



BULLETIN

BANK OF FINLAND

April 1988 Vol. 62 No. 4

Recent Developments in the Finnish
Securities Market

Monetary Aggregates and Indices
in Finland

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ISSN 0784-6509

RECENT DEVELOPMENTS IN THE FINNISH SECURITIES MARKET

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The long upward trend in the Finnish stock market came to an end in October in the wake of the stock market collapse in the United States. Though the downturn in Finland can hardly be called a crash, some prices did experience marked falls in the short run. But compared with other industrialized countries, market values held their ground reasonably well in Finland, and at the end of 1987 equity prices were 31 per cent higher than a year earlier. The fall in stock market values can be regarded as an adjustment that brought the overheated market better into line with economic fundamentals in the corporate sector.

The sharp fluctuations in the stock market had scarcely any impact on the bond market. For instance, the effective yields on bonds remained stable throughout the October fall, an indication of the continuing thinness and inefficiency of the Finnish bond market in spite of its expansion in the past few years.

BACKGROUND

Structural change in the Finnish economy has been reflected in pressures for change in the Finnish financial markets, which have traditionally been characterized by the prominent role of banks in financial intermediation and the relatively minor importance of the capital market as a source of business finance. In the past few years, however, the money market, in particular, but also the capital market have experienced rapid expansion.

Encouraged by tax reliefs, favourable income developments and slower growth in housing investment, households have not only increased consumption but also channelled more and more

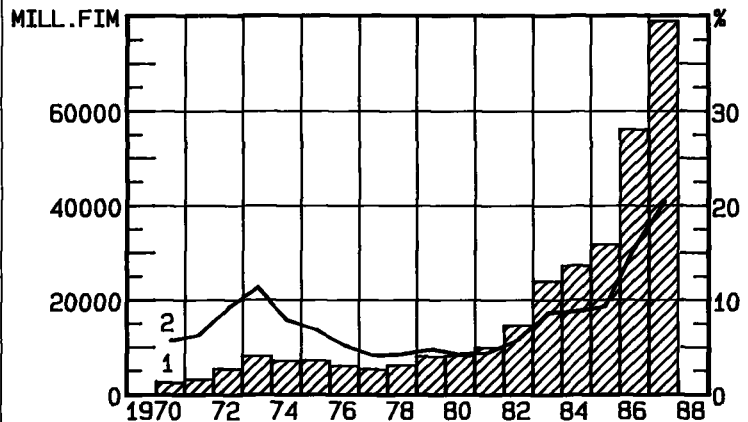
of their improved liquidity into financial assets of various kinds. Nevertheless, despite the growth of personal shareholding the relative share of households in the ownership of listed shares has fallen, currently accounting for just over one-third. The equity participation of private individuals is highest, some 60 per cent, in commercial banks quoted on the stock exchange.

Personal share ownership has been reduced to some extent by the fact that investors engaged in active share trading have set up securities trading companies with the aim of minimizing taxation. Households are switching part of their securities investment to unit trusts (mutual funds). Legislation on unit trusts came into force in the autumn of 1987, and several trust corporations commenced business immediately. However,

the fall in share prices cast a shadow over the initial phase of their operations, and the importance of unit trusts in allocating capital has been rather modest so far. In the first six months of their operations, unit trusts raised funds to the value of some FIM 500 million.

Companies have raised the bulk of their finance in the form of internally generated funds or by borrowing from financial institutions, which was an attractive alternative for companies some years ago because of the fast rate of inflation and the low level of regulated interest rates. In the past few years, just under 10 per cent of corporate sector investment has been financed by capital raised directly on the equity market. The limited importance of the stock market for the economy can also be seen

CHART 1.
MARKET CAPITALIZATION OF LISTED COMPANIES



1. Market capitalization of listed companies (left-hand scale)
2. Market capitalization of listed companies, per cent of GDP (right-hand scale)

in the fact that the market capitalization of listed companies in relation to GDP has been low until very recently (Chart 1).

As public sector budget deficits have been low in Finland, the central government and local authorities have not played an active role in the development of the money and capital markets. Local authorities have borrowed predominantly from financial institutions, while the central government has covered its long-term domestic borrowing requirements through issues of bonds, sold mainly to households, and by placing debt with insurance institutions. The central government's access to the short-term (less than twelve-month) money market was prohibited by legislation on budgeting in force until the end of 1987. With effect from the beginning of 1988, the central government has started to issue 3-month Treasury bills.

The increased activity in the stock market has been primarily evident in the growth of secondary market turnover (Chart 2) and to a lesser degree in the channelling of new risk capital to companies (Table 1).

TABLE 1. CAPITAL RAISED IN THE PRIMARY MARKET, MILLION FIM

	1983	1984	1985	1986	1987
Share issues (risk capital)	1 233	2 919	1 389	3 487	5 421
Bond and debenture issues	11 614	13 912	20 373	22 674	22 335
of which:					
Public issues	5 033	7 283	14 464	13 474	18 194
Total	12 847	16 831	21 762	26 161	27 756

While in the early 1980s, only every 30th share was traded on the stock exchange on average, last year the ratio was one in three. In addition to the increased activity of investors, trading on the stock exchange has been boosted by the restructuring of industry; mergers and takeovers have to an increasing extent been undertaken through the stock exchange.

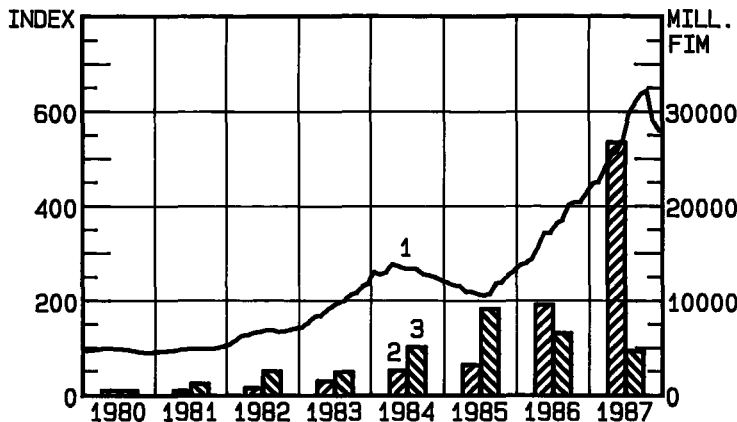
Like the stock market, the bond market has also undergone rapid expansion. At the beginning of the 1980s, the bond market still consisted almost exclusively of taxfree bonds issued by the government and mortgage banks. The extension of the capital income deduction in personal income taxation in 1981 paved the way for the growth of

household investment in taxable bonds. One of the main reasons for the expansion of the bond market was interest rate regulation in the financial markets. Banks circumvented the regulation of average interest rates by taking up loans issued by their own finance companies and other companies. The funding of finance companies also focused on the long-term market because long-term interest rates were lower than rates on short-term market money.

In 1984—85, the expansion of the bond market was boosted by vigorous demand for markka-denominated bonds by foreign investors. In 1985, sales of bonds and debentures abroad soared to FIM 4—5 million in the period up to late June, at which point the Bank of Finland imposed a temporary ban on the sale of markka-denominated debentures to non-residents for monetary policy reasons.

In August 1986, the Bank of Finland abolished the regulation of banks' average lending rates. Deregulation was quickly reflected in the bond market as a decrease in private placement issues, and 1987 saw a drastic reduction, some 60 per cent, in the amount of such issues. Companies moved out of the private placements market to the commercial paper market. Long-term foreign currency loans of 5 years or more have partly replaced issues of markka-denominated debentures.

CHART 2.
THE HELSINKI STOCK EXCHANGE



1. Unitas general index (left-hand scale)
2. Share turnover (right-hand scale)
3. Bond turnover (right-hand scale)

STOCK MARKET

In 1987, listed companies raised a record FIM 5.4 billion in new risk capital in the stock market (Table 1). Thanks to the favourable trend in equity values up to mid-October, share premiums accounted for about two-thirds of the new risk capital raised by listed companies. In addition, companies quoted on the OTC list raised new risk capital to the value of almost FIM 0.5 billion. New issue activity has continued brisk in the early months of this year. February saw the launching of the largest share issue ever by an industrial company on the stock exchange, almost immediately after a big bank issue, and further major issues were announced by listed companies in March.

After the October plunge in share market values, equity prices resumed an upward trend at the beginning of this year (Table 2). The rise in prices has been partly held in check by the large number of issues. At the beginning of the year, a number of new real estate companies were admitted to the Stock Exchange list.

Foreign investors' interest in Finnish shares slackened in 1987, and in the closing months of the year shares were resold to Finland. The value of shares and bonds resold to Finland in the course of the year amounted to over FIM 1 billion.

In 1987, the opportunities of Finns to invest in foreign securities were enlarged so that residents are now permitted to acquire publicly quoted foreign securities to a maximum value of FIM 50 000. However, Finns have so far shown little interest in portfolio investment abroad.

BOND MARKET

The volume of outstanding bonds issued in Finland amounted to more than FIM 80 billion at the end of 1987, an increase of 15 per cent on the previous year. New bond issues in 1987 totalled just over

TABLE 2. UNITAS SHARE INDEX (1975 = 100)

	30.12.1986	16.10.1987	30.12.1987	30.3.1988
Banks	284.9	410.1	319.2	358.2
Insurance	914.7	1531.4	1334.0	1409.7
Trade and transport	566.6	904.9	800.3	930.5
Industry	456.4	748.3	609.4	688.6
Conglomerates	355.1	604.0	487.8	523.1
Forest	340.0	587.6	451.6	489.7
Metal and engineering	764.4	1194.2	1042.6	1145.8
Textile and clothing	466.6	681.5	551.4	811.7
Other	842.0	1292.4	1081.0	1367.0
General index	425.4	681.5	556.0	627.0

FIM 22 billion, the same as in 1986.

The central government was the only sector to increase its issuing activity. The domestic government bonds sold to the public have traditionally been tax-exempt but at the end of last year the central government also launched a taxable bond issue. The importance of taxable bonds in meeting the central government's financing needs is likely to grow in 1988. Public issues by the central government will total FIM 7.3 billion this year, of which taxable bonds will account for about one-third. The issue of taxable bonds is the central government's initial response to the anticipated amendment to the legislation governing tax reliefs on deposits and bonds.

Bond issues by companies and financial institutions decreased by over 10 per cent, to just under FIM 14 billion. Issues of traditional bonds fell by notably more than this, but bond issues with equity warrants were introduced as a new investment outlet by companies and financial institutions. New capital raised through issues of markka-denominated bonds with equity warrants amounted to FIM 2.8 billion in Finland; in addition, foreign currency-denominated bonds with equity warrants were sold to non-resident investors to the value of almost FIM 0.9 billion.

Turnover in bonds quoted on the Helsinki Stock Exchange fell by about one-third in 1987, accounting for 15 per cent of

the total stock exchange turnover of FIM 31 billion (Chart 2). The main reason for the decrease was that almost all trading in large volumes shifted outside the stock exchange. In the second half of 1987, Reuters started to quote bond prices on its monitor, thereby creating the necessary conditions for a more broadly-based and efficient secondary market.

At the end of the year, the Bank of Finland started to publish 3- and 5-year long-term reference rates in addition to short-term reference rates on the basis of quotations by the five largest commercial banks. These rates can be used as reference rates for long-term market-based loans, such as corporate and housing loans.

Market rates declined in Finland throughout 1987 (see Chart 10 in the chart section). Short-term rates fell below long-term ones, thus resulting in the re-emergence of a 'normal' positively-sloped yield curve. This, in turn, restricted issues of long-term domestic bonds by the corporate sector, which instead resorted increasingly to borrowing in the short-term commercial paper market and abroad.

One sign of the underdeveloped state of the Finnish financial markets is the fact that there are hardly any instruments with an original maturity of 1 to 5 years in circulation. Under the current Act on Bonds, debentures are required to have a minimum maturity of 5 years. The central government has applied the same minimum maturity to its bonds. Commer-

cial paper and certificates of deposit, now also issued with over one year's maturity, will partially fill the maturity gap of 1 to 5 years in the new issue market.

FUTURE PROSPECTS

The Finnish securities market will enter a new era when legislation governing the securities market comes into force. The aim is to pass the Act this year. So far stock exchange activities have been controlled mainly through self-regulation by the stock exchange. The ad-

vent of options and futures market trading, currently under preparation, will diversify activity in the Finnish capital market.

Capital raised by Finnish listed companies on domestic and foreign capital markets for financing their outlays on fixed investment and research and development is becoming increasingly important. Nevertheless, the capital market is still of only minor importance as a source of funds for the business sector as a whole.

The public sector is intensifying its activities in the money

and capital markets. Issues of local authority paper can be expected to increase as local authorities replace bill financing with short-term funds obtained directly from the market. Issues of taxable bonds by the central government will serve to deepen the secondary market for bonds. Government bonds are risk-free and homogeneous investments, which are also well suited for wholesale dealing.

March 31, 1988

MONETARY AGGREGATES AND INDICES IN FINLAND

by **Kjell Peter Söderlund**, Head of Office
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BACKGROUND

The use of monetary aggregates as an intermediate target in monetary policy spread rapidly in the 1970s. This reflected attempts in policy planning to move away from discretionary measures to fixed rules. Apart from the difficulties experienced in the pursuit of active demand management policies, this change was motivated by a desire to find fixed points for policy after the collapse of the Bretton Woods system of fixed exchange rates.

The United States was the first country to adopt monetary aggregates when, in 1970, it started to set target growth rates for narrowly defined money. Central banks in as many as 12 OECD countries employed some kind of monetary aggregate for targeting purposes at one time or another in the 1970s.¹ Growth targets were set for either narrow money (currency plus sight deposits) or for broader measures of the money supply (narrow money plus time deposits chosen according to different criteria).

The choice of a suitable monetary aggregate to be targeted or monitored is ultimately a pragmatic, empirical question, though it can also be approached analytically by examining the properties of different types of accounts. The use of a monetary aggregate is justified particularly if the velocity of money is stable. Consequently, efforts have focussed on finding an aggregate which also possesses this property. This can be done in two ways: by applying causality

tests or by estimating demand-for-money functions. Causality tests involve searching for an aggregate which best explains the ultimate target, frequently variations in nominal national income. In the other approach, the aim is to find a stable demand-for-money function in which the ultimate target variable appears as one of the determinants.

The money supply and its credit counterparts are linked together through the consolidated balance sheet of the banking system. Therefore it is not surprising that a credit aggregate can be used equally well as a monetary aggregate for targeting purposes. Though credit aggregates have not been employed as widely as monetary aggregates, they have nevertheless been used as an intermediate target in a number of OECD countries. Underlying the choice of a credit aggregate is the monetary approach to the balance of payments, which assigns an important role to domestic credit. Unlike money, "domestic" credit may be exogenous even under a fixed exchange rate system. However, even in the case of domestic credit targeting, the effects of monetary policy are transmitted to domestic monetary conditions primarily through the influence, if any, on the money stock.

FINNISH MONETARY POLICY AND MONETARY AGGREGATES

In contrast to many other OECD countries, Finland has never published specific growth targets for monetary aggregates, as the fixed exchange rate has served as an

intermediate target. Certain credit aggregates have, however, gained a foothold in the formulation of central bank policy and have long been monitored by the Bank of Finland. But no precise growth targets or ceilings have been set for these either.

The monetary policy pursued by the Bank of Finland in the 1960s' and 1970s' can be broadly characterized as follows: monetary policy was directed primarily towards maintaining the country's external liquidity and was conducted in terms of the central bank's balance sheet framework. In this framework, success in controlling net domestic assets automatically implies control over net external assets.

This variant of the monetary approach to the balance-of-payments analysis began to take shape in Finland in the 1960s but it was not relied on extensively until the mid-1970s. Exchange control and quantitative rationing of the banks' central bank debt were key elements in the Bank of Finland's aggregative financial framework.² It was long the accepted view that if, in addition to its net domestic assets, the central bank succeeded in controlling the country's capital movements, then it would also be able to control developments in the current account. This was felt to be very important because of the traditionally

¹ See, e.g., BINGHAM, G. (1985), *Banking and Monetary Policy*, OECD, Paris.

² This framework is presented, e.g., in AIRIKKALA, R. & PAULI, R., "Monetary Targetry in Finland", in J.E. Wadsworth & F.L. de Juvigny (eds) (1979); *New Approaches in Monetary Policy*, Alphen an den Rijn, pp. 89-95.

high priority attached to the external balance among the objectives of the Bank of Finland.

The kind of analytical framework outlined above, which completely ignores the significance of the money supply, no longer serves as a basis for monetary policy to the same extent as before owing to the liberalization of capital movements and the introduction of new monetary policy instruments. However, this has not meant that monetary aggregates have assumed a greater role in policy planning or that they have been employed as an intermediate target; the fixed exchange rate regime and relative freedom of capital movements make the money supply endogenous to a large degree. Nevertheless, monetary aggregates do contain information about the liquidity position of the private sector and the impact of monetary policy on the banking system.

MONETARY AGGREGATES IN FINLAND

Although it might be possible to define money at some

theoretical level, the construction of an unambiguous empirical counterpart to money has proved to be a difficult task. For example, it has to be decided where to draw the line between monetary and non-monetary assets. It also has to be decided how to take into account the disappearance of existing types of deposits from the market and the introduction of new ones, and so on. Perhaps the most widely discussed reason in economic literature for the emergence of new instruments is the phenomenon known as Goodhart's law. This states that any attempt to limit the growth of some monetary aggregate leads to the appearance of new types of deposits which are not included in the measure of the money supply being targeted. This explanation hardly applies in the case of Finland, but it nevertheless remains true that a great many changes have occurred in the menu and distribution of deposits when viewed over a long period.

In 1948, at the beginning of the period covered in this article, the only accounts available to investors were cheque ac-

counts, postal giro accounts and the almost identical "ordinary deposit" and "savings" accounts. The most important types of deposits to have later emerged in the market, but which subsequently disappeared, are various kinds of indexed deposits; nowadays these are prohibited by law.

Most deposits in Finland share the characteristic that they have typically borne rates of interest linked to the Bank of Finland's base rate (formerly the discount rate). Changes in the base rate have tended to be small and infrequent. Since, moreover, the tax exemption of deposits in effect precludes competition over deposits between the banks, the situation was for long unequivocal and poor in alternatives from the point of view of the investor. The setting on the deposits side was linked to the fact that lending rates were for long regulated by the authorities.

In fact, the system of administratively controlled interest rates resisted the pressures against it for a surprisingly long time. It was not until the beginning of the 1980s that channels for the in-

TABLE 1. ALTERNATIVE TYPES OF MARKKA DEPOSIT ACCOUNTS AS OF DECEMBER 31, 1987¹

Type of account	Rate of interest %	Intra-term withdrawal facility, FIM/month	Term of deposit, months	Cheque facility	Passbook	Debit card	Negotiable certificate of deposit	Giro facility	Tax treatment
Cheque account ²	0.50	unlimited	sight	yes	no	yes	no	yes	taxable
Postal giro account ²	0.50	unlimited	sight	yes	no	yes	no	yes	taxable
Deposit account with chequing facility ²	2.75	25 000	6	limited	no	yes	no	yes	taxfree
Ordinary deposit account	2.75	15 000	6	no	optional	yes	no	yes	taxfree
Savings account	2.75	15 000	6	no	compulsory	yes	no	yes	taxfree
Term deposits, 6 months	4.00	none	6	no	no	no	yes	no	taxfree
Term deposits, 12 months	5.75	none	12	no	no	no	yes	no	taxfree
Term deposits, 24 months	7.00	none	24	no	no	no	yes	no	taxfree
Corporation deposits ³	< 8.50	flexible	flexible	no	no	no	no	no	taxable
Investment accounts, company accounts ³	< 10.50	flexible	flexible	no	no	no ⁴	no	no ⁴	taxable

¹In 1987, supply on the deposits side diversified with the introduction of new types of corporate and investment accounts outside the banks' interest rate cartel. These — often bank-specific deposits — are included here in the item investment and company accounts.

²Interest paid on the lowest balance of the month. The interest paid may in some cases diverge substantially from 0.5 per cent.

³Effective interest rate dependent on the maturity of the deposit. Accordingly, the interest rates shown here were the highest applied.

8 ⁴"Yes" in some retail accounts

termediation of finance at market-related terms sprang up alongside regulated financial intermediation. At first, this activity took place outside bank balance sheets but was subsequently incorporated in bank balance sheets with the relaxation and eventual abolition of the average lending rate controls.

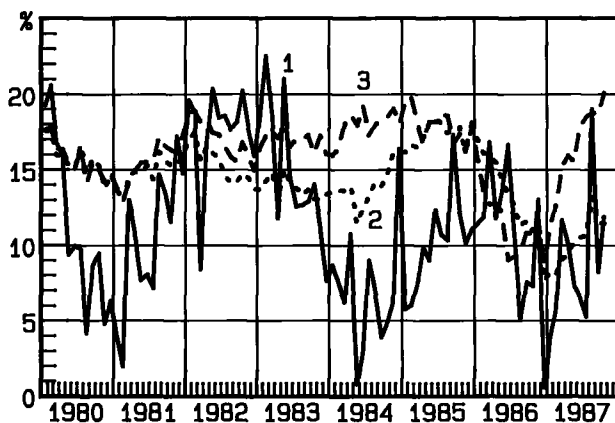
Towards the end of the 1970s, a sharp increase in corporate liquidity put many firms in a position where they were able to make banks compete for their liquid funds. Within a relatively short space of time, at least part of low-interest sight deposits were converted into so-called unregulated deposits bearing high rates of interest.³ Gradually, the unregulated money market acquired more organized forms; certificates of deposit were introduced and today the short-term money market seems to function fairly efficiently.

An additional problem is created by the high return on unregulated deposits: can an asset yielding a higher return than non-monetary assets such as bonds any longer be regarded as money? Or, in other words, do CDs and related instruments provide liquidity services comparable to money if a high explicit interest return is required from them? It is in fact possible to think of unregulated deposits as negative bank credit; that is to say, it is mopped-up liquidity appearing (with a minus sign) on the opposite side to money in the banks' consolidated balance sheet.

A clearer picture of the different types of markka-denominated accounts available to the public at the end of 1987 and of their respective properties can be obtained from Table 1.

³ For the sake of simplicity, the term "unregulated deposits" is used, although most of this part of the banks' funding has been made in other forms, including promissory notes and, nowadays, CDs.

CHART 1.
BANK OF FINLAND BULLETIN MONETARY AGGREGATES



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

1. M1 (narrow money)
2. M1 + quasi-money (broad money)
3. M1 + quasi-money + unregulated deposits

Official aggregates

Official statistics published on the money supply in Finland comprise the series on the public's holdings of M1 and M1+Quasi-Money appearing in this Bulletin and the IMF's International Financial Statistics. In these statistics the public refers to all domestic economic agents except the state, central bank and deposit money banks. Narrow money (M1) is defined to include currency and sight deposits (funds in cheque accounts and postal giro accounts) held by the public. Quasi-Money comprises all time deposits held by the public.

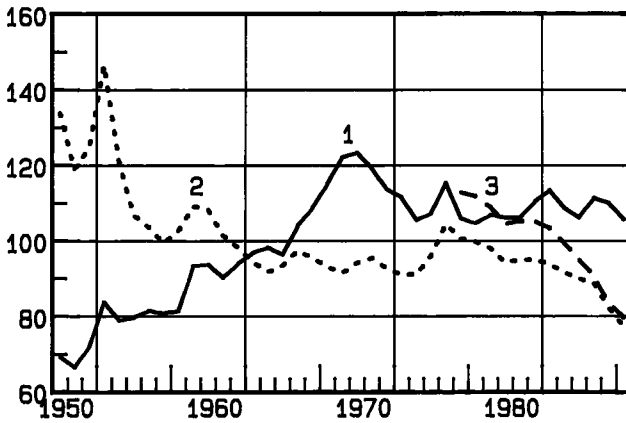
The monetary aggregates include deposits in all the different categories of banks because the savings banks, the cooperative banks and Postipankki have traditionally accepted deposits from the public at the same terms applied by the commercial banks. In addition, the aggregates include deposits — of minor magnitude — made by the public with the Bank of Finland.

The aggregates also include the relatively small amount of deposits held by the public in the savings funds of cooperative retail societies. Finally, it should be noted that the aggregates include domestic foreign currency deposits.

The emergence of unregulated deposits did not *per se* lead to any changes in the published aggregates but a broader measure of money including the banks' funding at market terms has also been used as background information in analyzing financial developments.

The problems of the choice of a monetary aggregate (in connection with the planning and monitoring of monetary policy) are well illustrated by the behaviour of the three aggregates discussed so far in the 1980s. Lacking clear-cut selection criteria — causality tests have been inconclusive in Finland and the demand for money has not as a rule proved to be very stable — various versions of the monetary aggregates have been employed

CHART 2.
VELOCITIES OF THE BANK OF FINLAND BULLETIN
AGGREGATES



1. M1, 1948 - 1986 = 100
2. M1 + quasi-money, 1948 - 1986 = 100
3. M1 + quasi-money + unregulated deposits, 1975 - 1986 = 100

to provide as comprehensive a picture as possible of financial market developments (Chart 1).

The picture is perhaps less confused if developments in the velocity of money are examined over the long term.⁴ Even then, however, narrow and broad money show clearly differing trends (Chart 2). As might be expected, the behaviour is the more stable the broader the concept applied. Simple-sum aggregates do not, however, tell us anything about changes in liquidity caused by reallocation of funds within the aggregate.

Alternative aggregates

However, empirical research in Finland on the demand-for-money has focussed more on the components of (mainly broad) monetary aggregates than on alternatives for official

monitoring. Three questions have been addressed: are there grounds for examining some kind of liquidity or potential liquidity concept which, in addition to conventional money, includes unutilized overdraft facilities? Should part of Quasi-Money be defined as lying outside money? How should foreign currency deposits be treated?

As regards the first question, it can be noted that "potential" money has been analyzed in a few studies but that this has not been a burning issue during the period under review. However, with the growing prevalence of various kinds of credit and debit cards, the boundary between money and credit is becoming more blurred, thus making the question of "potential" money increasingly topical.

The alternative monetary aggregates to be presented below were constructed for analytical purposes and, unlike the official aggregates, they are limited to domestic currency deposits. This mainly reflects the fact that, with financial integration, it is increasingly only the domestic currency part of

the money supply which is controllable from the point of view of the conduct of monetary policy by the central bank. From a technical point of view, estimating the returns on domestic bank deposits denominated in different currencies proved to be difficult on the basis of the existing statistical data. Additional problems, impossible to solve, would have arisen in trying to collect data on foreign currency deposits held in foreign banks.

Deposits with the Bank of Finland were also excluded from the official aggregates, since they can be regarded as "frozen funds" and do not serve any real role in the economy as a source of liquidity.

Several alternative aggregates of intermediate form were constructed between the markka measures of narrow money (M1FIM) and broad money (M3FIM). They were constructed by moving across the liquidity spectrum from the most liquid measure, narrow money (the return on which is zero or very small), towards the highest-yielding term deposits. Thus, by assumption or definition, we move beyond the domain of money on the liquidity spectrum when we come up against the first "non-monetary" asset. This can be considered to be government bonds, which, though comparable to deposits in some respects, are not usually regarded as money.

Applying this method leads to the exclusion of unregulated deposits from the monetary aggregates in the period examined; the return on these exceeded the yield on government bonds, expressed both as the effective yield and the rate at issue, throughout the period.⁵ Thus, during this period, holders of unregulated

⁴ The period covered in this article has been determined by the availability of reliable statistical data. Most of the data used in this article were constructed for a demand-for-money study to be published elsewhere.

⁵ The problems of calculating yields on government bonds are not explained here. Suffice it to say that the estimated yields could well be unreliable in the first part of the period up to 1967.

deposits were not apparently provided with liquidity services for which banks would have charged an interest rate margin below the prevailing capital market yield.

In moving across the liquidity spectrum, the following markka-denominated simple-sum aggregates were constructed in addition to M1FIM:

M1AFIM = M1FIM + deposit accounts with chequing facilities⁶

M2FIM = M1AFIM + savings and ordinary deposit accounts

M2AFIM = M2FIM + term (and other similar) deposits

M3FIM = M2AFIM + indexed deposits

The analysis is still aggregate in so far that the changes that have occurred within the category of term deposits do not show up at all. Nothing can be said about substitution between different types of term deposits on the basis of these aggregates, although in fact major changes have taken place during the period 1948—86 (Table 2).

The movements in the broad aggregate M3FIM are rather similar to those in M1 + Quasi-Money in Chart 1 and give the impression that the growth of the money supply has been very rapid in recent years, especially in relation to annual real economic growth of 3 per cent on average. However, the fastest growing components of broad money in recent years have been (long-term) term deposits, whose link with the real economy is not as direct as that of the more liquid forms of deposits.

As was pointed out at the beginning of this article, the major problem with simple-sum aggregates is the fact that, over time, new deposit products are introduced and gain

⁶ These are similar to savings accounts but have chequing facilities. Interest is paid according to the lowest balance during the month.

TABLE 2. STRUCTURE OF MARKKA LIQUIDITY IN SELECTED YEARS IN 1948 — 1986: PERCENTAGE SHARES OF TOTAL MONETARY ASSETS

	1948	1950	1960	1970	1980	1986
Currency held by the public	19.3	16.9	9.8	6.6	5.4	3.4
Cheque and postal giro accounts	20.7	20.0	11.9	10.8	12.5	10.5
Deposit accounts with chequing facility	—	—	—	2.8	5.2	5.6
Savings and deposit accounts	60.0	63.1	71.1	53.7	49.0	33.6
Term deposit accounts:						
1—6 months	—	—	—	0.8	1.4	0.7
12 months	—	—	5.2	7.3	3.9	3.7
24 months	—	—	—	18.0	18.3	27.3
36 months	—	—	—	—	2.7	—
Indexed accounts	—	—	2.0	—	—	—
Corporation deposits	—	—	—	—	—	3.9
Investment accounts	—	—	—	—	—	1.9
Unregulated deposits	—	—	—	—	1.6	9.4
TOTAL, %	100.0	100.0	100.0	100.0	100.0	100.0

popularity as existing ones disappear (Table 2).

MONETARY INDICES

All the monetary aggregates presented so far have been derived by adding together different types of deposits with weights of unity. The dividing line between the assets included in and those excluded from a particular definition of money has simply been drawn at a different point on the liquidity spectrum in each case. In practice this means that, for instance, highly liquid cheque accounts have the same posi-

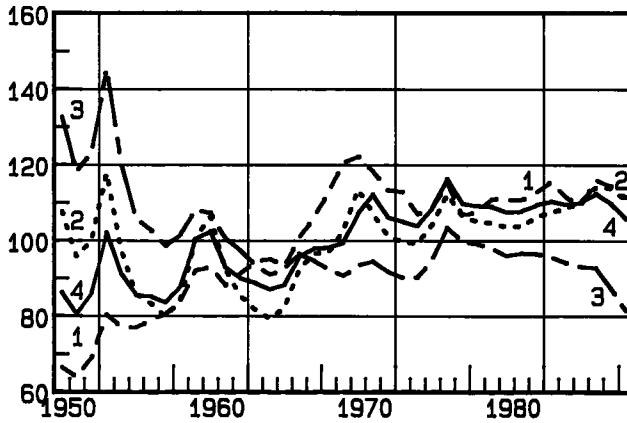
tion in broad money as 36-month term deposit accounts, even though the former can be assumed to offer more liquidity services than the latter.

One way to solve the problem of changes in the structure of the money supply is to consider the interest foregone as a result of holding different kinds of deposits (Table 3). The procedure can be compared to the construction of consumption volume indices, in which the changes in quantities of various items used are weighted by budget shares. As a way of measuring the cost of liquidity

TABLE 3. FOREGONE INTEREST INCOME DUE TO LIQUIDITY HOLDING IN SELECTED YEARS IN 1948 — 1986: PERCENTAGE SHARES OF TOTAL COST OF LIQUIDITY

	1948	1950	1960	1970	1980	1986
Currency held by the public	37.5	38.0	23.6	13.0	11.0	7.6
Cheque and postal giro accounts	40.0	44.8	28.7	21.4	25.6	23.2
Deposit accounts with chequing facility	—	—	—	3.4	6.8	9.0
Savings and deposit accounts	22.5	17.2	43.0	49.6	50.0	46.8
Term deposit accounts:						
1—6 months	—	—	—	0.6	1.0	0.7
12 months	—	—	2.1	4.9	1.8	1.1
24 months	—	—	—	7.1	3.7	4.0
36 months	—	—	—	—	0.1	—
Indexed accounts	—	—	2.6	—	—	—
Corporation deposits	—	—	—	—	—	6.2
Investment accounts	—	—	—	—	—	1.4
TOTAL, %	100.0	100.0	100.0	100.0	100.0	100.0

CHART 3.
VELOCITIES OF SIMPLE-SUM AGGREGATES AND
THE TÖRNQVIST-DIVISIA INDEX



Average for the period 1948 - 1986 = 100

1. M1FIM
2. M2FIM
3. M3FIM
4. T-D index

we consider a situation where, instead of holding funds in the form of deposits, many economic agents invest them in the nearest substitute to broad money, i.e. medium-term government bonds.⁷

It can be assumed that holding deposits is a way of acquiring liquidity services. We can then derive the equilibrium condition for an economic agent from the theory of demand. According to this, in equilibrium, an economic agent distributes his funds among different deposits so that the ratio of the liquidity services generated by a marginal placement in a particular account to the "price" is the same for each account, where the price can be regarded as being the interest foregone. It also follows that the interest margin foregone describes marginal li-

quidity regardless of the way in which the interest rate terms are associated with the objective characteristics of various types of bank accounts.

A comparison of Tables 2 and 3 reveals differences in the distributions, which can be assumed to reflect differences in the quantity of liquidity services provided by different types of deposits. This information can be utilized in the construction of monetary indices by applying index number and aggregation theory to derive monetary indices similar to monetary aggregates. Rather than equally weighting deposits possessing different properties (providing different liquidity services), the weights assigned are based on the "budget shares" of different deposits in the interest foregone by liquidity holders.

In fact, the computing of indices involved calculating a weighted average of changes in the deposit components for each month. The weights used were the monthly relative shares of each type of deposit

in total interest foregone.⁸ Technical questions related to the construction of the indices are not discussed here. It can be noted, however, that both the Törnqvist-Divisia index and the Vartia index were used as alternative approximations.⁹

For the purpose of comparison, the indices were calculated using both the effective yield and the rate at issue of government bonds as the benchmark rate. The indices were applied only to the broadest markka aggregate (M3FIM), although the same procedure, *mutatis mutandis*, could be used for the narrow aggregates as well. Thus four alternative monetary indices were obtained for the period 1949 - 1986. The indices do not differ very much from each other and here we present only one of them, a Törnqvist-Divisia index in which the rate at issue of bonds serves as the benchmark rate.

Particularly striking is its stable velocity as compared to that of the simple-sum aggregates (Chart 3). According to the calculations, investors' preferences are such that the indices are located near M2FIM.

Another interesting comparison can be made between the interpretation of de-

⁷ Indexed bonds served as alternatives to indexed deposits. Taxable bonds were alternatives to the taxable accounts introduced towards the end of the period.

⁸ For a discussion of the method of calculating monetary indices and their applications, see e.g. the following articles: BARNETT, W.A., OFFENBACHER, E.K. & SPINDT, P.A. (1984), "The New Divisia Monetary Aggregates", *Journal of Political Economy*, Vol. 92 pp. 1049-1085 and ISHIDA, K. (1984), "Divisia Monetary Aggregates and Demand for Money: A Japanese Case", *Bank of Japan, Monetary and Economic Studies*, Vol. 2 pp. 49-80.

⁹ See TÖRNQVIST, L., (1936), "The Bank of Finland's Consumption Price Index," *Bank of Finland Monthly Bulletin*, No. 10 pp. 27-34 and VARTIA, Y.O. (1976), *Relative Changes and Index Numbers*, ETLA A4, Helsinki.

velopments in the 1980s provided by the monetary index and that provided by various types of simple-sum aggregates (Chart 4, Chart 1).

ASSESSMENT

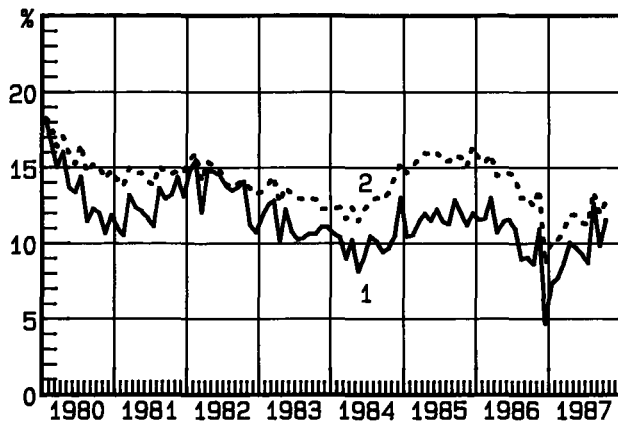
The nature of a monetary index should be underlined. It is not a new kind of monetary aggregate. Rather, it is an estimate of developments in the flow of liquidity services which accrue to the holders of the money stock. As an index it provides a dimensionless measure of developments in the public's liquidity over time. Simple-sum aggregates have traditionally been used for this purpose, even if on much weaker grounds from an economic point of view. In principle, there is nothing to prevent monetary aggregates from being used as an intermediate target in monetary policy. Nevertheless, viewed internationally, monetary indices have so far played only a minor role in policy formulation.

Perhaps monetary indices are, after all, better suited to monitoring and the analysis of history. Among other things, they reveal that the velocity of the money supply has, in fact, been fairly stable in Finland during the postwar period. Similarly, monetary indices "dedramatize" the purported rapid growth in the money supply in recent years (Chart 4). This reflects the fact that term deposits, which have increased rapidly of late but have a low degree of liquidity, have a far smaller weight in the monetary index than in the simple-sum aggregates.

In this article, the construction of monetary indices has been dealt with in terms of opportunity costs. Another way to construct indices is to utilize information available on the velocity or turnover rate of different deposit categories (deposit-withdrawal statistics). This kind of index has not been computed in Finland.

Finally, some other points should be stressed. Though

CHART 4.
TÖRNQVIST-DIVISIA MONETARY INDEX AND
M3FIM AGGREGATE



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

- 1. T-D index
- 2. M3FIM

monetary indices do not solve all the problems associated with monetary aggregates, they do solve many of them. In particular, the indices eliminate part of the velocity changes. On the other hand, the construction of indices gives rise to new technical problems, which are not touched upon here, however. The use of indices as intermediate targets in monetary policy does not seem appropriate at the present time. This is especially so since the formulation of central bank

policy in Finland is directed towards keeping the exchange rate stable by means of interest rates and not to securing the stable growth of a monetary aggregate. Nevertheless, monetary indices shed valuable light on monetary developments in a theoretically appealing way and are therefore also useful in monitoring financial markets in Finland.

March 31, 1988

MONETARY AND FOREIGN EXCHANGE POLICY MEASURES FROM APRIL 1987 TO MARCH 1988

1987

APRIL

Call money market. The Bank of Finland lowers the call money credit rate from 11.4 to 11.2 per cent as from April 2 and further to 11.0 per cent as from April 29.

MAY

Interest rate policy. As from the beginning of May, the Bank of Finland reduces the restrictions on the use of money market rates as reference rates for bank loans. Besides the base rate, the banks may, without special approval, use some other Bank of Finland rate, the official money market rate used in market transactions or some derivative of these rates as reference rates for all lending except housing loans.

As from May 1, the Bank of Finland begins to publish daily 1, 2, 3, 6, and 12-month HELIBOR (Helsinki Interbank Offered Rate) rates, which the banks may henceforth use as reference rates in their lending. HELIBOR rates are the average bid rates for each category of certificate of deposit as quoted by the five largest banks each day at 1 p.m.

JUNE

Revisions to the Foreign Exchange Regulations. The Bank of Finland decides on certain revisions to the Foreign Exchange Regulations that enter into force on June 15, 1987.

With certain exceptions, it is allowed to make direct investments abroad without obtaining the advance permission of the Bank of Finland up to the value of FIM 30 million. It is, however, necessary to provide the authorized bank with the information required by the Bank of Finland.

In payments of suppliers' credits for imports, credit periods exceeding six months are allowed without the special permission of the Bank of Finland up to the maximum amount of FIM 100 000.

The handling of applications for permission in respect of recreational dwellings abroad is transferred to the authorized banks. The upper limit of FIM 600 000 permitted for a purchase is not amended in this context, and for purchases exceeding this amount, the Bank of Finland grants permission on a case-by-case basis.

Investments abroad in publicly quoted securities are allowed up to the maximum amount of FIM 50 000.

Details of other minor changes and revisions can be read in the Foreign Exchange Regulations.

JULY

Call money market. With the effect from July 1, 1987, the Bank of Finland supplements the conditions governing borrowing by commercial banks in the Bank of Finland's call money market by stipulating that

the upper limit on the right of an individual bank to resort to call money credits is, in all cases, not less than FIM 10 million.

AUGUST

Revision of Foreign Exchange Regulations.

The Bank of Finland decides to extend the right of enterprises, previously granted only to manufacturing and shipping companies, to raise foreign loans with a maturity of at least five years for the financing of their operations. As from August 1, 1987, this right also applies to other companies and cooperative societies carrying on business activity, with the exception of financial and insurance institutions and housing and real estate companies.

Cash reserve requirement.

The Bank of Finland raises the cash reserve requirement from 4.7 per cent to 4.9 per cent of the total stock of deposits in August.

OCTOBER

Amendments to Foreign Exchange Regulations.

The Bank of Finland decides to allow authorized banks to write and purchase markka options as from October 1, 1987. At the same time, the Bank of Finland grants companies and other residents the right to purchase such options. Banks had previously been allowed to write foreign currency options but not markka options. Markka options entitle but do not

oblige the holder to purchase or sell foreign currency at an agreed markka rate within an agreed period.

Banks' central bank

financing. With effect from October 1, 1987, savings and cooperative banks are allowed to deal in certificates of deposit with the Bank of Finland provided that they meet with the requirements set on trading.

As from October 1, 1987, the Bank of Finland enlarges to some extent the right of banks to use call money credit which is not subject to penalty interest.

Housing loans.

From October 16, 1987, the Bank of Finland ceases to issue precise guidelines to the banks concerning prior savings required for housing loans and other personal credits.

NOVEMBER

Interest rate policy. On November 13, 1987, the Parliamentary Supervisory Board decides on new interest rate powers for the Board of Management of the Bank of Finland in respect of both call money rates and money and capital market operations.

The call money rate powers remain unchanged so that the upper limit on call money rates is still the base rate plus 15.0 percentage points and the lower limit the base rate.

Under the new powers, for rates of interest longer than one day, the Board of Management may, at its discretion, intervene in the market to regulate movements within a range the lower limit of which is the base rate and the upper limit the base rate plus 5 percentage points. If, because of market forces, interest rates move beyond these limits, the Board of Management may only undertake such operations

that reduce the gap between market rates and these limits.

At the same time, the new powers are extended to include rates of interest longer than 6 months whereas previously they only concerned rates of interest up to 6 months.

1988

JANUARY

Interest rate policy. With effect from January 1, 1988, the Bank of Finland commences to calculate and publish 3- and 5-year long-term market rates on a monthly basis. Banks may use these rates as reference rates in their lending (incl. housing loans). The long-term reference rates are based on market rates for taxable, fixed-rate bonds. Like HELIBOR rates, they are calculated on the basis of the offered rates quoted by the five largest banks.

Housing loans. With effect from the beginning of 1988, banks may, in addition to the base rate, use the 3- and 5-year market rates calculated and published by the Bank of Finland as reference rates for their new long-term housing loans.

Cash reserve requirement.

The Bank of Finland raises the cash reserve requirement from 4.9 per cent to 5.3 per cent of the cash reserve base in January.

Special financing

arrangements. The Bank of Finland decides to amend the terms applied to the financing of domestic suppliers' deliveries (KTR credits) as from the beginning of 1988. According to the new terms, the rate of interest on KTR credits is 2½ percentage points over the Bank of Finland's base rate while the Bank of Finland's share in the financing of the purchase price of a delivery is 30 per cent.

The Bank of Finland decides to abolish the financing arrangements for new-export credits and for short-term export credits with effect from the beginning of 1989. The present terms are to be applied to these financing arrangements in 1988.

FEBRUARY

Cash reserve requirement.

The Bank of Finland raises the cash reserve requirement from 5.3 per cent to 5.7 per cent of the cash reserve base in February.

MARCH

Refinancing of crop failure

loans. With effect from March 1, 1988, the Bank of Finland starts granting deposit banks one-year loans for refinancing their crop failure loans. The rate of interest on the refinancing loans, which is tied to the base rate, is 8 per cent. These loans can be granted up to 80 per cent of the total amount of the crop failure loans granted by each bank.

Cash reserve requirement.

The Bank of Finland raises the cash reserve requirement from 5.7 per cent to 5.9 per cent of the cash reserve base in March.

LAND, CLIMATE AND POPULATION

Finland covers an area of more than 338 000 square kilometres (1986). 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 4 926 000 (Dec. 31, 1986) and an average population density of 16 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 488 000 inhabitants, Tampere (Tammerfors) 170 000 and Turku (Åbo) 161 000.

There are two official languages: 93.6% of the population speaks Finnish as its mother tongue and 6.1% 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 and the AfDB in 1982.

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 roughly 85% of manufacturing output and 90% of banking services produced by private companies. Of the gross domestic product of FIM 316 billion in basic

values in 1986, 4% was generated in agriculture and fishing, 3% in forestry, 27% in industry, 8% in construction, 12% in trade, restaurants and hotels, 8% in finance and insurance, 16% in other private services and 17% by producers of government services. Of total employment, 11% was engaged in primary production, 32% in industry and construction and 57% in services.

In 1986, expenditure on the gross domestic product in purchasers' values amounted to FIM 357 billion and was distributed as follows: net exports 1% (exports 27%, imports -26%), gross fixed capital formation 23%, private consumption 54% and government consumption 21%. Finland's gross tax ratio (gross taxes in relation to GDP) was 37% and the net tax ratio (net taxes in relation to GDP) 23%, which is about the average for OECD countries.

Average annual (compounded) growth of real GDP was 4.1% in the period 1950-60, 5.0% in 1960-70, 3.4% in 1970-80, 2.9% in 1980-86 and 3.9% in 1950-86. Finland's GDP per capita in 1986 was USD 14 350; this put Finland in ninth place among the 24 member countries of the OECD, preceded by Switzerland, the United States, Japan, the Federal Republic of Germany and the other Nordic countries.

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 1986, the share of metal and engineering products in total merchandise exports was 39%, the share of forest industry products 38% and the share of other goods 23%. Raw materials and intermediate goods (incl. crude oil) accounted for 59% of merchandise imports, fuels for 5%, investment goods for 17% and consumption goods for 19%.

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 roundwood consumption was 52 million cubic metres in 1985.

Energy. In 1986, gross consumption of primary energy amounted to 28 Mtoe, of which industry accounted for 47 %, heating for 22 %, transportation for 13 % and other purposes for 18 %. The sources of primary energy in 1986 were as follows: oil 33 %, coal 13 %, nuclear power 16 %, hydro-electric power, peat and other indigenous sources 29 %, others 9 %. Compared internationally (1985), Finland's consumption of 5.5 toe per capita was 1.8 times higher than the average in European OECD countries. The self-sufficiency rate (OECD definition) in Finland was 42 %, 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, which may fluctuate within a range of 4.5 percentage points. The range is defined by fluctuation limits which are set by the Government at the proposal of the Bank of Finland. The present fluctuation limits are 101.3 and 106.0 (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. Exchange controls apply mainly to financial transactions.

Permission for outward and inward direct investment is granted liberally and foreign investors may also buy shares of listed Finnish companies; however, foreign investment in markka-denominated bonds is normally prohibited at present. Finnish companies may freely raise foreign credits of at least five years' duration for their own use. Finnish residents may invest in foreign securities and real estate up to specified amounts.

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, 1986). 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 29 foreign branches, subsidiaries and associate banks and 30 representative offices abroad. There are 241 savings banks and 370 cooperative banks with their own extensive branch networks. The government-owned Postipankki has 50 branches and also offers basic services in post offices.

Financial markets. Of the total stock of FIM 431 billion in outstanding domestic credit at the end of 1986, 56 % was provided by deposit banks, 4 % by mortgage banks, 18 % by insurance companies, 10 % by other credit institutions and 12 % by the state, local authorities and social security funds. There are no quantitative restrictions or interest rate limitations on lending. Regulation of bank lending rates was progressively relaxed earlier in the 1980s and finally abolished in 1986.

In the money market, approximately 60 % of the instruments, which totalled approximately FIM 56 billion at end-September 1987, 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 52 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 56 billion (at end-1986). Three foreign companies are also quoted. Domestic bonds and debentures in circulation at end-1986 totalled FIM 71 billion; government bonds made up 34% of the total. Turnover on the Stock Exchange in 1986 amounted to FIM 16 billion; the share of shares and subscription rights in the total was approximately 60 %.



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1. THE BALANCE SHEET OF THE BANK OF FINLAND

1.1 THE BALANCE SHEET OF THE BANK OF FINLAND,

MILL. FIM

	1987		1988			
	March 31	Dec. 31	March 6	March 15	March 23	March 31
ASSETS						
Gold and foreign currency claims	19 875	28 739	30 604	31 470	31 525	30 949
Gold	2 081	2 128	2 128	2 128	2 128	2 128
Special drawing rights	962	899	1 019	1 014	1 016	1 015
IMF reserve tranche	770	793	791	777	780	779
Convertible currencies	13 510	23 634	24 226	25 117	25 062	24 703
Tied currencies	2 552	1 284	2 440	2 433	2 539	2 323
Other foreign claims	4 567	4 357	4 331	4 344	4 348	4 340
Markka subscription to Finland's IMF quota	2 585	2 427	2 422	2 433	2 433	2 433
Term credit	1 982	1 930	1 909	1 911	1 914	1 907
Claims on financial institutions	8 491	5 147	5 050	5 028	4 997	6 384
Call money credits	179	0	38	118	—	634
Certificates of deposit	3 572	—	—	—	—	—
Till-money credits	2 177	2 730	2 608	2 517	2 569	2 521
Financing of crop failure loans	—	—	—	—	34	811
Bonds	2 153	2 140	2 139	2 125	2 125	2 124
Other claims on financial institutions	410	277	266	269	269	294
Claims on the public sector	959	977	982	984	985	986
Bonds	9	4	0	0	0	0
Total coinage	945	967	975	977	978	978
Other claims on the public sector	5	6	7	7	7	7
Claims on corporations	4 327	3 678	3 664	3 639	3 617	3 570
Financing of exports	1 325	868	820	813	797	764
Financing of domestic deliveries	2 748	2 568	2 606	2 590	2 586	2 558
Bonds: KTR credits	—	13	13	13	13	28
Bonds: Other	59	46	44	41	41	41
Other claims on corporations	195	182	181	181	180	180
Other assets	152	592	103	102	103	107
Accrued items	—	487	—	—	—	—
Other assets	152	105	103	102	103	107
Total	38 371	43 489	44 733	45 567	45 574	46 336
LIABILITIES						
Foreign currency liabilities	57	135	94	102	102	100
Convertible currencies	42	63	19	25	23	20
Tied currencies	15	72	75	77	78	80
Other foreign liabilities	3 399	3 226	3 215	3 222	3 226	3 225
IMF markka accounts	2 585	2 427	2 422	2 433	2 433	2 433
Allocations of special drawing rights	814	799	792	789	792	792
Notes and coin in circulation	8 325	9 990	9 366	9 345	9 368	9 720
Notes	7 524	9 117	8 509	8 486	8 509	8 850
Coin	801	873	857	858	859	870
Certificates of deposit	4 000	4 970	6 450	7 320	7 480	7 285
Liabilities to financial institutions	10 465	11 766	12 901	12 861	12 566	13 326
Call money deposits	548	757	762	720	402	36
Cash reserve deposits	9 597	10 941	12 084	12 089	12 089	13 211
Capital import deposits	236	—	—	—	—	—
Other liabilities to financial institutions	84	67	56	52	74	80
Liabilities to the public sector	1	901	901	901	901	901
Cheque accounts	1	1	1	1	0	0
Counter-cyclical deposits	—	900	900	900	900	900
Capital import deposits	—	—	—	—	—	—
Other liabilities to the public sector	0	0	0	0	0	0
Liabilities to corporations	4 770	5 009	5 064	5 059	5 013	4 995
Deposits for investment and ship purchase	4 437	4 799	4 817	4 811	4 769	4 731
Capital import deposits	331	209	241	241	241	260
Other liabilities to corporations	2	2	7	7	3	4
Other liabilities	23	757	35	27	55	31
Accrued items	—	733	—	—	—	—
Other liabilities	23	24	35	27	55	31
Valuation account and reserves	1 402	1 247	1 218	1 241	1 375	1 265
SITRA's capital	400	400	400	400	400	400
Capital accounts	5 529	5 088	5 088	5 088	5 088	5 088
Primary capital	5 000	5 000	5 000	5 000	5 000	5 000
Reserve fund	529	529	88	88	88	88
Profit/loss for the accounting year	—	-440	—	—	—	—
Total	38 371	43 489	44 733	45 567	45 574	46 336

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
1983	1383	226	751	5150	7510	550	8060	-794	7266	2178	3000	822
1984	1732	936	859	15303	18830	-337	18493	-917	17576	1951	4277	2326
1985	2081	931	775	18572	22359	-285	22074	-849	21225	1023	4300	3277
1986	2081	983	793	6778	10635	3421	14056	-838	13218	1002	2001	999
1987	2128	899	793	23571	27391	1212	28603	1131	29734	977	901	-76
1987												
March	2081	962	770	13468	17281	2537	19818	1168	20986	959	1	-958
April	2081	961	769	16440	20251	2908	23159	1160	24319	960	1	-959
May	2081	967	767	19442	23257	3036	26293	1165	27458	959	1	-958
June	2081	969	787	19006	22843	3207	26050	1167	27217	959	1	-958
July	2081	969	787	19991	23828	2899	26727	1173	27900	954	1	-953
Aug.	2081	973	789	19744	23587	2041	25628	1164	26792	963	1	-962
Sept.	2081	970	757	21291	25099	1428	26527	1157	27684	965	0	-965
Oct.	2081	964	753	22712	26510	1375	27885	1163	29048	968	0	-968
Nov.	2081	961	793	23575	27410	1067	28477	1131	29608	971	1	-970
Dec.	2128	899	793	23571	27391	1212	28603	1131	29734	977	901	-76
1988												
Jan.	2128	879	768	24076	27851	2195	30046	1125	31171	979	901	-78
Feb.	2128	1107	792	24059	28086	2257	30343	1123	31466	982	901	-81
March	2128	1015	779	24683	28605	2243	30848	1115	31963	986	901	-85

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, 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
1983	.	5175	5039	942	-1998	3076	4529	1282	3247	6574	.
1984	.	2802	8696	1563	-1618	-2713	4646	2614	2032	7442	.
1985	.	4014	10222	1925	-1386	-2897	4525	4113	412	8072	.
1986	2381	6687	9270	2305	-2240	4343	4581	4757	-176	8668	.
1987	-	-757	10941	2730	-2350	-6618	3449	4782	-1333	9990	4970
1987											
March	3572	-369	9597	2177	-2243	-1974	4073	4516	-443	8325	4000
April	2111	878	9734	2114	-2287	-2344	3927	4427	-500	8705	6703
May	1690	-872	9975	2139	-2290	-4728	3807	4222	-415	8865	7402
June	1217	90	10118	2370	-2488	-3953	3735	4704	-969	9010	7072
July	89	157	10435	2234	-2486	-5469	3706	4806	-1100	9029	5709
Aug.	258	-717	10335	2439	-2486	-5869	3608	4784	-1176	9012	4199
Sept.	-	-223	10853	2385	-2446	-6245	3567	4838	-1271	8952	4883
Oct.	-	-110	10984	2284	-2541	-6269	3601	4790	-1189	9069	6178
Nov.	-	-1570	11024	2538	-2584	-7472	3561	4772	-1211	9219	5817
Dec.	-	-757	10941	2730	-2350	-6618	3449	4782	-1333	9990	4970
1988											
Jan.	-	-1295	11085	2424	-2364	-7592	3462	4799	-1337	9406	6085
Feb.	-	297	12084	2596	-2346	-6845	3429	4799	-1370	9388	7120
March	-	598	13211	2521	-3149	-6942	3350	4774	-1424	9720	7285

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 certificates of deposit	Sales of certificates of deposit	Matured certificates of deposit, 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
1983	.	.	.	.	2 659	-860	3 519
1984	.	.	.	.	-767	1 606	-2 373
1985	.	.	.	.	201	-1 011	1 212
1986	.	.	.	.	1 599	-1 074	2 673
1987	1 263	23 658	-17 520	-4 875	-6 818	626	-12 319
1987							
March	73	10	.	63	155	-789	1 007
April	20	1 103	-	-1 084	897	-350	163
May	50	2 335	-	-2 285	-1 076	674	-4 035
June	800	2 970	-755	-1 415	185	-777	-453
July	60	2 585	-1 595	-930	120	53	-863
Aug.	260	1 380	-2 835	1 715	-224	650	841
Sept.	-	2 735	-1 845	-890	-61	-555	-396
Oct.	-	4 240	-2 900	-1 340	29	-84	-1 227
Nov.	-	3 390	-3 785	395	6	1 466	-1 065
Dec.	-	2 910	-3 805	895	-55	-868	1 708
1988							
Jan.	160	3 915	-2 640	1 115	2	540	-1 653
Feb.	-	3 955	-2 920	-1 035	295	-1 297	557
March	-	2 550	-2 385	-165	337	36	136

2.2 FORWARD EXCHANGE MARKET, MILL. FIM

End of period	Banks' forward positions with					Total, net (3+4+5)
	Domestic companies		Net (1-2)	Foreign banks, net	Bank of Finland, net	
	Forward exchange bought by banks	Forward exchange sold by banks				
	1	2	3	4	5	6
1983	7 541	1 227	6 314	-1 688	-2 290	2 335
1984	22 921	1 394	21 527	2 002	-19 962	3 566
1985	16 982	1 733	15 249	708	-9 005	6 951
1986	11 446	1 319	10 127	-2 461	-92	7 574
1987	21 671	1 158	20 513	-233	-1 287	18 994
1987						
Feb.	14 389	1 385	13 003	-1 204	26	11 825
March	15 908	1 263	14 645	-490	18	14 172
April	17 739	1 145	16 594	-1 384	18	15 228
May	18 742	981	17 762	-1 465	-423	15 873
June	18 322	771	17 551	-163	-287	17 102
July	18 596	805	17 792	867	-712	17 946
Aug.	20 075	793	19 282	630	-987	18 926
Sept.	20 088	718	19 369	1 535	-1 664	19 241
Oct.	20 358	1 178	19 181	284	-2 116	17 349
Nov.	20 714	1 632	19 081	85	-1 633	17 533
Dec.	21 671	1 158	20 513	-233	-1 287	18 994
1988						
Jan.	21 189	1 051	20 138	1 145	-612	20 671
Feb.	19 699	1 093	18 606	1 816	-264	20 158

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
1983	4 131	.	4 131	1 407	.	4 337	5 744	-1 613
1984	3 176	.	3 176	3 215	.	6 324	9 539	-6 364
1985	5 812	.	5 812	4 527	.	9 578	14 105	-8 293
1986	7 117	120	7 237	1 256	.	9 189	10 445	-3 208
1987	481	1 581	2 062	703	4 705	10 092	15 501	-13 439
1987								
March	158	3 573	3 732	440	3 648	9 362	13 449	-9 717
April	165	2 972	3 137	938	5 756	9 602	16 296	-13 160
May	407	1 862	2 269	365	6 720	9 758	16 843	-14 575
June	189	1 518	1 707	474	7 709	9 980	18 164	-16 457
July	145	750	895	1 057	5 457	10 128	16 643	-15 748
Aug.	435	181	616	181	5 589	10 431	16 202	-15 586
Sept.	39	142	181	667	5 080	10 352	16 099	-15 918
Oct.	19	-	19	557	5 244	10 861	16 662	-16 643
Nov.	36	-	36	679	5 897	10 985	17 561	-17 524
Dec.	10	-	10	909	5 101	11 021	17 031	-17 021
1988								
Jan.	9	6	15	1 081	5 653	10 955	17 690	-17 675
Feb.	15	-	15	546	7 583	11 114	19 242	-19 227
March	68	-	68	496	7 116	12 123	19 735	-19 668

3. RATES OF INTEREST

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

	Average of daily ob- servations	HELIBOR				Long-term unregulated market rate		Bank of Finland rates			Cash reserve require- ment
		Inter-bank overnight rate	1 month	3 months	6 months	12 months	3 years	5 years	Call money credit rate	Call money deposit rate	
	1	2	3	4	5	6	7	8	9	10	11
1983	..	..	..	..	..	..	..	15.37	14.87	9.00	4.30
1984	..	..	..	..	..	..	..	16.53	16.53	9.50	5.40
1985	..	..	..	..	..	..	..	13.37	13.37	9.04	5.60
1986	11.87	..	..	..	..	..	..	13.43	11.34	7.42	4.80
1987	9.16	9.90	10.02	10.14	10.40	..	..	11.71	7.78	7.00	4.80
1987											
March	8.93	10.34	10.54	10.59	10.75	..	..	11.44	7.64	7.00	4.70
April	8.99	9.86	10.04	10.11	10.28	..	..	11.14	7.50	7.00	4.70
May	9.67	9.80	9.89	10.02	10.27	..	..	11.00	7.50	7.00	4.70
June	9.20	9.51	9.69	9.86	10.24	..	..	11.00	7.50	7.00	4.70
July	8.81	9.54	9.63	9.77	10.11	..	..	11.00	7.50	7.00	4.70
Aug.	9.62	9.48	9.55	9.66	9.88	..	..	11.00	7.50	7.00	4.70
Sept.	8.12	9.37	9.48	9.62	9.92	..	..	11.00	7.50	7.00	4.90
Oct.	8.09	9.29	9.45	9.63	10.04	..	..	11.00	7.50	7.00	4.90
Nov.	8.35	9.30	9.48	9.64	10.01	..	..	11.00	7.50	7.00	4.90
Dec.	8.01	9.15	9.25	9.44	9.79	10.3	10.4	11.00	7.50	7.00	4.90
1988											
Jan.	8.09	9.07	9.21	9.35	9.71	10.2	10.3	11.00	7.50	7.00	4.90
Feb.	8.20	9.09	9.22	9.35	9.67	10.2	10.3	11.00	7.50	7.00	5.30
March	8.62	9.61	9.72	9.84	10.11	10.4	10.5	11.00	7.50	7.00	5.70

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

Average of daily observations	3 currencies ¹				12 currencies ²			
	1 month	3 months	6 months	12 months	1 month	3 months	6 months	12 months
1983	7.0	7.1	7.3	7.6	..	..	..	..
1984	7.5	7.7	8.0	8.2	..	..	..	..
1985	6.8	6.9	7.0	7.2	..	..	..	..
1986	5.9	5.9	5.9	5.8	..	..	..	..
1987	5.4	5.6	5.7	5.8	7.9	8.0	8.1	8.2
1987								
March	5.4	5.4	5.4	5.5	8.3	8.1	8.1	8.1
April	5.4	5.4	5.5	5.6	7.8	7.9	7.9	8.0
May	5.3	5.4	5.5	5.7	7.6	7.7	7.8	8.0
June	5.3	5.3	5.4	5.6	7.5	7.6	7.7	8.0
July	5.3	5.4	5.5	5.7	7.4	7.6	7.8	8.1
Aug.	5.4	5.5	5.8	6.0	7.7	8.0	8.2	8.5
Sept.	5.7	5.8	6.2	6.4	7.9	8.0	8.4	8.6
Oct.	5.7	6.4	6.5	6.7	7.8	8.3	8.5	8.7
Nov.	5.3	5.6	5.6	5.8	7.7	7.9	8.0	8.1
Dec.	5.5	5.5	5.5	5.7	7.7	7.8	7.9	8.1
1988								
Jan.	4.9	5.1	5.2	5.5	7.2	7.5	7.7	7.9
Feb.	5.0	5.0	5.1	5.3	7.2	7.4	7.5	7.7
March	4.9	5.0	5.1	5.3	7.3	7.4	7.5	7.7

¹ DEM 60 per cent, USD 30 per cent, GBP 10 per cent.

² Weighted according to their relative shares in the Bank of Finland currency index.

3.3 COVERED EURO-DOLLAR RATE, PER CENT

Average of daily observations	1	3	6	12
	month	months	months	months
1983	..	..	..	..
1984	..	..	..	..
1985	12.9	12.8	12.8	12.6
1986	12.1	11.7	11.5	11.1
1987	9.8	9.9	9.9	10.1
1987				
March	10.2	10.3	10.2	10.3
April	9.8	9.9	9.8	10.0
May	9.7	9.7	9.8	10.0
June	9.4	9.5	9.7	9.9
July	9.4	9.5	9.6	9.9
Aug.	9.4	9.4	9.5	9.8
Sept.	9.2	9.3	9.5	9.7
Oct.	9.2	9.4	9.5	9.9
Nov.	9.2	9.4	9.5	9.9
Dec.	9.1	9.1	9.3	9.5
1988				
Jan.	8.8	9.0	9.1	9.5
Feb.	9.0	9.1	9.2	9.5
March	9.6	9.7	9.7	9.9

3.4 RATES OF INTEREST APPLIED BY BANKS, PER CENT

End of period	Lending				Deposits						
	New credits ¹				Average lending rate	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	BLTs of exchange	Loans	New lending, total							
1983	..	..	..	..	10.39	5.25	8.00	9.25	6.08	13.55	..
1984	..	..	..	..	10.67	5.25	8.00	9.25	6.22	15.43	7.30
1985	11.49	12.61	10.34	11.08	10.37	4.75	7.50	8.75	5.91	13.24	6.81
1986	10.89	12.45	9.86	10.72	8.82	2.75	5.75	7.00	4.43	11.84	5.35
1987	10.68	11.95	9.81	10.23	9.12	2.75	5.75	7.00	4.56	10.13	5.29
1987											
Feb.	11.11	12.29	10.07	10.83	8.85	2.75	5.75	7.00	4.43	11.36	5.27
March	11.20	12.58	10.17	10.98	8.89	2.75	5.75	7.00	4.42	10.62	5.24
April	10.75	12.51	10.10	10.81	8.92	2.75	5.75	7.00	4.45	10.34	5.29
May	10.89	12.40	10.11	10.72	8.95	2.75	5.75	7.00	4.47	10.17	5.29
June	9.74	12.26	10.11	10.59	8.99	2.75	5.75	7.00	4.44	10.01	5.24
July	10.66	12.46	10.09	10.77	9.02	2.75	5.75	7.00	4.49	9.93	5.28
Aug.	9.45	12.27	9.97	10.49	9.04	2.75	5.75	7.00	4.47	9.85	5.26
Sept.	10.57	12.14	9.93	10.47	9.06	2.75	5.75	7.00	4.48	9.77	5.29
Oct.	10.65	12.22	10.03	10.49	9.08	2.75	5.75	7.00	4.50	9.69	5.34
Nov.	10.58	12.15	10.01	10.54	9.12	2.75	5.75	7.00	4.50	9.64	5.36
Dec.	10.68	11.95	9.81	10.23	9.12	2.75	5.75	7.00	4.56	9.61	5.40
1988											
Jan.	10.27	12.21	9.82	10.25	9.15	2.75	5.75	7.00	4.57	9.51	5.38
Feb.	9.56	11.82	10.04	10.24	9.17	2.75	5.75	7.00	4.55	9.43	5.40

¹ Average rate of interest for period

3.5 RATES OF INTEREST ON BONDS AND DEBENTURES, PER CENT

Period	Rates at issue		Secondary market rates	
	Taxable public issues	Tax-free public issues	Taxable public issues	Tax-free public issues
1983	13.1	10.9	13.1	10.3
1984	13.6	11.1	14.0	10.6
1985	12.7	10.6	12.7	10.1
1986	11.4	8.8	11.7	8.3
1987	10.7	7.9	11.2	8.1
1987				
Feb.	11.2	8.0	12.1	7.8
March	10.8	7.9	11.6	7.9
April	11.0	7.8	11.3	7.8
May	10.7	7.9	11.1	7.8
June	10.8	7.9	11.1	8.0
July	10.8	7.9	11.0	8.4
Aug.	10.7	7.9	10.8	8.7
Sept.	10.4	8.0	10.8	8.4
Oct.	10.4	7.8	10.9	8.2
Nov.	10.1	7.6	10.8	8.1
Dec.	10.2	7.7	10.5	8.0
1988				
Jan.	10.5	7.4	10.2	7.7
Feb.	10.0	7.5	10.7	7.7

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
1983	5.570	4.524	8.456	6.957	0.7275	0.7644	0.6107	2.1861	1.9566	0.10934	0.10742
1984	6.010	4.645	8.023	6.533	0.7277	0.7384	0.5816	2.1165	1.8772	0.10428	0.10274
1985	6.206	4.554	8.000	6.590	0.7222	0.7231	0.5871	2.1142	1.8745	0.10483	0.10421
1986	5.077	3.659	7.459	6.816	0.7138	0.6882	0.6290	2.3454	2.0789	0.11399	0.11299
1987	4.404	3.325	7.213	6.556	0.6952	0.6547	0.6444	2.4514	2.1755	0.11806	0.11735
1987											
March	4.509	3.421	7.185	6.579	0.7040	0.6521	0.6537	2.4603	2.1785	0.11884	0.11821
April	4.422	3.360	7.216	6.535	0.7014	0.6542	0.6480	2.4429	2.1652	0.11797	0.11747
May	4.358	3.253	7.280	6.534	0.6979	0.6561	0.6486	2.4398	2.1648	0.11770	0.11708
June	4.427	3.311	7.221	6.530	0.6990	0.6606	0.6469	2.4353	2.1620	0.11754	0.11726
July	4.487	3.389	7.236	6.522	0.6981	0.6652	0.6409	2.4309	2.1589	0.11730	0.11688
Aug.	4.505	3.404	7.207	6.503	0.6956	0.6645	0.6334	2.4275	2.1547	0.11695	0.11627
Sept.	4.394	3.344	7.240	6.493	0.6902	0.6624	0.6299	2.4258	2.1552	0.11686	0.11630
Oct.	4.361	3.337	7.249	6.489	0.6872	0.6591	0.6301	2.4196	2.1504	0.11629	0.11576
Nov.	4.138	3.151	7.354	6.551	0.6827	0.6462	0.6382	2.4617	2.1875	0.11772	0.11722
Dec.	4.043	3.096	7.399	6.584	0.6813	0.6352	0.6422	2.4753	2.1998	0.11837	0.11785
1988											
Jan.	4.036	3.143	7.288	6.505	0.6775	0.6373	0.6369	2.4456	2.1764	0.11702	0.11669
Feb.	4.120	3.251	7.249	6.473	0.6819	0.6435	0.6355	2.4290	2.1632	0.11622	0.11597
March	4.053	3.247	7.426	6.463	0.6822	0.6410	0.6313	2.4160	2.1513	0.11557	0.11527

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 ESB	1 JPY	1 SUR	1 AUD	1 XEU	1 XDR
	12	13	14	15	16	17	18	19	20	21	22	23
1983	2.6570	0.7353	0.00369	0.3111	0.0514	2.2325	0.0391	0.02351	7.491	..	..	5.94325
1984	2.5642	0.6907	0.00344	0.3013	0.0414	0.1939	0.0375	0.02534	7.357	..	..	6.14739
1985	2.5360	0.6940	0.00327	0.3012	0.0367	0.1520	0.0366	0.02610	7.419	..	..	6.27879
1986	2.8349	0.7355	0.00343	0.3339	0.0343	0.1259	0.0364	0.03028	7.228	..	..	5.94432
1987	2.9563	0.7345	0.00341	0.3488	0.0315	0.1163	0.0358	0.03050	6.965	3.106	5.075	5.68010
1987												
March	2.9353	0.7407	0.00347	0.3503	0.0322	0.1176	0.0352	0.02980	7.003	3.119	5.103	5.71328
April	2.9599	0.7350	0.00343	0.3478	0.0319	0.1162	0.0350	0.03097	6.971	3.165	5.072	5.70115
May	2.9689	0.7316	0.00339	0.3474	0.0316	0.1155	0.0350	0.03105	6.935	3.136	5.063	5.67351
June	2.9367	0.7306	0.00337	0.3468	0.0315	0.1163	0.0352	0.03066	6.969	3.196	5.050	5.68539
July	2.9246	0.7316	0.00337	0.3460	0.0314	0.1170	0.0355	0.02989	6.985	3.199	5.045	5.68463
Aug.	2.9321	0.7288	0.00337	0.3455	0.0313	0.1171	0.0360	0.03057	7.020	3.206	5.031	5.70792
Sept.	2.9284	0.7280	0.00337	0.3450	0.0311	0.1155	0.0364	0.03071	6.953	3.215	5.031	5.66425
Oct.	2.9163	0.7262	0.00336	0.3441	0.0308	0.1152	0.0369	0.03044	6.928	3.135	5.020	5.63821
Nov.	2.9957	0.7266	0.00336	0.3501	0.0306	0.1140	0.0367	0.03061	6.838	2.863	5.076	5.57249
Dec.	3.0403	0.7316	0.00338	0.3519	0.0305	0.1135	0.0366	0.03151	6.820	2.891	5.105	5.57906
1988												
Jan.	3.0050	0.7259	0.00333	0.3479	0.0301	0.1128	0.0361	0.03170	6.786	2.894	5.048	5.54743
Feb.	2.9625	0.7204	0.00330	0.3461	0.0300	0.1130	0.0361	0.03190	6.832	2.962	5.014	5.57446
March	2.9243	0.7135	0.00328	0.3441	0.0298	0.1060	0.0362	0.03189	6.786	2.989	5.001	5.54669

4.2. CURRENCY INDICES, 1982=100

Average of daily observations	Bank of Finland currency index ¹	Other currency indices		Currency	Weights of the Bank of Finland currency index As from March 24, 1988
		Payments currency index ¹	MERM index		
	1	2	3		4
1983	104.1	108.3	109.9	USD	7.6
1984	102.8	108.5	111.6	GBP	13.2
1985	102.5	109.4	112.5	SEK	20.8
1986	103.9	106.3	110.4	NOK	5.1
1987	103.3	100.7	106.1	DKK	5.0
				DEM	20.1
1987				NLG	4.9
March	103.8	101.5	107.0	BEC	3.1
April	103.6	100.7	106.7	CHF	2.7
May	103.4	100.3	106.0	FRF	6.8
June	103.3	100.6	106.2	ITL	4.8
July	103.3	100.8	106.3	JPY	5.9
Aug.	103.2	100.8	106.7		
Sept.	102.8	100.0	105.8		
Oct.	102.5	99.6	105.3		
Nov.	102.7	98.6	103.9		
Dec.	102.9	100.4	103.7		
1988					
Jan.	102.2	100.3	103.4		
Feb.	102.2	100.6	104.1		
March	102.0	100.2	103.4		

¹The base 1982=100 has been applied since January 1, 1984. The figures before that date are based on the earlier index of 1974=100, but they have been rebased to the current base.

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
1982	13268	82606	.	95874	3258	4200	103332
1983	14337	93551	.	107888	5101	7700	120688
1984	16975	108118	.	125093	4960	11287	141340
1985	19268	125366	1781	146415	6192	13998	166605
1986	18393	137521	3423	159337	4306	17271	180914
1986							
Nov.	18419	135022	3193	156635	5209	18344	180187
Dec.	18393	137521	3423	159337	4306	17271	180914
1987*							
Jan.	17574	139858	3633	161065	4704	21550	187320
Feb.	17561	141266	3775	162602	4509	20770	187881
March	19535	141446	3886	164866	4222	21675	190764
April	19805	143672	3995	167472	4022	19652	191145
May	19369	145829	4121	169318	4209	20465	193992
June	21564	146857	4289	172710	4430	19175	196315
July	20046	147725	4447	172219	4501	20063	196783
Aug.	21610	149397	4574	175581	4189	20162	199933
Sept.	21090	148720	4777	174586	4259	22539	201384
Oct.	21583	149455	5000	176038	3794	25321	205153
Nov.	21631	149098	5194	175923	5174	22478	203575

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
1982	3468	7686	85328	96482	14105	110587
1983	4350	7264	97362	108977	17253	126231
1984	5233	7644	111280	124157	20363	144520
1985	6313	7471	132668	146451	24704	171155
1986	7542	6354	152335	166231	25016	191246
1986						
Nov.	7644	6065	151157	164867	25820	190686
Dec.	7542	6354	152335	166231	25016	191246
1987*						
Jan.	7455	6086	153938	167479	25118	192597
Feb.	7557	6115	155426	169098	25981	195079
March	7943	5800	156849	170592	27183	197775
April	8019	5729	158580	172328	28108	200437
May	7998	5667	160769	174435	29732	204167
June	8224	5589	163290	177103	30079	207182
July	8262	5465	165436	179164	30867	210031
Aug.	8392	5499	167896	181787	31538	213324
Sept.	8697	5453	170322	184472	33160	217632
Oct.	8739	5286	172968	186994	35895	222889
Nov.	8974	5174	175284	189431	36635	226066

5.3 MONEY SUPPLY AND MONETARY AGGREGATES, MILL. FIM

End of period	Foreign assets, net	Domestic credit			Other items, net	M ₁	M ₂ (1+4+5)
		Claims on the central government	Claims on the public	Total (2+3)			
	1	2	3	4	5	6	7
1983	-6081	-3297	152 199	148 902	-20 915	21 427	121 906
1984	-2575	-5483	176 694	171 211	-26 978	24 945	141 658
1985	-6641	-8694	209 231	200 537	-27 244	27 694	166 652
1986	-16 784	-13 884	237 514	223 630	-27 522	27 838	179 324
1987	-25 484	-14 993	276 302	261 309	-35 363	30 342	200 461
1986							
Dec.	-16 784	-13 884	237 514	223 630	-27 522	27 838	179 324
1987							
Jan.	-13 870	-8 180	239 460	231 280	-36 216	27 075	181 194
Feb.	-14 633	-10 046	241 314	231 269	-34 200	26 782	182 436
March	-17 184	-11 234	243 932	232 698	-31 522	28 901	183 992
April	-17 467	-9 074	245 599	236 525	-32 276	29 029	186 783
May	-17 917	-8 835	249 597	240 762	-34 297	28 547	188 548
June	-18 863	-8 281	253 240	244 960	-34 004	30 754	192 092
July	-17 724	-9 289	255 448	246 159	-36 373	29 126	192 062
Aug.	-21 425	-7 994	258 743	250 749	-34 109	30 991	195 215
Sept.	-23 440	-9 092	263 257	254 165	-36 404	30 360	194 321
Oct.	-23 445	-9 941	268 569	258 628	-39 961	30 729	195 222
Nov.	-23 021	-14 346	271 682	257 337	-38 052	30 757	196 264
Dec.	-25 484	-14 993	276 302	261 309	-35 363	30 342	200 461

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
1983	14 127	3 391	4 205	21 723	9 506	4 377	2 518	16 401	38 124	31 187	5 042
1984	16 513	2 666	5 767	24 946	12 037	4 520	2 766	19 323	44 269	33 816	6 300
1985	17 316	2 703	5 658	25 677	14 994	4 107	2 203	21 304	46 981	36 033	6 383
1986	17 905	3 038	6 038	26 981	18 059	4 481	2 474	25 013	51 994	38 028	11 686
1987	20 407	2 697	5 576	28 680	22 121	4 691	3 018	29 831	58 511	..	11 553
1987											
Feb.	18 435	2 954	6 548	27 937	18 393	4 401	1 874	24 667	52 604	38 419	7 559
March	19 168	2 443	6 267	27 878	19 119	4 378	1 949	25 446	53 324	38 783	8 820
April	19 185	2 447	6 263	27 895	19 154	4 009	1 670	24 833	52 728	39 081	6 449
May	20 027	2 413	6 370	28 810	19 705	3 978	1 903	25 586	54 396	39 028	7 421
June	19 210	2 417	6 028	27 655	19 868	4 082	2 040	25 990	53 645	39 196	6 234
July	19 204	2 415	5 942	27 561	19 971	4 387	2 146	26 504	54 065	39 565	6 795
Aug.	18 279	2 416	5 940	26 635	20 426	4 422	2 194	27 042	53 677	39 623	6 219
Sept.	18 139	2 387	5 858	26 384	20 576	4 443	2 216	27 235	53 619	39 896	6 750
Oct.	19 136	2 418	5 758	27 312	21 328	4 494	2 481	28 303	55 615	40 199	8 084
Nov.	19 820	2 591	5 711	28 122	22 034	4 490	2 731	29 255	57 377	40 299	13 109
Dec.	20 407	2 697	5 576	28 680	22 121	4 692	3 018	29 831	58 511	..	11 553
1988											
Jan.	19 750	2 645	5 465	27 860	22 663	4 678	3 328	30 669	58 529	..	..
Feb.	19 665	2 463	5 404	27 532	23 053	4 643	3 713	31 409	58 941	..	..

5.5 DOMESTIC BOND MARKET

A) ISSUES, MILL. FIM

During period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporate sector	Financial institutions	Central government	Local government	Others	Public Issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1983	2035	5602	3890	77	10	1151	3882	6581	11614
1984	2528	6167	5073	112	32	1947	5336	6629	13912
1985	4804	9112	5994	435	28	8070	6394	5909	20373
1986	4976	10639	6532	422	105	5987	7487	9200	22674
1987	4527	9415	8119	206	69	9364	8830	4142	22335
1987									
Feb.	433	1085	195	10	20	545	1060	138	1743
March	551	1796	1218	—	—	851	1704	1010	3564
April	153	475	1006	—	—	280	127	1227	1634
May	230	254	1092	27	20	501	1092	30	1623
June	205	63	209	55	—	210	209	113	531
July	147	153	116	—	—	228	116	72	416
Aug.	440	205	941	59	—	674	941	30	1644
Sept.	685	1769	331	—	—	1260	1070	455	2786
Oct.	851	1174	1083	4	—	2024	974	114	3112
Nov.	336	1005	841	—	11	1289	450	454	2193
Dec.	347	757	101	—	18	714	101	408	1222
1988									
Jan.	251	5	1370	—	—	108	1370	148	1626
Feb.	260	968	631	63	—	874	806	241	1922

B) STOCK, MILL. FIM

End of period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporate sector	Financial institutions	Central government	Local government	Others	Public Issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1982	3329	10607	9448	60	1	973	9798	12673	23444
1983	5027	14986	11869	152	11	1901	12057	18087	32045
1984	6766	19850	14904	247	43	3474	15148	23189	41810
1985	10482	26117	18575	661	56	10911	19002	25977	55891
1986	14076	31293	22090	1042	177	16178	23314	29186	68677
1986									
III	13718	29049	20682	870	95	14465	21963	27985	64412
IV	14076	31293	22090	1042	177	16178	23314	29186	68677
1987									
I	15286	31159	23087	1091	198	17878	24365	28578	70821
II	15511	31962	23623	1159	213	18897	25906	27664	72468
III	16260	32528	24707	1224	203	20501	26782	27639	74922

5.6 HELSINKI STOCK EXCHANGE

During period	Turnover, mill. FIM			Share prices Unites index ¹ , 1975 = 100		
	Shares and subscription rights	Bonds and debentures	Total (1+2)	Banks	Industry	Overall index
	1	2	3	4	5	6
1983	1 390	2 356	3 746	190	144	194
1984	2 508	5 007	7 515	259	193	273
1985	3 114	9 046	12 160	229	184	234
1986	9 488	6 479	15 968	350	254	357
1987	26 641	4 604	31 245	546	319	603
1987						
Feb.	1 173	549	1 722	450	296	485
March	2 669	594	3 262	478	295	523
April	1 472	203	1 675	505	292	561
May	1 858	212	2 070	514	287	575
June	1 798	358	2 156	538	296	604
July	2 647	152	2 799	593	317	666
Aug.	2 809	193	3 002	615	335	689
Sept.	2 962	172	3 133	635	351	707
Oct.	4 099	140	4 239	643	379	708
Nov.	2 275	251	2 525	578	360	631
Dec.	1 701	1 241	2 942	558	328	611
1988						
Jan.	994	75	1 069	547	318	600
Feb.	1 485	248	1 733	572	340	625

¹ 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 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
1983	67960	5765	2851	6159	14775	82735	3067	3310	89112	70731	2565	3599	4467
1984	78961	6580	3039	5610	15229	94190	4537	3624	102351	73496	2572	4250	5819
1985	82475	6216	3258	6224	15698	98173	5847	3791	107811	80764	2545	5031	6554
1986*	81086	5293	3148	5158	13599	94685	4580	3640	102905	76745	2223	5567	5527
1987*	84000	5000	3600	5500	14100	98100	4600	3900	106600	82200	2200	6600	5800
1985													
III	20284	1465	1181	1424	4070	24354	1514	954	26822	19366	559	1475	1343
IV	20347	1542	693	1770	4004	24351	1391	959	26702	21610	727	1172	1962
1986*													
I	19717	1269	564	999	2832	22549	1209	903	24661	20601	438	1163	1361
II	17780	1287	780	1171	3238	21018	1297	904	23219	15506	566	1424	1346
III	20933	1435	1134	1257	3826	24759	966	897	26622	20640	595	1648	1336
IV	22657	1302	671	1730	3703	26360	1108	935	28403	19998	624	1332	1485
1987*													
I	20141	1210	579	1157	2946	23087	1035	1044	25166	19645	514	1392	1486
II	21399	1360	916	1263	3540	24939	1284	950	27172	20563	615	1671	1516
III	20936	1221	1311	1378	3910	24846	1081	922	26849	20356	504	1896	1417
IV	21524	1209	794	1701	3704	25228	1201	983	27412	21636	567	1641	1382

During period	Services expenditure, total (11+12 services +13)	Imports of goods and services (10+14)	Investment expenditure (16)	Transfers and other expenditure (15+16)	Current account (15+16 +17)	Trade account (1-10)	Transport (2-11)	Travel (3-12)	Other services (4-13)	Services account (20+21+22)	Goods account (19+23)	Investment and other, net (7-16)	Transfers and others, net (8-17)	Current account (24+25) = (9-18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1983	10631	81361	8875	4094	94331	-2771	3200	-748	1692	4144	1373	-5808	-784	-5219
1984	12641	86137	11298	5010	102445	5465	4008	-1211	-209	2588	8053	-6761	-1385	-93
1985	14130	94893	12134	5300	112327	1711	3671	-1773	-330	1568	3279	-6287	-1509	-4517
1986*	13317	90062	11533	5809	107405	4341	3070	-2419	-370	282	4623	-6954	-2169	-4500
1987*	14600	96800	12600	6400	115800	1800	2800	-3000	-300	-500	1300	-8000	-2500	-9200
1985														
III	3377	22742	2770	1259	26772	919	906	-294	81	693	1612	-1257	-305	50
IV	3862	25472	2899	1314	29685	-1263	814	-479	-192	143	-1121	-1508	-355	-2984
1986*														
I	2962	23563	2890	1445	27898	-884	831	-600	-361	-130	-1014	-1681	-542	-3237
II	3336	18843	3360	1270	23472	2273	721	-645	-175	-98	2175	-2064	-365	-254
III	3578	24218	2411	1378	28007	293	840	-513	-79	248	541	-1445	-480	-1385
IV	3441	23439	2871	1717	28027	2659	678	-661	245	262	2921	-1763	-782	376
1987*														
I	3392	23038	2937	1769	27743	496	696	-813	-329	-446	50	-1902	-725	-2577
II	3802	24364	3829	1498	29691	836	745	-755	-252	-262	574	-2545	-548	-2519
III	3816	24172	2429	1515	28116	580	717	-585	-38	94	674	-1348	-593	-1267
IV	3590	25226	3406	1617	30250	-112	642	-846	319	114	2	-2205	-634	-2837

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 (8-13)	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
1983	88	..	2554	323	-38	2839	652	3579	1452	..	-423	676	1705	1874
1984	324	1492	2598	2861	1090	6549	68	8433	2479	..	1682	-1960	2201	6232
1985	392	4264	1556	1489	442	3487	140	8283	2073	78	-1313	948	1786	6497
1986*	1627	646	-63	5935	-482	5390	87	7750	3641	489	-381	713	4462	3288
1987*	430	-1626	2287	5383	2843	10513	91	9408	3785	2119	181	3223	9308	100
1985														
III	54	-107	516	721	-654	583	20	550	486	..	-263	29	252	298
IV	179	67	222	77	879	1178	43	1467	349	78	-347	588	668	799
1986*														
I	86	94	-722	1246	62	587	-65	701	357	-15	-241	8	109	592
II	56	710	596	1040	-194	1442	17	2225	925	89	111	126	1251	974
III	273	-206	16	1412	-105	1323	83	1473	1152	279	-110	409	1729	-256
IV	1212	48	47	2237	-245	2039	52	3351	1207	136	-141	170	1372	1979
1987*														
I	131	-387	1640	1756	873	4269	79	4092	778	124	265	2495	3662	430
II	199	6	-442	1530	1257	2345	-55	2495	1173	925	-145	83	2036	459
III	17	-271	-1018	974	522	478	12	236	653	367	112	120	1253	-1017
IV	83	-974	2107	1123	191	3421	55	2585	1181	703	-51	525	2358	227

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 excl. 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
1983	-3344	7594	2121	9714	6328	2228	8556	24	1182	-2162	2162	1187	975
1984	6138	16080	944	17024	13994	-2811	11183	-2704	3137	9275	-9275	-10142	867
1985	1980	6890	350	7240	1623	1732	3355	-2121	1764	3744	-3744	-3729	-15
1986*	-1212	6019	-917	5101	15676	-92	15584	3764	-6719	-7930	7930	11678	-3748
1987*	-9100	14594	3202	17796	-906	-1298	-2204	4836	24836	-15736	-15736	-17817	2081
1985													
III	347	-3134	-355	-3489	-1734	-63	-1797	-222	-1914	-1566	1566	1042	525
IV	-2185	2563	-1200	1363	15	-63	-49	1703	3115	930	-930	-969	39
1986*													
I	-2645	-736	1243	507	1649	-15	1634	610	-517	-3162	3162	3945	-782
II	720	1999	-1844	156	4813	-15	4798	687	-3956	-3236	3236	4161	-925
III	-1641	3185	1237	4422	6304	-31	6273	1279	-572	-2213	2213	3455	-1242
IV	2355	1571	-1554	17	2910	-31	2879	1188	-1673	681	-681	117	-798
1987*													
I	-2147	2656	1063	3719	-3809	-118	-3927	736	8382	6236	-6236	-7020	785
II	-2060	7672	165	7837	3902	-118	3784	4243	8296	6237	-6237	-5569	-667
III	-2283	8340	-32	8307	5681	125	5806	419	2920	637	-637	-2407	1771
IV	-2610	-4072	2005	-2067	-6680	-1187	-7867	-563	5237	2627	-2627	-2820	193

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	
1983	2317	848	21740	2419	33749	57909	444	61518	6166	..	6612	4051	16829	44689
1984	2905	2013	24928	5960	37227	68116	512	73546	8689	..	8920	2097	19706	53840
1985	3274	6313	25678	6410	34276	66364	652	76603	10524	78	6539	3053	20194	56409
1986*	4892	6959	26292	11992	32044	70330	739	82920	13727	567	5649	3685	23628	59292
1987*	5289	5333	27826	17328	32942	78095	830	89547	16686	2686	5260	6737	31369	58178
1985														
III	3104	6210	25749	6556	34401	66707	609	76630	10484	..	7194	2417	20095	56535
IV	3274	6313	25678	6410	34276	66364	652	76603	10524	78	6539	3053	20194	56409
1986*														
I	3351	6407	25126	7546	32986	65659	587	76004	10697	63	6103	3033	19896	56108
II	3414	7117	26548	8708	33159	68417	604	79551	11719	152	6158	3148	21177	58375
III	3687	6911	26710	10063	32664	69438	687	80723	12601	431	5865	3527	22424	58299
IV	4892	6959	26292	11992	32044	70330	739	82920	13727	567	5649	3685	23628	59292
1987*														
I	5013	6572	27361	13447	31978	72787	818	85190	14166	691	5660	6114	26631	58559
II	5209	6578	26967	15024	33267	75259	763	87809	15347	1616	5527	6203	28693	59116
III	5213	6307	25679	15800	33472	74952	775	87247	15812	1983	5478	6304	29577	57670
IV	5289	5333	27826	17328	32942	78095	830	89547	16686	2686	5260	6737	31369	58178

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	
1983	5705	39443	16181	61328	11842	29263	15915	57020	4308	48997	10875	4914	12.2
1984	4562	55695	17988	78245	22912	43319	12804	79035	-790	53050	11586	4613	11.3
1985	4070	51374	17354	72798	25183	38775	18155	82113	-9314	47095	11287	4808	10.5
1986*	3455	56881	16119	76454	16613	54498	18381	89493	-13038	46254	13189	6018	12.8
1987*	3362	71475	23161	97997	31134	53692	16255	101082	-3085	55093	14662	6516	13.8
1985													
III	4240	59370	19120	82730	24770	44927	18183	87880	-5150	51385	2296	1011	8.6
IV	4070	51374	17354	72798	25183	38775	18155	82113	-9314	47095	2769	1197	10.4
1986*													
I	3659	50424	18682	72765	21647	40424	18037	80109	-7343	48765	3850	2118	15.6
II	3499	52647	16965	73111	18470	45237	18213	81921	-8809	49566	3288	1176	14.2
III	3565	55602	18234	77401	16168	51541	18131	85841	-8440	49859	2309	834	8.7
IV	3455	56881	16119	76454	16613	54498	18381	89493	-13038	46254	3741	1890	13.2
1987*													
I	3521	59536	18592	81649	22482	50790	17830	91102	-9453	49106	3331	1411	13.2
II	3490	67208	18830	89528	28680	54691	18024	101396	-11868	47248	4089	1496	15.0
III	3607	75547	19797	98952	29291	60373	18061	107725	-8773	48897	2574	1217	9.6
IV	3362	71475	23161	97997	31134	53692	16255	101082	-3085	55093	4669	2392	17.0

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
1983	30082	8541	22184	710	61518	12791	2472	1447	119	16829	44689
1984	34012	13366	25440	728	73546	17624	222	1678	182	19706	53840
1985	35709	13980	26330	585	76603	17102	859	1955	279	20194	56409
1986*	35210	20169	27031	509	82920	19209	1591	2309	520	23628	59292
1987*	33717	26665	28656	511	89547	23349	4498	2653	869	31369	58178
1985											
III	36248	13391	26358	633	76630	17691	277	1877	250	20095	56535
IV	35709	13980	26330	585	76603	17102	859	1955	279	20194	56409
1986*											
I	34646	15090	25713	555	76004	16839	765	1970	321	19896	56108
II	35001	16847	27152	551	79552	17906	849	2056	366	21177	58375
III	34231	18554	27397	541	80723	18462	1360	2191	412	22424	58299
IV	35210	20169	27031	509	82920	19209	1591	2309	520	23628	59292
1987*											
I	34716	21814	28179	481	85190	19717	3876	2458	581	26631	58559
II	35601	24004	27730	474	87809	21633	3936	2465	659	28693	59116
III	35045	25209	26454	539	87247	22308	4005	2519	744	29577	57670
IV	33717	26665	28656	511	89547	23349	4498	2653	869	31369	58178

7. FOREIGN TRADE¹

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
1983	69692	71528	-1836
1984	80904	74682	6222
1985	84028	81520	2508
1986	82579	77601	4978
1987*	85315	82797	2518
1987*			
Jan.	6712	6706	6
Feb.	6375	5731	644
March	7360	7328	32
April	7285	6500	785
May	7007	7154	-147
June	7444	7090	354
July	6620	6458	162
Aug.	6601	6943	-342
Sept.	8042	7080	962
Oct.	7894	7317	577
Nov.	6966	7502	-536
Dec.	7009	6988	21
1988*			
Jan.	6885	6883	2

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
1983	104	98	127	125	101
1984	114	98	134	131	102
1985	115	104	138	135	102
1986	116	110	135	121	111
1987*	117	119	138	119	116
1987*					
1987*					
II	122	106	139	138	101
III	113	100	138	135	102
IV	117	113	135	133	101
1986					
I	113	110	134	129	103
II	104	90	133	122	109
III	116	119	138	120	116
IV	128	115	136	121	112
1987*					
I	114	113	136	120	113
II	120	120	137	119	115
III	116	116	139	121	115
IV	119	126	140	119	117

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	Consumer goods	Other goods
	1	2	3	4	5	6	7	8	9	10
1983	6944	19327	8524	20211	14686	32209	17554	10860	10572	333
1984	7145	23573	10176	22998	17012	35162	16900	10993	11454	173
1985	6728	25030	9803	24412	18055	38676	17770	11675	12967	432
1986	6947	24600	7858	26115	17059	39292	10070	12898	15069	272
1987*	7449	26691	7823	26347	17005	41066	9623	14074	17412	622
1987*										
1987*										
Jan.	584	2040	691	2073	1324	3270	955	1080	1255	146
Feb.	512	2077	653	1825	1308	3052	301	928	1427	23
March	619	2276	599	2228	1638	3571	649	1448	1619	41
April	616	2352	574	2236	1507	3407	461	1218	1407	7
May	746	2164	749	2089	1259	3554	886	1209	1467	38
June	732	2097	599	2526	1490	3538	915	1151	1327	159
July	526	2271	660	1983	1180	3125	796	1197	1317	23
Aug.	545	2191	669	1849	1347	3292	1137	1012	1471	31
Sept.	666	2496	688	2629	1563	3503	964	1047	1547	19
Oct.	670	2500	624	2493	1607	3634	845	1151	1579	108
Nov.	664	2168	563	2077	1494	3713	720	1436	1622	11
Dec.	569	2059	754	2339	1288	3407	994	1197	1374	16
1988*										
Jan.	569	2472	623	2021	1200	3486	780	1270	1340	7

7.4 FOREIGN TRADE BY REGIONS AND COUNTRIES

Region and country	Exports, f.o.b.				Imports, c.i.f.			
	1986		1987 ^a		1986		1987 ^a	
	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
All OECD countries	57753	69.9	63184	9.4	57905	74.6	63076	8.9
OECD Europe	50181	60.8	55667	10.9	48446	62.4	52211	7.8
Of which:								
Austria	781	0.9	951	21.8	1015	1.3	1066	5.0
Belgium and Luxembourg	1410	1.7	1526	8.3	1899	2.4	2138	12.6
Denmark	3321	4.0	3320	0.0	2181	2.8	2343	7.4
France	3691	4.5	4497	21.8	3459	4.5	3553	2.7
Federal Republic of Germany	8016	9.7	9335	16.5	13159	17.0	14447	9.8
Italy	1741	2.1	2182	25.3	3256	4.2	3620	11.2
Netherlands	2855	3.5	3060	7.2	2369	3.1	2557	8.0
Norway	3715	4.5	4009	7.9	1714	2.2	1819	6.2
Spain	877	1.1	1090	24.3	873	1.1	920	5.4
Sweden	12228	14.8	12754	4.3	10559	13.6	10703	1.4
Switzerland	1331	1.6	1541	15.8	1579	2.0	1665	5.4
United Kingdom	8667	10.5	9734	12.3	5056	6.5	5906	16.8
Other OECD	7571	9.2	7517	-0.7	9459	12.2	10864	14.9
Of which:								
Canada	910	1.1	971	6.7	410	0.5	429	4.7
Japan	1266	1.5	1206	-4.7	5022	6.5	5862	16.7
United States	4480	5.4	4407	-1.6	3722	4.8	4336	16.5
CMEA countries	18176	22.0	14620	-19.6	14210	18.3	14092	-0.8
Of which:								
Soviet Union	16774	20.3	13175	-21.5	11933	15.4	11909	-0.2
Developing countries	5736	6.9	6199	8.1	4945	6.4	4937	-0.2
OPEC countries	1437	1.7	1527	6.2	1022	1.3	802	-21.5
Other	4299	5.2	4672	8.7	3923	5.1	4135	5.4
Other countries	914	1.1	1311	43.4	539	0.7	693	28.5
TOTAL	82579	100.0	85315	3.3	77599	100.0	82797	6.7
Of which:								
EEC countries	31657	38.3	35967	13.6	33396	43.0	36785	10.2
EFTA countries	18193	22.0	19396	6.6	14979	19.3	15358	2.5

^aThe trade values and volumes for December 1987 and January 1988 differ from those in the official statistics. For details, see Notes and Explanations on page S26.

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
1983	171 330	63 113	69 001	10 467	-2 704	311 207	92 001	87 959	315 249
1984	176 038	64 872	67 584	10 202	-1 327	317 369	96 993	88 857	325 505
1985	181 664	68 218	69 599	10 453	3 610	333 544	98 173	94 893	336 824
1986*	188 823	70 398	68 720	10 962	5 467	344 370	99 365	98 760	344 975
1987*	199 032	72 973	72 371	11 381	7 609	363 366	101 357	107 260	357 463
1985									
III	45 833	17 146	16 697	2 790	-471	81 995	24 606	22 842	83 759
IV	46 045	17 322	17 675	2 643	2 972	86 657	23 336	24 692	85 301
1986*									
I	46 391	17 383	17 239	2 664	2 166	85 843	24 933	25 701	85 075
II	47 215	17 325	16 610	2 322	-193	83 280	22 126	20 727	84 678
III	47 597	17 772	17 613	2 965	2 467	88 414	26 061	27 131	87 344
IV	47 620	17 914	17 258	2 804	998	86 594	26 154	25 004	87 744
1987*									
I	48 719	17 959	17 662	2 764	338	87 443	24 664	24 280	87 827
II	49 524	18 158	18 304	2 524	3 811	92 320	26 504	28 375	90 449
III	49 908	18 359	17 894	3 190	1 572	90 924	25 767	27 463	89 228
IV	50 882	18 497	18 508	2 903	3 303	94 093	24 440	27 144	91 389

8.2 VOLUME OF INDUSTRIAL PRODUCTION, 1985=100 (1980 WEIGHTS) (seasonally adjusted figures)

Period	2-4		2		3		Industry (SIC): 331,341		37,38		4	
	Total industry (100.0)	Mining and quarrying (1.5)	Manufacturing (89.5)	Wood and paper industries (20.5)	Metal and engineering industries (28.3)	Other manufacturing (40.7)	Electricity, gas and water (9.0)					
	1	2	3	4	5	6	7					
1983	91.9	92.8	92.5	94.2	87.8	95.5	86.0					
1984	96.1	96.3	96.6	101.7	92.5	97.6	91.8					
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0					
1986*	100.8	101.7	100.8	101.8	101.3	99.9	100.1					
1987*	105.0	79.0	105.2	107.9	106.2	103.0	108.0					
1987*												
Jan.	101.5	90.8	101.3	106.3	99.9	99.2	109.3					
Feb.	104.6	97.5	105.0	108.5	104.4	101.4	102.8					
March	108.9	96.6	106.5	107.0	107.2	101.9	111.7					
April	105.2	93.7	103.8	108.9	103.5	103.3	104.5					
May	107.8	74.7	106.0	108.7	107.3	105.9	108.1					
June	107.0	52.4	106.4	106.0	105.9	106.0	109.2					
July	109.1	74.6	107.7	107.7	106.5	105.7	107.7					
Aug.	105.6	81.8	105.7	108.4	108.4	104.9	108.9					
Sept.	103.7	77.8	104.6	110.1	108.2	103.7	109.0					
Oct.	102.8	69.4	106.0	109.8	107.2	102.8	107.5					
Nov.	100.8	72.5	103.6	108.4	107.4	100.5	109.5					
Dec.	102.7	67.3	105.5	105.4	108.4	100.1	108.4					
1988*												
Jan.	106.4	64.7	109.6	112.9	110.4	105.4	94.2					

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
1982	96.7	93.6	98.8	105.1	114.9	87.3	95.0	91.7
1983	97.6	94.4	108.1	107.7	123.0	105.1	100.9	94.3
1984	97.2	96.8	101.7	104.1	112.8	96.3	98.6	96.9
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986*	104.7	102.5	94.1	88.4	100.1	99.5	105.2	101.8
1986*								
Nov.	105.4	101.2	..	..	..	..	..	102.9
Dec.	101.6	103.1	..	..	..	..	..	103.3
III	106.0	102.5	99.2	89.6	109.5	106.0	107.4	103.2
IV	104.9	103.1	100.8	90.1	107.4	109.8	120.4	103.3
1987*								
Jan.	109.3	104.6	..	..	..	..	..	102.7
Feb.	108.8	106.4	..	..	..	..	..	104.5
March	108.5	105.5	..	..	..	..	..	106.0
April	115.9	111.3	..	..	..	..	..	106.0
May	111.0	106.9	..	..	..	..	..	106.5
June	114.6	112.2	..	..	..	..	..	105.8
July	110.8	107.9	..	..	..	..	..	105.8
Aug.	110.5	106.4	..	..	..	..	..	106.4
Sept.	110.6	109.0	..	..	..	..	..	106.4
Oct.	117.1	107.4	..	..	..	..	..	106.2
Nov.	113.9	108.9	..	..	..	..	..	106.1
I	108.9	105.5	93.3	89.1	91.7	94.3	112.4	104.4
II	113.8	110.1	93.1	96.5	106.9	100.0	122.0	106.1
III	110.7	107.7	89.9	78.3	101.1	100.6	100.5	106.2

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 mar- ket goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1983	84.3	84.0	85.2	86.4	84.0	85.8	88.8	90.8	90.0	93.5	90.8	91.3	90.7	89.2
1984	92.2	92.0	92.9	92.6	92.8	92.1	95.1	95.7	95.0	97.8	96.0	98.0	95.3	94.6
1985	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
1986¹	107.0	106.7	106.2	106.7	108.1	107.0	102.9	97.0	98.6	91.0	96.5	96.7	96.4	104.3
1987¹	114.5	114.4	113.5	115.9	114.0	116.2	107.2	97.9	100.2	89.3	97.3	98.1	96.8	109.1
1986¹														
IV	109.1	109.3	107.9	107.6	109.8	108.1	103.9	96.2	98.0	89.5	95.5	97.0	94.8	105.5
1987¹														
Feb.	..	..	..	..	..	..	105.7	97.0	99.0	89.8	96.4	97.4	95.9	106.9
March	..	..	..	..	..	..	106.3	97.0	99.2	89.2	96.4	97.1	96.1	108.0
April	..	..	..	..	..	..	106.8	97.4	99.6	89.3	96.7	97.6	96.2	108.7
May	..	..	..	..	..	..	106.9	97.5	99.9	89.0	96.8	97.8	96.3	108.9
June	..	..	..	..	..	..	107.3	97.7	100.0	89.2	96.9	97.8	96.4	109.1
July	..	..	..	..	..	..	107.2	98.2	100.4	90.3	97.4	98.2	97.0	109.4
Aug.	..	..	..	..	..	..	107.5	98.2	100.5	89.9	97.4	98.2	97.0	109.6
Sept.	..	..	..	..	..	..	108.1	98.4	100.8	89.4	97.9	98.7	97.5	109.9
Oct.	..	..	..	..	..	..	108.3	98.7	101.3	89.2	98.2	99.0	97.8	110.0
Nov.	..	..	..	..	..	..	108.1	98.7	101.6	88.3	98.4	99.4	97.9	110.8
Dec.	..	..	..	..	..	..	108.4	98.9	102.0	87.7	98.6	99.6	98.3	110.9
I	111.4	111.2	110.5	111.9	111.8	112.3	105.8	96.9	99.0	89.6	96.3	97.3	95.9	107.2
II	115.4	115.2	114.5	117.1	114.6	117.4	107.0	97.5	99.8	89.2	96.8	97.7	96.3	108.9
III	115.0	114.8	113.8	117.1	114.7	117.5	107.6	98.3	100.6	89.9	97.6	98.4	97.2	109.7
IV	116.4	116.6	115.1	117.3	114.9	117.8	108.3	98.8	101.6	88.4	98.4	99.2	98.0	110.6
1988¹														
Jan.	..	..	..	..	..	..	109.7	99.3	102.4	87.8	99.1	99.9	98.8	111.8
Feb.	..	..	..	..	..	..	110.0	99.6	102.7	87.9	99.5	100.1	99.2	111.9

¹Preliminary 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				Unemployed	Unemployment rate		
				Self-employed	Wage and salary earners	Agriculture and forestry	Industry	Construction	Service industries				
											1000 persons		
											%		
	1	2	3	4	5	6	7	8	9	10	11		
1983	68.7	2 527	2 390	386	2 004	303	606	183	1 298	138	5.5		
1984	68.8	2 546	2 414	378	2 035	294	600	183	1 337	133	5.2		
1985	69.2	2 567	2 437	361	2 076	280	597	178	1 380	130	5.0		
1986	69.1	2 568	2 431	359	2 071	266	589	185	1 391	138	5.4		
1987	68.6	2 554	2 423	372	2 051	251	569	184	1 419	130	5.1		
1987													
Jan.	68.8	2 560	2 416	374	2 042	262	566	189	1 399	145	5.7		
Feb.	68.7	2 554	2 427	374	2 053	251	576	185	1 415	127	5.0		
March	69.1	2 570	2 437	373	2 064	264	570	184	1 420	133	5.2		
April	68.9	2 564	2 437	370	2 066	259	573	187	1 417	128	5.0		
May	68.4	2 543	2 410	360	2 050	243	561	181	1 424	133	5.2		
June	68.4	2 544	2 418	370	2 048	250	567	189	1 412	126	5.0		
July	68.5	2 548	2 422	370	2 052	245	585	182	1 410	126	4.9		
Aug.	69.1	2 569	2 441	366	2 075	247	571	183	1 440	128	5.0		
Sept.	68.5	2 548	2 420	365	2 055	240	573	176	1 430	129	5.1		
Oct.	68.5	2 551	2 422	378	2 045	254	575	184	1 408	128	5.0		
Nov.	68.4	2 548	2 418	382	2 035	251	557	180	1 430	130	5.1		
Dec.	68.3	2 545	2 414	382	2 032	249	557	182	1 425	131	5.1		
1988													
Jan.	68.7	2 559	2 439	388	2 051	252	578	195	1 414	120	4.7		

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)	Borrowing	Total revenue (7+8)	Con-sump-tion	Trans-fers and subsidies	Of which:	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1982	17160	34665	360	6997	59182	1168	60350	8165	68515	18163	35444	13601	21129
1983	19565	36183	531	8284	64563	1854	66416	11378	77794	20984	39411	15717	22817
1984	22526	42737	598	9711	75572	1894	77466	10752	88218	22155	44333	18444	24836
1985	25750	47578	546	10415	84290	2071	86361	11189	97550	24835	49269	21183	26866
1986	28079	51733	323	11640	91774	2209	93983	14744	108727	26354	52845	23215	28131
1986													
Nov.	2349	4370	17	976	7711	288	7999	747	8746	2233	4958	2186	2629
Dec.	2947	5777	30	806	9560	368	9927	1673	11600	2426	5259	2006	3012
1987													
Jan.	1434	3163	23	906	5526	46	5571	2853	8424	2424	4584	1876	2600
Feb.	2023	5181	29	791	8024	88	8112	260	8373	2226	5049	1941	2920
March	2671	4132	17	1172	7993	79	8072	2530	10601	2268	4555	2196	2141
April	2957	4632	15	1289	8893	59	8952	335	9288	2313	5172	2464	2476
May	2450	3390	84	1014	6938	372	7310	2482	9792	2440	5763	2131	3441
June	2561	5243	28	1092	8925	191	9115	455	9570	2468	4636	2630	1910
July	2941	5335	49	603	8929	95	9023	619	9642	2923	4775	2148	2434
Aug.	2935	4880	37	1209	9060	343	9402	1143	10546	2331	5003	2138	2729
Sept.	2461	4237	40	968	7706	144	7850	619	8470	2424	4341	2131	2102
Oct.	2480	4360	38	1025	7904	119	8023	2295	10318	2505	4713	2227	2296
Nov.	2545	5465	29	1024	9062	266	9329	2397	11726	2366	5746	2336	3306

During period	Expenditure							Financial balance			
	Fixed investment	Other expenditure	Expenditure before financial transactions (10+11+14+15)	Lending and other financial investment	Expenditure before redemptions of state debt (16+17)	Redemptions of state debt	Total expenditure, (18+19)	Revenue surplus (5-16)	Net borrowing requirement (7-18)	Gross borrowing requirement (7-20)	Cash surplus (9-20)
	14	15	16	17	18	19	20	21	22	23	24
1982	4964	2478	61049	4457	65506	2751	68257	-1867	-5156	-7907	258
1983	5454	4095	69944	4999	74943	3939	78881	-5381	-8527	-12465	-1088
1984	5455	4220	76162	4717	80878	5552	86430	-590	-3412	-8964	1788
1985	5700	4936	84739	4982	89722	7682	97404	-449	-3361	-11043	145
1986	6111	5058	90368	4913	95281	10541	105822	1406	-1298	-11839	2905
1986											
Nov.	534	196	7921	392	8313	1163	9476	-210	-314	-1477	-730
Dec.	747	400	8831	557	9388	121	9509	728	539	418	2091
1987											
Jan.	434	771	8213	268	8482	1323	9805	-2688	-2910	-4233	-1381
Feb.	452	418	8144	359	8503	764	9267	-120	-390	-1154	-894
March	597	697	8118	492	8610	1886	10497	-125	-539	-2425	104
April	526	684	8695	404	9098	871	9969	199	-146	-1017	-682
May	534	678	9416	469	9885	820	10705	-2478	-2575	-3395	-913
June	640	255	7999	561	8560	1314	9874	925	555	-759	-304
July	643	284	8625	752	9377	190	9566	304	-353	-543	76
Aug.	542	294	8170	479	8649	1410	10059	890	754	-657	487
Sept.	648	137	7551	552	8102	320	8423	156	-252	-572	47
Oct.	644	321	8184	446	8629	620	9249	-280	-606	-1226	1069
Nov.	550	199	8861	407	9267	252	9519	202	62	-190	2207

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 Matured certificates of deposit, net (Column 3) = matured bank certificates of deposit held by the Bank of Finland - matured certificates of deposit issued by the Bank of Finland.

Table 2.3 Bank CDs held by the Bank of Finland (Column 2) include term credits from December 1986 to July 1987. Holdings of CDs issued by the Bank of Finland (Column 5) include term liabilities from February to July 1987.

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. Long-term unregulated market rate (Columns 6 and 7): The long-term unregulated market rate is calculated by the Bank of Finland as the monthly average of the offered rates for taxable and fixed-rate bonds quoted by the five largest banks.

Table 3.2 The rates shown are based on the lending rates quoted for the respective currencies in the Euro-market.

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 averages of monthly observations. *Deposits.* The rates of interest applied to deposit accounts (Columns 6-8) 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 9) 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 10) 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 *Rates at issue* on bonds and debentures (Columns 1 and 2) 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. *Secondary market rates.* The rate of interest for taxable public issues (Column 3) 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). The Bank of Finland calculates the yields once a week on the basis of the trading quotations of the Helsinki Stock Exchange for loans with a remaining maturity of between 3 and 6 years. The rate of interest for taxfree public issues (Column 4) is the yield on fixed-rate public bonds with a remaining maturity of between 4 and 5 years. Monthly observations are the averages of weekly observations and annual observations the averages of monthly observations.

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 12 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 12 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 7.7 billion at the end of 1986.

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 Sys-

tem 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. 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 remunerations 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.

On January 1, 1988, the new international harmonized commodity description and coding system was introduced in the compilation of the official foreign trade statistics. Because of the changeover, the trade value figures in the customs statistics are exceptionally high for December 1987 and excep-

tionally low for January 1988 as compared with the old system. For the sake of comparability, the customs statistics figures for December 1987 and January 1988 have been adjusted in the Bulletin to comply with the old system. For this reason the total trade values for 1987 as a whole also differ from the customs statistics. The Bulletin follows the same practice as in the balance of payments statistics. Adjustments have been made to all value and volume figures for exports and imports. Unit values correspond to those of the customs statistics. The adjustments have been made by the Economics Department of the Bank of Finland.

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.

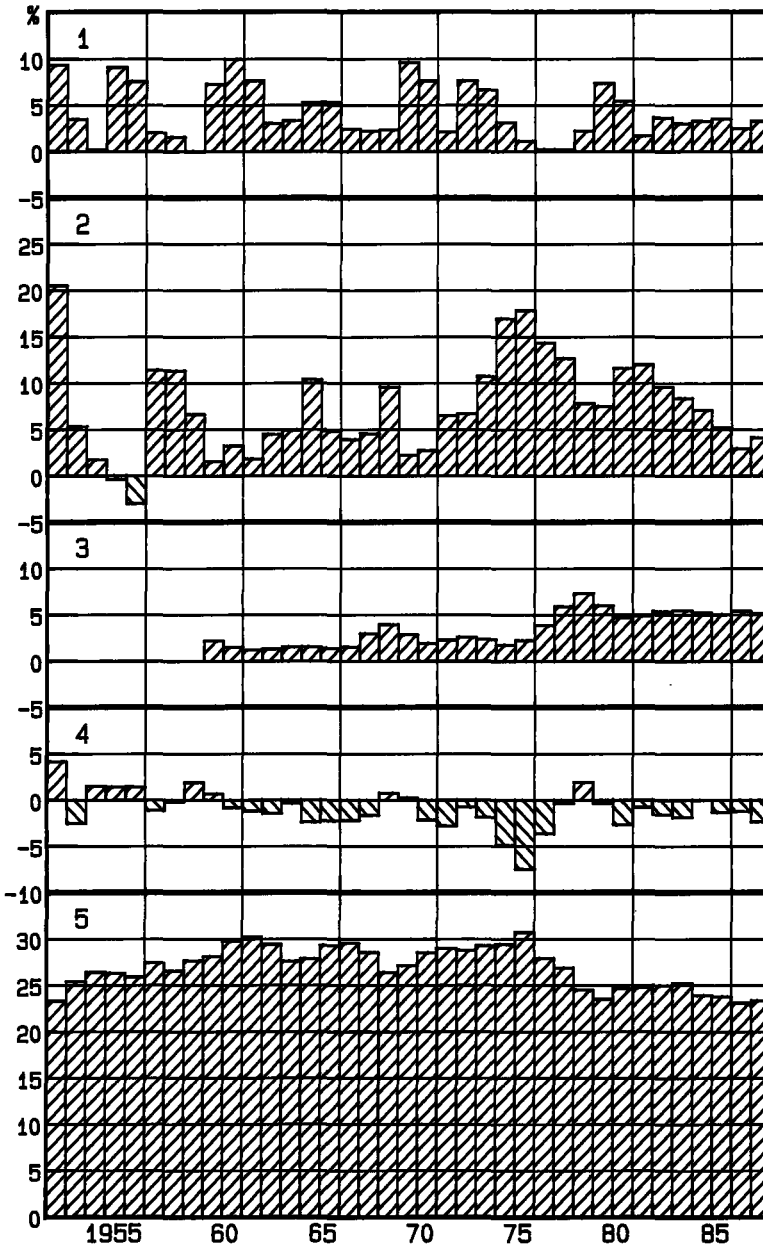
Table 8.3 The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various industries.

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.

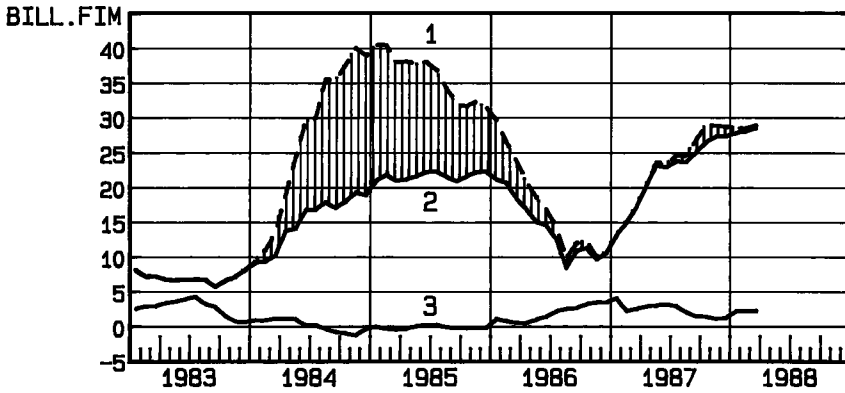
1. Long-term indicators	S28
2. The Bank of Finland's foreign exchange reserves and forward position	S29
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17. Money supply	S34
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19. Central government debt	S34
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27. Foreign trade: prices and terms of trade	S38
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30. Production	S39
31. Fixed investment	S39
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33. Prices and wages	S40
34. Central government finances	S41

1. LONG-TERM INDICATORS



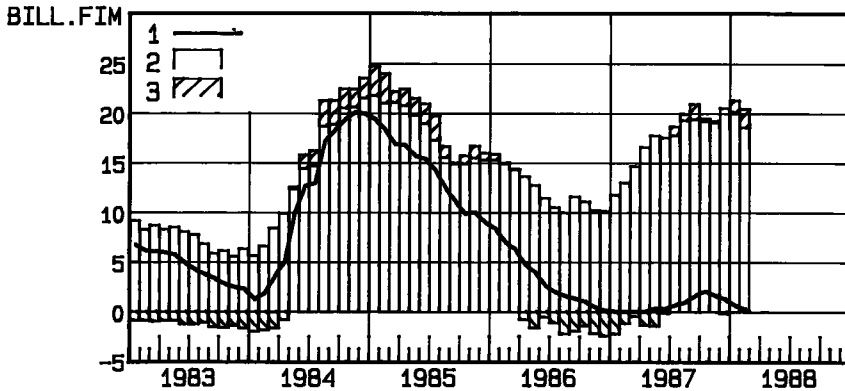
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

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



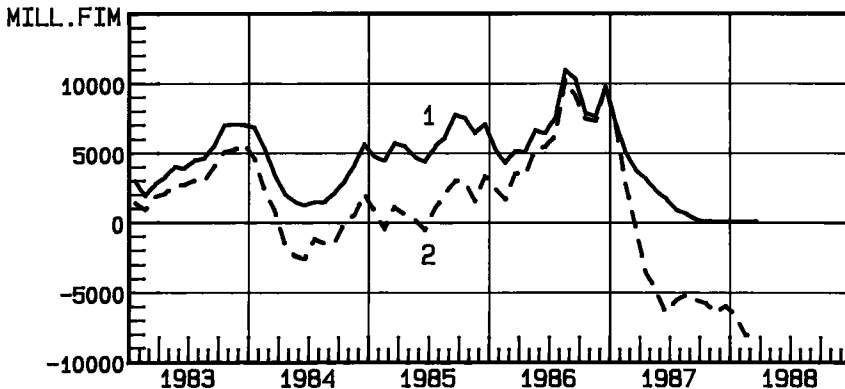
1. Convertible foreign exchange reserves plus forward position
2. Convertible foreign exchange reserves
3. Tied currencies

3. FORWARD MARKET



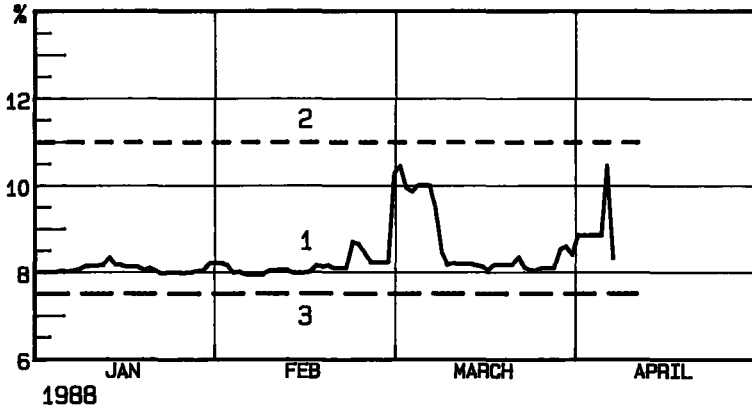
1. Forward exchange purchased by the Bank of Finland from banks
2. Forward exchange sold by companies to banks
3. Forward exchange sold by foreign banks to banks

4. BANKS' CENTRAL BANK POSITION



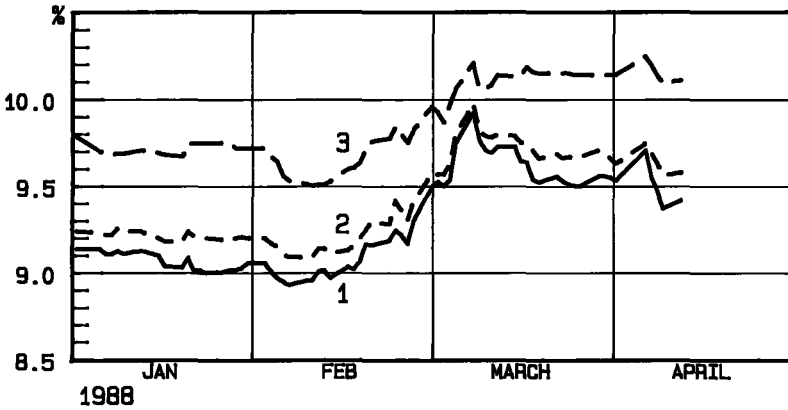
1. Gross debt to the Bank of Finland
2. Net debt to the Bank of Finland (excl. cash reserve deposits)

5. OVERNIGHT RATES



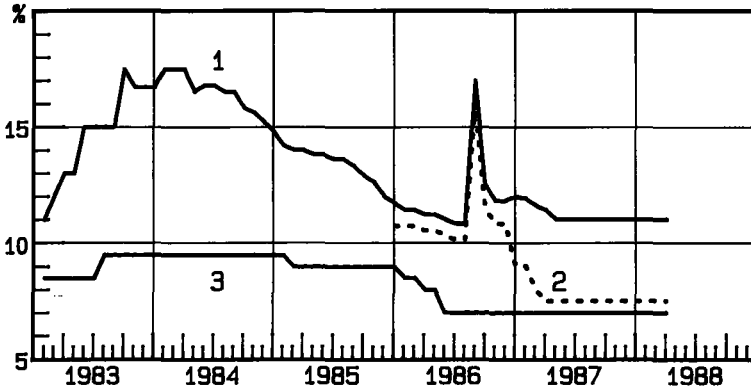
- 1. Inter-bank overnight rate
 - 2. Call money credit rate
 - 3. Call money deposit rate
- Daily observations

6. HELIBOR RATES OF INTEREST



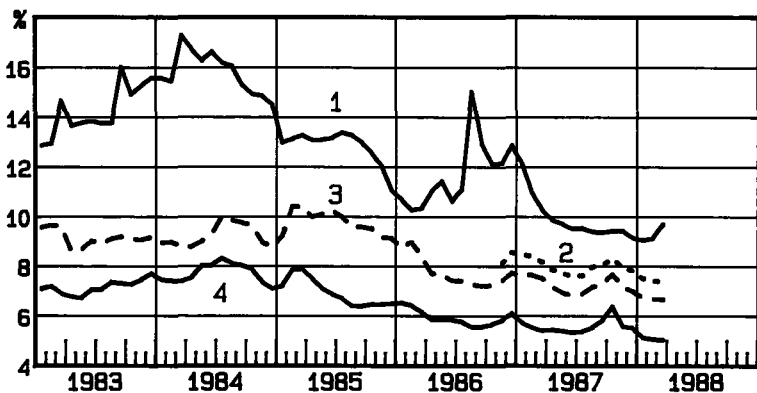
- 1. 1-month HELIBOR
- 2. 3-month HELIBOR
- 3. 12-month HELIBOR

7. RATES OF INTEREST APPLIED BY THE BANK OF FINLAND



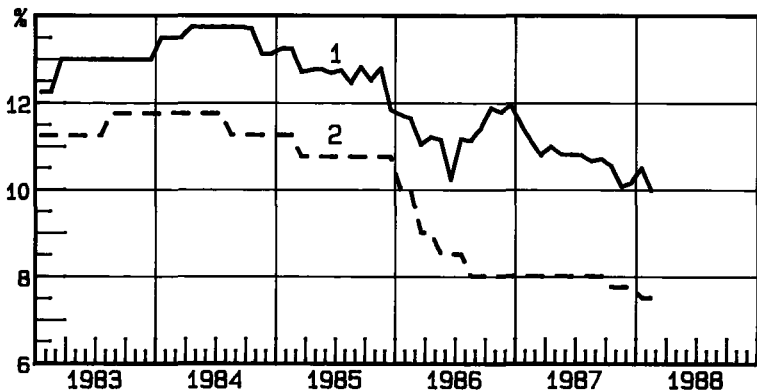
- 1. Call money credit rate
 - 2. Call money deposit rate
 - 3. Base rate
- End-of-month observations

8. 3-MONTH COVERED EURODOLLAR RATE AND 3-MONTH CURRENCY BASKET RATES



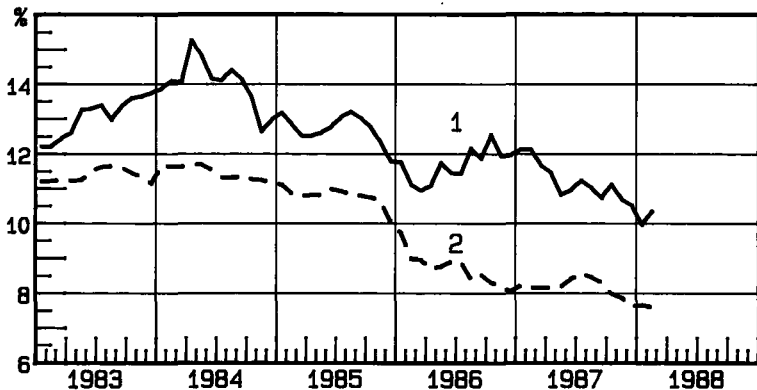
- 1. Covered Eurodollar rate
- 2. 12-currency basket rate
- 3. 8-currency basket rate
- 4. 3-currency basket rate

9. RATES ON NEW ISSUES OF BONDS AND DEBENTURES



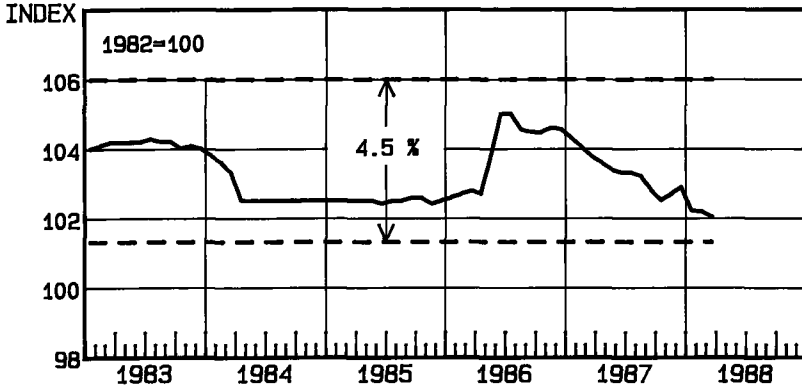
- 1. Rates on new fixed-rate debentures
- 2. Rates on new 10-year tax-free government bonds

10. SECONDARY MARKET RATES ON BONDS AND DEBENTURES



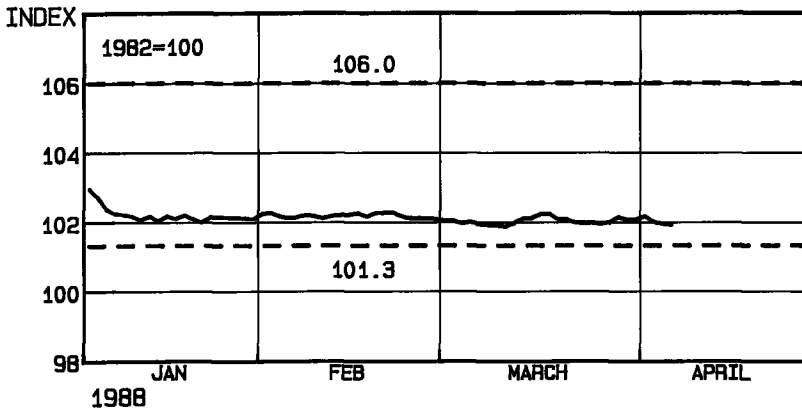
- 1. Secondary market rate on (3-6 year) fixed-rate debentures
- 2. Secondary market rate on (9-10 year) taxfree government bonds

11. BANK OF FINLAND CURRENCY INDEX



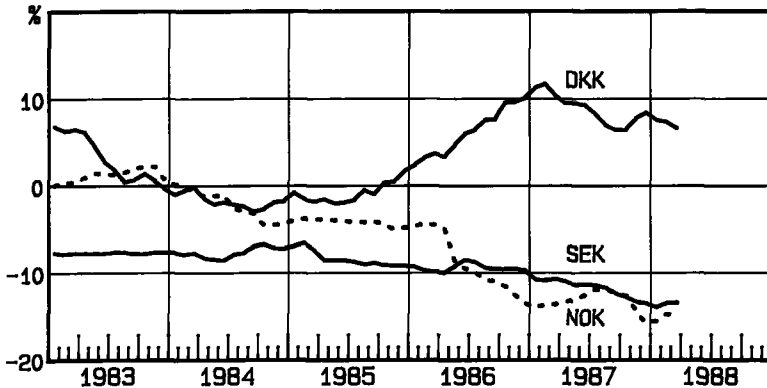
4.5 % = fluctuation range of the index
Monthly averages

12. BANK OF FINLAND CURRENCY INDEX



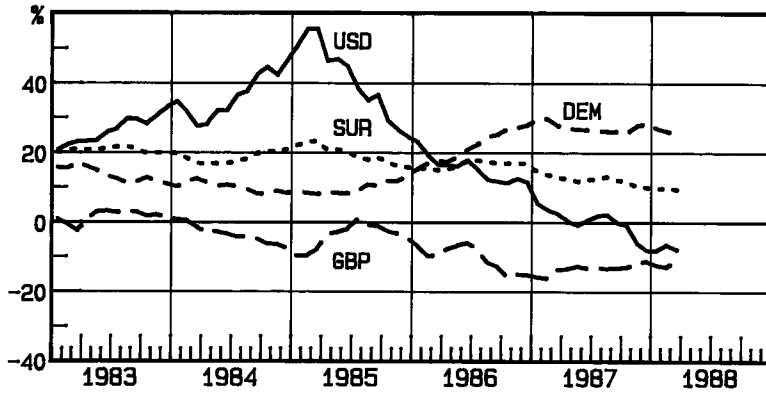
Daily observations

13. CHANGES IN THE EXCHANGE RATES OF SELECTED NORDIC CURRENCIES



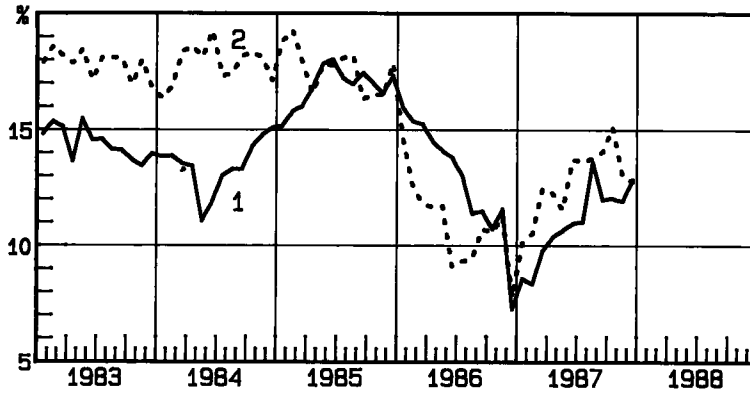
Monthly changes in markka selling rates calculated from the average rates for January 1982

14. CHANGES IN THE EXCHANGE RATES OF SELECTED MAJOR CURRENCIES



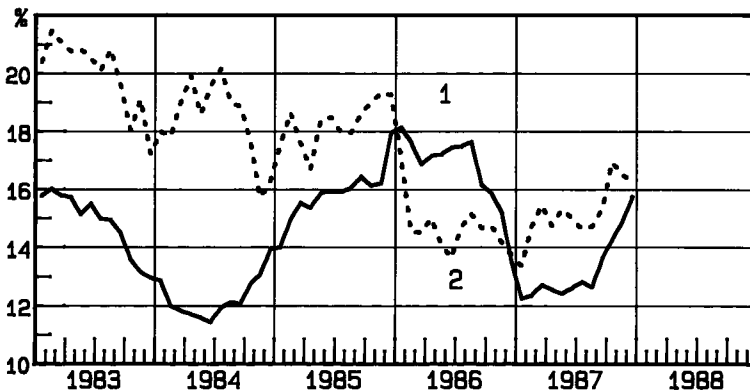
Monthly changes in markka selling rates calculated from the average rates for January 1982

15. BANK DEPOSITS FROM THE PUBLIC



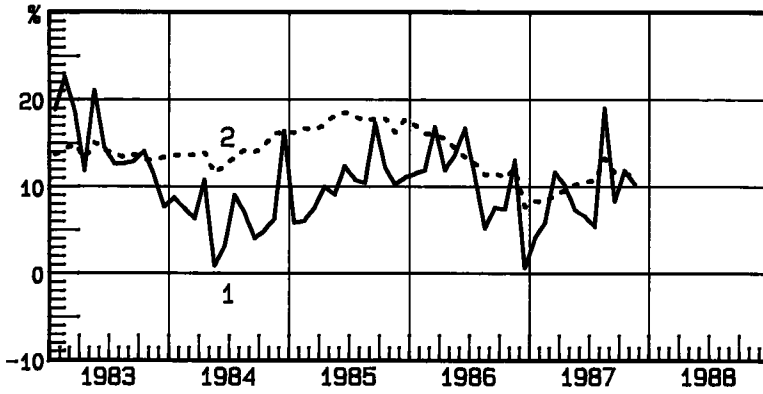
1. Regulated deposits
2. Total deposits
Change from the corresponding month of the previous year, per cent

16. BANK LENDING TO THE PUBLIC



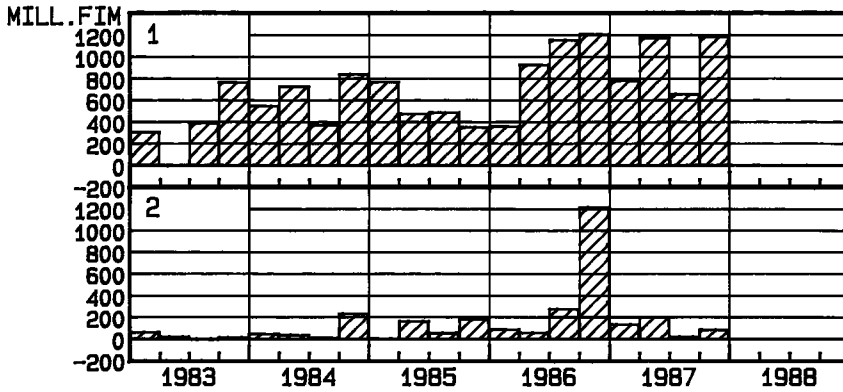
1. Markka lending
2. Total lending
Change from the corresponding month of the previous year, per cent

17. MONEY SUPPLY



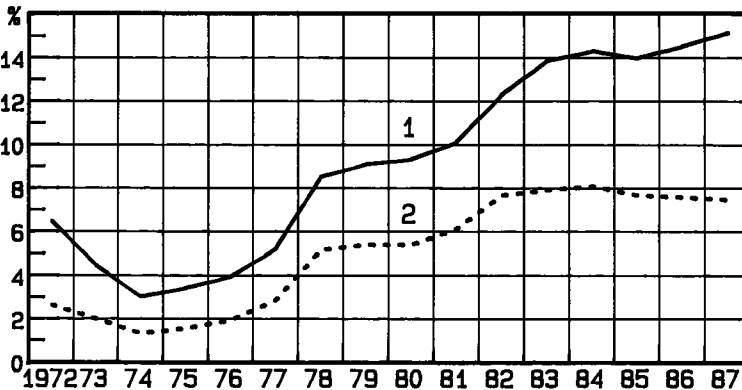
1. Narrow money supply (M1)
 2. Broad money supply (M2)
- Change from the corresponding month of the previous year, per cent

18. DIRECT INVESTMENT



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

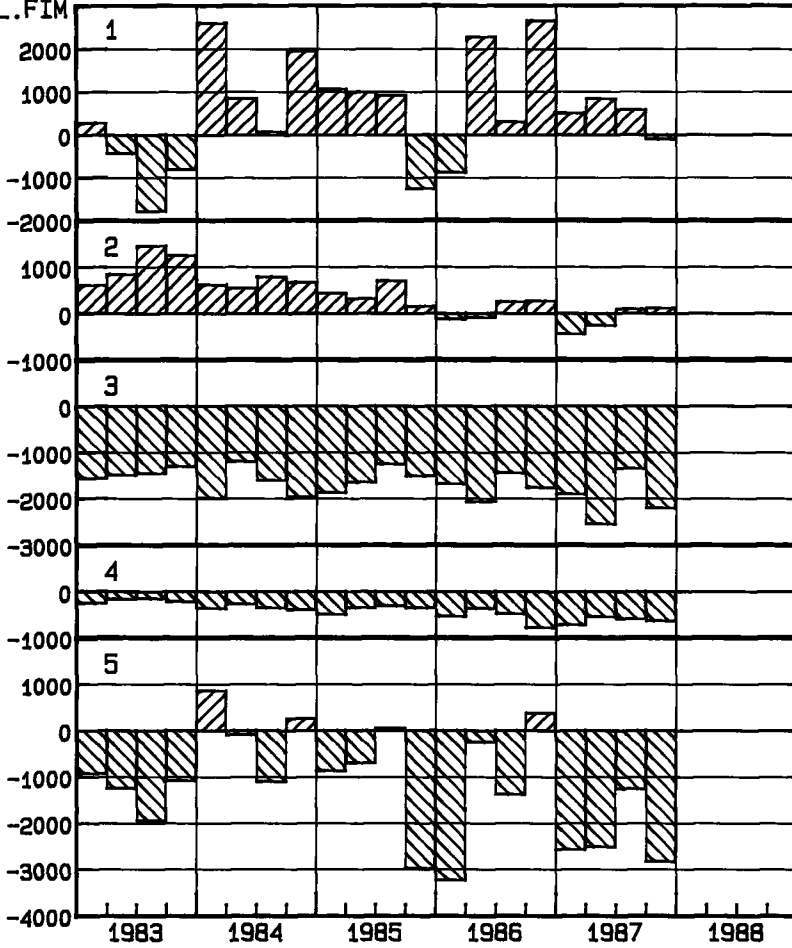
19. CENTRAL GOVERNMENT DEBT



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

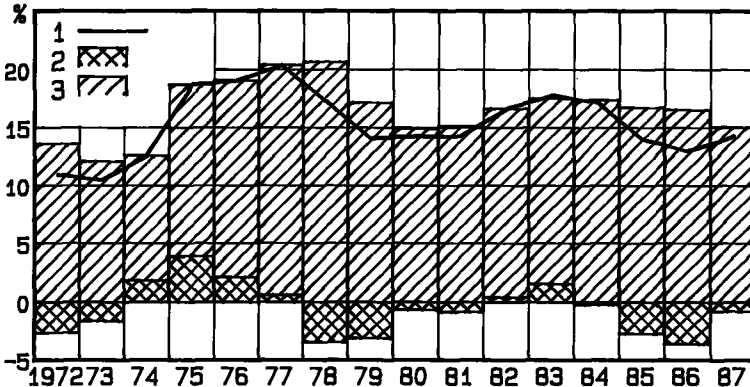
20. CURRENT ACCOUNT

MILL. FIM



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

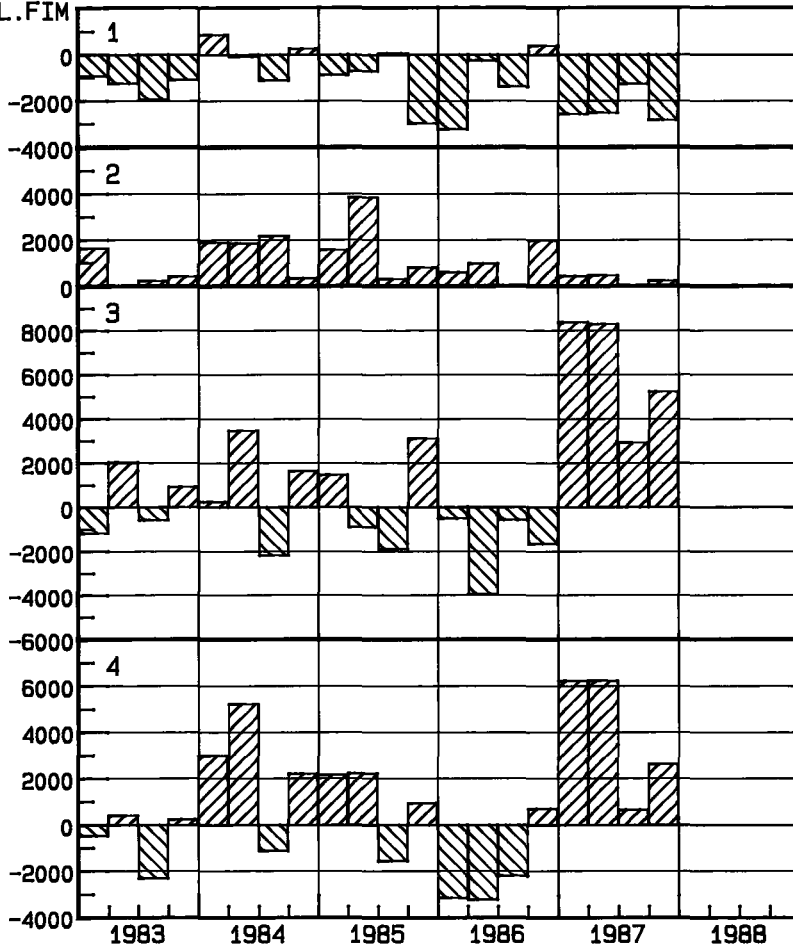
21. FOREIGN DEBT



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

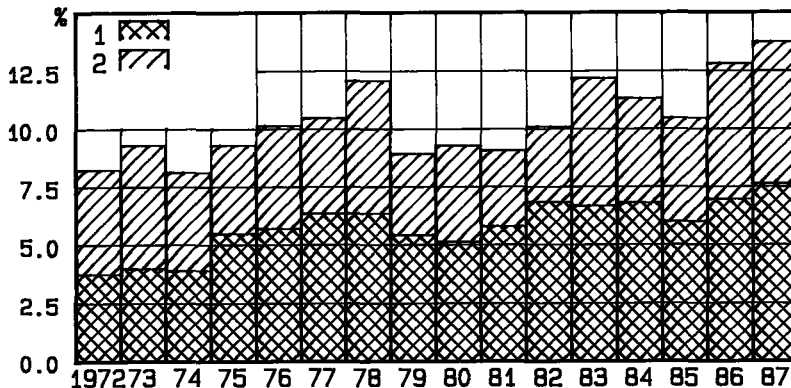
22. BALANCE OF PAYMENTS

MILL. FIM



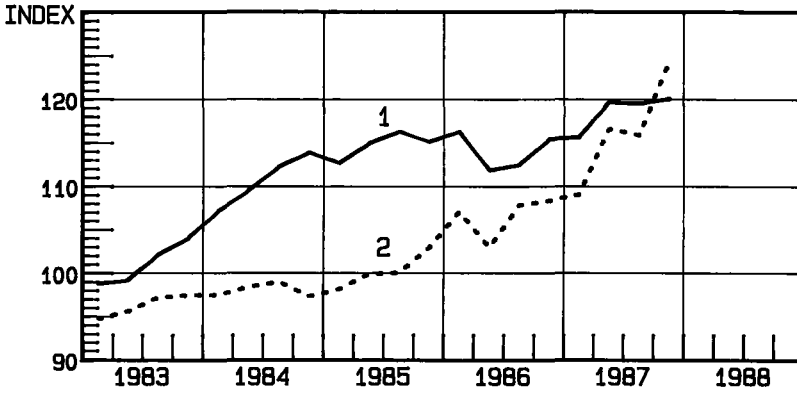
1. Current account
2. Long-term capital account
3. Short-term capital account
4. Overall balance = change in the foreign exchange reserves of the Bank of Finland

23. DEBT SERVICE RATIO



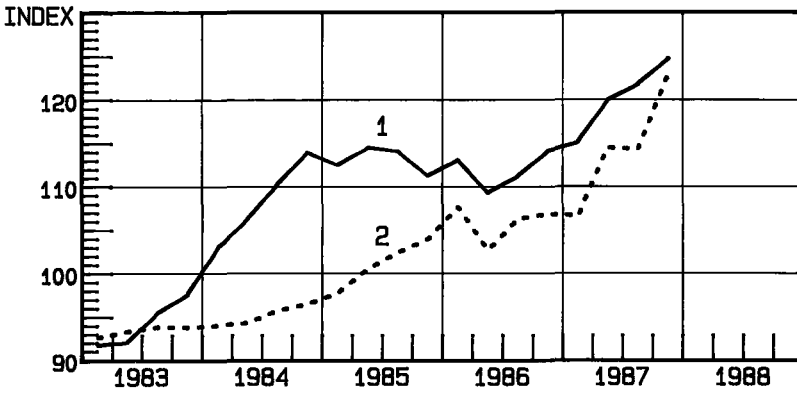
1. Interest payments
 2. Redemptions
- As a percentage of current account earnings

24. FOREIGN TRADE



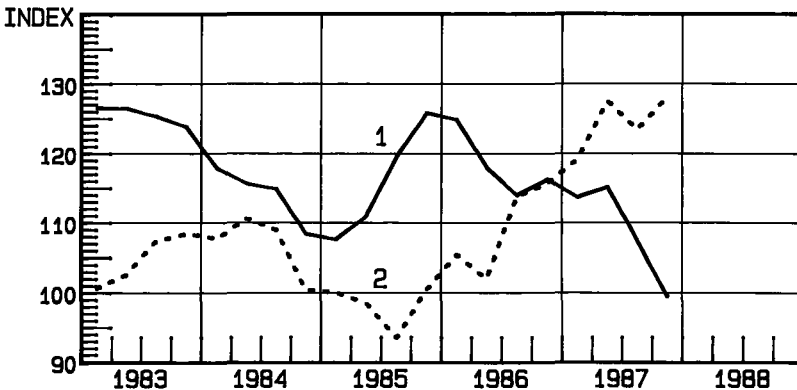
1. Total exports
2. Total imports
Volume index, 1980 = 100, four-quarter moving average shown as at the last quarter

25. WESTERN TRADE



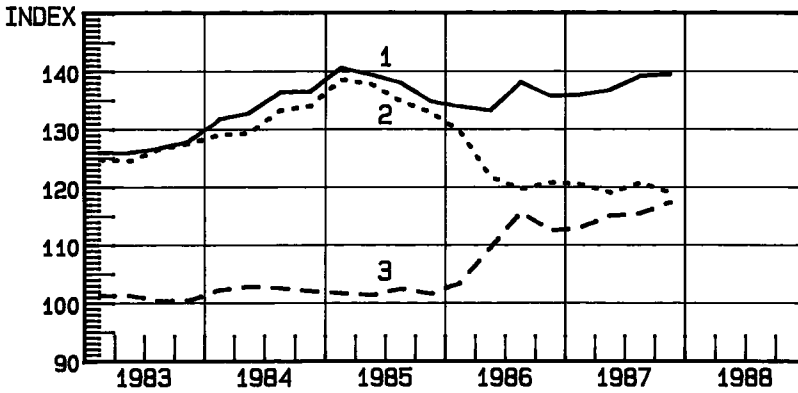
1. Western exports
2. Western imports
Volume index, 1980 = 100, four-quarter moving average shown as at the last quarter

26. BILATERAL TRADE



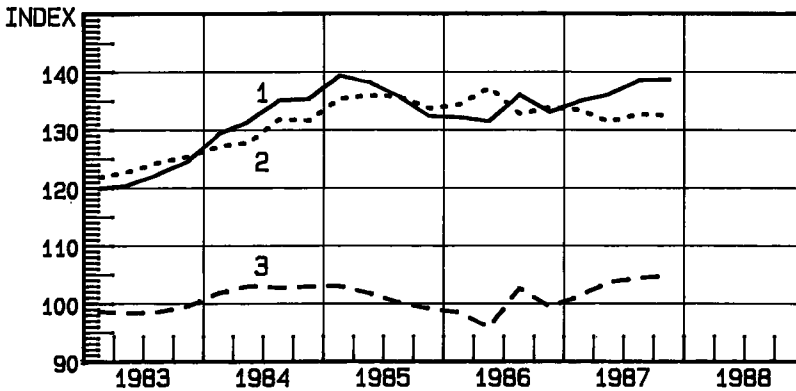
1. Bilateral exports
2. Bilateral imports
Volume index, 1980 = 100, four-quarter moving average shown as at the last quarter

27. FOREIGN TRADE: PRICES AND TERMS OF TRADE



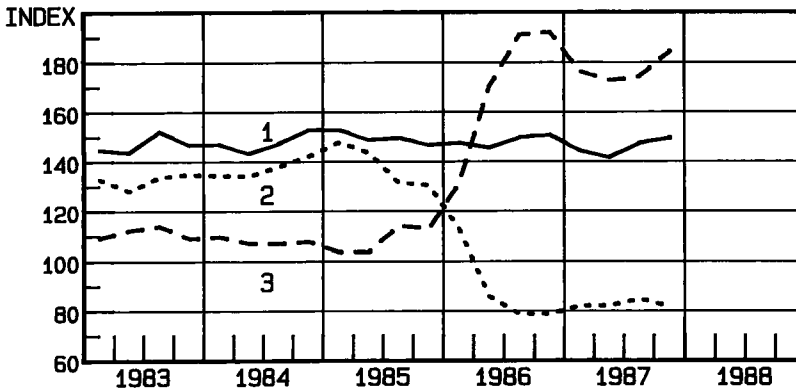
- 1. Unit value index of exports
 - 2. Unit value index of imports
 - 3. Terms of trade
- 1980 = 100

28. WESTERN TRADE: PRICES AND TERMS OF TRADE



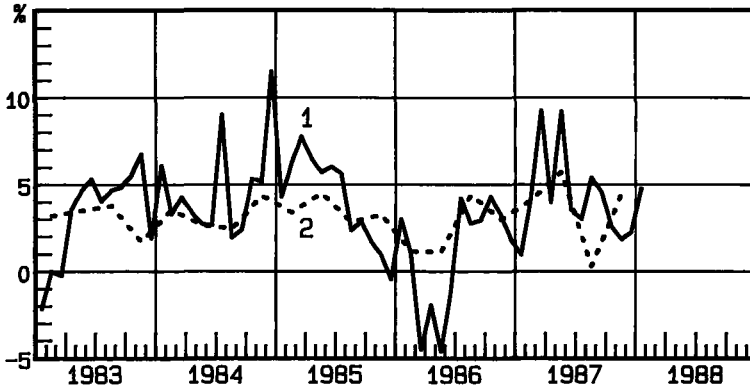
- 1. Unit value index of western exports
 - 2. Unit value index of western imports
 - 3. Terms of trade in western trade
- 1980 = 100

29. BILATERAL TRADE: PRICES AND TERMS OF TRADE



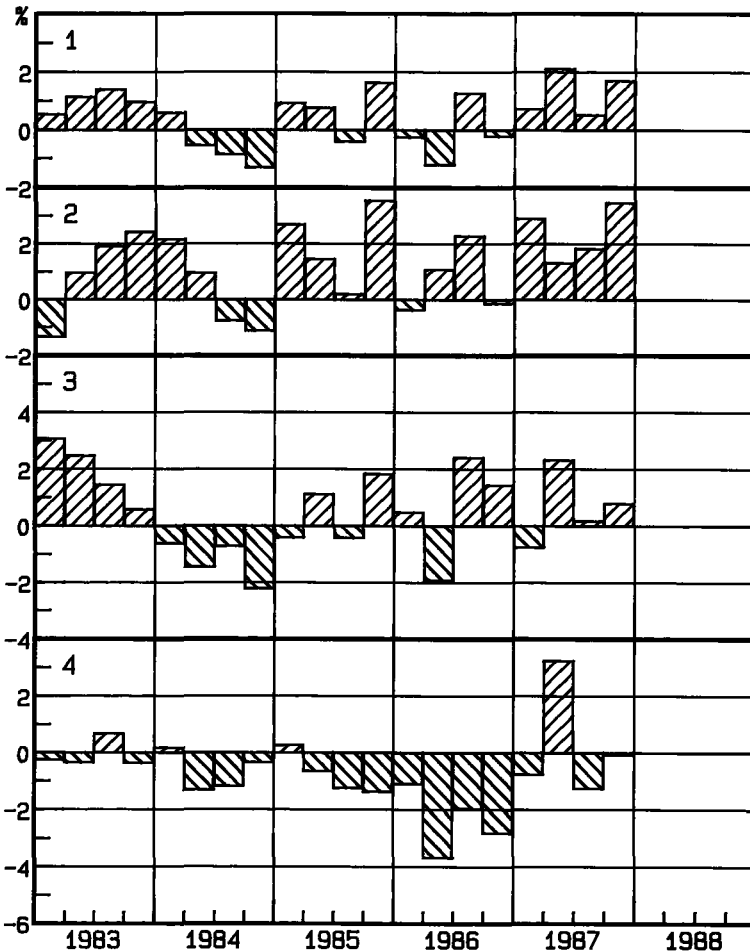
- 1. Unit value index of bilateral exports
 - 2. Unit value index of bilateral imports
 - 3. Terms of trade in bilateral trade
- 1980 = 100

30. PRODUCTION



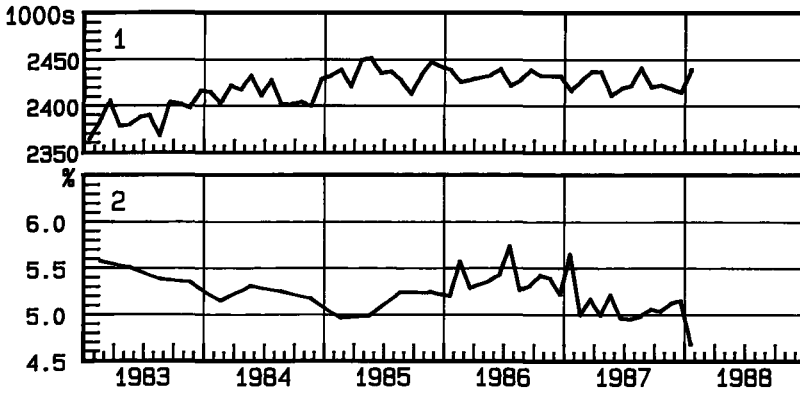
1. Industrial production, change in volume from the corresponding month of the previous year, per cent
2. GDP, change in volume from the corresponding quarter of the previous year, per cent

31. FIXED INVESTMENT



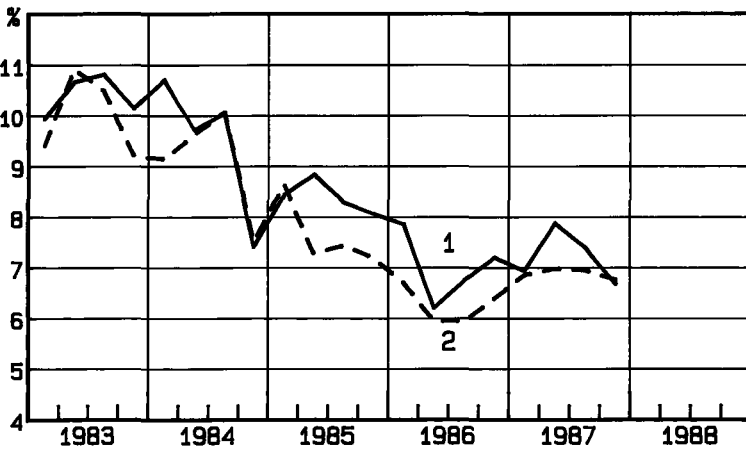
1. Total fixed investment
 2. Investment in machinery and equipment
 3. Building investment, excl. residential buildings
 4. Residential buildings
- Volume changes calculated from four-quarter moving totals and shown as at the last quarter, per cent

32. EMPLOYMENT AND THE UNEMPLOYMENT RATE

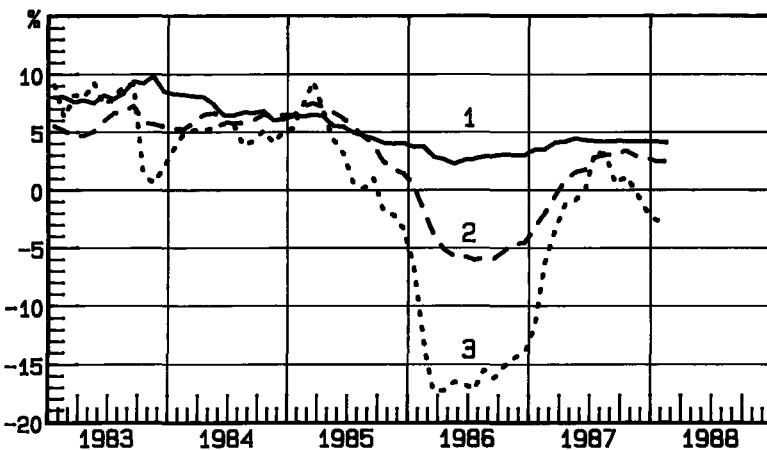


1. Employment, 1000 persons
2. Unemployment rate, per cent

33. PRICES AND WAGES

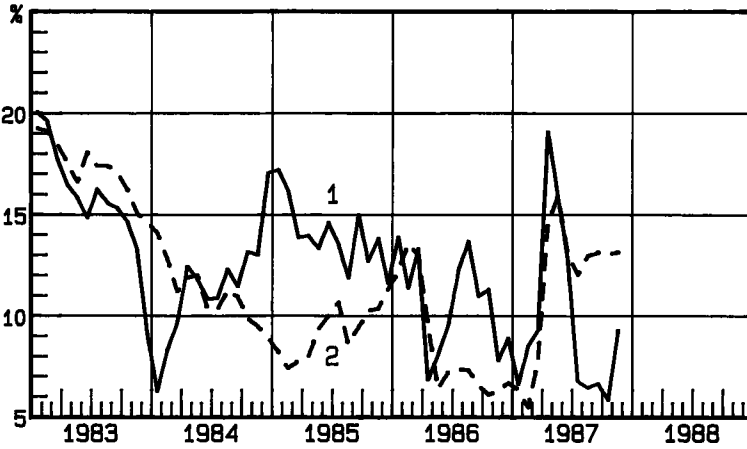


1. Index of wage and salary earnings, all wage and salary earners
 2. Index of wage and salary earnings, manufacturing workers
- Change from the corresponding quarter of the previous year, per cent



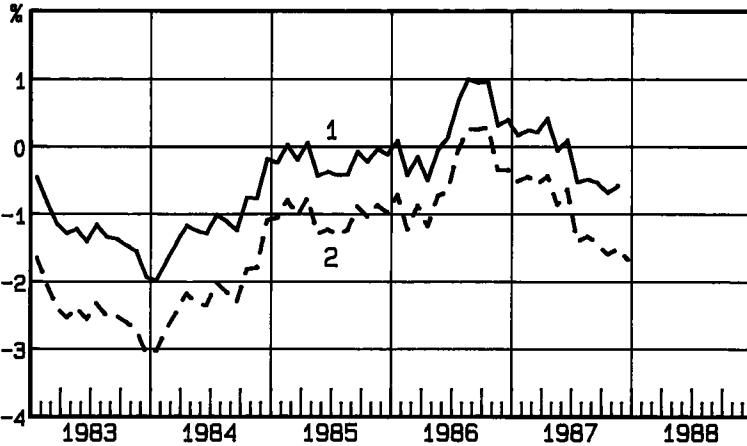
1. Consumer price index
 2. Wholesale price index
 3. Import price index
- Change from the corresponding month of the previous year

34. 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

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