3-month HELIBOR
3. 12-month HELIBOR

9. Bond yields



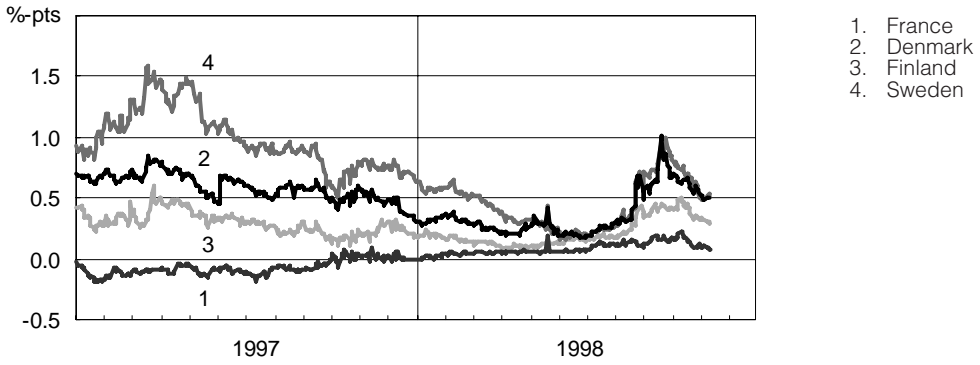
1. Yield on 5-year government bonds
2. Yield on 10-year government bonds

10. Differential between Finnish and German interest rates

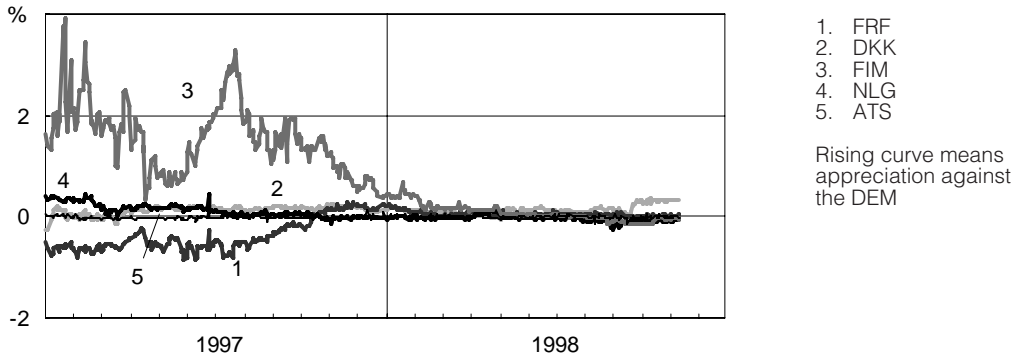


1. 3-month HELIBOR minus 3-month DEM eurorate
2. 10-year Finnish government bond yield minus 10-year German government bond yield

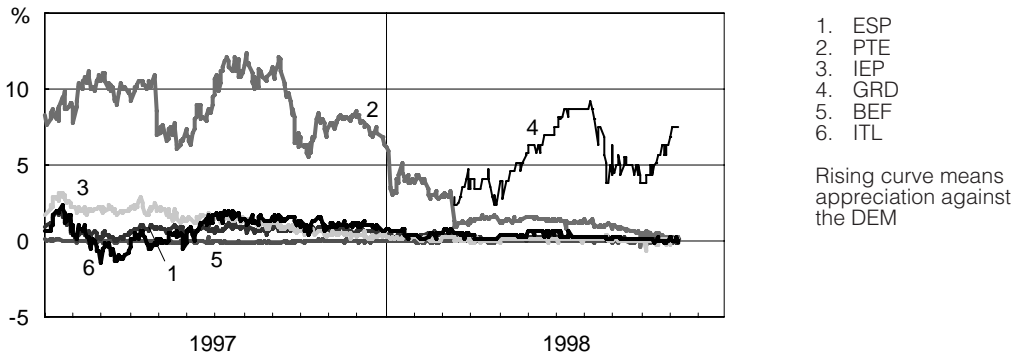
11. Differential between German and selected EU-countries' 10-year interest rates



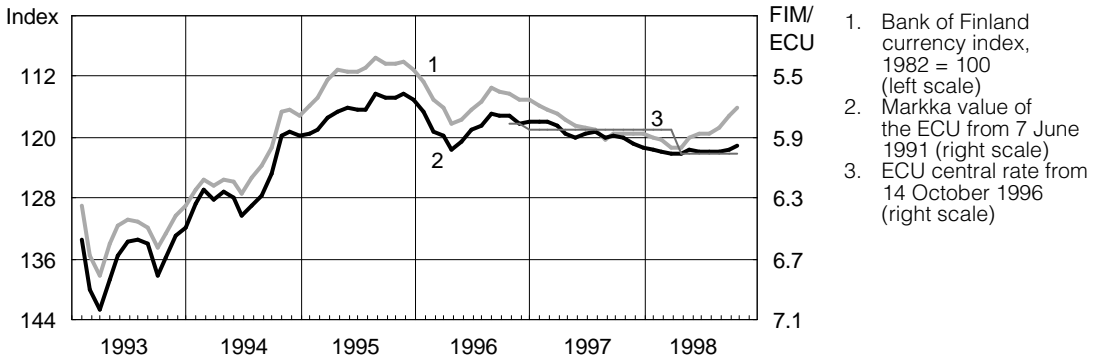
12. ERM exchange rates: deviation from DEM central parity



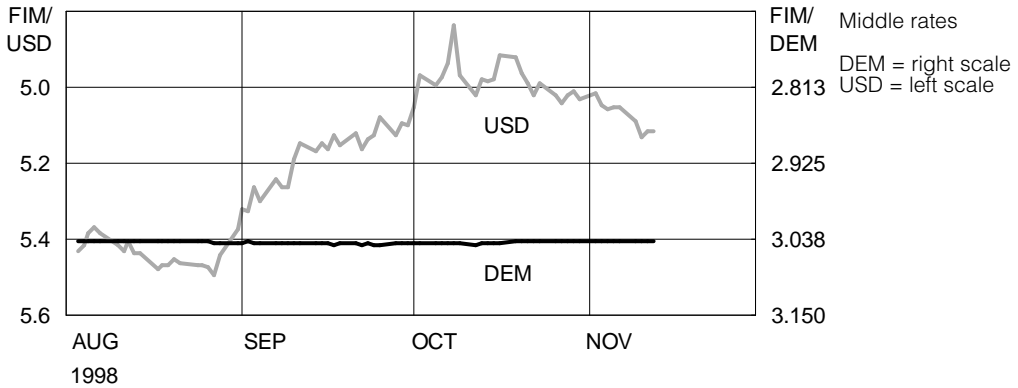
13. ERM exchange rates: deviation from DEM central parity



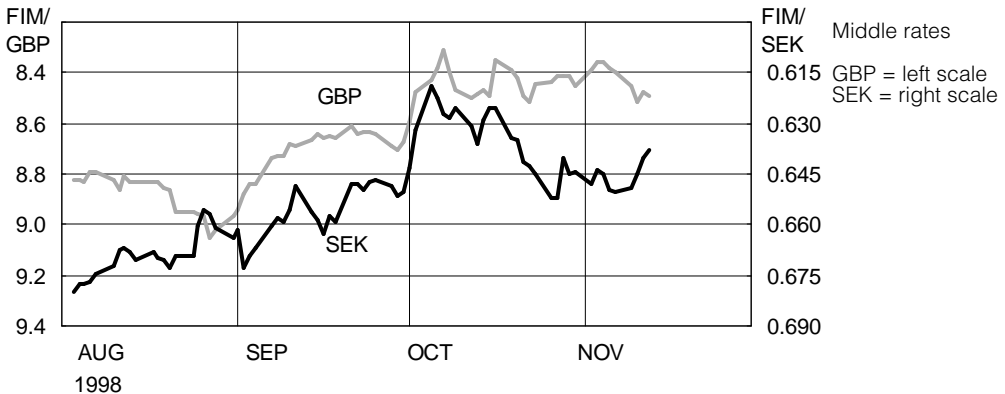
14. Bank of Finland currency index and markka value of the ECU



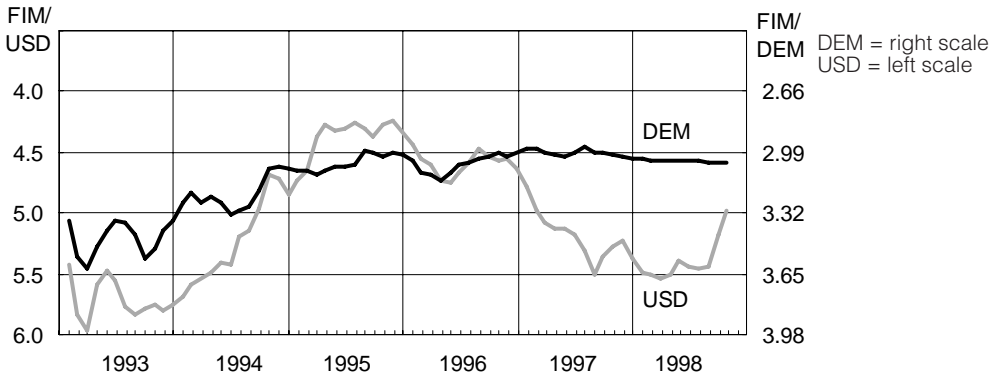
15. Daily spot rates for the markka against the Deutschemark and US dollar



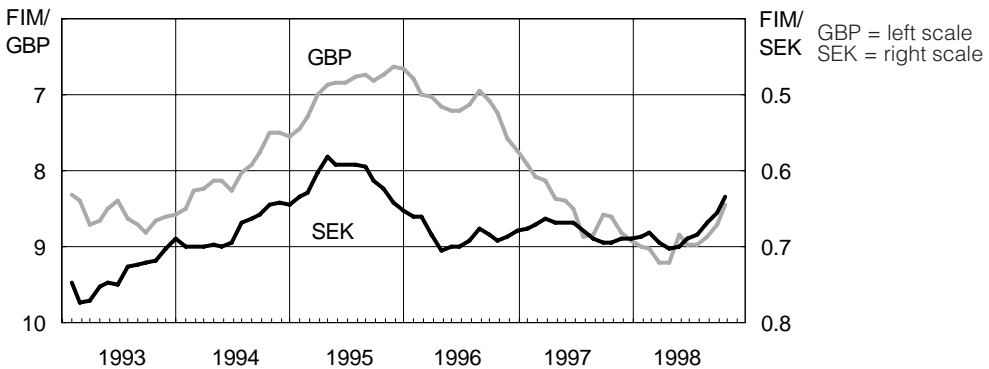
16. Daily spot rates for the markka against the pound sterling and Swedish krona



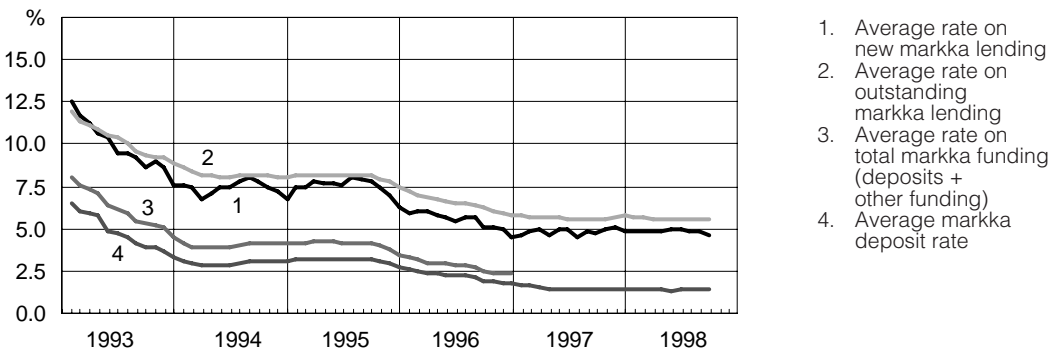
17. Monthly spot rates for the markka against the Deutschemark and US dollar



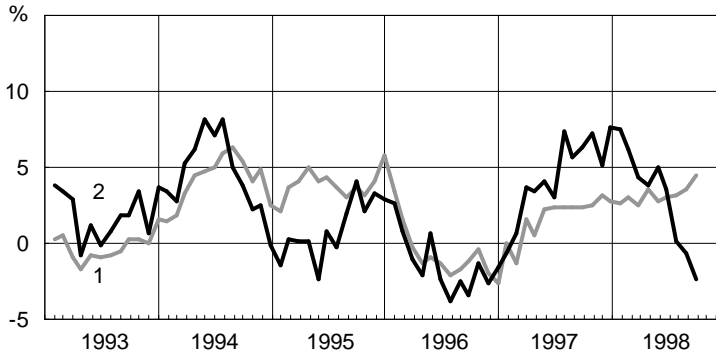
18. Monthly spot rates for the markka against the pound sterling and Swedish krona



19. Banks' markka lending rates and markka funding rates



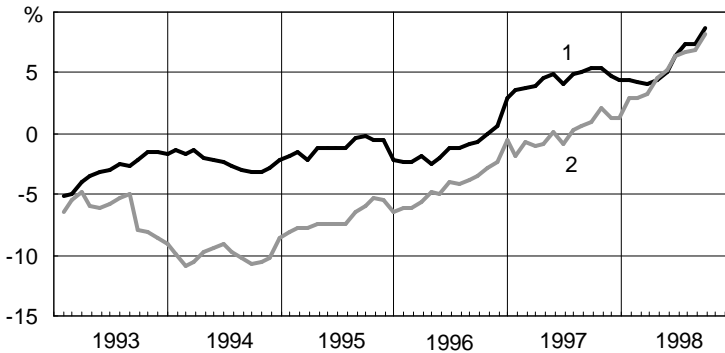
20. Bank funding from the public



1. Markka deposits
2. Total funding

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

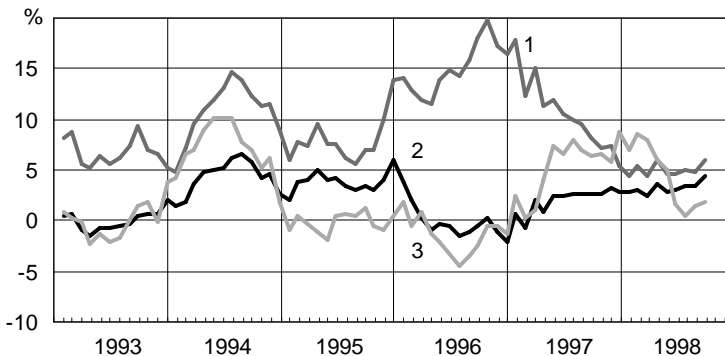
21. Bank lending to the public



1. Markka lending
2. Total lending

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

22. Money supply

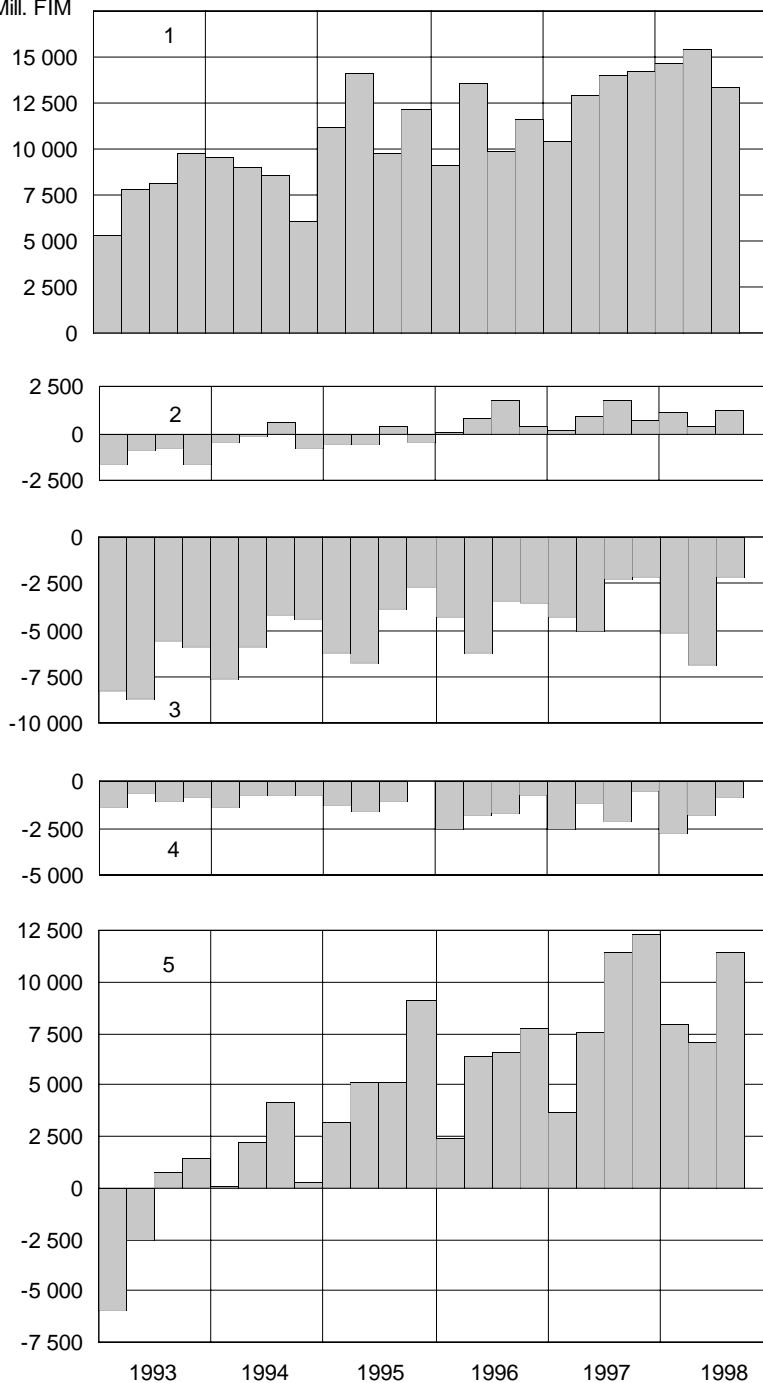


1. Narrow money (M1)
2. Broad money (M2)
3. M2 + bank CDs held by the public (M3)

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

23. Current account

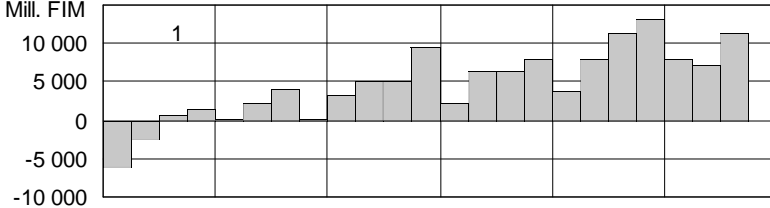
Mill. FIM



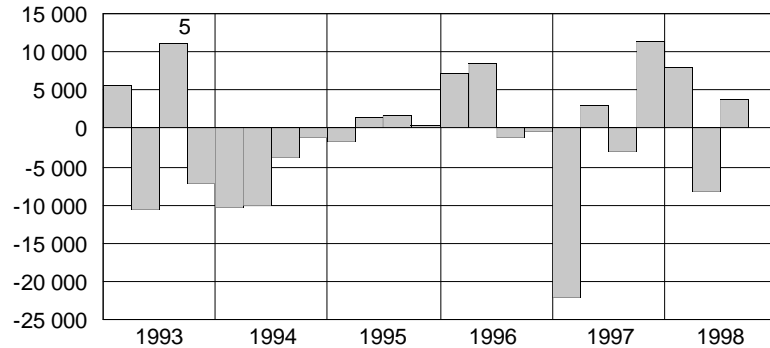
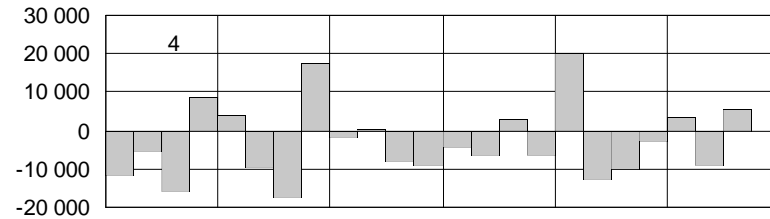
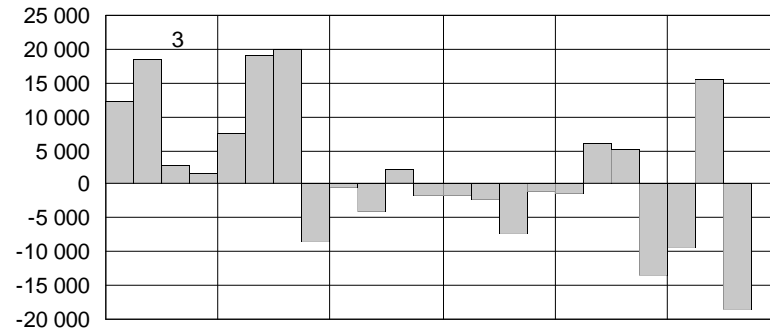
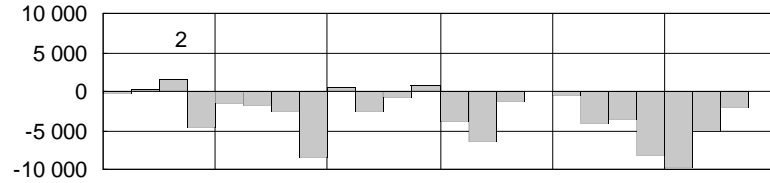
1. Trade account
2. Services account
3. Investment income account
4. Unrequited transfers account and other items, net
5. Current account

24. Balance of payments

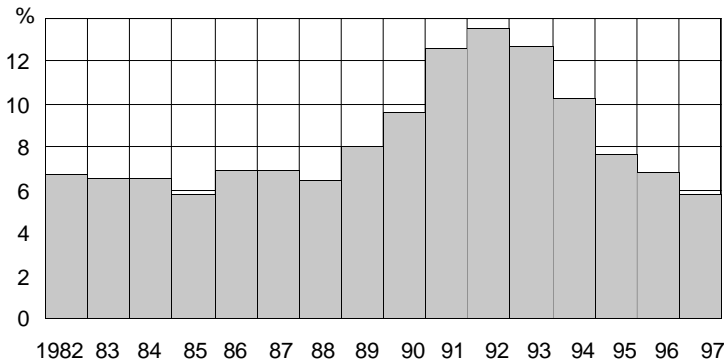
Mill. FIM



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

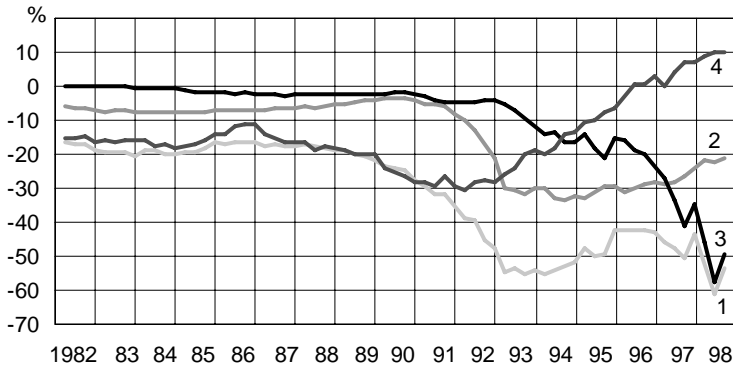


25. Net interest and dividend expenditure



As per cent of current account receipts

26. Finland's net international investment position

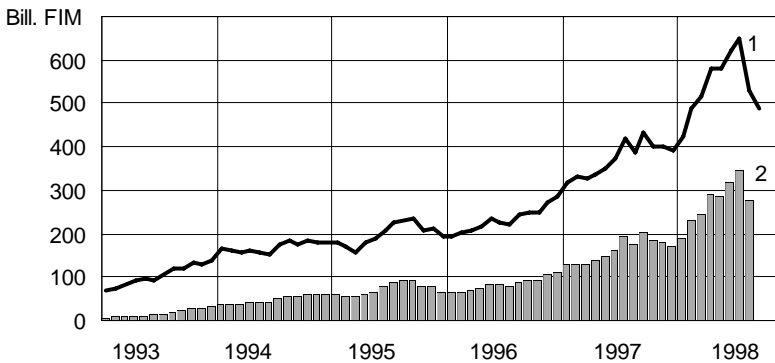


As a per cent of GDP

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

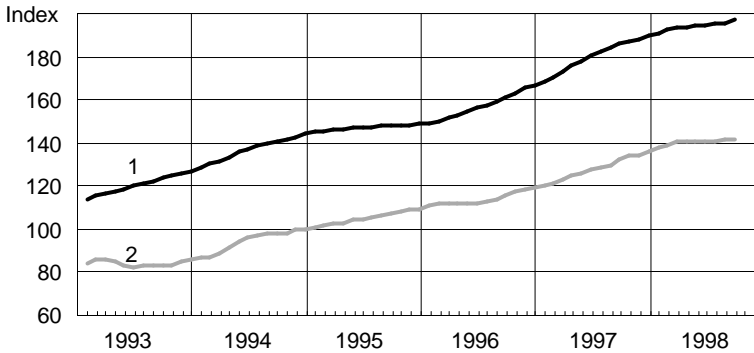
Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

27. Share market



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

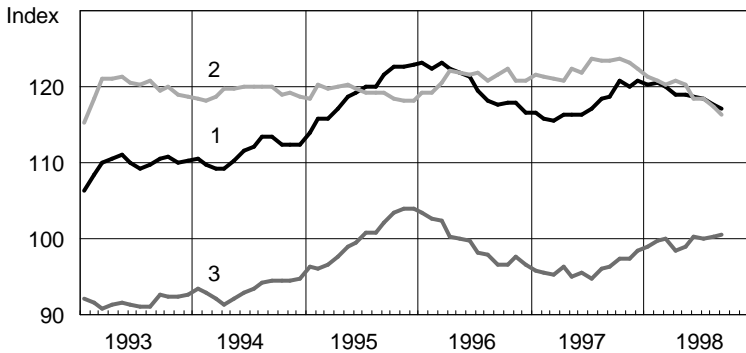
28. Foreign trade



1. Exports of goods
2. Imports of goods

Volume index, 1990 = 100, trend

29. Foreign trade: prices and terms of trade



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

Index 1990 = 100

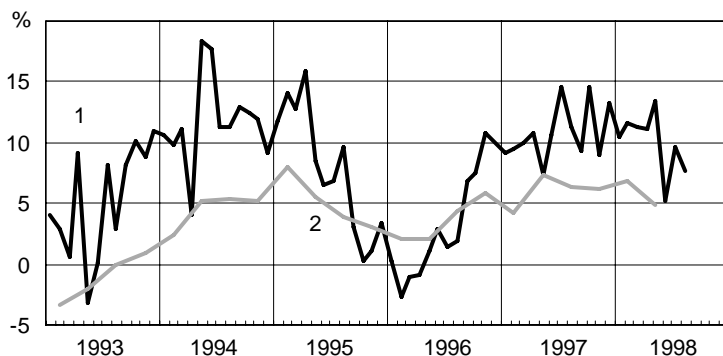
30. Finland's export performance



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

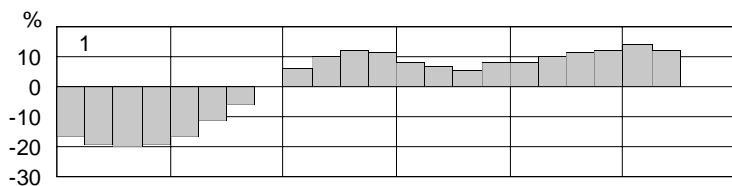
1980 = 100

31. Production

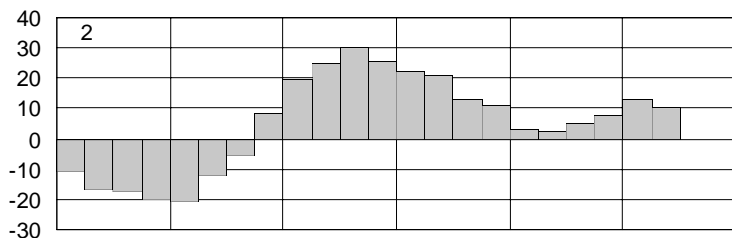


1. Industrial production, change in volume from the corresponding month of the previous year, per cent
2. GDP, change in volume from the corresponding quarter of the previous year, per cent

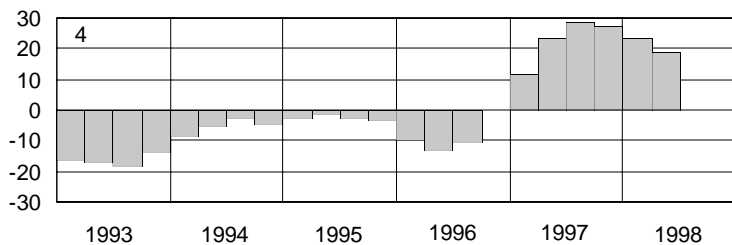
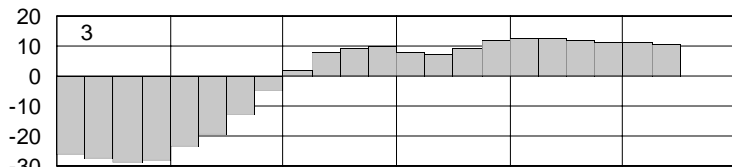
32. Fixed investment



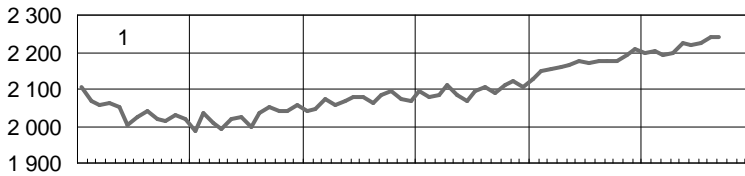
1. Total fixed investment
2. Investment in machinery and equipment
3. Building investment, excl. residential buildings
4. Residential buildings



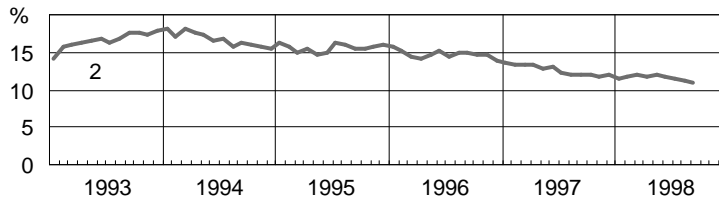
Four-quarter volume change calculated from four-quarter moving totals and plotted at the last quarter, per cent



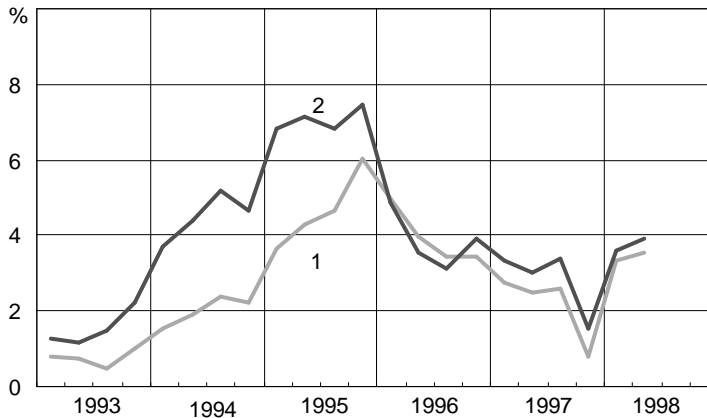
33. Employment and the unemployment rate



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

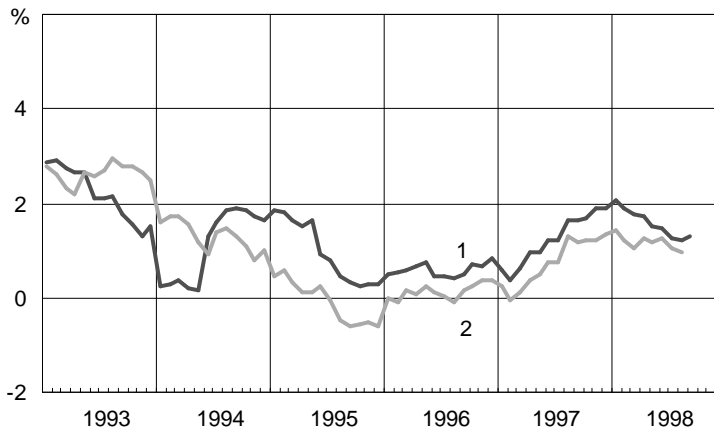


34. Prices and wages



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

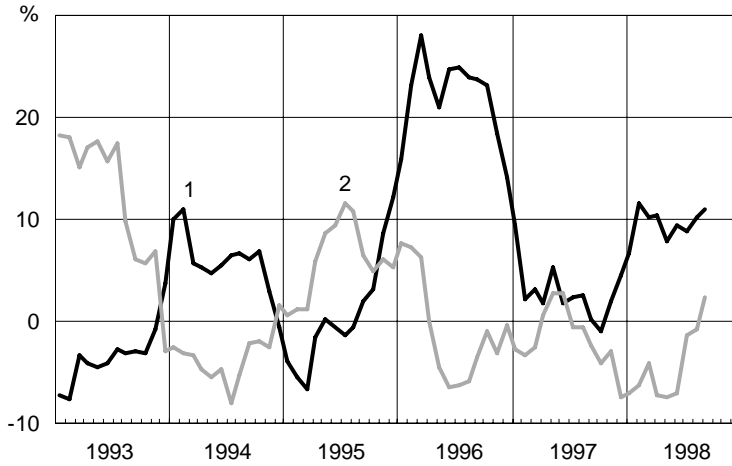
Change from the corresponding quarter of the previous year, per cent



1. Consumer price index
2. Indicator of underlying inflation

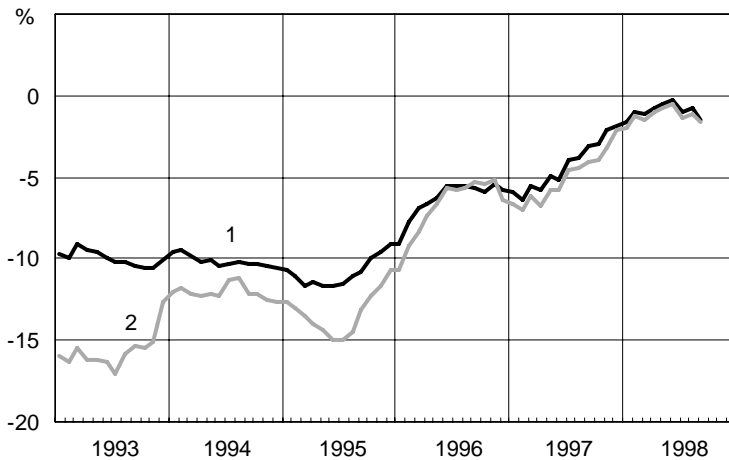
Change from the corresponding month of the previous year, per cent

35. Central government finances



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

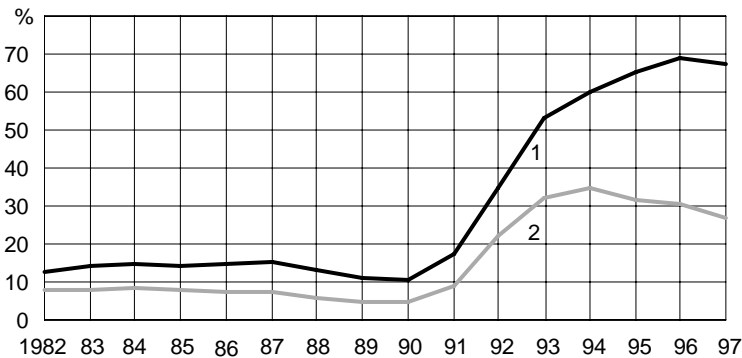
12-month changes calculated from 12-month moving totals and plotted at the last month, per cent



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

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

36. Central government debt



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

As a percentage of GDP

BANK OF FINLAND

24 September 1998

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JOHANNES KOSKINEN, Vice Chairman
OLAVI ALA-NISSILÄ

KIMMO SASI
TUULIKKI HÄMÄLÄINEN
MAURI PEKKARINEN

VIRPA PUJSTO
MARTTI KORHONEN
ANNELI JÄÄTTEENMÄKI

ANTON MÄKELÄ, Secretary to the Parliamentary Supervisory Council

THE BOARD

MATTI VANHALA, Governor
ESKO OLLILA, Deputy Governor

MATTI LOUEKOSKI
MATTI KORHONEN

HEIKKI T. HÄMÄLÄINEN, Secretary to the Board

DIRECTOR

PENTTI KOIVIKKO

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Market Operations MARKUS FOGELHOLM

Administration ESA OJANEN

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

Communications ANTTI JUUSELA

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

Economics ANTTI SUVANTO

Payment Instruments URPO LEVO

Financial Markets HEIKKI KOSKENKYLÄ,
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Institute for Economies in Transition PEKKA SUTELA

BRANCH OFFICES

Kuopio, Oulu, Tampere, Turku

FINANCIAL SUPERVISION AUTHORITY

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

KAARLO JÄNNÄRI, Director General
