



# BULLETIN

BANK OF FINLAND

May 1990 Vol. 64 No. 5

Recent Economic and Financial Market  
Developments

Unions, Wage Bargaining and  
Employment in Finland: a Bargaining  
Model Approach

<b>Recent Economic and Financial Market Developments</b> by Christian Starck	3
<b>Unions, Wage Bargaining and Employment in Finland: a Bargaining Model Approach</b> by Timo Tyrväinen	6
Items: Board of Management of the Bank of Finland New cash reserve agreement First supplementary budget for 1990 Publication of the Bank of Finland	11
Monetary and foreign exchange policy measures from June 1989 to May 1990	13
Finland in brief	16
Statistics	S1
Charts	S27

## PUBLISHER

**Suomen Pankki Finlands Bank**  
P.O.Box 160, SF-00101 HELSINKI, FINLAND  
Telephone: National (90)1831  
International +358 0 1831

Telex: 121224 SPFB SF  
Telefax: 174872  
Cables: SUOMENPANKKI

**Editor-in-Chief** Antero Arimo  
**Editor** Marja Hirvensalo-Niini  
**Subscriptions** Heli Virtanen

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

ISSN 0784-6509

# RECENT ECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

by **Christian Starck**, Lic.Sc.(Econ.)  
Economics Department  
Bank of Finland

## GROWTH AT A TURNING POINT

The Finnish economy continued to expand rapidly in the first three quarters of 1989. However, growth slowed down markedly towards the end of the year, and both industrial production and consumption fell marginally in the fourth quarter. Real GDP growth amounted to 5.0 per cent for the year as a whole. The scant information so far available for the first quarter of the current year lends support to the view that activity has cooled down further.

The imbalances in the economy have persisted into the current year in spite of the downturn in economic activity. In the first quarter of 1990, the 12-month rise in consumer prices peaked at over 7 per cent and the four-quarter moving total of the current account deficit amounted to FIM 22 billion.<sup>1</sup>

During the latter half of 1989, increased uncertainty about future economic conditions coupled with sharply higher interest rates curbed consumption. According to revised national account figures, the volume of private consumption expenditure increased by 3½ per cent in 1989. The volume of private fixed investment rose by a remarkable 14½ per cent. Residential construction grew exceptionally fast in early 1989, while corporate investment in machinery and equipment ex-

panded strongly throughout the year. Activity in the first quarter of the current year was sustained chiefly by investments initiated last year.

The demand for labour remained high throughout 1989, and the supply of labour increased by 2 per cent in the course of the year. The downward trend in the unemployment rate has continued into the current year, reflecting cyclical lags in the labour market. In the first two months of this year the seasonally adjusted unemployment rate stood at about 3 per cent.

The current account deficit widened to FIM 21 billion, 4.3 per cent of GDP, in 1989. The terms of trade deteriorated somewhat during the first quarter of 1990, mainly because of a fall in export prices for basic metals and forest products. The recent fall in the price of crude oil may lead to a small strengthening of the terms of trade in the near future, however. Growth in the volume of both exports and imports slowed down in the first quarter of the current year, giving rise to a cumulative deficit of FIM 0.2 billion in the trade account.

## FISCAL POLICY IMPACT NEUTRAL

Whereas central government budgetary operations had a restrictive effect on real GDP growth in 1989, the overall impact is estimated to be broadly neutral this year as growth is slowing down. The substantial financial surplus of the government sector is expected to decrease slightly, but will stay high in relation to GDP. In 1989, state debt was

reduced by FIM 5.2 billion, and outstanding debt in relation to GDP fell from 13 to 11 per cent. The increases in funding for central government pensions will contribute to keeping the fiscal policy stance relatively tight, and growth will also be curbed by the continuation of the investment tax on construction in the service sectors.

Last November, the central labour market organizations accepted the state mediator's proposal for a comprehensive economic and incomes policy settlement. As unions in most sectors of the economy subsequently concluded pay agreements in accordance with the proposal, the implied changes in fiscal policy are incorporated in this year's first supplementary budget. These changes include the revoking of increases in national pension and sickness insurance contributions. However, those unions — representing almost one-third of the labour force — which did not accept the state mediator's proposal reached agreements providing for pay increases in excess of those in the comprehensive settlement. All in all, the new wage agreements have done little to ease the rise in domestic cost pressures. Their effects on consumer prices have, however, been counteracted by a downward trend in dwelling prices and recent developments in foreign trade prices.

## MARKET RATES DOWN

At the turn of the year, market interest rates were very high by historical standards, reflecting the imbalances in the economy and expectations

<sup>1</sup>An industrial dispute in the banking sector from mid-January to early March delayed the release of financial market statistics, thus complicating the assessment of developments during the first months of 1990.

that they would worsen further as well as uncertainty related to the outcome of the wage settlements. Keeping monetary policy tight continued to be the main objective of the Bank of Finland during the first months of 1990. However, as a consequence of the banking dispute, normal trading in the money market was suspended, and the Bank of Finland had to fix the intervention rate at 16 per cent for the period from the middle of January to early March. During the dispute, banks' central bank funding was taken care of through term deposits and credits.

During and after the banking dispute, confidence in the markka remained strong, and the currency index stayed close to the lower (revaluation) limit of its band. In fact, the Bank of Finland's operations in the money and foreign exchange markets in the first quarter of the year mainly consisted of purchases of foreign exchange aimed at keeping the markka within the official fluctuation limits. Part of the interventions were undertaken in the forward exchange market in order to mitigate the liquidity effects. Cash reserve deposits increased by FIM 0.6 billion in the first four months of 1990, and totalled FIM 26 billion at the end of April. The cash reserve agreement between the Bank of Finland and the deposit banks was revised at the end of April. As a result of the changes, the effectiveness of the cash reserve system will be noticeably less than hitherto.<sup>2</sup>

Most of the new pay agreements were reached by the end of March, and indications that the overheated economy was cooling down became increasingly evident. Hence, some of the tensions in the economy eased, and the uncertainty concerning near-term economic prospects was

reduced. This seems to have attracted the attention of foreign investors, resulting in a strong capital inflow. In particular, long-term borrowing abroad by domestic firms and markka investments by foreigners in the forward exchange market were significant. When the money market started to function normally again, interest rates began to fall. By the end of March, the 3-month HELIBOR rate had fallen by 2 percentage points to 14 per cent, at which level it remained for most of April. The differential between domestic interest rates and foreign interest rates calculated on the basis of the currency index weights narrowed from 5 percentage points at the turn of the year to 3 percentage points in April.

Capital flows in January were influenced by the impending banking dispute and the introduction of a credit tax on foreign loans at the beginning of February. Domestic companies raised almost FIM 10 billion abroad in their own name in January, but their foreign borrowing almost ceased in February and March. Credit intermediated by banks picked up somewhat after the banking dispute, totalling FIM 10 billion in the first quarter of 1990. In particular, small and medium-sized firms raised funds abroad.

With effect from February 1, the Bank of Finland allowed the sale abroad of new markka-denominated bonds of over one year's maturity. Exceptions are bonds issued by housing and real estate companies, and the present ban on cross-border sales remains in force for bonds issued previously. Also effective from February 1, non-residents were allowed to issue markka-denominated bonds in Finland. However, because of the banking dispute, issues abroad of markka-denominated bonds did not get started properly until March. So far,

issues to non-residents amount to FIM 3<sup>1</sup>/<sub>2</sub> billion. Finance companies were accorded the right to intermediate foreign finance as from March 1.

## **BANKING PROFITS SQUEEZED**

The indications are that the major slowdown in credit expansion which occurred in the last quarter of 1989 has continued in the first quarter of this year. Coupled with the brisk growth of banks' markka lending in recent years, credit losses in the banking sector soared last year. Rises in funding costs in the latter part of 1989 and portfolio losses due to declining share prices added to the weakening in the profitability of the banking sector. The average deposit rate rose by approximately 0.5 percentage point in December 1989, and the average rate of interest on total new markka advances to the public by deposit banks rose by 0.5 percentage point while the average rate of interest on total new credits linked to money market rates rose by nearly 1.2 percentage points. Some 70 per cent of banks' new lending is still tied to the Bank of Finland's base rate or to a fixed interest rate.

During the banking dispute, the amount of currency in circulation doubled to FIM 23 billion. The return of the stock of outstanding currency to its normal level after the ending of the dispute was fairly slow, and the adjustment was not completed until the end of March.

Following many years of strong growth, price performance in the Finnish share market in 1989 was poor, reflecting changed economic expectations. According to the Uritas index, prices of shares traded on the Helsinki Stock Exchange fell by 17 per cent in 1989. In Stockholm prices rose by 35 per cent, in Oslo by 45 per cent and in Copenhagen by 34 per cent. Market

capitalization of listed shares fell by 2 per cent to FIM 125 billion at the turn of the year compared to a year earlier. Listed companies raised FIM 9 billion on the stock exchange in 1989, which is slightly less than in the preceding year, reflecting the higher funding costs. Stock exchange turnover amounted to FIM 41 billion, which represented an increase of 8 per cent on the preceding year. The increase in turnover focused on bonds and debentures. Declines in other forms of private wealth also occurred during the latter part of 1989 and at the turn of the year through a modest fall in dwelling prices throughout the country.

With effect from February 1, 1990, the Bank of Finland exempted Finnish companies' share issues abroad from the requirement of prior authorization. Likewise, quotation by the Helsinki Stock Exchange or the OTC market is no longer required as a condition for the issue of foreign securities in Finland. Similarly, non-residents are no longer required to effect their purchases of Finnish securities through the Helsinki Stock Exchange or the OTC market.

May 2, 1990

# UNIONS, WAGE BARGAINING AND EMPLOYMENT IN FINLAND: A BARGAINING MODEL APPROACH

by **Timo Tyrväinen**, Lic. Pol. Sc.  
Economics Department  
Bank of Finland

## INTRODUCTION

This article, which draws on earlier research by the author, discusses some key features of the functioning of the Finnish labour market. The important issues from a macroeconomic point of view are the factors affecting the determination of wages and employment. A bargaining model approach is used as a framework for discussion. Although some theoretical considerations and empirical results are presented, the article is non-technical by nature. Using this framework, some important implications for incomes policy — as applied in Finland — and more generally for economic policy are considered.

### MAIN CHARACTERISTICS OF WAGE BARGAINING IN FINLAND

Trade-union membership in Finland is one of the highest in the OECD area. In most industrialised countries the degree of unionization grew between the middle of the 1960s and

the end of the 1970s. In Finland the rise in the unionization rate was exceptionally sharp. During the 1980s, the degree of unionization declined in several countries. In Finland, however, it continued to rise and is now around 90 per cent (Chart 1).

There are four trade-union confederations. The blue-collar trade-union federation dominates the scene, but the relative position of the three federations of white-collar unions has strengthened, particularly in the 1980s. There are also four central employer organizations: one representing employers in manufacturing, one for service industries, one representing central government and, finally, one for the local government sector.

The collective bargaining process in Finland is highly centralized and by and large institutionalized. The labour market parties have a common body for gathering and analyzing economic information. Typically, each wage round starts with attempts to reach a

centralized agreement with concomitant stabilization goals. The appropriate role for government involvement is also discussed.

Incomes policy has been one of the key concepts in the economic debate in Finland since the mid-1960s. In fact, all centralized agreements since the stabilization pact of 1968 have been classified as incomes policy settlements. It should, however, be noted that incomes policy as operated in Finland lacks some of the features which are normally associated with incomes policies in other countries. Thus, there have not been any attempts in Finland to use statutory means to enforce wage moderation on the unions. Rather the Government has sought to persuade unions to accept moderate contracts by influencing the bargaining climate. A wide variety of instruments has been used for this purpose, including tax concessions and changes in social security contribution rates.

During the period from 1965 to 1990, there were only three years when contracts were concluded at the industry level without the guidance of a central agreement. The consequences of the centralized bargaining process are relatively uniform wage developments and the synchronization of settlement periods: almost all contracts expire on the same date. Viewed from another angle, synchronization is an essential requirement for the continuation of bargaining on a centralized basis. Indeed, a breakdown in synchronization would seriously impair the pre-

CHART 1.  
UNIONIZATION RATE IN FINLAND



requisites for incomes policy in general.

### MODELLING THE WAGE BARGAINING PROCESS

During the 1980s, bargaining models gained considerable popularity. They are designed for analyzing wage setting in a unionized labour market on the assumption that there are two parties participating in the wage bargaining process, unions and employers. The institutional framework for collective bargaining in Finland suggests that the bargaining model approach might also be applied in the case of Finland. Wages are bargained over in Finland but employers retain their right to manage employment. Hence, they tend to adjust their demand for labour towards the profit-maximizing level when labour costs are given.

In bargaining models, the "equilibrium" level of real wages, as also that of employment, is determined by factors influencing union targets, on the one hand, and firms', i.e. employers', targets, on the other. The union maximizes the real after-tax wage of its members, also taking into account the consequences for employment. Firms maximize their profits. The welfare of both unions and employers is influenced by such factors as output, raw-material prices, taxes etc. In the bargaining game, the relative bargaining power of the parties also matters.

"Bargaining equilibrium" is a state to which the system will return after a disturbance. If there is a deviation from the equilibrium ("a target error"), an adjustment period of gradual correction of this "error" ensues. The result is not necessarily "the full-employment equilibrium" commonly supposed in macroeconomics.

The implications of the theoretical considerations are summarized in Table 1, which lists a group of factors influenc-

TABLE 1. DETERMINANTS OF REAL WAGES AND EMPLOYMENT<sup>1</sup>

	Real wage	Employment
Output	+	+
Income taxes	+	-
Employers' social security contributions	+	-
Relative price of raw materials (incl. energy)	-	-
Relative consumer prices in relation to producer prices (incl. influence of indirect tax)	-	-
Unemployment benefits	+	-
Strike allowances	+	-
Capital stock	+	?
Technical progress	+	?
Union power	+	?

<sup>1</sup> (+/-) indicates that an increase in the factor concerned will lead to an increase/reduction in the level of the dependent variable.

ing union targets and/or profits. These "micro" factors also work their way through at the "macro" level. In the long run both wages and employment — and essentially a combination of them — adjust to changes in these determinants. The output variable is included to capture the effect of the level of activity.

Empirical work was undertaken to test whether the interrelationships implied by the model could be detected in the data and whether they could be quantified in a "reliable" way. Success in this respect would also be an indication of the relevancy of the approach applied.

### EVALUATION OF EMPIRICAL RESULTS

The empirical models<sup>1</sup> tracked the actual development of wages and employment well. There were no problematic subperiods in any of the relevant regressions. Statistically significant empirical counterparts were found

for almost all relations implied by the theoretical model.

More than half of the tightening of *income taxation* was found to be passed through to higher pre-tax wages. This also implies that, as a cut in income taxes is not fully shifted into lower wages, an expansionary effect on purchasing power will result. On the other hand, a rise in *employers' social security contributions* appears to have been shifted backwards in full into lower wages. The wage-reducing effect of higher *raw-material prices* was small, as might be expected given their small share of total production costs.

The bargaining position of unions has clearly strengthened in Finland since the mid-1960s. In the estimations *union power* was measured by the unionization rate. The results indicate that the unions have succeeded in pushing up wages.

A small positive effect of the replacement ratio, i.e. *unemployment benefits* in relation to

<sup>1</sup> The ideas of error correction models were applied. They imply that the actual change in, e.g., wages is affected not only by changes in its determinants in the present period but also by the past divergence of wages from the target level. The variables in Table 1 were assumed to determine the target levels concerned. The estimations were carried out using the two-stage procedure presented by Engle & Granger (*Econometrica*, Vol. 55, No. 2, 1987). The estimation period was 1965Q1—1984Q4.

Wage and employment equations were estimated for the private sector (excluding primary production) as an aggregate. In addition, the manufacturing industry was analyzed separately. Mainly aggregate results are discussed here.

wages, on real wages was found in the manufacturing industry.

As far as the estimation period as a whole is concerned, the growth of *output* is the driving force behind real wage growth and employment. *Technical progress* appears to have reduced the need for labour for any given level of output.

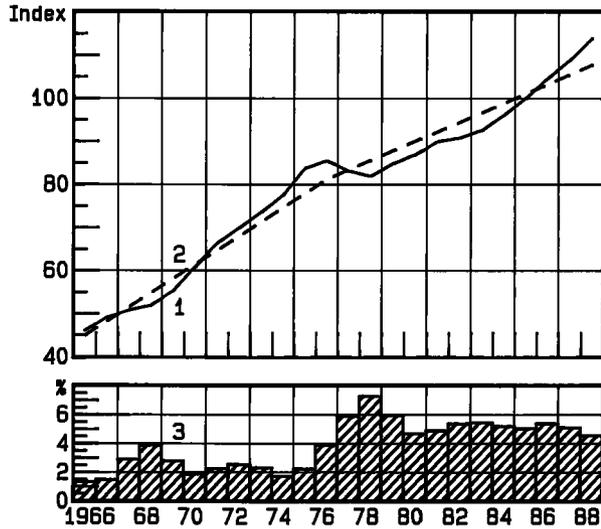
The model applied does not overlook the role of profitability. Rather, it has been replaced by its determinants. For instance, a fall in (*relative*) *producer prices* implies a deterioration in profitability, which reduces the demand for labour. This effect was also evident in the empirical equations.

One of the unexpected results was that a rise in the degree of unionization appears to have increased employment in the manufacturing industry.<sup>2</sup> This contrasts with the widespread view that unionization will lead to lower employment if unions are able to push up wages.

One possible way to evaluate this result stems from the — now commonly accepted — notion that unions in different positions and circumstances behave differently.<sup>3</sup> As wage setting becomes highly centralized, unions can no longer disregard the consequences of their actions on aggregate prices or aggregate unemployment; it is union members who have to pay the costs. In these circumstances a rational union tends to take an economy-wide view. This leads to a tendency towards lower unemployment, that is, higher employment.

This line of reasoning also appears to be relevant in Finland. Union response in certain periods confirms this. In addition, unions may have succeeded in preventing part of the lay-offs induced by negative demand shocks. This kind

CHART 2.  
REAL WAGES AND UNEMPLOYMENT



1. Real wage, actual, 1985 = 100
2. Real wage, trend\*
3. Unemployment rate in percentage points

\* As there appears to be a change in trend in the latter half of the 1970s, the trend plotted in the chart was estimated separately for pre-1977 and post-1977 observations.

of job protection could be part of the positive union effect on employment in the manufacturing industry.<sup>4</sup>

In the model discussed here, the unions influence the "equilibrium" combination of (real) wages and employment. This should, however, be distinguished from theories indicating rigid or slow adjustment. The results obtained by the author indicate that both real wages and employment appear to adjust towards their equilibrium faster than is commonly thought. The effects of shocks are largely transmitted within 4–6 quarters.

These results, as also those in OECD (1986), question the role of labour market rigidities in the case of Finland. Thus, the developments in actual employment — in so far as they are considered unfavourable — do not appear to be attributable primarily to "too slow" adjustment of wages, i.e. wage

rigidity. Rather, it is the equilibrium level which is inappropriate.

Bean, Layard & Nickell (1986) studied the determination of employment and wages in 19 countries using a framework which is quite close to that described in this article. According to their results, "the degree of corporatism"<sup>5</sup> is related to the ability of an economy to adjust to exogenous shocks. Finland belongs to those countries in which adjustment takes place rapidly. The authors conclude that "the results are not very supportive of the notion that unions *per se* inhibit the efficient functioning of the labour market".

### SELECTED ASPECTS OF DEVELOPMENTS IN WAGES AND EMPLOYMENT

A distinct slowdown took place in the trend growth of real wages after the mid-

<sup>2</sup> Alogoskoufis & Manning (19987) find a similar effect for the UK

<sup>3</sup> See, e.g., Calmfors & Driffil (1988).

<sup>4</sup> In the metal and engineering industries more than 10 per cent of strikes in 1977–79 were against dismissals or plans to shed labour.

<sup>5</sup> Corporatism is identified as a mode of social organization in which groups rather than individuals wield power and transact affairs.

1970s (Chart 2). Real wages<sup>1</sup> virtually doubled between 1965 and 1975, but increased by only 10–15 per cent over the next ten year period. In more recent years, the trend growth in real wages appears to have reached the same rate as before the first oil price shock. It can also be seen that real wage growth was influenced by the increasing unemployment<sup>2</sup> in 1967–68 and 1975–78. The improvement in this respect in 1969–70, 1979–80 and 1987–88 is evident in the data as well.

For an optimizing union, the after-tax wage — the real take-home pay — is the final target variable whereas the real labour cost is the key variable for the employer. While real take-home pay has doubled since the mid-1960s, real labour costs have almost tripled. The difference between the real labour cost and the real take-home pay is known as the "wedge". It consists of payroll taxes, income taxes and the ratio of consumer prices to producer prices. The last-mentioned item also incorporates the effect of indirect taxes. Increases in the wedge tend to push up labour costs and reduce employment. The relevance of the factors influencing the wedge was confirmed by the empirical results discussed above.

As Chart 3 shows, the wedge has nearly doubled since 1965. Its steady increase in 1966–1974 was primarily due to the tightening of income taxation. In 1975–1977, real labour costs rose quickly although real take-home pay did not increase at all. The explo-

<sup>1</sup>The term "real wage" refers to nominal pre-tax earnings of wage and salary earners deflated by consumer prices.

<sup>2</sup>The conventional Phillips-relation in which unemployment appears to bid down the real wage is fully in accordance with the bargaining approach used here. On the one hand, shifts in the unemployment rate can be seen as a factor signalling the real state of the economy to the unions. On the other hand, higher unemployment may be expected to reduce the bargaining power of the unions.

CHART 3.  
THE WEDGE\*, 1965 = 100

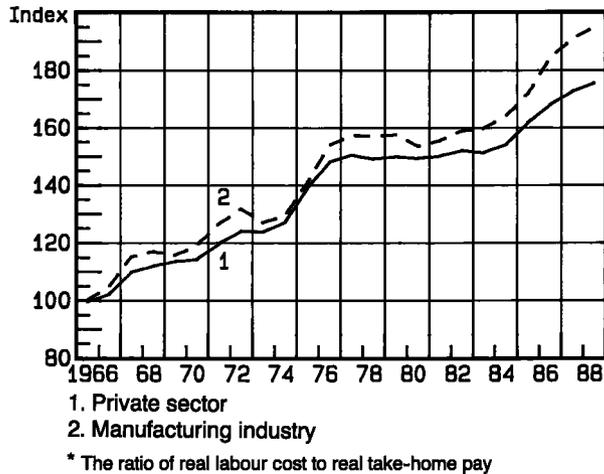
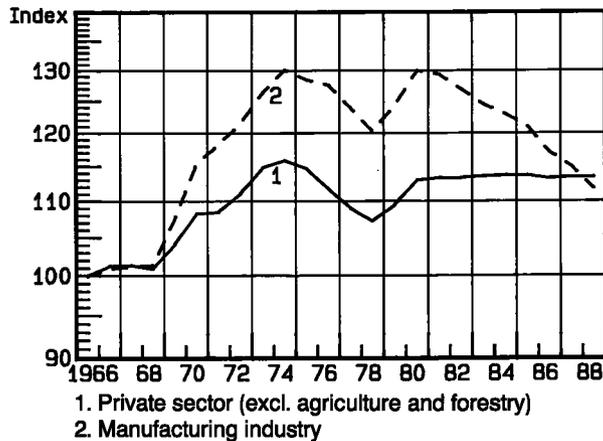


CHART 4.  
EMPLOYMENT, 1965 = 100



sion in the wedge was a consequence of policies aimed at cooling the overheated economy. The upward trend in the wedge was reversed in 1978–1979 as a key element of a shift in policies designed to bring the rise in unemployment to a halt.

In contrast to many other countries the wedge was rather stable in Finland in 1976–1985. Hence, the sluggish demand for labour witnessed during most of the 1980s (Chart 4) was hardly due to the wedge. The slowdown in the trend growth of output and with strong productivity growth

appear to have been the key factors contributing here.

The increase in the wedge in 1985–1988 was due mainly to shifts in relative prices rather than to economic policy.

#### FINAL REMARKS

A bargaining model was applied in specifying wage and employment equations for Finland. The results imply that the actual combination of real wages and employment adjusts rather quickly to the equilibrium implied by the bargaining process. Hence, rigidities should not be a major problem for the functioning of the labour

market in Finland. In so far as the level of actual employment is considered unfavourable, it is rather the equilibrium level that is inappropriate.<sup>1</sup>

In a small open economy like Finland an exogenous demand restraint is not a simple matter for economic policy. Policies inducing higher relative activity tend to lead to higher relative wages and weaker external balance.

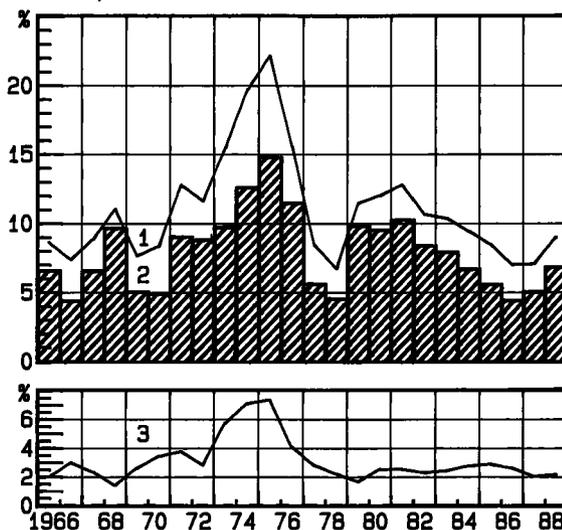
The model indicates that income tax cuts have favourable effects on the trade-off between wages and employment: the equilibrium wage is lower and employment higher. The result is similar to that of supply-side economics, although the reasoning here is rather different. Tax cuts do not seem to have the unfavourable secondary effects on wage inflation that so commonly accompany an increase in public sector demand. To the extent that demand is boosted, the effect on the external balance still exists. This is a severe restraint on policies reducing taxes.

Incomes policy has been applied on several occasions during the past twenty years. Wage moderation would require that the labour market parties agree on the need for adjustment. The experiences gained so far seem to indicate that this kind of consensus only comes about as a result of compulsion. It has been reached only when the economy is in severe disequilibrium.<sup>2</sup> On the other hand, the consensus is easily broken when times get better. The struggle over income shares as well as over relative wage positions then receives more attention

<sup>1</sup>In recent years, the tendency for the prevailing level of unemployment to persist has been called "hysteresis". To the extent that unions mainly take care of the interests of their actual members (i.e. insiders), labour market hysteresis can be easily understood with the help of the framework used in this article.

<sup>2</sup>For instance, it is often claimed that success in incomes policy has been achieved only in 1968-69 and 1977-78. These were periods of rapidly rising unemployment (Chart 2).

CHART 5.  
LEVEL OF EARNINGS, CONTRACT WAGES AND  
WAGE DRIFT, CHANGE FROM THE PREVIOUS  
YEAR, PER CENT



1. Level of earnings index
2. Contract wages
3. Wage drift

within the unions. This also indicates that a permanent incomes policy with fundamental long-term aims would probably not be very successful in Finland. However, incomes policy might at times make adjustment to exogenous shocks quicker and better managed.

During the 1980s, variation in wage inflation largely reflected variation in wage contracts (Chart 5). Wage drift was fairly stable. This stresses the potential role of central agreements — and incomes policy — in controlling wage inflation. To be successful, these attempts must, however, be backed by all sectors of economic policy.

May 14, 1990

## REFERENCES

- ALOGOSKOUFIS, G. & MANNING, A. (1987): Tests of Alternative Wage Employment Bargaining Models with an Application to the UK Aggregate Labour Market, Birkbeck College, an unpublished manuscript.
- BEAN, C.R. & LAYARD, P.R.G. & NICKELL, S.J. (1986): The Rise in Unemployment: A Multi-Country Study. *Economica* vol. 53 No. 210, Supplement.
- CALMFORS, L. & DRIFFIL, J. (1988): Bargaining Structure, Corporatism and Macroeconomic Performance, *Economic Policy* No. 6.
- OECD (1986) Finland, OECD Economic Surveys 1985/1986.
- TYRVÄINEN, T. (1988b): Wages and Employment in a Unionized Economy: Practical Implications of Theoretical Considerations in the Context of Finland, Bank of Finland, Discussion Papers 20/88.
- TYRVÄINEN, T. (1989a): Unions, Wages and Employment in Finland, Bank of Finland, Discussion Papers No. 17/89.
- TYRVÄINEN, T. (1989b): Why Break Down Centralized Wage Bargaining?, Bank of Finland, Discussion Papers No. 22/89.
- TYRVÄINEN, T. (1989c): A Guide to the Finnish Labour Market, Finnish Economic Papers Vol. 2, No. 2.
- TYRVÄINEN, T. (1990): Wage Drift Reconsidered: The Evidence from Finland, forthcoming in Bank of Finland, Discussion Papers.

### **BOARD OF MANAGEMENT OF THE BANK OF FINLAND**

The President of the Republic, on the proposal of the Parliamentary Supervisory Board, appointed Mr. Markku Puntila, Dr. Pol.Sc., to the Board of Management with effect from May 16, 1990. Mr. Puntila replaces Mr. Pentti Uusivirta, who retired on the same date.

### **NEW CASH RESERVE AGREEMENT**

The Bank of Finland and the deposit banks have agreed on the revision of the cash reserve agreement originally concluded in 1979. The new agreement was signed on April 26, 1990.

According to the new agreement, the cash reserve requirement is based on domestic deposits outstanding at the end of each month. This represents a reduction of some 10 per cent in comparison to the former cash reserve base because, for example, banks' bond holdings and foreign liabilities are no longer included in the cash reserve base. The maximum permissible cash reserve requirement will be 8 per cent of the cash reserve base until the end of June 1991, i.e. the same as under the former agreement, and 7 per cent thereafter.

The most important change concerns the rate of interest payable on cash reserve deposits. According to the new agreement, the rate of interest on cash reserve deposits will henceforth be the 3-month HELIBOR rate less 3 percentage points, not however less than 8 per cent. The rate of

interest applied under the old agreement was the Bank of Finland's base rate less 1/4 percentage point, and last stood at 8 1/4 per cent. The change in the basis for determining interest removes the interest rate risk for banks inherent in the former system, which, with the rise in market rates, caused a considerable strain on bank profitability.

The effectiveness of the new agreement as a monetary policy instrument is noticeably less than that of the former agreement. However, the application of highly efficient cash reserve systems in today's integrated financial markets is not possible without internationally harmonized cash reserve systems. In this respect the new agreement is far better suited to the circumstances of integration than the former agreement. By freeing long-term certificates of deposit and bonds from the cash reserve requirement, the new agreement will help to improve the prerequisites for the development of these markets.

The new agreement came into force so that the new cash reserve base was applicable for the first time to deposits in April and the new interest rate as from the beginning of May.

In addition, the Bank of Finland has decided to terminate, with effect from June, the capital import deposit scheme applied to companies' short-term foreign financing raised in their own name.

### **FIRST SUPPLEMENTARY BUDGET FOR 1990**

The first supplementary budget for 1990 was approved by Parliament in April. Chang-

es in budgeted expenditure and revenue are mainly due to the comprehensive economic and incomes policy settlement reached in January. In the ordinary budget for this year the Government had been prepared to implement a tight fiscal policy in the event that the labour market organizations did not reach moderate pay settlements. As a clear majority of wage earners accepted the centralized agreement proposed by the state mediator, the Government was able to take steps to cancel the planned tightening. In the supplementary budget these steps include revoking the proposed increase in employers' and employees' social insurance contributions, providing for a small rise in unemployment benefit and cancelling the planned tightening of withholding rates in income taxation. The last-mentioned item gives rise to a reduction in budgeted income of FIM 2.3 billion.

The first supplementary budget provides for an increase in revenue of FIM 3.5 billion, some FIM 2 billion of which represents payments to social security funds to cover the deficit caused by lower employers' and employees' social insurance contributions than planned in the ordinary budget. In addition to these technical changes, extra outlays of about FIM 1.1 billion are earmarked for agricultural support schemes.

The extra outlays in the supplementary budget will be financed by borrowing. No new net borrowing will, however, be needed compared with last year. Central government debt will be further reduced so that it will have fallen to about 9 per

cent of GDP by the end of 1990. The central government's financial surplus is estimated to remain at around 2 per cent of GDP this year.

### **PUBLICATION OF THE BANK OF FINLAND**

The following publication has appeared in series B:44: Christian C. Starck, *Foreign and Domestic Shocks and Fluctuations in the Finnish Economy 1960—1988*, doctoral dissertation presented to the Swedish School of Economics and Business Administration, Helsinki 1990, 232 pp. ISBN 951-686-241-1, ISSN 0357-4776.

The aim of this study was to empirically assess the main sources and characteristics of aggregate fluctuations in the Finnish economy. This entailed documenting stylized facts of the effects over time of different kinds of foreign and domestic shocks using historical data on key macroeconomic variables. A shock is defined as an unexpected movement in an economic variable. The study is based on monthly data from the years 1960—1988.

Earlier empirical studies addressing the sources and nature of aggregate variability in the Finnish economy have typically been partial econometric analyses or evaluations based on traditional econometric macro models. This analysis takes a fresh look at the topic by drawing on recent developments in business cycle research and macroeconomic methodology. These developments include an emphasis on shocks, dynamic interactions between variables and data-oriented model building. The study is carried out using multivariate time series methods that take into account contemporaneous relations given by economic theory and long-run equilibrium relationships between variables. The methodology employed in the analysis was developed in the

US in the 1980s, and it has attained fairly widespread popularity in recent years.

Most of the shocks driving the Finnish economy were found to be small, but occasionally large shocks have occurred, and such large shocks of various kinds have typically hit the economy in clusters over periods of two to three years duration. The years 1973—1975 stand out as particularly turbulent, while the 1980s emerge as remarkably calm.

With respect to the interactions between output developments in OECD countries, the following empirical regularities were found. US economic activity essentially calls the tune, while middle-sized economies influence mainly each other and small open economies. Like othello open economies, the Finnish economy reacts to, but does not influence, other economies. The effects of output movements in one country on output in another country in general peak during the third or fourth quarter following a shock, and most contributions to output variability have vanished two years after a shock. In general, foreign output shocks have permanent effects on the level of Finnish output. Finland has, in terms of output developments, been somewhat more closed than other small open economies, historically.

In the analysis of the long-run impact of shocks, no sizeable impact of nominal shocks, including economic policy, on Finnish real output was found. Half of an unforeseen movement in output brought about by a shock to labour supply or to technology persists into the infinite future, however. Foreign price developments are eventually crucial for domestic prices. The exceptionally large shocks of 1973—1975 have had permanent effects in the sense that they triggered structural changes in the economy that took years to

complete and permanently altered the short-run dynamics of the economy.

In the analysis of the short-run impact of shocks the following conclusions were reached. The response of the Finnish economy to shocks of various kinds has typically not been as slow as indicated by previous estimates. The response tends to peak within a one-year horizon, and the impact settles down fairly well within two years after the shock. The effect on domestic prices of a foreign price shock is slow, however. Money and prices are nonneutral in the short run, but their quantitative impact on real output has been small. By contrast, both monetary and fiscal policy have contributed to short-run fluctuations.

Changes in Finnish short-run dynamics have taken place since the breakdown of the Bretton Woods system. Domestic output has become increasingly susceptible to shocks, with roughly one-fifth of the short-run variability in the 1980s attributable to inherent output dynamics, two-fifths to other domestic factors and the remainder to foreign factors. More specifically, foreign output, the foreign interest rate, the price of oil and fiscal policy have to an increasing extent begun to affect output since the end of the Bretton Woods era. Money and the domestic interest rate influenced output in the 1980s. Domestic prices have also become more susceptible to shocks, mainly reacting to foreign price and interest rate shocks. These findings caution against the common practice of basing inference about current short-run dynamics on observations from the 1960s and the early 1970s.

# MONETARY AND FOREIGN EXCHANGE POLICY MEASURES FROM JUNE 1989 TO MAY 1990

1989

## JUNE

### **Foreign Exchange**

**Regulations.** The Bank of Finland relaxes the foreign exchange regulations concerning direct investments by enterprises in the financial and insurance sector as from June 1, 1989. After this date, only direct investments by private individuals and direct investments in countries with which Finland maintains payments agreements require the Bank of Finland's authorization.

**Call money market.** With effect from June 16, 1989, the Board of Management of the Bank of Finland decides to abolish the bank-specific quotas for call money credit of the banks entitled to central bank financing. At the same time, the penalty interest charged on borrowing in excess of quota, which last stood at 19 per cent, is abolished. In addition, the call money credit rate is raised from 13 per cent to 15 per cent; the call money deposit rate remains at 4 per cent.

### **Cash reserve requirement.**

The Bank of Finland raises the cash reserve requirement for certain banks and groups of banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 8.4 per cent of the cash reserve base in May.

## JULY

### **Cash reserve requirement.**

The Bank of Finland adjusts the cash reserve requirement for certain banks and groups

of banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 8.5 per cent of the cash reserve base in June.

## AUGUST

### **Cash reserve requirement.**

The Bank of Finland adjusts the cash reserve requirement for certain banks and groups of banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 8.7 per cent of the cash reserve base in July.

## SEPTEMBER

### **Foreign Exchange**

**Regulations.** The Bank of Finland relaxes the foreign exchange regulations concerning foreign investments and capital imports. The amendments enter into force on September 1, 1989, except for those applying to private individuals. For tax control reasons, the decisions regarding capital exports by private individuals will enter into force on a later date, however not later than July 1, 1990.

**Capital exports.** Acquisitions of dwellings and real estate abroad no longer require authorization; previously, permission was necessary if the purchase price exceeded FIM 1 million. Investments in the form of foreign securities, deposits held in accounts with foreign monetary institutions and merchandise held abroad are permitted without the permission of the Bank of Finland or quantitative restrictions. In addition,

credit of more than one year's maturity may be granted to non-residents without the Bank of Finland's permission.

**Capital imports.** Non-financial companies, except housing and real estate companies, are permitted to raise foreign credit of more than one year's maturity; previously, only loans of more than five years' maturity were permitted. The authorization of the Bank of Finland is still required if a company borrows directly from a foreign lender.

Suppliers' credits and prepayments in respect of imports are entirely freed from authorization. In addition, most direct investments in Finland no longer require authorization.

### **Cash reserve requirement.**

The Bank of Finland raises the cash reserve requirement for certain banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to 8.8 per cent of the cash reserve base in August.

## OCTOBER

### **Government cash fund**

**deposits.** The Ministry of Finance and the Bank of Finland reach an agreement according to which the government will make cash fund deposits totalling FIM 5 billion with the Bank of Finland between October 5, 1989 and January 31, 1990. These deposits will be transferred on February 1, 1990 to a pension fund to be set up by the government. Additional deposits totalling FIM 1.6

billion will be made by the government in the pension fund, between February 1 and December 31, 1990.

#### **Cash reserve requirement.**

The Bank of Finland raises the cash reserve requirement for certain banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 9.0 per cent of the cash reserve base in September.

### NOVEMBER

**Base rate.** The Bank of Finland raises the base rate from 7.5 per cent to 8.5 per cent as from November 1.

**Call money market.** With effect from November 6, 1989, the Bank of Finland amends the terms of the call money credit system so that the 5-day moving average of a bank's position may be negative but in this case the call money credit rate will be charged at double the normal rate. It was a condition of the revision of June 1989 that the moving average of a bank's 5-day call money position should not be negative. The call money credit rate remains unchanged at 15 per cent and the call money deposit rate at 4 per cent.

#### **Cash reserve requirement.**

The Bank of Finland raises the cash reserve requirement for certain banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 9.1 per cent of the cash reserve base in October.

### DECEMBER

#### **Cash reserve requirement.**

The Bank of Finland adjusts the cash reserve requirement for certain banks and groups of banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 9.1 per cent of

the cash reserve base in November.

### 1990

### JANUARY

**Prime rates.** The Bank of Finland complements its recommendations on reference rates to banks by permitting them to apply their own prime rates in all their lending and deposit-taking, with effect from January 1, 1990.

#### **Money market operations.**

As from January 1, 1990, only CDs issued by banks which meet the following requirements can be accepted for use in money market dealings: the bank's capitalization exceeds the minimum amount set by the Bank of Finland, the bank meets the minimum capital adequacy requirements set by the BIS and operates as a market maker in the CD market. These banks may at the same time act as the Bank of Finland's market counterparties and may be granted access to call money credit. As a rule, a one-year transition period will be applied in the introduction of the new requirements for banks which are already entitled to call money credit and in whose CDs the Bank of Finland deals.

#### **Cash reserve requirement.**

The Bank of Finland adjusts the cash reserve requirement for certain banks. Together with the current 8 per cent ratio, the banks' average deposit requirement remains at about 9.1 per cent of the cash reserve base in December.

Provided bank lending does not accelerate sharply in January-February 1990, the collection of additional deposits under the supplementary cash reserve agreement will be discontinued. The interest-

free additional deposits collected on the basis of the lending growth figures at the end of December 1989 will remain at the Bank of Finland and be refunded at the latest in July-December of the current year in six equal instalments at the end of each month.

### FEBRUARY

#### **Foreign Exchange**

**Regulations.** The Bank of Finland allows the sale abroad of new markka-denominated bonds of over one year's maturity as from February 1, 1990, with the exception of bonds issued by housing and real estate companies. The present ban on cross-border sales remains in force for bonds issued previously. Effective the same date, non-residents allowes to issue markka-denominated bonds in Finland.

With effect from the beginning of February, the Bank of Finland also decides to exempt Finnish companies' share issues abroad from the requirement of prior authorization. Starting from this date, the Bank of Finland no longer requires quotation by the Helsinki Stock Exchange or the OTC market as a condition for the issue of foreign securities in Finland. Similarly, it is no longer necessary for non-residents purchasing Finnish securities to effect their purchases through the Helsinki Stock Exchange or the OTC market.

### MARCH

#### **Finance companies accorded the right to intermediate foreign**

**finance.** The Bank of Finland decides that, with effect from March 1, 1990, finance companies may apply for the right to intermediate and raise foreign loans to the extent permitted by

the limits on their foreign currency positions. Previously only deposit banks were accorded this right.

## APRIL

### **Cash reserve agreement.**

The Bank of Finland signs a new cash reserve agreement with the deposit banks on April 26, 1990. According to the new agreement, the cash reserve base comprises domestic deposits by the public and the rate of interest payable on cash reserve deposits is the 3-month HELIBOR

rate less three percentage points, not however less than 8 per cent. The new cash reserve base is applied for the first time to deposits in April and interest will be paid at the new rate with effect from May 1, 1990.

## MAY

### **Cash reserve requirement.**

The cash reserve requirement corresponding to the new cash reserve agreement amounts to 8 per cent of the cash reserve base at the end of April.

## 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 the Soviet Union in the east and has a coastline bordered by the Baltic Sea in the south and west. Agricultural land accounts for 8 % of the total area, forest and other wooded land for 69 % and inland waters for 10 %. Located between latitudes 60° and 70° north, Finland has warm summers and cold winters. Helsinki on the south coast has an average maximum temperature of 22° C (72° F) in July and -4° C (25° F) in February.

Finland has a population of 4 969 200 (Dec. 31, 1989) and an average population density of 16.3 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 490 800 inhabitants, Tampere (Tammerfors) 171 300, Espoo (Esbo) 169 400, Turku (Åbo) 158 900 and Vantaa (Vanda) 152 500.

There are two official languages: 93.6 % of the population speaks Finnish as its mother tongue and 6.0 % 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 December 6, 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; March 1, 1988 to March 1, 1994, is Dr. Mauno Koivisto.

Parliament, comprising 200 members, is elected by universal suffrage for a period of four years. Following the parliamentary elections of 1987, the seats of the various parties in Parliament are distributed as follows:

Social Democratic Party 56; National Coalition Party 53; Centre Party 40; People's Democratic League 16; Swedish People's Party 13; Rural Party 9; Christian League 5; the Greens 4; and the Democratic Alternative 4.

Of the 18 ministerial posts in the present government appointed in May 1987, 8 are held by Social Democrats, 7 by the National Coalition Party, 2 by the Swedish People's Party and 1 by the Rural Party. The Prime Minister is Mr. Harri Holkeri of the National Coalition Party.

Finland is divided into 461 self-governing municipalities. Members of the municipal council are elected by universal suffrage for a period of four years.

## INTERNATIONAL RELATIONS

Finland pursues a policy of neutrality in foreign affairs, and enjoys friendly relations with all European countries and countries elsewhere. Finland's development cooperation programmes channel assistance via international organizations and, bilaterally, to a number of African, Asian and Latin American countries.

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 and the MIGA in 1988.

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. 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.

## THE ECONOMY

**Output and employment.** The Finnish economy is essentially based on private enterprise, with over 80 % of manufacturing output and some 90 %

of banking services produced by private companies. Of the gross domestic product of FIM 383 billion in basic values in 1988, 3 % was generated in agriculture and fishing, 3 % in forestry, 27 % in industry, 9 % in construction, 12 % in trade, restaurants and hotels, 8 % in transport and communications, 5 % in finance and insurance, 16 % in other private services and 17 % by producers of government services. Of total employment of 2.5 million persons in 1989, 9 % were engaged in primary production, 31 % in industry and construction and 60 % in services.

In 1989, expenditure on the gross domestic product in purchasers' values amounted to FIM 494 billion and was distributed as follows: net exports -1.7 % (exports 23.8 %, imports -25.5 %), gross fixed capital formation 27 %, private consumption 52 % and government consumption 20 %. Finland's gross tax ratio (gross taxes in relation to GDP) was 37 % and the net tax ratio (net taxes in relation to GDP) 25 %, which is about the average for OECD countries.

Average annual (compounded) growth of real GDP was 4.9 % in the period 1950-60, 4.8 % in 1960-70, 3.5 % in 1970-80, 3.4 % in 1980-89 and 4.2 % in 1950-89. Finland's GDP per capita in 1989 was USD 23 200. According to preliminary data, this put Finland in second place after Switzerland among the 24 member countries of the OECD.

**Foreign trade.** Over 80 % of Finland's trade is carried on with market economies, the most important among which are Sweden, the Federal Republic of Germany, the United Kingdom, the United States, France and Japan. Bilateral trade with the Soviet Union, which is conducted at world market prices, dominates Finland's trade with socialist countries. Finland imports mainly oil and other energy products from the Soviet Union, while her exports consist primarily of manufactured goods.

In 1989, the share of forest industry products in total merchandise exports was 40 %, the share of metal and engineering products 42 % and the share of other goods 18 %. Raw materials and intermediate goods (incl. crude oil) accounted for 54 % of merchandise imports, fuels for 3 %, investment goods for 19 % and consumption goods for 23 %.

**Forest resources.** Finland has fairly abundant forest resources, but

only limited amounts of other raw materials. The growing stock comprises 1 660 million cubic metres, of which 45 % is pine, 37 % spruce and 18 % broad-leaved species, chiefly birch. The annual growth increment totals 68 million cubic metres and the total drain calculated on the basis of commercial fellings was 59 million cubic metres in 1989.

**Energy.** In 1988, gross consumption of primary energy amounted to 30 Mtoe, of which industry accounted for 45 %, heating for 23 %, transportation for 14 % and other purposes for 18 %. The sources of primary energy in 1988 were as follows: oil 32 %, coal 12 %, nuclear power 16 %, hydro-electric power, peat and other indigenous sources 30 %, others 10 %. Compared internationally (1987), Finland's consumption of 6.3 toe per capita was 2.0 times higher than the average in European OECD countries. The self-sufficiency rate (OECD definition) in Finland was 38 %, as compared with 62 % in western Europe on average.

## FINANCE AND BANKING

**Currency.** Since 1865 Finland has had its own monetary system. The currency unit is the markka (plural: markkaa), abbreviation FIM, which is divided into 100 penniä (singular: penni). Since Nov. 1, 1977 the external value of the markka has been officially expressed in terms of a trade-weighted currency index. As from Jan. 1, 1984 only convertible currencies have been included in the index. Since November 30, 1988, the index has been permitted to fluctuate within a range of 6 percentage points (previously 4.5). The range is defined by fluctuation limits which are set by the Government at the proposal of the Bank of Finland. Since March 17, 1989, the fluctuation limits have been 96.5 and 102.5 (1982 = 100), where the lower limit means the highest permissible value for the markka and the upper limit the lowest permissible value.

**International payments.** The use of the markka in foreign trade and as a eurocurrency has increased, but most international payments are effected in other currencies. Finland adopted Article VIII status at the International Monetary Fund in 1979. There are no restrictions concerning payments for merchandise or invisibles, and short-term trade finance may be acquired whenever exporters and importers see fit. The remaining exchange controls apply mainly to financial transactions.

Outward direct investment is permitted without the Bank of Finland's authorization except for direct investments in countries with which Finland maintains payments agreements. Similarly, inward direct investment is permitted without the Bank of Finland's authorization except for direct investments in enterprises in the financial sector and direct investments by countries with which Finland maintains payments agreements. Foreign investors

may also buy shares of listed Finnish companies; however, foreign investment in markka-denominated bonds is normally prohibited for the present. Finnish companies may freely raise foreign credits and extend loans abroad of over one year's maturity. Finnish residents, except enterprises in the financial sector, may invest freely in foreign securities and real estate. The unlimited right to make foreign investments also applies to private individuals, but the date of its entry into force is to be determined separately. The date will not, however, be later than July 1, 1990.

Transactions with the Soviet Union, the German Democratic Republic and Bulgaria are carried out on a bilateral basis and payments are effected through clearing accounts. The necessary licencing of trade for maintaining balance in bilateral trade is carried out by the Export and Import Permits Office; the scope for suppliers' credits is also limited.

**The Central Bank.** The Bank of Finland (Suomen Pankki - Finlands Bank), founded in 1811, operates under the supervision of the Parliamentary Supervisory Board, the nine members of which are entrusted with overall supervision of the Bank and certain specific decisions such as fixing the Bank's base rate and the limits for other rates. The Governor and a maximum of five other Members of the Board of Management are appointed by the President of the Republic. The Board manages all affairs not expressly entrusted to the Parliamentary Supervisory Board, including the terms of banks' central bank finance, open market operations, intervention in the foreign exchange market, determination of the external value of the currency within the fluctuation limits, direct lending and permits for international capital transactions. 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 12 branch offices in other towns.

**Other banks** (Dec. 31, 1989). Finland has four major groups of deposit banks with a total of more than 3 500 offices. There are two big commercial banks with national branch networks and eight smaller ones, four of which are foreign-owned. The commercial banks have a total of 33 foreign branches, subsidiaries and associate banks and 26 representative offices abroad. There are 178 savings banks and 360 cooperative banks with their own extensive branch networks. The government-owned Postipankki has 67 branches and also offers basic services in post offices. In addition, foreign banks have 9 representative offices in Finland.

**Financial markets.** Of the total stock of FIM 580 billion in outstanding

domestic credit at the end of 1988, 64 % was provided by deposit banks, 4 % by mortgage banks, 15 % by insurance companies, 8 % by other credit institutions and 9 % by the state, local authorities and social security funds. There are no quantitative restrictions or interest rate limitations on lending. Regulation of bank lending rates was progressively relaxed earlier in the 1980s and finally abolished in 1986.

In the money market, 71 % of the instruments, which totalled approximately FIM 150 billion at end-1989, were negotiable instruments such as bank certificates of deposit, commercial paper, Treasury notes and local authority paper. Funds intermediated through bank trust departments and non-negotiable bank debt instruments make up the bulk of non-negotiable instruments. In its open market operations, the Bank of Finland deals in bank certificates of deposit and also issues its own certificates of deposit.

There are 83 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 125 billion (at end-1989). Four foreign companies are also quoted. Domestic bonds and debentures in circulation at end-1989 totalled FIM 1 05 billion; government bonds made up 28 % of the total. Turnover on the Stock Exchange in 1989 amounted to FIM 41 billion; the share of shares and subscription rights in the total was approximately 82 %.



<b>1. THE BALANCE SHEET OF THE BANK OF FINLAND</b>	S2
1.1 The balance sheet of the Bank of Finland	S2
1.2 Time series for the balance sheet items of the Bank of Finland	S3
<b>2. THE BANK OF FINLAND'S MONEY MARKET OPERATIONS AND THE FORWARD MARKET</b>	S4
2.1 The Bank of Finland's money market operations and the call money market	S4
2.2 Forward exchange market	S5
2.3 Banks' central bank position	S5
<b>3. RATES OF INTEREST</b>	S6
3.1 Money market rates and rates applied by the Bank of Finland	S6
3.2 Weighted Eurorate (3 and 12 currencies)	S6
3.3 Covered Eurodollar rate	S6
3.4 Rates of interest applied by banks	S7
3.5 Rates of interest on bonds and debentures	S7
<b>4. RATES OF EXCHANGE</b>	S8
4.1 Average spot selling rates	S8
4.2 Currency indices	S9
<b>5. OTHER DOMESTIC FINANCING</b>	S10
5.1 Bank deposits by the public	S10
5.2 Bank lending to the public	S10
5.3 Money supply and monetary aggregates	S11
5.4 Liabilities and assets of the central government	S11
5.5 Markka bond market	S12
a) Issues	S12
b) Stock	S12
5.6 Helsinki Stock Exchange	S13
<b>6. BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS</b>	S14
6.1 Current account	S14
6.2 Capital account	S15
6.3 Finland's foreign liabilities and assets	S16
6.4 Finland's long-term foreign liabilities and assets by sector	S17
<b>7. FOREIGN TRADE</b>	S18
7.1 Exports, imports and the trade balance	S18
7.2 Foreign trade: indices of volume, unit value and terms of trade	S18
7.3 Foreign trade by main groups	S18
7.4 Foreign trade by regions and countries	S19
<b>8. DOMESTIC ECONOMIC DEVELOPMENTS</b>	S20
8.1 Supply and use of resources	S20
8.2 Volume of industrial production	S20
8.3 Indicators of domestic supply and demand	S21
8.4 Wages and prices	S22
8.5 Labour, employment and unemployment	S23
8.6 Central government finances: revenue, expenditure and financial balance	S24
<b>NOTES AND EXPLANATIONS TO THE STATISTICAL SECTION</b>	S25

# 1. THE BALANCE SHEET OF THE BANK OF FINLAND

## 1.1 THE BALANCE SHEET OF THE BANK OF FINLAND,

MILL. FIM

	1989		1990			
	April 30	Dec. 31	April 6	April 12	April 23	April 30
<b>ASSETS</b>						
<b>Gold and foreign currency claims</b>	30 379	23 009	34 004	34 123	34 669	34 060
Gold	2 128	2 179	2 180	2 180	2 180	2 180
Special drawing rights	832	966	789	787	784	779
IMF reserve tranches	890	950	906	904	903	899
Convertible currencies	24 665	18 822	30 003	30 126	30 676	30 075
Tied currencies	1 864	92	127	127	127	126
<b>Other foreign claims</b>	4 161	3 300	2 827	2 826	2 827	2 828
Markka subscription to Finland's IMF quota	2 302	2 103	2 128	2 128	2 128	2 129
Term credit	1 858	1 198	699	698	699	699
<b>Claims on financial institutions</b>	16 099	39 054	32 950	32 528	32 183	32 163
Call money credits	296	38	190	493	2	1 009
Certificates of deposit	10 116	33 230	24 806	25 896	25 526	24 818
Term credits	50	—	1 600	—	—	—
Till-money credits	2 342	3 310	3 776	3 563	4 088	3 770
Financing of crop failure loans	809	—	—	—	—	—
Bonds	2 249	2 238	2 340	2 339	2 329	2 329
Other claims on financial institutions	238	238	238	238	238	238
<b>Claims on the public sector</b>	1 103	1 137	1 205	1 206	1 211	1 217
Treasury notes and bills	10	—	—	—	—	—
Bonds	29	8	7	7	7	8
Total coinage	1 062	1 129	1 198	1 199	1 204	1 209
Other claims on the public sector	2	—	—	—	—	—
<b>Claims on corporations</b>	2 604	2 207	2 049	2 041	2 040	2 022
Financing of exports	87	1	0	0	0	0
Financing of domestic deliveries (KTR)	2 061	1 697	1 557	1 549	1 539	1 521
Bonds: KTR credits	238	302	290	290	289	288
Bonds: Other	30	21	17	17	17	17
Other claims on corporations	189	186	185	185	195	195
<b>Other assets</b>	123	571	105	105	107	111
Accrued items	—	464	—	—	—	—
Other assets	123	107	105	105	107	111
<b>Total</b>	<b>54 469</b>	<b>69 279</b>	<b>73 139</b>	<b>72 830</b>	<b>73 037</b>	<b>72 401</b>
<b>LIABILITIES</b>						
<b>Foreign currency liabilities</b>	176	697	863	1 023	1 087	1 087
Convertible currencies	37	42	69	53	48	41
Tied currencies	139	656	794	970	1 038	1 046
<b>Other foreign liabilities</b>	3 076	2 860	2 871	2 869	2 868	2 868
IMF markka accounts	2 302	2 103	2 128	2 128	2 128	2 129
Allocations of special drawing rights	774	758	743	741	740	739
<b>Notes and coin in circulation</b>	11 190	13 129	14 223	14 185	13 888	13 762
Notes	10 223	12 073	13 125	13 083	12 789	12 661
Coin	967	1 056	1 099	1 102	1 099	1 101
<b>Certificates of deposit</b>	580	—	900	740	690	690
<b>Liabilities to financial institutions</b>	22 580	26 303	26 972	26 746	27 008	26 415
Call money deposits	40	569	274	86	349	154
Term deposits	—	—	40	—	—	—
Cash reserve deposits	22 195	25 506	26 465	26 465	26 465	26 069
Capital import deposits	310	190	150	150	150	150
Other liabilities to financial institutions	34	38	42	44	44	43
<b>Liabilities to the public sector</b>	1 404	5 325	6 940	6 940	6 956	6 950
Cheque accounts	0	0	0	1	1	0
Cash fund deposits	—	3 770	—	—	—	—
Pension fund deposits	—	—	5 338	5 338	5 338	5 338
Counter-cyclical deposits	1 317	1 319	1 319	1 319	1 319	1 319
Export deposits	86	235	280	280	290	291
Other liabilities to the public sector	1	1	3	3	9	2
<b>Liabilities to corporations</b>	7 154	10 810	10 591	10 591	10 582	10 692
Deposits for investment and ship purchase	6 726	10 228	10 104	10 103	10 094	10 227
Capital import deposits	428	583	488	488	488	465
Other liabilities to corporations	0	—	—	—	—	—
<b>Other liabilities</b>	48	1 294	75	55	53	61
Accrued items	—	1 241	—	—	—	—
Other liabilities	48	53	75	55	53	61
<b>Valuation account and reserves</b>	2 426	2 696	3 540	3 518	3 740	3 711
<b>SITRA's capital</b>	400	400	400	400	400	400
<b>Capital accounts</b>	5 436	5 764	5 764	5 764	5 764	5 764
Primary capital	5 000	5 000	5 000	5 000	5 000	5 000
Reserve fund	436	436	764	764	764	764
Profit/loss for the accounting year	—	328	—	—	—	—
<b>Total</b>	<b>54 469</b>	<b>69 279</b>	<b>73 139</b>	<b>72 830</b>	<b>73 037</b>	<b>72 401</b>

## 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	Convertible currencies, net	Convertible currencies, total (1+2+3+4)	Tied currencies, net	Foreign exchange reserves, total (5+6)	Other claims, net	Net claims (7+8)	Claims	Liabilities	Net Liabilities (11-10)
	1	2	3	4	5	6	7	8	9	10	11	12
<b>1985</b>	2 081	931	775	18 572	22 359	-285	22 074	-849	21 225	1 023	4 300	3 277
<b>1986</b>	2 081	983	793	6 778	10 635	3 421	14 056	-838	13 218	1 002	2 001	999
<b>1987</b>	2 128	899	793	23 571	27 391	1 212	28 603	1 131	29 734	977	901	-76
<b>1988</b>	2 128	1 120	940	24 373	28 561	945	29 506	1 117	30 623	1 128	1 903	775
<b>1989</b>	2 179	966	950	18 780	22 875	-564	22 311	440	22 751	1 137	5 325	4 188
<b>1989</b>												
<b>April</b>	2 128	832	890	24 628	28 478	1 725	30 203	1 085	31 288	1 103	1 404	301
<b>May</b>	2 128	861	1 004	25 028	29 021	1 580	30 601	1 103	31 704	1 113	1 433	320
<b>June</b>	2 128	858	961	25 501	29 448	353	29 801	1 113	30 914	1 136	1 458	322
<b>July</b>	2 128	854	919	25 318	29 219	717	29 936	1 094	31 030	1 113	1 472	359
<b>Aug.</b>	2 128	882	934	25 545	29 489	706	30 195	1 117	31 312	1 113	1 486	373
<b>Sept.</b>	2 129	878	952	23 568	27 527	-826	26 701	1 107	27 808	1 135	1 504	369
<b>Oct.</b>	2 129	1 055	927	21 841	25 952	-307	25 645	772	26 417	1 112	2 683	1 571
<b>Nov.</b>	2 129	851	967	19 826	23 773	-381	23 392	769	24 161	1 126	4 150	3 024
<b>Dec.</b>	2 179	966	950	18 780	22 875	-564	22 311	440	22 751	1 137	5 325	4 188
<b>1990</b>												
<b>Jan.</b>	2 179	900	954	26 179	30 212	-584	29 628	432	30 060	1 168	6 384	5 216
<b>Feb.</b>	2 179	846	913	26 289	30 227	-311	29 916	433	30 349	1 185	6 523	5 338
<b>March</b>	2 180	791	910	29 685	33 566	-962	32 604	273	32 877	1 203	6 655	5 452
<b>April</b>	2 180	779	899	30 034	33 892	-920	32 972	- 40	32 932	1 217	6 950	5 733

End of period	Domestic financial sector						Corporate sector				
	Term claims on deposit banks	Call money claims on deposit banks, net	Cash reserve deposits of deposit banks	Till-money credits to deposit banks	Other liabilities to financial institutions, net	Net claims (13+14-15+16-17)	Claims in the form of special financing	Special deposits and other items, net	Net claims (19-20)	Notes and coin in circulation	Out-standing CDs issued by the Bank of Finland
	13	14	15	16	17	18	19	20	21	22	23
<b>1985</b>	.	4 014	10 222	1 925	-1 386	-2 897	4 525	4 113	412	8 072	.
<b>1986</b>	2 381	6 687	9 270	2 305	-2 240	4 343	4 581	4 757	-176	8 668	.
<b>1987</b>	-	-757	10 941	2 730	-2 350	-6 618	3 449	4 782	-1 333	9 990	4 970
<b>1988</b>	7 187	335	19 039	2 920	-3 733	-4 864	2 823	6 579	-3 756	11 550	1 130
<b>1989</b>	33 230	-531	25 506	3 310	-2 248	12 751	2 000	10 604	-8 604	13 129	-
<b>1989</b>											
<b>April</b>	10 166	256	22 195	2 342	-2 952	-6 479	2 386	6 935	-4 549	11 190	580
<b>May</b>	7 597	3 803	22 820	2 843	-2 716	-5 861	2 335	7 168	-4 833	11 385	180
<b>June</b>	16 601	-568	23 500	2 518	-2 816	-2 133	2 239	9 557	-7 318	11 737	160
<b>July</b>	17 582	-727	24 116	2 936	-2 817	-1 508	2 252	10 439	-8 187	11 774	160
<b>Aug.</b>	18 641	-839	24 639	2 899	-2 833	-1 105	2 214	10 587	-8 373	11 651	60
<b>Sept.</b>	22 152	-133	25 089	2 569	-2 781	2 280	2 184	10 617	-8 433	11 739	20
<b>Oct.</b>	25 623	-419	25 377	3 023	-2 374	5 224	2 096	10 597	-8 501	11 775	-
<b>Nov.</b>	29 475	261	25 581	2 925	-2 170	9 250	2 066	10 590	-8 524	11 894	-
<b>Dec.</b>	33 230	-531	25 506	3 310	-2 248	12 751	2 000	10 604	-8 604	13 129	-
<b>1990</b>											
<b>Jan.</b>	34 050	-3 243	25 441	8 099	-2 377	15 842	1 950	10 453	-8 503	22 760	-
<b>Feb.</b>	33 720	-1 367	26 068	7 677	-2 378	16 340	1 919	10 460	-8 541	23 178	-
<b>March</b>	25 994	696	26 465	4 002	-2 397	6 624	1 857	10 415	-8 558	14 782	1 050
<b>April</b>	24 818	855	26 069	3 770	-2 374	5 748	1 809	10 480	-8 671	13 762	690

## 2. THE BANK OF FINLAND'S MONEY MARKET OPERATIONS AND THE FORWARD MARKET

### 2.1 THE BANK OF FINLAND'S MONEY MARKET OPERATIONS AND THE CALL MONEY MARKET, MILL. FIM

During period	Purchases of money market instruments	Sales of money market instruments	Matured money market instruments, net	Impact on liquidity (1-2-3)	Call money credits	Call money deposits	Total net change (4+5-6)
	1	2	3	4	5	6	7
<b>1985</b>	.	.	.	.	201	-1 011	1 212
<b>1986</b>	.	.	.	.	1 599	-1 074	2 673
<b>1987</b>	1 263	23 658	-17 520	-4 875	-6 818	626	-12 319
<b>1988</b>	13 840	19 190	-16 850	11 500	463	-629	12 592
<b>1989</b>	131 110	3 855	99 245	28 010	-425	441	27 144
<b>1989</b>							
<b>April</b>	4 710	—	2 370	2 340	-1 548	-69	861
<b>May</b>	6 490	—	7 880	-1 390	3 507	-40	2 157
<b>June</b>	16 295	250	7 875	8 170	-3 798	573	3 799
<b>July</b>	16 790	240	15 170	1 380	7	166	1 221
<b>Aug.</b>	14 560	—	13 160	1 400	-10	102	1 288
<b>Sept.</b>	14 260	—	9 950	4 310	73	-633	5 016
<b>Oct.</b>	16 720	—	13 920	2 800	-72	214	2 514
<b>Nov.</b>	18 220	350	13 560	4 310	510	-170	4 990
<b>Dec.</b>	10 850	530	6 770	3 550	-475	317	2 758
<b>1990</b>							
<b>Jan.</b>	18 660	4 710	13 750	200	14	2 726	-2 512
<b>Feb.</b>	31 775	14 350	18 020	-595	-46	-1 922	1 281
<b>March</b>	24 811	4 739	27 905	-7 833	698	-1 365	-5 770
<b>April</b>	16 470	150	16 432	-112	305	146	47

## 2.2 FORWARD EXCHANGE MARKET, MILL. FIM

End of period	Banks' forward positions with					
	Domestic companies			Foreign banks, net	Bank of Finland, net	Total, net (3+4+5)
	Forward exchange bought by banks	Forward exchange sold by banks	Net (1-2)			
1	2	3	4	5	6	
<b>1985</b>	16 982	1 733	15 249	708	-9 005	6 951
<b>1986</b>	11 446	1 319	10 127	-2 461	-92	7 574
<b>1987</b>	21 671	1 158	20 513	-233	-1 287	18 994
<b>1988</b>	16 488	1 543	14 946	9 086	-377	23 654
<b>1989</b>	<u>10 531</u>	<u>3 563</u>	<u>6 967</u>	<u>8 031</u>	<u>205</u>	<u>15 204</u>
<b>1989</b>						
<b>March</b>	14 614	871	13 742	7 221	-168	20 795
<b>April</b>	13 536	1 044	12 492	7 003	-63	19 432
<b>May</b>	13 248	1 535	11 714	9 024	-	20 737
<b>June</b>	12 859	1 408	11 451	9 781	-306	20 926
<b>July</b>	13 125	1 393	11 731	9 870	-395	21 207
<b>Aug.</b>	12 652	1 187	11 465	15 126	-220	26 371
<b>Sept.</b>	11 782	1 669	10 113	13 261	-	23 374
<b>Oct.</b>	11 323	2 260	9 063	10 774	-	19 836
<b>Nov.</b>	11 487	2 934	8 552	8 784	-	17 336
<b>Dec.</b>	<u>10 531</u>	<u>3 563</u>	<u>6 967</u>	<u>8 031</u>	<u>205</u>	<u>15 204</u>
<b>1990</b>						
<b>Jan.</b>	9 339	3 793	5 545	11 854	125	17 524
<b>Feb.</b>	9 073	3 764	5 309	8 215	-1 741	11 783
<b>March</b>	10 328	3 418	6 910	14 739	-2 323	19 326

## 2.3 BANKS' CENTRAL BANK POSITION, MILL. FIM

Average of daily observations	Call money credits	Bank CDs held by the Bank of Finland	Gross debt to the Bank of Finland (1+2)	Call money deposits	Holdings of CDs issued by the Bank of Finland	Cash reserve deposits	Gross claim on the Bank of Finland (4+5+6)	Net position (3-7)
1	2	3	4	5	6	7	8	
<b>1985</b>	5 812	.	5 812	4 527	.	9 578	14 105	-8 293
<b>1986</b>	7 117	120	7 237	1 256	.	9 189	10 445	-3 208
<b>1987</b>	481	1 581	2 062	703	4 705	10 092	15 501	-13 439
<b>1988</b>	128	2 190	2 319	621	5 044	15 159	20 824	-18 505
<b>1989</b>	373	15 146	15 519	403	465	23 035	23 903	-8 384
<b>1989</b>								
<b>April</b>	689	8 697	9 386	129	774	22 128	23 031	-13 644
<b>May</b>	1 176	8 908	10 083	127	330	22 214	22 671	-12 588
<b>June</b>	779	11 264	12 042	321	118	22 842	23 282	-11 240
<b>July</b>	46	17 049	17 095	714	160	23 520	24 394	-7 299
<b>Aug.</b>	46	17 384	17 431	507	116	24 132	24 755	-7 325
<b>Sept.</b>	41	19 738	19 779	446	47	24 669	25 161	-5 382
<b>Oct.</b>	62	24 529	24 591	483	11	25 098	25 592	-1 001
<b>Nov.</b>	360	26 702	27 062	363	-	25 384	25 747	1 315
<b>Dec.</b>	328	31 497	31 824	462	-	25 574	26 036	5 788
<b>1990</b>								
<b>Jan.</b>	308	34 151	34 459	1 200	860	25 504	27 564	6 895
<b>Feb.</b>	367	43 675	44 043	1 017	12 978	25 463	39 459	4 584
<b>March</b>	131	36 855	36 987	1 885	7 299	26 094	35 278	1 709
<b>April</b>	222	26 291	26 513	406	908	26 452	27 766	-1 254

### 3. RATES OF INTEREST

#### 3.1 MONEY MARKET RATES AND RATES APPLIED BY THE BANK OF FINLAND, PER CENT

Average of daily observations	Inter-bank overnight rate	HELIBOR				Bank of Finland rates			Cash reserve requirement	
		1 month	3 months	6 months	12 months	Call money credit rate	Call money deposit rate	Base rate	Ordinary	Additional (average)
	1	2	3	4	5	6	7	8	9	10
<b>1985</b>	..	..	..	..	..	13.37	13.37	9.04	5.6	.
<b>1986</b>	11.87	..	..	..	..	13.43	11.34	7.46	4.8	.
<b>1987</b>	9.16	9.90	10.02	10.14	10.40	11.71	7.78	7.00	4.8	.
<b>1988</b>	8.47	9.77	9.97	10.16	10.50	11.50	7.04	7.63	6.5	.
<b>1989</b>	10.21	12.32	12.53	12.61	12.72	13.40	4.00	7.67	8.0	0.5
<b>1989</b>										
<b>April</b>	11.37	12.08	12.11	12.11	12.15	13.00	4.00	7.50	8.0	.
<b>May</b>	11.43	11.70	11.75	11.79	11.90	13.00	4.00	7.50	8.0	0.2
<b>June</b>	9.79	11.62	11.78	11.93	12.13	13.00	4.00	7.50	8.0	0.4
<b>July</b>	10.56	11.64	11.79	11.94	12.11	15.00	4.00	7.50	8.0	0.5
<b>Aug.</b>	8.86	11.87	12.06	12.22	12.35	15.00	4.00	7.50	8.0	0.7
<b>Sept.</b>	8.56	12.69	13.09	13.30	13.40	15.00	4.00	7.50	8.0	0.8
<b>Oct.</b>	10.31	14.06	14.19	14.22	14.19	15.00	4.00	7.50	8.0	1.0
<b>Nov.</b>	12.78	14.78	14.77	14.66	14.51	15.00	4.00	8.50	8.0	1.1
<b>Dec.</b>	15.03	16.23	16.08	15.56	15.17	15.00	4.00	8.50	8.0	1.1
<b>1990</b>										
<b>Jan.</b>	S	16.01	16.05	15.73	15.45	15.00	4.00	8.50	8.0	1.1
<b>Feb.</b>	S	16.01	16.01	15.73	15.39	15.00	4.00	8.50	8.0	.
<b>March</b>	8.97	15.08	15.38	15.40	15.37	15.00	4.00	8.50	8.0	.
<b>April</b>	8.86	13.16	13.94	14.33	14.70	15.00	4.00	8.50	8.0	.

#### 3.2 WEIGHTED EURORATE (3 AND 12 CURRENCIES), PER CENT

Average of daily observations	3 currencies <sup>1</sup>				12 currencies <sup>2</sup>			
	1 month	3 months	6 months	12 months	1 month	3 months	6 months	12 months
	1	2	3	4	5	6	7	8
<b>1985</b>	6.8	6.9	7.0	7.2	..	..	..	..
<b>1986</b>	5.9	5.9	5.9	5.8	..	..	..	..
<b>1987</b>	5.4	5.6	5.7	5.8	7.9	8.0	8.1	8.2
<b>1988</b>	5.9	6.0	6.2	6.4	7.8	8.0	8.1	8.3
<b>1989</b>	8.3	8.4	8.5	8.5	9.7	9.8	9.9	9.9
<b>1989</b>								
<b>April</b>	8.0	8.2	8.4	8.6	9.2	9.5	9.6	9.7
<b>May</b>	8.3	8.4	8.6	8.7	9.5	9.7	9.7	9.8
<b>June</b>	8.3	8.4	8.5	8.5	9.7	9.8	9.8	9.9
<b>July</b>	8.3	8.2	8.2	8.1	9.7	9.8	9.7	9.7
<b>Aug.</b>	8.3	8.3	8.2	8.2	9.7	9.8	9.7	9.7
<b>Sept.</b>	8.5	8.6	8.6	8.6	9.9	10.0	10.0	9.9
<b>Oct.</b>	8.9	9.0	8.9	8.8	10.4	10.5	10.4	10.4
<b>Nov.</b>	8.8	9.0	9.0	8.9	10.5	10.7	10.7	10.7
<b>Dec.</b>	9.0	9.0	9.0	8.9	10.8	10.9	10.9	10.9
<b>1990</b>								
<b>Jan.</b>	8.8	9.0	9.2	9.2	10.8	11.0	11.2	11.3
<b>Feb.</b>	8.9	9.1	9.3	9.6	11.1	11.3	11.5	11.7
<b>March</b>	8.9	9.1	9.4	9.7	11.2	11.4	11.6	11.8
<b>April</b>	8.8	9.1	9.3	9.7	10.9	11.1	11.3	11.6

#### 3.3 COVERED EURO-DOLLAR RATE, PER CENT

Average of daily observations	1 month	3 months	6 months	12 months
	1	2	3	4
<b>1985</b>	12.9	12.8	12.8	12.6
<b>1986</b>	12.1	11.7	11.5	11.1
<b>1987</b>	9.8	9.9	9.9	10.1
<b>1988</b>	9.6	9.8	10.0	10.3
<b>1989</b>	11.8	12.1	12.2	12.2
<b>1989</b>				
<b>April</b>	11.9	11.8	11.8	11.7
<b>May</b>	11.1	11.2	11.2	11.3
<b>June</b>	11.2	11.3	11.4	11.5
<b>July</b>	11.1	11.3	11.5	11.5
<b>Aug.</b>	11.1	11.5	11.7	11.8
<b>Sept.</b>	11.9	12.5	12.8	12.9
<b>Oct.</b>	13.6	13.8	13.8	13.7
<b>Nov.</b>	14.2	14.3	14.3	14.1
<b>Dec.</b>	15.3	15.2	14.8	14.5
<b>1990</b>				
<b>Jan.</b>	14.9	15.4	15.1	15.0
<b>Feb.</b>	15.0	15.0	14.9	14.7
<b>March</b>	14.3	14.7	14.8	14.7
<b>April</b>	12.7	13.6	13.9	14.4

<sup>1</sup> DEM 60 per cent, USD 30 per cent, GBP 10 per cent.

<sup>2</sup> Weighted according to their relative shares in the Bank of Finland currency index. Since March 1989, the index has consisted of 14 currencies.

### 3.4 RATES OF INTEREST APPLIED BY BANKS, PER CENT

End of period	Lending						Deposits					
	New credits <sup>1</sup>				Average lending rate	Of which: Commercial banks	Savings accounts and ordinary deposit accounts	12-month time deposits	24-month time deposits	Average rate of interest on regulated deposits	Average rate of interest on unregulated deposits	Average rate of interest on total deposits
	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
<b>1985</b>	12.04	12.94	10.62	11.55	10.37	10.37	4.75	7.50	8.75	5.91	13.24	6.81
<b>1986</b>	10.89	12.30	9.76	10.64	8.82	8.81	2.75	5.75	7.00	4.43	11.84	5.35
<b>1987</b>	10.50	12.31	10.01	10.62	9.12	8.99	2.75	5.75	7.00	4.56	10.13	5.29
<b>1988</b>	10.22	12.27	10.50	10.72	10.37	10.25	3.75	6.75	8.00	5.87	9.80	6.20
<b>1989*</b>	12.97	13.47	11.58	12.07	11.86	11.80	4.50	.	7.50	6.60	11.92	7.37
<b>1988</b>												
<b>Dec.</b>	10.02	11.68	10.33	10.48	10.37	10.25	3.75	6.75	8.00	5.87	10.62	6.92
<b>1989*</b>												
<b>Jan.</b>	11.63	12.37	10.58	10.95	10.09	9.90	3.50	.	5.50	5.45	10.86	6.99
<b>Feb.</b>	11.63	12.23	10.85	11.18	10.09	9.92	3.50	.	5.50	5.41	10.85	7.06
<b>March</b>	12.04	12.69	11.04	11.45	10.11	9.94	3.50	.	5.50	5.51	10.89	6.87
<b>April</b>	12.73	13.10	11.35	11.80	10.23	10.06	3.50	.	5.50	5.54	11.32	7.09
<b>May</b>	12.75	13.11	11.48	11.91	10.31	10.13	3.50	.	5.50	5.52	11.41	7.07
<b>June</b>	12.46	13.12	11.43	11.83	10.35	10.18	3.50	.	5.50	5.48	11.55	7.06
<b>July</b>	12.60	13.25	11.59	12.03	10.34	10.18	3.50	.	5.50	5.46	11.53	7.04
<b>Aug.</b>	12.67	13.36	11.33	11.79	10.37	10.20	3.50	.	5.50	5.48	11.60	7.07
<b>Sept.</b>	12.28	13.54	11.84	12.21	10.46	10.31	3.50	.	5.50	5.53	11.92	7.29
<b>Oct.</b>	14.08	14.12	12.09	12.72	10.72	10.59	3.50	.	5.50	5.57	12.56	7.56
<b>Nov.</b>	14.99	14.77	12.90	13.58	11.60	11.44	4.50	.	6.50	6.40	13.27	8.35
<b>Dec.</b>	16.36	15.37	13.28	14.02	11.86	11.80	4.50	.	7.50	6.60	14.18	8.77

<sup>1</sup> Average rate of interest for period.

### 3.5 RATES OF INTEREST ON BONDS AND DEBENTURES, PER CENT

Period	Secondary market rates						Rates at issue		
	Long-term rate		Taxable government bonds	Taxable public issues	Issued by:		Taxfree public issues	Taxable public issues	Taxfree public issues
	3 years	5 years			Financial institutions	Corporations			
	1	2	3	4	5	6	7	8	9
<b>1985</b>	..	..	.	12.7	..	..	10.1	12.7	10.6
<b>1986</b>	..	..	.	11.7	..	..	8.3	11.3	8.8
<b>1987</b>	..	..	.	11.2	11.1	11.2	8.1	10.7	7.9
<b>1988</b>	10.7	10.8	10.6	10.6	10.6	10.6	7.8	10.4	7.3
<b>1989</b>	12.2	12.0	12.1	11.9	12.0	12.0	8.1	11.7	6.6
<b>1989</b>									
<b>March</b>	11.6	11.6	11.8	11.8	11.5	11.8	7.7	11.5	6.5
<b>April</b>	11.9	11.8	11.8	11.8	11.9	11.7	7.6	11.6	6.5
<b>May</b>	11.8	11.7	11.8	11.8	11.9	11.8	7.9	11.6	6.5
<b>June</b>	11.9	11.7	12.3	11.8	11.8	11.7	8.1	11.5	6.5
<b>July</b>	11.8	11.7	12.1	11.8	12.0	11.6	8.2	11.6	6.5
<b>Aug.</b>	11.9	11.7	11.9	11.9	11.8	12.0	8.5	11.5	6.5
<b>Sept.</b>	12.5	12.0	12.2	12.1	12.0	12.2	8.4	11.9	6.5
<b>Oct.</b>	13.3	12.8	12.4	12.4	12.6	12.3	8.4	11.9	6.5
<b>Nov.</b>	13.3	12.9	12.6	12.4	12.2	12.6	8.7	12.2	6.5
<b>Dec.</b>	13.5	13.0	12.9	12.4	12.1	12.6	8.9	12.5	7.5
<b>1990</b>									
<b>Jan.</b>	13.5	13.0	12.7	12.7	12.9	12.4	8.7	12.0	
<b>Feb.</b>	13.5	13.0	S	S	S	S	S	12.9	8.5
<b>March</b>	13.8	13.4	13.2	13.2	13.3	13.1	8.6	13.0	

## 4. RATES OF EXCHANGE

### 4.1 AVERAGE SPOT SELLING RATES, FIM

Average of daily quotations	New York	Montreal	London	Dublin	Stockholm	Oslo	Copenhagen	Frankfurt a.M.	Amsterdam	Brussels	
	1 USD	1 CAD	1 GBP	1 IEP	1 SEK	1 NOK	1 DKK	1 DEM	1 NLG	1 BEC	1 BEL
	1	2	3	4	5	6	7	8	9	10	11
<b>1985</b>	6.206	4.554	8.000	6.590	0.7222	0.7231	0.5871	2.1142	1.8745	0.10483	0.10421
<b>1986</b>	5.077	3.659	7.459	6.816	0.7138	0.6882	0.6290	2.3454	2.0789	0.11399	0.11299
<b>1987</b>	4.404	3.325	7.213	6.556	0.6952	0.6547	0.6444	2.4514	2.1755	0.11806	0.11735
<b>1988</b>	4.191	3.412	7.466	6.397	0.6848	0.6444	0.6235	2.3895	2.1233	0.11421	0.11345
<b>1989</b>	4.295	3.632	7.051	6.104	0.6673	0.6234	0.5886	2.2879	2.0281	0.10925	0.10894
<b>1989</b>											
<b>April</b>	4.197	3.534	7.149	6.001	0.6605	0.6190	0.5776	2.2465	1.9913	0.10737	0.10691
<b>May</b>	4.347	3.650	7.090	5.975	0.6618	0.6187	0.5737	2.2325	1.9805	0.10672	0.10639
<b>June</b>	4.437	3.706	6.899	5.985	0.6643	0.6183	0.5757	2.2397	1.9884	0.10708	0.10681
<b>July</b>	4.278	3.602	6.947	6.043	0.6622	0.6164	0.5818	2.2601	2.0043	0.10803	0.10786
<b>Aug.</b>	4.348	3.703	6.950	6.036	0.6657	0.6186	0.5814	2.2582	2.0029	0.10802	0.10782
<b>Sept.</b>	4.419	3.744	6.952	6.050	0.6698	0.6215	0.5830	2.2650	2.0088	0.10827	0.10803
<b>Oct.</b>	4.281	3.649	6.809	6.115	0.6648	0.6177	0.5892	2.2951	2.0326	0.10933	0.10897
<b>Nov.</b>	4.262	3.649	6.715	6.180	0.6644	0.6190	0.6001	2.3302	2.0648	0.11108	0.11089
<b>Dec.</b>	4.125	3.556	6.597	6.262	0.6569	0.6167	0.6107	2.3725	2.1016	0.11294	0.11289
<b>1990</b>											
<b>Jan.</b>	4.010	3.431	6.632	6.270	0.6508	0.6139	0.6117	2.3708	2.1018	0.11317	0.11315
<b>Feb.</b>	3.960	3.315	6.724	6.277	0.6482	0.6129	0.6128	2.3635	2.0966	0.11322	0.11320
<b>March</b>	4.030	3.416	6.561	6.308	0.6548	0.6125	0.6177	2.3648	2.1001	0.11399	
<b>April</b>	4.000	3.439	6.557	6.362	0.6546	0.6117	0.6217	2.3704	2.1060	0.11472	

Average of daily quotations	Zurich	Paris	Rome	Vienna	Lisbon	Reykjavik	Madrid	Tokyo	Moscow	Melbourne	ECU	SDR
	1 CHF	1 FRF	1 ITL	1 ATS	1 PTE	1 ISK	1 ESP	1 JPY	1 SUR	1 AUD	1 XEU	1 XDR
	12	13	14	15	16	17	18	19	20	21	22	23
<b>1985</b>	2.5360	0.6940	0.00327	0.3012	0.0367	0.1520	0.0366	0.02610	7.419	..	..	6.27879
<b>1986</b>	2.8349	0.7355	0.00343	0.3339	0.0343	0.1259	0.0364	0.03028	7.228	..	..	5.94432
<b>1987</b>	2.9563	0.7345	0.00341	0.3488	0.0315	0.1163	0.0358	0.03050	6.965	3.106	5.075	5.68010
<b>1988</b>	2.8700	0.7060	0.00324	0.3401	0.0294	0.1006	0.0361	0.03273	6.891	3.309	4.954	5.61826
<b>1989</b>	2.6306	0.6757	0.00315	0.3254	0.0276	0.0782	0.0364	0.03122	6.817	3.423	4.731	5.49375
<b>1989</b>												
<b>April</b>	2.5518	0.6659	0.00308	0.3195	0.0275	0.0819	0.0363	0.03181	6.702	3.395	4.672	5.44433
<b>May</b>	2.5138	0.6615	0.00308	0.3176	0.0273	0.0814	0.0359	0.03151	6.770	3.374	4.644	5.48599
<b>June</b>	2.5942	0.6616	0.00310	0.3185	0.0271	0.0789	0.0351	0.03079	6.831	3.367	4.639	5.49166
<b>July</b>	2.6243	0.6679	0.00314	0.3214	0.0273	0.0762	0.0361	0.03047	6.759	3.260	4.678	5.42928
<b>Aug.</b>	2.6201	0.6700	0.00316	0.3211	0.0273	0.0751	0.0362	0.03079	6.821	3.336	4.678	5.47435
<b>Sept.</b>	2.6202	0.6723	0.00316	0.3220	0.0273	0.0740	0.0363	0.03047	6.870	3.435	4.694	5.49998
<b>Oct.</b>	2.6260	0.6776	0.00314	0.3263	0.0272	0.0717	0.0362	0.03014	6.801	3.338	4.710	5.43586
<b>Nov.</b>	2.6348	0.6868	0.00319	0.3312	0.0273	0.0705	0.0367	0.02971	6.799	3.359	4.765	5.43347
<b>Dec.</b>	2.6339	0.6959	0.00321	0.3371	0.0273	0.0691	0.0369	0.02872	6.716	3.263	4.810	5.35882
<b>1990</b>												
<b>Jan.</b>	2.6457	0.6980	0.00319	0.3371	0.0272	0.0684	0.0367	0.02768	6.640	3.159	4.812	5.27623
<b>Feb.</b>	2.6625	0.6975	0.00320	0.3359	0.0271	0.0684	0.0367	0.02723	6.591	3.029	4.829	5.24250
<b>March</b>	2.6677	0.7021	0.00322	0.3362	0.0270	0.0682	0.0370	0.02634	6.610	3.067	4.827	5.23570
<b>April</b>	2.6899	0.7072	0.00324	0.3372	0.0270	0.0680	0.0375	0.02528	6.582	3.075	4.847	5.19392

## 4.2 CURRENCY INDICES, 1982=100

Average of daily observations	Bank of Finland currency index	Other currency indices		Currency	Weights of the Bank of Finland currency index As from March 28, 1990
		Payments currency index	MERM index		
	1	2	3		4
<b>1985</b>	102.5	109.4	112.5	<b>USD</b>	8.5
<b>1986</b>	103.9	106.3	110.4	<b>GBP</b>	13.3
<b>1987</b>	103.3	103.2	106.1	<b>SEK</b>	19.1
<b>1988</b>	102.0	101.1	104.7	<b>NOK</b>	3.8
<b>1989</b>	98.4	98.4	102.8	<b>DKK</b>	4.4
				<b>DEM</b>	19.1
<b>1989</b>				<b>NLG</b>	4.8
<b>April</b>	97.4	97.1	101.6	<b>BEC</b>	3.2
<b>May</b>	97.3	97.6	102.4	<b>CHF</b>	2.4
<b>June</b>	97.2	98.0	102.8	<b>FRF</b>	6.6
<b>July</b>	97.4	97.5	101.7	<b>ITL</b>	5.0
<b>Aug.</b>	97.7	98.0	102.6	<b>ATS</b>	1.6
<b>Sept.</b>	98.0	98.6	103.1	<b>ESP</b>	1.9
<b>Oct.</b>	97.7	97.9	102.0	<b>JPY</b>	6.3
<b>Nov.</b>	98.1	98.2	102.1		
<b>Dec.</b>	97.9	97.6	100.9		
<b>1990</b>					
<b>Jan.</b>	97.2	96.7	99.2		
<b>Feb.</b>	97.1	96.4	98.4		
<b>March</b>	97.0	96.7	98.7		
<b>April</b>	97.0	96.6	98.0		

## 5. OTHER DOMESTIC FINANCING

### 5.1 BANK DEPOSITS BY THE PUBLIC, MILL. FIM

End of period	Demand deposits	Time deposits	Investment accounts	Markka deposits, total (1+2+3)	Foreign currency deposits	Unregulated deposits	Total deposits (4+5+6)
	1	2	3	4	5	6	7
<b>1984</b>	16 975	108 118	.	125 093	4 960	11 287	141 340
<b>1985</b>	19 268	125 366	1 781	146 415	6 184	13 998	166 597
<b>1986</b>	18 393	137 521	3 423	159 337	4 259	17 271	180 866
<b>1987</b>	20 377	155 115	5 243	180 735	3 915	17 892	202 542
<b>1988*</b>	24 831	194 181	5 089	224 102	4 561	41 028	269 690
<b>1988*</b>							
<b>Nov.</b>	23 389	171 714	6 602	201 706	4 936	44 564	251 206
<b>Dec.</b>	24 831	194 181	5 089	224 102	4 561	41 028	269 690
<b>1989*</b>							
<b>Jan.</b>	24 190	194 308	5 842	224 340	4 526	48 256	277 122
<b>Feb.</b>	26 225	194 930	6 433	227 588	4 900	48 346	280 834
<b>March</b>	25 618	193 825	6 932	226 375	4 660	51 153	282 187
<b>April</b>	25 872	195 207	7 408	228 487	5 323	55 898	289 707
<b>May</b>	26 969	194 708	7 672	229 349	5 627	51 275	286 250
<b>June</b>	29 176	196 927	8 080	234 182	6 499	57 898	298 580
<b>July</b>	29 608	195 487	8 371	233 465	6 745	58 715	298 925
<b>Aug.</b>	28 191	195 844	8 612	232 647	6 633	62 039	301 319
<b>Sept.</b>	27 588	196 169	9 219	232 975	6 235	67 515	306 724
<b>Oct.</b>	28 296	195 743	9 667	233 706	6 550	70 701	310 956
<b>Nov.</b>	27 687	195 226	9 913	232 825	6 612	79 346	318 784

### 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
<b>1984</b>	5 233	7 644	111 280	124 157	20 363	144 520
<b>1985</b>	6 313	7 471	132 668	146 451	24 236	170 687
<b>1986</b>	7 542	6 354	152 335	166 231	24 450	190 681
<b>1987</b>	8 507	5 177	178 698	192 382	36 475	228 857
<b>1988*</b>	11 358	5 920	234 268	251 545	49 910	301 455
<b>1988*</b>						
<b>Nov.</b>	10 898	4 902	221 029	236 830	48 213	285 043
<b>Dec.</b>	11 358	5 920	234 268	251 545	49 910	301 455
<b>1989*</b>						
<b>Jan.</b>	11 765	5 334	237 089	254 188	52 726	306 914
<b>Feb.</b>	11 783	5 044	239 517	256 345	56 193	312 537
<b>March</b>	12 595	5 122	241 517	259 234	55 929	315 163
<b>April</b>	12 836	5 129	240 945	258 910	57 233	316 143
<b>May</b>	12 926	5 195	246 520	264 641	59 553	324 194
<b>June</b>	13 422	5 347	248 921	267 691	60 671	328 362
<b>July</b>	14 052	5 305	250 961	270 318	59 621	329 939
<b>Aug.</b>	13 931	5 358	253 401	272 691	60 892	333 582
<b>Sept.</b>	14 691	5 436	256 014	276 141	62 836	338 977
<b>Oct.</b>	15 190	5 471	256 958	277 619	63 133	340 752
<b>Nov.</b>	15 584	5 465	257 252	278 300	64 932	343 232

### 5.3 MONEY SUPPLY AND MONETARY AGGREGATES, MILL. FIM

End of period	Foreign assets, net	Domestic credit			Other items, net	M <sub>1</sub>	M <sub>2</sub> (1+4+5)
		Claims on the central government	Claims on the public	Total (2+3)			
	1	2	3	4	5	6	7
<b>1985</b>	-6 641	-8 694	209 231	200 537	-27 244	27 694	166 652
<b>1986</b>	-16 784	-13 884	237 514	223 630	-27 522	27 838	179 324
<b>1987</b>	-25 484	-14 977	277 068	262 090	-36 145	30 342	200 461
<b>1988</b>	-40 670	-15 356	352 371	337 015	-50 306	35 232	246 039
<b>1989*</b>	-59 049	-18 868	407 403	388 535	-58 955	41 444	270 531
<b>1988</b>							
<b>Dec.</b>	-40 670	-15 356	352 371	337 015	-50 306	35 232	246 039
<b>1989*</b>							
<b>Jan.</b>	-40 982	-13 442	358 025	344 583	-57 465	34 954	246 137
<b>Feb.</b>	-41 631	-13 958	364 209	350 252	-58 621	37 294	250 000
<b>March</b>	-43 785	-16 112	368 268	352 156	-59 424	36 810	248 947
<b>April</b>	-45 413	-13 377	372 511	359 134	-61 684	37 559	252 037
<b>May</b>	-47 950	-10 575	377 748	367 173	-65 853	38 966	253 370
<b>June</b>	-50 499	-11 982	384 021	372 039	-58 889	42 526	262 651
<b>July</b>	-49 924	-13 556	385 135	371 579	-59 946	41 333	261 708
<b>Aug.</b>	-51 975	-14 549	390 251	375 703	-62 613	40 017	261 115
<b>Sept.</b>	-53 458	-15 381	396 292	380 911	-66 143	39 625	261 310
<b>Oct.</b>	-55 551	-15 567	399 696	384 128	-66 557	40 176	262 020
<b>Nov.</b>	-57 974	-18 766	403 920	385 154	-65 808	39 730	261 372
<b>Dec.</b>	-59 049	-18 868	407 403	388 535	-58 955	41 444	270 531

### 5.4 LIABILITIES AND ASSETS OF THE CENTRAL GOVERNMENT, MILL. FIM

End of period	Foreign debt				Domestic debt				Total central government debt (4+8)	Out-standing lending	Cash funds
	Bonds	Other bonds and debentures	Long-term promissory notes	Total (1+2+3)	Public bonds	Other long-term liabilities	Treasury notes and bills	Total (5+6+7)			
	1	2	3	4	5	6	7	8	9	10	11
<b>1985</b>	17 316	2 703	5 658	25 677	14 994	4 107	2 203	21 304	46 981	36 032	6 383
<b>1986</b>	17 905	3 038	6 038	26 981	18 059	4 481	2 474	25 013	51 994	38 028	11 686
<b>1987</b>	20 407	2 697	5 576	28 680	22 121	4 692	3 018	29 831	58 511	40 035	11 553
<b>1988</b>	20 202	1 804	4 273	26 279	24 243	5 272	2 290	31 805	58 084	42 990	15 858
<b>1989</b>	18 505	852	3 429	22 786	24 126	5 750	250	30 126	52 912	45 270	21 248
<b>1989</b>											
<b>March</b>	19 285	1 234	3 893	24 412	24 399	5 219	1 630	31 248	55 660	44 013	17 893
<b>April</b>	18 236	1 219	3 678	23 133	24 508	4 975	1 280	30 763	53 896	44 313	15 128
<b>May</b>	19 333	1 239	3 564	24 136	24 351	4 806	980	30 137	54 273	44 418	14 374
<b>June</b>	18 759	1 249	3 400	23 408	24 539	4 810	780	30 129	53 537	44 595	14 598
<b>July</b>	18 587	1 229	3 370	23 186	24 526	4 812	660	29 998	53 184	44 848	16 701
<b>Aug.</b>	18 809	1 166	3 390	23 365	24 352	4 798	420	29 570	52 935	44 786	17 363
<b>Sept.</b>	18 764	1 160	3 377	23 301	24 404	4 799	280	29 483	52 784	45 032	17 846
<b>Oct.</b>	18 591	1 138	3 385	23 114	23 998	4 801	250	29 049	52 163	45 371	17 788
<b>Nov.</b>	18 601	853	3 319	22 773	23 988	4 798	250	29 036	51 809	45 471	21 445
<b>Dec.</b>	18 505	852	3 429	22 786	24 126	5 750	250	30 126	52 912	45 270	21 248
<b>1990</b>											
<b>Jan.</b>	18 353	851	3 350	22 554	23 172	5 747	100	29 019	51 573	..	19 182
<b>Feb.</b>	18 322	729	3 303	22 354	23 122	5 728	—	28 850	51 204	..	..
<b>March</b>	18 310	663	3 155	22 128	22 403	5 723	—	28 126	50 254	..	..

## 5.5 MARKKA BOND MARKET

### A) ISSUES, MILL. FIM

During 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
<b>1985</b>	4 799	9 112	5 994	435	33	8 070	6 394	5 909	20 373
<b>1986</b>	4 976	10 638	6 532	422	105	5 987	7 487	9 199	22 674
<b>1987</b>	4 477	9 510	8 119	206	69	9 409	8 830	4 142	22 380
<b>1988</b>	3 027	8 418	6 889	268	61	7 861	6 522	4 280	18 663
<b>1989</b>	4 204	11 022	5 717	233	13	11 146	2 997	7 046	21 189
<b>1989</b>									
<b>March</b>	611	1 218	—	6	—	1 067	381	386	1 835
<b>April</b>	274	553	982	13	—	575	—	1 247	1 822
<b>May</b>	353	450	450	56	—	495	450	363	1 308
<b>June</b>	502	2 407	—	15	—	916	—	2 008	2 924
<b>July</b>	58	100	—	8	3	100	—	69	169
<b>Aug.</b>	247	103	450	35	—	507	200	128	835
<b>Sept.</b>	789	663	800	7	3	1 210	273	779	2 262
<b>Oct.</b>	72	1 040	160	8	7	974	—	313	1 287
<b>Nov.</b>	150	875	—	23	—	761	—	288	1 048
<b>Dec.</b>	258	850	—	9	—	665	—	452	1 117
<b>1990*</b>									
<b>Jan.</b>	399	818	—	—	—	110	—	1 107	1 217
<b>Feb.</b>	437	3 773	—	—	—	2 861	357	992	4 210
<b>March</b>	602	2 242	—	—	—	980	—	1 864	2 844

### 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
<b>1985</b>	10 482	26 173	18 575	661	56	10 967	19 002	25 977	55 947
<b>1986</b>	14 075	31 902	22 091	1 042	177	16 432	23 314	29 541	69 287
<b>1987</b>	17 509	36 773	26 518	1 200	232	24 831	28 229	29 172	82 232
<b>1988*</b>	19 195	42 892	28 953	1 413	292	32 028	30 054	30 663	92 745
<b>1989*</b>	21 463	50 216	29 381	1 555	290	41 162	27 742	34 001	102 906
<b>1988*</b>									
<b>IV</b>	19 195	42 892	28 953	1 413	292	32 028	30 054	30 663	92 745
<b>1989*</b>									
<b>I</b>	20 327	45 721	29 061	1 457	292	35 808	29 424	31 626	96 858
<b>II</b>	20 841	48 406	28 843	1 519	283	38 183	28 877	32 831	99 892
<b>III</b>	21 537	48 392	28 714	1 539	288	39 154	28 279	33 036	100 470
<b>IV</b>	21 463	50 216	29 381	1 555	290	41 162	27 742	34 001	102 906

## 5.6 HELSINKI STOCK EXCHANGE

During period	Turnover, mil.FIM			Share prices Unitas index <sup>1</sup> , 1975 = 100		
	Shares and subscription rights	Bonds and debentures	Total (1+2)	Banks	Industry	Overall index
	1	2	3	4	5	6
<b>1985</b>	3 114	9 046	12 160	184	234	229
<b>1986</b>	9 488	6 479	15 968	254	357	350
<b>1987</b>	26 641	4 604	31 245	319	603	546
<b>1988</b>	31 734	5 718	37 452	404	734	677
<b>1989</b>	33 160	7 375	40 536	441	793	742
<b>1989</b>						
<b>April</b>	3 520	171	3 691	489	854	807
<b>May</b>	2 861	367	3 228	482	851	801
<b>June</b>	2 016	268	2 283	486	844	796
<b>July</b>	1 344	303	1 647	473	823	776
<b>Aug.</b>	3 198	1 171	4 370	466	829	776
<b>Sept.</b>	2 265	400	2 665	429	786	732
<b>Oct.</b>	1 304	689	1 993	397	727	677
<b>Nov.</b>	1 081	876	1 957	369	674	627
<b>Dec.</b>	2 929	1 471	4 400	354	669	619
<b>1990</b>						
<b>Jan.</b>	4 475	709	5 184	332	701	633
<b>Feb.</b>	1 324	15	1 339	319	745	661
<b>March</b>	1 520	599	2 120	320	715	638
<b>April</b>	850	197	1 047	314	660	594

<sup>1</sup> Average of daily observations.

## 6. BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS

### 6.1 CURRENT ACCOUNT, MILL. FIM

During period	Exports of goods, f.o.b.	Transport receipts	Travel receipts	Other services receipts	Services receipts, total (2+3+4)	Exports of goods and services (1+5)	Investment income	Transfers and other income	Current account of receipts (6+7+8)	Imports of goods, c.i.f.	Transport expenditure	Travel expenditure	Other services expenditure
	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1985</b>	82 475	6 216	3 258	6 224	15 698	98 173	5 847	3 791	107 811	80 764	2 545	5 031	6 554
<b>1986</b>	81 066	5 757	3 195	5 616	14 568	95 634	4 510	3 609	103 752	76 736	2 160	5 587	5 415
<b>1987</b>	83 826	6 370	3 736	6 099	16 204	100 030	5 075	3 231	108 336	81 867	2 610	6 811	6 488
<b>1988*</b>	91 299	7 146	4 257	6 333	17 736	109 035	7 752	3 396	120 183	91 234	3 576	7 913	7 500
<b>1989*</b>	98 200	7 900	4 500	6 800	19 200	117 400	10 000	4 200	131 600	104 500	3 900	9 000	8 300
<b>1987</b>													
<b>III</b>	20 849	1 698	1 339	1 573	4 610	25 459	1 115	781	27 355	20 258	670	1 915	1 467
<b>IV</b>	21 638	1 554	808	1 890	4 252	25 890	1 659	777	28 325	21 573	694	1 741	2 019
<b>1988*</b>													
<b>I</b>	20 513	1 663	777	1 511	3 951	24 464	1 804	818	27 086	19 684	715	1 830	2 041
<b>II</b>	22 565	1 828	1 041	1 456	4 325	26 890	1 781	864	29 535	23 185	831	1 917	1 760
<b>III</b>	21 617	1 913	1 486	1 518	4 916	26 533	1 944	883	29 361	23 769	1 013	2 210	1 813
<b>IV</b>	26 603	1 743	954	1 848	4 544	31 148	2 223	831	34 201	24 597	1 017	1 956	1 886
<b>1989*</b>													
<b>I</b>	24 904	1 884	865	1 706	4 454	29 358	2 323	942	32 623	24 320	753	2 081	2 286
<b>II</b>	23 331	2 009	1 100	1 525	4 634	27 965	2 271	1 033	31 269	24 803	905	2 230	2 000
<b>III</b>	22 594	2 115	1 494	1 663	5 272	27 866	2 525	1 114	31 505	25 584	1 128	2 494	2 050
<b>IV</b>	27 371	1 892	1 041	1 907	4 840	32 211	2 881	1 112	36 203	29 793	1 113	2 195	1 963

During period	Services expenditure, total (11+12)+13)	Imports of goods and services (10+14)	Investment expenditure (15+16)	Transfers and other expenditure (17)	Current account expenditure (15+16)+17)	Trade account (1-10)	Transport (2-11)	Travel (3-12)	Other services (4-13)	Services account and goods (20+21)+22)	Goods and services account net (19+23)(7-16)	Investment income, net (8-17)	Transfers and other, net (24+25)(9-18)	Current account (24+25)+26)=
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
<b>1985</b>	14 130	94 893	12 134	5 300	112 327	1 711	3 671	-1 773	-330	1 568	3 279	-6 287	-1 509	-4 517
<b>1986</b>	13 162	89 898	11 719	5 964	107 580	4 329	3 597	-2 392	201	1 406	5 735	-7 209	-2 355	-3 828
<b>1987</b>	15 909	97 775	12 617	5 860	116 251	1 960	3 760	-3 075	-390	296	2 255	-7 542	-2 629	-7 915
<b>1988*</b>	18 989	110 223	15 769	6 771	132 763	64	3 570	-3 656	-1 167	-1 252	-1 188	-8 017	-3 375	-12 580
<b>1988*</b>	21 200	125 700	19 500	7 400	152 600	-6 300	4 000	-4 500	-1 500	-2 000	-8 300	-9 500	-3 200	-21 000
<b>1987</b>														
<b>III</b>	4 052	24 310	2 660	1 303	28 274	591	1 028	-576	106	558	1 149	-1 545	-522	-919
<b>IV</b>	4 455	26 027	3 431	1 523	30 982	65	860	-933	-129	-203	-138	-1 773	-747	-2 657
<b>1988*</b>														
<b>I</b>	4 585	24 269	3 882	1 919	30 070	828	948	-1 053	-529	-634	194	-2 077	-1 100	-2 983
<b>II</b>	4 508	27 692	3 863	1 501	33 056	-619	997	-876	-304	-183	-802	-2 082	-637	-3 521
<b>III</b>	5 037	28 805	3 511	1 503	33 819	-2 151	900	-725	-296	-120	-2 272	-1 567	-620	-4 459
<b>IV</b>	4 859	29 456	4 514	1 848	35 818	2 007	725	-1 003	-38	-315	1 692	-2 291	-1 017	-1 617
<b>1989*</b>														
<b>I</b>	5 121	29 441	4 288	2 106	35 835	584	1 130	-1 216	-581	-666	-82	-1 965	-1 164	-3 212
<b>II</b>	5 135	29 938	5 076	1 735	36 749	-1 472	1 104	-1 130	-475	-501	-1 973	-2 805	-702	-5 480
<b>III</b>	5 672	31 256	4 772	1 676	37 704	-2 990	987	-1 000	-388	-401	-3 391	-2 247	-562	-6 199
<b>IV</b>	5 271	35 064	5 364	1 883	42 312	-2 422	779	-1 154	-56	-431	-2 853	-2 483	-772	-6 109

## 6.2 CAPITAL ACCOUNT, MILL. FIM

During period	Direct investment in Finland	Portfolio investment in Finland	Long-term credits				Imports of other long-term capital	Imports of long-term capital (1+2+6+7)	Direct investment abroad	Portfolio investment abroad	Long-term export credits	Exports of other long-term capital	Exports of long-term capital (9+10+11+12)	Long-term capital account (8-13)
			Central government	Authorized banks	Others	Total (3+4+5)								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>1985</b>	392	4 264	1 556	1 489	442	3 487	140	8 283	2 073	1 329	-1 313	1 026	3 115	5 168
<b>1986</b>	1 627	646	-63	5 935	-482	5 390	87	7 750	3 641	2 347	-381	702	6 309	1 441
<b>1987</b>	424	179	2 284	5 700	2 526	10 510	91	11 204	3 741	3 294	158	3 103	10 296	908
<b>1988*</b>	1 164	-182	-1 690	9 796	9 076	17 182	85	18 249	7 935	1 307	675	1 899	11 816	6 433
<b>1989*</b>	1 353	991	-1 854	14 659	10 854	23 659	79	26 082	11 793	409	2 934	1 852	16 988	9 094
<b>1987</b>														
<b>III</b>	24	82	-1 019	945	549	475	12	593	682	519	106	82	1 389	-796
<b>IV</b>	51	-30	2 108	1 471	-157	3 422	55	3 498	1 346	360	-65	482	2 123	1 376
<b>1988*</b>														
<b>I</b>	63	6	-857	361	3 230	2 734	89	2 892	1 113	245	6	572	1 936	956
<b>II</b>	313	-212	1 171	2 356	1 599	5 126	-42	5 185	2 972	344	180	431	3 927	1 258
<b>III</b>	107	-43	-1 571	3 011	885	2 325	-19	2 370	1 677	375	89	380	2 521	-151
<b>IV</b>	681	67	-433	4 068	3 362	6 997	57	7 802	2 173	343	400	515	3 431	4 371
<b>1989*</b>														
<b>I</b>	-165	706	-141	5 951	2 199	8 009	42	8 592	3 173	-372	1 395	1 057	5 253	3 339
<b>II</b>	176	-256	-1 197	1 491	2 951	3 245	-22	3 143	1 785	430	543	160	2 918	225
<b>III</b>	484	495	-93	2 452	1 938	4 297	-16	5 260	3 237	333	225	158	3 953	1 307
<b>IV</b>	858	46	-423	4 765	3 766	8 108	75	9 087	3 598	18	771	478	4 865	4 222

During period	Basic balance	Short-term capital imports of authorized banks	Import liabilities and prepayments related to exports	Imports of short-term capital (16+17)	Short-term capital exports of authorized banks	Export receivables and prepayments related to imports	Exports of short-term capital (19+20)	Other short-term capital incl. errors and omissions	Short-term capital account (18-21+22)	Overall balance exd. reserve movements (15+23)	Change in central bank's foreign exchange reserves (26+27)	Of which:	
												Convertible reserves	Tied reserves
	15	16	17	18	19	20	21	22	23	24	25	26	27
<b>1985</b>	651	6 890	350	7 240	323	1 732	2 055	-2 092	3 093	3 744	-3 744	-3 729	-15
<b>1986</b>	-2 387	6 019	-3 796	2 222	9 933	-92	9 841	2 075	-5 544	-7 930	7 930	11 678	-3 748
<b>1987</b>	-7 007	19 324	-665	18 659	-7 343	-183	-7 526	-3 442	22 743	15 736	-15 736	-17 817	2 081
<b>1988*</b>	-6 147	10 695	-1 061	9 634	5 970	644	6 614	3 309	6 330	183	-183	-517	334
<b>1989*</b>	-11 906	9 371	2 713	12 084	7 371	-1 287	6 084	-55	5 945	-5 961	5 961	4 455	1 506
<b>1987</b>													
<b>III</b>	-1 714	8 738	-355	8 383	3 494	27	3 521	-2 512	2 351	637	-637	-2 407	1 771
<b>IV</b>	-1 281	-763	-1 468	-2 230	-6 436	27	-6 410	-271	3 908	2 627	-2 627	-2 820	193
<b>1988*</b>													
<b>I</b>	-2 028	6 501	-1 604	4 897	2 966	-692	2 274	1 745	4 368	2 341	-2 341	-1 295	-1 046
<b>II</b>	-2 264	11 731	537	12 268	4 363	-692	3 671	-1 615	6 982	4 718	-4 718	-4 662	-57
<b>III</b>	-4 610	-547	854	308	3 405	1 014	4 419	1 634	-2 478	-7 088	7 088	6 337	751
<b>IV</b>	2 755	-6 990	-849	-7 838	-4 764	1 014	-3 750	1 546	-2 543	212	-212	-897	685
<b>1989*</b>													
<b>I</b>	127	6 707	-384	6 323	4 685	71	4 756	126	1 693	1 820	-1 820	-1 372	-449
<b>II</b>	-5 255	9 788	-2 136	7 652	4 648	72	4 720	1 148	4 080	-1 174	1 174	152	1 022
<b>III</b>	-4 892	4 629	1 447	6 076	4 747	-230	4 517	346	1 905	-2 987	2 987	1 802	1 185
<b>IV</b>	-1 886	-11 753	3 786	-7 967	-6 708	-1 200	-7 908	-1 675	-1 734	-3 620	3 620	3 873	-253

### 6.3 FINLAND'S FOREIGN LIABILITIES AND ASSETS, MILL. FIM

End of period	Long-term liabilities							Long-term assets					Long-term debt, net (8-13)	
	Direct investment in Finland	Portfolio investment in Finland	Long-term credits			Other long-term capital	Total (1+2+6+7)	Direct investment abroad	Portfolio investment abroad	Long-term export credits	Other long-term capital	Total (9+10+11+12)		
			Central government	Authorized banks	Others									Total (3+4+5)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>1985</b>	3 274	6 313	25 678	6 410	34 276	66 364	652	76 603	10 524	2 350	6 539	3 053	22 466	54 137
<b>1986</b>	4 892	7 992	26 292	11 992	32 044	70 330	739	83 953	13 727	4 697	5 649	3 685	27 758	56 195
<b>1987</b>	5 285	7 055	27 861	17 365	33 088	78 314	830	91 483	16 651	7 991	5 240	6 618	36 500	54 983
<b>1988*</b>	6 438	7 251	26 011	27 427	41 787	95 226	915	109 830	24 564	9 298	6 686	8 555	49 103	60 727
<b>1989*</b>	7 773	8 242	23 118	39 946	51 211	114 275	994	131 284	35 647	9 707	9 501	10 379	65 234	66 050
<b>1987</b>														
<b>III</b>	5 243	10 141	25 627	15 825	33 511	74 963	775	91 122	15 633	7 631	5 571	6 229	35 064	56 058
<b>IV</b>	5 285	7 055	27 861	17 365	33 088	78 314	830	91 483	16 651	7 991	5 240	6 618	36 500	54 983
<b>1988*</b>														
<b>I</b>	5 340	7 105	26 637	17 594	35 883	80 114	919	93 478	17 730	8 236	5 248	7 183	38 397	55 081
<b>II</b>	5 664	6 893	28 390	20 464	38 232	87 084	877	100 518	21 168	8 580	5 685	7 712	43 145	57 373
<b>III</b>	5 768	6 850	26 991	23 697	39 248	89 935	858	103 411	22 852	8 955	5 787	8 122	45 716	57 695
<b>IV</b>	6 438	7 251	26 011	27 427	41 787	95 226	915	109 830	24 564	9 298	6 686	8 555	49 103	60 727
<b>1989*</b>														
<b>I</b>	6 233	7 957	25 357	32 799	43 289	101 448	957	116 595	25 355	8 926	8 025	9 590	51 896	64 699
<b>II</b>	6 421	7 701	24 178	34 097	46 669	104 943	935	120 000	28 044	9 356	8 674	9 794	55 868	64 132
<b>III</b>	6 740	8 196	23 893	36 200	48 032	108 124	919	123 979	30 773	9 689	8 830	9 933	59 225	64 754
<b>IV</b>	7 773	8 242	23 118	39 946	51 211	114 275	994	131 284	35 647	9 707	9 501	10 379	65 234	66 050

End of period	Short-term liabilities				Short-term assets				Short-term liabilities, net (18-22)	Debt, net (14+23)	Debt service payments	Of which: repayments	Debt service ratio
	Bank of Finland's short-term liabilities	Short-term liabilities of authorized banks	Trade credits and other liabilities	Total (15+16+17)	Bank of Finland's short-term assets	Short-term assets of authorized banks	Trade credits and other assets	Total (19+20+21)					
	15	16	17	18	19	20	21	22	23	24	25	26	27
<b>1985</b>	4 070	51 374	17 474	72 918	25 183	36 208	18 450	79 841	-6 922	47 215	11 287	4 808	10.5
<b>1986</b>	3 455	56 881	14 483	74 819	16 613	46 141	19 279	82 034	-7 215	48 980	13 462	6 018	13.0
<b>1987</b>	3 362	73 132	16 898	93 392	31 134	38 798	18 060	87 993	5 400	60 383	14 203	6 516	13.1
<b>1988*</b>	3 341	83 828	15 257	102 426	32 037	44 768	20 830	97 635	4 791	65 518	14 240	6 146	11.8
<b>1989*</b>	3 558	93 199	19 701	116 458	25 113	52 139	21 327	98 579	17 879	83 929	13 594	3 998	10.3
<b>1987</b>													
<b>III</b>	3 607	75 547	18 654	97 808	29 291	45 235	18 009	92 535	5 273	61 331	2 771	1 217	10.1
<b>IV</b>	3 362	73 132	16 898	93 392	31 134	38 798	18 060	87 993	5 400	60 383	4 236	2 392	15.0
<b>1988*</b>													
<b>I</b>	3 467	79 633	14 083	97 183	33 515	41 764	18 164	93 443	3 740	58 821	3 530	1 433	13.0
<b>II</b>	3 177	91 364	14 662	109 203	39 025	46 127	16 986	102 138	7 065	64 438	3 326	1 225	11.3
<b>III</b>	3 539	90 817	16 773	111 129	32 750	49 532	19 678	101 960	9 169	66 864	3 980	2 394	13.6
<b>IV</b>	3 341	83 828	15 257	102 426	32 037	44 768	20 830	97 635	4 791	65 581	3 404	1 094	10.0
<b>1989*</b>													
<b>I</b>	3 278	90 535	15 973	109 786	33 376	49 453	20 905	103 734	6 051	70 750	3 227	1 238	9.9
<b>II</b>	3 136	100 323	14 656	118 115	32 142	54 101	22 149	108 392	9 723	73 855	4 581	1 752	14.6
<b>III</b>	3 919	104 952	16 212	125 082	29 839	58 848	22 139	110 826	14 257	79 011	3 027	756	9.6
<b>IV</b>	3 558	93 199	19 701	116 458	25 113	52 139	21 327	98 579	17 879	83 929	2 759	252	7.6

6.4 FINLAND'S LONG-TERM FOREIGN LIABILITIES AND ASSETS, BY SECTOR, MILL: FIM

End of period	Long-term liabilities					Long-term assets					Long-term liabilities, net (5-10)
	Corporate sector	Financial institutions	Central government	Local government	Total (1+2+3+4)	Corporate sector	Financial institutions	Central government	Other	Total (6+7+8+9)	
	1	2	3	4	5	6	7	8	9	10	11
<b>1985</b>	35 709	13 980	26 330	585	76 603	17 102	3 131	1 955	279	22 466	54 137
<b>1986</b>	36 243	20 169	27 031	509	83 953	19 209	5 721	2 309	520	27 758	56 195
<b>1987</b>	35 549	26 734	28 691	511	91 483	23 377	9 740	2 653	730	36 500	54 983
<b>1988*</b>	41 278	41 127	26 926	499	109 830	31 170	12 977	3 101	1 855	49 103	60 727
<b>1989*</b>	50 013	56 584	24 112	575	131 284	42 393	16 339	3 651	2 851	65 234	66 050
<b>1987</b>											
<b>III</b>	38 943	25 240	26 402	538	91 122	22 571	9 297	2 519	677	35 064	56 058
<b>IV</b>	35 549	26 734	28 691	511	91 483	23 377	9 740	2 653	730	36 500	54 983
<b>1988*</b>											
<b>I</b>	37 322	28 095	27 556	506	93 478	23 808	10 716	2 851	1 023	38 397	55 081
<b>II</b>	39 278	31 463	29 267	513	100 518	27 482	11 455	2 887	1 322	43 145	57 373
<b>III</b>	39 353	35 695	27 849	514	103 411	29 354	11 830	2 938	1 594	45 716	57 695
<b>IV</b>	41 278	41 127	26 926	499	109 830	31 170	12 977	3 101	1 855	49 103	60 727
<b>1989*</b>											
<b>I</b>	41 786	47 978	26 314	515	116 595	32 212	14 288	3 299	2 097	51 896	64 699
<b>II</b>	42 941	51 447	25 113	501	120 000	35 327	14 978	3 331	2 232	55 868	64 132
<b>III</b>	45 454	53 224	24 812	491	123 979	37 332	15 906	3 374	2 613	59 225	64 754
<b>IV</b>	50 013	56 584	24 112	575	131 284	42 393	16 339	3 651	2 851	65 234	66 050

## 7. FOREIGN TRADE

### 7.1 EXPORTS, IMPORTS AND THE TRADE BALANCE, MILL. FIM

During period	Exports, f.o.b.	Imports, c.i.f.	Balance (1-2)
	1	2	3
<b>1985</b>	84 028	81 520	2 508
<b>1986</b>	82 579	77 601	4 978
<b>1987</b>	85 516	82 807	2 709
<b>1988</b>	92 902	92 118	784
<b>1989*</b>	99 794	105 288	-5 494
<b>1989<sup>1</sup></b>			
<b>March</b>	8 804	8 714	90
<b>April</b>	8 930	8 361	569
<b>May</b>	7 681	8 635	-954
<b>June</b>	7 145	8 032	-887
<b>July</b>	7 485	7 424	61
<b>Aug.</b>	7 885	9 858	-1 973
<b>Sept.</b>	7 553	8 596	-1 043
<b>Oct.</b>	10 390	10 873	-483
<b>Nov.</b>	9 431	9 920	-489
<b>Dec.</b>	7 978	9 018	-1 040
<b>1990*</b>			
<b>Jan.</b>	8 538	8 300	238
<b>Feb.</b>	8 037	8 110	-73
<b>March</b>	8 227	8 568	-341

<sup>1</sup> Owing to certain technical difficulties during the summer months 1989 the figures for individual months of the foreign trade statistics compiled by the Board of Customs may contain inaccuracies. However, the cumulative total for 1989 should not be unduly affected.

### 7.2 FOREIGN TRADE: INDICES OF VOLUME, UNIT VALUE AND TERMS OF TRADE, 1980=100

Period	Volume		Unit value		Terms of trade
	Exports	Imports	Exports	Imports	
	1	2	3	4	5
<b>1985</b>	115	104	138	135	102
<b>1986</b>	116	110	135	121	111
<b>1987</b>	118	119	138	119	116
<b>1988</b>	121	130	145	122	119
<b>1989*</b>	121	143	156	126	124
<b>1989<sup>1</sup></b>					
<b>1987</b>					
<b>III</b>	116	116	140	121	115
<b>IV</b>	121	128	140	119	117
<b>1988</b>					
<b>I</b>	114	116	140	120	117
<b>II</b>	123	133	141	121	117
<b>III</b>	113	134	147	123	119
<b>IV</b>	136	137	150	124	121
<b>1989*</b>					
<b>I</b>	123	132	156	128	122
<b>II</b>	116	136	155	126	123
<b>III</b>	112	141	155	125	124
<b>IV</b>	134	161	157	126	125

### 7.3 FOREIGN TRADE BY MAIN GROUPS, MILL. FIM

During period	Exports by industries, f.o.b.					Imports by use of goods, c.i.f.				
	Wood industry products	Paper industry products	Chemical industry products	Metal and engineering industry products	Other goods	Raw materials (excl. crude oil)	Crude oil, fuels and lubricants	Finished goods		Other goods
	1	2	3	4	5	6	7	8	9	10
<b>1985</b>	6 728	25 030	9 803	24 412	18 055	38 676	17 770	11 675	12 967	432
<b>1986</b>	6 947	24 600	7 858	26 115	17 059	39 292	10 070	12 898	15 069	272
<b>1987</b>	7 470	27 058	7 770	26 230	16 988	41 174	9 406	14 138	17 478	611
<b>1988</b>	7 567	30 474	8 450	29 225	17 186	45 790	7 533	17 274	20 828	693
<b>1989*</b>	7 418	32 520	8 843	32 684	18 329	51 726	8 283	20 462	24 056	761
<b>1989<sup>1,2</sup></b>										
<b>March</b>	624	2 953	761	2 775	1 691	4 375	574	1 495	2 246	24
<b>April</b>	660	2 728	673	3 308	1 561	4 102	540	1 626	1 962	131
<b>May</b>	669	2 712	633	2 198	1 469	4 173	678	1 825	1 833	126
<b>June</b>	598	2 518	587	1 991	1 451	3 926	595	1 791	1 706	14
<b>July</b>	551	2 510	737	2 471	1 216	3 527	925	1 447	1 517	8
<b>Aug.</b>	477	2 978	668	2 379	1 383	5 009	862	1 748	2 189	50
<b>Sept.</b>	597	2 598	648	2 223	1 487	3 941	753	1 778	2 003	121
<b>Oct.</b>	719	2 913	967	3 866	1 925	5 463	733	2 055	2 546	76
<b>Nov.</b>	700	2 859	844	3 318	1 710	4 697	903	1 996	2 284	40
<b>Dec.</b>	618	2 552	684	2 805	1 319	4 326	796	1 867	1 963	66
<b>1990*</b>										
<b>Jan.</b>	617	2 327	824	3 426	1 344	4 028	498	1 782	1 963	29
<b>Feb.</b>	667	2 447	829	2 597	1 497	4 053	428	1 579	1 984	66
<b>March</b>	623	2 803	753	2 616	1 432	4 202	483	1 665	2 180	38

## 7.4 FOREIGN TRADE BY REGIONS AND COUNTRIES

Region and country	Exports, f.o.b.				Imports, c.i.f.			
	1989*		1990*		1989*		1990*	
	Mill. FIM	Percentage share	Mill. FIM	Percentage change from the corresponding period on the previous year	Mill. FIM	Percentage share	Mill. FIM	Percentage change from the corresponding period of the previous year
	1	2	3	4	5	6	7	8
<b>All OECD countries</b>	75 493	75.6	19 460	3.0	82 767	78.6	20 274	3.3
<b>OECD Europe</b>	64 393	64.5	16 318	1.6	67 056	63.7	16 464	2.9
Of which:								
Austria	1 175	1.2	275	6.9	1 295	1.2	318	7.8
Belgium and Luxembourg	1 947	2.0	512	-8.1	2 932	2.8	699	-0.6
Denmark	3 257	3.3	806	-6.3	3 290	3.1	798	9.7
France	5 453	5.5	1 687	22.7	4 418	4.2	1 147	19.4
Federal Republic of Germany	10 785	10.8	2 820	4.2	18 234	17.3	4 525	2.0
Italy	2 989	3.0	773	-1.3	4 900	4.7	1 224	9.4
Netherlands	3 961	4.0	1 079	9.6	3 416	3.2	751	-7.2
Norway	2 920	2.9	785	5.9	2 457	2.3	624	6.0
Spain	1 831	1.8	503	18.9	1 129	1.1	317	0.8
Sweden	14 314	14.3	3 457	5.5	14 314	13.6	3 421	-1.9
Switzerland	1 680	1.7	423	4.1	1 829	1.7	406	-6.8
United Kingdom	11 958	12.0	2 624	-18.6	6 898	6.6	1 653	-0.4
<b>Other OECD</b>	11 100	11.1	3 142	11.6	15 711	14.9	3 810	4.8
Of which:								
Canada	1 359	1.4	374	-3.9	919	0.9	179	-22.3
Japan	2 033	2.0	352	-32.8	7 695	7.3	1 795	-3.4
United States	6 388	6.4	2 124	40.5	6 669	6.3	1 766	20.3
<b>CMEA countries</b>	16 248	16.3	3 281	-26.8	14 907	14.2	2 958	-6.8
Of which:								
Soviet Union	14 496	14.5	2 787	-31.0	12 152	11.5	2 297	-8.4
<b>Developing countries</b>	7 224	7.2	1 794	5.8	6 612	6.3	1 528	0.8
<b>OPEC countries</b>	1 558	1.6	389	3.7	680	0.6	114	51.3
<b>Other</b>	5 666	5.7	1 406	6.4	5 932	5.6	1 414	-1.8
<b>Other countries</b>	829	0.8	266	7.4	1 002	1.0	218	-10.3
<b>TOTAL</b>	99 794	100.0	24 802	-2.0	105 288	100.0	24 978	1.7
Of which:								
<b>EEC countries</b>	43 869	44.0	11 279	-0.1	46 903	44.5	11 629	4.6
<b>EFTA countries</b>	20 195	20.2	4 960	5.2	20 006	19.0	4 794	-1.3

## 8. DOMESTIC ECONOMIC DEVELOPMENTS

### 8.1 SUPPLY AND USE OF RESOURCES, MILL. FIM, 1985 PRICES

(seasonally adjusted figures)

Period	Consumption expenditure		Fixed investment		Change in stocks, incl. statistical discrepancy	Domestic demand (1+2+3+4+5)	Exports	Imports	GDP (6+7-8)
	Private	Public	Private	Public					
	1	2	3	4	5	6	7	8	9
<b>1985</b>	181 664	68 218	69 599	10 453	1 772	331 706	98 173	94 893	334 986
<b>1986</b>	189 113	70 325	69 328	10 738	810	340 314	99 498	97 795	342 017
<b>1987*</b>	199 981	73 458	72 761	11 654	2 246	360 100	102 127	106 568	355 659
<b>1988*</b>	209 986	75 278	81 256	11 470	8 901	386 891	106 124	118 772	374 243
<b>1989*</b>	217 444	77 704	92 991	11 208	15 800	415 147	107 897	130 229	392 815
<b>1987*</b>									
<b>III</b>	49 931	18 480	17 933	3 089	-955	88 479	26 588	26 368	88 699
<b>IV</b>	51 364	18 599	18 669	2 911	1 531	93 073	24 600	27 463	90 210
<b>1988*</b>									
<b>I</b>	51 931	18 601	19 524	2 884	1 208	94 147	25 357	27 759	91 745
<b>II</b>	51 861	18 752	19 858	2 746	2 917	96 135	26 837	29 855	93 117
<b>III</b>	52 795	18 904	20 873	2 999	2 272	97 843	26 412	30 885	93 369
<b>IV</b>	53 400	19 021	21 002	2 841	2 503	98 766	27 518	30 273	96 012
<b>1989*</b>									
<b>I</b>	53 606	19 217	21 408	2 760	3 084	100 076	27 830	31 748	96 158
<b>II</b>	54 595	19 363	23 173	2 812	2 516	102 458	26 257	30 849	97 866
<b>III</b>	54 638	19 504	23 686	2 756	4 352	104 935	26 660	32 507	99 089
<b>IV</b>	54 606	19 621	24 723	2 880	5 848	107 678	27 150	35 125	99 702

### 8.2 VOLUME OF INDUSTRIAL PRODUCTION, 1985=100

(seasonally adjusted figures)

Period	Total industry	Mining and quarrying	Manufacturing	Wood and paper industries	Metal and engineering industries	Other manufacturing	Energy and water supply
	(100.0)	(1.6)	(87.9)	(16.5)	(30.0)	(41.4)	(10.5)
	1	2	3	4	5	6	7
<b>1985</b>	100.4	99.8	100.4	100.1	100.6	100.3	100.2
<b>1986</b>	101.9	102.8	102.0	102.3	103.0	101.2	100.4
<b>1987</b>	107.2	99.9	107.2	106.5	110.2	105.4	107.8
<b>1988*</b>	111.1	110.6	111.2	114.5	114.8	107.3	110.3
<b>1989*</b>	114.5	114.8	115.1	118.1	123.9	107.5	109.1
<b>1989*</b>							
<b>Feb.</b>	114.1	119.0	114.8	118.4	120.3	109.0	106.6
<b>March</b>	115.4	119.5	116.1	119.3	123.0	108.0	108.9
<b>April</b>	113.0	112.4	113.4	119.7	120.8	105.4	110.8
<b>May</b>	115.3	113.9	116.0	122.1	122.6	108.7	111.6
<b>June</b>	115.2	116.5	115.5	117.6	124.2	108.2	114.7
<b>July</b>	114.2	109.8	115.6	116.8	125.0	109.1	105.8
<b>Aug.</b>	116.2	103.6	117.6	118.3	131.4	108.1	105.7
<b>Sept.</b>	115.0	110.2	116.3	118.6	126.6	108.1	103.7
<b>Oct.</b>	114.3	117.9	115.2	115.8	125.7	107.1	105.8
<b>Nov.</b>	114.3	116.2	115.2	117.6	124.1	107.4	110.7
<b>Dec.</b>	113.5	117.1	113.2	112.7	123.5	105.1	115.6
<b>1990*</b>							
<b>Jan.</b>	113.2	116.1	111.4	114.2	117.9	106.3	122.2
<b>Feb.</b>	113.9	121.7	113.7	115.0	124.8	105.1	112.7

### 8.3 INDICATORS OF DOMESTIC SUPPLY AND DEMAND, 1985=100 (seasonally adjusted figures)

Period	Volume of wholesale trade	Volume of retail trade	Volume of construction of buildings	Of which:			Imports of investment goods	Monthly indicator of GDP
				Residential buildings	Industrial buildings	Other buildings		
	1	2	3	4	5	6	7	8
<b>1985</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>1986</b>	104.7	102.5	94.0	88.4	99.9	99.5	105.2	102.0
<b>1987</b>	111.3	107.7	95.6	89.0	101.0	102.6	114.3	106.8
<b>1988*</b>	116.7	113.0	108.6	106.0	113.4	110.6	135.0	110.5
<b>1989*</b>	124.2	117.0	127.4	132.3	139.7	115.9	160.4	114.8
<b>1988*</b>								
<b>IV</b>	118.5	114.7	114.4	117.1	122.3	110.9	146.0	112.4
<b>1989*</b>								
<b>Jan.</b>	123.5	119.5	..	..	..	..	..	113.2
<b>Feb.</b>	120.9	115.9	..	..	..	..	..	112.9
<b>March</b>	119.3	114.9	..	..	..	..	..	113.6
<b>April</b>	121.4	117.4	..	..	..	..	..	114.3
<b>May</b>	128.2	119.8	..	..	..	..	..	115.1
<b>June</b>	121.1	118.2	..	..	..	..	..	115.1
<b>July</b>	120.6	116.5	..	..	..	..	..	114.6
<b>Aug.</b>	126.7	117.4	..	..	..	..	..	115.9
<b>Sept.</b>	124.9	117.5	..	..	..	..	..	115.5
<b>Oct.</b>	130.4	116.0	..	..	..	..	..	116.0
<b>Nov.</b>	130.9	117.7	..	..	..	..	..	116.3
<b>Dec.</b>	122.3	112.7	..	..	..	..	..	115.1
<b>I</b>	121.2	116.8	118.6	120.5	127.9	108.5	133.9	113.3
<b>II</b>	123.6	118.5	128.5	131.2	148.8	113.3	167.5	114.8
<b>III</b>	124.1	117.2	128.0	133.0	137.7	119.0	152.6	115.4
<b>IV</b>	127.8	115.5	134.4	144.6	144.3	123.1	189.3	115.8
<b>1990*</b>								
<b>Jan.</b>	127.9	112.9	..	..	..	..	..	115.8

## 8.4 WAGES AND PRICES, 1985=100

Period	Index of wage and salary earnings	By sectors					Consumer price index	Basic price index for domestic supply	By origin		Producer price index for manufacturing	By marketing area		Building cost index
		Private Total	Of which: Manufacturing (SIC 3)	Central government	Local government	Non-profit institutions			Domes- tic goods	Import- ed goods		Export- ed goods	Home market goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>1985</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>1986</b>	106.9	106.6	106.2	106.6	107.8	107.2	102.9	97.0	98.6	91.0	96.5	96.7	96.4	104.3
<b>1987</b>	114.4	114.5	113.4	115.7	113.3	115.2	107.2	97.9	100.2	89.3	97.3	98.1	96.8	109.1
<b>1988</b>	124.7	124.6	122.7	128.8	122.0	128.0	112.6	101.5	104.9	89.1	101.7	103.8	100.7	116.3
<b>1989<sup>1</sup></b>	135.3	136.2	133.4	137.2	131.4	136.4	120.0	107.3	111.3	92.6	107.8	110.5	106.4	125.5
<b>1988</b>														
<b>IV</b>	128.4	128.5	126.6	132.1	125.2	131.4	114.7	103.6	107.3	90.0	104.0	107.1	102.5	119.6
<b>1989<sup>1</sup></b>														
<b>March</b>	..	..	..	..	..	..	117.9	105.9	109.3	93.4	106.3	110.2	104.4	123.4
<b>April</b>	..	..	..	..	..	..	119.1	107.0	110.6	93.6	107.1	109.9	105.8	124.3
<b>May</b>	..	..	..	..	..	..	119.5	107.4	111.3	93.2	107.8	110.1	106.6	124.9
<b>June</b>	..	..	..	..	..	..	120.6	107.4	111.4	92.6	107.9	110.4	106.8	124.6
<b>July</b>	..	..	..	..	..	..	120.4	107.4	111.4	92.6	108.2	110.5	107.1	124.8
<b>Aug.</b>	..	..	..	..	..	..	120.6	107.6	111.8	92.3	108.3	110.6	107.3	125.8
<b>Sept.</b>	..	..	..	..	..	..	121.9	108.1	112.4	92.3	108.8	111.3	107.6	127.6
<b>Oct.</b>	..	..	..	..	..	..	122.4	108.7	113.2	92.5	109.2	111.7	108.0	128.2
<b>Nov.</b>	..	..	..	..	..	..	122.3	108.9	113.5	92.3	109.1	111.2	108.0	128.6
<b>Dec.</b>	..	..	..	..	..	..	123.0	109.0	113.6	92.4	109.3	111.5	108.2	129.8
<b>I</b>	131.6	131.6	129.4	135.1	129.3	134.4	116.8	105.4	108.9	92.5	105.8	109.4	104.0	122.3
<b>II</b>	135.7	136.9	134.3	137.1	130.8	136.3	119.7	107.3	111.1	93.1	107.6	110.1	106.4	124.6
<b>III</b>	136.0	137.3	134.3	137.1	130.8	136.4	121.0	107.7	111.9	92.4	108.4	110.8	107.3	126.1
<b>IV</b>	138.0	138.8	135.7	139.5	134.8	138.5	122.6	108.9	113.4	92.4	109.2	111.5	108.1	128.9
<b>1990</b>														
<b>Jan.</b>	..	..	..	..	..	..	124.8	109.4	113.9	93.0	109.4	111.5	108.4	130.4
<b>Feb.</b>	..	..	..	..	..	..	125.3	109.2	113.8	92.5	108.9	110.2	108.2	130.8
<b>March</b>	..	..	..	..	..	..	125.7	109.3	114.1	91.9	109.0	110.1	108.5	131.7

<sup>1</sup> Preliminary figures for columns 1—6.

## 8.5 LABOUR, EMPLOYMENT AND UNEMPLOYMENT (seasonally adjusted figures)

Period	Labour force participation rate among 15-74 year olds	Labour force	Total employment (4+5) = (6+7+8+9)	By industrial status		By industry				Unem- ployed	Unem- ployment rate
				Self-employed	Wage and salary earners	Agriculture and forestry	Industry	Construction	Service industries		
%											
	1	2	3	4	5	6	7	8	9	10	11
<b>1985</b>	69.2	2 566	2 437	361	2 076	280	597	178	1 380	129	5.0
<b>1986</b>	69.1	2 569	2 431	359	2 071	266	589	185	1 391	138	5.4
<b>1987</b>	68.6	2 554	2 423	372	2 051	251	569	184	1 419	130	5.1
<b>1988</b>	68.4	2 546	2 431	368	2 062	238	553	188	1 452	116	4.6
<b>1989</b>	68.7	2 559	2 470	367	2 104	218	561	199	1 492	89	3.5
<b>1989</b>											
<b>Feb.</b>	68.9	2 563	2 472	369	2 103	231	552	188	1 500	92	3.6
<b>March</b>	68.3	2 542	2 450	364	2 086	229	554	208	1 458	92	3.6
<b>April</b>	69.1	2 572	2 481	374	2 107	230	550	203	1 498	92	3.6
<b>May</b>	69.2	2 578	2 492	362	2 130	221	576	194	1 502	86	3.3
<b>June</b>	68.7	2 557	2 471	363	2 108	217	564	199	1 492	86	3.3
<b>July</b>	68.6	2 557	2 467	370	2 097	206	561	196	1 504	90	3.5
<b>Aug.</b>	68.2	2 542	2 451	348	2 103	199	565	194	1 493	92	3.6
<b>Sept.</b>	68.4	2 549	2 462	365	2 097	216	574	204	1 468	87	3.4
<b>Oct.</b>	68.6	2 557	2 484	379	2 105	218	557	201	1 507	73	2.9
<b>Nov.</b>	68.7	2 560	2 472	372	2 100	212	563	193	1 504	88	3.4
<b>Dec.</b>	68.9	2 567	2 477	368	2 110	213	566	207	1 491	90	3.5
<b>1990</b>											
<b>Jan.</b>	68.6	2 559	2 489	378	2 111	221	563	201	1 504	70	2.7
<b>Feb.</b>	69.2	2 580	2 499	372	2 126	218	560	212	1 509	81	3.1

8.6 CENTRAL GOVERNMENT FINANCES: REVENUE, EXPENDITURE  
AND FINANCIAL BALANCE, MILL. FIM, CASH FLOW BASIS

During period	Revenue							Expenditure			
	Direct taxes	Indirect taxes	Other taxes and similar revenue	Other revenue	Revenue before financial transactions (1+2+3+4)	Redemptions of loans granted by the state	Revenue before borrowing (5+6)	Consumption	Transfers and subsidies	Of which:	
										Local government	Other domestic sectors
	1	2	3	4	5	6	7	8	9	10	11
<b>1984</b>	22 526	42 737	598	9 711	75 572	1 894	77 466	22 155	44 333	18 444	24 836
<b>1985</b>	25 750	47 578	546	10 415	84 290	2 071	86 361	24 835	49 269	21 183	26 866
<b>1986</b>	28 079	51 733	323	11 640	91 774	2 209	93 983	26 354	52 845	23 215	28 131
<b>1987</b>	29 454	57 312	491	12 391	99 648	2 482	102 129	29 419	59 498	26 456	30 964
<b>1988</b>	35 339	66 348	473	13 629	115 789	2 557	118 346	32 266	65 502	29 757	33 108
<b>1988</b>											
<b>Nov.</b>	2 900	6 315	45	1 277	10 536	394	10 931	2 753	6 717	2 711	3 846
<b>Dec.</b>	3 116	7 486	57	1 555	12 214	537	12 751	3 012	5 193	2 542	2 142
<b>1989</b>											
<b>Jan.</b>	3 090	5 482	1	1 180	9 754	6	9 760	2 764	5 635	2 433	3 066
<b>Feb.</b>	2 792	6 185	86	824	9 887	67	9 953	2 708	6 177	2 464	3 446
<b>March</b>	3 375	5 613	37	1 014	10 040	1 713	11 754	2 735	5 204	2 589	2 320
<b>April</b>	3 881	6 221	36	1 266	11 405	63	11 468	2 911	6 055	3 337	2 532
<b>May</b>	2 927	6 045	38	2 349	11 359	300	11 658	3 135	6 870	2 881	3 544
<b>June</b>	3 186	6 347	13	1 156	10 701	264	10 965	3 034	5 632	3 033	2 447
<b>July</b>	3 938	7 353	62	945	12 298	115	12 412	3 453	5 043	2 594	2 203
<b>Aug.</b>	3 211	6 455	119	1 065	10 850	488	11 338	2 780	5 768	2 685	2 918
<b>Sept.</b>	3 172	5 474	46	1 354	10 046	210	10 256	2 792	5 100	2 659	2 312
<b>Oct.</b>	3 108	6 458	46	969	10 581	101	10 682	2 950	6 203	3 001	3 058
<b>Nov.</b>	3 199	7 013	47	1 396	11 655	391	12 046	2 942	6 912	2 817	3 944

During period	Expenditure					Financial balance			
	Fixed investment	Other expenditure	Expenditure before financial transactions (8+9+12+13)	Lending and other financial investment	Expenditure before redemptions of state debt (14+15)	Revenue surplus (5-14)	Net borrowing requirement (7-16)	Net borrowing	Cash surplus (18+19)
<b>1984</b>	5 455	4 220	76 162	4 717	80 878	-590	-3 412	5 200	1 788
<b>1985</b>	5 700	4 936	84 739	4 982	89 722	-449	-3 361	3 506	145
<b>1986</b>	6 111	5 058	90 368	4 913	95 281	1 406	-1 298	4 203	2 905
<b>1987</b>	7 089	4 732	100 738	5 672	106 410	-1 090	-4 280	7 604	3 324
<b>1988</b>	7 565	5 614	110 946	6 529	117 476	4 842	870	1 853	2 723
<b>1988</b>									
<b>Nov.</b>	645	199	10 313	428	10 741	223	190	-1 239	-1 049
<b>Dec.</b>	811	208	9 224	316	9 540	2 990	3 211	323	3 533
<b>1989</b>									
<b>Jan.</b>	580	743	9 722	623	10 345	32	-586	-881	-1 466
<b>Feb.</b>	501	288	9 675	557	10 232	212	-278	-634	-912
<b>March</b>	591	640	9 170	1 841	11 011	870	742	137	880
<b>April</b>	544	941	10 451	379	10 830	954	638	-1 512	-875
<b>May</b>	670	642	11 317	639	11 956	42	-297	189	-109
<b>June</b>	839	316	9 821	515	10 336	880	629	-708	-79
<b>July</b>	619	-13	9 103	414	9 517	3 195	2 895	-151	2 744
<b>Aug.</b>	634	309	9 490	467	9 957	1 359	1 381	-519	862
<b>Sept.</b>	740	649	9 282	470	9 752	765	505	-75	429
<b>Oct.</b>	779	672	10 604	617	11 221	-23	-539	-532	-1 072
<b>Nov.</b>	758	193	10 805	503	11 308	850	738	-387	351

# NOTES AND EXPLANATIONS TO THE STATISTICAL SECTION

## GENERAL

### Source

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

### Symbols used

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

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

## NOTES AND EXPLANATIONS TO TABLES

### 1 THE BALANCE SHEET OF THE BANK OF FINLAND

**Table 1.2** *Domestic financial sector.* Term claim on deposit banks (Column 13) = term credits (from December 1986 to July 1987) + bank certificates of deposit held by the Bank of Finland (since March 1987). Other liabilities to financial institutions, net (Column 17) = capital import deposits + other liabilities to financial institutions - bonds and debentures - other claims on financial institutions. *Corporate sector.* Claims in the form of special financing (Column 19) = export bills + new-export credits + financing of domestic deliveries. Special deposits, net (Column 20) = deposits for investment and ship purchase + capital import deposits + export deposits + other liabilities to corporations - bonds - other claims on corporations.

### 2 THE BANK OF FINLAND'S MONEY MARKET OPERATIONS AND THE FORWARD EXCHANGE MARKET

**Table 2.1** Money market instruments (Columns 1-3) denote bank certificates of deposit, Treasury bills and banks' fixed-term deposits with the Bank of Finland. Matured money market instruments, net, comprise both purchased and sold instruments.

**Table 2.2** As from the beginning of 1990, the statistics on the forward exchange market are based on data on individual contracts against the Finnish markka as reported by banks (excluding Columns 5 and 6). The new statis-

tical system covers all authorized banks and contracts. The rates of exchange used in the statistics are the forward rates on the contract date.

**Table 2.3** Bank CDs held by the Bank of Finland (Column 2) include term credits. Holdings of CDs issued by the Bank of Finland (Column 5) include term liabilities.

### 3 RATES OF INTEREST

**Table 3.1** HELIBOR (Helsinki Interbank Offered Rate) (Columns 2-5): The HELIBOR rate for each maturity is calculated by the Bank of Finland as the average of the offered rates for certificates of deposit quoted daily at 1 p.m. by the five largest banks.

**Table 3.2** The rates shown are based on the lending rates quoted for the respective currencies in the Euromarket.

**Table 3.3** The covered Eurodollar rate is a computed rate of interest for the markka obtained by adding the difference between the forward selling rate and the spot selling rate for the U.S. dollar expressed as an annual rate of interest to the Eurodeposit rate for the dollar. The rates shown are based on daily quotations at noon by two banks.

**Table 3.4** *Lending.* New credits (Columns 1-4): the rates of interest on new credits drawn during the month are average monthly rates weighted by loan amounts, whereas annual rates are arithmetic averages of monthly observations. As from January 1989, Postipankki Oy has been included in the calculation of the average rate on the commercial banks' outstanding stock of loans. *Deposits.* The rates of interest applied to deposit accounts (Columns 7-9) are the rates of interest applied to standard tax-exempt deposit accounts as agreed upon between banks. The average rate of interest on the stock of regulated deposits (Column 10) is the average rate of interest weighted by the deposit amounts at the end of period, where the stock of deposits comprises cheque accounts, postal giro accounts, deposit accounts with a cheque facility, savings and ordinary deposit accounts, other time deposit accounts and taxable investment accounts. The average rate of interest on unregulated deposits (Column 11) is the average rate of interest weighted by the amounts in the period. Unregulated deposits include, inter alia, sales of certificates of deposit, promissory notes and bonds as well as corporate deposits at market rates.

**Table 3.5** *Secondary market rates.* The long-term unregulated

market rate (Columns 1 and 2) is calculated by the Bank of Finland as the monthly average of the offered rates for taxable, fixed-rate bonds quoted by the five largest banks. The rate of interest for taxable government bonds (Column 3) is the effective annual yield, calculated as the arithmetic mean, on fixed-rate government bonds with a remaining maturity of between 4 and 5 years. The rate of interest for taxable public issues (Column 4) is the effective annual yield, calculated as the arithmetic mean, on fixed-rate ordinary bonds, debentures or other bonds (excl. zero coupon loans, bonds with equity warrants and convertible debentures) issued by all issuers except the central government with a remaining maturity of between 3 and 6 years. Financial institutions (Column 5): as in Column 4 for issues by financial institutions incl. banks. Corporations (Column 6): as in Column 4 for issues by non-financial corporations. The rate of interest for taxfree public issues (Column 7) is the yield on fixed-rate public bonds with a remaining maturity of between 4 and 5 years. The Bank of Finland calculates the yields for columns 3-7 once a week on the basis of the trading quotations of the Helsinki Stock Exchange. Monthly observations are the averages of weekly observations and annual observations the averages of monthly observations. *Rates at issue* on taxable public bonds and debentures (Column 8) are the average rates of interest weighted by issue amounts - in the case of government bonds by sales amounts - on ordinary bonds, debentures and other bonds (excl. zero coupon loans, bonds with equity warrants and convertible debentures) issued during the period.

The rate of interest on taxfree bonds issued by the government and mortgage banks (Column 9) in the period from December 1, 1989 to December 31, 1990 may not exceed the Bank of Finland's base rate.

### 4 RATES OF EXCHANGE

**Table 4.2** The weights of the Bank of Finland currency index (Column 1) are moving averages of the shares of countries in Finland's merchandise export and import trade. The index comprises 14 convertible currencies. The index values are based on the Bank of Finland's daily quotations at noon. The weights of the payments currency index (Column 2) are moving averages of the shares of payments currencies in Finland's trade. The index comprises 14 convertible currencies. The weights of the MERM index (Column 3) are

fixed 1977 weights computed on the basis of the IMF's world trade model. Fourteen currencies are included in this index.

## 5 OTHER DOMESTIC FINANCING

**Table 5.1** Source: The Central Statistical Office of Finland. The public comprises households and non-profit institutions, enterprises (excl. financial institutions) and local government. Domestic foreign-currency deposits are included in the figures. Time deposits (Column 2) consist of tax-exempt time deposits held by the public. Investment accounts (Column 3) are taxable time deposits held by the public. For the definition of unregulated deposits (Column 6), see the explanation under Table 3.4. Since the beginning of 1987, the figures for banks' holdings of certificates of deposit issued by other banks have been netted out. Netting out is done by the Bank of Finland.

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

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

**Table 5.4** Source: State Treasury Office. *Foreign debt*. Other bonds and debentures (Column 2) are so-called private placings. Long-term promissory notes (Column 3) are bank loans. Outstanding lending (Column 10) comprises the stock of central loans

granted from the central government budget and from extra-budgetary funds. Cash funds (Column 11) comprise the cash funds held in central government accounting offices, funds held in cheque and postal giro accounts, as well as placements of central government cash funds. The main part of the latter is reserved for covering transferable allocations budgeted in previous years (for details, see the article "State Borrowing and Cash Management" by Pekka Laajanen and Pekka Saarinen in the August 1987 issue of the Bulletin). Transferable allocations amounted to FIM 8.1 billion at the end of 1988.

**Table 5.5** Tables A and B on the markka bond market include markka-denominated bonds issued by Finnish issuers in Finland and abroad as well as those issued by foreign issuers in Finland.

**Table 5.6** *Turnover*. Source: The Helsinki Stock Exchange. *Share prices*. Source: Union Bank of Finland Ltd.

## 6 BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS

**Table 6.1** The figures for the trade and goods and services accounts are compiled in accordance with the System of National Accounts.

**Table 6.2** Columns 1-8: Net change in long-term liabilities. Columns 9-13: Net change in long-term assets. Portfolio investment in Finland (Column 2) and abroad (Column 10): Secondary market transactions in securities and share issues. As from the June-July 1989 issue of the Bulletin, portfolio investment abroad (Column 10) also includes investments in long-term bonds and shares by Finnish authorized banks. These were previously included in short-term capital exports of authorized banks. Long-term credits (Columns 3-6): Financial loans, import credits and leasing credits. Others (Column 5): Long-term credits of enterprises, financial institutions other than authorized banks and local government. Imports of other long-term capital (Column 7): Finland's subscriptions to international financial institutions paid in the form of promissory notes. Exports of other long-term capital (Column 12) = financial loans abroad + development credits + purchases of real estate and other acquisitions by private persons + Finland's subscriptions to international financial institutions.

**Table 6.3** Net foreign debt (Columns 1-24) at the end of a period is classified in the same way as the corresponding data on changes in the capital account (Table 6.2). The items included in net foreign debt have been translated into markkaa using the spot rates for each date. Thus the figures include the impact of changes in exchange rates. Debt service payments (Column 25): the total of net payments of interest, dividends and remunera-

tions relating to long- and short-term foreign liabilities and assets plus net repayments relating to long-term foreign liabilities and assets. Repayments do not include early repayments of loans, repatriations of equity capital included under direct investment, repurchases of shares included under portfolio investment (since 1986), repayments of the Bank of Finland's reserve tranche and oil facility credits, or repayments of rouble-denominated assets included under loan assets. The debt-service ratio (Column 27) = service charges on net foreign debt as a percentage of current account earnings.

**Table 6.4** All direct investments have been placed under the corporate sector (Columns 1 and 6). Other (Column 9) consists mainly of long-term assets of private persons.

The sectoral figures for short-term foreign liabilities and assets correspond to the figures shown in Columns 15-23 of Table 6.3.

## 7 FOREIGN TRADE

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

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

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

## 8 DOMESTIC ECONOMIC DEVELOPMENTS

**Tables 8.1-8.5** Source: Central Statistical Office of Finland. Seasonal adjustment is carried out by the Bank of Finland.

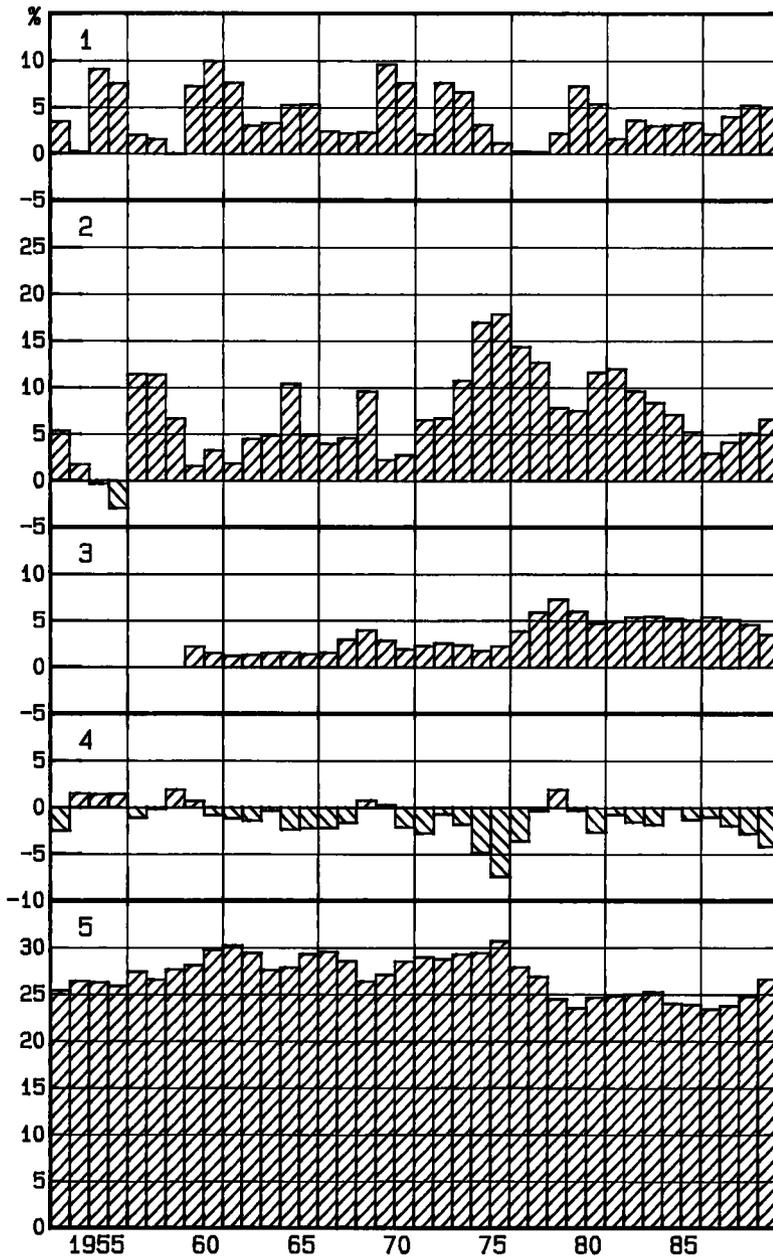
**Table 8.3** The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various industries.

**Table 8.4** The consumer price index (Column 7) was revised as from January 1988. Both the weights and the methods of calculation were changed (see the item in the March 1988 issue of the Bulletin). The base year of the new CPI is 1985, while the base year of the index shown until end-1984 is 1981.

**Table 8.6** Source: Ministry of Finance.

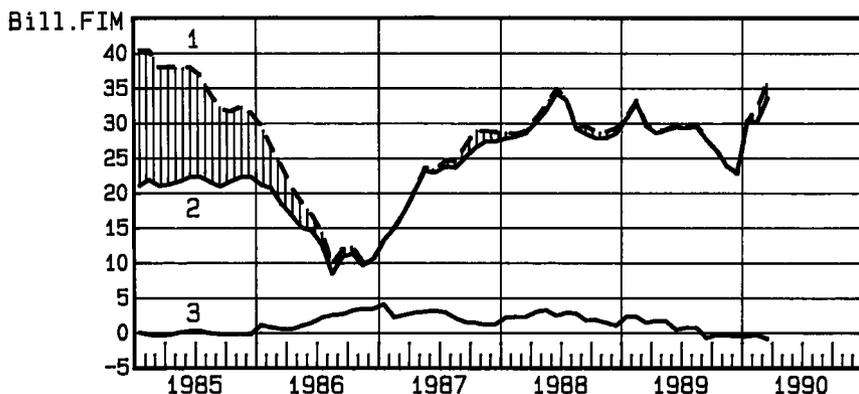
1. Long-term indicators	S28
2. The Bank of Finland's foreign exchange reserves and forward position	S29
3. Forward market	S29
4. Items affecting domestic liquidity	S29
5. Overnight rates	S30
6. HELIBOR rates of interest (daily)	S30
7. HELIBOR rates of interest (monthly)	S30
8. Rates of interest applied by the Bank of Finland	S31
9. 3-month covered Eurodollar rate and 3-month currency basket rates	S31
10. Rates on bonds and debentures	S31
11. Bank of Finland currency index (monthly)	S32
12. Bank of Finland currency index (daily)	S32
13. Changes in the exchange rates of selected Nordic currencies	S32
14. Changes in the exchange rates of selected major currencies	S33
15. Bank deposits from the public	S33
16. Bank lending to the public	S33
17. Money supply	S34
18. <i>Direct investment</i>	S34
19. Central government debt	S34
20. Current account	S35
21. Foreign debt	S35
22. Balance of payments	S36
23. Debt service ratio	S36
24. Foreign trade	S37
25. Foreign trade: prices and terms of trade	S37
26. Finland's export performance	S37
27. Production	S38
28. Fixed investment	S38
29. Employment and unemployment rate	S39
30. Prices and wages	S39
31. Central government finances	S40

# 1. LONG-TERM INDICATORS



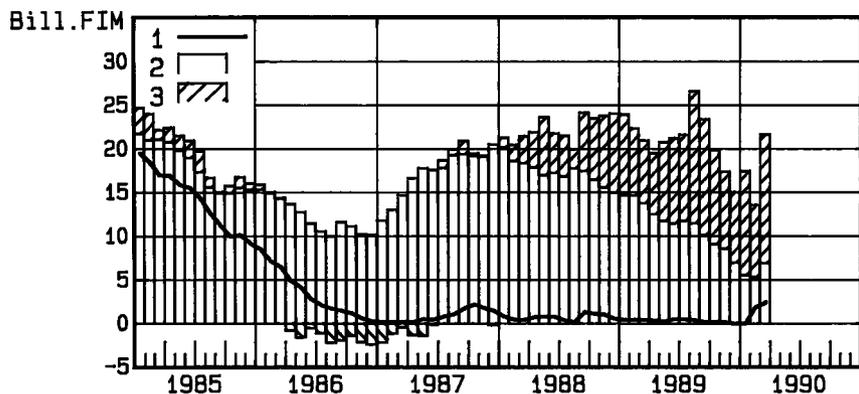
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

## 2. THE BANK OF FINLAND'S FOREIGN EXCHANGE RESERVES AND FORWARD POSITION



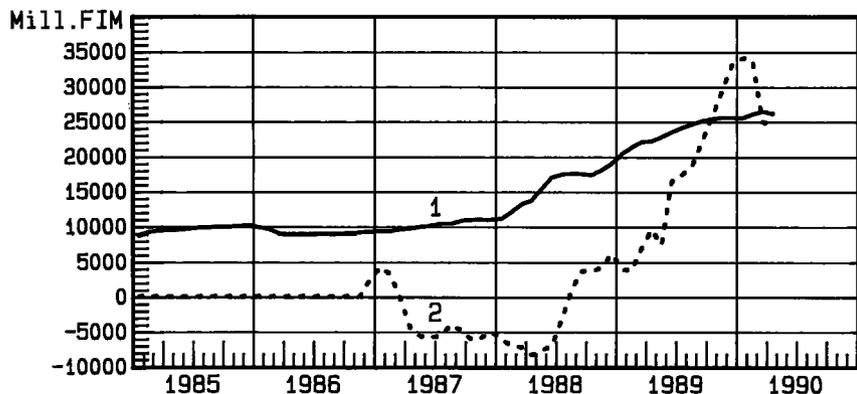
1. Convertible foreign exchange reserves plus forward position
2. Convertible foreign exchange reserves
3. Tied currencies

## 3. FORWARD MARKET



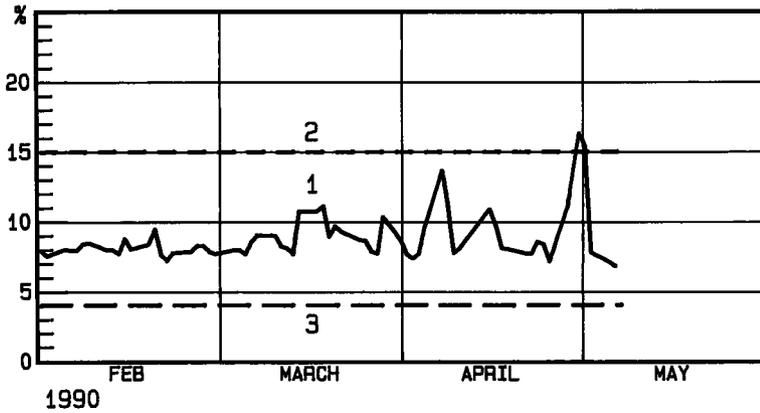
1. Forward exchange purchased by the Bank of Finland from banks
2. Forward exchange sold by companies to banks
3. Forward exchange sold by foreign banks to banks

## 4. ITEMS AFFECTING DOMESTIC LIQUIDITY



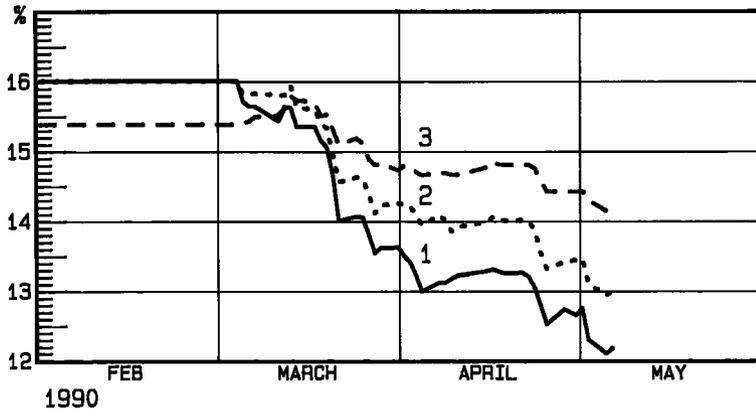
1. Cash reserve deposits
2. Bank of Finland's holdings of money market instruments, net

### 5. OVERNIGHT RATES



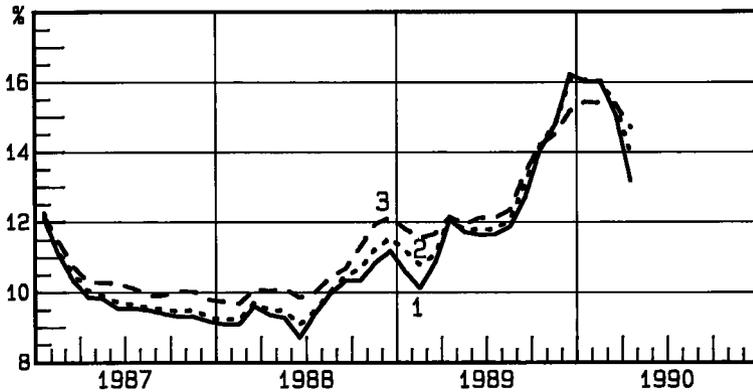
- 1. Inter-bank overnight rate
  - 2. Call money credit rate
  - 3. Call money deposit rate
- Daily observations

### 6. HELIBOR RATES OF INTEREST



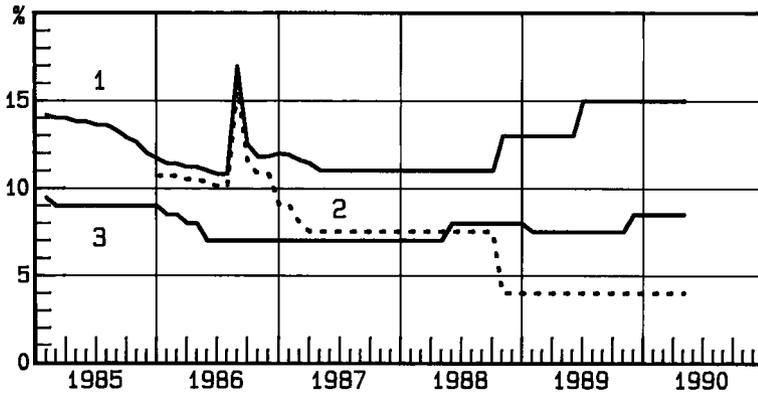
- 1. 1-month HELIBOR
  - 2. 3-month HELIBOR
  - 3. 12-month HELIBOR
- Daily observations

### 7. HELIBOR RATES OF INTEREST



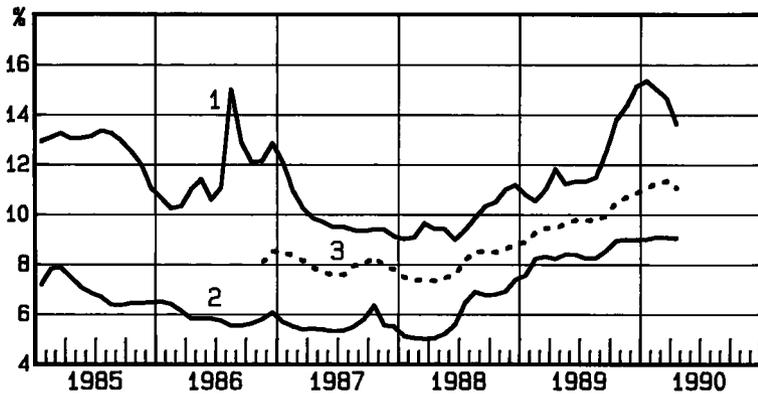
- 1. 1-month HELIBOR
  - 2. 3-month HELIBOR
  - 3. 12-month HELIBOR
- Monthly averages

8. RATES OF INTEREST APPLIED BY THE BANK OF FINLAND



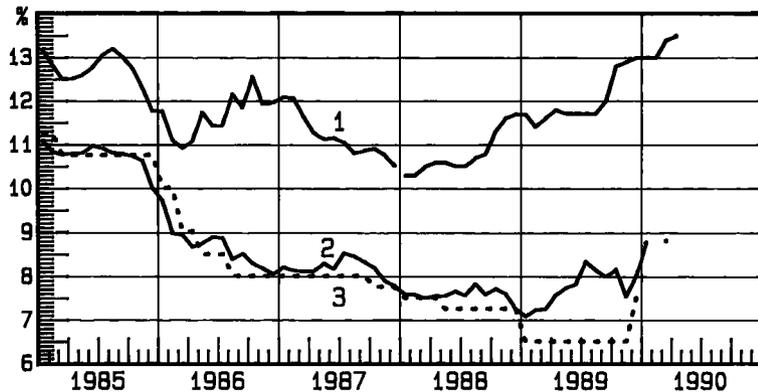
- 1. Call money credit rate
  - 2. Call money deposit rate
  - 3. Base rate
- End-of-month observations

9. 3-MONTH COVERED EURODOLLAR RATE AND 3-MONTH CURRENCY BASKET RATES



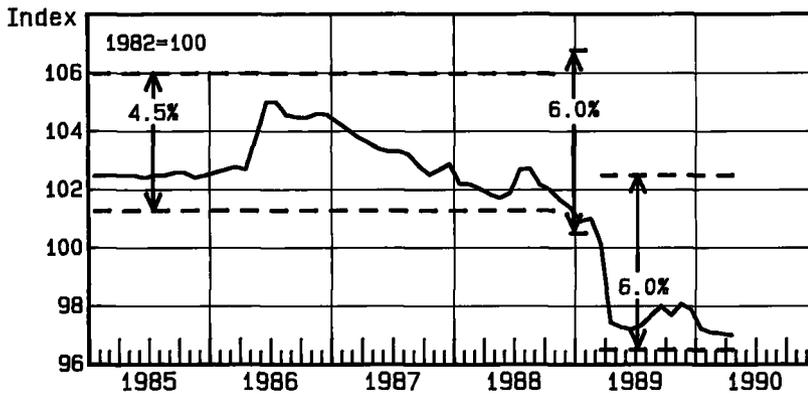
- 1. Covered Eurodollar rate
- 2. 3-currency basket rate (DEM 60 %, USD 30 %, GBP 10 %)
- 3. 14-currency basket rate (Bank of Finland currency index weights)

10. RATES ON BONDS AND DEBENTURES



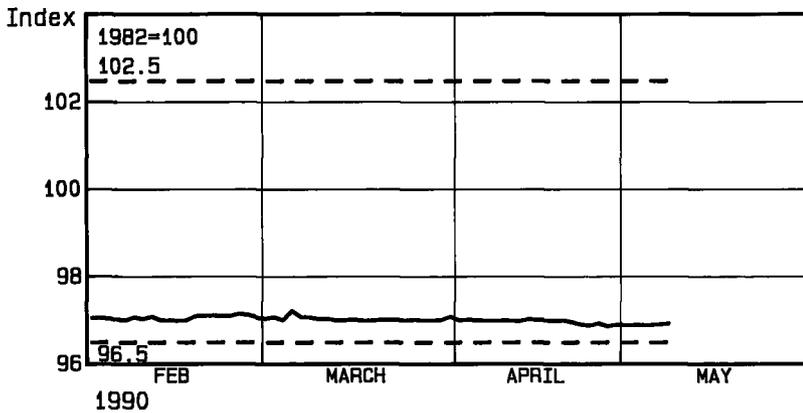
- 1. Long-term (5-year) market rate (before 1988 rate on (3-6 year) fixed-rate debentures)
- 2. Rate on (9-10 year) tax-free government bonds
- 3. Rate at issue on new 10-year taxfree government bonds

11. BANK OF FINLAND CURRENCY INDEX



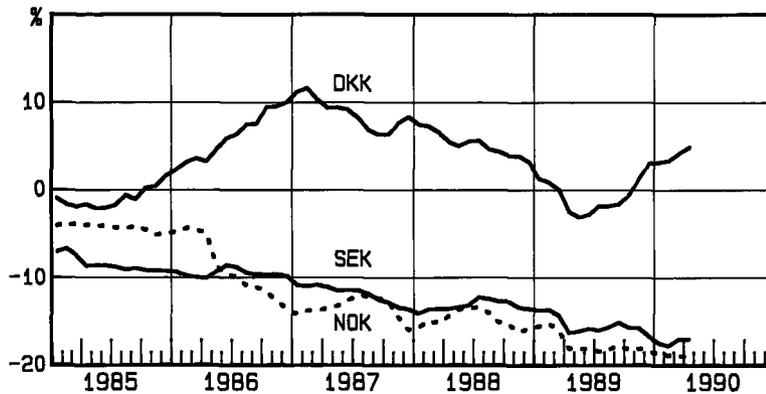
4.5 % and 6.0 % = fluctuation range of the index  
Monthly averages

12. BANK OF FINLAND CURRENCY INDEX



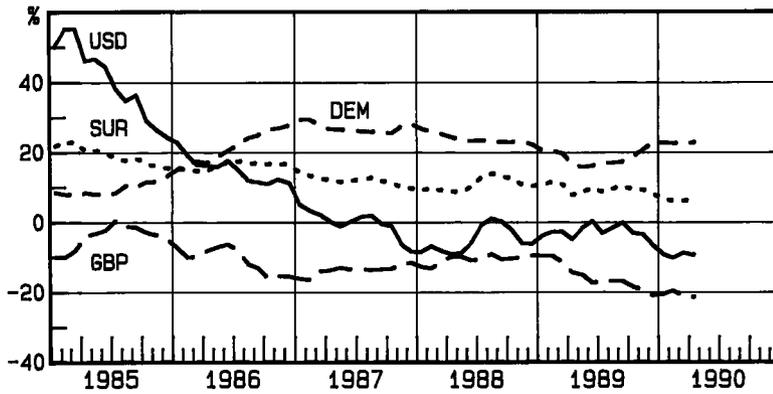
Daily observations

13. CHANGES IN THE EXCHANGE RATES OF SELECTED NORDIC CURRENCIES



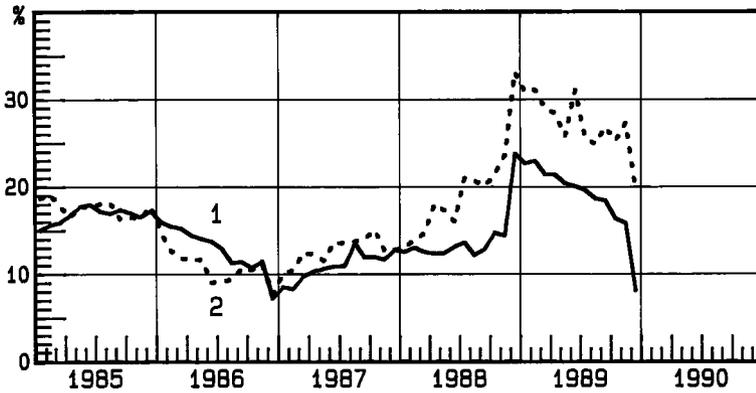
Monthly changes in markka selling rates calculated from the average rates for January 1982

14. CHANGES IN THE EXCHANGE RATES OF SELECTED MAJOR CURRENCIES



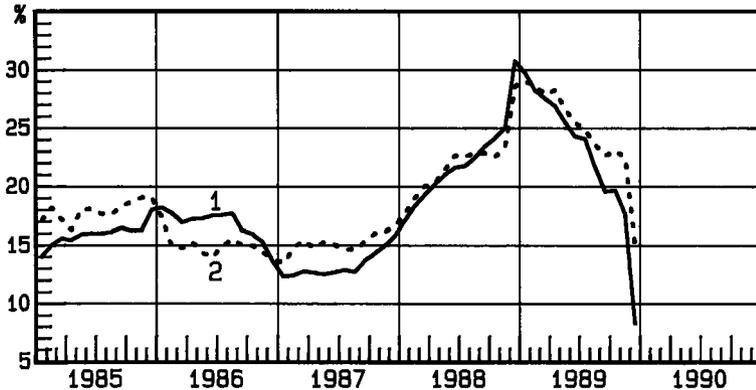
Monthly changes in markka selling rates calculated from the average rates for January 1982

15. BANK DEPOSITS FROM THE PUBLIC



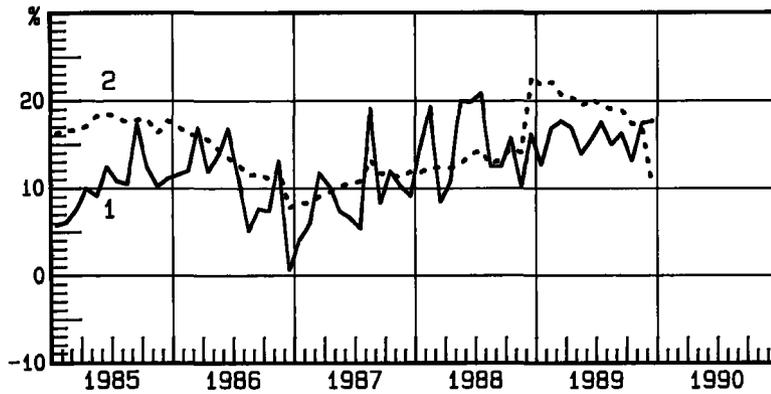
1. Regulated deposits  
2. Total deposits  
Change from the corresponding month of the previous year, per cent

16. BANK LENDING TO THE PUBLIC



1. Markka lending  
2. Total lending  
Change from the corresponding month of the previous year, per cent

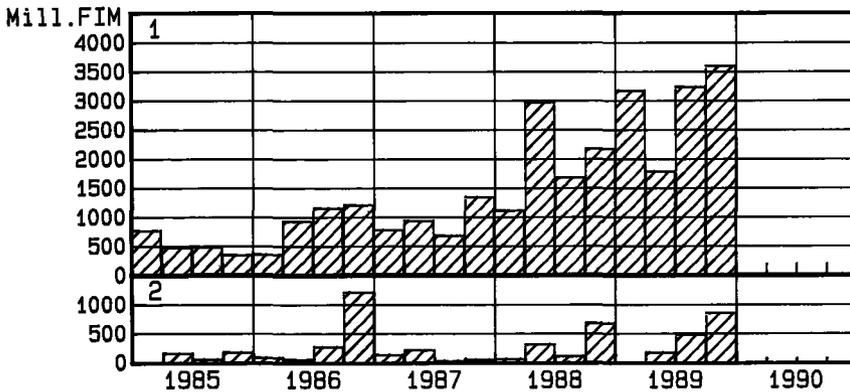
### 17. MONEY SUPPLY



1. Narrow money supply (M1)
2. Broad money supply (M2)

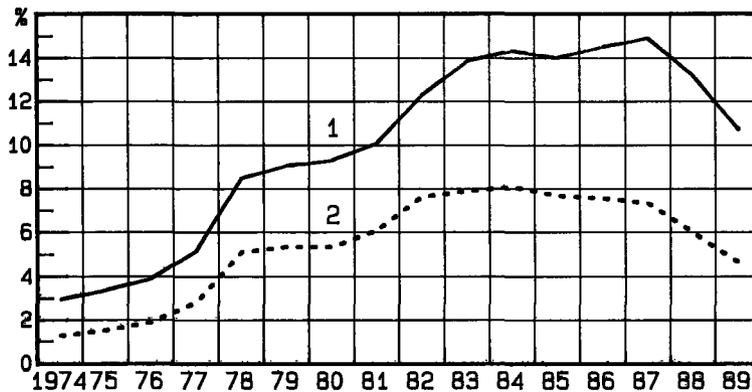
Change from the corresponding month of the previous year, per cent

### 18. DIRECT INVESTMENT



1. Finnish direct investment abroad, net
2. Foreign direct investment in Finland, net

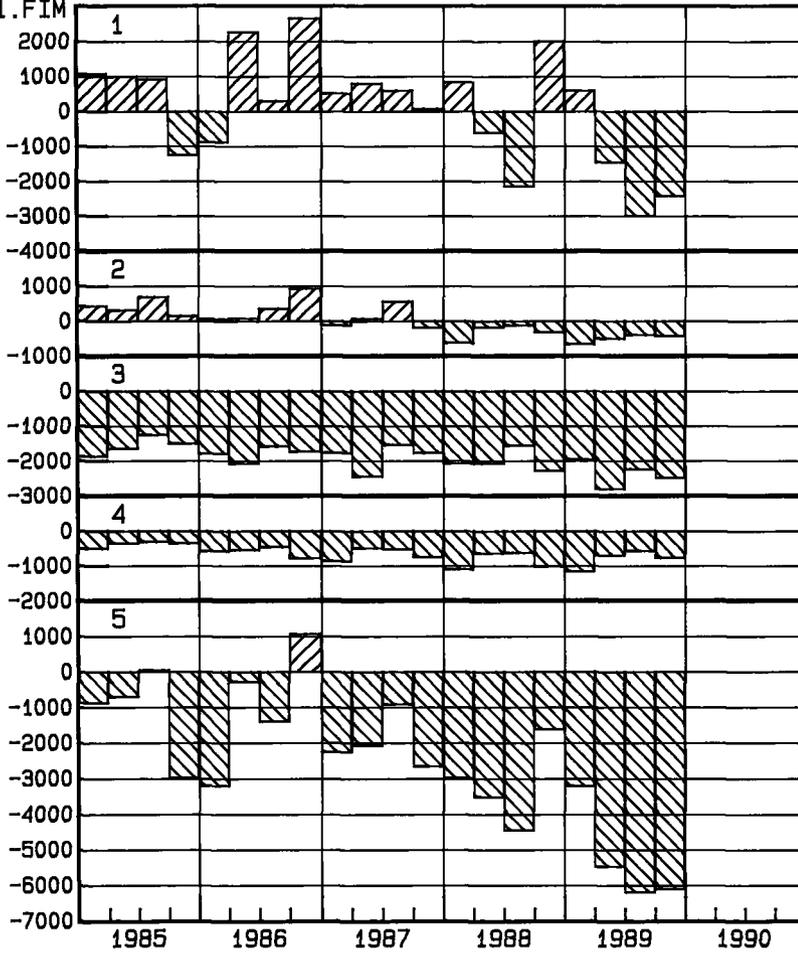
### 19. CENTRAL GOVERNMENT DEBT



1. Total debt
  2. Of which: foreign debt
- As a percentage of GDP

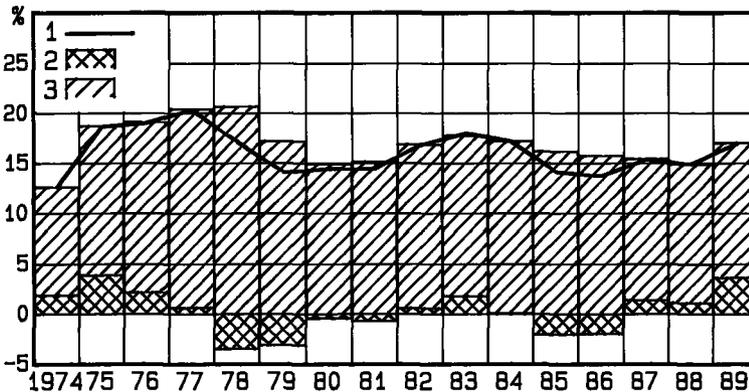
## 20. CURRENT ACCOUNT

Mill. FIM



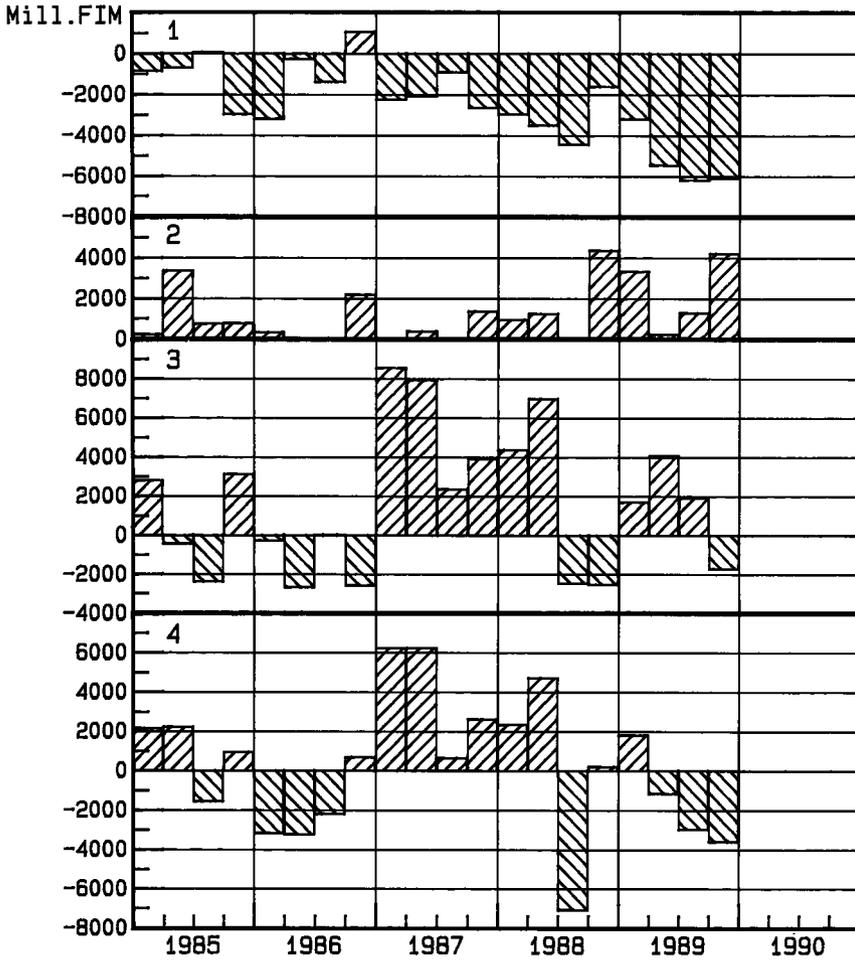
1. Trade account
2. Services account
3. Investment income account
4. Unrequited transfers account and other items, net
5. Current account

## 21. FOREIGN DEBT



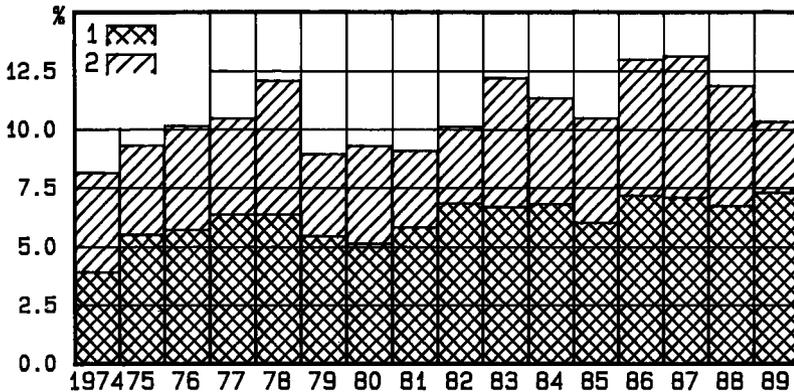
1. Total foreign net debt
  2. Short-term net debt
  3. Long-term net debt
- As a percentage of GDP

## 22. BALANCE OF PAYMENTS



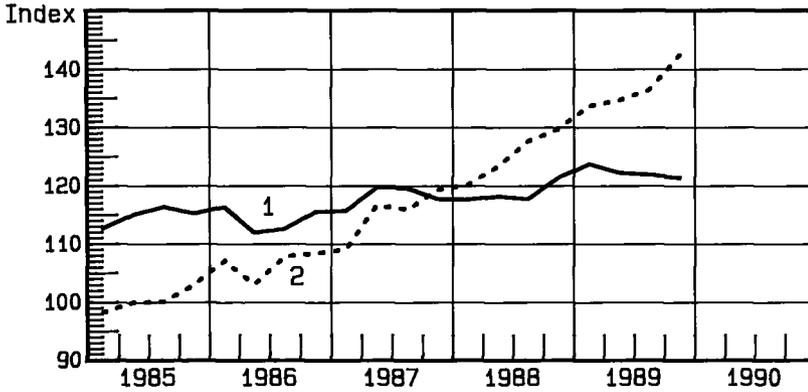
1. Current account
2. Long-term capital account
3. Short-term capital account
4. Overall balance=change in the foreign exchange reserves of the Bank of Finland

## 23. DEBT SERVICE RATIO



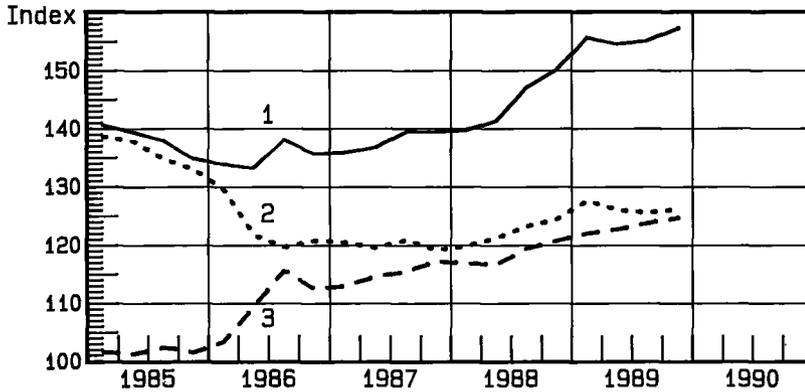
1. Interest payments
  2. Redemptions
- As a percentage of current account earnings

## 24. FOREIGN TRADE



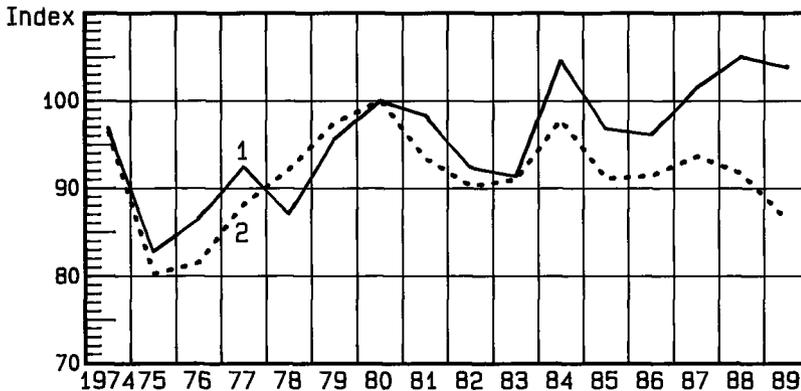
1. Total exports
  2. Total imports
- Volume index, 1980 = 100, four-quarter moving average shown as at the last quarter

## 25. FOREIGN TRADE: PRICES AND TERMS OF TRADE



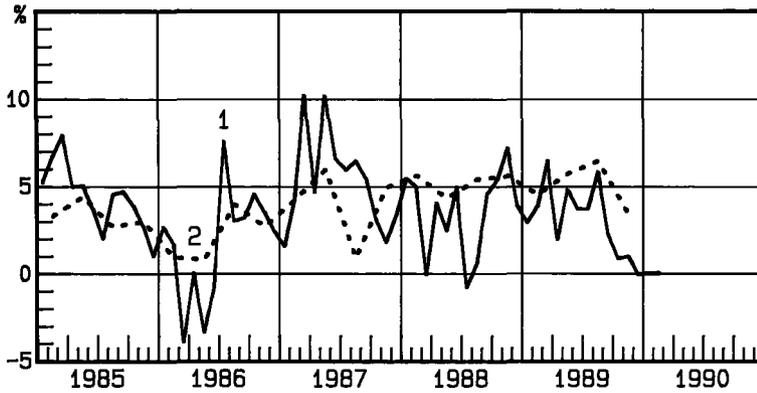
1. Unit value index of exports
  2. Unit value index of imports
  3. Terms of trade
- 1980 = 100

## 26. FINLAND'S EXPORT PERFORMANCE



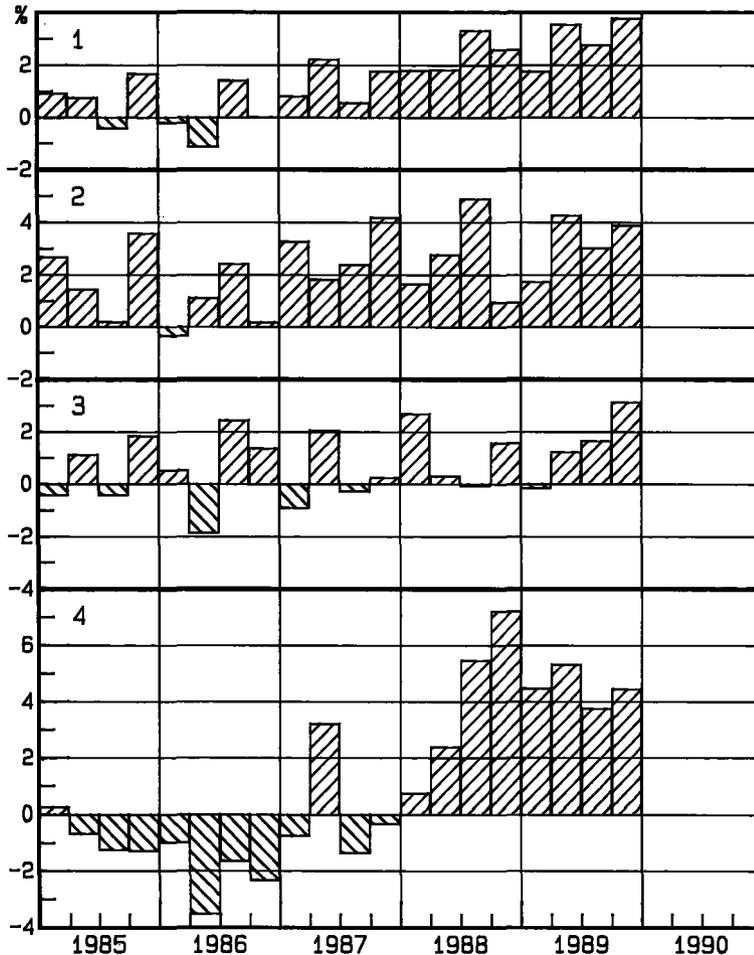
1. Value of exports to western countries in relation to exports of OECD Europe
  2. Volume of western exports in relation to exports of OECD Europe
- 1980 = 100

## 27. PRODUCTION



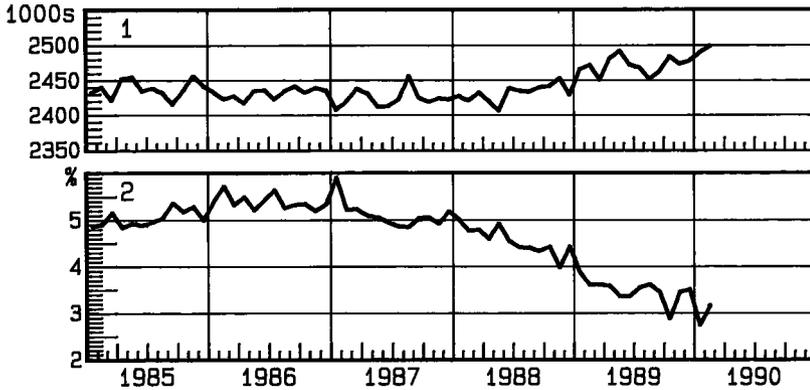
1. Industrial production, change in volume from the corresponding month of the previous year, per cent
2. GDP, change in volume from the corresponding quarter of the previous year, per cent

## 28. FIXED INVESTMENT



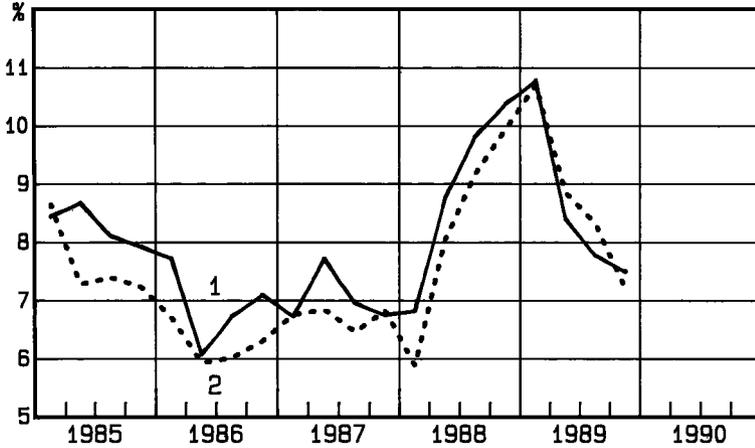
1. Total fixed investment
  2. Investment in machinery and equipment
  3. Building investment, excl. residential buildings
  4. Residential buildings
- Volume changes calculated from four-quarter moving totals and shown as at the last quarter, per cent

29. EMPLOYMENT AND THE UNEMPLOYMENT RATE

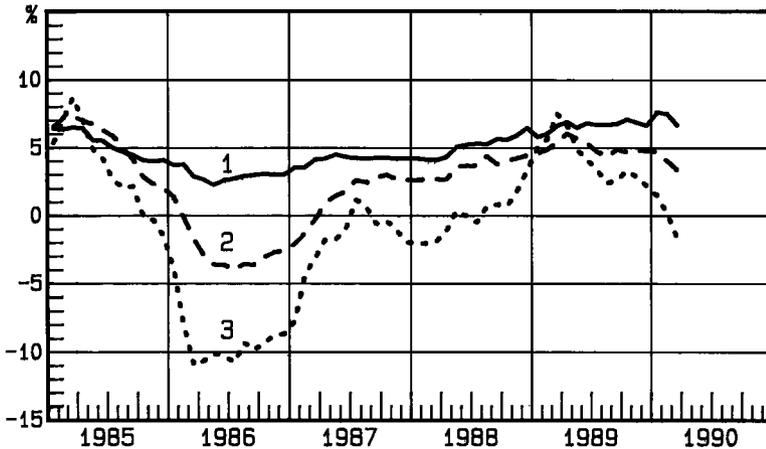


- 1. Employment, 1000 persons
- 2. Unemployment rate, per cent

30. PRICES AND WAGES

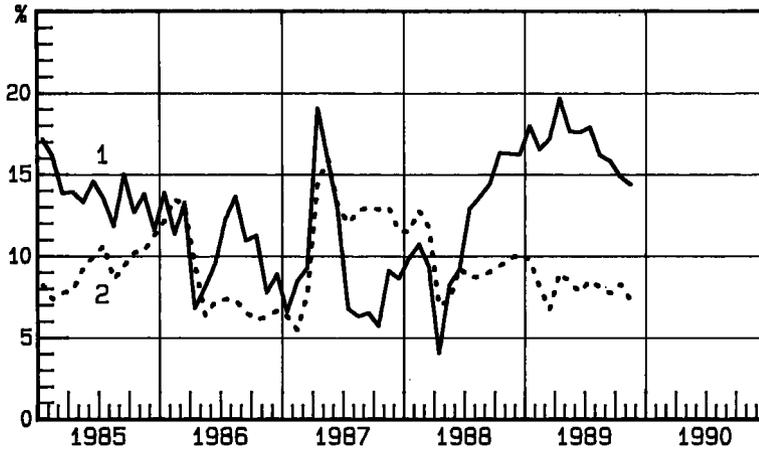


- 1. Index of wage and salary earnings, all wage and salary earners
  - 2. Index of wage and salary earnings, manufacturing workers
- Change from the corresponding quarter of the previous year, per cent



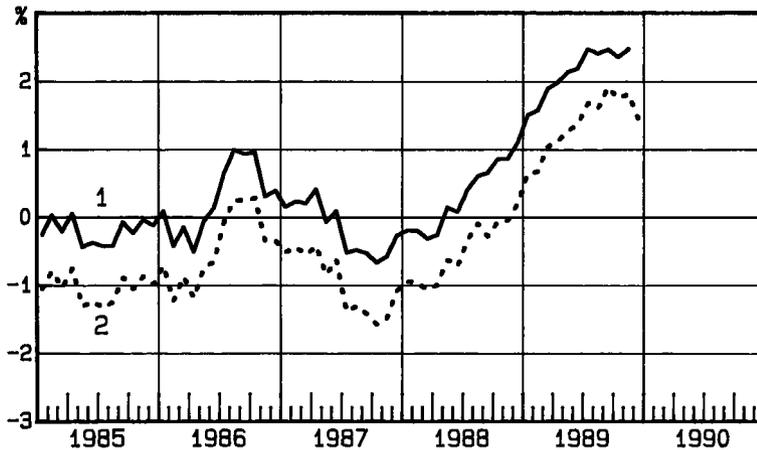
- 1. Consumer price index
  - 2. Wholesale price index
  - 3. Import price index
- Change from the corresponding month of the previous year

### 31. CENTRAL GOVERNMENT FINANCES



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

Changes calculated from 12-month moving totals and shown as at the last month, per cent



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

12-month moving total shown as at the last month and as a percentage of GDP

# BANK OF FINLAND

---

## THE PARLIAMENTARY SUPERVISORY BOARD

---

ERKKI PYSTYNEN, Chairman  
PERTTI HIETALA, Vice Chairman  
MATTI MAIJALA

TUURE JUNNILA  
ANTTI KALLIOMÄKI

HEIKKI PERHO  
JUSSI RANTA

HENRIK WESTERLUND  
PAAVO VÄYRYNEN

---

## THE BOARD OF MANAGEMENT

---

ROLF KULLBERG, Chairman

ESKO OLLILA

PENTTI UUSIVIRTA  
(until May 16)

KALEVI SORSA  
Speaker of Parliament, on leave of absence

ELE ALENIUS

MARKKU PUNTILA,  
(from May 16)

HARRI HOLKERI  
Prime Minister, on leave of absence

---

## DIRECTORS

## DEPARTMENTS

---

PENTTI KOIVIKKO

Accounting Department OSSI LEPPÄNEN  
Administration Department URPO LEVO  
Data Processing Department RIITTA JOKINEN

Payment Instruments Department  
REIJO MÄKINEN  
Personnel Department ANTON MÄKELÄ  
Branches

SIRKKA HÄMÄLÄINEN

Central Bank Policy Department  
JOHNNY ÅKERHOLM  
Economics Department KARI PUUMANEN

Financial Markets Department PETER NYBERG  
(Acting Head)  
Information Department ANTTI HEINONEN  
Research Department HEIKKI KOSKENKYLÄ

MATTI VANHALA

Bilateral Trade Department  
KARI HOLOPAINEN  
Exchange Control Department ESA OJANEN  
Market Operations Department KARI PEKONEN

Payments and Settlement Department  
RAIMO HYVÄRINEN  
Risk Monitoring Department KAARLO JÄNNÄRI

---

Internal Audit Department TIMO MÄNNISTÖ

---

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

---

## BRANCH OFFICES

---

12 branches: Joensuu, Jyväskylä, Kotka, Kuopio, Lahti, Mikkeli, Oulu, Pori, Rovaniemi, Tampere, Turku, Vaasa

---

## SECURITY PRINTING HOUSE

---

VELI TARVAINEN, Managing Director

---