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The Finnish Money and Capital Markets:
Developments and Main Features

Financial Options and Futures Markets
in Finland

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 by Markku Malkamäki and Heikki Solttila 3

Financial Options and Futures Markets in Finland

 by Esa Jokivuolle and Yrjö Koskinen 9

 Items: Finnish direct investment abroad in 1988
 Publication of the Bank of Finland 15

 Monetary and foreign exchange policy measures
 from April 1989 to March 1990 16

 Finland in brief 20

 Statistics S1

 Charts S27

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THE FINNISH MONEY AND CAPITAL MARKETS: DEVELOPMENTS AND MAIN FEATURES

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The Finnish money and capital markets expanded rapidly in the 1980s, the value of outstanding financial assets rising from about FIM 100 billion to about FIM 550 billion. Over the same period, the relative share of bank deposits fell by a half, from 80 per cent to about 40 per cent (Chart 1).

The initial spur to the development of the financial markets in Finland was provided by an increase in the liquidity of large companies in the early 1980s. High yields could be earned on these funds by lending them to other firms at market rates of interest. Hence, the proportion of market-rate assets in total short-term financial assets increased.

The development of the financial markets was also stimulated by the internationalization of financial markets worldwide and deregulation of both capital movements and the domestic credit market. With the development of the money market, the capital market also began to expand. Negotiable securities now account for about half the total value of outstanding financial assets, compared with one-fifth a decade ago.

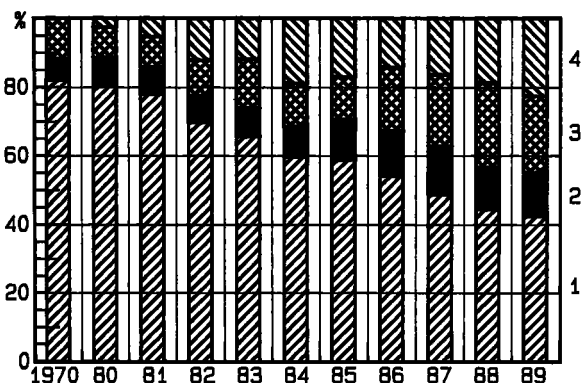
THE BANKS' ROLE IN THE FINNISH MONEY MARKET

As financial transactions on market terms became more widespread, banks started to engage in short-term financing, initially in traditional non-

negotiable instruments. This chiefly took the form of special deposits, intermediation of loans through their trust departments and repurchase agreements. Transactions in the forward exchange market also increased; besides offering companies a means of hedging their exchange rate risks, forward exchange sales brought them interest income at market-related rates as well as providing banks with part of their funding in the form of forward cover loans.

At the beginning of 1987, certificates of deposit (CDs) were exempted from the cash reserve requirement. Furthermore, all CDs with a maturity of less than a year issued by the five biggest banks, the so-called HELIBOR banks were henceforth treated as homogeneous instruments. As a consequence, the market in CDs and similar negotiable instruments started to expand rapidly. In addition to CDs, negotiable instruments currently comprise commercial paper, local authority paper and Treasury bills. The ending of credit rationing and the fact that the growth of deposits was slower than lending also contributed to this development. Bank funding in the unregulated money market grew at the expense of ordinary deposit-taking. By end-1989, deposits accounted for just over 60 per cent of banks' markka funding (Table). Moreover, a growing proportion of deposits were taxable and high-yielding.

CHART 1.
PERCENTAGE BREAKDOWN OF FINANCIAL ASSETS



1. Bank deposits
2. Bonds (stock of public issues)
3. Shares (market value of listed companies)
4. Money market investments*

* Money market claims held by the public: certificates of deposit, commercial paper, Treasury bills, local authority paper, trust department investments, banks' special deposits, companies' sales of forward exchange to banks, net

TABLE 1
BANKS' MARKKA FUNDING AND
USE OF FUNDS AT THE END OF
1989, BILLION FIM

FUNDING	
Deposits from the public	241.4
Special funding (incl. interbank loans)	29.7
Certificates of deposit	79.1
Forward cover	14.9
TOTAL	365.1
USE OF FUNDS	
Markka lending	275.2
— linked to market rates	71.7
Interbank investments	25.6
Bonds and commercial paper	21.5
Cash reserve deposits	25.5
TOTAL	347.8
INTERMEDIATION OF FINANCE	
Commercial paper	18.9
Trust department loans	21.6
TOTAL	40.5

The major part of bank credit is still granted in the form of traditional loans, even though their share has fallen. The partial shift in firms' borrowing from bank loans to negotiable credit instruments (bonds, debentures and commercial paper) started in cooperation with the banks as a means of circumventing lending rate controls in the financial markets. But even after deregulation, the banks' position in the financial markets has not diminished. This is partly due to the dominant role played by banks in arranging finance.

More than one-quarter of the credit granted by banks (incl. finance companies) to the corporate sector is based on securities, if commercial paper and bonds held as investments in banks' portfolios are included. In recent years, the corporate sector's interest in markka loans has been rather lukewarm, as foreign currency loans have been considerably more attractive as far as interest rates are concerned, particularly since there have been no expectations of a major fall in the external value of the markka.

¹ Interbank investments and commercial paper include only holdings by commercial banks. Bonds include only those held as investments in banks' portfolios.

By contrast, households' demand for markka loans has been buoyant in the past few years. The release of pent-up demand following the ending of credit rationing and favourable income expectations engendered by vigorous economic growth have resulted in households becoming more willing to incur debt. At the same time, households have become more exposed to interest rate risk than before, as about one-third of all new markka loans now carry interest rates linked to market rates. This is quite natural in a situation where banks have had to raise part of their funds in the money market. Nonetheless, it seems evident that the majority of loans will continue to be linked to the base rate in the years ahead, despite the fact that the base rate is likely to play a lesser role.

THE PUBLIC'S ROLE IN THE MONEY MARKET

At the end of 1986, investments by the public in the money market amounted to about FIM 43 billion, some 10

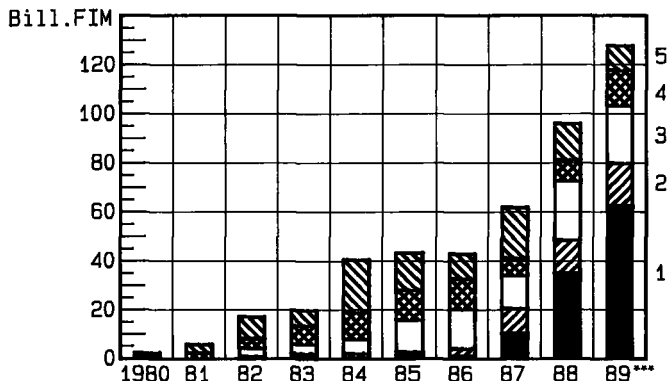
per cent of which was in negotiable instruments. By 1989, the public's money market investments had risen threefold to about FIM 126 billion, with negotiable instruments accounting for FIM 80 billion (Chart 2). Thus, there has been a substantial fall in the relative share of non-negotiable instruments.

Bank CDs have become the key instrument in the money market.² This is partly due to the predominant role played by banks in financial intermediation and to the introduction of open market operations in CDs by the Bank of Finland. At the end of 1989, outstanding bank CDs totalled FIM 79.1 billion, of which holdings by the public (incl. the central government) accounted for about 35 per cent and holdings by banks and the central bank for the rest.

In recent years, the importance of commercial paper has also increased. These instruments have frequently been issued by subsidiaries of

² See the article by Jarmo Kontulainen in the March 1990 issue of the Bulletin.

CHART 2.
MONEY MARKET INVESTMENTS BY THE PUBLIC*,
BILLION FIM



1. Bank CDs**
2. Commercial paper, Treasury bills and local authority paper**
3. Trust department investments (incl. repo sales)
4. Banks' special deposits (excl. CDs)
5. Companies' sales of forward exchange to banks, net

* It is assumed that the public has no holdings of CDs issued by the Bank of Finland

** Excl. holdings by banks

*** End-November, 1989

banks in the financial sector. At the end of 1989, companies had programmes totalling FIM 27.8 billion, of which banks' subsidiaries accounted for about 60 per cent. Banks' holdings of commercial paper amounted to about FIM 10 billion.

So far, there have been two main reasons preventing the more widespread use of commercial paper. First, foreign currency loans have represented a more attractive alternative to companies because they have lower rates of interest than corresponding market-rate markka loans. Second, the lack of credit rating agencies in Finland has made evaluation of companies' risks and the pricing of commercial paper difficult, which has consequently retarded the evolution of this market. At present, commercial paper is used mainly by large, reputable companies which can raise short-term finance directly in the market at almost the same rates as banks pay on their CDs. In these circumstances, banks are unable to price their loans on competitive terms because of the cash reserve requirement, stamp duty and capital adequacy requirements. The short-term financing of small companies consists mainly of trust department loans, which are exempt from stamp duty, and overdraft facilities.

The use of Treasury bills and local authority paper has not become as prevalent as expected. As regards the former, the central government has had little need for short-term borrowing owing to its substantial budget surplus.

Among the reasons preventing the more widespread use of local authority paper are the local authorities' unfamiliarity with this new instrument and the fact that their financing requirements are primarily long term. Moreover, local authorities have been able to raise loans through reciprocal arrangements with banks on

more attractive terms than those available on local authority paper. In addition, stricter capital adequacy requirements for banks have enhanced the position of the public sector in the credit market. The rates of interest paid by local authorities are also influenced by the fact that mortgage credit institutions, which are a major source of finance for the local government sector, are allowed to issue taxfree bonds.

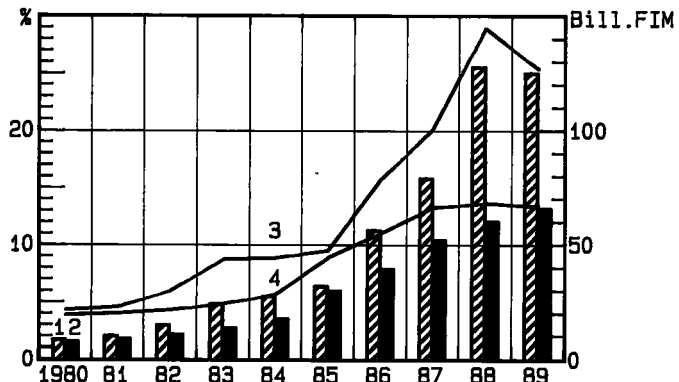
Derivative markets have sprung up in Finland in the past few years. By far the most business is done in forward rate agreements (FRAs), since they are used on a large scale in the interbank market. In addition, it is possible for non-bank enterprises to use tailor-made interest rate forwards and options for risk management purposes, but owing to their high costs and the large minimum size of contracts, trade in these has so far been modest. However, it is reasonable to assume that the minimum size of contracts will be reduced in the course of time, so that the derivative markets will come within reach of an ever-increasing number of companies.

INCREASED IMPORTANCE OF THE SECURITIES MARKET

In the course of the 1980s, the share of securities market instruments grew considerably in relation to the total value of outstanding financial assets. Charts 1 and 3 reveal that the market value of shares issued by companies listed on the Helsinki Stock Exchange grew more rapidly than the value of bonds. At the end of 1989, the market value of outstanding shares stood at about FIM 125 billion, some 15 times higher than at the beginning of the 1980s, and the nominal value of outstanding bonds at about FIM 65.5 billion, about some 9 times higher than at the beginning of the decade. Over the same period, the value of shares in relation to total financial assets rose to about 22.5 per cent, and the value of bonds to about 12.5 per cent.

During the 1980s, the market value of shares in relation to GDP grew from 4 to 25 per cent and the nominal value of bonds from about 4 to 13 billion FIM. These percentage shares are still fairly modest, especially in comparison to bond markets in other

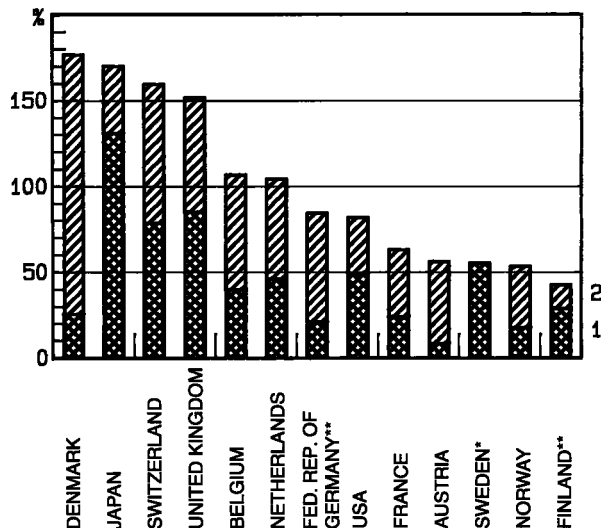
CHART 3.
MARKET VALUE OF LISTED COMPANIES AND BONDS IN BILLION FIM AND A PERCENTAGE OF GDP



1. Market value of listed companies (right scale)
2. Market value of bonds (right scale)*
3. Market value of listed companies, % of GDP (left scale)
4. Market value of bonds, % of GDP (left scale)

* The figures for 1988 and 1989 are nominal bond values

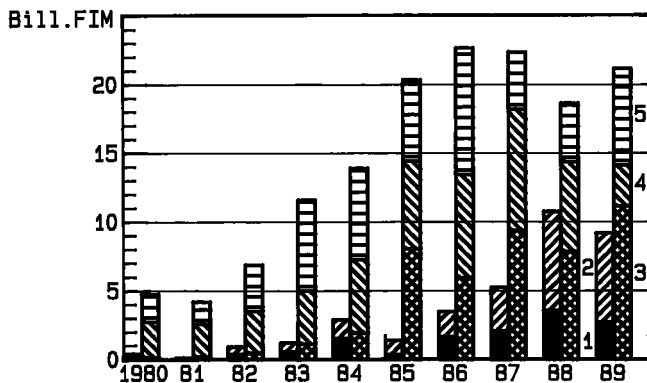
CHART 4.
MARKET VALUE OF LISTED SHARES (1) AND
BONDS (2) IN RELATION TO GDP IN SELECTED
COUNTRIES IN 1988 (FOR THE BIGGEST
EXCHANGE IN EACH COUNTRY)



* Only market value of shares available

** Nominal value of bonds used instead of market value

CHART 5.
RISK CAPITAL RAISED BY LISTED COMPANIES AND
BOND ISSUES IN THE DOMESTIC MARKET,
BILLION FIM



1. New risk capital: financial institutions
2. New risk capital: other companies
3. Taxable public bond issues
4. Taxfree public issues
5. Private placements

es. The growth in the outstanding stock of bonds was mainly attributable to an increase in the number of issues (Chart 5). The increase in bond issues was, however, checked by the ban imposed by the Bank of Finland on sales of Finnish bonds abroad in June 1985. The ban has now been lifted in respect of bonds issued after February 1, 1990.

Increase in securities issues

Share issues increased especially in the latter half of the 1980s. Nowadays, new types of market-based risk financing constitute an important source of capital for companies. Together with increased internal financing, the growth of new issue activity in the stock market has consolidated the capital structure of companies and enhanced their risk-taking ability. Particularly noteworthy is the increase in the relative proportion of share issues by companies other than financial institutions.

Issue activity in the bond market already started to grow at the beginning of the 1980s, particularly as far as privately placed issues and tax-exempt public issues were concerned. The share of taxable public issues increased in the late 1980s and amounted to FIM 11 billion, or more than half of total issues, in 1989. A contributory factor to this development was the substitution of taxable issues for part of the central government's tax-exempt public bond issues. This trend was reinforced by the growing interest of corporate investors in these instruments.

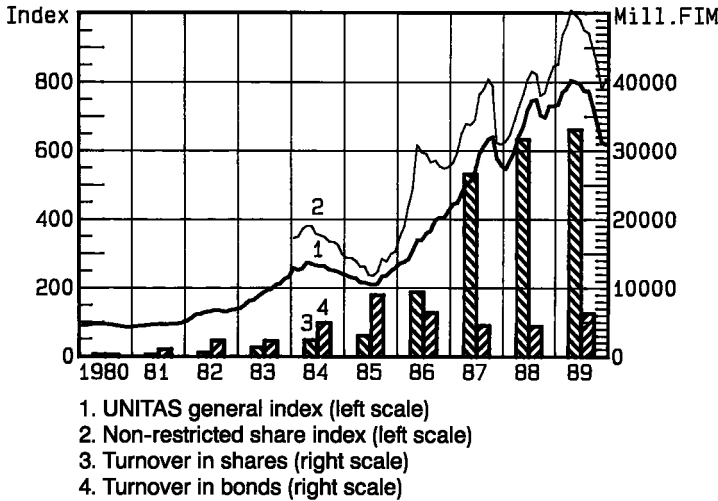
Underlying the growth in securities issues were many different factors. Throughout the 1980s, Finland's GDP grew at a faster pace than in the OECD countries on average, resulting in the growth of households' real income and wealth. With the deregulation of the financial markets, investment outlets diversified and

developed market economies (Chart 4).

The rapid growth in the market value of listed shares

was due to the listing of new companies on the stock exchange, an increase in share issues and a rise in share price

CHART 6.
HELSINKI STOCK EXCHANGE



liquidity in the economy increased. At the same time, investors' yield awareness and expectations increased, resulting in a rise in the prices of both real property and shares. For example, share prices rose sevenfold in the period from the beginning of 1980 until the end of 1989 (Chart 6).

The rise in share prices in the 1980s was partly due to the above factors. It should, however, be noted that share prices in the early 1980s were in many cases no more than 50 per cent of companies' estimated net worth, based on balance sheet information. By the end of 1989, this ratio had risen to 97 per cent. Company profits increased substantially in 1985-1988 and the business sector has been undergoing restructuring, involving a change in company ownership which is still going on.

The fall in share prices in 1989 can in part be attributed to the rise in interest rates and the recent deterioration in the profitability of Finnish companies. The rise in interest rates is mainly a consequence of the increase in the current account deficit and the acceleration of inflation. In addition, the differential between foreign and domestic interest rates has widened to several percentage points. According to

some preliminary studies, the profitability of listed companies fell on average by 7-10 per cent per share in 1989, depending on the indicator used. Enhanced opportunities for investing abroad have probably also contributed to the reduction in funds channelled to the stock market in particular.

Increased liquidity in the stock market

The structure of trade on the Helsinki Stock Exchange has also changed, and turnover has grown (Chart 6). In the early 1980s, turnover was modest and equally distributed between bonds and shares. Later, part of the bond trade moved outside the stock exchange. Nowadays, bonds are quoted not only in the stock exchange's own electronic trading system but also in other electronic information systems, and the volume traded by telephone is approximately the same as that traded on the exchange.

There was a manyfold increase in the liquidity of the stock market in the second half of the 1980s. Turnover in relation to the market value of shares reached the same level as, for example, in Sweden (Chart 7). Even so, the stock market in Finland is still notably smaller than that in Sweden.

Finnish shares are divided into restricted and non-restricted shares. Only non-restricted shares can be bought by foreigners. Chart 6 shows changes in average non-restricted share prices as measured by the UNITAS index since 1984, when it was first calculated. The volatility of the non-restricted share index tends to be greater than that of the general index.

Stock markets outside the exchange

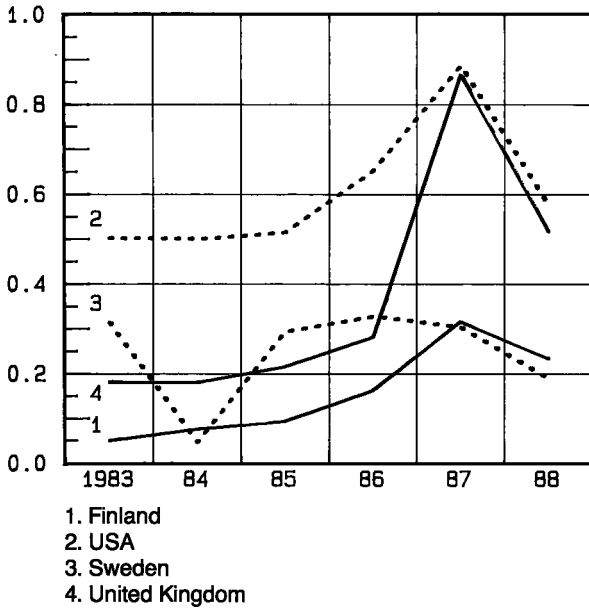
In Finland, the stock markets outside the exchange consist of the OTC market, in which a company itself has to seek a listing, and the brokers' list, on which the brokers' association may list shares at their own discretion, and sometimes even against a company's wishes. Trading in the OTC market in Finland started at the end of 1984. Its popularity grew rapidly in 1987-1988. At the end of 1989, the shares of 55 companies were included on the list but turnover amounted to a modest FIM 935 million. Turnover in shares on the brokers' list is minimal.

The derivative markets

Standardized index options and futures have been traded in Finland since November 1987 but trading did not reach significant proportions until autumn 1988, when daily volume exceeded 3000 contracts for the first time. There are two derivatives exchanges in Finland: the Finnish Options Exchange (FOE) and the Finnish Options Market (FOM). As a rule, derivatives trading is based on share baskets. The most popular share basket is the FOX basket (Finnish Options Index), which is comprised of the 25 shares with the highest turnover on the Helsinki Stock Exchange³.

³For a more detailed description of the derivative markets, see the article by Esa Jokivuolle and Yrjö Koskinen in this issue of the Bulletin.

CHART 7.
RATIO OF TURNOVER TO MARKET VALUE OF
LISTED SHARES IN SELECTED COUNTRIES



FUTURE PROSPECTS

The most important changes affecting the development of the financial markets in the near future will be the further liberalization of capital movements, internationalization of financial institutions and securitization of markets, partly in connection with European integration. These changes will lead to sharper competition both between financial institutions and marketplaces. This process is likely to accelerate in Finland in the next few years.

Finnish residents will, in the future, be able to freely invest and offer financial services abroad and foreigners will have greater opportunities to engage in corresponding operations in Finland. These changes will place increasingly stricter demands on the efficiency of financial institutions, the competitiveness of markets and the yield- and risk-awareness of the public.

The internationalization of financial markets will affect both markets and investors in Fin-

land. Financial intermediation and other financial services, as well as costs imposed on these operations by the public authorities, will have to adjust to correspond even more closely than before with international standards. This will require greater efficiency on the part of suppliers of financial and investment services, securities trading systems and back-office functions. In addition, Finnish tax rates and regulations will, especially to the extent that they affect the financial markets, face substantial pressures for harmonization with those abroad.

April 2, 1990

FINANCIAL OPTIONS AND FUTURES MARKETS IN FINLAND

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INTRODUCTION

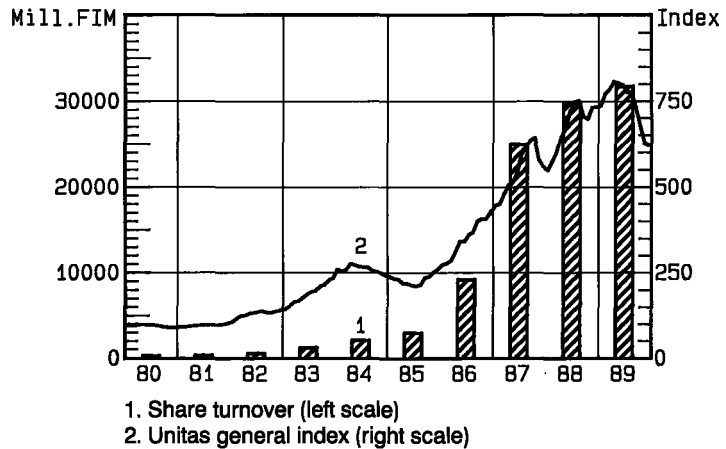
Trading in standardized options and futures¹ began in Finland in November 1987, when the Finnish Options Exchange commenced operations. A second exchange, the Finnish Options Market started trading in stock index options and futures in May 1988. The most distinctive feature of the options markets in Finland is that, in contrast to many other countries, trading has from the beginning focussed on index-related products.

The derivative markets have sprung up as a consequence of deregulation of the Finnish financial markets and an increase in their efficiency. During the 1980s, the significance of the stock market grew considerably and share turnover increased many tens of times. Share prices also rose rapidly (Chart 1). Before 1986, liquidity and price formation in the stock market would almost certainly have been insufficient to sustain functioning derivative markets. The rise of active, short-term trading has also underlined the importance of hedging against risks.

Interest rate deregulation, which began in the early 1980s, paved the way for the creation of a money market in which interest rates are freely determined by market forces. Trading in forward rate agreements (FRAs) began in the inter-bank market in November 1987.

¹In fact, the index futures traded in Finland are more like forward contracts, since they are not settled daily. A buyer or seller of a futures contract must, however, adjust his collateral daily in line with movements in the price of futures.

CHART 1.
SHARE TURNOVER ON THE HELSINKI STOCK EXCHANGE AND THE UNITAS INDEX



Interest rate options were introduced in September 1989, but so far the volumes traded have been small.

The present article examines only the stock-related derivative markets maintained by the Finnish Options Market and the Finnish Options Exchange. These are public exchanges supervised by the authorities.

LEGISLATION

The Act on Trading in Standardized Options and Futures entered into force on November 1, 1988. It is worth noting that it preceded the legislation governing stock market activities proper. It was not until August 1989 that the Securities Market Act and the Securities Broking Firms Act came into force.

Legislation on options and futures was urgently needed, since in the latter part of 1987 the opening of three different

exchanges for trading in derivatives was being planned in Finland. Legislation was needed in particular to protect investors, for some of whom options and futures were entirely new investment instruments.

The Act on Trading in Standardized Options and Futures lays down that a licence is required for the operation of an exchange serving as a trading and clearing organization for derivative instruments and that options exchanges, brokers and market makers are subject to supervision by the Banking Supervision Office. According to the Act, the minimum share capital requirement for a clearing organization is FIM 10 million. In addition, the Act includes provisions on collateral, underlying securities and restrictions on trade. Options exchanges are also required to draw up rules for approval by the Ministry of Finance. Thus,

self-regulation plays a prominent role in the derivative markets.

EXCHANGES

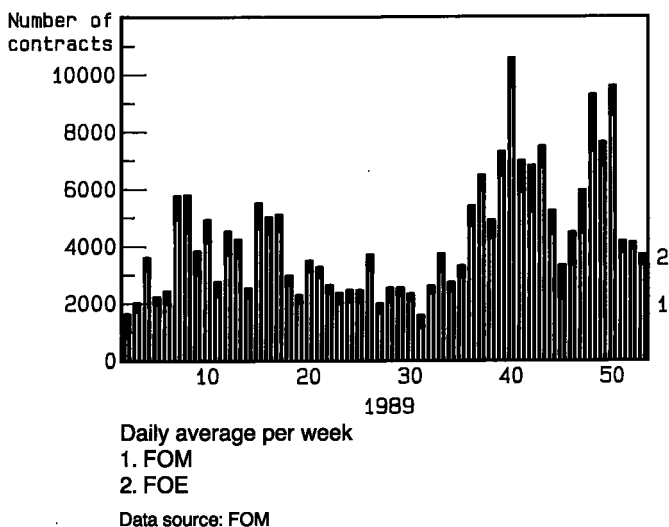
The Finnish Options Market (FOM) occupies a dominant position in the derivative markets in Finland. During 1989, its share of the total volume of options and futures contracts traded varied between 75 and 95 per cent (Chart 2). The FOM partly owes its predominant position to the powerful groups backing it. The biggest banks and securities broking firms are its main shareholders and have been involved in its operations since the market opened. A special feature of the derivative markets in Finland is that both exchanges are operated as private business enterprises. The FIM 50 million share capital of the FOM is equally distributed between the market participants. The Stockholm Options Market (SOM), which has been involved in the establishment of several derivative exchanges in Europe, also has an equity stake in the FOM.

The beginnings of the Finnish Options Exchange were far more modest. Initially, the FOE did not include any major institutions among its shareholders; most of its shares were held by its management. Following a share issue in late 1989, the FOE's ownership base expanded and the brokers operating in the market increased their shareholdings. So far, however, the widening of its ownership base has not had any direct effects on its operations.

PRODUCTS TRADED IN THE MARKETS

The two exchanges are very similar as regards their range of products and operating procedures. They both trade mainly in stock index options and futures. In addition, the FOM used to trade in options on the common stock of the forest industry company Kym-

CHART 2.
VOLUME OF CONTRACTS



mene Oy, but owing to modest trading volumes their quotation was discontinued in December 1989. The products offered by the FOE also include currency options and options on currency futures involving the Finnish markka and the US dollar, but so far this trade has been of only minor significance.

There are at least four reasons why options based on individual stocks have attracted only little interest. The first and most important reason is the poor liquidity of individual shares, as a result of which price movements are not entirely reliable. A second factor contributing to the sluggishness of the stock options trade is that the writer of a call option is required to pledge the underlying shares as additional collateral. The third reason is the practice of physical delivery of share certificates still applied in the settlement of share transactions. This also increases the cost of stock option trades, since share certificates may have to be delivered in the settlement of option transactions, although net value settlement is the normal practice. A fourth factor was the call over system of doing business on the Helsinki Stock

Exchange, which resulted in only slight movements in prices within a day. The situation in this respect has now changed, however, with the introduction of an electronic trading system on the Helsinki Stock Exchange.

The derivative instruments quoted by the FOM are based on a capital-weighted stock index, FOX, which is calculated on the basis of 25 shares quoted on the Helsinki Stock Exchange. The structure of the index is changed semi-annually by selecting the 25 shares with the highest turnover in the previous six months; median turnover is used as the criterion. The purpose of the FOX index is to be as widely representative as possible. Its correlation with the Unitas index, often used as the general index for the Helsinki Stock Exchange is good - about 0.9. The FOX index is not adjusted for dividends. The FOE has ceased trading in its own instruments based on an index of ten equally-weighted shares and now offers options and futures based on a stock index of 25 shares almost identical to that of the FOM.

Trading in a new index future and new index options starts every second month.

Since the expiration period of all index derivatives is four months, there is always a supply of instruments in the market with a remaining time to expiration of at least two months. At least four call and put index options with a different exercise price are available at any one time. Index futures and index options are both European-style and thus exercised on the expiration date as net value settlements.

TRADING SYSTEMS

The trading procedures followed on the FOM are modelled on those of the Stockholm Options Market. Customers give their buy or sell orders to brokers. Each customer is obliged to open a clearing account with the FOM through the broker. The identity of the customer is never revealed to the FOM; the exchange only knows his account number. Brokers do business with the FOM from their own offices either by telephone or via computer terminals. The trading systems on the FOE are very similar (Chart 3). The main difference is that the FOE does not have an electronic trading system.

When dealing by telephone, which is far more usual than dealing via terminal, brokers transmit quotes to the exchanges. The quotes are recorded manually and entered into a computer. Other market participants receive the quotes by terminal. Market makers are connected with the exchange over an open telephone line. The minimum size of a telephone order is 20 contracts.

For orders of less than 20 contracts, brokers transmit quotes to the exchange via computer terminals. Quotes are ranked according to the following criteria: 1) lowest ask price and highest bid price are given first priority; 2) a quote from a customer precedes one from a market maker; 3) quotes are executed in the order received (first in, first out).

Dealing on the telephone and via computer terminals has proved to be efficient. Its advantage over the open outcry practice is that both brokers and market makers require fewer staff.

So far, all brokers and market makers trading on the options exchanges in Finland have been Finnish companies. In 1989, more than twenty

brokers and about ten market makers traded in the FOM market. Among brokers, the largest single market share was about 20 per cent. Among market makers, the biggest market share was about 40 per cent while the three largest market makers had a combined market share of some 70 per cent. The number of market makers fell in the course of 1989, and in January 1990 only five of any significance remained. In the FOE market, trading was carried on by fourteen brokers but there were only four market makers, the largest of whom had a market share of about 56 per cent. As regards the number of market makers, the situation in both options exchanges can be regarded as too highly concentrated and thus unsatisfactory.

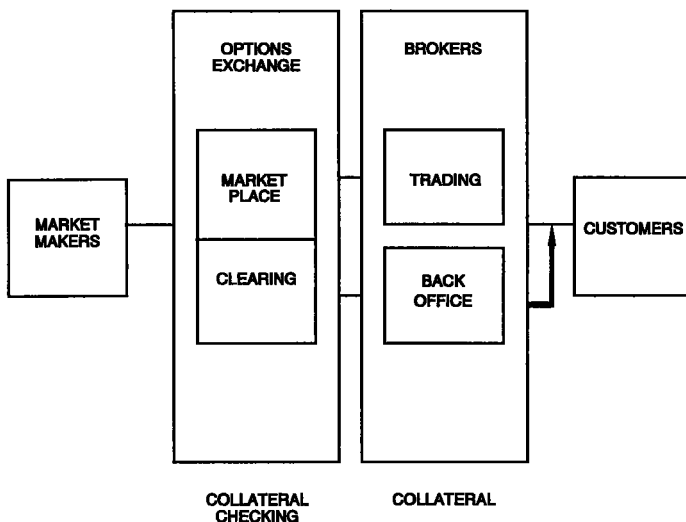
CLEARING AND COLLATERAL

In both options markets in Finland, trading and clearing take place within the same organization. After a trade has been executed, the exchange, in its clearing role, separates the buyer and the seller from each other and acts as a buyer towards the seller and as a seller towards the buyer. The options exchange may not have a position of its own; rather the only function of its buying and selling of options is to facilitate clearing.

Centralized clearing has many advantages. Since the exchange is the counterparty to each transaction, customers can always be sure of receiving payment. All transactions are continuously registered in clearing accounts, and hence brokers are constantly informed of their customers' transactions and positions. This is important for the brokers, as they are responsible for ensuring the adequacy of their customers' collateral.

The FOM requires sellers of options and buyers and sellers of futures to deposit collateral in a custodian bank approved

**CHART 3.
MARKET ORGANIZATION**



by the FOM. If the custodian bank informs the exchange that the collateral is inadequate, the broker has to put up the missing collateral. Crucial from the point of view of the amount of collateral are movements in the index and in implicit volatility. In determining the amount of collateral, it is assumed that the index and volatility will move in the most unfavourable way possible from the point of view of the customer. Securities are assigned different collateral values according to how risky the asset is considered to be. The FOM, for example, values shares quoted on the Helsinki Stock Exchange at 60 per cent of their market value. The principles applied by the FOE in fixing collateral requirements differ from those applied by the FOM in that brokers' risks are higher. In addition, the FOE's method of calculating collateral is more lenient than that of the FOM.

EFFICIENCY OF THE DERIVATIVE MARKETS

The size of the derivative markets has grown markedly following the opening of the FOM. In the early summer of 1988, the combined daily trading volume of the two markets was less than a thousand contracts. The first notable boost to activity in the derivative markets came in August 1988, when there was a sharp fall in share prices on the Helsinki Stock Exchange. Average daily trading volume then rose to 4 000 contracts.

Volume remained at a high level during the winter of 1988—1989, but trading was quiet in summer 1989. Last autumn, however, activity reached record levels on both exchanges. September was the busiest month, the average daily volume amounting to more than 7 000 contracts. On the FOM, volume was about 86 per cent higher than in autumn 1988. Contributing to the growth of trade were in-

CHART 4.
FOX INDEX



Data source: FOM

creased uncertainty and a decline in values in the stock market (Chart 4).

A rough picture of the size of the derivative markets in relation to the stock market can be obtained by comparing the number of derivative contracts multiplied by the value of the underlying securities with daily turnover in the stock market. Calculated in this way, turnover in the derivative markets was twice that in the stock market in 1989. Viewed internationally, however, the derivative markets in Finland are fairly small. In the world's largest derivative market, the Chicago Board of Trade, the volume of contracts is more than 130 times that in the FOM, while the contract volume of the biggest European exchanges is, on average, about 25 times higher, when all derivative instruments, both commodity and financial, are included.

A striking feature of the Finnish derivative markets is the small size of futures trading. The main reason for this is the difficulty of undertaking riskless arbitrage operations between futures and underlying shares, because the short selling of shares on a large scale is not possible in the Finnish market.

Investment in the derivative markets is not yet very com-

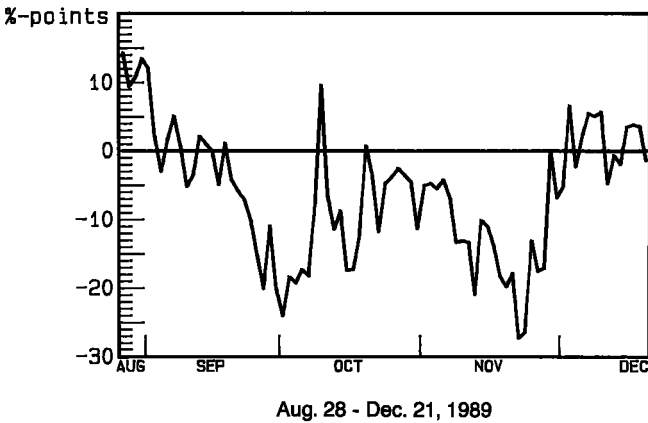
mon in Finland. All in all, there are about a thousand clearing accounts in active use. The number of customers is probably somewhat smaller.

Pricing

How suitable the derivative markets are for hedging purposes depends, among other things, on transaction costs and the efficiency of pricing. In Finland, transactions costs are distinctly higher than in Europe in general. At the end of 1989, brokers' transactions costs were 1.8 per cent of option prices on the FOE while on the FOM they varied between 1.8 and 2.7 per cent. Costs faced by market makers are substantially lower. The operation of the FOE is to a large extent based on lower transaction costs. Competition from the FOE has compelled the FOM to lower its commissions, most recently in March 1990.

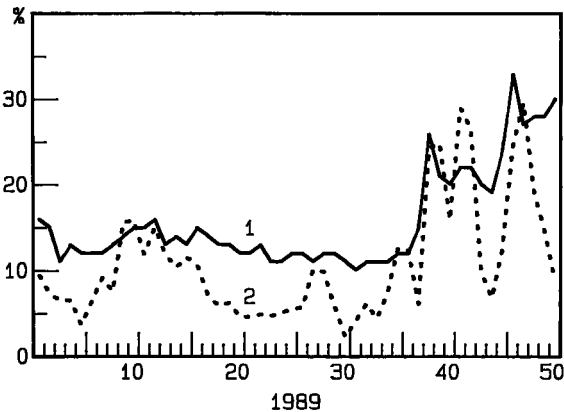
In an efficient market, one would expect prices of index derivatives to be such that there would be no opportunities to earn arbitrage profits through operations involving these instruments and the basket of shares underlying the stock index. In the index derivative markets in Finland, the price of futures contracts has often been lower than the price implied by arbitrage.

CHART 5.
DIFFERENCE BETWEEN THE PRICE OF
THE FUTURE AND THE FOX INDEX



Data source: FOM

CHART 6.
VOLATILITY OF FOX INDEX



Standard deviations, end-of-week observations

1. Implied standard deviation
2. Historical standard deviation

Data sources:

1. Kansallis-Osake-Pankki investment research, 2. FOM

Occasionally, it has even been lower than the spot price of the index (Chart 5). The same phenomenon has also been observed elsewhere in the world.

The reason why markets have not been able to remove the price inefficiency of futures observed in Finland and elsewhere is probably the restrictions of various degree imposed on the short selling of shares. Such restrictions are widely applied in European markets in particular. A short-

coming in Finland is that there is no institutional framework within which short selling could be facilitated.

Despite a certain degree of inefficiency, movements in futures prices in Finland correlate relatively well with those in share indices. This indicates that the futures market is able to offer opportunities for hedging against risks inherent in stock indices.

Daily movements in stock index prices in Finland are less

than in index futures prices. This does not mean that futures exaggerate changes in the market situation. In fact, they reflect the situation prevailing at any time more efficiently than the stock index. The index is informationally inefficient because trading in some stocks is not continuous. This phenomenon occurs even in the stock indices of the world's most liquid stock markets. Since the price of futures reacts more efficiently than the index itself to new information on the market, the price of index options has been observed to follow primarily the price of futures.

It is more difficult to price options than futures, since options prices include an estimate of the risk related to future developments in the price of the underlying share, i.e. the variance of returns. Risk is usually measured by historical volatility, which describes recent movements in share prices, or by the volatility implied by the market prices of options. During 1989, historical volatility stayed mostly between 5 and 10 percentage points, expressed as an annual rate, but in autumn 1989 it occasionally rose to 25 to 30 percentage points. The volatility implied by market prices of options was distinctly higher on average. According to theory, there should not be a continuous systematic discrepancy between historical and implied volatility (Chart 6).

Apparently, the difference between historical and implied volatility does not arise from the mispricing of options but from informationally inefficient stock indices. (This is evident in the autocorrelation of daily movements in the index). Hence, historical volatility calculated on the basis of daily movements underestimates the actual variability in the stock index. The recommended way of obtaining a correct picture of the volatility of the stock market is to exam-

ine the volatility implied by option prices.

CONCLUSIONS

The future development of the derivative markets will largely depend on that of the stock market. When the Helsinki Stock Exchange eventually switches to a fully electronic and paperless trading system, new opportunities will be created for trading in stock options. On the other hand, the observed tendency for increased cross-ownership between listed companies in Finland is likely to reduce the liquidity of the stock market and the reliability of pricing.

This may have an adverse effect on the performance of the derivative markets. Its efficiency could be further enhanced by the laying down of clear rules on the short selling of shares, whereby the conditions for arbitrage between futures and the index would be better realized.

Technically, the options markets in Finland are at a very advanced level. The FOM, for example, has the technical capacity to handle much more trade than it does at the moment. Transaction costs must, however, be cut further if the Finnish options markets hope to compete successfully once

deregulation of the financial markets in Europe has been completed. The derivative markets would also benefit if there were more competition in market making. It is not good as far as the reliability of the markets' operations are concerned that individual market makers have too much influence in determining prices.

April 2, 1990

FINNISH DIRECT INVESTMENT ABROAD IN 1988

Each year the Bank of Finland carries out a survey of Finnish direct investment abroad in which it collects data on the financial statements of Finnish-owned subsidiaries and associates abroad. The survey also includes data on companies' profitability and financing. The survey covers all Finnish-owned subsidiaries and associates abroad in which Finnish companies have a direct or indirect shareholding of at least 10 per cent and whose balance-sheet total exceeds FIM 10 million. Data for 1988 were obtained on 1429 subsidiaries and associates. Earlier the survey was used in connection with the exercise of exchange control, but it has recently been revised for balance-of-payments purposes. The data reported below differ from the published balance-of-payments statistics. The latter will, however, be corrected to take into account the results of the survey and other new sources of information by 1991.

Stock of Finnish direct investment. According to the survey, the stock of Finnish direct investment abroad, calculated according to IMF and OECD recommendations, amounted to FIM 21.8 billion at the end of 1988, of which the share of manufacturing companies was just under 60 per cent and that of finance and insurance a quarter. The total stock of direct investment was equivalent to nearly 5 per cent of nominal GDP. The direct investment stock of manufacturing companies has more

than doubled during the last five years.

Reinvested earnings. Reinvested earnings in Finnish-owned subsidiaries and associates amounted to FIM 1.7 billion in 1988. The share of manufacturing companies was FIM 1 billion.

Earnings from investment. Earnings remitted to Finland by subsidiaries and associates abroad in the form of dividends, interest, profit margins on goods and services, licence fees and royalties totalled FIM 0.8 billion. Earnings remitted to Finland and reinvested earnings totalled FIM 2.5 billion.

Turnover and employees of Finnish-owned manufacturing companies. The turnover of Finnish manufacturing companies operating abroad increased by nearly 40 per cent from the previous year and totalled FIM 64 billion. In 1988 one third of the turnover in respondent manufacturing companies originated from abroad. The share of the metal and engineering industries in the total turnover of the manufacturing industry abroad was almost a half. Growth was concentrated in the EFTA and EC areas.

All in all, Finnish-owned manufacturing companies employed 108 000 persons abroad, 24 000 more than in 1987. Employees in the metal and engineering industries accounted for more than half of total employees. Almost half of the employees worked in the EC area.

Profitability of Finnish-owned manufacturing companies. The average profitability of Finnish manufacturing

abroad in 1988, measured in terms of both operating margins and net profit, remained at almost the same level as in the previous year.

Measured in terms of both operating margins and net profit, the most profitable manufacturing sector abroad was the forest industries. The most profitable area was North America thanks to the good performance of the forest and chemical industries.

The capital structure of Finnish industrial companies abroad deteriorated to some extent compared with 1987. The ratio of shareholders' capital to total capital employed was on average 27 per cent.

PUBLICATIONS OF THE BANK OF FINLAND

The Bank of Finland Year Book for 1989 has been published. The Year Book includes a review of central bank policy and other central bank activities in 1989 as well as the financial statements and notes. Various banking transactions undertaken by the Bank during the year under review are included in a statistical appendix. Helsinki 1990. 69 pp. ISSN 0081-9468.

MONETARY AND FOREIGN EXCHANGE POLICY MEASURES FROM APRIL 1989 TO MARCH 1990

1989

APRIL

Till-money credits. The Bank of Finland raises the base amount — the share of banks' till-money holdings which is not financed by the Bank of Finland — by over FIM 60 million as from the beginning of April. The new base amount is effective until the end of March 1990.

Amendments to the cash reserve agreement and the terms of central bank financing. The Bank of Finland grants Interbank Ltd. the right to central bank financing with effect from the beginning of April. The bank joins the cash reserve agreement between the Bank of Finland and the banks on February 16, 1989.

MAY

Export deposits. The Government decides to terminate the temporary export deposits levied on wood-free printing paper since the beginning of February, 1989 with effect from the beginning of May.

Cash reserve requirement. The Bank of Finland raises the cash reserve requirement for certain banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to just under 8.2 per cent of the cash reserve base in April.

JUNE

Foreign Exchange Regulations. The Bank of Finland relaxes the foreign exchange regulations concerning direct investments by enterprises in the financial and insurance

sector as from June 1, 1989. After this date, only direct investments by private individuals and direct investments in countries with which Finland maintains payments agreements require the Bank of Finland's authorization.

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

In addition, the call money credit rate is raised from 13 per cent to 15 per cent; the call money deposit rate remains at 4 per cent.

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

JULY

Cash reserve requirement. The Bank of Finland adjusts the cash reserve requirement for certain banks and groups of banks. Together with the current 8 per cent ratio, the banks' average deposit requirement now amounts to about 8.5 per cent of the cash reserve base in June.

AUGUST

Cash reserve requirement. The Bank of Finland adjusts the cash reserve requirement

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

SEPTEMBER

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

Capital exports. Acquisitions of dwellings and real estate abroad no longer require authorization; previously, permission was necessary if the purchase price exceeded FIM 1 million. Investments in the form of foreign securities, deposits held in accounts with foreign monetary institutions and merchandise held abroad are permitted without the permission of the Bank of Finland or quantitative restrictions. In addition, credit of more than one year's maturity may be granted to non-residents without the Bank of Finland's permission.

Capital imports. Non-financial companies, except housing and real estate companies, are permitted to raise foreign credit of more than one year's maturity; previously, only loans of more than five years' maturity were permitted. The authorization

of the Bank of Finland is still required if a company borrows directly from a foreign lender. Suppliers' credits and prepayments in respect of imports are entirely freed from authorization. In addition, most direct investments in Finland no longer require authorization.

Cash reserve requirement.

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

OCTOBER

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

Cash reserve requirement.

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

NOVEMBER

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

Call money market. With effect from November 6,

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

Cash reserve requirement.

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

DECEMBER

Cash reserve requirement.

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

1990

JANUARY

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

Money market operations.

As from January 1, 1990, only CDs issued by banks which meet the following requirements can be accepted for use in money market dealings: the bank's

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

Cash reserve requirement.

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

Provided bank lending does not accelerate sharply in January-February 1990, the collection of additional deposits under the supplementary cash reserve agreement will be discontinued. The interest-free additional deposits collected on the basis of the lending growth figures at the end of December 1989 will remain at the Bank of Finland and be refunded at the latest in July-December of the current year in six equal instalments at the end of each month.

FEBRUARY

Foreign Exchange Regulations.

The Bank of Finland allows the sale abroad of new markka-denominated bonds of over one year's maturity as from February 1, 1990, with the exception of bonds issued by housing and real estate

companies. The present ban on cross-border sales remains in force for bonds issued previously. Effective the same date, non-residents allows to issue markka-denominated bonds in Finland.

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

residents purchasing Finnish securities to effect their purchases through the Helsinki Stock Exchange or the OTC market.

MARCH

Finance companies accorded the right to intermediate foreign finance. The Bank of Finland decides that, with effect from March 1, 1990, finance companies may apply for the right to intermediate and raise foreign loans to the extent permitted by the limits on their foreign currency positions. Previously only deposit banks were accorded this right.



LAND, CLIMATE AND POPULATION

Finland covers an area of more than 338 000 square kilometres. The total area is slowly increasing because of the steady uplift of the land since the last glacial era. The country shares frontiers with Sweden in the west, Norway in the north and the Soviet Union in the east and has a coastline bordered by the Baltic Sea in the south and west. Agricultural land accounts for 8 % of the total area, forest and other wooded land for 69 % and inland waters for 10 %. Located between latitudes 60° and 70° north, Finland has warm summers and cold winters. Helsinki on the south coast has an average maximum temperature of 22° C (72° F) in July and -4° C (25° F) in February.

Finland has a population of 4 954 400 (Dec. 31, 1988) and an average population density of 16.3 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 491 800 inhabitants, Tampere (Tammerfors) 171 000, Espoo (Esbo) 168 100, Turku (Åbo) 159 400 and Vantaa (Vanda) 151 400.

There are two official languages: 93.6 % of the population speaks Finnish as its mother tongue and 6.0 % Swedish. There is a small Lapp population in the north. Finnish is a member of the small Finno-Ugrian group of languages, which also includes Estonian and Hungarian.

FORM OF GOVERNMENT

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

The legislative power of the country is exercised by Parliament and the President of the Republic. The supreme executive power is vested in the President, who is elected for a period of six years. The President for the current term, March 1, 1988 to March 1, 1994, is Dr. Mauno Koivisto.

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

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

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

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

INTERNATIONAL RELATIONS

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

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

Having abolished most quantitative restrictions on foreign trade in 1957, Finland first took part in European free trade arrangements under the auspices of EFTA in 1961. Imports from the USSR were also progressively freed from customs duties. Finland's free trade agreement with the EEC entered into force in 1974 and agreements for the removal of trade barriers were concluded with several eastern European countries as well. Citizens of the five Nordic countries, Denmark, Finland, Iceland, Norway and Sweden, have enjoyed a common labour market, a passport union and reciprocal social security benefits since the mid-1950s.

THE ECONOMY

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

of banking services produced by private companies. Of the gross domestic product of FIM 383 billion in basic values in 1988, 3 % was generated in agriculture and fishing, 3 % in forestry, 27 % in industry, 9 % in construction, 12 % in trade, restaurants and hotels, 8 % in transport and communications, 5 % in finance and insurance, 16 % in other private services and 17 % by producers of government services. Of total employment of 2.3 million persons, 10 % were engaged in primary production, 31 % in industry and construction and 59 % in services.

In 1988, expenditure on the gross domestic product in purchasers' values amounted to FIM 440 billion and was distributed as follows: net exports -0.3 % (exports 24.8 %, imports -25.1 %), gross fixed capital formation 25 %, private consumption 53 % and government consumption 20 %. Finland's gross tax ratio (gross taxes in relation to GDP) was 38 % and the net tax ratio (net taxes in relation to GDP) 25 %, which is about the average for OECD countries.

Average annual (compounded) growth of real GDP was 4.9 % in the period 1950-60, 4.8 % in 1960-70, 3.5 % in 1970-80, 3.2 % in 1980-88 and 4.2 % in 1950-88. Finland's GDP per capita in 1988 was USD 21 200; this put Finland in fifth place among the 24 member countries of the OECD, preceded by Switzerland, Iceland, Japan and Norway.

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 1988, the share of forest industry products in total merchandise exports was 42 %, the share of metal and engineering products 39 % and the share of other goods 19 %. Raw materials and intermediate goods (incl. crude oil) accounted for 55 % of merchandise imports, fuels for 3 %, investment goods for 19 % and consumption goods for 23 %.

Forest resources. Finland has fairly abundant forest resources, but

only limited amounts of other raw materials. The growing stock comprises 1 660 million cubic metres, of which 45 % is pine, 37 % spruce and 18 % broad-leaved species, chiefly birch. The annual growth increment totals 68 million cubic metres and the total drain calculated on the basis of commercial fellings was 58 million cubic metres in 1988.

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

FINANCE AND BANKING

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

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

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

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

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

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

Other banks (Dec. 31, 1988). Finland has four major groups of deposit banks with a total of more than 3 550 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 29 representative offices abroad. There are 211 savings banks and 267 cooperative banks with their own extensive branch networks. The government-owned Postipankki has 56 branches and also offers basic services in post offices.

Financial markets. Of the total stock of FIM 580 billion in outstanding domestic credit at the end of 1988,

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

In the money market, 69 % of the instruments, which totalled approximately FIM 108 billion at end 1988, 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 69 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 127 billion (at end-1988). Three foreign companies are also quoted. Domestic bonds and debentures in circulation at end-1988 totalled FIM 93.6 billion; government bonds made up 33 % of the total. Turnover on the Stock Exchange in 1988 amounted to FIM 37 billion; the share of shares and subscription rights in the total was approximately 85 %.



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

1. THE BALANCE SHEET OF THE BANK OF FINLAND

1.1 THE BALANCE SHEET OF THE BANK OF FINLAND,

MILL. FIM

	1989		1990			
	March 31	Dec. 31	March 8	March 15	March 23	March 30
ASSETS						
Gold and foreign currency claims	31 077	23 009	31 532	32 201	33 369	33 760
Gold	2 128	2 179	2 179	2 179	2 180	2 180
Special drawing rights	853	966	846	795	794	791
IMF reserve tranche	901	950	913	914	913	910
Convertible currencies	25 715	18 822	27 474	28 185	29 355	29 751
Tied currencies	1 480	92	120	128	127	128
Other foreign claims	4 183	3 300	3 307	3 150	3 149	3 144
Markka subscription to Finland's IMF quota	2 302	2 103	2 126	2 126	2 126	2 126
Term credit	1 881	1 198	1 181	1 024	1 022	1 018
Claims on financial institutions	15 572	39 054	51 334	45 771	39 767	36 245
Call money credits	1 844	38	6	519	241	704
Certificates of deposit	7 917	33 230	10 483	9 450	15 060	22 422
Term credits	—	—	30 586	27 076	17 396	6 531
Till-money credits	2 481	3 310	7 670	6 140	4 485	4 002
Financing of crop failure loans	816	—	—	—	—	—
Bonds	2 277	2 238	2 351	2 347	2 347	2 347
Other claims on financial institutions	238	238	238	238	238	238
Claims on the public sector	1 079	1 137	1 189	1 193	1 200	1 203
Treasury notes and bills	10	—	—	—	—	—
Bonds	25	8	7	7	7	7
Total coinage	1 041	1 129	1 182	1 186	1 192	1 196
Other claims on the public sector	2	—	—	—	—	—
Claims on corporations	2 665	2 207	2 114	2 092	2 076	2 058
Financing of exports	126	1	1	1	1	1
Financing of domestic deliveries (KTR)	2 090	1 697	1 612	1 593	1 578	1 566
Bonds: KTR credits	239	302	295	295	295	290
Bonds: Other	30	21	21	17	17	17
Other claims on corporations	181	186	186	186	185	185
Other assets	121	571	105	103	104	109
Accrued items	—	464	—	—	—	—
Other assets	121	107	105	103	104	109
Total	54 697	69 279	89 581	84 510	79 665	76 520
LIABILITIES						
Foreign currency liabilities	185	697	457	722	911	1 156
Convertible currencies	56	42	66	56	69	66
Tied currencies	128	656	391	666	842	1 090
Other foreign liabilities	3 086	2 860	2 873	2 874	2 874	2 871
IMF markka accounts	2 302	2 103	2 126	2 126	2 126	2 126
Allocations of special drawing rights	783	758	747	748	747	745
Notes and coin in circulation	10 996	13 129	22 252	17 893	15 551	14 782
Notes	10 034	12 073	21 120	16 769	14 441	13 681
Coin	962	1 056	1 132	1 124	1 110	1 101
Certificates of deposit	980	—	110	1 350	1 140	1 050
Liabilities to financial institutions	22 544	26 303	36 990	34 755	32 187	29 620
Call money deposits	109	569	2 259	1 376	271	8
Term deposits	—	—	8 469	7 119	5 659	2 959
Cash reserve deposits	22 120	25 506	26 068	26 068	26 068	26 465
Capital import deposits	280	190	150	150	150	150
Other liabilities to financial institutions	34	38	44	42	39	38
Liabilities to the public sector	1 368	5 325	6 525	6 523	6 534	6 655
Cheque accounts	1	0	0	0	0	0
Cash fund deposits	—	3 770	—	—	—	—
Pension fund deposits	—	—	4 932	4 932	4 932	5 053
Counter-cyclical deposits	1 302	1 319	1 319	1 319	1 319	1 319
Export deposits	65	235	269	269	279	280
Other liabilities to the public sector	1	1	4	3	3	3
Liabilities to corporations	6 911	10 810	10 664	10 662	10 659	10 617
Deposits for investment and ship purchase	6 506	10 228	10 112	10 110	10 107	10 129
Capital import deposits	405	583	552	552	552	488
Other liabilities to corporations	0	—	—	—	—	—
Other liabilities	46	1 294	53	53	53	60
Accrued items	—	1 241	—	—	—	—
Other liabilities	46	53	53	53	53	60
Valuation account and reserves	2 746	2 696	3 493	3 513	3 592	3 544
SITRA's capital	400	400	400	400	400	400
Capital accounts	5 436	5 764	5 764	5 764	5 764	5 764
Primary capital	5 000	5 000	5 000	5 000	5 000	5 000
Reserve fund	436	436	764	764	764	764
Profit/loss for the accounting year	—	328	—	—	—	—
Total	54 697	69 279	89 581	84 510	79 665	76 520

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
1985	2 081	931	775	18 572	22 359	-285	22 074	-849	21 225	1 023	4 300	3 277
1986	2 081	983	793	6 778	10 635	3 421	14 056	-838	13 218	1 002	2 001	999
1987	2 128	899	793	23 571	27 391	1 212	28 603	1 131	29 734	977	901	-76
1988	2 128	1 120	940	24 373	28 561	945	29 506	1 117	30 623	1 128	1 903	775
1989	2 179	966	950	18 780	22 875	-564	22 311	440	22 751	1 137	5 325	4 188
1989												
March	2 128	853	901	25 659	29 541	1 352	30 893	1 097	31 990	1 079	1 368	289
April	2 128	832	890	24 628	28 478	1 725	30 203	1 085	31 288	1 103	1 404	301
May	2 128	861	1 004	25 028	29 021	1 580	30 601	1 103	31 704	1 113	1 433	320
June	2 128	858	961	25 501	29 448	353	29 801	1 113	30 914	1 136	1 458	322
July	2 128	854	919	25 318	29 219	717	29 936	1 094	31 030	1 113	1 472	359
Aug.	2 128	882	934	25 545	29 489	706	30 195	1 117	31 312	1 113	1 486	373
Sept.	2 129	878	952	23 568	27 527	-826	26 701	1 107	27 808	1 135	1 504	369
Oct.	2 129	1 055	927	21 841	25 952	-307	25 645	772	26 417	1 112	2 683	1 571
Nov.	2 129	851	967	19 826	23 773	-381	23 392	769	24 161	1 126	4 150	3 024
Dec.	2 179	966	950	18 780	22 875	-564	22 311	440	22 751	1 137	5 325	4 188
1990												
Jan.	2 179	900	954	26 179	30 212	-584	29 628	432	30 060	1 168	6 384	5 216
Feb.	2 179	846	913	26 289	30 227	-311	29 916	433	30 349	1 185	6 523	5 338
March	2 180	791	910	29 685	33 566	-962	32 604	273	32 877	1 203	6 655	5 452

End of period	Domestic financial sector						Corporate sector			Notes and coin in circulation	Out-standing CDs issued by the Bank of Finland
	Term claims on deposit banks	Coll money claims on deposit banks, net	Cash reserve deposits of deposit banks	Till-money credits to deposit banks	Other liabilities to financial institutions, net	Net claims (13+14-15+16-17)	Claims in the form of special financing	Special deposits and other items, net	Net claims (19-20)		
	13	14	15	16	17	18	19	20	21	22	23
1985	.	4 014	10 222	1 925	-1 386	-2 897	4 525	4 113	412	8 072	.
1986	2 381	6 687	9 270	2 305	-2 240	4 343	4 581	4 757	-176	8 668	.
1987	—	-757	10 941	2 730	-2 350	-6 618	3 449	4 782	-1 333	9 990	4 970
1988	7 187	335	19 039	2 920	-3 733	-4 864	2 823	6 579	-3 756	11 550	1 130
1989	33 230	-531	25 506	3 310	-2 248	12 751	2 000	10 604	-8 604	13 129	—
1989											
March	7 917	1 735	22 120	2 481	-3 017	-6 970	2 455	6 700	-4 245	10 996	980
April	10 166	256	22 195	2 342	-2 952	-6 479	2 386	6 935	-4 549	11 190	580
May	7 597	3 803	22 820	2 843	-2 716	-5 861	2 335	7 168	-4 833	11 385	180
June	16 601	-568	23 500	2 518	-2 816	-2 133	2 239	9 557	-7 318	11 737	160
July	17 582	-727	24 116	2 936	-2 817	-1 508	2 252	10 439	-8 187	11 774	160
Aug.	18 641	-839	24 639	2 899	-2 833	-1 105	2 214	10 587	-8 373	11 651	60
Sept.	22 152	-133	25 089	2 569	-2 781	2 280	2 184	10 617	-8 433	11 739	20
Oct.	25 623	-419	25 377	3 023	-2 374	5 224	2 096	10 597	-8 501	11 775	—
Nov.	29 475	261	25 581	2 925	-2 170	9 250	2 066	10 590	-8 524	11 894	—
Dec.	33 230	-531	25 506	3 310	-2 248	12 751	2 000	10 604	-8 604	13 129	—
1990											
Jan.	34 050	-3 243	25 441	8 099	-2 377	15 842	1 950	10 453	-8 503	22 760	—
Feb.	33 720	-1 367	26 068	7 677	-2 378	16 340	1 919	10 460	-8 541	23 178	—
March	25 994	696	26 465	4 002	-2 397	6 624	1 857	10 415	-8 558	14 782	1 050

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

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

During period	Purchases of money market instruments	Sales of money market instruments	Matured money market instruments, net	Impact on liquidity (1-2-3)	Call money credits	Call money deposits	Total net change (4+5-6)
	1	2	3	4	5	6	7
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
1988	13 840	19 190	-16 850	11 500	463	-629	12 592
1989	131 110	3 855	99 245	28 010	-425	441	27 144
1989							
March	8 695	170	5 095	3 430	1 785	-51	5 266
April	4 710	—	2 370	2 340	-1 548	-69	861
May	6 490	—	7 880	-1 390	3 507	-40	2 157
June	16 295	250	7 875	8 170	-3 798	573	3 799
July	16 790	240	15 170	1 380	7	166	1 221
Aug.	14 560	—	13 160	1 400	-10	102	1 288
Sept.	14 260	—	9 950	4 310	73	-633	5 016
Oct.	16 720	—	13 920	2 800	-72	214	2 514
Nov.	18 220	350	13 560	4 310	510	-170	4 990
Dec.	10 850	530	6 770	3 550	-475	317	2 758
1990							
Jan.	18 660	4 710	13 750	200	14	2 726	-2 512
Feb.	31 775	14 350	18 020	-595	-46	-1 922	1 281
March	24 811	4 739	27 905	-7 833	698	-1 365	-5 770

2.2 FORWARD EXCHANGE MARKET, MILL. FIM

End of period	Banks' forward positions with					
	Domestic companies			Foreign banks, net	Bank of Finland, net	Total, net (3+4+5)
	Forward exchange bought by banks	Forward exchange sold by banks	Net (1-2)			
1	2	3	4	5	6	
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
1988	16 488	1 543	14 946	9 086	-377	23 654
1989	10 531	3 563	6 967	8 031	205	15 203
1988						
Dec.	16 488	1 543	14 946	9 086	-377	23 654
1989						
Jan.	15 710	1 058	14 652	9 284	-62	23 874
Feb.	15 495	857	14 638	7 706	-273	22 071
March	14 614	871	13 742	7 221	-168	20 795
April	13 536	1 044	12 492	7 003	-63	19 432
May	13 248	1 535	11 714	9 024	-	20 737
June	12 859	1 408	11 451	9 781	-306	20 926
July	13 125	1 393	11 731	9 870	-395	21 207
Aug.	12 652	1 187	11 465	15 126	-220	26 371
Sept.	11 782	1 669	10 113	13 261	-	23 374
Oct.	11 323	2 260	9 063	10 774	-	19 836
Nov.	11 487	2 934	8 552	8 784	-	17 336
Dec.	10 531	3 563	6 967	8 031	205	15 203

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	
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
1988	128	2 190	2 319	621	5 044	15 159	20 824	-18 505
1989	373	15 146	15 519	403	465	23 035	23 903	-8 384
1989								
March	711	5 175	5 886	177	1 202	21 352	22 731	-16 845
April	689	8 697	9 386	129	774	22 128	23 031	-13 644
May	1 176	8 908	10 083	127	330	22 214	22 671	-12 588
June	779	11 264	12 042	321	118	22 842	23 282	-11 240
July	46	17 049	17 095	714	160	23 520	24 394	-7 299
Aug.	46	17 384	17 431	507	116	24 132	24 755	-7 325
Sept.	41	19 738	19 779	446	47	24 669	25 161	-5 382
Oct.	62	24 529	24 591	483	11	25 098	25 592	-1 001
Nov.	360	26 702	27 062	363	-	25 384	25 747	1 315
Dec.	328	31 497	31 824	462	-	25 574	26 036	5 788
1990								
Jan.	308	34 151	34 459	1 200	860	25 504	27 564	6 895
Feb.	367	43 675	44 043	1 017	12 978	25 463	39 459	4 584
March	131	36 855	36 987	1 885	7 299	26 094	35 278	1 709

3. RATES OF INTEREST

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

Average of daily observations	Inter-bank overnight rate	HELIBOR				Bank of Finland rates			Cash reserve requirement	
		1 month	3 months	6 months	12 months	Call money credit rate	Call money deposit rate	Base rate	Ordinary	Additional (average)
	1	2	3	4	5	6	7	8	9	10
1985	..	..	..	..	..	13.37	13.37	9.04	5.6	.
1986	11.87	..	..	..	..	13.43	11.34	7.46	4.8	.
1987	9.16	9.90	10.02	10.14	10.40	11.71	7.78	7.00	4.8	.
1988	8.47	9.77	9.97	10.16	10.50	11.50	7.04	7.63	6.5	.
1989	10.21	12.32	12.53	12.61	12.72	13.40	4.00	7.67	8.0	0.5
1989										
March	9.09	10.85	11.09	11.34	11.66	13.00	4.00	7.50	8.0	.
April	11.37	12.08	12.11	12.11	12.15	13.00	4.00	7.50	8.0	.
May	11.43	11.70	11.75	11.79	11.90	13.00	4.00	7.50	8.0	0.2
June	9.79	11.62	11.78	11.93	12.13	13.00	4.00	7.50	8.0	0.4
July	10.56	11.64	11.79	11.94	12.11	15.00	4.00	7.50	8.0	0.5
Aug.	8.86	11.87	12.06	12.22	12.35	15.00	4.00	7.50	8.0	0.7
Sept.	8.56	12.69	13.09	13.30	13.40	15.00	4.00	7.50	8.0	0.8
Oct.	10.31	14.06	14.19	14.22	14.19	15.00	4.00	7.50	8.0	1.0
Nov.	12.78	14.78	14.77	14.66	14.51	15.00	4.00	8.50	8.0	1.1
Dec.	15.03	16.23	16.08	15.56	15.17	15.00	4.00	8.50	8.0	1.1
1990										
Jan.	S	16.01	16.05	15.73	15.45	15.00	4.00	8.50	8.0	1.1
Feb.	S	16.01	16.01	15.73	15.39	15.00	4.00	8.50	8.0	.
March	8.97	15.08	15.38	15.40	15.37	15.00	4.00	8.50	8.0	.

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
	1	2	3	4	5	6	7	8
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
1988	5.9	6.0	6.2	6.4	7.8	8.0	8.1	8.3
1989	8.3	8.4	8.5	8.5	9.7	9.8	9.9	9.9
1989								
March	8.0	8.3	8.6	8.8	9.3	9.5	9.7	9.8
April	8.0	8.2	8.4	8.6	9.2	9.5	9.6	9.7
May	8.3	8.4	8.6	8.7	9.5	9.7	9.7	9.8
June	8.3	8.4	8.5	8.5	9.7	9.8	9.8	9.9
July	8.3	8.2	8.2	8.1	9.7	9.8	9.7	9.7
Aug.	8.3	8.3	8.2	8.2	9.7	9.8	9.7	9.7
Sept.	8.5	8.6	8.6	8.6	9.9	10.0	10.0	9.9
Oct.	8.9	9.0	8.9	8.8	10.4	10.5	10.4	10.4
Nov.	8.8	9.0	9.0	8.9	10.5	10.7	10.7	10.7
Dec.	9.0	9.0	9.0	8.9	10.8	10.9	10.9	10.9
1990								
Jan.	8.8	9.0	9.2	9.2	10.8	11.0	11.2	11.3
Feb.	8.9	9.1	9.3	9.6	11.1	11.3	11.5	11.7
March	8.9	9.1	9.4	9.7	11.2	11.4	11.6	11.8

3.3 COVERED EURO-DOLLAR RATE, PER CENT

Average of daily observations	1 month	3 months	6 months	12 months
	1	2	3	4
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
1988	9.6	9.8	10.0	10.3
1989	11.8	12.1	12.2	12.2
1989				
March	10.6	10.9	11.1	11.3
April	11.9	11.8	11.8	11.7
May	11.1	11.2	11.2	11.3
June	11.2	11.3	11.4	11.5
July	11.1	11.3	11.5	11.5
Aug.	11.1	11.5	11.7	11.8
Sept.	11.9	12.5	12.8	12.9
Oct.	13.6	13.8	13.8	13.7
Nov.	14.2	14.3	14.3	14.1
Dec.	15.3	15.2	14.8	14.5
1990				
Jan.	14.9	15.4	15.1	15.0
Feb.	15.0	15.0	14.9	14.7
March	14.3	14.7	14.8	14.7

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. Since March 1989, the index has consisted of 14 currencies.

3.4 RATES OF INTEREST APPLIED BY BANKS, PER CENT

End of period	Lending						Deposits					
	New credits ¹				Average lending rate	Of which: Commercial banks	Savings accounts and ordinary deposit accounts	12-month time deposits	24-month time deposits	Average rate of interest on regulated deposits	Average rate of interest on unregulated deposits	Average rate of interest on total deposits
	Cheque account and post-office giro credits	Bills of exchange	Loans	New lending, total								
	1	2	3	4	5	6	7	8	9	10	11	12
1985	12.04	12.94	10.62	11.55	10.37	10.37	4.75	7.50	8.75	5.91	13.24	6.81
1986	10.89	12.30	9.76	10.64	8.82	8.81	2.75	5.75	7.00	4.43	11.84	5.35
1987	10.50	12.31	10.01	10.62	9.12	8.99	2.75	5.75	7.00	4.56	10.13	5.29
1988	10.22	12.27	10.50	10.72	10.37	10.25	3.75	6.75	8.00	5.87	9.80	6.20
1989*	12.97	13.47	11.58	12.07	11.86	11.80	4.50	.	7.50	6.60	11.92	7.37
1988												
Dec.	10.02	11.68	10.33	10.48	10.37	10.25	3.75	6.75	8.00	5.87	10.62	6.92
1989*												
Jan.	11.63	12.37	10.58	10.95	10.09	9.90	3.50	.	5.50	5.45	10.86	6.99
Feb.	11.63	12.23	10.85	11.18	10.09	9.92	3.50	.	5.50	5.41	10.85	7.06
March	12.04	12.69	11.04	11.45	10.11	9.94	3.50	.	5.50	5.51	10.89	6.87
April	12.73	13.10	11.35	11.80	10.23	10.06	3.50	.	5.50	5.54	11.32	7.09
May	12.75	13.11	11.48	11.91	10.31	10.13	3.50	.	5.50	5.52	11.41	7.07
June	12.46	13.12	11.43	11.83	10.35	10.18	3.50	.	5.50	5.48	11.55	7.06
July	12.60	13.25	11.59	12.03	10.34	10.18	3.50	.	5.50	5.46	11.53	7.04
Aug.	12.67	13.36	11.33	11.79	10.37	10.20	3.50	.	5.50	5.48	11.60	7.07
Sept.	12.28	13.54	11.84	12.21	10.46	10.31	3.50	.	5.50	5.53	11.92	7.29
Oct.	14.08	14.12	12.09	12.72	10.72	10.59	3.50	.	5.50	5.57	12.56	7.56
Nov.	14.99	14.77	12.90	13.58	11.60	11.44	4.50	.	6.50	6.40	13.27	8.35
Dec.	16.36	15.37	13.28	14.02	11.86	11.80	4.50	.	7.50	6.60	14.18	8.77

¹ Average rate of interest for period.

3.5 RATES OF INTEREST ON BONDS AND DEBENTURES, PER CENT

Period	Secondary market rates						Rates at issue		
	Long-term rate		Taxable government bonds	Taxable public issues	Issued by:		Taxfree public issues	Taxable public issues	Taxfree public issues
	3 years	5 years			Financial institutions	Corporations			
	1	2	3	4	5	6	7	8	9
1985	..	..	.	12.7	..	..	10.1	12.7	10.6
1986	..	..	.	11.7	..	..	8.3	11.3	8.8
1987	..	..	.	11.2	11.1	11.2	8.1	10.7	7.9
1988	10.7	10.8	10.6	10.6	10.6	10.6	7.8	10.4	7.3
1989	12.2	12.0	12.1	11.9	12.0	12.0	8.1	11.7	6.6
1989									
Feb.	11.5	11.4	11.7	11.5	11.8	11.3	7.5	11.5	6.5
March	11.6	11.6	11.8	11.8	11.5	11.8	7.7	11.5	6.5
April	11.9	11.8	11.8	11.8	11.9	11.7	7.6	11.6	6.5
May	11.8	11.7	11.8	11.8	11.9	11.8	7.9	11.6	6.5
June	11.9	11.7	12.3	11.8	11.8	11.7	8.1	11.5	6.5
July	11.8	11.7	12.1	11.8	12.0	11.6	8.2	11.6	6.5
Aug.	11.9	11.7	11.9	11.9	11.8	12.0	8.5	11.5	6.5
Sept.	12.5	12.0	12.2	12.1	12.0	12.2	8.4	11.9	6.5
Oct.	13.3	12.8	12.4	12.4	12.6	12.3	8.4	11.9	6.5
Nov.	13.3	12.9	12.6	12.4	12.2	12.6	8.7	12.2	6.5
Dec.	13.5	13.0	12.9	12.4	12.1	12.6	8.9	12.5	7.5
1990									
Jan.	13.5	13.0	12.7	12.7	12.9	12.4	8.7	12.0	.
Feb.	13.5	13.0	S	S	S	S	S	12.9	8.5

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
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
1988	4.191	3.412	7.466	6.397	0.6848	0.6444	0.6235	2.3895	2.1233	0.11421	0.11345
1989	4.295	3.632	7.051	6.104	0.6673	0.6234	0.5886	2.2879	2.0281	0.10925	0.10894
1989											
March	4.302	3.604	7.393	6.170	0.6756	0.6347	0.5925	2.3084	2.0459	0.11026	0.10982
April	4.197	3.534	7.149	6.001	0.6605	0.6190	0.5776	2.2465	1.9913	0.10737	0.10691
May	4.347	3.650	7.090	5.975	0.6618	0.6187	0.5737	2.2325	1.9805	0.10672	0.10639
June	4.437	3.706	6.899	5.985	0.6643	0.6183	0.5757	2.2397	1.9884	0.10708	0.10681
July	4.278	3.602	6.947	6.043	0.6622	0.6164	0.5818	2.2601	2.0043	0.10803	0.10786
Aug.	4.348	3.703	6.950	6.036	0.6657	0.6186	0.5814	2.2582	2.0029	0.10802	0.10782
Sept.	4.419	3.744	6.952	6.050	0.6698	0.6215	0.5830	2.2650	2.0088	0.10827	0.10803
Oct.	4.281	3.649	6.809	6.115	0.6648	0.6177	0.5892	2.2951	2.0326	0.10933	0.10897
Nov.	4.262	3.649	6.715	6.180	0.6644	0.6190	0.6001	2.3302	2.0648	0.11108	0.11089
Dec.	4.125	3.556	6.597	6.262	0.6569	0.6167	0.6107	2.3725	2.1016	0.11294	0.11289
1990											
Jan.	4.010	3.431	6.632	6.270	0.6508	0.6139	0.6117	2.3708	2.1018	0.11317	0.11315
Feb.	3.960	3.315	6.724	6.277	0.6482	0.6129	0.6128	2.3635	2.0966	0.11322	0.11320
March	4.030	3.416	6.561	6.308	0.6548	0.6125	0.6177	2.3648	2.1001	0.11399	

Average of daily quotations	Zurich	Paris	Rome	Vienna	Lisbon	Reykjavik	Madrid	Tokyo	Moscow	Melbourne	ECU	SDR
	1 CHF	1 FRF	1 ITL	1 ATS	1 PTE	1 ISK	1 ESP	1 JPY	1 SUR	1 AUD	1 XEU	1 XDR
	12	13	14	15	16	17	18	19	20	21	22	23
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
1988	2.8700	0.7060	0.00324	0.3401	0.0294	0.1006	0.0361	0.03273	6.891	3.309	4.954	5.61826
1989	2.6306	0.6757	0.00315	0.3254	0.0276	0.0782	0.0364	0.03122	6.817	3.423	4.731	5.49375
1989												
March	2.6830	0.6824	0.00316	0.3284	0.0283	0.0842	0.0372	0.03305	6.896	3.530	4.801	5.60538
April	2.5518	0.6659	0.00308	0.3195	0.0275	0.0819	0.0363	0.03181	6.702	3.395	4.672	5.44433
May	2.5138	0.6615	0.00308	0.3176	0.0273	0.0814	0.0359	0.03151	6.770	3.374	4.644	5.48599
June	2.5942	0.6616	0.00310	0.3185	0.0271	0.0789	0.0351	0.03079	6.831	3.367	4.639	5.49166
July	2.6243	0.6679	0.00314	0.3214	0.0273	0.0762	0.0361	0.03047	6.759	3.260	4.678	5.42928
Aug.	2.6201	0.6700	0.00316	0.3211	0.0273	0.0751	0.0362	0.03079	6.821	3.336	4.678	5.47435
Sept.	2.6202	0.6723	0.00316	0.3220	0.0273	0.0740	0.0363	0.03047	6.870	3.435	4.694	5.49998
Oct.	2.6260	0.6776	0.00314	0.3263	0.0272	0.0717	0.0362	0.03014	6.801	3.338	4.710	5.43586
Nov.	2.6348	0.6868	0.00319	0.3312	0.0273	0.0705	0.0367	0.02971	6.799	3.359	4.765	5.43347
Dec.	2.6339	0.6959	0.00321	0.3371	0.0273	0.0691	0.0369	0.02872	6.716	3.263	4.810	5.35882
1990												
Jan.	2.6457	0.6980	0.00319	0.3371	0.0272	0.0684	0.0367	0.02768	6.640	3.159	4.812	5.27623
Feb.	2.6625	0.6975	0.00320	0.3359	0.0271	0.0684	0.0367	0.02723	6.591	3.029	4.829	5.24250
March	2.6677	0.7021	0.00322	0.3362	0.0270	0.0682	0.0370	0.02634	6.610	3.067	4.827	5.23570

4.2 CURRENCY INDICES, 1982=100

Average of daily observations	Bank of Finland currency index	Other currency indices		Currency	Weights of the Bank of Finland currency index As from March 28, 1990
		Payments currency index	MERM index		
	1	2	3		4
1985	102.5	109.4	112.5	USD	8.5
1986	103.9	106.3	110.4	GBP	13.3
1987	103.3	103.2	106.1	SEK	19.1
1988	102.0	101.1 ^f	104.7	NOK	3.8
1989	98.4	98.4	102.8	DKK	4.4
				DEM	19.1
1989				NLG	4.8
March	100.1	99.8	104.4	BEC	3.2
April	97.4	97.1	101.6	CHF	2.4
May	97.3	97.6	102.4	FRF	6.6
June	97.2	98.0 ^f	102.8	ITL	5.0
July	97.4	97.5	101.7	ATS	1.6
Aug.	97.7	98.0	102.6	ESP	1.9
Sept.	98.0	98.6	103.1	JPY	6.3
Oct.	97.7	97.9 ^f	102.0		
Nov.	98.1	98.2 ^f	102.1		
Dec.	97.9	97.6	100.9		
1990					
Jan.	97.2	96.7	99.2		
Feb.	97.1	96.4	98.4		
March	97.0	96.7	98.7		

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

5.2 BANK LENDING TO THE PUBLIC, MILL. FIM

End of period	Cheque account and postal giro credits	Bills of exchange	Loans	Markka lending, total (1+2+3)	Foreign currency credits	Total lending (4+5)
	1	2	3	4	5	6
1984	5 233	7 644	111 280	124 157	20 363	144 520
1985	6 313	7 471	132 668	146 451	24 236	170 687
1986	7 542	6 354	152 335	166 231	24 450	190 681
1987	8 507	5 177	178 698	192 382	36 475	228 857
1988*	11 358	5 920	234 268	251 545	49 910	301 455
1988*						
Nov.	10 898	4 902	221 029	236 830	48 213	285 043
Dec.	11 358	5 920	234 268	251 545	49 910	301 455
1989*						
Jan.	11 765	5 334	237 089	254 188	52 726	306 914
Feb.	11 783	5 044	239 517	256 345	56 193	312 537
March	12 595	5 122	241 517	259 234	55 929	315 163
April	12 836	5 129	240 945	258 910	57 233	316 143
May	12 926	5 195	246 520	264 641	59 553	324 194
June	13 422	5 347	248 921	267 691	60 671	328 362
July	14 052	5 305	250 961	270 318	59 621	329 939
Aug.	13 931	5 358	253 401	272 691	60 892	333 582
Sept.	14 691	5 436	256 014	276 141	62 836	338 977
Oct.	15 190	5 471	256 958	277 619	63 133	340 752
Nov.	15 584	5 465	257 252	278 300	64 932	343 232

5.3 MONEY SUPPLY AND MONETARY AGGREGATES, MILL. FIM

End of period	Foreign assets, net	Domestic credit			Other items, net	M 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
1984	-2 575	-5 483	176 694	171 211	-26 978	24 945	141 658
1985	-6 641	-8 694	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	-14 977	277 068	262 090	-36 145	30 342	200 461
1988*	-40 670	-15 691	351 266	335 574	-48 866	35 232	246 039
1988*							
Nov.	-38 919	-16 343	333 845	317 502	-54 941	33 856	223 642
Dec.	-40 670	-15 691	351 266	335 574	-48 866	35 232	246 039
1989*							
Jan.	-40 982	-13 442	358 025	344 583	-57 465	34 954	246 137
Feb.	-41 631	-13 958	364 209	350 252	-58 621	37 294	250 000
March	-43 785	-16 112	368 268	352 156	-59 424	36 810	248 947
April	-45 413	-13 377	372 511	359 134	-61 684	37 559	252 037
May	-47 950	-10 575	377 748	367 173	-65 853	38 966	253 370
June	-50 499	-11 982	384 021	372 039	-58 889	42 526	262 651
July	-49 924	-13 556	385 135	371 579	-59 946	41 333	261 708
Aug.	-51 975	-14 549	390 251	375 703	-62 613	40 017	261 115
Sept.	-53 458	-15 401	396 312	380 911	-66 143	39 625	261 310
Oct.	-55 551	-15 567	399 696	384 128	-66 557	40 176	262 020
Nov.	-57 974	-18 766	403 920	385 154	-65 808	39 730	261 372

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
1985	17 316	2 703	5 658	25 677	14 994	4 107	2 203	21 304	46 981	36 032	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	4 692	3 018	29 831	58 511	40 035	11 553
1988	20 202	1 804	4 273	26 279	24 243	5 272	2 290	31 805	58 084	42 990	15 858
1989	18 505	852	3 429	22 786	24 126	5 750	250	30 126	52 912	45 390	..
1989											
Feb.	19 999	1 486	4 158	25 643	23 877	5 225	1 930	31 032	56 675	43 932	13 926
March	19 285	1 234	3 893	24 412	24 399	5 219	1 630	31 248	55 660	44 013	17 893
April	18 236	1 219	3 678	23 133	24 508	4 975	1 280	30 763	53 896	44 313	15 128
May	19 333	1 239	3 564	24 136	24 351	4 806	980	30 137	54 273	44 418	14 374
June	18 759	1 249	3 400	23 408	24 539	4 810	780	30 129	53 537	44 595	14 598
July	18 587	1 229	3 370	23 186	24 526	4 812	660	29 998	53 184	44 848	16 701
Aug.	18 809	1 166	3 390	23 365	24 352	4 798	420	29 570	52 935	44 786	17 363
Sept.	18 764	1 160	3 377	23 301	24 404	4 799	280	29 483	52 784	45 032	17 846
Oct.	18 591	1 138	3 385	23 114	23 998	4 801	250	29 049	52 163	45 371	17 788
Nov.	18 601	853	3 319	22 773	23 988	4 798	250	29 036	51 809	45 471	21 445
Dec.	18 505	852	3 429	22 786	24 126	5 750	250	30 126	52 912	45 390	..
1990											
Jan.	18 353	851	3 350	22 554	23 172	5 747	100	29 019	51 573	..	..
Feb.	18 322	729	3 303	22 354	23 122	5 728	—	28 850	51 204	..	..

5.5 MARKKA BOND MARKET

A) ISSUES, MILL. FIM

During period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporations	Financial institutions	Central government	Local government	Others	Public issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1985	4 799	9 112	5 994	435	33	8 070	6 394	5 909	20 373
1986	4 976	10 638	6 532	422	105	5 987	7 487	9 199	22 674
1987	4 477	9 510	8 119	206	69	9 409	8 830	4 142	22 380
1988	3 027	8 418	6 889	268	61	7 861	6 522	4 280	18 663
1989	4 204	11 022	5 717	233	13	11 146	2 997	7 046	21 189
1989									
Feb.	153	1 403	1 800	7	—	2 683	400	280	3 362
March	611	1 218	—	6	—	1 067	381	386	1 835
April	274	553	982	13	—	575	—	1 247	1 822
May	353	450	450	56	—	495	450	363	1 308
June	502	2 407	—	15	—	917	—	2 008	2 924
July	58	100	—	8	3	100	—	69	169
Aug.	247	103	450	35	—	507	200	128	835
Sept.	789	663	800	7	3	1 210	273	779	2 262
Oct.	72	1 040	160	8	7	974	—	313	1 287
Nov.	150	875	—	23	—	761	—	288	1 048
Dec.	258	850	—	9	—	665	—	452	1 117
1990*									
Jan.	399	818	—	—	—	110	—	1 107	1 217
Feb.	437	3 773	—	—	—	2 861	357	992	4 210

B) STOCK, MILL. FIM

End of period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporations	Financial institutions	Central government	Local government	Others	Public issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1985	10 482	26 173	18 575	661	56	10 967	19 002	25 977	55 947
1986	14 075	31 902	22 091	1 042	177	16 432	23 314	29 541	69 287
1987	17 509	36 773	26 518	1 200	232	24 831	28 229	29 172	82 232
1988*	19 195	42 892	28 953	1 413	292	32 028	30 054	30 663	92 745
1989*	21 463	50 216	29 381	1 555	290	41 162	27 742	34 001	102 906
1988*									
IV	19 195	42 892	28 953	1 413	292	32 028	30 054	30 663	92 745
1989*									
I	20 327	45 721	29 061	1 457	292	35 808	29 424	31 626	96 858
II	20 841	48 406	28 843	1 519	283	38 183	28 877	32 831	99 892
III	21 537	48 392	28 714	1 539	288	39 154	28 279	33 036	100 470
IV	21 463	50 216	29 381	1 555	290	41 162	27 742	34 001	102 906

5.6 HELSINKI STOCK EXCHANGE

During period	Turnover, mill.FIM			Share prices Unitas index ¹ , 1975 = 100		
	Shares and subscription rights	Bonds and debentures	Total (1+2)	Banks	Industry	Overall Index
	1	2	3	4	5	6
1985	3 114	9 046	12 160	184	234	229
1986	9 488	6 479	15 968	254	357	350
1987	26 641	4 604	31 245	319	603	546
1988	31 734	5 718	37 452	404	734	677
1989	33 160	7 375	40 536	441	793	742
1989						
Feb.	5 491	883	6 373	447	829	771
March	4 530	463	4 993	467	838	784
April	3 520	171	3 691	489	854	807
May	2 861	367	3 228	482	851	801
June	2 016	268	2 283	486	844	796
July	1 344	303	1 647	473	823	776
Aug.	3 198	1 171	4 370	466	829	776
Sept.	2 265	400	2 665	429	786	732
Oct.	1 304	689	1 993	397	727	677
Nov.	1 081	876	1 957	369	674	627
Dec.	2 929	1 471	4 400	354	669	619
1990						
Jan.	4 475	709	5 184	332	701	633
Feb.	1 324	15	1 339	319	745	661

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

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

6.2 CAPITAL ACCOUNT, MILL. FIM

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

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

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

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

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

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

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

7. FOREIGN TRADE

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

During period	Exports, f.o.b.	Imports, c.i.f.	Balance (1-2)
	1	2	3
1985	84 028	81 520	2 508
1986	82 579	77 601	4 978
1987	85 516	82 807	2 709
1988	92 902	92 118	784
1989*	99 799	105 304	-5 505
1989**			
Feb.	8 251	7 603	648
March	8 804	8 714	90
April	8 930	8 361	569
May	7 681	8 635	-954
June	7 145	8 032	-887
July	7 485	7 424	61
Aug.	7 885	9 858	-1 973
Sept.	7 553	8 596	-1 043
Oct.	10 390	10 873	-483
Nov.	9 431	9 920	-489
Dec.	7 978	9 018	-1 040
1990*			
Jan.	8 538	8 300	238
Feb.	8 000	8 000	0

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

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

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

7.3 FOREIGN TRADE BY MAIN GROUPS, MILL. FIM

During period	Exports by industries, f.o.b.					Imports by use of goods, c.i.f.				
	Wood industry products	Paper industry products	Chemical industry products	Metal and engineering industry products	Other goods	Raw materials (excl. crude oil)	Crude oil, fuels and lubricants	Finished goods		Other goods
								Investment goods	Consumer goods	
	1	2	3	4	5	6	7	8	9	10
1985	6 728	25 030	9 803	24 412	18 055	38 676	17 770	11 675	12 967	432
1986	6 947	24 600	7 858	26 115	17 059	39 292	10 070	12 898	15 069	272
1987	7 470	27 058	7 770	26 230	16 988	41 174	9 389	14 138	17 478	628
1988	7 567	30 474	8 450	29 225	17 186	45 790	7 533	17 274	20 828	693
1989*	7 418	32 520	8 843	32 684	18 329	51 726	8 283	20 467	24 060	752
1989**										
Feb.	604	2 621	832	2 704	1 490	3 832	515	1 315	1 912	29
March	624	2 953	761	2 775	1 691	4 375	574	1 495	2 246	24
April	660	2 728	673	3 308	1 561	4 102	540	1 626	1 962	131
May	669	2 712	633	2 198	1 469	4 173	678	1 825	1 833	126
June	598	2 518	587	1 991	1 451	3 926	595	1 791	1 706	14
July	551	2 510	737	2 471	1 216	3 527	925	1 447	1 517	8
Aug.	477	2 978	668	2 379	1 383	5 009	862	1 748	2 189	50
Sept.	597	2 598	648	2 223	1 487	3 941	753	1 778	2 003	121
Oct.	719	2 913	967	3 866	1 925	5 463	733	2 055	2 546	76
Nov.	700	2 859	844	3 318	1 710	4 697	903	1 996	2 284	40
Dec.	618	2 552	684	2 805	1 319	4 326	796	1 867	1 963	66
1990*										
Jan.	617	2 327	824	3 426	1 344	4 028	498	1 782	1 963	29
Feb.	665	2 449	831	2 599	1 497	4 053	417	1 579	1 984	66

7.4 FOREIGN TRADE BY REGIONS AND COUNTRIES

Region and country	Exports, f.o.b.				Imports, c.i.f.			
	1989*		1990*		1989*		1990*	
	Mill. FIM	Percentage share	Mill. FIM	Percentage change from the corresponding period on the previous year	Mill. FIM	Percentage share	Mill. FIM	Percentage change from the corresponding period of the previous year
	1	2	3	4	5	6	7	8
All OECD countries	75 493	75.6	12 834	1.4	82 767	78.6	13 213	4.1
OECD Europe	64 393	64.5	10 518	-1.7	67 056	63.7	10 607	3.7
Of which:								
Austria	1 175	1.2	182	4.6	1 295	1.2	210	10.9
Belgium and Luxembourg	1 947	2.0	318	-15.4	2 932	2.8	461	4.2
Denmark	3 257	3.3	536	-9.7	3 290	3.1	492	5.6
France	5 453	5.5	1 092	20.1	4 418	4.2	772	26.2
Federal Republic of Germany	10 785	10.8	1 799	2.4	18 234	17.3	2 894	1.9
Italy	2 989	3.0	468	-6.3	4 900	4.7	760	8.4
Netherlands	3 961	4.0	707	7.8	3 416	3.2	490	-7.3
Norway	2 920	2.9	518	0.1	2 457	2.3	380	7.6
Spain	1 831	1.8	309	20.9	1 129	1.1	220	2.8
Sweden	14 314	14.3	2 257	1.3	14 314	13.6	2 203	-4.6
Switzerland	1 680	1.7	281	5.7	1 829	1.7	264	-7.5
United Kingdom	11 958	12.0	1 693	-21.2	6 898	6.6	1 086	8.2
Other OECD	11 100	11.1	2 316	18.8	15 711	14.9	2 606	6.1
Of which:								
Canada	1 359	1.4	270	-1.0	919	0.9	134	-8.9
Japan	2 033	2.0	221	-36.3	7 695	7.3	1 208	-4.4
United States	6 388	6.4	1 686	57.8	6 669	6.3	1 221	24.5
CMEA countries	16 248	16.3	2 257	-10.7	14 907	14.2	1 960	-4.4
Of which:								
Soviet Union	14 496	14.5	1 955	-12.7	12 152	11.5	1 531	-3.5
Developing countries	7 224	7.2	1 249	8.4	6 612	6.3	1 035	7.0
OPEC countries	1 558	1.6	265	3.3	680	0.6	65	65.2
Other	5 666	5.7	984	9.9	5 932	5.6	970	4.5
Other countries	829	0.8	239	32.5	1 002	1.0	191	27.8
TOTAL	99 794	100.0	16 579	0.4	105 288	100.0	16 399	3.4
Of which:								
EEC countries	43 869	44.0	7 212	-3.1	46 903	44.5	7 512	6.7
EFTA countries	20 195	20.2	3 249	1.3	20 006	19.0	3 068	-3.2

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

8.2 VOLUME OF INDUSTRIAL PRODUCTION, 1985=100

(seasonally adjusted figures)

Period	Total industry	Mining and quarrying	Manu- facturing	Wood and paper industries	Metal and engineering industries	Other manu- facturing	Energy and water supply
	(100.0)	(1.6)	(87.9)	(16.5)	(30.0)	(41.4)	(10.5)
	1	2	3	4	5	6	7
1985	100.4	99.8	100.4	100.1	100.6	100.3	100.2
1986	101.9	102.8	102.0	102.3	103.0	101.2	100.4
1987	107.2	99.9	107.2	106.5	110.2	105.4	107.8
1988*	111.1	110.6	111.2	114.5	114.8	107.3	110.3
1989*	114.5	114.8	115.1	118.1	123.9	107.5	109.1
1989*							
Jan.	113.2	121.3	112.9	119.9	119.8	105.9	109.6
Feb.	114.1	119.0	114.8	118.4	120.3	109.0	106.6
March	115.4	119.5	116.1	119.3	123.0	108.0	108.9
April	113.0	112.4	113.4	119.7	120.8	105.4	110.8
May	115.3	113.9	116.0	122.1	122.6	108.7	111.6
June	115.2	116.5	115.5	117.6	124.2	108.2	114.7
July	114.2	109.8	115.6	116.8	125.0	109.1	105.8
Aug.	116.2	103.6	117.6	118.3	131.4	108.1	105.7
Sept.	115.0	110.2	116.3	118.6	126.6	108.1	103.7
Oct.	114.3	117.9	115.2	115.8	125.7	107.1	105.8
Nov.	114.3	116.2	115.2	117.6	124.1	107.4	110.7
Dec.	113.5	117.1	113.2	112.7	123.5	105.1	115.6
1990*							
Jan.	113.2	116.1	111.4	114.2	118.6	105.7	122.2

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
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986	104.7	102.5	94.0	88.4	99.9	99.5	105.2	101.9
1987	111.3	107.7	95.6	89.0	101.0	102.6	114.3	106.6
1988*	116.7	113.0	108.6	106.0	113.4	110.6	135.0	110.3
1989*	124.2	117.0	127.4	132.3	139.7	115.9	160.4	114.5
1988*								
Dec.	123.0	117.1	..	..	..	..	..	112.7
IV	118.5	114.7	114.4	117.1	122.3	110.9	146.0	112.1
1989*								
Jan.	123.5	119.5	..	..	..	..	..	113.2
Feb.	120.9	115.9	..	..	..	..	..	112.9
March	119.3	114.9	..	..	..	..	..	113.4
April	121.4	117.4	..	..	..	..	..	114.0
May	128.2	119.8	..	..	..	..	..	114.5
June	121.1	118.2	..	..	..	..	..	114.5
July	120.6	116.5	..	..	..	..	..	114.0
Aug.	126.7	117.4	..	..	..	..	..	115.3
Sept.	124.9	117.5	..	..	..	..	..	115.0
Oct.	130.4	116.0	..	..	..	..	..	115.5
Nov.	130.9	117.7	..	..	..	..	..	116.0
Dec.	122.3	112.7	..	..	..	..	..	115.2
I	121.2	116.8	118.6	120.5	127.9	108.5	133.9	113.2
II	123.6	118.5	128.5	131.2	148.8	113.3	167.5	114.3
III	124.1	117.2	128.0	133.0	137.7	119.0	152.6	114.8
IV	127.8	115.5	134.4	144.6	144.3	123.1	189.3	115.6

8.4 WAGES AND PRICES, 1985=100

Period	Index of wage and salary earnings	By sectors					Consumer price index	Basic price index for domestic supply	By origin		Producer price index for manufacturing	By marketing area		Building cost index
		Private Total	Of which: Manufacturing (SIC 3)	Central government	Local government	Non-profit institutions			Domes-tic goods	Import-ed goods		Export-ed goods	Home market goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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
1986	106.9	106.6	106.2	106.6	107.8	107.2	102.9	97.0	98.6	91.0	96.5	96.7	96.4	104.3
1987	114.4	114.5	113.4	115.7	113.3	115.2	107.2	97.9	100.2	89.3	97.3	98.1	96.8	109.1
1988	124.7	124.6	122.7	128.8	122.0	128.0	112.6	101.5	104.9	89.1	101.7	103.8	100.7	116.3
1989	135.3	136.2	133.4	137.2	131.4	136.4	120.0	107.3	111.3	92.6	107.8	110.5	106.4	125.5
1988														
IV	128.4	128.5	126.6	132.1	125.2	131.4	114.7	103.6	107.3	90.0	104.0	107.1	102.5	119.6
1989¹														
Feb.	..	..	..	..	..	..	116.6	105.5	109.0	92.4	105.8	109.6	103.9	121.9
March	..	..	..	..	..	..	117.9	105.9	109.3	93.4	106.3	110.2	104.4	123.4
April	..	..	..	..	..	..	119.1	107.0	110.6	93.6	107.1	109.9	105.8	124.3
May	..	..	..	..	..	..	119.5	107.4	111.3	93.2	107.8	110.1	106.6	124.9
June	..	..	..	..	..	..	120.6	107.4	111.4	92.6	107.9	110.4	106.8	124.6
July	..	..	..	..	..	..	120.4	107.4	111.4	92.6	108.2	110.5	107.1	124.8
Aug.	..	..	..	..	..	..	120.6	107.6	111.8	92.3	108.3	110.6	107.3	125.8
Sept.	..	..	..	..	..	..	121.9	108.1	112.4	92.3	108.8	111.3	107.6	127.6
Oct.	..	..	..	..	..	..	122.4	108.7	113.2	92.5	109.2	111.7	108.0	128.2
Nov.	..	..	..	..	..	..	122.3	108.9	113.5	92.3	109.1	111.2	108.0	128.6
Dec.	..	..	..	..	..	..	123.0	109.0	113.6	92.4	109.3	111.5	108.2	129.8
I	131.6	131.6	129.4	135.1	129.3	134.4	116.8	105.4	108.9	92.5	105.8	109.4	104.0	122.3
II	135.7	136.9	134.3	137.1	130.8	136.3	119.7	107.3	111.1	93.1	107.6	110.1	106.4	124.6
III	136.0	137.3	134.3	137.1	130.8	136.4	121.0	107.7	111.9	92.4	108.4	110.8	107.3	126.1
IV	138.0	138.8	135.7	139.5	134.8	138.5	122.6	108.9	113.4	92.4	109.2	111.5	108.1	128.9
1990														
Jan.	..	..	..	..	..	..	124.8	109.4	113.9	93.0	109.4	111.5	108.4	130.4
Feb.	..	..	..	..	..	..	125.3	109.2	113.8	92.5	108.9	110.2	108.2	130.8

¹ Preliminary figures for columns 1—6.

8.5 LABOUR, EMPLOYMENT AND UNEMPLOYMENT (seasonally adjusted figures)

Period	Labour force participation rate among 15-74 year olds	Labour force	Total employment (4+5) = (6+7+8+9)	By industrial status		By industry				Unemployed	Unemployment rate
				Self-employed	Wage and salary earners	Agri-culture and forestry	Industry	Con-struction	Service industries		
				1000 persons							
	1	2	3	4	5	6	7	8	9	10	11
1985	69.2	2 566	2 437	361	2 076	280	597	178	1 380	129	5.0
1986	69.1	2 569	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
1988	68.4	2 546	2 431	368	2 062	238	553	188	1 452	116	4.6
1989	68.7	2 559	2 470	367	2 104	218	561	199	1 492	89	3.5
1989											
Jan.	68.9	2 566	2 467	369	2 098	226	551	201	1 489	98	3.8
Feb.	69.0	2 568	2 475	370	2 105	230	551	190	1 504	92	3.6
March	68.3	2 543	2 451	365	2 086	230	554	209	1 459	91	3.6
April	69.1	2 572	2 481	374	2 107	230	550	203	1 498	92	3.6
May	69.2	2 577	2 491	362	2 129	221	576	194	1 501	86	3.3
June	68.6	2 556	2 470	362	2 108	216	564	199	1 491	86	3.4
July	68.6	2 556	2 466	369	2 097	205	561	196	1 504	90	3.5
Aug.	68.2	2 541	2 449	346	2 103	198	565	194	1 491	92	3.6
Sept.	68.4	2 548	2 460	363	2 097	216	575	204	1 466	88	3.4
Oct.	68.5	2 556	2 482	378	2 105	218	558	201	1 505	73	2.9
Nov.	68.7	2 560	2 471	372	2 100	212	563	192	1 504	88	3.4
Dec.	68.9	2 567	2 478	369	2 109	214	566	206	1 492	90	3.5
1990											
Jan.	68.6	2 560	2 490	381	2 109	223	562	199	1 506	69	2.7

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

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

NOTES AND EXPLANATIONS TO THE STATISTICAL SECTION

GENERAL

Source

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

Symbols used

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

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

NOTES AND EXPLANATIONS TO TABLES

1 THE BALANCE SHEET OF THE BANK OF FINLAND

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

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

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

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

3 RATES OF INTEREST

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

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

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

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

Table 3.5 *Secondary market rates.* The long-term unregulated market rate (Columns 1 and 2) is calculated by the Bank of Finland as the monthly average of the offered rates for taxable, fixed-rate bonds quoted by the five largest banks. The rate of interest for taxable government bonds (Column 3) is the effective annual yield, calculated as the arithmetic mean, on fixed-rate government bonds with a remaining maturity of between 4 and 5 years.

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

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

4 RATES OF EXCHANGE

Table 4.2 The weights of the Bank of Finland currency index (Column 1) are moving averages of the shares of countries in Finland's merchandise export and import trade. The index comprises 14 convertible currencies. The index values are based on the Bank of Finland's daily quotations at noon. The weights of the payments currency index (Column 2) are moving averages of the shares of payments currencies in Finland's trade. The index comprises 14 convertible currencies. The weights of the MERM index (Column 3) are fixed 1977 weights computed on the basis of the IMF's world trade model. Fourteen currencies are included in this index.

5 OTHER DOMESTIC FINANCING

Table 5.1 Source: The Central Statistical Office of Finland. The public comprises households and non-profit institutions, enterprises (excl. financial

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

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

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

Table 5.4 Source: State Treasury Office. *Foreign debt.* Other bonds and debentures (Column 2) are so-called private placings. Long-term promissory notes (Column 3) are bank loans. Outstanding lending (Column 10) comprises the stock of central loans granted from the central government budget and from extra-budgetary funds. Cash funds (Column 11) comprise the cash funds held in central government accounting offices, funds held in cheque and postal giro accounts, as well as placements of central government cash funds. The main part of the latter is reserved for covering transferable allocations budgeted in

previous years (for details, see the article "State Borrowing and Cash Management" by Pekka Laajanen and Pekka Saarinen in the August 1987 issue of the Bulletin). Transferable allocations amounted to FIM 8.1 billion at the end of 1988.

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

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

6 BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS

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

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

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

serve tranche and oil facility credits, or repayments of rouble-denominated assets included under loan assets. The debt-service ratio (Column 27) = service charges on net foreign debt as a percentage of current account earnings.

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

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

7 FOREIGN TRADE

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

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

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

8 DOMESTIC ECONOMIC DEVELOPMENTS

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

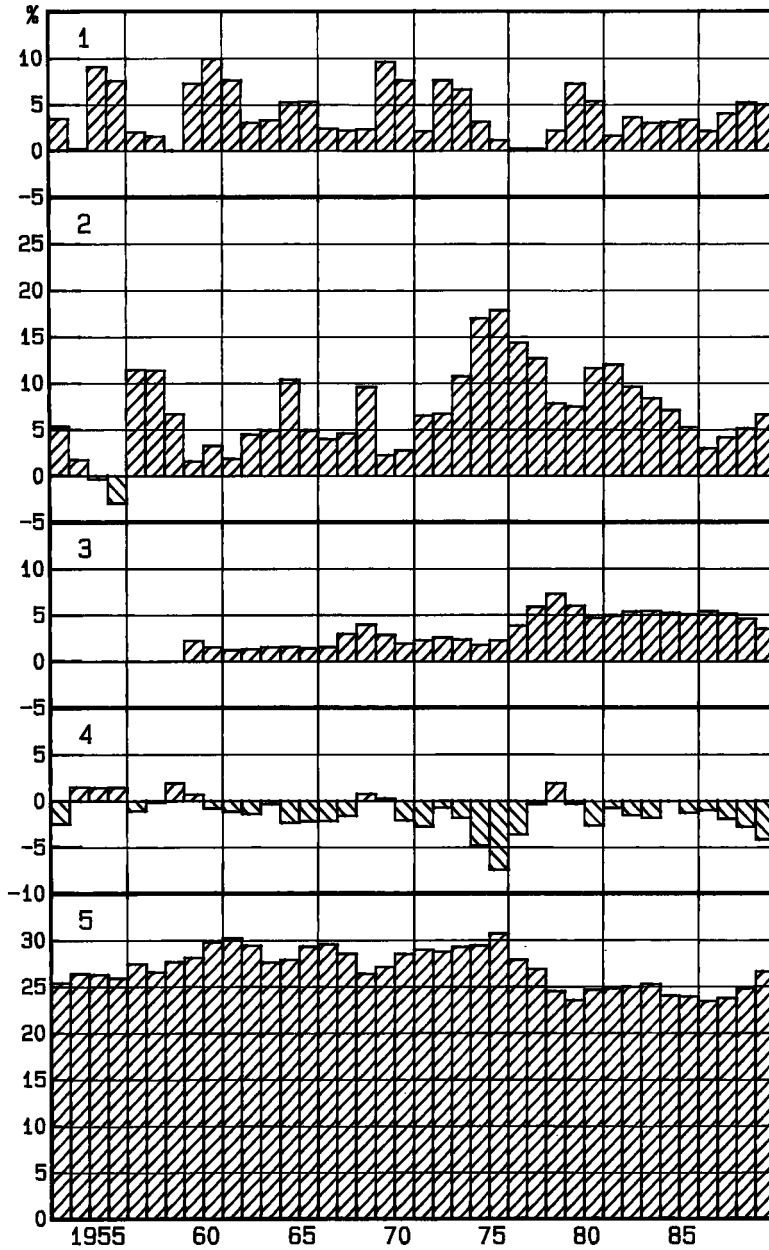
Table 8.3 The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various industries.

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

Table 8.6 Source: Ministry of Finance.

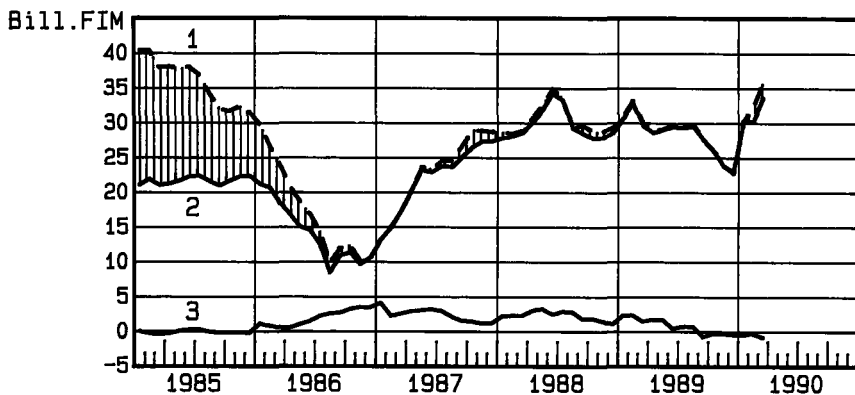
1. Long-term indicators	S28
2. The Bank of Finland's foreign exchange reserves and forward position	S29
3. Forward market	S29
4. Items affecting domestic liquidity	S29
5. Overnight rates	S30
6. HELIBOR rates of interest (daily)	S30
7. HELIBOR rates of interest (monthly)	S30
8. Rates of interest applied by the Bank of Finland	S31
9. 3-month covered Eurodollar rate and 3-month currency basket rates	S31
10. Rates on bonds and debentures	S31
11. Bank of Finland currency index (monthly)	S32
12. Bank of Finland currency index (daily)	S32
13. Changes in the exchange rates of selected Nordic currencies	S32
14. Changes in the exchange rates of selected major currencies	S33
15. Bank deposits from the public	S33
16. Bank lending to the public	S33
17. Money supply	S34
18. Direct investment	S34
19. Central government debt	S34
20. Current account	S35
21. Foreign debt	S35
22. Balance of payments	S36
23. Debt service ratio	S36
24. Foreign trade	S37
25. Western trade	S37
26. Bilateral trade	S37
27. Foreign trade: prices and terms of trade	S38
28. Western trade: prices and terms of trade	S38
29. Bilateral trade: prices and terms of trade	S38
30. Production	S39
31. Fixed investment	S39
32. Employment and unemployment rate	S40
33. Prices and wages	S40
34. Central government finances	S41

1. LONG-TERM INDICATORS



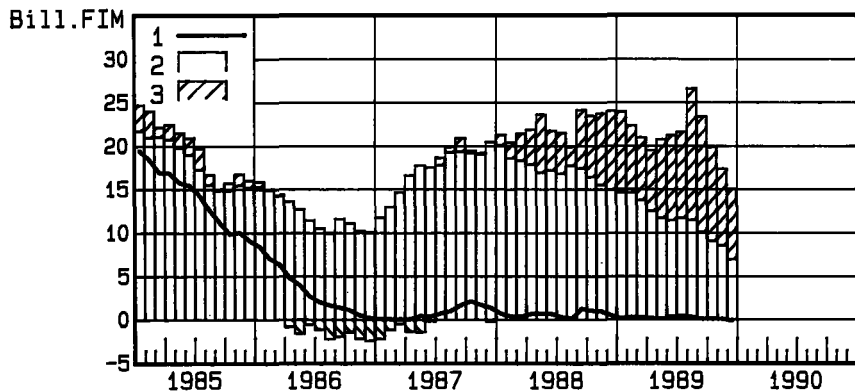
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

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



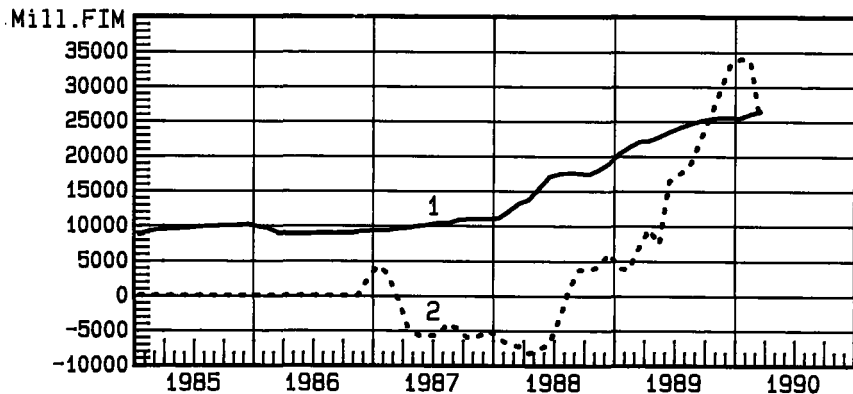
1. Convertible foreign exchange reserves plus forward position
2. Convertible foreign exchange reserves
3. Tied currencies

3. FORWARD MARKET



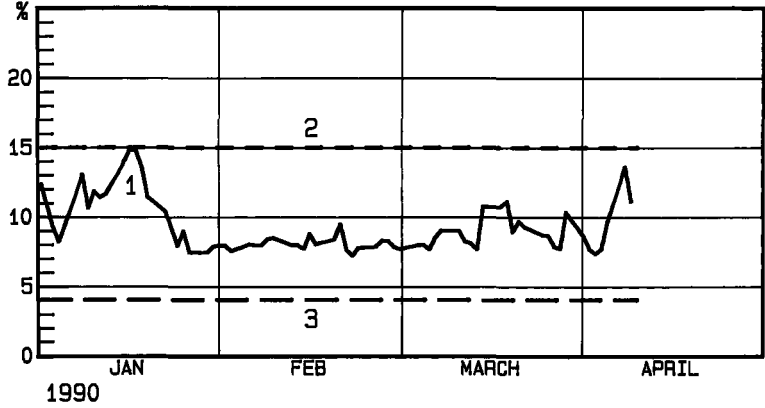
1. Forward exchange purchased by the Bank of Finland from banks
2. Forward exchange sold by companies to banks
3. Forward exchange sold by foreign banks to banks

4. ITEMS AFFECTING DOMESTIC LIQUIDITY



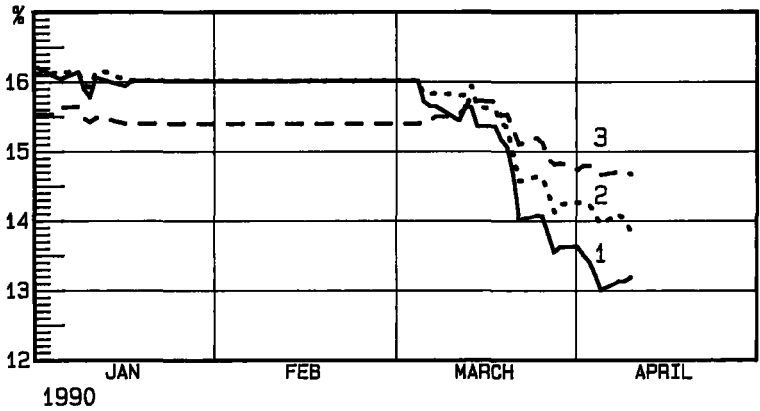
1. Cash reserve deposits
2. Bank of Finland's holdings of money market instruments, net

5. OVERNIGHT RATES



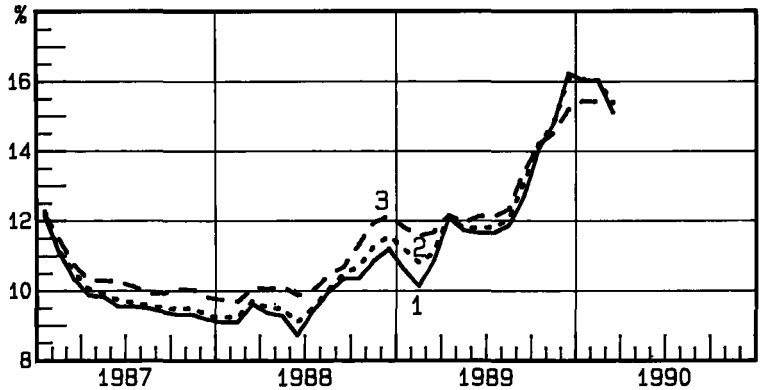
- 1. Inter-bank overnight rate
 - 2. Call money credit rate
 - 3. Call money deposit rate
- Daily observations

6. HELIBOR RATES OF INTEREST



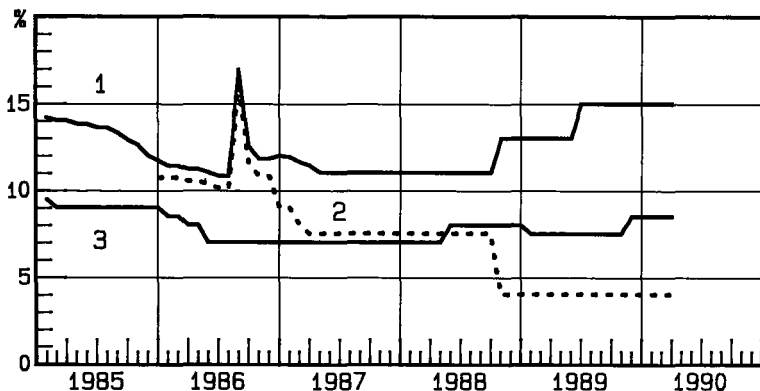
- 1. 1-month HELIBOR
 - 2. 3-month HELIBOR
 - 3. 12-month HELIBOR
- Daily observations

7. HELIBOR RATES OF INTEREST



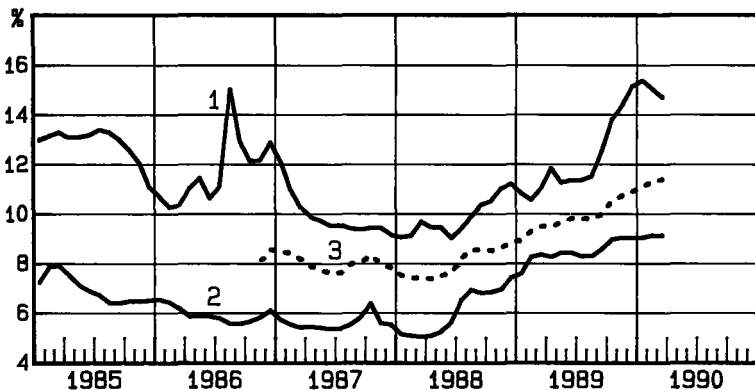
- 1. 1-month HELIBOR
 - 2. 3-month HELIBOR
 - 3. 12-month HELIBOR
- Monthly averages

8. RATES OF INTEREST APPLIED BY THE BANK OF FINLAND



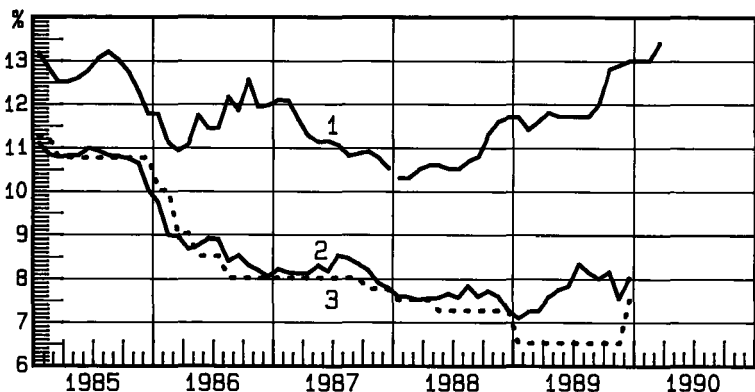
- 1. Call money credit rate
 - 2. Call money deposit rate
 - 3. Base rate
- End-of-month observations

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



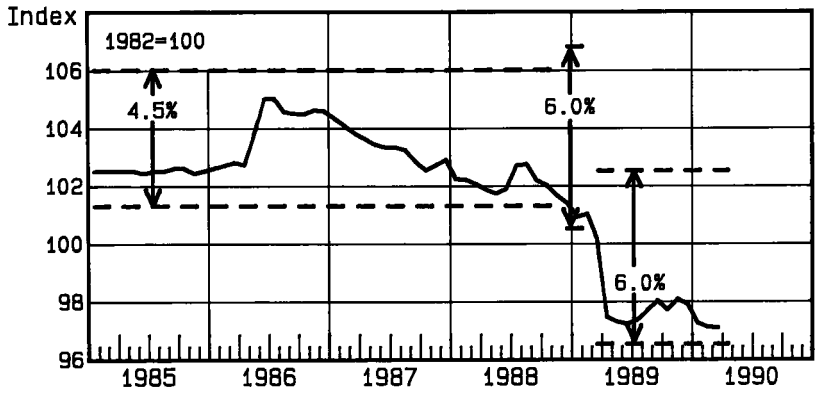
- 1. Covered Eurodollar rate
- 2. 3-currency basket rate (DEM 60 %, USD 30 %, GBP 10 %)
- 3. 14-currency basket rate (Bank of Finland currency index weights)

10. RATES ON BONDS AND DEBENTURES



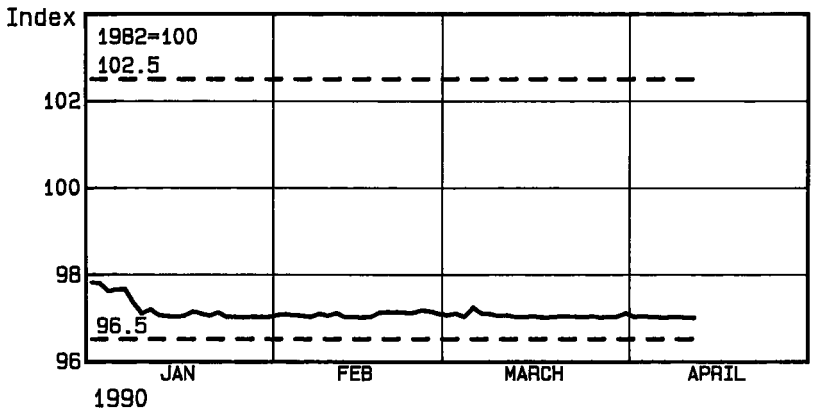
- 1. Long-term (5-year) market rate (before 1988 rate on (3-6 year) fixed-rate debentures)
- 2. Rate on (9-10 year) tax-free government bonds
- 3. Rate at issue on new 10-year taxfree government bonds

11. BANK OF FINLAND CURRENCY INDEX



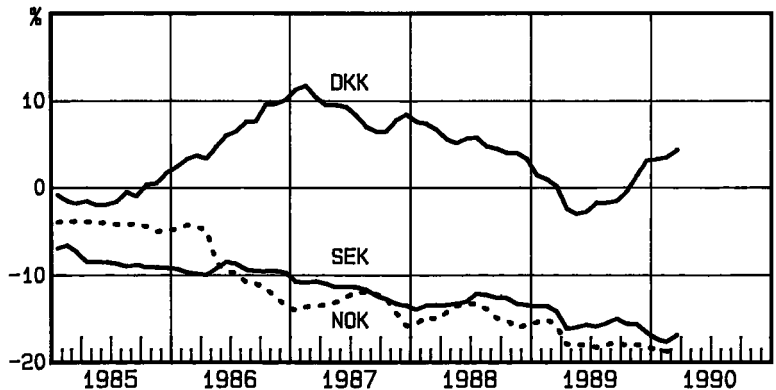
4.5 % and 6.0 % = fluctuation range of the index
Monthly averages

12. BANK OF FINLAND CURRENCY INDEX



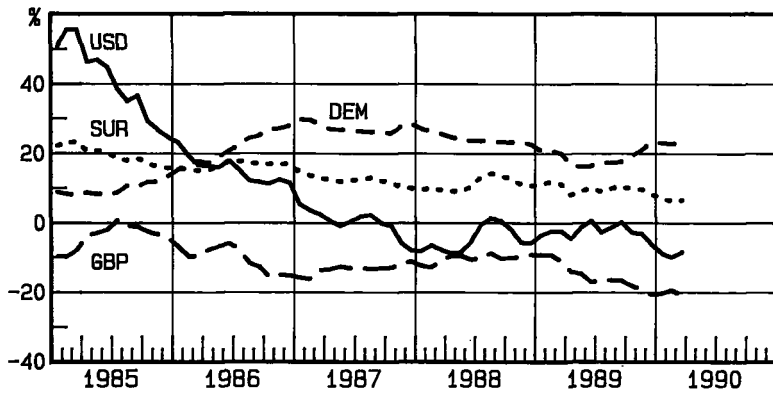
Daily observations

13. CHANGES IN THE EXCHANGE RATES OF SELECTED NORDIC CURRENCIES



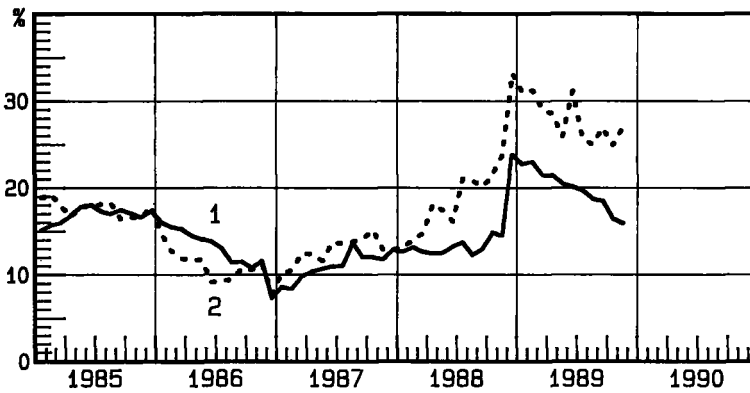
Monthly changes in markka selling rates calculated from the average rates for January 1982

14. CHANGES IN THE EXCHANGE RATES OF SELECTED MAJOR CURRENCIES



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

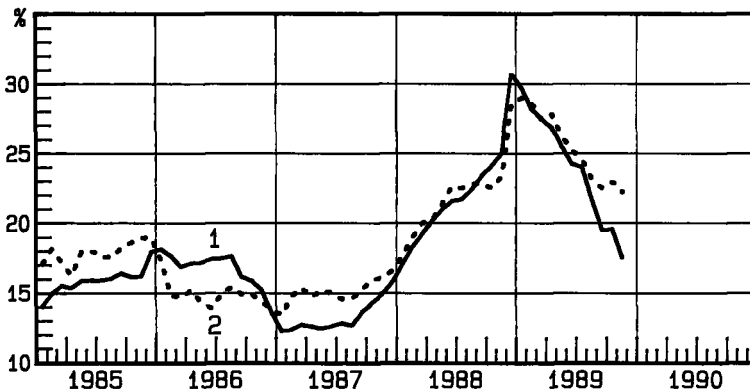
15. BANK DEPOSITS FROM THE PUBLIC



- 1. Regulated deposits
- 2. Total deposits

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

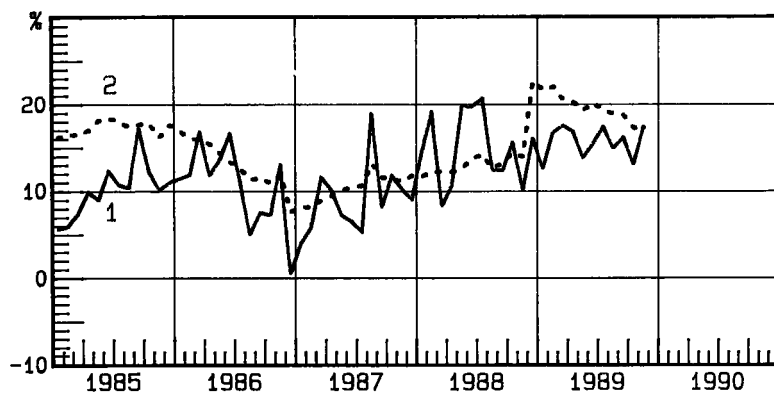
16. BANK LENDING TO THE PUBLIC



- 1. Markka lending
- 2. Total lending

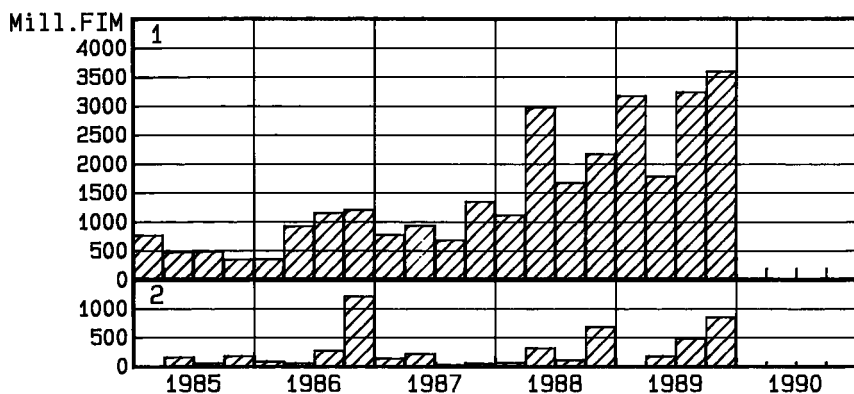
Change from the corresponding month of the previous year, per cent

17. MONEY SUPPLY



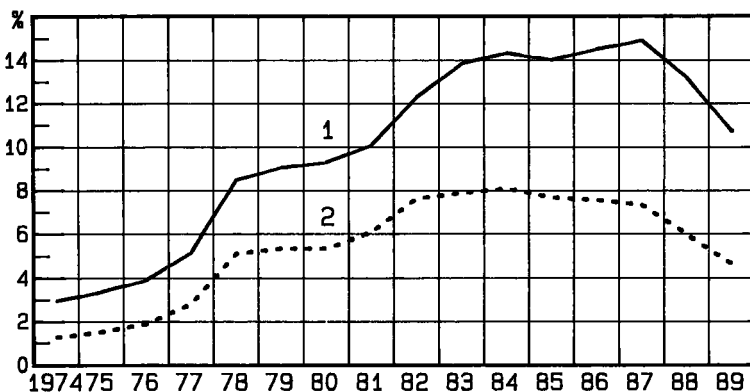
1. Narrow money supply (M1)
 2. Broad money supply (M2)
- Change from the corresponding month of the previous year, per cent

18. DIRECT INVESTMENT



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

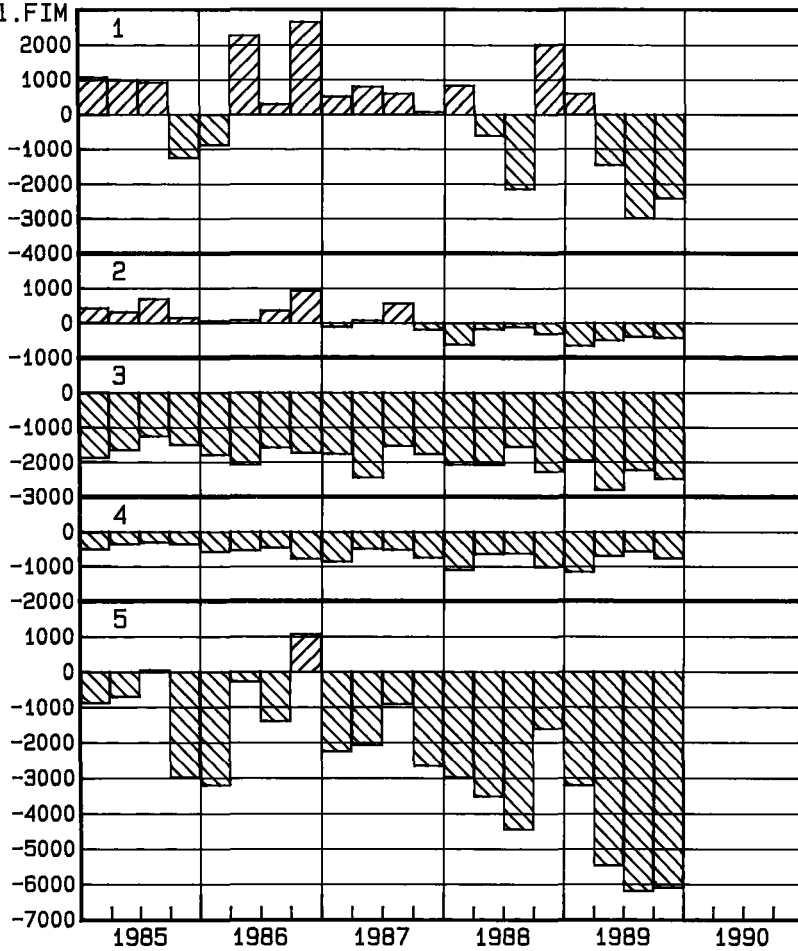
19. CENTRAL GOVERNMENT DEBT



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

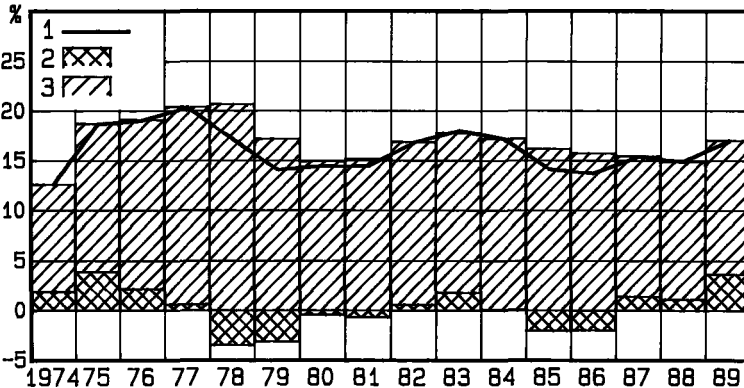
20. CURRENT ACCOUNT

Mill.FIM



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

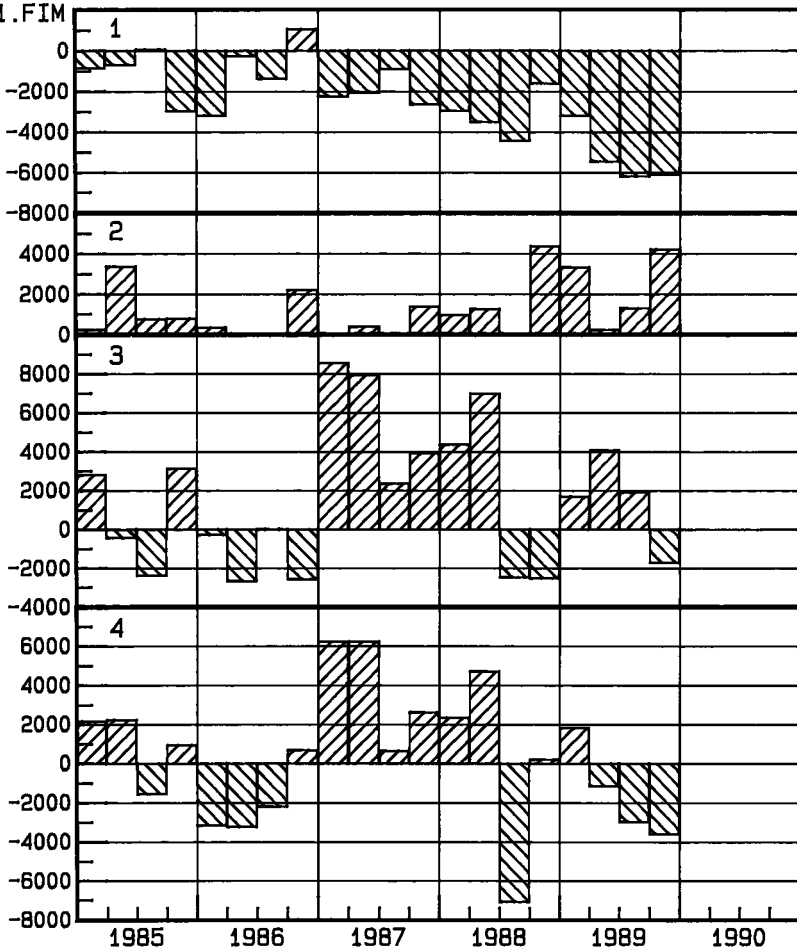
21. FOREIGN DEBT



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

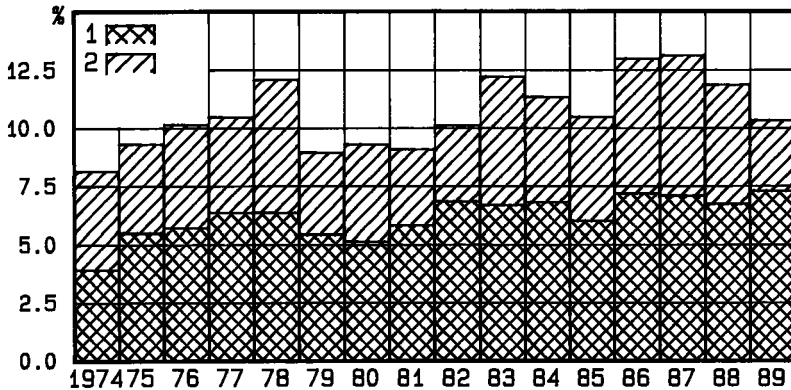
22. BALANCE OF PAYMENTS

Mill.FIM



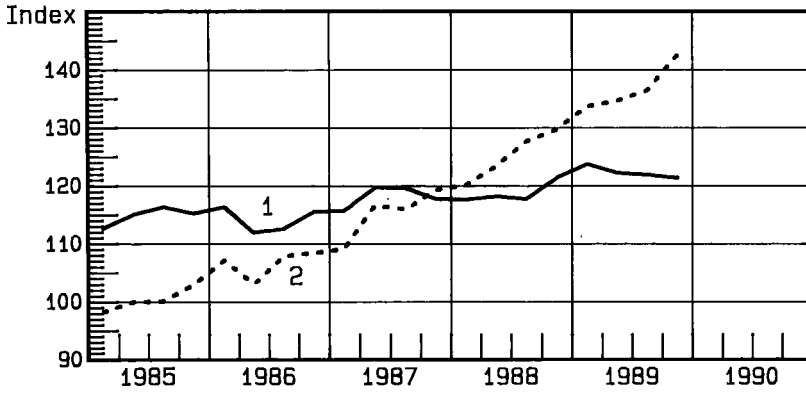
1. Current account
2. Long-term capital account
3. Short-term capital account
4. Overall balance=change in the foreign exchange reserves of the Bank of Finland

23. DEBT SERVICE RATIO



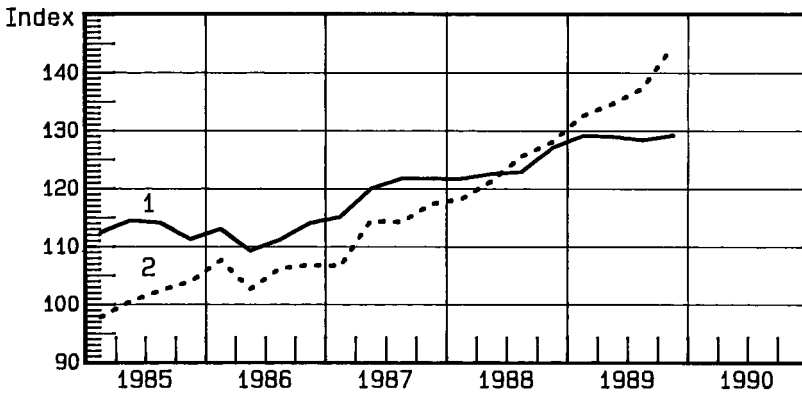
1. Interest payments
 2. Redemptions
- As a percentage of current account earnings

24. FOREIGN TRADE



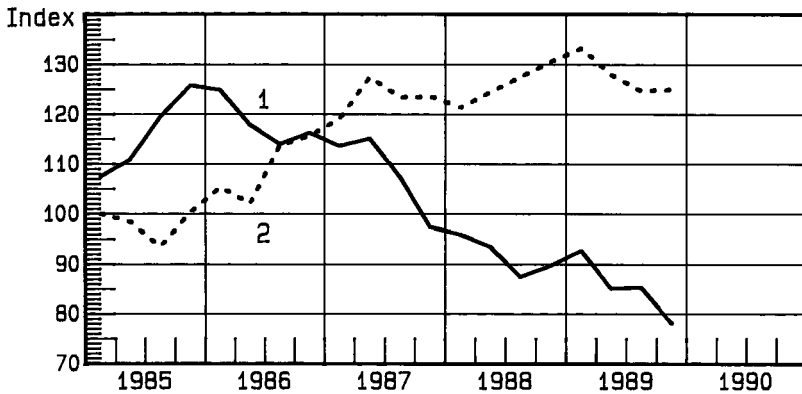
1. Total exports
2. Total imports
Volume index, 1980 = 100,
four-quarter moving average
shown as at the last quarter

25. WESTERN TRADE



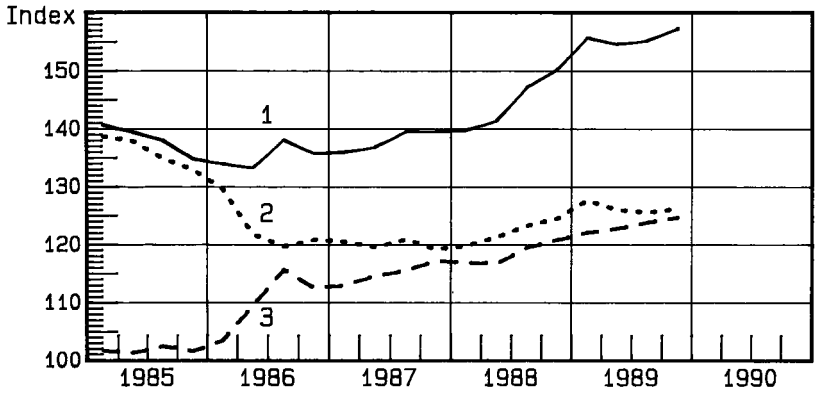
1. Western exports
2. Western imports
Volume index, 1980 = 100,
four-quarter moving average
shown as at the last quarter

26. BILATERAL TRADE



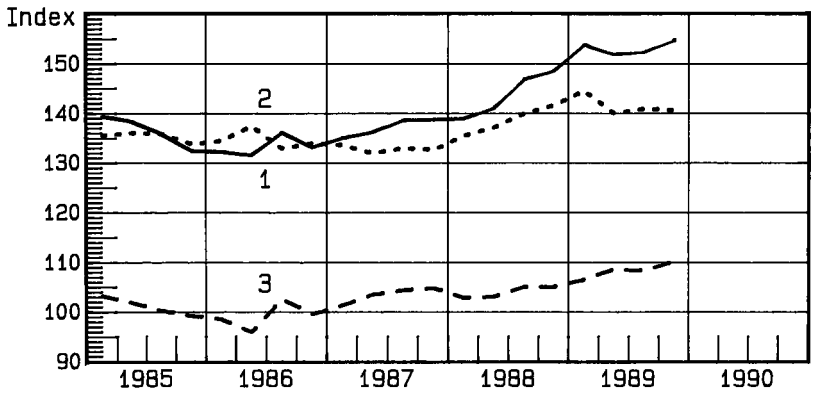
1. Bilateral exports
2. Bilateral imports
Volume index, 1980 = 100,
four-quarter moving average
shown as at the last quarter

27. FOREIGN TRADE: PRICES AND TERMS OF TRADE



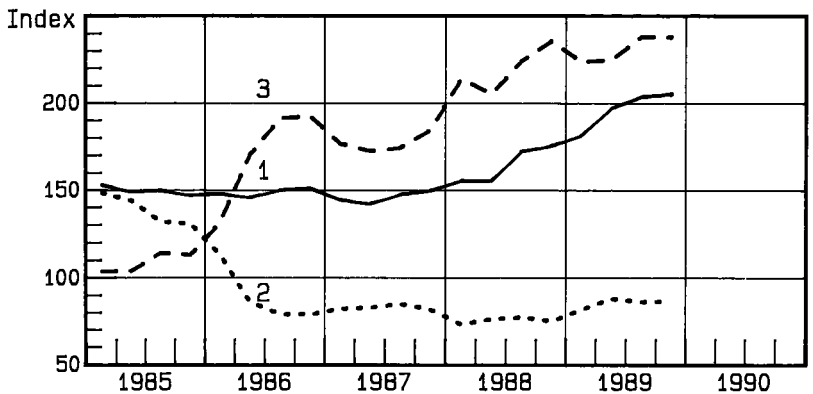
- 1. Unit value index of exports
 - 2. Unit value index of imports
 - 3. Terms of trade
- 1980 = 100

28. WESTERN TRADE: PRICES AND TERMS OF TRADE



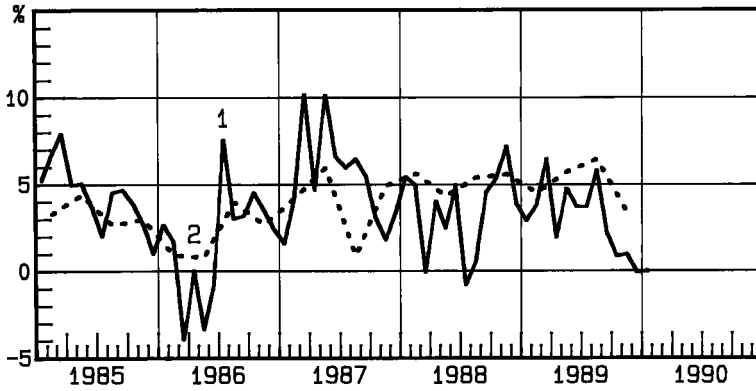
- 1. Unit value index of western exports
 - 2. Unit value index of western imports
 - 3. Terms of trade in western trade
- 1980 = 100

29. BILATERAL TRADE: PRICES AND TERMS OF TRADE



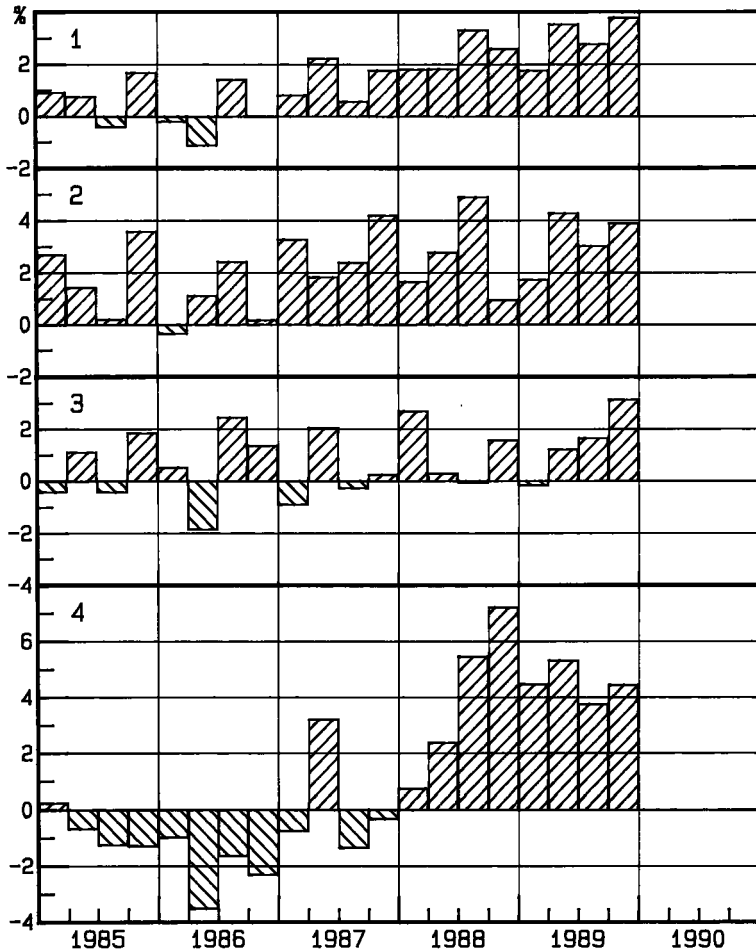
- 1. Unit value index of bilateral exports
 - 2. Unit value index of bilateral imports
 - 3. Terms of trade in bilateral trade
- 1980 = 100

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

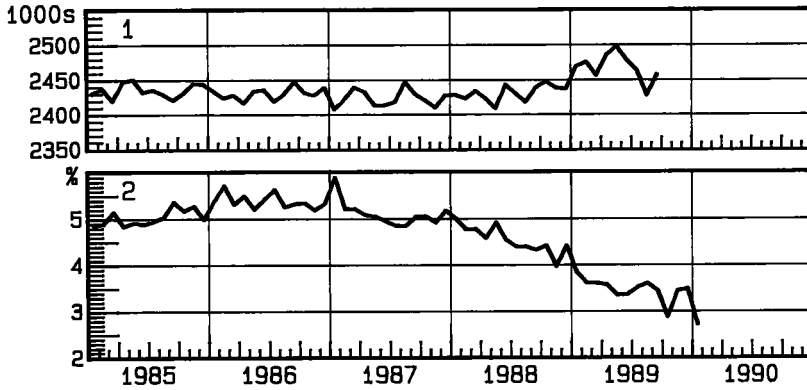
31. FIXED INVESTMENT



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

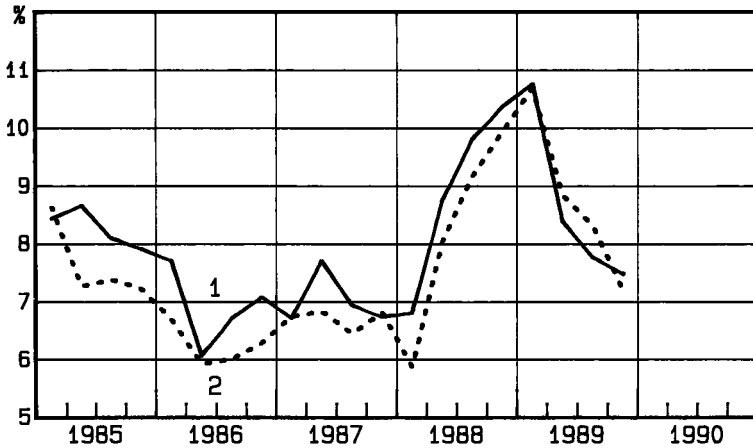
Volume changes calculated from four-quarter moving totals and shown as at the last quarter, per cent

32. EMPLOYMENT AND THE UNEMPLOYMENT RATE

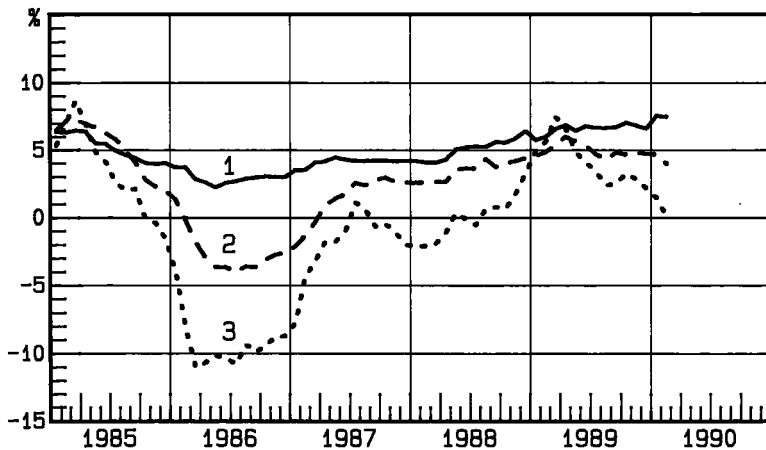


- 1. Employment, 1000 persons
- 2. Unemployment rate, per cent

33. PRICES AND WAGES

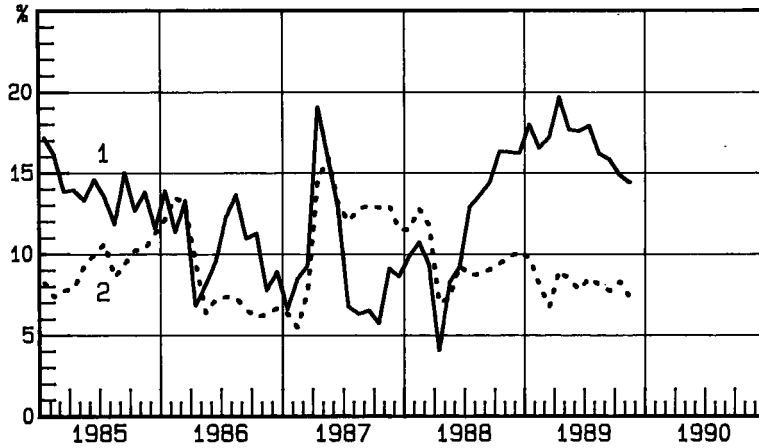


- 1. Index of wage and salary earnings, all wage and salary earners
 - 2. Index of wage and salary earnings, manufacturing workers
- Change from the corresponding quarter of the previous year, per cent



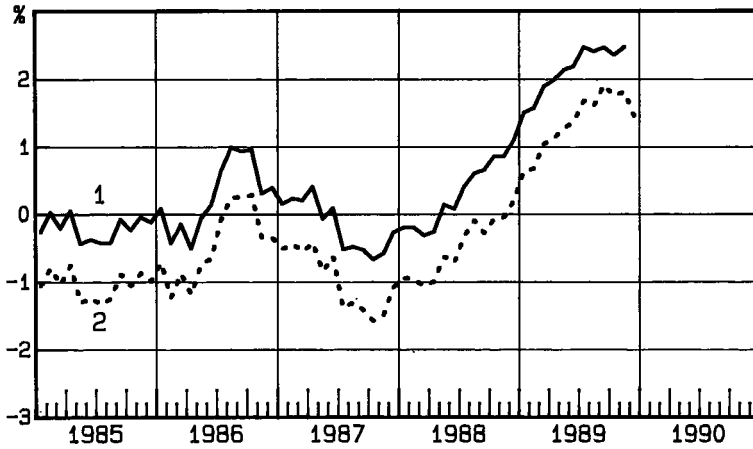
- 1. Consumer price index
 - 2. Wholesale price index
 - 3. Import price index
- Change from the corresponding month of the previous year

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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