

Finnish Monetary and Foreign Exchange Policy on the Way towards the Euro¹

Tapio KORHONEN*

1. Finnish Economy Already Adjusted to Integration pre-1990s

When the heads of the European Community states agreed on the gradual transition to Economic and Monetary Union in Maastricht on 10 December 1991, the project was not immediately seen as something that would directly affect Finland. Finland's membership to the European Union seemed a distant possibility and the realisation of the single currency concept within the proposed timeframe was generally regarded with scepticism.

Finland had already participated in Western Europe's integration process for decades. Finland's foreign trade had been liberalised in the 1950s. Finland was very much involved in European economic organisations, despite some constraints imposed by its foreign policy of that period. Finland had become a member of OECD (1969) and EFTA (1961, with full membership in 1986). In 1972 there had been negotiations with the European Community on a free trade agreement, and in 1991 cooperation centred on negotiations on the establishment of the European Economic Area. The EEA agreement came into force in 1994, meaning that from this time on most EU directives also concerned Finland.

The Finnish economy had already become highly integrated with the international economy. Finnish industry developed a competitive edge, particularly in the forestry sector and metal and engineering industries. Foreign trade was centred on Western Europe; albeit business with the Soviet Union accounted for somewhere around a fifth of all foreign trade.

Finland's economy was typical of the Nordic countries, with the central government playing a relatively large role, even though tax levels were not quite as high as in Denmark and Sweden. Productivity rose faster in Finland than in Western Europe on average, virtually closing the economic gap in standards of living that had appeared after the war. The rapid growth was achieved at the cost of very high investment levels (25–30 % of GNP).

* Bank of Finland, Economics Department (tapio.korhonen@bof.fi)

¹ A more detailed version of this article is available as a Bank of Finland Discussion Paper 25/2001. The views expressed are those of the author and do not necessarily reflect the views of the Bank of Finland.

In terms of the real economy, Finland's overall preparedness for integration was fairly good. The monetary and inflation requirements posed more serious problems. Inflation and nominal income had risen almost continually faster than in the competitor countries. Wage levels were agreed to in the context of extensive nationally binding collective agreements under which public authorities were often bound to take certain measures, which could even include policy decisions on interest rates.

Financial market regulations had been in place in Finland for the entire post-war period. However, at about the time of the signing of the Maastricht Treaty, the dismantling of control provisions concerning foreign exchange activities was completed. Although a step behind the others, Finland followed the rest of Western Europe along the path to greater liberalisation.

The Bank of Finland liberalised the interest rate system, as regards the banks, in 1986, after which banks' lending and deposit rates quickly became more market oriented. By the end of the 1980s a market-oriented approach for regulating bank liquidity had been adopted.

The markka had been pegged to the US dollar up until the early 1970s, after which the Bank of Finland began to fix the markka's external value according to a trade-weighted currency index. The permitted fluctuation limits were at various times 4.5 % or 6 %. The exchange rate generally remained (or was kept) fairly steady within the band. However, because Finland's inflation rate exceeded that of its trading partners, the markka had to be devalued at roughly ten-year intervals, by 10–30 %.

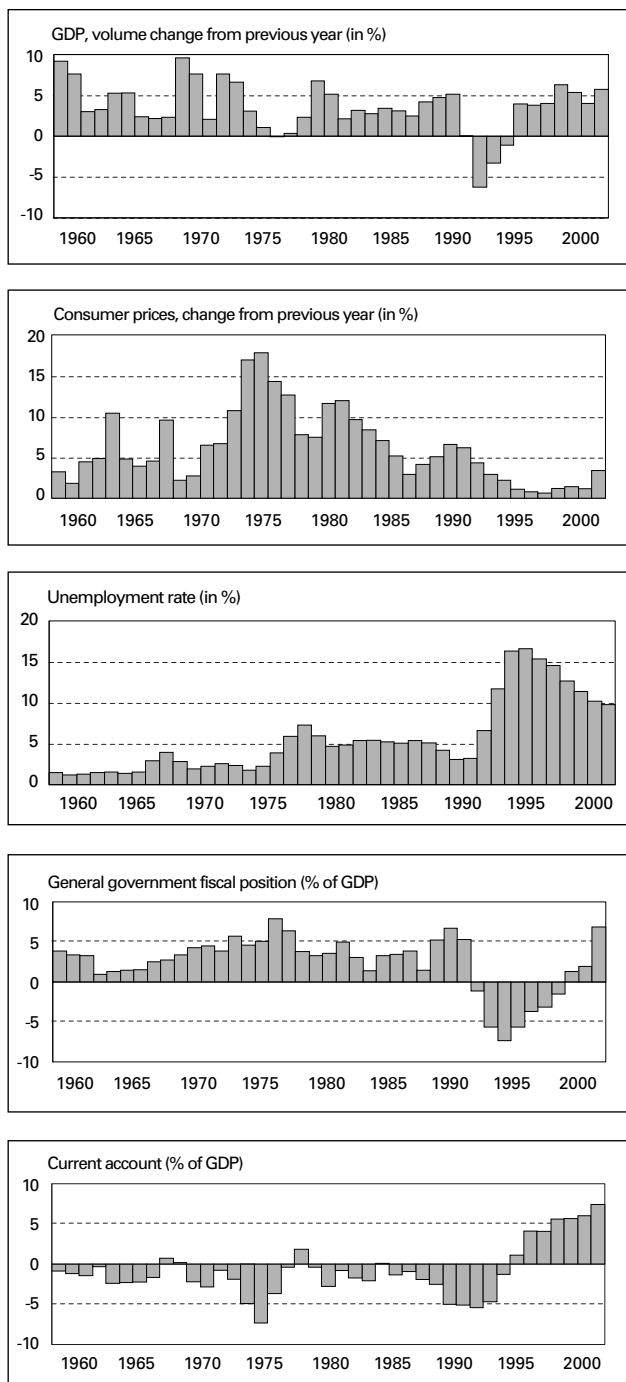
In June 1991 the markka was linked to the EC's official accounting unit, the European Currency Unit. The ECU-link was not sought after; rather Finland found itself forced by market pressures to mimic Norway and Sweden. The move aroused intense interest despite its modest economic impact, as ECU countries accounted for over 85 % of the trade-weighted index. All of the Western European currencies were now linked, admittedly via differing mechanisms, and were in practice 'pegged' to the Deutschemark, which served to anchor the system.

2. Backdrop for EU Membership and Monetary Union – the Deep Economic and Banking Crisis of the 1990s

At the time of the Maastricht Treaty, Finland was faced with a deepening recession; in fact this was an exceptionally deep recession for a western nation (*Figure 1*). Its roots could be partly found in the domestic economy, mainly in long-standing excessive demand, inflated costs and heavy debt loads at the time. Another causal factor was external: export trade to the Soviet Union plummeted to a fraction of its previous level as the Soviet Union disintegrated. In addition, there was a depression within the forestry industry and high international interest rates. Exports and investment collapsed. Finland's total output dropped by 7 % in 1991 and continued to fall the following year. Unemployment rose steeply and the central government slipped into a pronounced cycle of indebtedness.

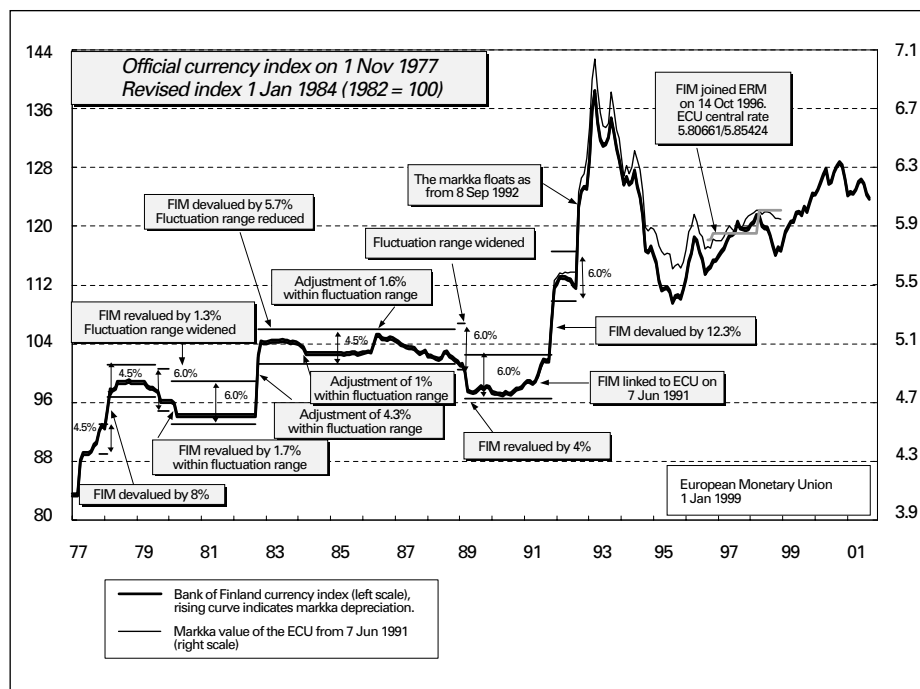
The government fiscal deficit (excluding the surplus of employment pension schemes) rose as high as 6 % of GDP in 1991 and 9 % the following

FIGURE 1 Finland: Key Economic Indicators



Source: Statistics Finland and Bank of Finland

FIGURE 2 External Value of the Markka



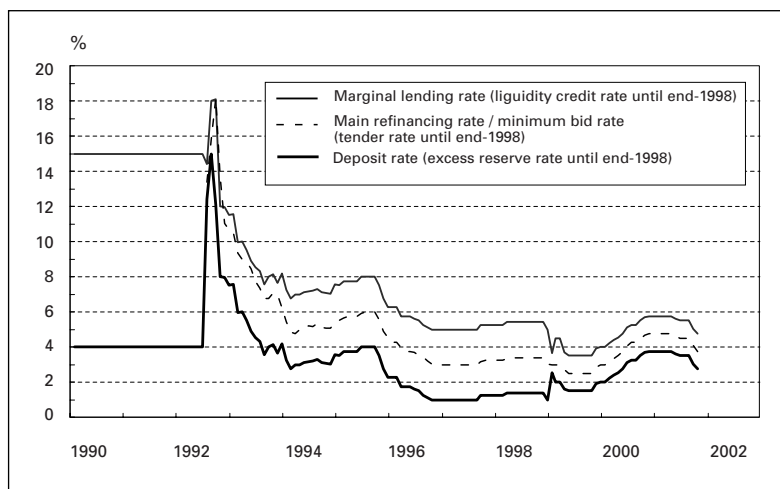
year. The large deficit had a stimulative effect on the economy, but there was a danger that financing could dry up. The government drafted a medium-term plan for 1993–1995, according to which the expenditure increase for 1992–1993 would be followed by a return to the 1991 level by the end of the plan period.

Immediately before the November 1991 Maastricht meeting, the markka came under speculative pressure and it became necessary to devalue the markka by slightly more than 12 % (*Figure 2*). Conditions in the foreign exchange market remained turbulent after the devaluation.

There were also serious problems in the financial markets. Despite the recession, Finland's interest rates had to be kept at a high level due to pressures from the foreign exchange market. The one-month Helibor rates touched over 20 % in autumn 1991 and again in 1992, under the pressure of devaluation speculation (*Figure 3 and 4*).

With the economic crisis came a severe banking crisis. The situation was exacerbated by the devaluation-related increase in the markka-value of a sizeable foreign currency-denominated debt. While the factors behind the banking crisis were primarily associated with problems in the real economy, a lack of preparedness for financial deregulation on the part of market participants exacerbated the situation. An accumulation of pent-up demand for credit was suddenly released with the deregulation of the market. Moreover, borrowers were not prepared for the possibility of high market rates.

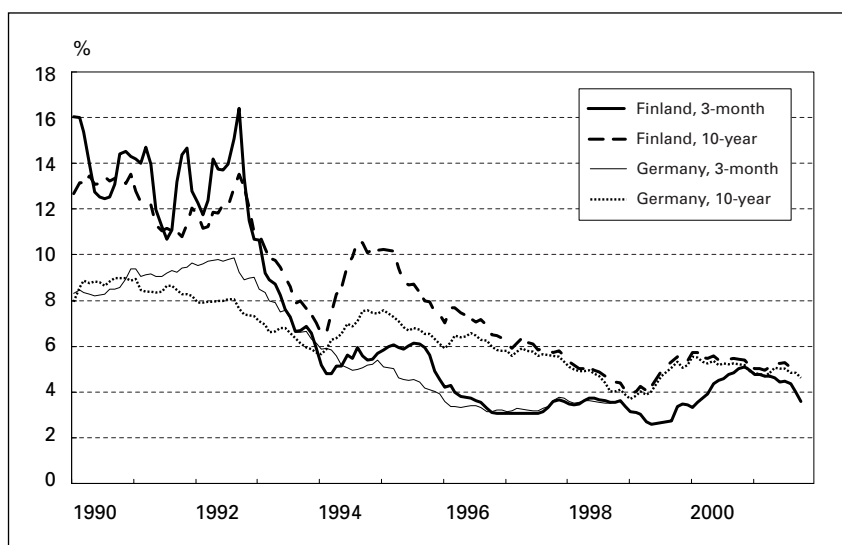
FIGURE 3 Monetary Policy Interest Rates



Source: European Central Bank; Bank of Finland

Note: Bank of Finland interest rate until end-1998. Since 1999 ECB interest rate.

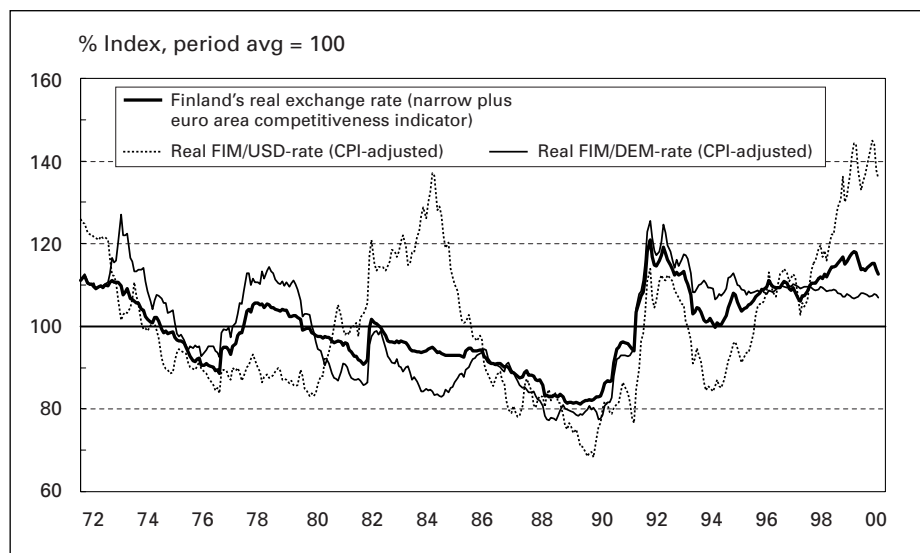
FIGURE 4 Interest Rates in Finland and Germany



A tax system that favoured borrowers was not reformed before the crisis hit.

The Bank of Finland has been widely blamed for the too rapid deregulation and poor timing prior to economic overheating and the recession that followed. In retrospect, the criticism may be fair, albeit in 1986, when deregulation was perhaps in its crucial phase, economic growth and the out-

FIGURE 5 Markka's Real Exchange Rates



Note: Rising curve indicates markka depreciation.
Source: Bank of Finland

look were fairly weak. There has also been heavy criticism of Finland's holding tightly to a fixed foreign exchange rate that was almost 20 % overvalued, in real terms, based on its average over the previous several decades (Figure 5).

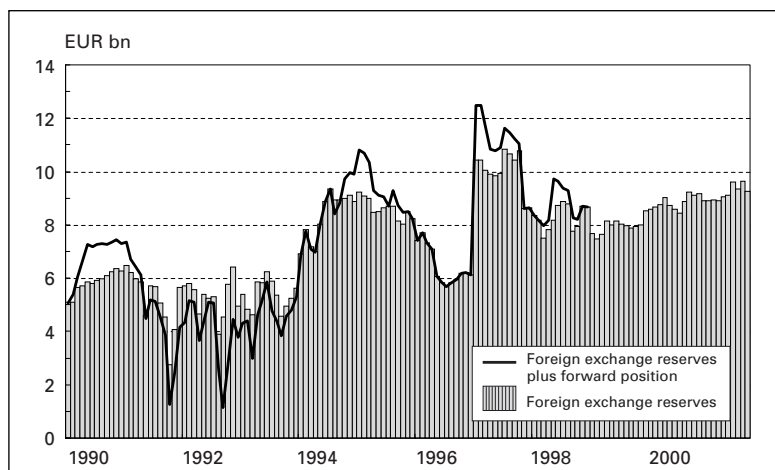
The roots of the problems stretched back to the 1980s. There were serious problems in the late 1980s concerning appropriate policies for restraining a surprisingly strong economic boom. The freeing of capital flows began to have a pronounced effect on monetary policy. Attempts at monetary tightening failed as foreign capital streamed into Finland, which also increased exchange rate risks for the private sector. Monetary policy had lost its effectiveness in the context of a fixed exchange rate.

In the early 1990s the feeling at the Bank of Finland was that a small devaluation would be impossible to control, as it would only add to exchange rate pressures. A switch to a floating exchange rate regime under these conditions was totally excluded if only for political reasons. Exchange rate policy was also strongly affected by the European fixed rate environment.

In the light of experience, these factors took on disproportionate importance; the fixed rate system soon failed in many other countries, and the inflation pick-up remained subdued in Finland and in other countries. On the other hand, in ex post assessments the timing of the devaluation was overemphasised.

The bulk of banks' loan losses were accounted for by savings banks. The central financial institution of savings banks had to be taken over by the Bank of Finland, and it was later turned over to the Government Gua-

FIGURE 6 The Bank of Finland's Foreign Exchange Reserves



rantee Fund for dismantlement. The branches of the failed savings banks were sold to other banks. On 23 February 1993, Parliament approved a resolution requiring that the Finnish State guarantee Finnish banks' ability to meet their commitments 'under all circumstances'; otherwise the banks would have found themselves in a deep crisis because of foreign liabilities.

It is estimated that the banking crisis cost Finnish taxpayers the equivalent of some 7–8 % of the annual GDP of that time. On the other hand, banking operations underwent rapid rationalisation in the years that followed, e. g. via staff cuts of 50 %. The Finnish banking sector became one of Europe's most efficient banking sectors. In terms e. g. of technology, settlement systems run by Finnish banks already had a long history of high efficiency.

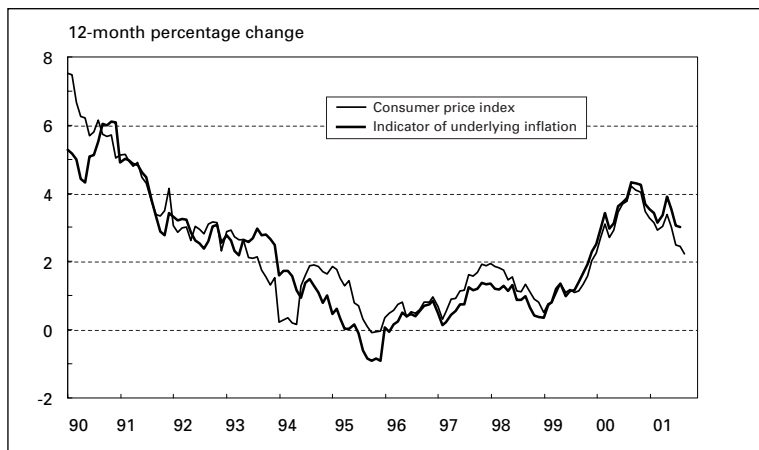
3. Run-up to EU Membership – Markka Floated (1992–1994)

An entirely new light was cast on Finland's foreign currency and monetary policies in the early part of 1992, as the government set its sights on becoming a member of the European Union. An essential part of a successful bid for membership was acceptance of the Maastricht Treaty in full and the implied agreement to join the single currency and single monetary policy.

The Bank of Finland's foreign reserves declined to a very low level as a result of speculative bouts in autumn 1991 and spring 1992 (*Figure 6*). In autumn 1992, pressure on the Finnish markka became unbearable. The Bank of Finland's foreign exchange position, including support loans, became negative. It became necessary to float the markka on 8 September 1992. The markka's external value fell immediately by another 10 %.

Not long after this the ERM itself fell. Thus the Western European exchange rates were starting to fluctuate again. In August 1993, the EU central bank governors and finance ministers decided to widen the fluctuation

FIGURE 7 CPI



ranges for ERM currencies, mostly to ± 15 %. Despite this, the core EU countries were able to maintain fairly stable mutual exchange rates.

The economic crisis had by that time resulted in a considerable lowering of Finland's international credit rating. Banks' foreign funding was limited to short-term borrowing, and spring 1993 saw a further reduction of the central government's credit rating. On the other hand, the position of export companies had strengthened considerably, having so far enjoyed a devaluation of about 30 %. After a brief but critical period, the central government's foreign financing sources became more readily accessible, and this fostered high levels of borrowing from abroad in the following years.

Although the international export markets were still weak in 1993, Finland's exports posted robust growth. A current account deficit that had persisted almost continuously for decades finally disappeared. GDP, after declining by more than 10 % over a two to three year period, recorded a slight increase in 1993 and a strong pick-up in 1994. Rapid growth of 4–6 % p. a. continued to the end of the decade. However, for many years demand was strongly biased toward exports while domestic demand remained sluggish. Growth and exports were supported by the exceptional success of the Finnish telecommunications industry (Nokia) at that time, which contributed roughly 0.5–1 percentage point to the annual growth rate in the last years of the decade. All in all, economic balance – excluding unemployment – was fairly well achieved.

The markka float was initially viewed as a temporary measure, but it was soon realised that conditions were not ripe for quickly re-establishing a fixed exchange rate. On 13 November 1992, the Council of State amended the Currency Act, authorising the Bank of Finland to abandon the limits on the markka's fluctuation range for an unspecified period.

The markka floated for about half a year without a clearly defined anchor for monetary policy. In February 1993 the Bank of Finland adopted a new policy of inflation targeting. The aim of monetary policy would be to stabilise inflation (CPI inflation, excluding the effects of indirect taxes,

grants, housing prices, and interest rates on housing loans) at 2 % by 1995. Partly due to the moderate wage agreements, inflation was already close to the desired level (*Figure 7*).

The foreign exchange market was marked by a great deal of uncertainty throughout 1993, and the Bank of Finland smoothed out fluctuations in the exchange rate via fairly large interventions in both directions. The easing of monetary policy could only be done gradually. Nonetheless, interest rates declined over the course of the year, until they were virtually on a par with German rates.

Over time, the markka float proved to be more stable than anticipated. The markka continued on the upward trend that had begun in 1993, moving toward its prefloat level, which helped ensure attainment of the inflation objective. The markka's depreciation had clearly been excessive.

4. Monetary Policy Arrangements and Market Institutions in the 1990s

4.1 Monetary Policy Arrangements

The monetary policy regime was already highly market-oriented. The key elements were (1) a permanent minimum reserve system, based on bank deposits, (2) open market operations, which were the prime means of exercising control over bank liquidity, and (3) the liquidity facility, which ensured that a bank could automatically acquire or invest liquidity.

A new minimum reserve system entered into effect in July 1993. The reserve ratio varied between 1 % and 2 %, depending on the liquidity of the account, and no interest was paid on reserve deposits. Later, in October 1995, the system was changed so that reserve requirements were met on the basis of monthly averages instead of fixed monthly amounts. With the new averaging feature, the system was now an integral part of banks' daily liquidity management.

Liquidity was controlled via open market operations, which, in the early phase, took the form of direct transactions with banks, largely in bank CDs. These operations were not conducted on a fixed time schedule but rather in accord with current conditions. Because banks generally had ample liquidity, the Bank of Finland also frequently absorbed liquidity by issuing its own CDs.

In July 1992 the Bank of Finland adopted an auction (tender) system. For the first couple years, the new system was based on variable-rate tenders. The operations were usually based on a maturity of one month, albeit occasionally three-month or even one-year maturities were applied. In December 1994 the Bank of Finland switched to fixed rate (i.e. quantity) tenders, which underlined the role of the tender rate as the key signalling mechanism of monetary policy. With the introduction of fixed rate tenders, banks' bids quickly grew to many times their liquidity needs. Starting in March 1996, the Bank of Finland accepted the banks' bids in full, which forced them to gauge their bids realistically.

In addition, the monetary policy instruments included the liquidity faci-

lity. The facility's liquidity credit rate and call money deposit (later excess reserve) rate were defined as margins vs. the tender rate. In 1993 both margins were set at 2 percentage points, where they remained until the end of the era of national monetary policy. The maturity of liquidity credit was generally one week.

Overall, the monetary policy instruments were relatively effective and were not changed much during the final years of national monetary policy.

4.2 Intervention in the Foreign Exchange Market

At best, the Bank of Finland's foreign reserve assets were only slightly above the international average, at about 10 % of GDP (Figure 7). Due to frequently occurring pressures, the foreign reserves tended to fall substantially below the Bank's target level. The Bank pursued an active policy of investing its reserves. The US dollar was the most important currency, but the European currencies together accounted for the bulk of the investments.

Often in the face of exchange rate pressures, forward interventions were resorted to. Foreign currency could be sold without a visible reduction in foreign reserves until the forward agreements expired several months later. Forward exchange agreements also enabled delay of the effects of currency pressures on liquidity in the domestic money market and hence to an extent performed the task of open market operations. Both domestic and foreign companies used forward exchange agreements for speculative purposes, and these were the primary means of capital flight. The volume was perhaps affected by the fact that the forward markets were largely deregulated already at the start of liberalisation in 1980.

Problems in the currency markets and concerning liquidity management sometimes arose as a result of the old practice by which the central government handled its currency operations via the Bank of Finland. The central government's foreign currency operations did not affect the exchange rate but did have major impacts on the amount of foreign reserves and bank liquidity. The central government's foreign currency-denominated debt remained excessive in the latter half of the decade, amounting to about a third of GDP.

Defending the markka via interventions was sometimes costly to the Bank of Finland. The government in 1996 provided compensation for part of the costs related to the banking crisis. Nor was the Bank able to turn over any earnings to the central government for over a decade. One factor in the Bank's poor financial results was the fact that the amount of banknotes in circulation was extremely low by international standards. This was largely due to an extensive bank branch network and efficient payment system.

4.3 Changes in the Banking System

The Finnish banking system had functioned in a highly stable manner for decades. Up until the 1990s the banking markets were dominated by five banks/banking groups, consisting of two large commercial banks and

the state-owned Postipankki, as well as large groups of local savings and cooperative banks. In Helsinki there were a few small commercial banks and subsidiaries of foreign banks. Postipankki operated largely in the manner of a commercial bank – partly via the post offices – but was in a special position vis-à-vis central government payments. Thus the government did not hold its financial assets at the Bank of Finland.

A legacy of the regulation era was the large number of national features of the financial markets. The markets were highly bank-centred. The securities markets were relatively unimportant. The interest rate system and taxation of financial assets had particularly national features; most bank deposits and bonds were variable-rate instruments. A broad system of reference rates was put in place, which included – in addition to the traditional base rate – LIBOR-type HELIBOR rates and bank-specific prime rates set by individual banks.

The banking crisis, broad internationalisation and gradual preparation for EU integration gave rise to an adaptation of the financial system to a new situation. The Finnish banking system was almost completely revamped in the 1990s. At the start of 1995 the two largest commercial banks were merged into a single institution, and at the end of the decade the bank joined the Nordic banks' merger trend. Postipankki discontinued its postal activities and lost its legally mandated status as regards government payments. Despite this concentration of banking business, the banks' competition has tightened. The interest rate margin has narrowed, mainly as a result of declining rates on household lending.

5. The EU-era Float Prior to Joining the ERM

5.1 Maastricht Criteria

Finland joined the EU at the start of 1995, along with Sweden and Austria. Referenda on joining were held in autumn 1994. Uncertainty about the outcome caused a rise in interest rates and a slight depreciation of the markka in summer 1994. In order to curb the rise in interest rates, the Bank of Finland allowed for a relatively high level of liquidity in the money market, and the markka was supported with small interventions. The positive vote eased the situation, and during the latter part of the year the markka appreciated by nearly 10 %, in terms of both the ECU and the foreign trade-weighted index. In the summer it became possible to repurchase foreign currency, and foreign exchange reserves grew substantially for the whole year 1994. The tender rate fluctuated, most of the year just over 5 %, but ended the year slightly above 5.5 %.

Before Finland joined the EU, the Bank of Finland signed agreements with other EU central banks on the Exchange Rate Mechanism (ERM), which was a part of the EMS, and a short-term financing arrangement. However, Finland, unlike Austria, did not join the ERM. Pegging the markka within the ERM was not deemed realistic – from the viewpoint of either Finland or the ERM countries – in light of the recent period of uncertainty.

Finland at the time was fairly far from meeting the four detailed con-

vergence criteria set out in the Maastricht Treaty as requirements for EMU membership. At the time, it seemed that Finland was able to easily fulfil only the inflation criterion (average CPI inflation for the year before the examination not to exceed by more than 1.5 percentage points that of the three best performing Member States). The CPI rose at an annual rate of only about 1 % in the latter part of 1994, although there was concern about the effects of the wage settlement agreed.

Finland's general government debt clearly amounted to less than 60 % of GDP, but the general government deficit for 1994 had again amounted to more than 5 % (the limit was 3 %). The long-term yield on government bonds had risen, along with international yields, back to around the 10 % level – clearly above the interest rate criterion. On the other hand, it seemed fairly certain that the interest rate criterion would be met if the other criteria were met.

The exchange rate criterion (compliance with the ERM for at least two years) caused the most concern. The markka's exchange rate had been extremely volatile. It had started on a clear upward trend and by end 1994 had nearly reached the pre-float level. Floating was in fact seen as beneficial as a means of determining a realistic and stable exchange rate.

An additional requirement set out in the Maastricht Treaty was that the central bank be guaranteed independence as regards monetary policy. Although the Bank of Finland had been relatively independent of the government, it was clearly subordinate to Parliament. The fact that the Bank was not independent of the government became quite clear in spring 1992 when the Governor of Bank of Finland was forced to resign as a result of a dispute with the Prime Minister.

5.2 Monetary Conditions Were Favourable at First but Unsettled in 1996

EU membership did not immediately affect Finnish monetary policy in any essential way. Integration, however, did mean that developments related to the monetary policy regime and financial institutions in general were guided to a greater extent by events in other EU countries. The Bank of Finland participated in preparatory work within the EMI, e. g. in the development of Eurosystem monetary policy instruments.

The Finnish markets remained calm, and the markka continued to appreciate slowly up to year-end. In connection with a rise in international interest rates, the Bank had raised the tender rate in December 1994. In February the rate was raised to 5.75 %, and in June to 6 %. By December 1995 the tender rate had fallen to 4.25 %. The traditional – but no longer highly significant – base rate was lowered at that time to 4.75 %, which was half of its peak level of 9.5 % reached in 1992.

The decline in interest rates was enabled by a decline in inflation and inflation expectations to less than 2 %, in fact nearly to zero. Thus the inflation target for 1995 was achieved, albeit this was partly due to a one-off drop in food prices in connection with EU membership.

Toward the end of 1995 the markka began to depreciate. The weakening

was a result of speculation in connection with the ERM link-up, as well as temporary sluggishness in the Finnish economy. Especially the domestic markets expressed the view that the markka was then too strong for the ERM link-up. The Deutschemark rose in value from FIM 2.97 in December 1995 to a peak of FIM 3.16 in May 1996. More than 10 % of foreign exchange reserves were sold.

In May the market pressures were reversed, probably due in part to parliamentary approval of a change in the Currency Act that enabled more flexible decision-making in connection with the ERM link-up. Foreign investors began to have confidence in the markka and its readiness for the ERM. In the summer the markka again appreciated vs. the Deutschemark, to a FIM/DEM rate of 3.

It was again possible to lower the level of Finnish interest rates. In July the tender rate was already down to 3.5 %, and in October it was lowered to 3 %, i.e. the same as the Bundesbank's repo rate. The differential vs. Germany for the yield on ten-year government bonds narrowed to about one-half percentage point. In terms of interest rate level, Finland had reached the average for ERM countries.

6. Membership in the EU's Exchange Rate Mechanism (ERM)

6.1 ERM Linkup in October 1996

In the environment of the European Union, the Bank of Finland and the government together had explored the prospects for linking the markka to the ERM. The exchange rate and the financial markets had gradually stabilised in accord with objectives, nor did ERM countries any longer express doubts as to Finland's eligibility for the ERM. The government's outspoken goal was for Finland to be part of the first wave of countries to enter Stage Three of EMU.

The key issue to be decided – not only for Finland but for other EU countries as well – was the rate at which the markka should be linked to the ERM, against the background that the rate chosen was to be consistent with the final conversion rate for changeover to a single currency. Although the decision formally concerned the markka's ECU rate, it was in fact taken on the basis of the exchange rate vs. the Deutschemark. The FIM/DEM rate had been highly volatile during the 1990s. Before the markka devaluation in 1991, the FIM/DEM rate was about FIM 2.30–2.40. The markka hit its weakest level in 1993 when the FIM/DEM rate was 3.60. The fact that the markka was floating facilitated the choice of an appropriate exchange rate. In 1995–1996 the markka had fluctuated between FIM 3.16 and FIM 2.95, gradually stabilising at about FIM 3.

Extensive studies of the equilibrium exchange rate were also conducted at the Bank of Finland, but the results varied greatly. It was feared that too weak an exchange rate would generate inflationary pressures, especially considering that the interest rates were to be fixed at a low level. On the other hand, a relatively weak ECU central rate could be justified e. g. by the continued heavy external indebtedness of the Finnish economy (about

50 % of GDP). Furthermore, at the time, the Deutschemark, like the ECU, was very strong vis-à-vis the dollar.

On 12 October 1996 the government finally decided to join the Finnish markka to the ERM. The markka's central rate was agreed within the Monetary Committee, under the ECOFIN Council, in a fairly broad consensus. The markka's ECU central rate was set at FIM 5.80661, the bilateral Deutschemark central rate being FIM 3.0400. The agreed central rate was thus close to the average level that had prevailed for the markka vis-à-vis major ERM currencies over the past couple years.

In connection with the ERM linkup, bilateral exchange rates and fluctuation limits were set for the markka in relation to all the ERM currencies. With the ERM's fluctuation margins of approximately 15 %, the Deutschemark intervention limits became FIM 3.53 and FIM 2.62. Within the ERM, no intervention limits were defined against the ECU. In keeping with the Maastricht Treaty, new currencies were no longer included in the ECU basket.

Finland's membership in the ERM became effective on 14 October 1996. The linkup went smoothly. The selected exchange rate level was a couple per cent weaker than the market rate and thus not far out of line with expectations. At the time of the linkup, the markka exchange rate vs. the Deutschemark remained in the region of FIM 2.99. In relation to its ECU central rate, the Finnish markka was one of the strongest currencies within the ERM.

In connection with the ERM linkup, the Bank of Finland announced that it would continue to pursue the price stability objective but also underlined the importance of exchange rate stability. The Bank's objective was to keep the markka quite stable within the ERM. The Bank intervened in the exchange market only to a minor extent, and in both directions, toward the end of 1996.

The chosen exchange rate level was consistent with the final conversion rate. In light of subsequent developments, the selected rate turned out to be rather weak. With the clear depreciation of the ECU and with domestic costs remaining fairly well contained, Finland's international price competitiveness remained exceptionally good over a long period of time. This was mirrored e. g. in very large current account surpluses (6–7 % of GDP) around the millennium change.

6.2 The Government Sector Deficit and Decisions in Incomes Policy

The performance of the Finnish economy was favourable as Stage Three of EMU drew closer. Robust economic growth continued and unemployment declined, though it remained among the highest in the EU countries. In 1997 inflation picked up slowly but still remained within the 2 % target. Corporate profitability remained good and share prices rose partly due to strong demand by non-residents. The central government deficit declined rapidly. The government took a decision to keep total budget expenditure roughly unchanged over the period 1998–2001.

The EU's ECOFIN Council in May 1997 removed Finland from the list of countries with excessive general government deficits. In 1996 the general government (including the Finnish statutory earnings-related pension scheme) deficit still exceeded 3 % of GDP but in 1997 the deficit had fallen clearly below the reference value, actually close to 1 % of GDP as a result of exceptionally good overall economic performance and strict adherence to spending ceilings. Membership in the EU did not have remarkable effects on government finances. Excluding the first year, Finland's payments to the EU slightly exceeded the corresponding receipts. The ratio of general government debt to GDP had stayed below 60 %.

Membership in a single currency area of low inflation imposed a clear and powerful restriction on incomes policy. The loss of the devaluation option was recognised by labour market organisations on both sides. The trade unions said they appreciated the importance of wage moderation, whereas the employers announced that they would in principle refrain from demanding wage cuts. However, in the face of expected cyclical problems in the EMU context as well, the government, together with the labour market organisations, took measures to build up 'cyclical buffer funds'.

In 1997 the central labour market organisations made an agreement to build up two separate buffer funds, designed to smooth out fluctuations in labour costs. It was decided that an amount representing nearly 0.5 % of GDP would be set aside in an Unemployment Insurance Fund. The fund serves to ensure that the rate of unemployment insurance contribution payable by wage earners and employers can be kept unchanged in periods of economic slack. Another, slightly larger, buffer fund was built up within the statutory earnings-related pension scheme, for collection of pension contributions from both employees and employers. Total assets in the funds were estimated at 2–3 % of total wages.

This was not an entirely new approach in that contribution rates had also in the past been adjusted in response to cyclical conditions. The funds will remain small and their practical importance is far less than that of the devaluations of the past. It has also been suspected that timely usage of the funds may be difficult. In any case, the funds are clearly of some importance.

6.3 The Last Currency Speculation and Calmer Markets

With the changeover date, 1 January 1999, gradually becoming an established fact and the situation stabilising within the ERM, market confidence in the transition to a single currency strengthened. Consequently, the prospective EMU currencies started to converge in terms of exchange rates and interest rates. Considering also that the Bank of Finland deemed it essential that the markka remain stable within the ERM, the scope for an independent monetary policy started to diminish. The Bank's management nonetheless stressed that the responsibility for monetary policy would remain with the Bank up until the very onset of Stage Three.

In January 1997 the Finnish markka surprisingly became the focus of heavy speculation. This time, the pressure was upward, as foreign investors,

especially, started to purchase markka in large amounts. Underlying this behaviour was probably the view that the markka's conversion rate would be too low in light of the strong performance of the economy.

The Bank of Finland responded by purchasing foreign currency in such large amounts that the foreign exchange reserves (incl. the forward position) doubled in January. Representing more than 5 % of GDP, the interventions were very large, even by international standards. Nonetheless, the Bank eventually had to allow the markka to float at about 5 % stronger than its Deutschemark central rate. Official interest rates were however kept unchanged. Subsequently calm was suddenly restored and the markka fell back to its pre-appreciation level within a few days.

In the following months calm continued to prevail both in the Finnish foreign exchange market and within the ERM. In 1998 various currencies continued to come under pressure, strengthening pressure in the case of the markka. However, only the central rate of the Irish pound was adjusted.

Moderate upward pressure on prices prompted the Bank of Finland to raise its tender rate to 3.25 % in September 1997. The conduct of an independent interest rate policy was possible until the very onset of Stage Three but not in practice, partly because of the general awareness of the temporary nature of interest rate hikes. Fortunately the balanced performance of the Finnish economy continued. Inflation seemed to be settling below the 2 % level.

As confidence in the use of the central rate as the final conversion rate strengthened, convergence of interest rates and exchange rates continued. Insofar as a country's interest rate was higher than the German rate, its currency had to be stronger too, to ensure that the depreciation was consistent with the interest rate differential. In practice, this interest rate parity did not fully hold, even for the Finnish markka, which apparently continued to face a moderate risk of revaluation for the remainder of the time before the start of Stage Three.

6.4 Changeover to the Single Currency and Single Monetary Policy

The final major changes in the monetary policy framework of the Bank of Finland were made in November 1997. The Bank began to apply two-week, instead of one-month, maturities in its tenders. Moreover, the quantitative limits on credit were abolished, but the collateral requirement remained.

Markets were very calm in the year before the changeover and the final decisions could be taken without major problems. Monetary policy continued to be relatively easy. However, the rate of inflation was already higher in Finland than the average rate for the prospective euro area countries, which prompted a moderate increase in the tender rate to 3.4 % still in spring 1998.

Long-term yield differentials vs. Germany had narrowed to less than 50 basis points already in the course of 1997 in all prospective EMU countries.

They narrowed further in 1998, except for late summer, at the time of the Russian financial crisis. The impact on ERM currencies, including the Finnish markka, nonetheless remained subdued. At the time of the changeover to the euro, the interest rate on the Finnish government 10-year bond was as low as 4.0 %.

At the EU summit held on 2–3 May 1998, the heads of state and government decided on the eleven countries that would be in the first wave to join monetary union. Countries of importance to Finland, i. e. Sweden, Denmark and the United Kingdom, did not join in the first wave, which was a disappointment to Finland, considering Finland's volume of trade with these countries, which was roughly the same as that with the first wave countries.

In connection with the summit, a pre-announcement was issued on the bilateral conversion rates for the prospective euro area currencies to be fixed on 1 January 1999 and an assurance that they would no longer be changed. These decisions had a stabilising effect on the money and foreign exchange markets. Following the decisions taken at the summit, the European Central Bank commenced operations on 1 June 1998. The Governor of the Bank of Finland was elected to the first six-member Executive Board of the ECB. She and the new governor both became members of the Governing Council.

The ECB's monetary policy strategy differed from the inflation targeting strategy applied by the Bank of Finland. However, the monetary policy instruments of the ECB closely resembled the arsenal that had been in use by the Bank of Finland.

At the December meeting of the ECB Council it was agreed that the national central banks adopt a harmonised steering rate of 3 %, which then became the initial rate for the single monetary policy. The Bank of Finland took its last interest rate decisions on 3 December 1998 when it lowered the tender rate from 3.4 % to 3.0 %, and the base rate was set at 3.5 %. The rate cut was not well suited to the strong performance of the economy. This concern was further heightened by the reversal in early 1999 of the upward trend in the euro exchange rate witnessed toward the end of 1998. Domestic costs could however be surprisingly well contained.

At the EU's summit in May the final conversion rates against the euro could not yet be fixed because the Maastricht Treaty did not allow changes in the value of the euro in connection with the changeover. The problem was due to the fact that the currencies in the ECU basket were not identical with the prospective EMU currencies. It was only in the evening of the last day of 1998 and on the basis of the exchange rates then prevailing that the EU Council fixed the conversion rates against the euro. The markka's rate was to be 5.94573 per euro.

7. Concluding Remarks

Over the course of a little more than ten years, the Finnish money and foreign exchange markets had undergone a profound transition. Financial market restrictions, of a regulatory nature, had been lifted. The liberalisa-

tion had brought about surprises and difficulties, the severe banking crisis being the most serious one. However, at the same time the financial system developed favourably and became increasingly globalised.

Finnish foreign exchange policy has actually been carried out within all the foreign exchange regimes, starting with financial market regulation and a fixed exchange rate regime. The liberalisation of capital flows in the late 1980s resulted in the loss of monetary policy independence, and attempts at pursuing an independent monetary policy led to successive speculative attacks against the currency and ultimately to the collapse of the peg in 1992. A monetary policy strategy based on the price stability objective under the floating exchange rate was introduced in 1993. This strategy proved very effective in the following years. Membership in the ERM in 1996 again brought the fixed exchange rate objective to the surface, although this time without tensions. Commitment to monetary union paved the way for the changeover from a national monetary policy to the single currency and single monetary policy of the EU at the start of 1999.

In Finland the adjustment to a single currency proceeded surprisingly well in the final years before adoption of the euro. This was clearly a consequence of the economic crisis of the early 1990s, which – though in itself very severe and expensive – had brought balance to areas of the economy which had traditionally given rise to problems. Problem areas included inflation in particular and cost developments in general, as well as the continuous tendency of the economy toward overindebtedness. The realism following in the wake of the crisis provided a strong foundation for participation in a single monetary union that sets very strict criteria for economic performance.

REFERENCES

The main sources are the Bank's annual reports, the Bulletin and Markka ja talous.

The Finnish economic and banking crises are discussed in various English-language articles, for example:

Finnish Economic Papers – Special Issue on the Crisis of the Finnish Economy, vol. 9, 1996, no. 1.

HONKAPOHJA, S. – KOSKELA, E. (1999): The economic crisis of the 1990s in Finland. *ETLA* (The Research Institute of the Finnish Economy) *Discussion Papers*, 1999, no. 683.

NYBERG, P. – VIHRIÄLÄ, V. (1994): The Finnish banking crisis and its handling. *Bank of Finland Discussion Paper*, 1994, no. 7.

The Bank's monetary and exchange rate policy and developments in the domestic financial markets in the 1990s are discussed in various English-language articles in the Bulletin:

AHONEN, J. – PYYHTIÄ, I. (1996): Integrating Finland's economy into the EU. *Bank of Finland Bulletin*, 1996, May.

Finland joins the EU exchange rate mechanism. *Bank of Finland Bulletin*, 1996, October.

HÄMÄLÄINEN, S. (1996): Finland and the EMU: some perspectives. *Bank of Finland Bulletin*, 1996, November.

OLLILA, E. (1998): EMU and the Finnish financial markets. *Bank of Finland Bulletin*, 1998, March.

PIKKARAINEN, P. – SUVANTO, A. – HUKKINEN, J. – PYYHTIÄ, I. (1997): Monetary policy in Finland, experiences since 1992. *BIS Policy Papers*, 1997, no. 2 – “Monetary policy in the Nordic countries since 1992”.

PIKKARAINEN, P. – TYRVÄINEN, T. (1993): The Bank of Finland's Inflation Target and the Outlook for Inflation over the Next Few Years. *Bank of Finland Bulletin*, 1993, June-July.

VANHALA, M. (1997): Monetary policy in 1998. *Bank of Finland Bulletin*, 1997, December.

SUMMARY

JEL Classification: E58

Keywords: monetary policy – foreign exchange policy – EMU – euro – monetary policy arrangements

Finnish Monetary and Foreign Exchange Policy on the Way towards the Euro

Tapio KORHONEN – Bank of Finland, Economics Department (tapio.korhonen@bof.fi)

This paper presents the salient aspects of Finland's monetary and exchange rate policies during the run-up to monetary union in the 1990s. In the course of slightly more than a decade, Finland's monetary and exchange rate policies were thoroughly revamped. There were serious problems associated with the liberalisation process in the early part of the decade, the most noteworthy being an economic and banking crisis. Finland's financial system nonetheless developed rapidly. As regards exchange rate policy, almost all varieties of exchange rate regime were tried. A fixed rate regime based on a currency index fell apart in the early part of the decade and was replaced by a floating rate system. Later, in 1993, this was combined with an inflation-targeting monetary policy strategy. At the start of 1995 Finland joined the European Union, and in October 1996 the markka was joined to the EU's Exchange Rate Mechanism. The improvement in financial and price stability that followed the economic crisis facilitated the adjustment to the euro area's single currency and single monetary policy at the start of 1999, which was accomplished without serious problems.