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Inflation, monetary policy and economic performance

Monetary policy in 1998

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Inflation, monetary policy and economic performance

The Bank of Finland raised its tender rate by 0.25 percentage point to 3.25 per cent in mid-September. The interest rate decision derived from hightened concern over the possibility of an excessive acceleration in inflation and was based on markka depreciation as measured by the trade-weighted currency index, a rise in asset prices, and gradually spreading production bottlenecks due to increasing demand. By tightening its monetary policy, the central bank sought to prevent further risk of a pickup in inflation and to keep inflation expectations subdued. Maintenance of price stability is the best way to promote sustainable economic growth and an improving employment situation. Joining Stage Three of the Economic and Monetary Union with a rate of inflation higher than that of the other participants, and accelerating, would be extremely detrimental in terms of the employment situation.

In early October the Bundesbank also tightened its monetary policy as a result of concern over a possible acceleration of inflation owing to a pickup in economic growth. Interest rates were adjusted in the other core ERM countries – Belgium, the Netherlands, Austria, France and Denmark – in line with German rates. Of these countries, the Netherlands and Denmark (like Finland) are currently ahead of the others in terms of the business cycle. Although the Bank of Finland did not change its steering rate in response to the Bundesbank's action, Finnish three- to twelve-month money market interest rates did rise in the wake of the European interest rates, in anticipation of a further tightening of monetary policy in Finland.

Judging by current forward rates, the markets expect money market interest rates in the ERM countries to converge during 1998, with rates rising further in the core ERM countries and falling in ERM countries whose interest rates are presently higher than the average. In the ERM countries, the overall level of forward rates effective at end-1998 is now slightly lower than in October.

Internationally, inflation expectations seem to have abated since summer. Disturbances in international foreign exchange and stock markets and economic problems in Asia have made market participants more cautious. Cyclical asymmetries across the world's economic regions also have a restraining impact on commodity price developments, which in turn is moderating the outlook for inflation and interest rates in Europe.

Wage negotiations conducted this autumn resulted in an agreement whereby contractual wages will rise by 2 per cent annually on average during the agreement period, ie till the start of 2000. At the same time, wage-earners' taxation will be reduced by an amount corresponding to 2 per cent of aggregate wages in 1999. The rate of rise in contractual wages is consistent with the inflation target. There is however some risk that strong demand could lead to an increase in wage drift compared to the very moderate development over the previous agreement period. As it will be increasingly difficult in the future to pass on increases in domestic costs to domestic prices, an acceleration of wage inflation would portend a gloomier outlook for employment.

The interest rate rise, the relatively moderate wage increases agreed, and the abating of consumers' inflation expectations have reduced the risk of inflation since early autumn. Nonetheless, it appears likely that domestic inflation will soon climb above the level in the other EU countries. The risk of demand inflation in 1998 and 1999 has not been eliminated.

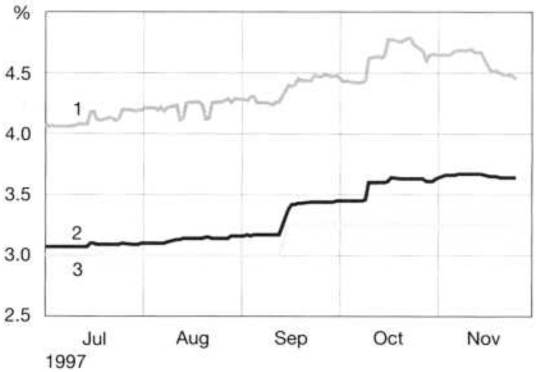
The financial position of the central government has continued to improve. The contraction of the central government deficit will however remain rather modest in 1997, and the deficit is still large considering the exceptionally rapid rate of economic growth. The fiscal tightening projected for 1998 is likely to be less intensive than planned because of the terms of the new pay settlement. Therefore the process of putting central government finances on a sustainable basis will take many years yet. It is also necessary for this process that economic developments both in Finland and abroad continue smooth and shock-free. As private demand is continuing to grow vigorously, it would seem appropriate to adopt a tighter fiscal policy stance.

Tender rate hike had the expected impact

Before the Bank of Finland's tender rate hike in September, the markets had generally expected a tightening of monetary policy. HELIBOR rates and

Chart 1.

Finnish short-term interest rates



1. Expected Jun 1998 3-month interest rate (based on forward rates)
2. 3-month HELIBOR
3. Bank of Finland's tender rate

forward rates rose both after the Bank of Finland's tender rate hike and later after the Bundesbank's rate hike. During the autumn months, the three-month HELIBOR has risen by a half percentage point and the one-year HELIBOR by a full percentage point (Chart 1). In addition, Finnish banks have raised their prime rates.

The tender rate hike did not affect long-term interest rates or interest rate differentials vs Germany. The ten-year interest rate differential vs Germany has stabilized below 0.3 percentage point. The tender rate hike and the rise in HELIBOR rates seem to have dampened consumers' inflation expectations. According to a survey of consumer confidence carried out by Statistics Finland, inflation expectations clearly turned down in September.

Despite the modest tightening of monetary policy in September, the Bank of Finland's administered interest rates are still among the lowest in the EU, although the growth rate of the Finnish economy is the second highest among EU countries, after Ireland. Thus the Bank of Finland will continue to closely monitor inflation expectations and other indicators of accelerating inflation and to consider further interest rate hikes if there is clear evidence of an impending increase in inflation.

Economic strengthening will lead to tighter monetary policy also elsewhere in Europe

The Bundesbank cited the outlook for domestic inflation as the primary reason for its interest rate hike in October. The German monetary policy stance has long been relatively accommodating and thus supportive of economic growth. The rate of growth of the money supply has slightly exceeded targeted growth. Depreciation of the Deutschemark against the US dollar has also contributed to the easing of monetary conditions. After the interest rate rise and subsequent marginal strengthening of the Deutschemark, monetary policy in Germany has assumed a more neutral stance as the economy has become more buoyant.

The central banks of Belgium, the Netherlands, Austria, France and Denmark followed the German interest rate movement, raising their steering rates on the same day. These countries have traditionally gauged their monetary policies in terms of exchange rate stability and so have generally tracked the Bundesbank's interest rate measures. Apart from Germany, economic growth is also starting to gather momentum in several other European countries, which may generate inflationary pressures. So far, monetary policy tightening has been most intense in countries that have moved ahead of the European average in terms of the business cycle, ie the United Kingdom, the Netherlands and Finland. On the other hand, the economic problems confronting Asia may have a dampening effect on inflation pressures also in Europe.

The start of EMU is reflected in interest rate expectations

Interest rate expectations and market behaviour are starting to more clearly reflect the approach of Stage Three of EMU. In all potential EMU countries, long-term interest rates have moved close to the German level. At the same time, there has been a convergence in the inflation outlook. If the inflation outlook for the euro area continues favourable even after the start of Stage Three and if confidence in euro-area economies remains strong, one would not expect to see upward pressure on long-term rates.

Interest rate convergence in the EMU countries – forecasted for mid-1998 – is judged by the markets to exert modest upward pressure on interest rates in the core ERM countries and downward pressure on rates in the southern European countries (Chart 2)[1].

However, the interest rate level decided on by the European System of Central Banks at the start of 1999 will depend crucially on the degree of convergence of participating countries' economies,

[1] The impact of EMU on monetary policy is dealt with in more detail in an article by Matti Vanhala in this issue of the Bulletin.

particularly in terms of inflation, and on euro-area inflation prospects for 1999 and 2000. Therefore interest rates cannot be unconditionally expected to converge to the level now foreseen by the markets. The markets' view itself points in the same direction as the economic fundamentals. Accelerating growth and the need to curb inflation expectations argue for monetary tightening in some of the participating countries. The interest rate level will also depend on the gauging of fiscal policies in Europe.

ERM exchange rates remained stable

As with interest rate movements, exchange rate movements in ERM countries have also been heavily infuenced by the approach of Stage Three of EMU. Exchange rates in ERM countries have fluctuated closely around their central rates. The Finnish markka's exchange rate against the Deutschemark has also remained very stable even though the Bank of Finland has not intervened at all in the foreign exchange market since the summer. Among potential EMU participants' currencies, the Irish punt is the only one that has moved further away from its central rate and made use of the wide fluctuation margin.

The US dollar has continued to gyrate. After having appreciated against the Deutschemark for almost two years, the dollar reversed course in August, after which it has depreciated by more than 5 per cent. The trend reversal was due primarily to changes in interest rate expectations. Expectations of a rise in US interest rates subsided following a correction in share prices and currency turbulence in Asia. On the other hand, the Bundesbank's interest rate hike and confirmation of an economic turnaround have strengthened the Deutschemark and other ERM currencies against the dollar.

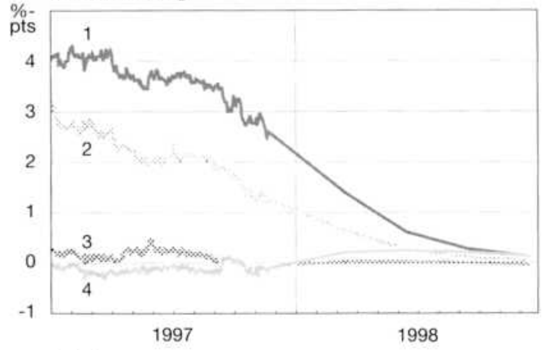
The dollar has depreciated as much against the Finnish markka as against other ERM currencies, ie by a good 5 per cent. In terms of the trade-weighted currency index, the markka has strengthened by about 2 per cent since the start of September. Nonetheless, according to this measure of the effective exchange rate, the markka is still about 4 per cent weaker than it was on average in 1996.

Japan's economic difficulties were reflected in the yen's exchange rate, which depreciated against the dollar. It is feared that the problems being experienced in Southeast Asia will have an even greater detrimental effect on economic performance in Japan than in the western industrial countries. Japanese investment in Southeast Asia is considerable and, moreover, the competitiveness of its products will suffer from the steep depreciation of Southeast Asian currencies.

If the exchange rate disturbances and fall in equity prices that started in Asia remain short-lived, they are not likely to have a significant impact on economic growth. In the United States, the fallout from the crisis is likely be a slowing of economic growth, which has until now continued at a robust pace. This will reduce local inflation pressures and expectations of a rise in interest rates. The international disturbances that have occurred so far are not expected to have significant effects on economic prospects in Europe. In the near future, exchange rate movements in Europe will be affected largely by decisions concerning EMU.

Chart 2.

3-month interest rate differentials vs Germany



1. Italy
2. Spain
3. France
4. Finland

Expected rates based on interest rate futures and forward rate agreements.

Low interest rates are reviving lending activity

In September banks' lending and deposit rates did not yet fully reflect the Bank of Finland's tender rate hike. In fact, the average interest rate on new markka loans declined slightly owing to a fall in interest rates on new corporate loans. By contrast, the average interest rate on new loans to households rose slightly. The rise in HELIBOR rates and banks' prime rates in October – November will gradually be reflected in the statistics. In the last few weeks, several banks have announced increases in their prime rates.

Low market interest rates have stimulated credit demand. The rate of growth of deposit banks' markka lending has accelerated slightly and there has been a distinct increase in total outstanding markka lending. For the first time in 1997, the stock of lending increased in August. The increase continued in September, on the year-earlier period. By

Chart 3.

Consumer prices

1. Consumer price index, 1990 = 100
2. Indicator of underlying inflation, 1990 = 100
3. EU harmonized consumer price index, 1994 = 100

contrast, deposit banks' foreign currency-denominated lending has continued to decrease. Growth in the lending stock continues to derive from an increase in lending to households and a pickup in the demand for housing loans in particular. In the autumn the demand for housing loans has revived to some extent and the stock of housing loans is also on the increase. By contrast, outstanding corporate lending has decreased in the last few months.

Central government debt servicing drew down foreign reserve assets

The Bank of Finland's foreign reserve assets remained quite stable in the autumn. However, in late November they declined by about FIM 15 billion owing to the central government's repayment of external debt. On the other hand, the maturing of the Bank of Finland's forward exchange contracts was reflected in an increase in the Bank's convertible reserves in early autumn.

Despite the abatement of inflation expectations, inflation is accelerating

Consumer price inflation accelerated in Finland in the autumn. Import prices rose, mainly as a result of markka depreciation in terms of the trade-weighted currency index. Rises in housing prices and rents have also been reflected in the CPI. The annual rate of consumer price inflation accelerated to 1.7 per cent in October (Chart 3). The annualized rate of inflation based on monthly changes in consumer prices has risen above 2 per cent in the latter part of 1997. Of the subgroups in the CPI, food prices and housing costs increased the most. Inflation as measured by the indicator of underlying inflation follows, with a lag, movements in consumer prices. In September underlying inflation was 1.2 per cent.

The rate of increase in inflation in early autumn has been in line with forecasts. The annual inflation rate is expected to accelerate further over the next few months so that the twelve-month rate of change in consumer prices is likely to exceed the 2 per cent target in December. Consumer price inflation and underlying inflation are both forecasted to substantially exceed 2 per cent at the start of 1998; in respect of the former, this derives partly from a rise in fuel taxes.

Although the risk of an excessive acceleration of inflation will still obtain in 1998, certain factors are having a salutary effect. Since August, the dollar has depreciated against the markka and as a result the markka has appreciated in terms of the trade-weighted currency index. Short-term interest rates have risen, which partly explains the abatement of inflation expectations. No significant increase in wage drift has been detected in 1997. The fall in share prices and disturbances in foreign exchange markets have weakened prospects for economic growth, especially in Asia. A less favourable economic outlook and improved price competitiveness in Asia are reducing inflation pressures in the United States and Europe.

Inflation rates in EU countries have converged. In September, the harmonized consumer price indices of the major ERM countries recorded rates of increase between 1.1 and 2.6 per cent. In the last few months, however, the rate of inflation has accelerated especially in countries such as the Netherlands, Finland and Denmark, where economic growth has exceeded that in the bigger ERM countries. In the latter countries, inflation has slowed during the last few months; this may have been caused inter alia by the depreciation of the dollar. In Germany recent pay settlements have also been moderate considering the country's economic prospects. In Finland the harmonized consumer price index, which excludes housing-related capital costs and prices of certain public services, has long been rising at a slower rate than the European average. However, the rate is now rapidly approaching the European average and is likely to overtake it by the end of 1997.

In the last six months, world commodity prices have risen at a relatively moderate rate compared to the growth of manufacturing production in the OECD countries. In July–October prices of raw materials used in manufacturing rose at an annual rate of slightly less than 2 per cent. The price of crude

Table. Consumer prices in September 1997

12-month percentage change in harmonized CPI

Ireland	0.6	Spain	1.9
Austria	1.1	Denmark	2.2
France	1.5	Netherlands	2.6
Portugal	1.5	Sweden	2.7
Belgium	1.6	Greece	4.9
Germany	1.6	EU15	1.8
Italy	1.6		
Finland	1.6	Iceland	1.9
Luxembourg	1.7	Norway	2.1
United Kingdom	1.8	EEA	1.8

oil has however risen temporarily owing to the events in Iraq. Over the next few months, increases in markka-equivalent import prices will be curbed by the recent weakening of the dollar. Export prices started to rise in summer owing to increases in the prices of forest industry products. Despite this, the upward trend in stumpage prices levelled off at the same time, once prices had reached a level considered satisfactory by the markets.

Producer and wholesale prices in manufacturing rose at a slightly faster pace than consumer prices. Wholesale prices of goods used in Finland rose by more than 2 per cent from October 1996, with wholesale prices of domestically produced goods rising by slightly more and imported goods by less. Prices of industrial goods manufactured in Finland, ie producer prices in manufacturing, and prices of consumer goods manufactured for the domestic market recorded somewhat larger increases than did wholesale prices.

Asset prices have risen sharply. The rise in prices of existing dwellings has been a necessary catalyst for new construction. However, asset prices are only indirectly connected to movements in the CPI. The primary impact comes indirectly via demand and inflation expectations.

The summer-autumn surge in asset prices seems to have slowed, which in turn appears to have had an impact on households' inflation expectations. In the third quarter of 1997, prices of existing dwellings throughout the country only rose by less than 2 per cent on average compared with the previous quarter, and the annual rate of increase slowed to 17 per cent. The uptrend in housing prices in the Helsinki metropolitan area is also levelling off. Real housing prices have already reached their level of the mid-1980s. However, housing prices continue on an uptrend sustained by excess demand for housing owing to still-sluggish commercial production of owner-occupied housing.

As construction activity started to recover, contract tender prices rose from their 1996 trough almost as fast as housing prices. It does however seem that the rise in tender prices is starting to level off, judging by the slowdown in September. Cuts in government interest subsidies for construction of rental housing are also likely to curb the rise in tender prices. Construction costs have risen at a markedly slower pace than tender prices. The building cost index was up by only 3 per cent in September on the year-earlier level, on a par with the increases in building materials prices and construction labour costs.

The GDP gap (between potential and actual output) is expected to close in 1998. This view is supported by the latest (October) survey of business confidence conducted by the Confederation of Finnish Industry and Employers. According to the survey, the capacity utilization rate in manufacturing has reached its previous (1995) peak level. The number of firms suffering from capacity constraints was however smaller than in 1995.

Consumers' inflation expectations have subsided during the autumn. According to the October survey of consumer confidence carried out by Statistics Finland, consumers' inflation expectations for the next twelve-month period declined to 1.8 per cent, compared to more than 2 per cent recorded by the August and September surveys. The tightening of monetary policy may have contributed to the change.

In 1997 labour-cost-based inflation pressures have remained moderate as agreed wage increases have been relatively small and annual wage drift has amounted to only about 1 per cent. In addition, productivity has continued to grow at a rapid pace. In the third quarter of 1997, the rate of increase in the level of wage and salary earnings slowed to 2.5 per cent compared to 4.5 per cent at the start of 1996.

This autumn's wage negotiations resulted in a two-year agreement by which the average increase in contractual wages will be 2.6 per cent in 1998 and 1.7 per cent in 1999. The increase for 1998 consists of a 1.7 per cent across-the-board increase, a 0.5 per cent item for sector-specific adjustments, and a 0.4 per cent increase aimed at women and low-wage sectors. In addition, the agreement includes an index clause and a clause on monitoring of wage developments in 1998 and 1999. If wage drift remains as moderate as it has been in the last few years, ie at about 1 per cent, the average annual rise in wage level would be 3 per cent over the term of the agreement. In connection with the wage negotiations, the government agreed on reductions in taxes on wage income, the main part of which will be implemented in 1999. As a result of the tax reductions, there will be a FIM 5 billion cumulative increase in wage earners' purchasing power in 1998–1999. The increase will correspond to 2 per cent of estimated total wages for 1999.

Robust growth in output continues

In the summer and autumn months, total output has continued to grow, at an even slightly higher rate than expected. Domestic demand is being sustained by the recovery in housing construction and rapid growth of private consumption. According to the monthly GDP indicator, the annual growth rate

Chart 4.

Total output

1. Monthly GDP indicator
2. GDP

for total output exceeded 6 per cent in July – August. Consequently, the growth rate for total output will be at least 5 per cent in the third quarter of 1997 (Chart 4). Output growth is estimated to continue nearly as robust for the remainder of 1997.

Manufacturing output has also continued its rapid growth: in August the increase was 8 per cent on the year-earlier period. In the main export sectors, ie the forest and electronics industries, production grew by almost one-fifth. The growth rate figures for the forest industry will be restrained by a rise in the year-earlier comparison figure at the end of 1996. The rapid growth in construction activity boosted output in the wood products manufacturing sector.

In October manufacturers' confidence in the performance of the economy remained at almost the same level it was in August–September. Manufacturers' confidence, which is measured by an index of manufacturers' production expectations, is expressed as a net balance (characteristic value), ie the difference between the percentage share of interviewees with a positive outlook regarding production expectations and volumes of orders and stocks and the percentage share of interviewees with a negative outlook. In October the net balance was 13, which was considerably smaller than the all-time high of 29 recorded in 1994. The index has been calculated since 1993.

According to the manufacturers' confidence index, economic conditions in Finland continue to be clearly better than in the other EU countries. Surveys of consumer confidence yield similar results, although in Ireland and the Netherlands, consumer optimism has already risen slightly above the Finnish level.

The official rate of unemployment according to the labour force survey conducted by Statistics Finland has decreased in the last few months. In October the unemployment rate stood at 13.1 per cent. The number of unemployed was 324 000, ie 45 000 less than a year ago. Owing to changes in the compilation of employment statistics, comparisons between 1996 and 1997 employment and unemployment figures have become more complicated. Statistics Finland has harmonized the definition of unemployment more in line with common EU principles on the compilation of statistics. The number of persons classified as unemployed has declined as a result.

Current account developments favourable – public finances moving into balance

Current account developments have continued favourable during the autumn. The volume of exports in particular has increased rapidly. By contrast, imports have been sluggish compared to the growth in domestic demand, as the growth has focused on sectors such as construction activity, in which imported inputs play a relatively small role. Developments in the services account have also been favourable despite the increase in domestic demand and travel abroad. The deficit on the investment income account, due mainly to interest payments abroad, is narrowing as a result of the meltdown of foreign debt. The twelve-month cumulative surplus on the current account increased to FIM 29 billion in September.

The central government deficit has narrowed significantly owing to a rise in revenue, partly due to temporary factors, and a decrease in expenditure. For January–September, the central government's net borrowing requirement was FIM 14 billion, ie almost half of the year-earlier amount. The central government's receipts of taxes and tax-like revenues increased by 8 per cent compared to year-earlier levels. Revenues were buoyed by corporate tax receipts in particular, whereas the growth of income tax receipts was sluggish owing to reduced taxes on wages and salaries and a modest increase in the level of wage and salary earnings.

The reduction in taxes on wage income agreed in the wage negotiations will be implemented mainly in 1999. In 1998 and 1999 income taxes will be reduced by a total of FIM 5 billion. The resulting burden on the financial position of the public sector will be smaller, as an inflation adjustment included in connection with the tax reductions had already been taken into account in the Government's budget proposal. Furthermore, there may be increases in other taxes and fees later on. One factor that facilitated the wage agreement process was the 'buffer fund agreement' concluded between the labour market organizations. This agreement contains principles by which changes in contributions to the employment pension and unemployment insurance schemes will be levelled out over the course of the business cycle.

According to the Government's convergence programme, central government finances, while consolidating rapidly, will not be in balance until the the start of the next millennium. Even more front-loaded consolidation of public finances would be propitious in the present economic boom. A tighter fiscal policy stance in 1998 and 1999 would also prevent potential inflationary pressures. Central government finances also require manoeuvring leeway in order to prepare for future cyclical disturbances and population aging. Expenditure growth should be curbed to allow for a gradual lowering of taxes on wage and salary incomes. This is a long-run necessity because of Finland's nagging unemployment problem.

26 November 1997

- Key words: inflation, monetary policy, economic performance

Monetary policy in 1998[1]

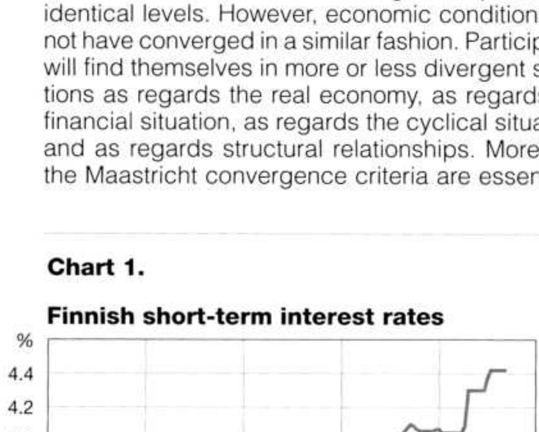
by **Matti Vanhala,**
Member of the Board
Bank of Finland

Over the next year or so, the EMU process will be the dominating force in the European money and foreign exchange markets. The time remaining before the start of Stage Three is so short that we are not going to see any surprises in European economies' fundamentals unless external impulses interfere in a major way. By contrast, while the fundamentals are known, it is not possible to forecast the degree of stability that will obtain in the money and foreign exchange markets. At times markets react to minor political twists and turns; at times they completely ignore them. It remains to be seen in what mood the markets will accompany the EMU project during the run-up to 1999. Fortunately, from the viewpoint of monetary policy it is not essential to anticipate all the vibes of the market.

By January 1999 EMU participants' short-term interest rates will have converged to practically identical levels. However, economic conditions will not have converged in a similar fashion. Participants will find themselves in more or less divergent situations as regards the real economy, as regards the financial situation, as regards the cyclical situation, and as regards structural relationships. Moreover, the Maastricht convergence criteria are essentially a set of monetary yardsticks that focus mainly on performance preceding Stage Three. But monetary union will not bring an end to business fluctuations nor to politics. Therefore, even after 1998, EMU economies will continue to converge and diverge cyclically, despite the single monetary policy. The launch of monetary union will not freeze the relative positions of participants. Time will tell whether the inevitable country differences prove to be a significant problem.

Chart 1.

Finnish short-term interest rates



1. 12-month HELIBOR
2. 3-month HELIBOR
3. BOF tender rate

The European Central Bank's policies will not – and should not – be able to meet the country-specific needs of participants. A single monetary policy cannot be country-specific. The same would apply to exchange rate policy in the union – should there ever be such a policy. These are facts of life in a monetary union. Nevertheless, it would not be surprising if among the public there were increasing concern over whether the single monetary policy will fit the Finnish economic situation.

Presently, the Bank of Finland's monetary policy tender rate stands at 3.25 per cent (Chart 1) and Finnish money market rates have long been among the lowest in the EU. From the current term structure of interest rates, one can surmise that the markets expect participants' three-month interest rates to converge to 4.5–5 per cent (Chart 2). Such a term-structure-based 'forecast' might overestimate the outcome, and the number will certainly change over time, but at least it indicates the likely direction of any interest rate movements (Chart 3).

The question is whether the interest rate level at the start of monetary union will be appropriate from the Finnish point of view. Will monetary union in fact give us higher interest rates rather than the presumed (and hoped-for) low rates? These questions will be posed, and have been posed, in other countries as well.

It will take years before we get an answer. A monetary union is not a cyclical project, conditional upon the emergence of a favourable cyclical situation. We will never see the ideal moment, when all EU economies are in sync and in need of exactly the same monetary stance. But of course the changeover to monetary union will coincide with

[1] Translation of a speech presented at the Finance '98 Seminar in Helsinki on 30 October 1997.

some phase of the cycle, and the cyclical situation will have a bearing on what rate levels are appropriate. Also in an EMU environment, interest rates will fluctuate.

Current (October) EU forecasts for 1998 and 1999 point to higher GDP and demand growth. A pickup in growth is typically accompanied by some rise in interest rates. The adjustment of interest rates in response to cyclical conditions is part of a policy that aims to ensure price stability and hence lower average interest rates in the long run. Thus, market expectations of somewhat higher rates are understandable.

The cyclical situation in Finland now differs from that of the major EU countries. It also appears that the Finnish economy is now behaving to differently from its postwar pattern: inflation seems to remain low in spite of continued rapid growth. This may be due mainly to factors other than monetary policy. But whatever the reasons, developments have allowed a lowering of the tender rate and other short-term rates to levels that are among the lowest in Europe.

The present level of the Bank of Finland's tender rate, 3.25 per cent, was decided after a thorough evaluation of all the evidence and the risks concerning inflation pressures. The fundamental and overriding objective of monetary policy was the price stability objective, as set and defined in February 1993.

Soon after the Bank raised its tender rate, the Bundesbank raised its steering rate, on similar grounds, ie in order to safeguard domestic balance in the German economy.

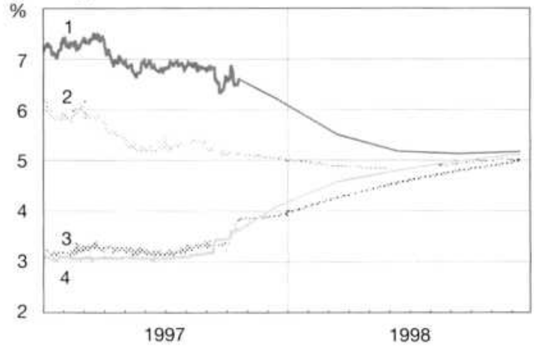
It would not have been natural nor even possible from the Bank of Finland's viewpoint to synchronize these interest rate decisions. To be sure, there are situations in which coordinated interest rate moves are justified and even desirable, for instance in the context of the exchange rate mechanism (ERM). However, at the time the Bank of Finland decided to raise its tender rate, expectations in the money and foreign exchange markets did not impose any need for the Bank to base its interest rate policy decision on considerations other than the inflation target. If the Bank's interest rate move had been timed to coincide with subsequent interest rate moves in the core ERM countries, the policy message would have been less clear.

It is important for credibility that the rationale for monetary policy measures be communicated in a transparent and unambiguous manner. The link between monetary policy and the inflation outlook must not become clouded in the public mind. For as long as the Bank of Finland conducts its own monetary policy, the overriding objective will be to ensure monetary stability, ie to keep inflation low. Public certainty as to monetary policy priorities promotes confidence in stability, which in turn is critical for real economic performance.

If inflation were allowed to build up on the eve of the monetary union, Finland would get off to a bad

Chart 2.

Projected 3-month interest rates



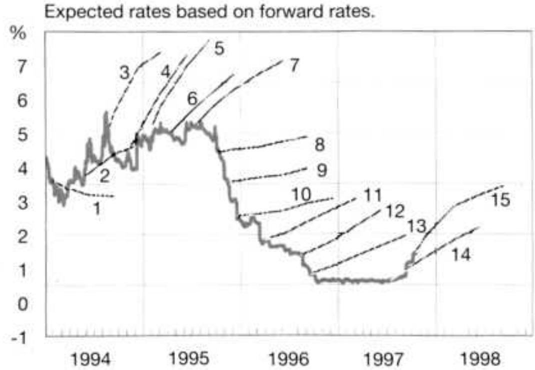
1. Italy
2. Spain
3. Germany
4. Finland

Situation at 22 Oct 1997.

Chart 3.

Actual and expected 3-month HELIBOR

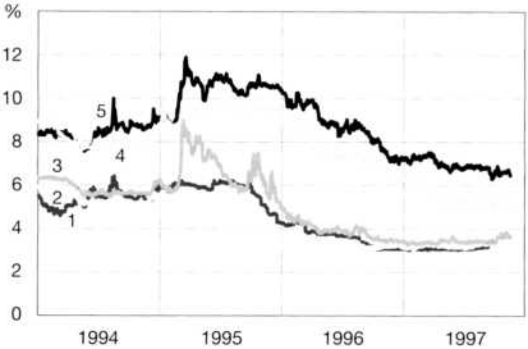
Expected rates based on forward rates.



1. 15.1.1994
2. 15.4.1994
3. 15.7.1994
4. 14.10.1994
5. 16.1.1995
6. 13.4.1995
7. 14.7.1995
8. 13.10.1995
9. 15.11.1995
10. 20.12.1995
11. 1.4.1996
12. 16.8.1996
13. 23.9.1996
14. 18.7.1997
15. 20.10.1997

Chart 4.

EU 3-month interest rates



1. Finland
2. Germany
3. France
4. Spain
5. Italy

start in the union. In particular, this would hurt employment prospects. Therefore, as we approach monetary union, monetary and fiscal policy must carry a special responsibility for maintaining the preconditions for economic performance over the long run. Procrastination and timidity are not virtues in the conduct of a monetary policy aimed at ensuring monetary stability. We know that inflation raises interest rates and that any delay in curbing inflation pressures will in the end only prolong the resultant period of high interest rates.

Anchoring Finnish monetary policy to the price stability objective does not mean that interest rate developments in other countries are of no consequence. On the contrary, they affect Finland via several channels, just as they have up until now. By the start of 1999 short-term market interest rates will be practically identical across EMU countries. Obviously, it is not a matter of indifference to Finland at what level the European Central Bank sets its steering rate at the start. The route by which that level is attained is also highly important.

The European Central Bank will inherit the outcome and result of its predecessors' policies. Meanwhile, prospective members of the EU still have some scope to influence the situation inherited by the ECB.

As regards the public sector financial position, it is by now widely understood and accepted that bringing large deficits and unsustainable debts into the monetary union is unreasonable and would jeopardize the stability of the EMU. This consensus has found its expression in the famous convergence criteria for public finances and in the Stability and Growth Pact. The same logic must apply to monetary policy: participating countries should not burden the union with weak currencies and the resultant inflation pressures.

Taking into account the fact that cyclical positions and inflation pressures differ across member states as we approach monetary union, it is necessary that national monetary policies bear their responsibilities for as long as it is possible. This obligation is indeed a statutory one, both under national central banking legislation and under the Maastricht Treaty.

The scope for independent interest rate policies will diminish as 1998 winds down. However, the pre-announcement of the bilateral conversion rates, assumed to take place in spring 1998, does not alone and per se necessitate an unconditional harmonization of national steering rates. The pre-announcement concerns the conversion rates to be applied at the start of 1999, not the market spot rates in the interim period.

The reactions of the money and foreign exchange markets to possible differences in national monetary policies will naturally constrain such differences. But generally speaking, premature forced convergence of interest rate levels is not desirable if the tradeoff is higher inflation in the monetary union. Policies that effectively curb inflationary pressures will provide the best backdrop for the start of EMU and will in the long run help deliver lower interest rates in the monetary union.

The closer we come to end-1998, the more today's interest rates will be influenced by market perceptions of the economic policy to be conducted after 1998.

One cause for concern in the market is the possibility that some countries might relax their fiscal policies already in 1998 despite the upswing in the cycle. Indeed, most EU countries are not progressing satisfactorily toward a consolidation of public finances. As a result, inadequate room for manoeuvre in public finances could easily become a major policy-mix problem in EMU. In order to regain at least some leeway for fiscal policy, it is necessary that consolidation of public finances be carried beyond the minimum deficit and debt ratios defined in the Maastricht Treaty, to the point where the risk of spiralling debt is eliminated and automatic fiscal stabilizers can operate at least to some extent during a slowdown.

If there is not greater progress in the consolidation of public finances, interest rate developments in the monetary union will be unsatisfactory and the markets will become susceptible to turbulence.

Will monetary union bring greater certainty about monetary stability?

Actual progress toward convergence in EU countries differs decisively from the standard forecasts made a year ago. Countries then considered weak have in fact converged apace in terms of the Maastricht criteria, whereas core countries find themselves in more difficult straits than expected.

It appears that the numerical convergence criteria of the Maastricht Treaty are being fulfilled, contrary to expectations. At the same time, it appears that the goals of the Stability and Growth Pact remain quite distant. Finally, the realization of so-called real convergence on the eve of monetary union was never really anything more than a pipe dream. It is not an achievable precondition for a monetary union.

Will monetary union improve the chances for permanently stable monetary conditions in the future? My personal judgement would be: yes, with a reasonable probability. But since a monetary union is not a cyclical project, we need to raise our sights above and beyond 1999. And it must be stressed that any confident judgement on the monetary union needs the seasoning of a serious warning that we are prone to underestimate the policy problems that need to be resolved even within a monetary union.

The prime task for our domestic economic policy is to lay the best possible foundation for participation. This means that we must continue to ensure price stability and continue to consolidate our public finances.

30 October 1997

- Key words: EMU, euro, monetary policy, convergence

Items

Direct investment in Finland's balance of payments, 1996

According to a survey of companies carried out by the Bank of Finland, there was in 1996 a net outflow of direct investment on the financial account amounting to FIM 11.4 billion: Finnish direct investment abroad totalled FIM 16.5 billion and foreign direct investment in Finland FIM 5.1 billion. At end-1996 the book value of Finnish direct investment abroad was FIM 82 billion and of foreign direct investment in Finland FIM 40.9 billion. In the current account, Finnish companies' income on foreign direct investment totalled FIM 4.9 billion and foreign investors' income on direct investment in Finland FIM 5.3 billion.

Finnish direct investment abroad

Internationalization of Finnish companies accelerated. In 1996 the internationalization of Finnish companies accelerated for the first time since the late 1980s. Finnish companies exported capital totalling FIM 16.5 billion in net terms to foreign subsidiaries and associates (FIM 6.3 billion in equity, FIM 9.1 billion in loans and FIM 1.1 billion in reinvested earnings, ie retained earnings growth). Capital exports, primarily in form of loan capital, increased by FIM 10 billion on the previous year. Exports of loan capital were boosted not only by financing needs in connection with corporate acquisitions abroad but also by intragroup loan arrangements, which played a key role in Finland's net capital outflow in the early years of the 1990s, especially in 1994, which was a record year in terms of capital exports. Capital was exported to EU countries to the value of FIM 13.4 billion. Manufacturing companies increased their investment abroad by FIM 10 billion.

At end-1996 the book value of Finnish direct investment abroad totalled FIM 82 billion, of which the share of manufacturing companies was FIM 69.3 billion, with metal and engineering accounting for the major part. The major immediate host countries at yearend were the Netherlands, Sweden and the United States.

Finnish companies' income on direct investment totalled FIM 4.9 billion. Income from Finnish direct investment abroad (share of investee profits and net interest received) totalled FIM 4.9 billion in 1996, up FIM 1.1 billion on the previous year. Direct investment abroad by companies in the finance and insurance sector began to generate profits.

Direct investment income is broken down into dividends, interest and reinvested earnings (change in retained earnings). Finnish companies repatriated from their foreign subsidiaries and associates FIM 3.1 billion in dividends and FIM 1.4 billion in interest and remitted to them FIM 0.7 billion in interest. Retained earnings in foreign subsidiaries and associates increased by FIM 1.1 billion.

Turnover and employees of Finnish companies' subsidiaries operating abroad. In 1996 the total turnover of Finnish companies' subsidiaries operating abroad (subsidiaries with balance sheet total exceeding FIM 50 million) was FIM 214 billion, and they employed 137 000 persons on average, compared to 134 000 in 1995. Measured in terms of turnover and number of employees, the major host countries for Finnish subsidiaries were the United States, Sweden, Germany, the United Kingdom and France.

The turnover of Finnish-owned manufacturing companies located abroad totalled FIM 139 billion and their employees numbered 116 000. The leading manufacturing sector abroad was metal and engineering. Foreign sales companies employed 13 000 persons.

Foreign direct investment in Finland

Foreign capital flowed into the Finnish chemical industry. In 1996 foreign enterprises invested FIM 5.1 billion worth of capital in net terms in their subsidiaries and associates in Finland, compared to FIM 4.6 billion in 1995. Investments of capital in the chemical industry amounted to FIM 2.7 billion. The book value of foreign enterprises' direct investment in Finland totalled FIM 40.9 billion at yearend. Manufacturing companies accounted for FIM 22.9 billion, of which FIM 10.3 billion was invested in the metal and engineering industries. The share of sales companies amounted to FIM 9.9 billion. The major immediate investor countries at yearend were Sweden, the Netherlands and the United States.

Foreign enterprises' income on direct investment in Finland totalled FIM 5.3 billion. Income on foreign direct investment in Finland totalled FIM 5.3 billion in 1996, compared to FIM 4.4 billion in 1995. Income on investment in manufacturing companies amounted to FIM 3.3 billion, while income generated by sales companies totalled FIM 1.4 billion. Foreign-owned companies remitted to their foreign investors FIM 2.8 billion in dividends and FIM 0.4 billion in net interest. Retained earnings of foreign-owned enterprises increased by FIM 2.1 billion.

Wage settlement for 1998–1999

The central labour market organizations have negotiated a new two-year wage settlement that runs beyond the start of Stage Three of Economic and Monetary Union. The new settlement, approved on 26 November 1997, combines two annual agreements and is intended to promote low inflation and rising purchasing power. By 15 December 1997 all member organizations of the central organizations had signed their collective agreements and civil service collective agreements in accord with the negotiated settlement.

According to the settlement, average rises in negotiated wages will be 2.6 per cent in 1998 and 1.7 per cent in 1999. The settlement also contains an index clause that will be triggered if the CPI rises by more than 3.0 per cent between December 1997 and October 1998. The settlement will be in force from the start of 1998 until 15 January 2000.

The negotiated agreement is also connected with a Government proposal on easing of taxation of earned income, mainly in 1999. The planned tax adjustment will give employees FIM 5 billion in additional purchasing power over the two-year period. This amounts to about 2 per cent of estimated total wages for 1999. The proposal includes, inter alia, a reduction in sickness insurance contributions, a 2 percentage point inflation adjustment on income tax rates, increases in the maximum amounts of the earned income allowance and standard deduction for work-related expenses, as well as a reduction in income tax rates of 0.5 percentage point. The Government will decide on funding details for the planned tax adjustment in connection with the drafting of the 1999 budget in spring 1998.

Agreement on buffer funds

In anticipation of EMU, the central organizations of the labour market and the Federation of Employment Pension Institutions (representing the statutory employment pension scheme) reached agreement on 17 November 1997 on the incorporation of so-called buffer funds in the social security system. The new arrangement is a means of alleviating fluctuations in contributions, which have tended to aggrevate business cycle movements.

Fluctuations in pension fund contributions stemming from normal cyclical movements will be stabilized via an existing clearing reserve. In boom years the clearing reserve will expand beyond that required for statutory funding of employment pensions, and during recessions pension contribution rates will not need to be increased as the reserve is allowed to contract. According to the agreement, 2.5 per cent of total private sector wages (FIM 3.5–4 billion) is a sufficient buffer for the employment pension system.

A second buffer fund will be established in connection with the unemployment insurance scheme. As from 1 January 1999 funding of unemployment benefits will be organized permanently so that the government pays the base benefit, which in 1998 will be FIM 120 per day. The proposed employer contribution for 1998 is 2.8 per cent of wages on which the contribution is based and the employee contribution is 1.4 per cent. The new buffer fund will be administered by the Central Fund of Unemployment Funds (renamed the Unemployment Insurance Fund) and will comprise the cumulated difference between combined employer and employee unemployment insurance contributions and unemployment benefits. The intended size of this fund, based on normal cyclical fluctuations, will be about FIM 3 billion. Thus, the two buffer funds are expected to cumulate a total of FIM 6.5–7 billion (about one per cent of GDP) in the course of the next several years.

Second supplementary budget for 1997

The second supplementary budget for 1997 was approved by Parliament on 3 December 1997. It includes banks' repayments of capital support and several other items.

The budget includes minor increases in expenditures. On the revenue side, FIM 1783 million is added because of principal and interest payments on capital support previously granted by the Finnish government to Postipankki Ltd and the cooperative banks. Government net borrowing for 1997 will be reduced by FIM 1740 million. Including supplementary budgets, central government expenditure totals FIM 188.7 billion, compared to FIM 190.3 billion in the original 1997 budget.

Matti Korhonen appointed to the Board following resignation of Harri Holkeri

The President of the Republic has appointed Mr Matti Korhonen, M Pol Sci, as a Member of the Board of the Bank of Finland effective 1 January 1998. The appointment is based on a proposal by the Parliamentary Supervisory Council. Mr Korhonen is presently President of the Finnish Forest Industries Federation. He has previously served as a Director at Merita Bank Ltd and as a Secretary of State in the Finnish Prime Minister's Office. He has also worked at the Confederation of Finnish Employers.

Mr Korhonen succeeds Mr Harri Holkeri, who is retiring after having served on the Board since September 1978.

80th anniversary commemorative coins

To commemorate the 80th anniversary of Finnish independence, the Mint of Finland Ltd has struck a gold coin in the denomination of 1000 markkaa and a bimetallic coin in the denomination of 25 markkaa.

On the obverse of the 1000 markka coin there are symbolic figures in a rectangle that describe Finland's history. On the left side of the rectangle, the year 1917 is indicated and on the right side the year 1997. The reverse of the coin features a shoot growing up from a tree trunk. The reverse bears the inscriptions '1000 mk' and 'Suomi Finland'. The coin was designed by the sculptor Reijo Paavilainen.

The 25 markka coin has a dual-metal construction, with a centre of Nordic Gold alloy and an outer ring of cupro-nickel. The middle of the obverse features a riverbed parting from a landscape. The outer ring of the obverse bears the inscriptions '1917–1997' and 'Suomi-Finland'. On the middle of the reverse there is a stylized city landscape in silhoutte, and the outer ring bears the inscription '25 mk'. The coin was designed by sculptor Tero Lounas.

The 1000 markka issue comprises 20 000 coins at most. The gold used in the coin is from Lapland and the coin is composed of 90 per cent gold, 5 per cent silver and 5 per cent copper. The weight of the coin is 8.64 grammes and the diameter 22 mm.

The 25 markka issue comprises 100 000 coins at most. The weight of the coin is 20.2 grammes and the diameter 35 mm.

The period for advance orders for the 1000 markka coin has expired. The 25 markka coin was issued on 2 December 1997. Foreign sales are handled by the commercial banks and the Mint of Finland Ltd. Both denominations are legal tender.

Publication of the Bank of Finland

A new publication has appeared in the Bank of Finland's economic studies series: *Fiscal Policy and Private Consumption-Saving Decisions: European Evidence* (E:8) by Anne Brunila.

It is only recently that the sustainability of fiscal policy and the effects of fiscal deficits on the economy have emerged as topics for public discussion in the industrial countries. Economic theory recognizes two analytical views of the macroeconomic effects of fiscal deficits and government debts. The Keynesian view, which held sway until well into the 1970s, holds that private sector entities treat their holdings of government debt as net wealth. This implies that a budget deficit has a definite stimulative effect on the economy. By contrast, the so-called Ricardian debt neutrality view is that growth of the debt-financed budget deficit has no impact on consumer demand because the government's financing of a deficit causes an equal amount of saving in the private sector.

A central purpose of the study was to examine whether empirical evidence supports the Ricardian debt neutrality hypothesis. The estimated consumption function was derived from the representative household's life-cycle utility maximization problem, for which the possible finiteness of the household's life-cycle or horizon assumes a central position in respect of the hypotheses to be tested. Within the model, public consumption affects the time path of private consumption because the former affects households' welfare. The empirical data covers ten EU countries for the years 1961–1994. The analytical methodology used is the nonlinear instrumental variable or GMM approach.

The findings of the study suggest that in consumers' utility functions government consumption and private consumption tend to be unrelated or

complements rather than substitutes. Although the study shows that some consumers seem to behave according to the Ricardian model by saving for anticipated higher taxes in response to fiscal deficits, such deficits have also had stimulative effects on economic performance. From the perspective of economic policy, the findings can be interpreted as implying that fiscal deficits have real effects and are thus potentially useful in aggregate demand management. On the other hand, from the standpoint of economic equilibrium there is cause for concern about persistent fiscal deficits and accumulating government debt. Helsinki 1997. ISBN 951-686-558-5. ISSN 1238-1691.

- Key words: private consumption, private saving, current income, fiscal policy, planning horizon

Measures concerning monetary and foreign exchange policy and the financial markets

1996

OCTOBER

Tender rate. On 9 October, the Bank of Finland lowers its tender rate from 3.10 per cent to 3.00 per cent. In addition, the interest rate on banks' excess reserves is cut from 1.10 per cent to 1.00 per cent.

Finland joins the ERM. Finland joins the EU Exchange Rate Mechanism (ERM) as of 14 October 1996.

1997

SEPTEMBER

Tender rate. On 15 September, the Bank of Finland raises its tender rate from 3.00 per cent to 3.25 per cent. In addition, the interest rate on banks' excess reserves is raised from 1.00 per cent to 1.25 per cent.

NOVEMBER

Money market tenders. As at 3 November, the Bank of Finland shortens the maturity applied in its money market tenders from one month to two weeks. The normal settlement day for these tenders will be the banking day following the trade day.

Liquidity credit. As at 3 November, the Bank of Finland shortens the maturity applied in its liquidity credit from seven days to one day. The Bank of Finland also abolishes the limits on collateralized liquidity credit.

Monetary policy instruments – November 1997

The Bank of Finland's monetary policy objective is to stabilize the inflation rate at about 2 per cent. This corresponds to the price stability objectives of the major ERM countries. Finland joined the Exchange Rate Mechanism (ERM) of the European Monetary System on 14 October 1996. In this regard, Finland's monetary policy remains unchanged, although membership underlines the importance of exchange rate stability. The central rate for the markka is FIM 5.85424 per ECU and the corresponding central rate against the Deutschemark is FIM 3.04. The Bank of Finland is responsible for ensuring that the markka remains within the ±15 per cent fluctuation margin vs the other ERM currencies.

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

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

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

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

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

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

Market operations

The Bank of Finland affects interest rates and exchange rates by means of market operations, ie by dealing in ders. Tenders, in which the Bank of Finland lends money to the banks, are carried out via repurchase (repo) transactions. In order to drain liquidity from the banking system, ie collect deposits from banks, the Bank of Finland generally sells its own CDs via tenders.

In a fixed-rate tender, the Bank of Finland announces the tender rate in advance and the banks submit bids for the volumes they wish to transact. In a variable-rate tender, banks bid by both rate and volume, and the Bank of Finland's tender rate becomes the weighted average of accepted bids. As a preparatory step for economic and monetary union, the Bank of Finland began applying a two-week maturity in its tenders at the start of November 1997, in contrast to the previously applied one-month maturity. As a result, the key steering rate for the money market, the tender rate, is now expressed as an annualized two-week interest rate. Also effective 1 November 1997, the settlement lag for tender-related payments was shortened from two banking days to one, ie the payments are settled on the banking day following the trade day. Short-term market rates move in line with the tender rate. Since 15 September 1997 the tender rate has been 3.25 per cent.

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

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

Aktia Savings Bank Ltd
Bank of Åland Ltd
Merita Bank Ltd
Okobank
Postipankki Ltd
Skandinaviska Enskilda Banken Helsinki Branch
Svenska Handelsbanken AB,
Branch Operation in Finland

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

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

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

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

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

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

Merita Bank Ltd
Okobank
Postipankki Ltd
Skandinaviska Enskilda Banken Helsinki Branch
Svenska Handelsbanken AB,
Branch Operation in Finland

Liquidity credit facility

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

Liquidity credit must be fully collateralized and the applicable interest rate is tied to the Bank of Finland's tender rate. Since 15 September 1997 the rate on liquidity credit has been 5.25 per cent, ie the margin vs the tender rate has been 2 percentage points. The maturity for liquidity credit may be 1, 7, 14, 21 or 28 days. The maturity and other terms and conditions are decided by the Bank of Finland. As from the start of November 1997, the maturity on liquidity credit was shortened from seven days to one day. The other terms and conditions for liquidity credit were amended to the effect that the maximum credit amount no longer depends on meeting the minimum reserve requirement. Instead, banks can obtain liquidity credit in whatever amounts they choose subject to the provision of eligible collateral. Previously, a bank was allowed to obtain liquidity credit only to the extent needed to cover end-of-day negative balances on its current account or to maintain its average reserve balance at the minimum level.

If the monthly average of a bank's daily current account balances exceeds the bank's reserve requirement, the bank is considered to have excess reserves. The Bank of Finland may separately decide to pay interest on excess reserves; since 15 September 1997 the rate has been 1.25 per cent.

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

Minimum reserve system

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

The reserve requirement is graded according to the composition of a bank's funding so that the more liquid an item, the larger the reserve requirement. The reserve requirement on deposits payable on demand (ie liquid deposits) is 2 per cent, on other deposits 1.5 per cent and on other balance sheet items 1 per cent. At the end of September 1997, the sum total of required reserves was FIM 6.8 billion and the weighted average reserve requirement 1.7 per cent.

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

The minimum reserve requirement applies to the following banks:
Aktia Savings Bank Ltd
Bank of Åland Ltd
Citibank International plc Finland Branch
Crédit Agricole Indosuez Helsinki Branch
Den Danske Bank Helsinki Branch
Gyllenberg Private Bank Oy
Interbank Ltd
Merita Bank Ltd
OP-Homebank Ltd
Okobank
Okopankki Oy, an Okobank subsidiary
Postipankki Ltd
Skandinaviska Enskilda Banken Helsinki Branch
Skopbank

Svenska Handelsbanken AB,
Branch Operation in Finland
Unibank A.S. Helsinki Branch
Other cooperative banks and savings banks

Current account system

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

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

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

At the start of May 1997, the Bank of Finland abolished the application procedure for changes in intraday overdraft limits on current accounts. Credit institutions entitled to intraday credit can now change their limits by notifying the Bank of Finland of the requested limit and posting the necessary Bank-approved collateral. As a result, banks are able to manage their liquidity more flexibly in accord with their own needs.

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

The following entities have a current account at the Bank of Finland:
Aktia Savings Bank Ltd
Asset Management Company Arsenal Ltd
Bank of Åland Ltd
Citibank International plc Finland Branch
Crédit Agricole Indosuez Helsinki Branch
Den Danske Bank Helsinki Branch
Finnish Central Securities Depository Ltd
Finnish Export Credit Ltd
Gyllenberg Private Bank Oy
Interbank Ltd
Merita Bank Ltd
Okobank
Postipankki Ltd
Skandinaviska Enskilda Banken Helsinki Branch
Skopbank
SOM Ltd, Securities and Derivatives Exchange,
Clearing House
State Treasury
Svenska Handelsbanken AB,
Branch Operation in Finland
Unibank A.S. Helsinki Branch

Base rate

The Parliamentary Supervisory Council decides on the Bank of Finland's base rate upon a proposal of the Board of the Bank of Finland. The base rate is used as a market reference rate. About 11.5 per cent of outstanding deposits and 14.8 per cent of lending is tied to the base rate, but only 0.9 per cent of new lending is tied to it (August 1997). Since 16 September 1996, the base rate has been 4.0 per cent.

Finland in brief

Land, climate and population

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

Finland has a population of 5 132 320 (31 December 1996) and an average population density of 17 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 532 053 inhabitants, Espoo (Esbo) 196 260, Tampere (Tammerfors) 186 026, Vantaa (Vanda) 168 778 and Turku (Åbo) 166 929.

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.

Having abolished most quantitative restrictions on foreign trade in 1957, Finland first took part in European free trade arrangements under the auspices of EFTA in 1961. Imports from the USSR were also progressively freed from customs duties. Finland's free trade agreement with the EEC entered into force in 1974 and agreements for the removal of trade barriers were concluded with several eastern European countries as well. The agreement on the European Economic Area (EEA) between the member countries of EFTA and the European Union came into effect at the beginning of 1994. Finland's negotiations to join the European Union were concluded in spring 1994. The accession treaty was signed in Corfu in June. In autumn 1994, a consultative referendum was held in which the majority of the voters (56.9 %) were in favour of membership. The Finnish Parliament ratified the accession treaty in November. The accession treaty having been ratified by each Member State, Finland became a member of the European Union on 1 January 1995. Citizens of the five Nordic countries, Denmark, Finland, Iceland, Norway and Sweden, have enjoyed a common labour market, a passport union and reciprocal social security benefits since the mid-1950s.

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

The economy

Output and employment. Of the gross domestic product of FIM 500 billion in basic values in 1996, 2 % was generated in agriculture and fishing, 2 % in forestry, 26 % in industry, 6 % in construction, 11 % in trade, restaurants and hotels, 9 % in transport and communications, 4 % in finance and insurance, 21 % in other private services and 19 % by producers of government services. Of total employment of 2.1 million persons in 1996, 7.1 % were engaged in primary production, 27.6 % in industry and construction and 65.3 % in services.

In 1996, expenditure on the gross domestic product in purchasers' values amounted to FIM 574 billion and was distributed as follows: net exports 8 % (exports 38 %, imports –30 %), gross fixed capital formation 16 %, private consumption 54 % and government consumption 22 %. Finland's tax ratio (gross taxes including compulsory employment pension contributions relative to GDP) was 48.2 per cent, which is somewhat below the average for the Nordic countries.

Average annual (compounded) growth of real GDP was 4.7 % in the period 1950–59, 5.0 % in 1960–69, 3.7 % in 1970–79, 3.7 % in 1980–89 and 3.6 % in 1950–96. Finland's GDP per capita in 1996 was USD 24 400.

Foreign trade. EU countries absorb the bulk of Finnish merchandise exports. In 1992–1996 their average share was 51.7 %. Over the same period, Finland's exports to other European countries (including Russia) accounted for 23.4 % and to the rest of the world for 24.9 %. The regional distribution of Finland's merchandise imports in the same period has been quite similar to that of exports: EU countries accounted for 51.4 %, other European countries for 24.7 % and the rest of the world for 23.9 %.

In 1996, the share of forest industry products in total merchandise exports was 30 %, the share of metal and engineering products 40 % and the share of other goods 30 %. Raw materials and intermediate goods (incl. crude oil) accounted for 59 % of merchandise imports, fuels for 5 %, investment goods for 15 % and consumption goods for 21 %.

Forest resources. Finland has fairly abundant forest resources but only limited amounts of other raw materials. The growing stock comprises 1 973 million cubic metres, of which 46 % is pine, 36 % spruce, 15 % birch and 3 % other broad-leaved species.

The annual growth increment totals 75.4 million cubic metres and the total drain was about 59 million cubic metres in 1996.

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 25 November 1996 the ECU central rate is FIM 5.85424.

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

Other banks (31 December1996). Finland has three major groups of deposit banks with a total of 1 447 offices. There are two big commercial banks with national branch networks and five smaller ones. The commercial banks have a total of 14 foreign branches, subsidiaries and associate banks and 18 representative offices abroad. There are 40 savings banks and 298 cooperative banks with their own extensive branch networks. In addition, four foreign banks have branches in Finland and nine foreign banks have representative offices .

Financial markets. Of the total stock of FIM 712 billion in outstanding domestic credit at end-June 1997, 48 % was accounted for by deposit banks, 6 % by insurance companies, 23 % by pension insurance institutions, 12 % by other credit institutions and 11 % by state and local authorities and social security funds.

In the money market, 68 % of the instruments, which totalled approximately FIM 165 billion at end-June 1997, were bank certificates of deposit (including central bank paper). Other negotiable money market instruments consist of Treasury bills, commercial paper and local authority paper.

There are 75 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 371 billion (at end-June 1997). Domestic bonds and debentures in circulation at end-June 1997 totalled FIM 259 billion; government bonds made up 73 % of the total. Turnover on the Stock Exchange in 1996 amounted to FIM 102 billion; the share of shares and subscription rights in the total was about 99 %. In January–June 1997 share turnover amounted to FIM 82 billion.

1. The balance sheet of the Bank of Finland

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

	1996	1997			
	31 Dec	7 Nov	14 Nov	21 Nov	28 Nov
ASSETS					
Reserve assets	36 397	63 812	64 112	50 938	51 238
Gold	1 742	1 742	1 742	1 742	1 742
Special drawing rights	1 344	1 227	1 246	1 110	1 234
IMF reserve tranche	1 953	2 067	2 250	2 253	2 271
ECU–claim on the European Monetary Insitute	2 541	4 042	4 048	4 058	4 071
Foreign exchange assets	28 817	54 734	54 826	41 775	41 920
Other foreign claims	3 853	4 130	3 951	3 952	3 951
Markka subscription to Finland s quota in the IMF	3 794	4 070	3 891	3 891	3 890
Share in the European Monetary Institute	59	60	60	61	61
Claims on financial institutions	13 497	14 826	16 147	10 121	7 103
Liquidity credits	–	–	–	–	–
Securities with repurchase commitments	11 626	12 138	13 452	7 429	4 411
Term credits	–	–	–	–	–
Bonds	196	116	116	116	116
Other claims on financial institutions	1 676	2 572	2 579	2 576	2 576
Claims on the public sector	1 906	1 947	1 949	1 953	1 955
Treasury bills	–	–	–	–	–
Bonds	–	–	–	–	–
Total coinage	1 906	1 947	1 949	1 953	1 955
Other claims on the public sector	–	–	–	–	–
Claims on corporations	2 266	1 762	1 762	1 762	1 762
Financing of domestic deliveries (KTR)	70	26	26	26	26
Other claims on corporations	2 197	1 736	1 736	1 736	1 736
Other assets	598	807	799	647	645
Accrued items	490	709	701	547	524
Other assets	108	98	98	100	121
Valuation account	–	–	–	–	–
Total	58 518	87 285	88 721	69 372	66 655
LIABILITIES					
Foreign liabilities	5 680	6 292	6 117	6 197	6 208
Allocations of special drawing rights	951	1 021	1 023	1 024	1 031
IMF markka accounts	3 794	4 070	3 891	3 891	3 891
Other foreign liabilities	934	1 200	1 203	1 281	1 286
Notes and coin in circulation	16 891	16 180	16 158	16 188	16 381
Notes	15 076	14 370	14 348	14 372	14 558
Coin	1 815	1 810	1 810	1 816	1 822
Certificates of deposit	15 530	38 610	38 610	26 030	12 200
Liabilities to financial institutions	8 329	9 362	10 713	3 541	14 120
Reserve deposits	6 829	6 862	8 205	1 034	11 612
Term deposits	–	–	–	–	–
Other liabilities to financial insitutions	1 500	2 500	2 508	2 508	2 508
Liabilities to the public sector	–	–	–	–	–
Current accounts	–	–	–	–	–
Other liabilities to the public sector	–	–	–	–	–
Liabilities to corporations	574	68	60	55	52
Deposits for investment and ship purchase	574	68	60	55	52
Other liabilities to corporations	–	–	–	–	–
Other liabilities	220	192	144	112	68
Accrued items	193	150	107	77	32
Other liabilities	27	41	36	35	36
Valuation account	260	5 547	5 886	6 216	6 592
Provisions	5 270	5 270	5 270	5 270	5 270
Pension provision	1 516	1 516	1 516	1 516	1 516
Other provisions	3 754	3 754	3 754	3 754	3 754
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	58 518	87 285	88 721	69 372	66 655

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

End of period	Foreign sector								Public sector		
	Gold	Special drawing rights	IMF reserve tranche	ECU-claim on the European Monetary Institute	Foreign exchange assets	Reserve assets (1+2+3+4+5)	Other claims, net	Net claims (6+7)	Claims	Liabil-ities	Net claims (9–10)
	1	2	3	4	5	6	7	8	9	10	11
1992	2 180	564	1 732	.	25 041	29 517	–2 998	26 519	2 446	90	2 356
1993	2 180	664	1 747	.	28 882	33 473	–1 324	32 148	1 788	784	1 004
1994	2 180	1 537	1 354	.	47 672	52 743	–1 114	51 629	1 806	93	1 713
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
1996											
Nov	1 742	1 044	1 945	2 541	29 713	36 985	–2 088	34 897	5 987	–	5 987
Dec	1 742	1 344	1 953	2 541	28 817	36 397	–1 826	34 571	1 906	–	1 906
1997											
Jan	1 742	1 370	1 937	2 528	54 432	62 009	–1 292	60 717	1 907	–	1 907
Feb	1 742	1 544	1 983	2 544	54 189	62 002	–1 370	60 632	1 907	–	1 907
Mar	1 742	1 514	1 930	2 532	51 982	59 700	–1 268	58 432	1 907	–	1 907
Apr	1 742	1 186	1 986	4 011	49 851	58 775	–1 227	57 548	1 904	–	1 904
May	1 742	1 121	1 998	4 000	49 607	58 468	–1 267	57 201	1 908	–	1 908
Jun	1 742	1 100	1 963	3 984	50 322	59 111	–1 397	57 714	1 921	–	1 921
Jul	1 742	1 557	2 023	3 965	55 189	64 475	–1 533	62 942	1 921	–	1 921
Aug	1 742	1 711	2 031	3 978	54 008	63 470	–1 622	61 848	1 926	–	1 926
Sep	1 742	1 588	2 081	3 958	52 686	62 055	–1 750	60 305	1 939	–	1 939
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

End of period	Domestic financial sector				Corporate sector				
	Term claims on deposit banks, net	Reserve deposits of deposit banks[1]	Other claims on financial institu-tions, net	Net claims (12+13+14)	Claims in the form of special financing	Special deposits and other items, net	Net claims (16+17)	Notes and coin in circu-lation	Out-standing CDs issued by the Bank of Finland
	12	13	14	15	16	17	18	19	20
1992	3 738	–13 165	4 022	–5 405	747	–2 651	–1 904	14 508	4 880
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
1996									
Nov	7 041	–4 145	1 100	3 996	74	1 591	1 665	15 449	22 160
Dec	11 626	–6 829	372	5 169	70	1 623	1 692	16 891	15 530
1997									
Jan	14 277	–5 082	336	9 531	68	1 797	1 865	15 659	47 370
Feb	12 104	–1 404	324	11 024	63	1 856	1 918	15 590	47 520
Mar	18 158	–10 649	319	7 828	59	1 919	1 978	16 131	41 950
Apr	17 070	–6 717	294	10 647	50	1 784	1 834	16 064	41 700
May	12 568	–8 091	283	4 760	42	1 669	1 712	16 068	34 760
Jun	9 558	–10 397	258	–581	42	1 695	1 738	16 315	29 110
Jul	10 575	–3 651	252	7 176	42	1 712	1 754	16 359	40 170
Aug	8 225	–12 522	252	–4 045	37	1 748	1 785	16 287	28 440
Sep	9 214	–4 458	226	4 982	33	1 767	1 800	16 046	36 760
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

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

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

		Reserve requirement			Required reserves [1], mill. FIM	Excess reserves, mill. FIM	Total reserves, mill. FIM (4+5)	Liquidity credits, mill. FIM
		On deposits payable on demand, %	On other deposits, %	On other items, %				
		1	2	3	4	5	6	7
1993		2.0	1.5	1.0	6 398	.	.	440
1994		2.0	1.5	1.0	6 526	.	.	14
1995	I–IX	2.0	1.5	1.0	6 557	.	.	123
	X–XII	2.0	1.5	1.0	6 530	616	7 146	37
1996		2.0	1.5	1.0	6 652	440	7 092	121
1996								
Nov		2.0	1.5	1.0	6 596	136	6 732	233
Dec		2.0	1.5	1.0	6 578	992	7 570	186
1997								
Jan		2.0	1.5	1.0	6 560	423	6 983	–
Feb		2.0	1.5	1.0	6 590	992	7 582	–
Mar		2.0	1.5	1.0	6 582	1 478	8 060	–
Apr		2.0	1.5	1.0	6 589	566	7 156	18
May		2.0	1.5	1.0	6 623	598	7 221	–
Jun		2.0	1.5	1.0	6 612	1 165	7 777	–
Jul		2.0	1.5	1.0	6 786	378	7 164	–
Aug		2.0	1.5	1.0	6 813	626	7 439	–
Sep		2.0	1.5	1.0	6 779	521	7 300	–
Oct		2.0	1.5	1.0	6 808	1 020	7 827	–
Nov		2.0	1.5	1.0	6 920	892	7 812	–

[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
1992	76 230	137 940	–60 417	–1 293
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
1996				
Nov	7 900	19 340	–23 630	12 190
Dec	12 650	15 530	–6 430	3 550
1997				
Jan	17 100	47 370	–2 780	–27 490
Feb	15 500	47 520	–28 660	–3 360
Mar	1 450	41 950	–47 030	6 530
Apr	24 200	41 700	–13 630	–3 870
May	5 700	34 760	–34 700	5 640
Jun	9 600	32 760	–22 160	–1 000
Jul	10 420	36 520	–22 950	–3 150
Aug	8 350	30 260	–26 320	4 410
Sep	12 300	34 630	–23 120	790
Oct	12 200	36 900	–28 830	4 130
Nov	11 400	15 700	–18 480	14 180

2.3 *The Bank of Finland's transactions in convertible currencies*, mill. FIM

During period	Intervention in the foreign exchange market			Spot transactions related to forward contracts, net	Central government's foreign exchange transactions, net
	Spot purchases	Spot sales	Forward exchange intervention = change in forward exchange position		
	1	2	3	4	5
1992	20 050	–70 640	–1 650	390	45 060
1993	25 120	–45 080	7 460	–6 910	33 240
1994	20 930	–12 900	9 060	–8 930	24 660
1995	4 910	–5 470	–6 170	9 170	–10 135
1996	7 360	–7 320	–	–	–13 868
1996					
Oct	2 200	–	–	–	–690
Nov	–	–480	–	–	30
Dec	–	–	–	–	–950
1997					
Jan	38 340	–	12 620	–12 260	–250
Feb	–	–	430	–	–1 660
Mar	1 460	–720	–2 610	2 540	–3 490
Apr	–	–690	–4 240	3 070	–8 160
May	–	–60	–100	–	–930
Jun	2 880	–	70	–	–870
Jul	4 940	–	–1 310	6 300	–3 560
Aug	–	–	–70	–	–670
Sep	–	–	–70	–	–1 240
Oct	–	–	–3 160	3 100	–800

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 (1–2)	Currency purchases from foreign customers	Currency sales to foreign customers	Net (4–5)	Net (3+6)	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net (8–9)	Net currency sales
	1	2	3	4	5	6	7	8	9	10	11
1992	39 195	32 939	6 256	21 142	32 339	–11 197	–4 941	1 614	1 929	–315	7 133
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	–
1996											
Oct	54 587	24 466	30 120	50 823	73 163	–22 341	7 779	18 988	6 902	12 085	–
Nov	53 072	22 459	30 614	51 554	76 001	–24 446	6 168	18 476	7 649	10 827	–
Dec	53 520	21 793	31 726	44 068	72 021	–27 953	3 773	15 871	6 908	8 963	–
1997											
Jan	61 066	21 103	39 964	61 130	72 501	–11 371	28 593	18 219	5 597	12 622	–12 185
Feb	60 646	20 139	40 507	58 008	66 207	–8 199	32 308	18 779	5 040	13 740	–12 185
Mar	62 218	23 415	38 803	57 783	85 313	–27 530	11 273	18 160	5 138	13 023	–9 924
Apr	65 819	25 160	40 659	59 142	84 411	–25 268	15 391	20 854	10 927	9 927	–5 589
May	65 324	25 735	39 588	53 735	82 076	–28 340	11 248	22 115	9 477	12 638	–5 589
Jun	65 886	30 056	35 830	58 688	83 157	–24 468	11 362	24 007	12 681	11 326	–5 589
Jul	71 933	31 074	40 859	55 146	83 978	–28 831	12 028	30 797	14 976	15 821	–4 690
Aug	74 387	33 124	41 263	60 935	99 872	–38 936	2 327	28 558	17 323	11 235	–4 690
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

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[1]	Excess-reserve rate[2]	Base rate
	1	2	3	4	5	6	7	8
1992	13.32	13.49	13.27	13.08	12.96	14.90	7.41	9.17
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
1996								
Nov	3.29	3.02	3.08	3.21	3.46	5.00	1.00	4.00
Dec	3.11	3.02	3.08	3.20	3.40	5.00	1.00	4.00
1997								
Jan	2.68	3.02	3.07	3.16	3.34	5.00	1.00	4.00
Feb	2.85	3.01	3.07	3.17	3.34	5.00	1.00	4.00
Mar	2.51	3.01	3.07	3.18	3.42	5.00	1.00	4.00
Apr	3.24	3.02	3.08	3.21	3.48	5.00	1.00	4.00
May	2.51	3.01	3.08	3.19	3.40	5.00	1.00	4.00
Jun	2.76	3.00	3.07	3.19	3.42	5.00	1.00	4.00
Jul	2.85	3.00	3.08	3.22	3.50	5.00	1.00	4.00
Aug	3.02	3.01	3.13	3.31	3.68	5.00	1.00	4.00
Sep	3.06	3.15	3.31	3.52	3.89	5.14	1.14	4.00
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

[1] Call money credit rate until 2 July 1992.
[2] 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
1992[1]	13.85	1992	+1.00	7	–3.00	.
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
1996		1996				
Nov	3.00	Nov	+2.00	7	.	1.00
Dec	3.00	Dec	+2.00	7	.	1.00
1997						
Jan	3.00	Jan	+2.00	7	.	1.00
Feb	3.00	Feb	+2.00	7	.	1.00
Mar	3.00	Mar	+2.00	7	.	1.00
Apr	3.00	Apr	+2.00	7	.	1.00
May	3.00	May	+2.00	7	.	1.00
Jun	3.00	Jun	+2.00	7	.	1.00
Jul	3.00	Jul	+2.00	7	.	1.00
Aug	3.00	Aug	+2.00	7	.	1.00
Sep	3.14	Sep	+2.00	7	.	1.25
Oct	3.25	Oct	+2.00	7	.	1.25
Nov	3.25	Nov	+2.00	1	.	1.25
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

[1] July–December.

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

Average of daily obser-vations	ECU	3 currencies	Commercial ECU
	3 months		
	1	2	3
1992	10.4	7.8	10.6
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
1996			
Nov	4.1	4.2	4.2
Dec	4.1	4.3	4.2
1997			
Jan	4.1	4.2	4.1
Feb	4.1	4.2	4.1
Mar	4.2	4.3	4.3
Apr	4.1	4.4	4.2
May	4.1	4.3	4.2
Jun	4.1	4.3	4.2
Jul	4.2	4.3	4.2
Aug	4.3	4.4	4.4
Sep	4.3	4.5	4.3
Oct	4.5	4.6	4.5
Nov	4.6	4.8	4.6

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
1992	14.04	15.86	13.32	13.75	12.46	12.13	7.50	8.50	4.50	7.41	12.84	9.14
1993	9.69	13.55	9.40	9.75	10.20	9.92	3.50	4.50	2.00	4.78	8.86	6.15
1994	7.32	11.55	7.13	7.35	8.18	7.91	3.25	4.25	2.00	2.99	5.96	4.01
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
1996												
Oct	5.63	9.73	4.90	5.04	5.99	5.67	2.00	3.00	2.00	1.84	3.72	2.39
Nov	5.12	9.58	4.87	4.98	5.94	5.62	2.00	3.00	2.00	1.80	3.77	2.38
Dec	5.21	9.04	4.38	4.48	5.83	5.48	2.00	3.00	2.00	1.73	3.92	2.35
1997												
Jan	4.03	9.99	4.63	4.65	5.75	5.39	2.00	.	2.00	1.69	..	..
Feb	5.59	10.01	4.67	4.79	5.70	5.35	2.00	.	2.00	1.61	..	..
Mar	5.51	9.97	4.78	4.91	5.67	5.32	2.00	.	2.00	1.48	..	..
Apr	6.03	9.68	4.53	4.64	5.65	5.29	2.00	.	2.00	1.47	..	..
May	5.25	9.83	4.85	4.96	5.62	5.27	2.00	.	2.00	1.45	..	..
Jun	5.46	9.31	4.84	4.93	5.59	5.24	2.00	.	2.00	1.43	..	..
Jul	5.45	9.69	4.43	4.53	5.57	5.21	2.00	.	2.00	1.42	..	..
Aug	4.17	9.77	4.75	4.80	5.54	5.18	2.00	.	2.00	1.42	..	..
Sep	4.99	9.42	4.69	4.77	5.57	5.22	2.00	.	2.00	1.42	..	..
Oct	4.09	9.70	4.95	4.97	5.61	5.27	2.00	.	2.00	1.44	..	..

[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
1992	13.1	13.0	12.0	11.5[1]	2.5
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
1996					
Oct	5.0	5.9	5.1	6.5	2.4
Nov	5.0	5.9	5.1	6.5	2.3
Dec	5.0	5.9	5.0	6.3	2.2
1997					
Jan	4.8	5.7	4.8	6.1	2.2
Feb	4.7	5.5	4.6	5.9	1.8
Mar	4.8	5.6	4.8	6.1	2.1
Apr	5.0	5.8	5.0	6.4	2.3
May	4.9	5.7	4.8	6.2	2.2
Jun	4.9	5.7	4.8	6.1	2.1
Jul	4.9	5.6	4.7	5.9	2.0
Aug	5.0	5.7	4.9	5.9	2.0
Sep	5.2	5.8	4.9	5.8	2.0
Oct	5.3	5.9	5.1	5.7	1.9

[1] November and December only.

4. Rates of exchange

4.1 Middle rates, FIM

Average of daily quotations	New York 1 USD	Montreal 1 CAD	London 1 GBP	Dublin 1 IEP	Stockholm 1 SEK	Oslo 1 NOK	Copenhagen 1 DKK	Reykjavik 1 ISK	Frankfurt am Main 1 DEM	Amsterdam 1 NLG	Brussels 1 BEF	Zurich 1 CHF
	1	2	3	4	5	6	7	8	9	10	11	12
1992	4.4835	3.706	7.875	7.636	0.7714	0.7222	0.7444	0.0778	2.8769	2.5552	0.1397	3.2000
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
1996												
Nov	4.5500	3.400	7.571	7.576	0.6869	0.7162	0.7839	0.0687	3.0106	2.6843	0.1461	3.5703
Dec	4.6398	3.409	7.726	7.709	0.6799	0.7173	0.7809	0.0692	2.9883	2.6635	0.1450	3.4927
1997												
Jan	4.7765	3.541	7.924	7.791	0.6764	0.7408	0.7803	0.0700	2.9754	2.6498	0.1443	3.4297
Feb	4.9757	3.672	8.089	7.898	0.6720	0.7508	0.7794	0.0707	2.9729	2.6468	0.1441	3.4264
Mar	5.0716	3.702	8.141	7.932	0.6622	0.7448	0.7834	0.0713	2.9886	2.6558	0.1448	3.4601
Apr	5.1307	3.681	8.360	7.965	0.6678	0.7360	0.7876	0.0721	3.0003	2.6680	0.1454	3.5109
May	5.1337	3.722	8.382	7.780	0.6694	0.7271	0.7922	0.0729	3.0169	2.6825	0.1462	3.5903
Jun	5.1732	3.737	8.503	7.797	0.6680	0.7177	0.7869	0.0735	2.9966	2.6637	0.1452	3.5881
Jul	5.3051	3.854	8.869	7.942	0.6793	0.7134	0.7783	0.0747	2.9641	2.6325	0.1436	3.5832
Aug	5.5097	3.967	8.838	8.004	0.6891	0.7221	0.7850	0.0759	2.9903	2.6550	0.1448	3.6380
Sep	5.3561	3.862	8.571	7.931	0.6954	0.7318	0.7862	0.0747	2.9932	2.6579	0.1450	3.6364
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

Average of daily quotations	Paris 1 FRF	Rome 1 ITL	Vienna 1 ATS	Lisbon 1 PTE	Madrid 1 ESP	Athens 1 GRD	Tallinn 1 EEK	Tokyo 1 JPY	Melbourne 1 AUD	Seoul 1 KRW	ECU Commercial 1 XEU	SDR 1 XDR
	13	14	15	16	17	18	19	20	21	22	23	24
1992	0.8486	0.00364	0.4088	0.0332	0.0438	0.024	0.4060	0.03546	3.289	..	5.798	6.31546
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
1996												
Nov	0.8898	0.00301	0.4279	0.0298	0.0358	0.0191	0.3763	0.04052	3.625	..	5.782	6.60942
Dec	0.8845	0.00304	0.4247	0.0296	0.0355	0.0189	0.3735	0.04075	3.702	..	5.767	6.67218
1997												
Jan	0.8817	0.00305	0.4229	0.0298	0.0355	0.0190	0.3719	0.04051	3.712	..	5.777	6.75569
Feb	0.8806	0.00301	0.4225	0.0296	0.0351	0.0190	0.3716	0.04048	3.818	..	5.771	6.88718
Mar	0.8859	0.00299	0.4246	0.0297	0.0352	0.0190	0.3736	0.04138	3.998	..	5.801	6.98562
Apr	0.8908	0.00303	0.4263	0.0299	0.0356	0.0190	0.3750	0.04086	3.997	..	5.853	7.03636
May	0.8945	0.00305	0.4286	0.0299	0.0357	0.0189	0.3771	0.04335	3.975	..	5.880	7.12016
Jun	0.8878	0.00305	0.4258	0.0297	0.0355	0.0189	0.3745	0.04527	3.902	..	5.855	7.19320
Jul	0.8785	0.00304	0.4213	0.0293	0.0351	0.0189	0.3705	0.04609	3.939	0.00596	5.846	7.30859
Aug	0.8873	0.00306	0.4250	0.0295	0.0354	0.0191	0.3738	0.04672	4.085	0.00614	5.886	7.45951
Sep	0.8904	0.00307	0.4254	0.0295	0.0355	0.0190	0.3741	0.04434	3.876	0.00589	5.872	7.28131
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

4.2 Markka value of the ECU and currency indices

Average of daily observa-tions	Markka value of the ECU FIM/ECU	Currency indices, 1982=100	
		Trade-weighted currency index	Payments currency index
	1	2	3
1992	5.80140	116.4	115.7
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
1996			
Nov	5.81220	115.1	115.2
Dec	5.79898	115.2	115.9
1997			
Jan	5.80159	115.8	117.4
Feb	5.80357	116.4	119.4
Mar	5.82954	116.8	120.5
Apr	5.87626	117.8	121.6
May	5.90366	118.6	122.1
Jun	5.88180	118.7	122.4
Jul	5.86447	119.0	123.8
Aug	5.90587	120.4	126.4
Sep	5.89038	119.5	124.7
Oct	5.89974	119.4	123.9
Nov	5.94676	119.4	123.7

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
Central rate as of 25 Nov. 1996	5.85424	3.04000	0.906422	2.69806	0.796976	0.147391	0.0357345	0.432094	0.029657	7.32960	0.00307071
	1	2	3	4	5	6	7	8	9	10	11
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
1996											
Nov	–0.10	–0.97	–1.84	–0.51	–1.64	–0.87	0.10	–0.98	0.43	3.36	–2.10
Dec	–0.94	–1.70	–2.42	–1.28	–2.02	–1.63	–0.70	–1.71	–0.14	5.17	–1.16
1997											
Jan	–0.90	–2.13	–2.73	–1.79	–2.10	–2.07	–0.78	–2.12	0.39	6.29	–0.74
Feb	–0.87	–2.21	–2.85	–1.90	–2.20	–2.26	–1.79	–2.23	–0.21	7.76	–2.04
Mar	–0.42	–1.69	–2.27	–1.57	–1.70	–1.73	–1.45	–1.73	0.29	8.22	–2.53
Apr	0.38	–1.31	–1.73	–1.12	–1.18	–1.34	–0.52	–1.34	0.88	8.67	–1.31
May	0.84	–0.76	–1.31	–0.58	–0.60	–0.84	0.02	–0.80	0.97	6.14	–0.53
Jun	0.47	–1.43	–2.06	–1.27	–1.26	–1.49	–0.74	–1.45	0.01	6.37	–0.61
Jul	0.17	–2.50	–3.08	–2.43	–2.35	–2.58	–1.65	–2.50	–1.04	8.36	–0.86
Aug	0.88	–1.64	–2.11	–1.60	–1.50	–1.74	–0.92	–1.65	–0.47	9.20	–0.30
Sep	0.62	–1.54	–1.77	–1.49	–1.36	–1.62	–0.73	–1.56	–0.59	8.20	–0.11
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

5. Other domestic financing

5.1 Bank funding from the public, mill. FIM

End of period	Cheque and giro deposits	Trans-action deposits	Time deposits	Other deposits	Markka deposits, total (1+2+3+4)	Foreign currency deposits	Total deposits (5+6)	Other funding	Total funding (7+8)
	1	2	3	4	5	6	7	8	9
1992	34 832	88 526	114 771	21 218	259 347	14 626	273 973	65 557	339 530
1993	36 379	92 357	112 413	21 766	262 915	14 883	277 798	63 173	340 971
1994	41 200	99 691	108 922	19 838	269 650	12 774	282 424	44 228	326 651
1995	52 496	110 455	103 573	22 166	288 689	13 679	302 369	37 851	340 220
1996	58 016	131 632	49 827	45 963	285 438	12 358	297 796	40 315	338 111
1995									
Dec	52 496	110 455	103 573	22 166	288 689	13 679	302 369	37 851	340 220
1996									
Jan	49 611	112 796	95 511	25 399	283 316	13 011	296 327	50 008	346 335
Feb	50 458	114 837	92 259	24 321	281 875	14 184	296 059	38 431	334 490
Mar	47 744	117 393	88 832	24 956	278 925	13 951	292 876	41 906	334 782
Apr	48 998	118 926	85 803	25 557	279 285	14 896	294 182	43 472	337 653
May	49 759	120 368	82 956	26 065	279 148	15 399	294 547	46 802	341 349
Jun	50 372	123 941	77 448	29 039	280 800	13 816	294 617	43 867	338 483
Jul	49 770	123 827	74 304	31 319	279 221	13 735	292 955	42 524	335 479
Aug	49 632	124 983	71 631	32 613	278 859	12 857	291 717	47 258	338 975
Sep	51 578	124 477	67 805	33 601	277 462	13 706	291 168	53 697	344 865
Oct	53 460	127 084	63 616	34 720	278 880	12 938	291 818	48 272	340 090
Nov	52 682	128 841	59 728	35 853	277 104	12 050	289 154	47 988	337 142
Dec	58 016	131 632	49 827	45 963	285 438	12 358	297 796	40 315	338 111

5.2 Bank lending to the public, mill. FIM

End of period	Cheque account and postal giro credits	Bills of exchange	Loans	Markka lending, total (1+2+3)	Foreign currency credits	Total lending (4+5)
	1	2	3	4	5	6
1992	16 045	3 335	252 163	271 544	95 168	366 712
1993	14 217	2 223	248 406	264 846	66 931	331 777
1994	13 241	1 301	242 417	256 958	45 138	302 096
1995	12 348	901	235 074	248 323	32 252	280 575
1996	11 712	628	238 839	251 179	23 302	274 481
1995						
Dec	12 348	901	235 074	248 323	32 252	280 575
1996						
Jan	12 150	792	234 104	247 046	32 406	279 452
Feb	12 182	853	235 211	248 246	31 240	279 486
Mar	12 262	835	235 623	248 719	30 734	279 453
Apr	12 142	834	235 029	248 005	31 704	279 709
May	12 117	763	235 306	248 187	29 035	277 221
Jun	11 936	747	237 366	250 049	29 206	279 255
Jul	11 722	698	236 967	249 387	27 516	276 903
Aug	11 872	685	237 913	250 471	26 540	277 011
Sep	11 803	659	237 999	250 462	26 131	276 593
Oct	11 522	640	238 811	250 974	25 311	276 285
Nov	11 725	616	239 174	251 515	24 736	276 251
Dec	11 712	628	238 839	251 179	23 302	274 481

5.3 Money supply, mill. FIM

End of period	Foreign assets, net	Domestic credit: Claims on the central government	Domestic credit: Claims on the public	Domestic credit: Total (2+3)	Other items, net	Monetary aggregates: M_1	Monetary aggregates: M_2 (1+4+5)	Monetary aggregates: M_3
	1	2	3	4	5	6	7	8
1992	–68 099	81	439 937	440 018	–97 909	134 829	274 011	310 733
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
1996								
Oct	31 312	17 873	349 742	367 615	–105 768	195 621	293 160	332 372
Nov	36 768	16 834	350 532	367 366	–111 862	196 631	292 273	326 535
Dec	40 638	12 821	350 230	363 052	–106 399	204 834	297 291	325 473
1997*								
Jan	53 240	14 975	335 976	350 951	–105 893	206 956	298 298	339 801
Feb	56 614	9 887	338 163	348 050	–111 763	200 605	292 901	328 095
Mar	56 842	10 209	337 213	347 421	–105 201	206 040	299 062	338 407
Apr	58 658	14 411	337 724	352 134	–115 138	202 323	295 654	340 840
May	63 106	16 769	338 988	355 757	–118 574	206 912	300 289	349 640
Jun	73 782	3 256	337 432	340 689	–112 576	209 080	301 894	350 332
Jul	73 668	6 226	337 876	344 102	–118 495	206 628	299 276	353 820
Aug	72 438	5 162	339 432	344 594	–117 191	207 465	299 841	348 202
Sep	87 296	3 685	340 221	343 906	–133 072	206 090	298 129	350 548
Oct	..	..	..	..	..	209 178	300 745	353 649

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

End of period	Foreign currency-denominated debt: Bonds	Foreign currency-denominated debt: Other debt	Foreign currency-denominated debt: Total (1+2)	Markka-denominated debt: Public bonds	Markka-denominated debt: Other long-term liabilities	Markka-denominated debt: Treasury notes and bills	Markka-denominated debt: Miscella-neous items	Markka-denominated debt: Total (4+5+6+7)	Central govern-ment debt (3+8)	Out-standing lending	Cash funds
	1	2	3	4	5	6	7	8	9	10	11
1992	100 244	6 143	106 387	40 578	13 555	14 762	–9 700	59 195	165 582	61 671	19 781
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	66 855	41 878
1996	158 847	16 161	175 008	177 700	17 187	37 620	–12 300	220 479	395 487	64 316	38 369
1997											
Nov	159 449	16 292	175 741	174 696	17 198	36 909	–12 300	216 756	392 497	63 764	42 220
Dec	158 847	16 161	175 008	177 700	17 187	37 620	–12 300	220 479	395 487	64 316	38 369
1997											
Jan	159 222	20 920	180 142	180 261	17 187	40 506	–12 300	225 926	406 068	64 637	38 322
Feb	162 085	21 502	183 587	183 752	17 187	43 932	–12 300	232 769	416 356	64 957	51 137
Mar	158 001	21 195	179 196	187 972	17 149	43 821	–12 300	236 879	416 075	65 096	44 839
Apr	155 575	21 828	177 403	192 178	16 865	43 658	–12 300	240 588	417 991	66 479	41 543
May	155 880	23 054	178 934	194 126	16 865	44 045	–12 300	242 923	421 857	65 951	46 841
Jun	159 454	24 635	184 089	186 952	16 581	42 797	–12 300	234 248	418 337	65 979	37 376
Jul	156 183	25 261	181 444	190 450	16 574	44 522	–12 417	239 416	420 860	65 569	37 195
Aug	155 814	24 994	180 808	192 441	16 574	41 545	–12 417	238 430	419 238	65 716	37 233
Sep	154 425	25 586	180 011	202 789	16 573	39 063	–12 417	246 215	426 226	66 004	48 389
Oct	154 826	25 462	180 288	204 172	16 573	34 599	–12 417	243 193	423 481	..	48 685
Nov	141 898	25 597	167 495	216 455	16 557	34 458	–12 417	255 279	422 774	..	..

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
1992	6 984	15 043	12 965	2 674	4	37 671
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
1996*						
Oct	600	600	6 976	–	–	8 176
Nov	1 109	1 392	2 656	–	–	5 157
Dec	63	1 412	3 538	–	–	5 013
1997*						
Jan	–	377	4 608	–	–	4 985
Feb	417	432	4 836	–	–	5 685
Mar	75	1 380	4 660	–	–	6 115
Apr	6	988	4 258	–	–	5 252
May	–	1 071	2 201	–	–	3 276
Jun	451	289	5 472	–	–	6 212
Jul	–	–	3 508	–	–	3 508
Aug	–	425	3 375	–	–	3 800
Sep	1 070	1 454	10 431	–	–	12 955
Oct	1	650	1 509	–	–	2 159

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
1992	26 624	82 153	44 005	5 238	3 358	89 382	13 918	58 078	161 378
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*	25 245	44 656	179 419	4 362	140	219 863	2 956	31 003	253 822
1996*									
Oct	25 184	46 793	174 273	4 642	145	213 851	2 974	34 212	251 037
Nov	25 641	47 288	176 414	4 641	142	217 494	2 962	33 670	254 126
Dec	25 245	44 656	179 419	4 362	140	219 863	2 956	31 003	253 822
1997*									
Jan	25 091	43 814	181 980	4 357	140	222 769	2 614	29 999	255 382
Feb	24 727	41 827	185 472	4 302	140	226 058	2 393	28 017	256 468
Mar	25 514	43 257	189 688	4 126	99	231 672	2 118	28 894	262 684
Apr	25 462	44 214	193 517	4 126	99	236 936	2 107	28 375	267 418
May	24 336	43 819	195 466	3 977	93	238 090	1 842	27 759	267 691
Jun	23 872	42 300	188 292	3 943	91	229 911	1 833	26 754	258 498
Jul	23 402	41 461	191 789	3 932	91	232 715	1 829	26 131	260 675
Aug	23 103	41 564	193 780	3 924	91	234 752	1 663	26 047	262 462
Sep	23 844	42 915	204 128	3 918	90	247 500	1 477	25 918	274 895
Oct	23 433	43 068	205 511	3 910	88	248 820	1 366	25 824	276 010