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Intervention

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Finnish Banks

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Telephone: National 19011831

International +358 01831

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Telex: 121224 SPFB SF

Telefax: 174872

Cables: SUOMENPANKKI

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THE BANK OF FINLAND'S MARKET INTERVENTION

by **Esko Aurikko**, Acting Head of Office
Central Bank Policy Department
Bank of Finland

Financial markets in Finland have undergone a major transformation during the last few years, with important implications for the conduct of central bank policy. The development of a short-term money market has enabled the Bank of Finland to radically alter its intervention techniques. Under the present system the Bank mainly intervenes in the domestic money market by selling and buying certificates of deposits at market rates.

This article examines the present framework and the general principles guiding the Bank of Finland's market operations. The actual operations are reviewed quarterly in the Bulletin.

THE REFORM OF THE SYSTEM OF CENTRAL BANK FINANCING

As described earlier in various articles in the Bulletin, market rates have gradually gained in importance during the 1980s. At first, transactions in the unregulated market for short-term funds took place outside the banks' balance sheets e.g. through their finance companies and trust departments. With the gradual relaxation of the regulation of bank lending rates, money market transactions were shifted on to banks' balance sheets. However, throughout this period and also initially after the last remaining controls on bank lending rates had been lifted in August 1986, the system of central bank financing was kept unchanged. The Bank of Finland allowed the banks free access to the call money window, where lending and deposit rates were equal and administratively determined by the

Bank of Finland. Thus the central bank was willing to provide banks with unlimited financing through the call money facility.

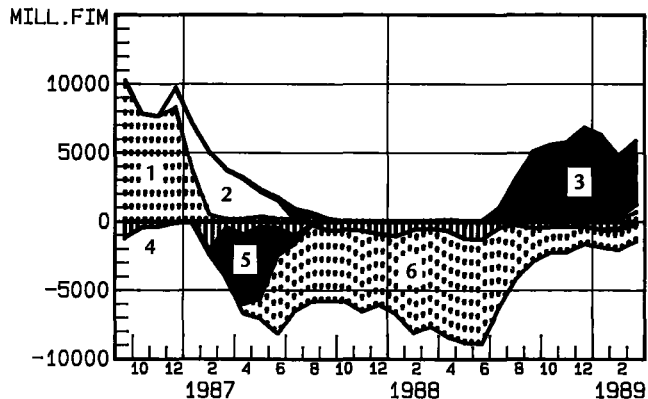
Though this system worked well for many years, its shortcomings were revealed during the exchange rate crisis of 1986. When the markka came under pressure in the summer of 1986, the Bank of Finland was only able to influence the very short end of the yield curve. This required a drastic increase in the call money rates, which briefly reached 40 per cent.

The first step in the development of a market-oriented system of central bank financing was taken in December 1986 when the Bank of Finland start-

ed to offer banks 3-month fixed-rate credits. In February and March 1987, when liquidity had been swelled by an inflow of capital, banks were allowed to make 3-month fixed-rate deposits with the Bank of Finland (Chart 1).

At the same time as fixed-rate credits were introduced, the call money credit and call money deposit rates were clearly differentiated. In the early months of 1987 the differential was enlarged and from the spring of 1987 until the autumn of 1988 it was 3.5 percentage points. By differentiating the rates the Bank of Finland discouraged the banks from using the call money window as a permanent source of finance. The

CHART 1.
FINANCIAL RELATIONS BETWEEN THE BANK OF FINLAND AND THE BANKS (EXCL. CASH RESERVE DEPOSITS)



1. Call money credits
2. 3-month credits
3. Bank certificates of deposit held by the Bank of Finland
4. Call money deposits
5. 3-month deposits
6. Bank of Finland's certificates of deposit held by banks

use of call money credit was further discouraged in April 1987 when access to the call money borrowing facility was limited by the setting of bank-specific quotas, with penalty interest being charged on borrowing in excess of quota.

With effect from the beginning of 1987 the Bank of Finland exempted certificates of deposits issued by banks from the cash reserve requirement. As a result, the market for short-term financial assets expanded rapidly and the Bank of Finland commenced trading in this market from the beginning of March. In mid-April, dealings in certificates of deposit issued by banks and the Bank of Finland completely replaced 3-month credits and deposits.

DIFFERENT WAYS OF INFLUENCING LIQUIDITY

The system of monetary control has remained virtually unchanged since the spring of 1987. In addition to operations in the money market, the Bank of Finland affects liquidity through the banks' cash reserves and through operations in the foreign exchange market, both spot and forward. The call money window serves as a residual source of finance and as an overnight deposit facility for banks.

Cash reserve requirement

Reserve requirements have been used actively in the 1980s. The cash reserve system is based on an agreement between the banks and the Bank of Finland. Under this agreement, deposit banks are required to make cash reserve deposits with the central bank at a rate which is decided monthly by the Bank of Finland, the maximum permissible ratio nevertheless being 8 per cent of the reserve base. This ceiling was reached in February this year. The Bank of Finland announces the reserve requirement at the end of each month, and the deposits are made at

the end of the following month.¹ Monthly interest is paid on deposits at an annual rate which is one-quarter of a

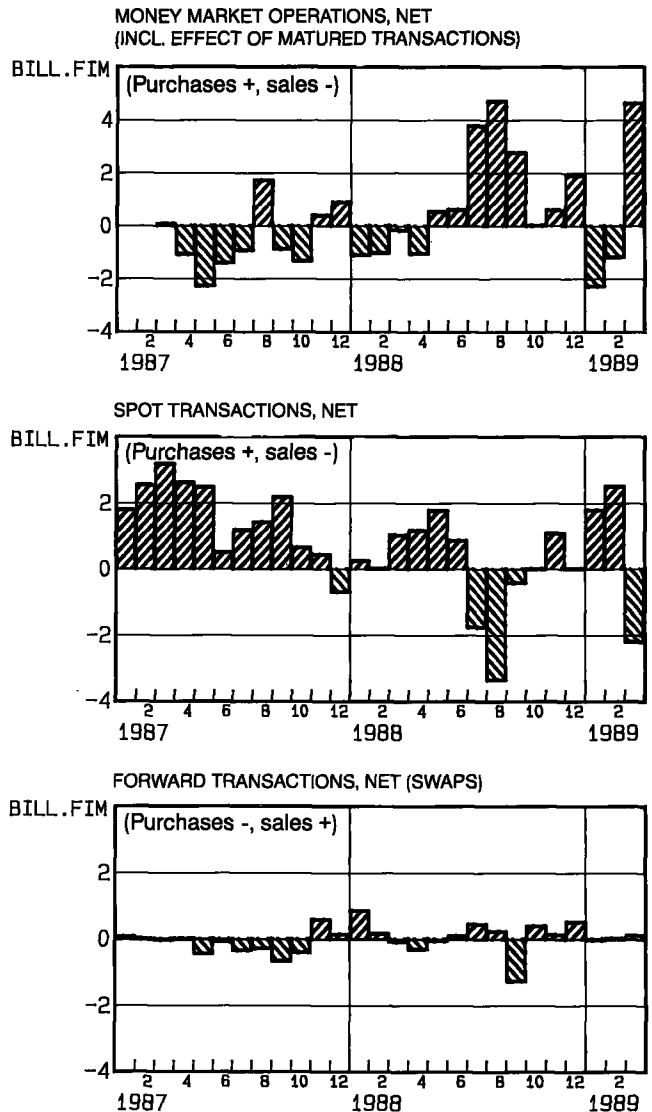
¹ Under a supplementary agreement concluded between the Bank of Finland and the deposit banks in March 1989, the ceiling on the cash reserve requirement was raised from 8 per cent to 12 per cent. This additional non-interest bearing requirement can be used if bank lending exceeds agreed limits. See the item in this issue of the Bulletin.

percentage point below the Bank of Finland's base rate.

Intervention in the foreign exchange market

In recent years, changes in the foreign exchange reserves arising from intervention in the spot market have been one of the main reasons for variations in the banks' liquidity position.

CHART 2.
THE BANK OF FINLAND'S MONEY MARKET OPERATIONS AND INTERVENTION IN THE FOREIGN EXCHANGE MARKET



Finland pursues a fixed exchange rate policy, which, however, allows, for fluctuations in the markka within a predetermined band.² With increasing flexibility in capital flows, the Bank of Finland has had at times to intervene in the market on a significant scale to support its chosen interest rate policy, despite the fact that greater short-term flexibility has been allowed in the exchange rate.

More recently, the Bank of Finland has intervened fairly seldom; for example, it did not enter the market at all in October and December of last year (Chart 2).

Every day, at noon, the Bank of Finland publishes the selling rates for the most important exchange rates together with the currency index number. The index is calculated as a trade-weighted basket of 14 convertible currencies.³

By intervening in the forward market, i.e. by either selling or buying forward exchange, the Bank of Finland affects the foreign exchange reserves and domestic liquidity and thereby domestic market rates. Large-scale buying was resorted to in 1984-85 when Finland lacked a short-term money market. This enabled the Bank of Finland to keep the growth of foreign exchange reserves and domestic liquidity in check. Recently, the Bank of Finland has intervened in the forward market only rarely. In practice, forward intervention is effected in the form of swaps, i.e. in connection with the forward deal an offsetting transaction is simultaneously undertaken in the spot market.

Intervention in the money market

The Bank of Finland intervenes in the domestic financial markets mainly by buying and selling negotiable debt instru-

ments in the interbank market. The most important instruments are certificates of deposit issued by banks with access to central bank credit, certificates of deposit issued by the Bank of Finland and Treasury bills. The Bank of Finland deals in certificates of deposits at the rates quoted by banks and, in principle, the Bank is present in the market throughout the day. In recent months, the Bank of Finland has intervened in the market for certificates of deposit every other day on average.

In the very short term, open-market operations in the domestic financial markets affect money market rates in two stages. Initially, the interest rate effect is generated on the same day as the instrument is bought or sold. As soon as the banks become aware that the central bank is active in the money market, interest rate quotations tend to change. In the second stage, open-market operations influence money market rates after two banking days when the transactions are settled and the banks' combined call money window position on the previous day is published on the Reuters screen.

Since February 6, 1989, the value date has been the next banking day, although the Bank has also transacted a small amount of business in very short-term deposits with value same day.

With changes in liquidity occurring mainly as a result of fluctuations in the foreign exchange reserves, daily open-market operations are facilitated by the customary value date practice of two banking days applied in spot exchange deals in the foreign exchange market.

The call money window

By using the channels described above, the Bank of Finland can influence the banks' liquidity position and hence their call money window position. Thus the call money window constitutes a residual component of the system. The

banks' combined call money window position is published on the Reuters screen with a lag of one day. Banks with access to this facility can be either depositors or borrowers. The call money deposit rate is currently 4 per cent and the call money credit rate 13 per cent; these rates determine the range within which the shortest market rates normally fluctuate. Recourse to call money credit is restricted by bank-specific quotas, borrowing in excess of which is subject to penalty interest at a rate of 19 per cent.

INTERVENTION AND OPERATING TARGETS

The reserve requirement differs as a monetary policy instrument from transactions in certificates of deposit in several respects. First, a change in the cash reserve requirement, affects liquidity permanently. Second, the announcement of a change serves as a signal to the market of the policy stance. Third, the liquidity effect of the decision to raise the cash reserve requirement is not felt until more than a month after the requirement has been raised. The increase in cash reserve deposits influences bank profitability, as the rate of interest payable on cash reserve deposits is, as a rule, lower than the market interest rate.

Operations in the money market and the forward market are comparable in their liquidity effects. By contrast, their effects on the foreign exchange reserves are different. For example, a forward exchange purchase results in a reduction of corresponding size in both liquidity and the foreign exchange reserves, whereas sales of certificates of deposit do not have any direct effect on the foreign exchange reserves. Hence, forward intervention offers a means of "concealing" fluctuations in the foreign exchange reserves and influencing expectations.

Through the Bank of Finland's call money facility, the in-

² Currently, the fluctuation limits are 96.5 and 102.5 (1982=100). For further details, see the item in this issue of the Bulletin.

³ For the calculation of the index, see the article by Ilkka Puro in the January 1984 issue of the Bulletin.

terbank overnight rate efficiently reflects fluctuations in liquidity in the money market. After the differential between call money credit and call money deposit rates was widened last October, the overnight rate has varied even more rapidly along with changes in the banks' overall liquidity position. The interest rate effect is at its strongest when the banks' position at the call money window changes from one of net borrowers to net depositors and vice versa because of the large discrete step in the interest rate at this point.

This set-up allows the Bank of Finland to flexibly choose operating targets in its money market intervention. The short-run operating targets of intervention policy are the exchange rate, the market rate of interest, the foreign exchange reserves or the banks' call money window position.

In practice, because of the problems posed by inflation and the current account deficit, more emphasis was given to the interest rate target during the early part of 1988. By raising the banks cash reserve requirement and through open-market operations, the Bank of Finland kept money market interest rates at a high level. Intervention in the forward exchange market was resorted to only on a very limited scale. Throughout the early part of 1988 the high interest differential between domestic and foreign interest rates attracted inflows of foreign capital. Intervention in the spot exchange market was necessary from time to time, leading to an increase in the Bank of Finland's foreign currency reserves.

In the summer of 1988 a moderate shift in the immediate operating targets was introduced. In order to curb the capital inflow, the interest rate differential was allowed to narrow. In July 1988 the Bank of Finland started to purchase certificates of deposit. In the third quarter of 1988 there was a moderate outflow of capital.

During the last half of 1988 the aim of monetary policy was to keep interest rates as high as possible without attracting capital inflows on a large scale. The cash reserve requirement was raised successively until it reached the 8 per cent ceiling permitted under the present cash reserve agreement in early 1989. In the money market, the Bank of Finland purchased certificates of deposit in order to prevent an undue tightening of bank liquidity. However, in the last quarter of 1988 the capital outflow was reversed. In November it was again necessary for the Bank of Finland to intervene in the spot exchange market after the markka had strengthened close to the lower limit of its band.

So as to provide more leeway in the operation of monetary policy, the fluctuation range of the Bank of Finland's currency index was widened from approximately 4.5 per cent to about 6 per cent at the end of November. The middle point was kept unchanged. This gave the Bank of Finland an opportunity to marginally tighten its policy stance. However, because of the larger interest differential, inflows of capital increased again in the early 1989. In January and early February, the Bank of Finland made frequent purchases of foreign currency in the spot exchange market. This led to a rapid increase in the Bank of Finland's foreign currency reserves.

In March 1989, the fluctuation limits of the Bank of Finland's currency index were lowered by about 4 per cent, thus allowing the markka more room to appreciate. Within a few days after this decision, the external value of the markka strengthened by more than 3 per cent. The increased exchange rate risk associated with holding markkaa provides the Bank of Finland with an opportunity to widen the interest differential between domestic and foreign interest rates.

CONCLUDING REMARKS

The Bank of Finland's current intervention policy system has operated satisfactorily during the past two years. Depending on the prevailing situation, it has allowed a flexible choice of the most suitable target for policy. However, during its existence the system has been used mainly for mopping up liquidity and thus there is no experience of how it would work in a situation where substantial amounts of liquidity had to be made available to the market.

With the ongoing development of the financial markets, the framework and operating methods of policy will be adapted accordingly. In particular, because of the shortcomings which have become apparent in the current cash reserve agreement, a working group has been set up to draw up a proposal for new legislation.

April 5, 1989

PRODUCTIVITY AND EFFICIENCY IN FINNISH BANKS¹

by **Sampo Alhonsuo**, Research Officer
Risk Monitoring Department
and **Juha Tarkka**, Research Supervisor
Research Department
Bank of Finland

Efficiency is, along with security, one of the major requirements set for the financial sector. Traditionally, the efficiency of financial institutions has been evaluated from the point of view of regulation. In order to safeguard the reliability and stability of the financial system, the authorities regulate the activities of banks and other financial institutions more carefully than those of companies in general. At the same time, the activities of the authorities tend to restrict the importance of competition as a factor guiding the operations of financial institutions. However, over the past few years the operating environment of financial markets has been developed in many countries with a view to promoting the allocative effects of competition. The specific aim has been to enhance efficiency.

In Finland, too, competitive conditions in the banking sector have undergone major change in the course of the 1980s and continue to change. Interbank competition in lending and deposit rates and in other terms has intensified since the abolition of interest rate regulation. With the increased activity in the securities market, banks now also face sharper competition in the form of the alternative investment outlets offered by the bond market. Furthermore, foreign competition in financial markets has increased with liberalization of capital movements, and the dismantling of barriers to international trade in financial services is currently under discussion. Progress in

this area would greatly increase the importance of foreign competition in the financial sector from its present level.

What kind of structural changes tougher competition will ultimately generate in the financial sector largely depends on differences in efficiency between various types of financial institutions. A widely held view is that intenser competition leads not only to an increase in the size of companies but also to rationalization of the branch network. Besides competition, future developments in the financial sector will be affected by technological advances. Changes in payment techniques could even result in a rapid rise in productivity in the banking sector. Direct data communications links between banks and customers and EFT-POS terminals in shops will for their part decrease the need for maintaining dense branch networks. However, no reasonable assessment of future developments in the financial sector can be attempted without first undertaking a thorough analysis of the sector's productivity and the factors affecting it.

The following presents some results of calculations made at the Bank of Finland concerning the growth of productivity in the financial sector and differences in efficiency between banks. These calculations incorporate certain refinements to the method employed in official national accounting for estimating output volumes in the financial sector. The results show that developments in productivity in the financial sector differ markedly from those in other sectors, such as manufacturing. Moreover, interbank differences in efficiency were not quite what had been expected.

No clear indications of a direct link between efficiency and company size were found. Rather, the results suggest that efficiency is positively related to the average size of branches.

MEASURING PRODUCTION AND PRODUCTIVITY

In calculating productivity, the volume of output can be defined either as gross output or real value added. Gross output measures the total volume of goods and services produced by a company. Its use in productivity calculations is justified when changes in the use of intermediate inputs are examined in addition to labour and capital productivity. If, however, the analysis is limited to labour and capital productivity, output is normally defined as real value added. Double deflation is considered the best way to calculate real value added. Double deflated real value added is the weighted difference between gross output and intermediate consumption, both evaluated at constant prices, where the weight of intermediate inputs is set so as to correspond to their share in costs of production.

In national accounting, the financial sector comprises deposit banks, the Bank of Finland and certain other public and private financial institutions, such as the Regional Development Fund and finance companies.

The measurement of output and productivity in the financial sector is far more complicated than in most other sectors both in theory and in practice. This is due to the wide spectrum and abstract nature of financial and payment services provided by financial institutions. The defini-

¹ The authors wish to thank Ms T Viso-Virkkunen of the Central Statistical Office of Finland for her assistance.

tion of the volume of output is particularly difficult but even the methods used in national product calculations for the nominal value of output differ from those used in other sectors.

The value of total output in the financial industry is defined as the sum of actual and imputed bank service charges. Actual bank service charges correspond to banks' income from services sold by them, and they include such items as fees and commissions. Imputed bank service charges, by contrast, consist of interest margins. The idea here is that interest margins are banks' compensation for services for which their customers do not pay actual bank service charges.

Intermediate consumption, i.e. commodities used up in the production of bank services, can be deducted from total output. This gives nominal value added in the financial sector, which represents new income generated by production and can be used for the compensation of labour and capital and the payment of taxes.

DEFLATION OF OUTPUT

Since original data on output are in value terms, volume calculations require the existence of appropriate price indices. In official national accounting, actual bank services are nowadays deflated using general price indices. However, the volume data on output obtained in this way are not suitable as a basis for productivity studies. The earlier accounting practice whereby output was measured on the basis of the quantities of inputs employed is equally unsuitable since productivity growth has to be assumed in advance.

A new price index for charges for actual bank services has been calculated for the calculations described in the present article. Though it serves only as a rough indicator of prices it is measured independently of input prices, which is absolutely vital for es-

TABLE 1. ANNUAL AVERAGE PERCENTAGE CHANGES IN PRICES

	1960-1987	1960-1978	1978-1987
Wholesale price index	7.8	7.8	7.7
Earnings level index	10.7	11.1	9.9
Financial sector			
— imputed bank services	9.8	10.9	7.7
— actual bank services	8.1	8.0	8.2
— implicit price of value added	9.8	10.7	8.2

timating productivity. The index is based on data on commissions and fees actually applied by banks. General price indices have been resorted to only in respect of that part of non-interest income which originates from sources other than fees and commissions.

In deflating imputed bank services we found it justified to apply the method used in the Finnish national accounts. The deflator is obtained by multiplying the interest rate spread between bank lending and deposit-taking by an index describing the rise in the general price level, which is a weighted average of the consumer price index, the wholesale price index and the building cost index. The deflator of imputed bank services describes the real cost of holding bank deposits as compared with investing the funds directly in the credit market.

Banks' intermediate consumption was deflated directly by the wholesale price index. Thus real value added is obtained as the result of double deflation. The value added at constant prices obtained for the financial industry differs to

some extent from the corresponding value added at constant prices calculated by the Central Statistical Office of Finland for the period 1975—1987.

The estimated pattern of price changes in the financial sector is shown in Table 1. It can be seen that prices of services in the financial sector have risen more than the general price level, but that this discrepancy in price developments has virtually disappeared during the 1980s. Admittedly, the rise in the real prices of actual bank services has accelerated but, at the same time, the growth of interest margins has come to a halt, thus stopping the real increase in imputed prices of bank services. On average, the increase in the real prices of bank services has slowed down. This seems to indicate that productivity developments in banking have improved in relation to other industries.

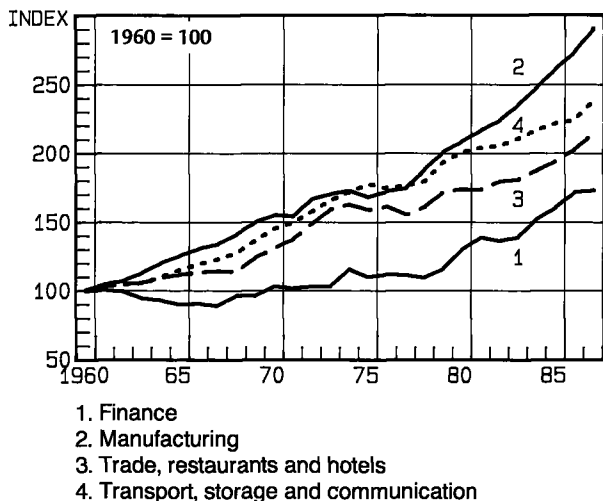
DEVELOPMENTS IN PRODUCTIVITY IN 1960—1987

In Table 2, productivity growth in the financial sector is compared with developments

TABLE 2. PRODUCTIVITY GROWTH IN FOUR SECTORS, PER CENT PER YEAR

	1960-1987	1960-1978	1978-1987
FINANCE:			
Labour productivity	2.1	0.5	5.3
Capital productivity	3.6	2.8	5.1
Total factor productivity	2.6	1.3	5.2
MANUFACTURING:			
Labour productivity	4.0	3.6	5.0
Capital productivity	0.5	-0.2	1.9
Total factor productivity	3.1	2.6	4.1
TRADE, RESTAURANTS AND HOTELS:			
Labour productivity	2.9	2.7	3.2
Capital productivity	0.6	0.2	1.3
Total factor productivity	2.4	2.2	2.9
TRANSPORT, STORAGE AND COMMUNICATION:			
Labour productivity	3.3	3.3	3.2
Capital productivity	0.3	-0.1	3.6
Total factor productivity	2.6	2.3	3.3

CHART 1.
LABOUR PRODUCTIVITY:
FOUR SECTORS 1960 - 1987



in productivity in three other sectors. In addition to labour and capital productivity, Table 2 shows total factor productivity, which is a widely used measure of the rate of technological progress and improvements in the quality of inputs. Total factor productivity is calculated as the weighted average of labour and capital productivity, the weights being the shares of these inputs in costs of production.

In the financial sector, developments in both labour and capital productivity have differed significantly from those in the other sectors. The other sectors are characterized by relatively steady trend-wise growth in labour productivity as well as the fact that the ratio between output and capital stock has remained fairly stable. By contrast the calculations indicate that per capita labour productivity in the financial sector actually fell in the early 1960s, after which it remained practically unchanged until 1978 (see Chart 1). In the 1980s, however, labour productivity in the financial sector has risen rapidly, even outstripping that in manufacturing, which is

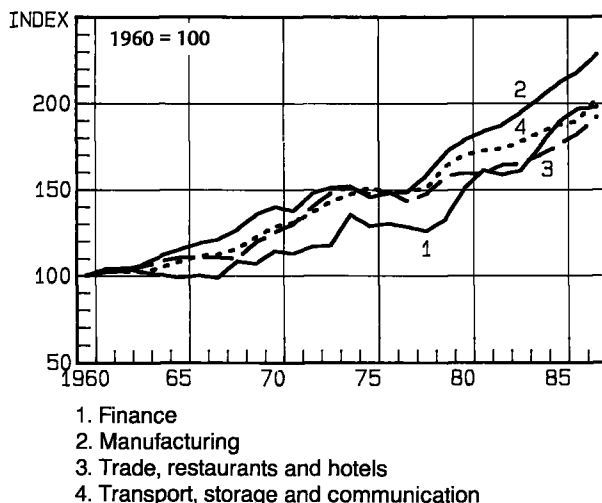
usually considered to be the leading industry as regards productivity growth.

The pattern of development in capital productivity is also somewhat surprising. Unlike the other industries, the growth of capital productivity in the

financial sector has been fairly rapid and even. The well-known problems related to the measurement of the real capital stock always introduce an element of uncertainty into capital productivity calculations. The results presented here, which are based on net capital stock data compiled by the Central Statistical Office of Finland, indicate that capital intensity in the financial sector has not increased to the same extent as in the other sectors. Even the rapid growth of labour productivity in the 1980s seems to derive from the faster pace of technical progress rather than from substitution of capital for labour in production.

The acceleration in the growth of total factor productivity in the financial sector in the late 1970s and early 1980s is clearly discernible in Chart 2. This measured acceleration in technical progress might be a consequence of the rapid advance in data processing technology, which has revolutionized "the production process" in banking in recent years. The 1980s have also witnessed an acceleration of

CHART 2.
TOTAL FACTOR PRODUCTIVITY:
FOUR SECTORS 1960 - 1987



growth in total factor productivity in the other industries studied, but the change is clearly sharpest in the financial industry. Another possible explanation for the rise in total factor productivity might be an increase in efficiency, resulting from the sharpening competition in the 1980s referred to above.

Along with the acceleration in productivity growth in the financial sector, there has also been an acceleration in the rate of growth of real output in this sector. In the period 1960-78, real value added in the financial sector grew by 6 per cent a year on average. In 1978-1987, the annual volume growth averaged as much as 8.4 per cent. It should be pointed out that the volume figures may be biased if our deflators are inaccurate. If the price of bank services has risen more rapidly in the 1980s than assumed, the estimates of productivity are also biased upwards.

When interpreting the charts and tables on developments in productivity presented here, it should be borne in mind that the indices calculated do not reveal anything about intersectoral differences in productivity. As regards these it can be noted that when value added is used as a measure of productivity the results obtained for the financial sector appear good. In 1987, for instance, the financial sector generated 4.1 per cent of total value added in the Finnish economy though the sector used only 2.2 per cent of the total labour input in the economy and 1.2 per cent of the available capital stock. The productivity of both labour and fixed capital were thus higher than in the economy on average.

The comparison may, however, be distorted in favour of the financial industry by possible monopoly profits in banking. These increase value added in exactly the same way as improvements in productivity and, if pricing in the financial sector is more monopolistic than in other industries, higher

value added cannot necessarily be considered an indication of better productivity.

Quantitative assessment of competition in the financial sector is rather difficult. Central banks operate in conditions of almost absolute monopoly but the Bank of Finland accounts for only a minor share of value added in the financial sector. In the rest of the financial sector, interbank competition in deposit rates and bank service charges has been restricted by cartel agreements for many decades. However, this has not prevented banks from devising non-price methods of competition, as for example in the availability of services, which has resulted in a dense branch network in Finland.

INTERBANK DIFFERENCES IN EFFICIENCY

Analysis of interbank differences in efficiency is less complicated than comparing banks with other sectors. Such analysis is essentially concerned with three issues: are there systematic differences in efficiency among banks of different corporate form? Does the size of the bank affect its efficiency, i.e. are there increasing returns to scale in the banking sector? Does the number of branches tend to weaken productivity? These questions can be studied using a cross-section approach; that is, banks are divided into appropriate groups and indicators of productivity and factors affecting it are calculated for the various groups.

The problem of measuring output is thus also encountered in cross-section studies. Some indicator based on banks' balance sheet items, such as the balance sheet total, the amount of deposits or lending, has usually been used instead of the income-based output measures in cross-section studies of bank productivity and efficiency.

The use of balance sheet items as indicators of output can be criticized for its lack of

theoretical foundations. It is also clear that in modern banking, where liability management and off-balance sheet business have become common practice, banks' balance sheet totals may not necessarily have a great deal to do with the amount of financial services produced by banks. A bank can be considered to generate financial services only to the extent it carries out actual asset transformation. The more closely a bank's asset and liability items resemble each other, for instance in terms of their liquidity, the less the bank has transformed the funds intermediated by it. If we use the compensation a bank receives for its operations as an indicator of its transformation, we come back to the use of income or value added as a measure of output.

In the following cross-section calculations, bank production has been measured using banks' net income. Of the different items in banks' income statements, this is the one that most closely corresponds to the concept of output in national accounting. Net income consists of the (net) interest margin and other (gross) income of banks. Productivity was measured using the ratio of banks' operating expenses (expenses other than interest expense) to net income. This ratio also measures the profitability of a bank's operations since it is closely related to the operating margin. This is logical since differences in efficiency between companies are reflected in differences in profitability, at least if the prices of output and inputs are common to them.

In order to shed light on the different components of productivity, averages describing labour productivity (net income per number of staff) and average branch size (net income per number of branches) were calculated for the different groups of banks. The calculations are based on the official 1985, 1986 and 1987 bank statistics.

Before summarizing the

results, a few words on the classification principles applied are in order. The Finnish deposit bank system comprises both commercial banks and cooperative and savings banks, the latter two groups being referred to as local banks. Each of these groups controls a significant market share. At present, the products offered by each group are virtually identical although, for commercial banks, the importance of big companies and the services used by them is still somewhat greater than for cooperative and savings banks. At the end of 1987 there were, 11 commercial banks in Finland. At the same time, cooperative banks numbered 369 and savings banks 230. Measured by the balance sheet total, savings banks are on average larger than cooperative banks.

Three distinctly different groups can be distinguished amongst commercial banks. The first group comprises "full-service" or universal banks, each with their own branch network. Of these, KOP (Kansallisosake-Pankki), SYP (Union Bank of Finland) and ÅAB (Bank of Åland Ltd) are included in this study. The second group is made up of SKOP (Skopbank) and OKO (OKO-BANK), which function as central institutions for their owners, the savings and cooperative banks. The third group consists of small commercial banks with only one office which focus on money and capital market operations and the provision of certain financial services, for instance those related to foreign operations. At the end of 1987, there were five banks in this group in Finland, four of which were foreign-owned. In the following comparison of efficiency, commercial banks have been divided into three groups according to the above classification.

In terms of size, KOP and SYP in Group 1 are the biggest banks in Finland. The only deposit bank excluded from this study is Postipankki. It re-

TABLE 3. THE SHARE OF OPERATING EXPENSES IN NET INCOME IN THE VARIOUS GROUPS OF BANKS AND SIZE CATEGORIES, AVERAGES FOR THE YEARS 1985—1987, PER CENT

	Category 3 (small)	Category 2 (medium-size)	Category 1 (large)
Commercial banks	64.5	61.3	64.2
Savings banks	82.3	82.6	83.6
Cooperative banks	79.0	79.2	82.0

TABLE 4. NET INCOME PER EMPLOYEE IN THE VARIOUS GROUPS OF BANKS AND SIZE CATEGORIES, AVERAGES FOR THE YEARS 1985—1987, FIM MILLION.

	Category 3 (small)	Category 2 (medium-size)	Category 1 (large)
Commercial banks	0.49	0.60	0.31
Savings bank	0.22	0.26	0.25
Cooperative banks	0.22	0.25	0.26

presents an obvious exception among the group of commercial banks, because it uses post offices to supplement its own branch network.

The classification of cooperative and savings banks is based on size measured in terms of net income. Both groups of banks have been divided into three categories: small, medium-size and large cooperative and savings banks. The levels of net income used as criteria in the size classification are the same for both cooperative and savings banks, and they have been chosen so that, in 1987 for instance, 14 per cent of total net income in this group of banks was generated in the category of small banks, 17 per cent in the category of medium-size banks and 69 per cent in the category of large banks.

A comparison of the three groups of commercial banks reveals that small commercial banks seem no less efficient than larger ones with branch networks. The central institutions of the savings and cooperative banks appear particularly efficient, but this can probably

be explained by their role within their own organizations since they sell a large amount of services to savings and cooperative banks and not only to the public. Generally speaking, no relation can be observed between efficiency and bank size among commercial banks. However, the small size of the sample and the fact that different banks focus on different services make it impossible to draw any definite conclusions.

When commercial banks are compared with local banks, it can be seen that, regardless of the size category, commercial banks are clearly more efficient as measured by all indicators. In commercial banks, the ratio of operating expenses to net income is smaller, labour productivity higher and output per branch much higher than in local banks (see Table 5), which reflects the much larger average size of commercial bank branches. One possible explanation for the differences in efficiency between commercial banks and local banks could very well be that productivity is positively correlated with average branch size.

TABLE 5. NET INCOME PER BRANCH, IN THE VARIOUS GROUPS OF BANKS IN 1985—1987 ON AVERAGE, FIM MILLION

Commercial banks with branch networks: 5:1

	Small	Medium-size	Large
Cooperative banks	1.5	2.4	3.3
Savings banks	1.5	2.4	2.6

Not even within the local bank groups can any increase in productivity be discerned when moving from smaller banks to larger ones. However, there is a clear difference between the local bank groups. A comparison of local banks reveals that, in the light of the indicators, cooperative banks are more efficient than savings banks. The difference in efficiency is clearly evident in the ratio of operating expenses to net income, i.e. cooperative banks manage to generate the same volume of output at lower operating expenses than savings banks. However, there are no significant differences in labour productivity between the local bank groups, nor between local banks of different size.

The branches of cooperative banks are larger on average than those of savings banks, particularly in the category of large banks. This means that the difference in efficiency between cooperative and savings banks can at least partly be explained by the too "dense" branch network of savings banks. Apart from the fact that

TABLE 6. NUMBER OF BRANCHES PER BANK IN LOCAL BANKS, AVERAGE FOR 1985—1987

	Small	Medium-size	Large
Cooperative banks	1.8	3.5	10.9
Savings banks	1.9	3.5	8.7

the branches of cooperative banks (at least in the largest size category) are larger than those of savings banks, the number of branches per cooperative bank is also smaller than the corresponding figure for savings banks. The number of branches per bank in each local bank group is shown in Table 6.

The above comparison of efficiency reveals the importance of the difference between bank and branch level in the analysis of efficiency. At bank level, larger size is not associated with efficiency gains, whereas at average branch level larger branch size seems to be associated with higher productivity. How far larger average branch size suffices as an explanation of the better efficiency of commercial banks in relation to other banks and the slightly smaller difference in efficiency between cooperative and savings banks

remains an unanswered question. The corporate form of banks is another factor whose influence on productivity cannot be excluded.

April 6, 1989

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**SUPPLEMENTARY
CASH RESERVE
AGREEMENT**

In March, the Bank of Finland and the banks concluded a temporary agreement supplementing the existing cash reserve agreement and aimed at curbing lending this year. The agreement is effective until the end of 1990 and enables the Bank of Finland to raise the cash reserve requirement to a maximum of 12 per cent compared with 8 per cent under the existing agreement. The Bank of Finland will use the extra room for manoeuvre to the full if the personal lending of a bank or a group of bank or the total lending of a consolidated banking group increases by more than 20 per cent between February 1989 and December 1989. If, on the other hand, personal lending increases by less than 9 per cent or total lending by less than 11 per cent, the additional requirement will not be applied. Loans intermediated by banks' trust departments are included in total lending.

Interest will not be paid on additional deposits exceeding the 8 per cent ratio based on the current agreement. Banks will not be notified of any additional deposit requirement until the end of the month in which the additional deposits are to be made with the Bank of Finland. Deposits in excess of 8 per cent will be determined individually for each bank, or group of banks in the case of cooperative and savings banks.

The use of the additional deposit requirement will be considered for the first time at the end of May on the basis of the stock of loans outstanding at

the end of April. The Bank of Finland may still resort to the additional requirement on the basis of developments in January-February 1990 if credit expansion should again accelerate markedly. The additional deposits will be refunded in equal instalments at the latest in July-December 1990.

In the same context, the Bank of Finland issued recommendations to the banks on lending. The Bank of Finland stressed that banks should take a particularly strict attitude towards granting consumer credit and loans for financing investments in the housing sector and securities. In this lending, as in the financing of owner-occupied housing, the Bank of Finland recommends that the borrower's own share of the financing should be set relatively high. Though the lending limits have been set so as to safeguard the availability of financing for productive investment, the Bank of Finland considers it desirable to postpone the start of investments in trade and other services until a later date.

To curb the demand for credit, banks may raise interest rates on new loans. The Bank of Finland nevertheless presumes that rates of interest on existing loans will not be raised in relation to the base rate or other reference rates.

**FOREIGN EXCHANGE
AND FISCAL POLICY
PACKAGE**

On March 17, the Government, on the basis of a proposal by the Parliamentary Supervisory Board, decided to lower the limits of the fluctuation band of the currency index by about 4 per cent.

The new fluctuation limits of the currency index are 102.5 and 96.5.

Maintaining interest rates at a level high enough to curb domestic demand within the former fluctuation limits of the currency index had led to currency inflows, weakening the impact of the high rates. Because of the high level of capacity utilization and labour shortages in the economy, income settlements and wage drift have continually been too high. Moreover, the acceleration of international inflation has been creating additional inflationary pressures via export and import prices.

The stabilization settlement reached in the autumn of 1988 provided, among other things, for an easing of income taxation and the inclusion of an index clause in pay agreements. This restricts the scope for swift fiscal action aimed at significantly curbing demand. Thus the decision to raise the external value of the markka was considered the only fast and effective way of cooling the present overheated economic situation.

In the same context, the Government announced measures designed to support the goals set for revaluation. Sales tax is to be temporarily raised by 0.5 percentage point between June 1 and November 30, 1989 and employers' social security contributions by 0.25 percentage point from the beginning of May until the end of the year. In addition, it is intended to bring forward to this summer the increase in employment pension contributions originally scheduled for the beginning of 1990. The restrictive impact of these measures on economic activity is estimated to amount to FIM 0.6 — 1.0 billion in the current year.

MONETARY AND FOREIGN EXCHANGE POLICY MEASURES FROM MAY 1988 TO APRIL 1989

1988

MAY

Interest rate policy. The Bank of Finland raises its base rate from 7.0 per cent to 8.0 per cent as from May 16, 1988.

Cash reserve requirement. The Bank of Finland raises the cash reserve requirement from 6.5 per cent to 7.0 per cent of the cash reserve base in May.

AUGUST

Foreign Exchange Regulations. The Bank of Finland relaxes the foreign exchange regulations concerning foreign investments as from August 1, 1988. Private individuals and companies may acquire publicly quoted foreign securities up to the total value of FIM 300 000 as against FIM 50 000 previously. The upper limit for investment in dwellings and real estate will be raised from FIM 600 000 to FIM 1 million. Direct investments by non-financial companies no longer require prior authorization.

Till-money credits. The Bank of Finland introduces new regulations concerning till-money credits according to which the banks are henceforth required to fund part of their till-money holdings, the base amount, themselves. Interest-free till-money credits are equivalent to the banks' markka till-money holdings less the base amount. The base amount is defined on the basis of the currency held by the public. This

amount is divided among the banks entitled to till-money credit in proportion to their deposit and savings accounts. As a result of the measure, the bank's liquidity position vis-à-vis the central bank is tightened by about FIM 1 billion.

SEPTEMBER

Export deposits. The Government decides to levy export deposits of 4.5 per cent on semi-bleached and bleached sulphate pulp exported during the period September 23, 1988 to September 22, 1989. The deposits are to be made with the Bank of Finland, which will pay interest at the rate of 7.25 per cent on them.

OCTOBER

Call money market. The differential between the call money deposit rate and the call money credit rate is widened with effect from October 6, 1988. The rate on call money credits is raised from 11 per cent to 13 per cent while the rate on call money deposits is lowered from 7.5 per cent to 4 per cent.

Cash reserve requirement. The Bank of Finland raises the cash reserve requirement from 7.0 per cent to 7.3 per cent of the cash reserve base in October.

NOVEMBER

Cash reserve requirement. The Bank of Finland raises the cash reserve requirement from 7.3 per cent to 7.6

per cent of the cash reserve base in November.

Currency index. On the proposal of the Parliamentary Supervisory Board, the Government decides to widen the fluctuation range of the Bank of Finland's currency index from approximately 4.5 per cent to about 6 per cent while keeping the middle point unchanged. Effective as from 30 November, the new fluctuation limits are 100.5 and 106.8.

DECEMBER

Cash reserve requirement. The Bank of Finland raises the cash reserve requirement from 7.6 per cent to 7.8 per cent of the cash reserve base in December.

1989

JANUARY

Base rate. The Bank of Finland's base rate is lowered from 8 to 7.5 per cent as from January 1.

Special financing arrangements. As from the beginning of 1989, the Bank of Finland abolishes the financing arrangements for new-export credits and short-term export credits. The Bank of Finland abandons the financing of KTR credits with effect from the beginning of 1989. (KTR = financing arrangement for domestic suppliers' credits.)

FEBRUARY

Export deposits. The Government decides to

levy export deposits of 3 per cent on wood-free printing paper exported during the period February 1, 1989 and January 31, 1990.

Cash reserve requirement.

The Bank of Finland raises the cash reserve requirement from 7.8 per cent to 8 per cent of the cash reserve base in February.

MARCH

Supplementary cash reserve agreement.

An agreement supplementing the cash reserve agreement between the Bank of Finland and the banks is signed on March 13, 1989. The supplementary agreement, which is effective until the end of 1990, enables the Bank of Finland to raise the cash reserve requirement to a maximum of 12 per cent. The application of the additional requirement is linked to developments in bank lending (see the item in the April 1989 Bulletin).

Fluctuation limits of the currency index.

On March 17, 1989, the Government, on the basis of a proposal by the Parliamentary Supervisory Board, decides to lower the fluctuation limits (range) of the currency index by about 4 per cent, thus making possible a revaluation of the markka of corresponding magnitude. The new upper limit of the fluctuation range of the currency index is 102.5 and the new lower limit 96.5.

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 1990.

FINLAND IN BRIEF

LAND, CLIMATE AND POPULATION

Finland covers an area of more than 338 000 square kilometres (1986). The total area is slowly increasing because of the steady uplift of the land since the last glacial era. The country shares frontiers with Sweden in the west, Norway in the north and the Soviet Union in the east and has a coastline bordered by the Baltic Sea in the south and west. Agricultural land accounts for 8 % of the total area, forest and other wooded land for 69 % and inland waters for 10 %. Located between latitudes 60° and 70° north, Finland has warm summers and cold winters. Helsinki on the south coast has an average maximum temperature of 22° C (72° F) in July and -4° C (25° F) in February.

Finland has a population of 4 939 000 (Dec. 31, 1987) and an average population density of 16.2 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 490 000 inhabitants, Tampere (Tammerfors) 170 000 and Turku (Åbo) 160 000.

There are two official languages: 93.6 % of the population speaks Finnish as its mother tongue and 6.1 % Swedish. There is a small Lapp population in the north. Finnish is a member of the small Finno-Ugrian group of languages, which also includes Estonian and Hungarian.

FORM OF GOVERNMENT

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

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

Parliament, comprising 200 members, is elected by universal suffrage for a period of four years. Following the parliamentary elections of 1987, the seats of the various parties in Parlia-

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

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

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

INTERNATIONAL RELATIONS

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

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

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

THE ECONOMY

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

manufacturing output and some 90 % of banking services produced by private companies. Of the gross domestic product of FIM 347 billion in basic values in 1987, 3 % was generated in agriculture and fishing, 3 % in forestry, 27 % in industry, 8 % in construction, 12 % in trade, restaurants and hotels, 8 % in transport and communications, 5 % in finance and insurance, 17 % in other private services and 17 % by producers of government services. Of total employment, 10 % was engaged in primary production, 31 % in industry and construction and 59 % in services.

In 1987, expenditure on the gross domestic product in purchasers' values amounted to FIM 394 billion and was distributed as follows: net exports 0.4 % (exports 25.2 %, imports -24.8 %), gross fixed capital formation 23 %, private consumption 54 % and government consumption 21 %. Finland's gross tax ratio (gross taxes in relation to GDP) was 36 % and the net tax ratio (net taxes in relation to GDP) 23 %, which is about the average for OECD countries.

Average annual (compounded) growth of real GDP was 4.9 % in the period 1950-60, 4.8 % in 1960-70, 3.5 % in 1970-80, 3.0 % in 1980-87 and 4.2 % in 1950-87. Finland's GDP per capita in 1987 was USD 18 100; this put Finland in ninth place among the 24 member countries of the OECD, preceded by Switzerland, Japan, the Federal Republic of Germany, the United States and the other Nordic countries.

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

In 1987, the share of metal and engineering products in total merchandise exports was 38 %, the share of forest industry products 40 % and the share of other goods 22 %. Raw materials and intermediate goods (incl. crude oil) accounted for 57 % of merchandise imports, fuels for 5 %, invest-

ment goods for 17% and consumption goods for 21%.

Forest resources. Finland has fairly abundant forest resources, but only limited amounts of other raw materials. The growing stock comprises 1 660 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 54 million cubic metres in 1987.

Energy. In 1987, gross consumption of primary energy amounted to 29 Mtoe, of which industry accounted for 45%, heating for 24%, transportation for 13% and other purposes for 18%. The sources of primary energy in 1987 were as follows: oil 33%, coal 12%, nuclear power 16%, hydro-electric power, peat and other indigenous sources 30%, others 9%. Compared internationally (1985), Finland's consumption of 5.5 toe per capita was 1.8 times higher than the average in European OECD countries. The self-sufficiency rate (OECD definition) in Finland was 42%, as compared with 62% in western Europe on average.

FINANCE AND BANKING

Currency. Since 1865 Finland has had its own monetary system. The currency unit is the markka (plural: markkaa), abbreviation FIM, which is divided into 100 penniä (singular: penni). Since Nov. 1, 1977 the external value of the markka has been officially expressed in terms of a trade-weighted currency index. As from Jan. 1, 1984 only convertible currencies have been included in the index. 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. Exchange controls apply mainly to financial transactions.

Outward direct investment is permitted without the Bank of Finland's authorization except in the case of direct investments by or in enterprises in the financial sector, direct investments in countries with which Finland maintains payments agreements and

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

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

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

Other banks (Dec. 31, 1987). Finland has four major groups of deposit banks with a total of more than 3 500 offices. There are two big commercial banks with national branch networks and eight smaller ones, four of which are foreign-owned. The commercial banks have a total of 30 foreign branches, subsidiaries and associate banks and 30 representative offices abroad. There are 230 savings banks and 369 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 487 billion in outstanding domestic credit at the end of 1987, 60% was provided by deposit banks, 4% by mortgage banks, 17% by insurance companies, 8% by other credit institutions and 11% 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, 72% of the instruments, which totalled approximately FIM 102 billion at end-September 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 52 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 79 billion (at end-1987). Three foreign companies are also quoted. Domestic bonds and debentures in circulation at end-1987 totalled FIM 85 billion; government bonds made up 35% of the total. Turnover on the Stock Exchange in 1987 amounted to FIM 31 billion; the share of shares and subscription rights in the total was approximately 85%.



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1. THE BALANCE SHEET OF THE BANK OF FINLAND

1.1 THE BALANCE SHEET OF THE BANK OF FINLAND,

MILL. FIM

	1988		1989			
	March 31	Dec. 31	March 8	March 15	March 23	March 31
ASSETS						
Gold and foreign currency claims	30 949	29 753	35 547	35 467	32 516	31 077
Gold	2 128	2 128	2 128	2 128	2 128	2 128
Special drawing rights	1 015	1 120	880	883	853	853
IMF reserve tranche	779	940	930	932	901	901
Convertible currencies	24 703	24 492	29 409	28 952	26 501	25 715
Tied currencies	2 323	1 073	2 199	2 572	2 133	1 480
Other foreign claims	4 340	4 199	4 248	4 250	4 188	4 183
Markka subscription to Finland's IMF quota	2 433	2 283	2 302	2 302	2 302	2 302
Term credit	1 907	1 916	1 945	1 947	1 886	1 881
Claims on financial institutions	6 384	14 384	10 969	11 138	13 190	15 572
Call money credits	634	463	0	42	1 829	1 844
Certificates of deposit	—	7 187	3 477	4 194	5 158	7 917
Term credits	—	—	1 050	525	50	—
Till-money credits	2 521	2 920	2 708	2 647	2 440	2 481
Financing of crop failure loans	811	1 222	1 222	1 222	1 205	816
Bonds	2 124	2 325	2 274	2 271	2 271	2 277
Other claims on financial institutions	294	267	238	238	238	238
Claims on the public sector	986	1 128	1 120	1 122	1 074	1 079
Treasury notes and bills	—	88	59	59	10	10
Bonds	0	20	22	22	22	25
Total coinage	978	1 020	1 036	1 037	1 039	1 041
Other claims on the public sector	7	—	3	3	3	2
Claims on corporations	3 570	3 041	2 735	2 703	2 674	2 665
Financing of exports	764	400	182	165	142	126
Financing of domestic deliveries (KTR)	2 558	2 205	2 119	2 108	2 102	2 090
Bonds: KTR-credits	28	218	218	218	218	239
Bonds: Other	41	35	33	30	30	30
Other claims on corporations	180	183	182	182	181	181
Other assets	107	787	115	114	114	121
Accrued items	—	668	—	—	—	—
Other assets	107	118	115	114	114	121
Total	46 336	53 291	54 734	54 794	53 756	54 697
LIABILITIES						
Foreign currency liabilities	100	247	207	202	178	185
Convertible currencies	20	119	87	83	54	56
Tied currencies	80	128	120	119	124	128
Other foreign liabilities	3 225	3 082	3 111	3 113	3 085	3 086
IMF markka accounts	2 433	2 283	2 302	2 302	2 302	2 302
Allocations of special drawing rights	792	800	809	811	783	783
Notes and coin in circulation	9 720	11 550	10 855	10 905	11 105	10 996
Notes	8 850	10 601	9 905	9 946	10 142	10 034
Coin	870	949	950	959	963	962
Certificates of deposit	7 285	1 130	1 460	1 230	980	980
Liabilities to financial institutions	13 326	19 248	21 833	21 740	21 695	22 544
Call money deposits	36	128	190	99	54	109
Term deposits	—	—	—	—	—	—
Cash reserve deposits	13 211	19 039	21 327	21 327	21 327	22 120
Capital import deposits	—	—	280	280	280	280
Other liabilities to financial institutions	80	81	37	35	35	34
Liabilities to the public sector	901	1 903	1 055	1 318	1 367	1 368
Cheque accounts	0	1	0	1	0	1
Counter-cyclical fund deposit	900	900	—	—	—	—
Counter-cyclical deposits	—	981	1 002	1 265	1 302	1 302
Export deposits	—	20	51	51	64	65
Capital import deposits	—	—	—	—	—	—
Other liabilities to the public sector	0	1	1	1	1	1
Liabilities to corporations	4 995	6 797	6 931	6 922	6 893	6 911
Deposits for investment and ship purchase	4 731	6 447	6 550	6 540	6 511	6 506
Capital import deposits	260	349	381	381	381	405
Other liabilities to corporations	4	1	0	0	0	0
Other liabilities	31	1 107	53	60	44	46
Accrued items	—	1 064	—	—	—	—
Other liabilities	31	43	53	60	40	46
Valuation account and reserves	1 265	2 391	3 393	3 467	2 573	2 746
SITRA's capital	400	400	400	400	400	400
Capital accounts	5 088	5 436	5 436	5 436	5 436	5 436
Primary capital	5 000	5 000	5 000	5 000	5 000	5 000
Reserve fund	88	88	436	436	436	436
Profit/loss for the accounting year	—	348	—	—	—	—
Total	46 336	53 291	54 734	54 794	53 756	54 697

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
1984	1732	936	859	15303	18830	-337	18493	-917	17576	1951	4277	2326
1985	2081	931	775	18572	22359	-285	22074	-849	21225	1023	4300	3277
1986	2081	983	793	6778	10635	3421	14056	-838	13218	1002	2001	999
1987	2128	899	793	23571	27391	1212	28603	1131	29734	977	901	-76
1988	2128	1120	940	24373	28561	945	29506	1117	30623	1128	1903	775
1988												
March	2128	1015	779	24683	28605	2243	30848	1115	31963	986	901	-85
April	2128	1065	842	26112	30147	3023	33170	1109	34279	989	901	-88
May	2128	1078	814	27806	31826	3269	35095	1119	36214	995	901	-94
June	2128	1132	956	30054	34270	2399	36669	1146	37815	997	1237	240
July	2128	923	964	29260	33275	2875	36150	1163	37313	997	1246	249
Aug.	2128	1025	947	25057	29157	2733	31890	1158	33048	999	1249	250
Sept.	2128	1022	945	24270	28365	1675	30040	1149	31189	1011	1566	555
Oct.	2128	1008	922	23638	27696	1818	29514	1134	30648	1044	1575	531
Nov.	2128	1011	939	23754	27832	1340	29172	1111	30283	1064	1581	517
Dec.	2128	1120	940	24373	28561	945	29506	1117	30623	1128	1903	775
1989												
Jan.	2128	1066	945	26514	30653	2296	32949	1129	34078	1114	2016	902
Feb.	2128	878	959	28919	32884	2332	35216	1131	36347	1119	2017	898
March	2128	853	901	25659	29541	1352	30893	1097	31990	1079	1368	289

End of period	Domestic financial sector						Corporate sector				
	Term claims on deposit banks	Call money claims on deposit banks, net	Cash reserve deposits of deposit banks	Till-money credits to deposit banks	Other liabilities to financial institutions, net	Net claims (13+14-15+16-17)	Claims in the form of special financing	Special deposits and other items, net	Net claims (19-20)	Notes and coin in circulation	Out-standing CDs issued by the Bank of Finland
	13	14	15	16	17	18	19	20	21	22	23
1984	.	2802	8696	1563	-1618	-2713	4646	2614	2032	7442	.
1985	.	4014	10222	1925	-1386	-2897	4525	4113	412	8072	.
1986	2381	6687	9270	2305	-2240	4343	4581	4757	-176	8668	.
1987	-	-757	10941	2730	-2350	-6618	3449	4782	-1333	9990	4970
1988	7187	335	19039	2920	-3733	-4864	2823	6579	-3756	11550	1130
1988											
March	-	598	13211	2521	-3149	-6943	3350	4774	-1424	9720	7285
April	-	142	13778	2608	-3121	-7907	3327	5161	-1834	9794	8345
May	-	-720	15363	2976	-3504	-9603	3233	5333	-2100	10142	7625
June	-	1094	17040	3006	-3499	-9441	3129	5929	-2800	10461	7015
July	1525	-661	17487	2875	-3484	-10264	3131	6203	-3072	10443	4810
Aug.	4399	421	17612	2042	-3496	-7254	3047	6320	-3273	10253	3450
Sept.	5506	-48	17464	2170	-3591	-6245	2965	6385	-3420	10617	1790
Oct.	5605	-394	17328	2559	-3569	-5989	2908	6471	-3563	10513	1930
Nov.	5907	165	18112	2516	-3554	-5970	2844	6474	-3630	10563	1690
Dec.	7187	335	19039	2920	-3733	-4864	2823	6579	-3756	11550	1130
1989											
Jan.	5291	632	20389	2733	-3447	-8286	2681	6622	-3941	10755	1440
Feb.	5195	-101	21328	2657	-3481	-10096	2555	6706	-4151	10769	1460
March	7917	1735	22120	2481	-3017	-6970	2455	6700	-4245	10996	980

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
1984	.	.	.	.	-767	1 606	-2 373
1985	.	.	.	.	201	-1 011	1 212
1986	.	.	.	.	1 599	-1 074	2 673
1987	1 263	23 658	-17 520	-4 875	-6 818	626	-12 319
1988	13 840	19 190	-16 850	11 500	463	-629	12 592
1988							
March	—	2 550	-2 385	-165	337	36	136
April	—	3 600	-2 540	-1 060	-217	239	-1 516
May	—	2 280	-2 820	540	-385	477	-322
June	—	2 210	-2 820	610	1 169	-645	2 424
July	1 560	—	-2 205	3 765	-1 201	554	2 010
Aug.	3 520	—	-1 190	4 710	457	-625	5 792
Sept.	1 160	210	-1 810	2 760	-415	54	2 291
Oct.	1 470	470	1 000	—	-32	314	-346
Nov.	2 970	—	2 380	590	212	-347	1 149
Dec.	3 000	—	1 100	1 900	241	71	2 070
1989							
Jan.	260	1 190	1 370	-2 300	252	-45	-2 003
Feb.	3 260	1 125	2 125	10	-656	77	-723
March	8 695	170	5 095	3 430	1 785	-51	5 266

2.2 FORWARD EXCHANGE MARKET, MILL. FIM

End of period	Banks' forward positions with					
	Domestic companies		Net (1-2)	Foreign banks, net	Bank of Finland, net	Total, net (3+4+5)
	Forward exchange bought by banks	Forward exchange sold by banks				
	1	2	3	4	5	6
1984	22921	1394	21527	2002	-19962	3566
1985	16982	1733	15249	708	-9005	6951
1986	11446	1319	10127	-2461	-92	7574
1987	21671	1158	20513	-233	-1287	18994
1988	16465	1543	14922	9244	-377	23789
1988						
Feb.	19699	1093	18606	1816	-264	20158
March	19494	1171	18323	3112	-264	21171
April	19397	1542	17855	4052	-648	21259
May	18451	1500	16952	6672	-687	22937
June	18669	1474	17195	4557	-606	21146
July	18309	1505	16805	4678	-201	21282
Aug.	19248	1479	17769	2147	-	19916
Sept.	19282	1847	17435	6712	-1216	22930
Oct.	18420	1998	16422	7072	-958	22536
Nov.	17447	1894	15553	8224	-863	22914
Dec.	16465	1543	14922	9244	-377	23789
1989						
Jan.	15710	1058	14652	9284	-62	23874
Feb.	15495	857	14638	7706	-273	22071

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
1984	3176	.	3176	3215	.	6324	9539	-6364
1985	5812	.	5812	4527	.	9578	14105	-8293
1986	7117	120	7237	1256	.	9189	10445	-3208
1987	481	1581	2062	703	4705	10092	15501	-13439
1988	128	2190	2319	621	5044	15159	20824	-18505
1988								
March	68	-	68	496	7116	12123	19735	-19668
April	122	-	122	659	7752	13248	21659	-21537
May	35	-	35	1247	7594	13887	22728	-22693
June	47	-	47	1306	7620	15419	24344	-24297
July	373	617	990	411	5883	17083	23377	-22387
Aug.	377	2804	3181	196	3955	17491	21642	-18462
Sept.	101	5006	5107	483	2389	17607	20479	-15372
Oct.	52	5543	5594	371	1851	17459	19681	-14087
Nov.	120	5677	5796	346	1846	17354	19545	-13749
Dec.	221	6633	6854	306	1287	18172	19765	-12911
1989								
Jan.	111	6203	6314	611	1252	19083	20946	-14632
Feb.	129	4612	4741	501	1568	20423	22491	-17750
March	711	5175	5886	177	1202	21352	22731	-16845

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	
	1	2	3	4	5	6	7	8	9
1984	..	..	..	..	..	16.53	16.53	9.50	5.4
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
1988									
March	8.62	9.61	9.72	9.84	10.11	11.00	7.50	7.00	5.7
April	8.26	9.35	9.47	9.64	10.03	11.00	7.50	7.00	5.9
May	8.13	9.26	9.47	9.68	10.10	11.00	7.50	7.52	6.5
June	8.01	8.70	9.06	9.36	9.85	11.00	7.50	8.00	7.0
July	9.05	9.38	9.47	9.64	10.00	11.00	7.50	8.00	7.0
Aug.	9.97	9.96	10.00	10.13	10.42	11.00	7.50	8.00	7.0
Sept.	8.51	10.34	10.48	10.58	10.68	11.00	7.50	8.00	7.0
Oct.	7.88	10.34	10.68	10.96	11.31	12.83	4.34	8.00	7.0
Nov.	8.24	10.85	11.26	11.56	11.93	13.00	4.00	8.00	7.3
Dec.	8.41	11.21	11.55	11.85	12.14	13.00	4.00	8.00	7.6
1989									
Jan.	7.46	10.60	11.19	11.42	11.80	13.00	4.00	7.50	7.8
Feb.	7.91	10.12	10.78	11.10	11.53	13.00	4.00	7.50	7.8
March	9.09	10.85	11.09	11.34	11.66	13.00	4.00	7.50	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
1984	7.5	7.7	8.0	8.2	..	..	..	..
1985	6.8	6.9	7.0	7.2	..	..	..	..
1986	5.9	5.9	5.9	5.8	..	..	..	..
1987	5.4	5.6	5.7	5.8	7.9	8.0	8.1	8.2
1988	5.9	6.0	6.2	6.4	7.8	8.0	8.1	8.3
1988								
March	5.0	5.0	5.1	5.4	7.3	7.4	7.5	7.7
April	5.0	5.1	5.2	5.5	7.2	7.3	7.5	7.8
May	5.0	5.2	5.5	5.8	7.3	7.5	7.6	7.9
June	5.5	5.6	5.8	6.1	7.5	7.6	7.7	8.0
July	6.2	6.5	6.7	6.8	7.9	8.2	8.3	8.5
Aug.	6.7	6.9	7.2	7.3	8.2	8.5	8.8	8.9
Sept.	6.6	6.8	7.0	7.1	8.4	8.5	8.7	8.8
Oct.	6.6	6.8	6.9	6.9	8.3	8.5	8.6	8.6
Nov.	6.7	6.9	7.0	7.0	8.5	8.6	8.7	8.7
Dec.	7.4	7.4	7.4	7.5	8.8	8.8	8.9	8.9
1989								
Jan.	7.4	7.6	7.7	7.8	8.8	8.9	8.9	9.0
Feb.	8.0	8.2	8.4	8.4	9.2	9.3	9.3	9.4
March	8.0	8.3	8.6	8.8	9.3	9.5	9.7	9.8

3.3 COVERED EURO-DOLLAR RATE, PER CENT

Average of daily observations	1 month	3 months	6 months	12 months
	1	2	3	4
1984	..	..	..	..
1985	12.9	12.8	12.8	12.6
1986	12.1	11.7	11.5	11.1
1987	9.8	9.9	9.9	10.1
1988	4.7	4.5	4.1	3.5
1988				
March	9.6	9.7	9.7	9.9
April	9.3	9.4	9.6	9.9
May	9.2	9.4	9.6	10.0
June	8.7	9.0	9.3	9.8
July	9.3	9.4	9.6	9.9
Aug.	9.9	9.9	10.1	10.4
Sept.	10.2	10.4	10.4	10.6
Oct.	10.2	10.5	10.8	11.0
Nov.	10.6	11.0	11.3	11.6
Dec.	10.8	11.2	11.4	11.7
1989				
Jan.	10.2	10.8	11.0	11.3
Feb.	10.0	10.5	10.7	11.1
March	10.6	10.9	11.1	11.3

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 postal giro credits	Bills of exchange	Loans	New lending, total								
1	2	3	4	5	6	7	8	9	10	11	12	
1984	..	..	..	..	10.67	10.68	5.25	8.00	9.25	6.22	15.43	7.30
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
1988												
Jan.	10.27	12.21	9.82	10.25	9.15	9.03	2.75	5.75	7.00	4.57	9.51	5.38
Feb.	9.56	11.82	10.04	10.24	9.17	9.05	2.75	5.75	7.00	4.55	9.43	5.40
March	9.87	12.17	10.23	10.42	9.20	9.07	2.75	5.75	7.00	4.57	9.49	5.52
April	9.17	12.09	10.27	10.16	9.25	9.12	2.75	5.75	7.00	4.59	9.54	5.56
May	12.31	12.33	10.63	11.01	10.03	9.89	3.75	6.75	8.00	5.39	9.51	6.22
June	10.28	12.50	10.55	10.78	10.07	9.89	3.75	6.75	8.00	5.37	9.46	6.20
July	11.29	12.60	10.72	11.08	10.08	9.91	3.75	6.75	8.00	5.45	9.44	6.30
Aug.	11.04	12.55	10.75	11.07	10.12	9.95	3.75	6.75	8.00	5.48	9.63	6.42
Sept.	12.24	12.53	10.81	11.14	10.19	10.06	3.75	6.75	8.00	5.56	9.83	6.56
Oct.	11.97	12.53	10.82	11.16	10.29	10.15	3.75	6.75	8.00	5.59	10.09	6.63
Nov.	12.08	12.62	11.02	11.33	10.33	10.21	3.75	6.75	8.00	5.66	10.39	6.77
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	..	..	..

¹Average 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 unregulated market rate		Taxable government bonds	Taxable public issues	Of which:		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	
1984	..	..	..	14.0	..	..	10.6	13.6	11.1
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	7.9	10.4	7.3
1988									
Feb.	10.2	10.3	9.9	10.6	10.3	10.8	7.7	10.0	7.5
March	10.4	10.5	10.0	10.4	10.4	10.4	7.8	10.2	7.4
April	10.4	10.6	10.0	10.4	10.3	10.4	7.6	10.1	7.4
May	10.5	10.6	10.3	10.5	10.5	10.5	7.7	10.1	7.2
June	10.3	10.5	10.3	10.4	10.3	10.5	7.8	10.4	7.2
July	10.3	10.5	10.6	10.4	10.4	10.6	8.1	9.8	7.2
Aug.	10.5	10.7	10.7	10.6	10.5	10.7	8.0	10.5	7.2
Sept.	10.7	10.8	10.6	10.7	10.8	10.5	8.2	10.7	7.2
Oct.	11.2	11.3	10.6	10.6	10.6	10.6	7.8	10.3	7.2
Nov.	11.6	11.6	11.6	11.0	11.0	11.3	8.0	10.7	7.2
Dec.	11.8	11.7	11.6	11.3	11.3	11.1	8.0	11.3	7.2
1989									
Jan.	11.8	11.7	11.6	11.8	11.7	12.0	8.0	11.1	6.5
Feb.	11.5	11.4	11.7	11.6	12.0	11.3	8.1	11.5	6.5

4. RATES OF EXCHANGE

4.1 AVERAGE SPOT SELLING RATES, FM

Average of daily quotations	New York	Montreal	London	Dublin	Stockholm	Oslo	Copen- hagen	Frankfurt a.M.	Amster- dam	Brussels	
	1 USD	1 CAD	1 GBP	1 IEP	1 SEK	1 NOK	1 DKK	1 DEM	1 NLD	1 BEC	1 BEL
	1	2	3	4	5	6	7	8	9	10	11
1984	6.010	4.645	8.023	6.533	0.7277	0.7384	0.5816	2.1165	1.8772	0.10428	0.10274
1985	6.206	4.554	8.000	6.590	0.7222	0.7231	0.5871	2.1142	1.8745	0.10483	0.10421
1986	5.077	3.659	7.459	6.816	0.7138	0.6882	0.6290	2.3454	2.0789	0.11399	0.11299
1987	4.404	3.325	7.213	6.556	0.6952	0.6547	0.6444	2.4514	2.1755	0.11806	0.11735
1988	4.191	3.412	7.466	6.397	0.6848	0.6444	0.6235	2.3895	2.1233	0.11421	0.11345
1988											
March	4.053	3.247	7.426	6.463	0.6822	0.6410	0.6313	2.4160	2.1513	0.11557	0.11527
April	4.010	3.251	7.530	6.414	0.6821	0.6470	0.6250	2.3984	2.1379	0.11469	0.11409
May	4.030	3.263	7.541	6.370	0.6837	0.6530	0.6220	2.3811	2.1249	0.11406	0.11338
June	4.163	3.422	7.437	6.382	0.6853	0.6547	0.6255	2.3781	2.1157	0.11375	0.11320
July	4.383	3.634	7.489	6.403	0.6925	0.6548	0.6263	2.3806	2.1111	0.11378	0.11273
Aug.	4.469	3.660	7.601	6.369	0.6910	0.6498	0.6198	2.3692	2.0986	0.11314	0.11162
Sept.	4.427	3.611	7.462	6.371	0.6885	0.6419	0.6183	2.3732	2.1034	0.11325	0.11181
Oct.	4.315	3.582	7.492	6.349	0.6883	0.6401	0.6153	2.3699	2.1019	0.11311	0.11197
Nov.	4.151	3.416	7.512	6.350	0.6827	0.6328	0.6154	2.3737	2.1049	0.11333	0.11250
Dec.	4.140	3.466	7.565	6.319	0.6816	0.6365	0.6112	2.3590	2.0902	0.11262	0.11212
1989											
Jan.	4.247	3.568	7.561	6.223	0.6804	0.6385	0.6003	2.3234	2.0583	0.11098	0.11048
Feb.	4.299	3.623	7.550	6.206	0.6814	0.6411	0.5974	2.3231	2.0578	0.11091	0.11045
March	4.302	3.604	7.393	6.170	0.6756	0.6347	0.5925	2.3084	2.0459	0.11026	0.10982

Average of daily quotations	Zurich	Paris	Rome	Vienna	Lisbon	Reykjavik	Madrid	Tokyo	Moscow	Mel- bourne	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
1984	2.5642	0.6907	0.00344	0.3013	0.0414	0.1939	0.0375	0.02534	7.357	..	..	6.14739
1985	2.5360	0.6940	0.00327	0.3012	0.0367	0.1520	0.0366	0.02610	7.419	..	..	6.27879
1986	2.8349	0.7355	0.00343	0.3339	0.0343	0.1259	0.0364	0.03028	7.228	..	..	5.94432
1987	2.9563	0.7345	0.00341	0.3488	0.0315	0.1163	0.0358	0.03050	6.965	3.106	5.075	5.68010
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
1988												
March	2.9243	0.7135	0.00328	0.3441	0.0298	0.1060	0.0362	0.03189	6.786	2.989	5.001	5.54669
April	2.9001	0.7081	0.00324	0.3416	0.0296	0.1057	0.0363	0.03209	6.767	3.021	4.976	5.52717
May	2.8592	0.7045	0.00322	0.3390	0.0294	0.1006	0.0361	0.03232	6.760	3.158	4.949	5.53394
June	2.8577	0.7063	0.00321	0.3384	0.0294	0.0963	0.0361	0.03277	6.856	3.381	4.938	5.59796
July	2.8657	0.7077	0.00323	0.3388	0.0295	0.0977	0.0360	0.03296	7.026	3.523	4.947	5.70985
Aug.	2.8246	0.7014	0.00321	0.3373	0.0294	0.0981	0.0362	0.03344	7.091	3.620	4.931	5.76379
Sept.	2.8112	0.6992	0.00320	0.3377	0.0291	0.0971	0.0358	0.03295	7.038	3.527	4.917	5.71616
Oct.	2.7995	0.6963	0.00319	0.3374	0.0290	0.0940	0.0360	0.03347	6.998	3.509	4.911	5.68200
Nov.	2.8293	0.6965	0.00321	0.3378	0.0288	0.0931	0.0362	0.03372	6.890	3.548	4.918	5.62011
Dec.	2.8009	0.6921	0.00321	0.3357	0.0288	0.0929	0.0366	0.03349	6.862	3.573	4.899	5.59952
1989												
Jan.	2.7332	0.6831	0.00318	0.3308	0.0286	0.0887	0.0372	0.03346	6.896	3.712	4.840	5.61726
Feb.	2.7314	0.6838	0.00319	0.3305	0.0286	0.0870	0.0373	0.03369	6.943	3.704	4.838	5.64865
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

4.2. CURRENCY INDICES, 1982=100

Average of daily observations	Bank of Finland currency index ^{1, 2}	Other currency indices		Currency	Weights of the Bank of Finland currency index As from January 2, 1989
		Payments currency index ^{1, 2}	MEEM index		
	1	2	3		4
1984	102.8	108.5	111.6	USD	7.7
1985	102.5	109.4	112.5	GBP	13.4
1986	103.9	106.3	110.4	SEK	19.3
1987	103.3	100.7	106.1	NOK	4.5
1988	102.0	100.8	104.7	DKK	4.6
				DEM	19.3
1988				NLG	4.7
March	102.0	100.2	103.4	BIC	3.1
April	101.8	99.8	103.0	CHF	2.6
May	101.7	99.7	103.1	FRF	6.6
June	101.9	100.5	104.5	ITL	4.9
July	102.7	102.1	106.6	ATS	1.6
Aug.	102.7	102.6	107.2	ESP	1.8
Sept.	102.2	102.0	106.4	JPY	6.0
Oct.	102.0	101.4	105.8		
Nov.	101.6	100.4	104.5		
Dec.	101.4	100.1	104.2		
1989					
Jan.	100.9	100.0	104.6		
Feb.	101.0	100.3	105.2		
March	100.1	99.6	104.4		

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

² As from March 16, 1989, the number of foreign currencies used in calculating the Bank of Finland's currency index was increased from twelve to fourteen currencies and the weights were revised accordingly. The currencies added were the Spanish peseta and the Austrian schilling.

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	16975	108118	.	125093	4960	11287	141340
1985	19268	125366	1781	146415	6192	13998	166605
1986	18393	137521	3423	159337	4306	17271	180914
1987*	20377	155115	5243	180735	3923	17892	202550
1988*	24831	194181	5089	224101	4643	41028	269772
1987*							
Dec.	20377	155115	5243	180735	3923	17892	202550
1988*							
Jan.	21169	156355	5419	182943	3639	25188	211770
Feb.	21901	157510	5531	184942	4119	25166	214227
March	21079	158431	5769	185279	5022	28512	218813
April	22028	159921	5850	187799	4870	32965	225634
May	23753	161340	5835	190928	4280	32383	227592
June	26163	164253	5900	196317	4169	27307	227793
July	24369	166174	5910	196454	4362	37097	237913
Aug.	24438	167010	5904	197352	4406	39645	241402
Sept.	23358	168233	6211	197801	4310	39761	241872
Oct.	25168	170139	6530	201837	4783	42652	249271
Nov.	23389	171714	6602	201706	5028	44564	251298
Dec.	24831	194181	5089	224101	4643	41028	269772

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	5233	7644	111280	124157	20363	144520
1985	6313	7471	132668	146451	24704	171155
1986	7542	6354	152335	166231	25016	191246
1987*	8507	5177	178698	192382	36954	229336
1988*	11358	5920	234268	251545	50267	301812
1987*						
Dec.	8507	5177	178698	192382	36954	229336
1988*						
Jan.	8703	4966	182310	195979	38182	234161
Feb.	8908	5070	186023	200000	40372	240372
March	9125	4734	189554	203413	41454	244867
April	9298	4796	192940	207033	42291	249323
May	9300	4756	196938	210994	44727	255720
June	9643	4809	200832	215283	47807	263090
July	9436	4722	203911	218068	47301	265370
Aug.	9907	4767	207885	222560	47085	269644
Sept.	10634	4755	212246	227635	47583	275218
Oct.	10647	4796	216684	232127	47913	280040
Nov.	10898	4902	221029	236830	48558	285388
Dec.	11358	5920	234268	251545	50267	301812

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	-2575	-5483	176 694	171 211	-26978	24945	141 658
1985	-6641	-8694	209 231	200 537	-27244	27694	166 652
1986	-16784	-13884	237 514	223 630	-27 522	27838	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	-48 177	35 921	246 727
1987							
Dec.	-25 484	-14 977	277 068	262 090	-36 145	30 342	200 461
1988*							
Jan.	-25 529	-11 911	281 442	269 532	-41 636	31 049	202 367
Feb.	-25 237	-14 698	285 874	271 176	-41 121	31 932	204 819
March	-27 061	-14 196	291 175	276 979	-43 386	31 300	206 532
April	-26 376	-14 601	295 527	280 926	-44 961	32 144	209 589
May	-29 452	-13 068	302 073	289 005	-47 122	34 237	212 432
June	-31 339	-14 240	308 714	294 474	-44 552	36 824	218 583
July	-31 862	-13 831	312 650	298 819	-47 602	35 182	219 356
Aug.	-33 160	-14 690	317 063	302 373	-48 881	35 520	220 332
Sept.	-37 256	-15 307	322 509	307 202	-49 152	34 786	220 794
Oct.	-38 414	-15 174	327 518	312 344	-49 814	36 227	224 117
Nov.	-38 919	-16 343	333 845	317 502	-54 253	34 544	224 330
Dec.	-40 670	-15 691	351 266	335 574	-48 177	35 921	246 727

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
1984	16 513	2 666	5 767	24 946	12 037	4 520	2 766	19 323	44 269	33 816	6 300
1985	17 316	2 703	5 658	25 677	14 994	4 107	2 203	21 304	46 981	36 032	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	..	..
1988											
Feb.	19 665	2 463	5 404	27 532	23 053	4 643	3 713	31 409	58 941	40 592	10 300
March	19 638	2 244	5 390	27 272	23 286	4 627	4 163	32 076	59 348	40 850	11 116
April	20 395	2 225	5 361	27 981	23 778	4 713	4 133	32 624	60 605	41 067	11 243
May	20 370	2 207	5 342	27 919	23 846	4 631	4 013	32 490	60 409	41 131	10 286
June	21 356	2 244	5 135	28 735	23 833	4 871	4 035	32 739	61 474	41 461	11 713
July	20 860	2 236	5 156	28 252	23 838	4 969	3 910	32 717	60 969	41 781	11 993
Aug.	20 652	1 865	5 129	27 646	23 834	4 983	3 850	32 667	60 313	41 693	12 504
Sept.	20 200	1 847	5 098	27 145	23 767	4 979	3 580	32 326	59 471	43 141	13 073
Oct.	20 015	1 833	5 100	26 948	24 056	4 980	3 310	32 346	59 294	43 357	13 886
Nov.	19 643	1 814	4 324	25 781	24 079	4 984	2 980	32 043	57 824	43 349	15 683
Dec.	20 202	1 804	4 273	26 279	24 243	5 272	2 290	31 805	58 084	..	..
1989											
Jan.	20 208	1 790	4 216	26 214	23 563	5 261	2 130	30 954	57 168	..	..
Feb.	19 999	1 486	4 158	25 643	23 877	5 225	1 930	31 032	56 675	..	..

5.5 DOMESTIC BOND MARKET

A) ISSUES, MILL. FIM

During period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporations	Financial institutions	Central government	Local government	Others	Public issues		Private placements	
						Taxable	Taxfree		
1	2	3	4	5	6	7	8	9	
1984	2528	6167	5073	112	32	1947	5336	6629	13912
1985	4799	9112	5994	435	33	8070	6394	5909	20373
1986	4976	10638	6532	422	105	5987	7487	9199	22674
1987	4477	9510	8119	206	69	9409	8830	4142	22380
1988	3027	8418	6889	268	61	7861	6522	4280	18663
1988									
Feb.	260	968	631	63	—	874	806	241	1922
March	203	1254	841	—	11	719	1376	215	2310
April	112	85	1487	—	—	540	55	1089	1684
May	64	783	792	—	—	829	792	18	1639
June	113	832	40	13	—	756	40	202	998
July	523	360	10	74	—	445	10	512	967
Aug.	314	474	576	100	—	772	576	116	1463
Sept.	13	903	127	—	—	378	482	183	1042
Oct.	324	706	656	15	—	930	656	115	1701
Nov.	14	1240	183	—	—	873	183	381	1437
Dec.	838	808	174	3	50	638	174	1062	1874
1989									
Jan.	738	1451	1075	47	—	1284	1293	734	3311
Feb.	153	1403	1800	7	—	2683	400	280	3362

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 placements	
						Taxable	Taxfree		
1	2	3	4	5	6	7	8	9	
1984	6766	19960	14904	247	43	3531	15148	23242	41921
1985	10482	26173	18575	661	56	10967	19002	25977	55947
1986	14075	31902	22091	1042	177	16432	23314	29541	69287
1987	17509	36773	26518	1200	232	24831	28229	29172	82232
1988*	19222	42927	28953	1412	292	31970	30064	30771	92805
1987									
IV	17509	36773	26518	1200	232	24831	28229	29172	82232
1988*									
I	17992	38676	27626	1251	253	26533	29612	29653	85798
II	17901	39712	28428	1250	246	28457	29627	29453	87537
III	18407	40650	28478	1416	246	29804	29588	29805	89197
IV	19222	42927	28953	1412	292	31970	30064	30771	92805

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
1984	2508	5007	7515	193	273	259
1985	3114	9046	12160	184	234	229
1986	9488	6479	15968	254	357	350
1987	26641	4604	31245	319	603	546
1988	31734	5718	37452	404	734	677
1988						
Feb.	1491	248	1739	340	625	572
March	2720	418	3138	347	658	600
April	2527	357	2884	373	707	645
May	2618	649	3266	386	738	672
June	4134	1689	5823	429	784	720
July	3765	353	4117	453	806	747
Aug.	3614	298	3911	458	809	752
Sept.	2149	270	2419	432	763	704
Oct.	1979	191	2170	421	751	696
Nov.	2271	205	2475	445	787	731
Dec.	3475	966	4441	443	786	732
1988						
Jan.	2621	314	2935	439	792	736
Feb.	5491	883	6373	447	829	771

¹ Average of daily observations

6. BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS

6.1 CURRENT ACCOUNT, MILL. FIM

During period	Exports of goods, f.o.b.	Transport receipts	Travel receipts	Other services receipts	Services receipts, total (2+3+4)	Exports of goods and services (1+5)	Investment income	Transfers and other income	Current account receipts (6+7+8)	Imports of goods, c.i.f.	Transport expenditure	Travel expenditure	Other services expenditure
	1	2	3	4	5	6	7	8	9	10	11	12	13
1984	78961	6580	3039	5610	15229	94190	4537	3624	102351	73496	2572	4250	5819
1985	82475	6216	3258	6224	15698	98173	5847	3791	107811	80764	2545	5031	6554
1986	81066	5757	3195	5616	14568	95634	4510	3609	103752	76736	2160	5587	5415
1987*	83606	5819	3729	6054	15601	99208	5075	2899	107182	81941	2345	6821	6578
1988*	91400	6400	3800	6850	17050	108450	7450	3200	119100	91200	3900	7100	7350
1986													
III	20928	1533	1126	1191	3850	24778	907	894	26579	20637	572	1631	1298
IV	22652	1394	726	2319	4439	27091	1241	926	29258	19995	588	1367	1555
1987*													
I	20035	1322	666	1288	3275	23311	1130	794	25234	19542	498	1477	1479
II	21300	1491	934	1435	3859	25159	1175	715	27049	20522	601	1684	1536
III	20847	1573	1333	1541	4446	25293	1115	696	27104	20272	604	1921	1469
IV	21424	1433	797	1791	4021	25445	1655	694	27795	21605	642	1739	2094
1988*													
I	20701	1414	656	1543	3614	24315	1777	770	26862	19719	823	1625	2080
II	22570	1626	921	1728	4275	26845	1641	815	29301	23306	943	1711	1791
III	21653	1771	1364	1816	4952	26605	1824	844	29273	23983	1184	2005	1767
IV	26476	1588	858	1763	4209	30685	2209	771	33664	24192	950	1759	1711

During period	Services exports, total and services (11+12 services +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)	Transfers and other (2-11)	Travel (3-12)	Other services (4-13)	Services account and services (20+21+22)	Goods account and services (19+23)	Investment income, net (7-16)	Transfers and others, net (8-17)	Current account (24+25 +26) = (9-18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1984	12641	86137	11298	5010	102445	5465	4008	-1211	-209	2588	8053	-6761	-1385	-93
1985	14130	94893	12134	5300	112327	1711	3671	-1773	-330	1568	3279	-6287	-1509	-4517
1986	13162	89898	11719	5964	107580	4329	3597	-2392	201	1406	5735	-7209	-2355	-3828
1987*	15744	97685	12563	5434	115682	1666	3473	-3092	-524	-143	1523	-7488	-2535	-8500
1988*	18350	109550	15800	6350	131700	200	2500	-3300	-500	-1300	-1100	-8350	-3150	-12600
1986														
III	3501	24138	2495	1347	27981	291	962	-506	-107	349	640	-1588	-454	-1402
IV	3510	23504	2982	1711	28198	2657	806	-641	764	929	3586	-1741	-785	1060
1987*														
I	3454	22996	2901	1639	27536	493	824	-812	-191	-178	315	-1771	-846	-2302
II	3822	24343	3624	1182	29150	779	890	-751	-102	38	816	-2450	-468	-2101
III	3994	24266	2660	1196	28122	575	968	-588	72	452	1027	-1545	-500	-1018
IV	4475	26080	3378	1416	30874	-181	791	-942	-303	-454	-635	-1723	-722	-3079
1988*														
I	4528	24246	3817	1798	29861	983	591	-968	-537	-914	69	-2041	-1028	-3000
II	4445	27751	3823	1448	33022	-736	683	-790	-64	-170	-906	-2182	-633	-3721
III	4956	28939	3592	1469	34000	-2330	587	-641	49	-4	-2334	-1768	-625	-4727
IV	4421	28613	4568	1635	34816	2283	638	-901	52	-212	2072	-2359	-864	-1152

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 (1+2+6+7)	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 (9+10+11+12)	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
1984	324	1 492	2 598	2 861	1 090	6 549	68	8 433	2 479	..	1 682	-1 960	2 201	6 232
1985	392	4 264	1 556	1 489	442	3 487	140	8 283	2 073	78	-1 313	948	1 786	6 497
1986	1 627	646	-63	5 935	-482	5 390	87	7 750	3 641	489	-381	702	4 451	3 299
1987*	430	-1 626	2 287	5 383	2 843	10 513	91	9 408	3 785	1 691	181	3 104	8 761	647
1988*	835	-182	-1 690	9 796	9 076	17 182	85	17 920	7 845	242	675	1 858	10 620	7 300
1986														
III	273	-206	16	1 412	-105	1 323	83	1 473	1 152	279	-110	405	1 726	-253
IV	1 212	48	47	2 237	-245	2 039	52	3 351	1 207	136	-141	170	1 372	1 979
1987*														
I	131	-387	1 640	1 756	873	4 269	79	4 092	778	124	265	2 486	3 653	440
II	199	6	-442	1 530	1 257	2 345	-55	2 495	1 173	925	-145	55	2 008	488
III	17	-271	-1 018	945	551	478	12	236	653	637	112	83	1 485	-1 248
IV	83	-974	2 107	1 472	-158	3 421	55	2 585	1 181	5	-51	482	1 617	969
1988*														
I	64	6	-857	361	3 230	2 734	89	2 893	997	90	6	532	1 625	1 268
II	301	-212	1 171	2 356	1 599	5 126	-42	5 173	2 996	-30	180	431	3 577	1 596
III	88	-43	-1 571	3 011	885	2 325	-19	2 351	1 661	119	89	381	2 250	101
IV	382	67	-433	4 068	3 362	6 997	57	7 503	2 191	63	400	514	3 168	4 335

During period	Basic balance	Short-term capital imports of authorized banks	Import facilities and prepayments re-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. or- rors 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
1984	6 138	16 080	944	17 024	13 994	-2 811	11 183	-2 704	3 137	9 275	-9 275	-10 142	867
1985	1 980	6 890	350	7 240	1 623	1 732	3 355	-2 121	1 764	3 744	-3 744	-3 729	-15
1986	-529	6 019	-3 796	2 222	11 791	-92	11 699	2 075	-7 402	-7 930	7 930	11 678	-3 748
1987*	-7 853	16 252	476	16 728	-5 739	-183	-5 922	939	23 589	15 736	-15 736	-17 817	2 081
1988*	-5 300	11 301	503	11 804	5 001	303	5 304	-1 017	5 483	183	-183	-517	334
1986													
III	-1 655	3 185	1 216	4 401	5 317	-31	5 286	326	-559	-2 213	2 213	3 455	-1 242
IV	3 039	1 571	-1 609	-38	12	-31	-19	-2 339	-2 358	681	-681	117	-798
1987*													
I	-1 862	2 656	1 065	3 720	-4 959	-118	-5 077	-700	8 098	6 236	-6 236	-7 020	785
II	-1 614	7 672	70	7 741	1 924	-118	1 806	1 915	7 850	6 237	-6 237	-5 569	-667
III	-2 266	8 339	-404	7 935	3 376	27	3 403	-1 630	2 903	637	-637	-2 407	1 771
IV	-2 111	-2 415	-255	-2 669	-6 081	27	-6 054	1 353	4 738	2 627	-2 627	-2 820	193
1988*													
I	-1 732	6 501	-1 527	4 974	3 511	-277	3 234	2 332	4 072	2 341	-2 341	-1 295	-1 046
II	-2 125	11 731	716	12 447	4 623	-277	4 345	-1 258	6 843	4 718	-4 718	-4 662	-57
III	-4 626	-547	1 299	753	3 446	429	3 875	660	-2 462	-7 088	7 088	6 337	751
IV	3 183	-6 384	14	-6 370	-6 579	429	-6 150	-2 751	-2 971	212	-212	-897	685

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
1984	2905	2013	24928	5960	37227	68116	512	73546	8689	..	8920	2097	19706	53840
1985	3274	6313	25678	6410	34276	66364	652	76603	10524	78	6539	3053	20194	56409
1986	4892	6959	26292	11992	32044	70330	739	82920	13727	567	5649	3685	23628	59292
1987*	5285	3964	27861	17365	33088	78314	830	88393	16651	2258	5239	6618	30766	57627
1988*	6112	3782	26011	27441	41787	95239	915	106048	24418	2500	5995	8514	41427	64621
1986														
III	3687	6911	26710	10063	32664	69438	687	80723	12601	431	5865	3527	22424	58299
IV	4892	6959	26292	11992	32044	70330	739	82920	13727	567	5649	3685	23628	59292
1987*														
I	5013	6572	27361	13447	31978	72787	818	85190	14166	691	5660	6105	26622	58568
II	5209	6578	26967	15024	33267	75259	763	87809	15347	1616	5527	6165	28655	59154
III	5213	6307	25679	15800	33472	74952	775	87247	15812	2253	5478	6229	29772	57475
IV	5285	3964	27861	17365	33088	78314	830	88393	16651	2258	5239	6618	30766	57627
1988*														
I	5308	3970	26637	17594	35884	80114	919	90311	17538	2348	5250	7142	32278	58033
II	5410	3758	28390	20464	38230	87083	877	97128	20928	2318	5629	7671	36546	60582
III	5521	3715	27007	23707	39278	89993	858	100087	22521	2437	5752	8082	38792	61295
IV	6112	3782	26011	27441	41787	95239	915	106048	24418	2500	5995	8514	41427	64621

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)					
1984	4562	55695	17988	78245	22912	43319	12804	79035	-790	53050	11586	4613	11.3
1985	4070	51374	17354	72798	25183	38775	18155	82113	-9314	47095	11287	4808	10.5
1986	3455	56881	13240	73575	16613	50613	18381	85608	-12032	47260	13462	6018	13.0
1987*	3362	73132	18256	94750	31134	44532	18726	94392	358	57985	14150	6516	13.2
1988*	3341	84433	19601	107376	32037	49533	20844	102415	4961	69582	14925	6479	12.5
1986													
III	3565	55602	15410	74577	16168	50554	18131	84854	-10277	48022	2452	834	9.2
IV	3455	56881	13240	73575	16613	50613	18381	85608	-12032	47260	3737	1890	12.8
1987*													
I	3521	59536	15714	78771	22482	45655	17829	85966	-7195	51373	3200	1411	12.7
II	3490	67208	15863	86561	28680	47579	18073	94332	-7771	51383	3994	1496	14.8
III	3607	75547	16500	95654	29291	50955	17836	98081	-2427	55048	2770	1217	10.2
IV	3362	73132	18256	94750	31134	44532	18726	94392	358	57985	4186	2392	15.1
1988*													
I	3467	79633	15546	98646	33515	48043	19030	100588	-1942	56091	3838	1773	14.3
II	3177	91364	16166	110707	39025	52666	18503	110193	513	61095	3495	1289	11.9
III	3539	90817	18774	113130	32750	56112	20755	109617	3512	64807	4022	2230	13.7
VI	3341	84433	19601	107376	32037	49533	20844	102415	4961	69582	3570	1187	10.6

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
1984	34012	13366	25440	728	73546	17624	222	1678	182	19706	53840
1985	35709	13980	26330	585	76603	17102	859	1955	279	20194	56409
1986	35210	20169	27031	509	82920	19209	1591	2309	520	23628	59292
1987*	32458	26734	28691	511	88393	23376	4007	2653	730	30766	57627
1988*	37733	40901	26926	489	106048	31038	6243	3101	1045	41427	64621
1986											
III	34231	18554	27397	541	80723	18462	1360	2191	412	22424	58299
IV	35210	20169	27031	509	82920	19209	1591	2309	520	23628	59292
1987*											
I	34716	21814	28179	481	85190	19717	3876	2458	572	26622	58568
II	35601	24004	27730	474	87809	21633	3936	2465	621	28655	59154
III	35045	25209	26454	539	87247	22656	3919	2519	677	29772	57475
IV	32458	26734	28691	511	88393	23376	4007	2653	730	30766	57627
1988*											
I	34154	28097	27556	506	90311	24181	4458	2851	788	32278	58033
II	35900	31460	29267	503	97128	27817	4950	2887	893	36546	60582
III	36246	35469	27865	506	100087	29588	5285	2938	982	38792	61295
IV	37733	40901	26926	489	106048	31038	6243	3101	1045	41427	64621

7. FOREIGN TRADE¹

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

During period	Exports, f.o.b.	Imports, c.i.f.	Balance (1-2)
	1	2	3
1984	80904	74682	6222
1985	84028	81520	2508
1986	82579	77601	4978
1987	85306	82801	2505
1988*	93128	92126	1002
1988*			
Feb.	6722	6061	661
March	7532	6959	573
April	7580	7499	81
May	8675	8249	426
June	6709	7650	-941
July	6404	7005	-601
Aug.	7198	8331	-1133
Sept.	8411	8643	-232
Oct.	8586	8348	238
Nov.	9906	8115	1791
Dec.	8515	8351	164
1989*			
Jan.	8263	8223	40
Feb.	8260	7570	690

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
1984	114	98	134	131	102
1985	115	104	138	135	102
1986	116	110	135	121	111
1987	117	119	138	119	116
1988*	122	129	145	122	119
1988*					
III	116	119	138	120	116
IV	128	115	136	121	112
1987					
I	114	113	136	120	113
II	120	120	137	119	115
III	116	116	140	121	115
IV	119	126	140	119	117
1988*					
I	114	114	140	119	117
II	123	133	141	121	116
III	114	133	147	124	118
IV	136	136	150	125	120

7.3 FOREIGN TRADE BY MAIN GROUPS, MILL. FIM

During period	Exports by industries, f.o.b.					Imports by use of goods, c.i.f.				
	Wood industry products	Paper industry products	Chemical industry products	Metal and engineering industry products	Other goods	Raw materials (excl. crude oil)	Crude oil, fuels and lubricants	Finished goods		Other goods
	1	2	3	4	5	6	7	8	9	10
1984	7145	23573	10176	22998	17012	35162	16900	10993	11454	173
1985	6728	25030	9803	24412	18055	38676	17770	11675	12967	432
1986	6947	24600	7858	26115	17059	39292	10070	12898	15069	272
1987	7449	26691	7823	26347	16996	41066	9623	14074	17412	626
1988	7592	30849	8377	29121	17189	45772	7434	17004	21244	672
1988*										
Feb.	543	2284	707	1626	1562	3217	349	989	1466	40
March	627	2746	690	2108	1361	3492	351	1285	1822	9
April	672	2369	639	2652	1248	3730	543	1343	1877	6
May	735	2459	736	3241	1504	4144	672	1465	1957	11
June	626	2270	599	1889	1325	3727	729	1587	1578	29
July	537	2340	628	1758	1141	3376	643	1334	1576	76
Aug.	545	2649	647	1920	1437	4119	732	1457	1954	69
Sept.	611	2865	781	2506	1648	3988	852	1939	1853	11
Oct.	690	2751	799	2749	1597	4165	632	1576	1922	53
Nov.	686	2853	730	3972	1665	4222	494	1368	1865	166
Dec.	751	2788	799	2674	1503	4154	584	1703	1700	210
1989*										
Jan.	601	2581	809	2647	1625	4350	381	1519	1893	80
Feb.	604	2624	833	2705	1494	3829	484	1314	1912	31

7.4 FOREIGN TRADE BY REGIONS AND COUNTRIES

Region and country	Exports, f.o.b.				Imports, c.i.f.			
	1988 ^a		1989 ^a January		1988 ^a		1989 ^a January	
	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	69 767	74.9	6 540	18.0	71 272	77.4	6 660	27.5
OECD Europe	60 456	64.9	5 552	12.5	57 573	62.5	5 370	29.6
Of which:								
Austria	940	1.0	89	3.7	1 140	1.2	98	26.2
Belgium and Luxembourg	1 830	2.0	185	36.8	2 332	2.5	233	41.8
Denmark	3 291	3.5	322	-1.7	2 699	2.9	247	35.1
France	4 954	5.3	477	-2.1	3 757	4.1	322	17.6
Federal Republic of Germany	10 089	10.8	893	13.9	15 536	16.9	1 484	31.9
Italy	2 521	2.7	280	47.3	4 101	4.5	340	23.5
Netherlands	3 393	3.6	330	17.4	2 973	3.2	303	40.4
Norway	3 243	3.5	267	-11.3	2 181	2.4	182	24.2
Spain	1 447	1.6	137	29.0	1 023	1.1	117	21.2
Sweden	13 171	14.1	1 181	20.1	12 269	13.3	1 241	38.7
Switzerland	1 596	1.7	142	12.9	1 717	1.9	164	24.3
United Kingdom	12 120	13.0	1 095	11.8	6 221	6.8	507	14.0
Other OECD	9 311	10.0	988	62.8	13 699	14.9	1 290	19.4
Of which:								
Canada	1 125	1.2	124	106.4	658	0.7	96	60.4
Japan	1 681	1.8	147	26.9	6 798	7.4	600	17.7
United States	5 361	5.8	603	64.1	5 818	6.3	552	14.4
CMEA countries	15 415	16.6	997	25.2	13 542	14.7	994	-12.5
Of which:								
Soviet Union	13 912	14.9	844	24.0	11 146	12.1	733	-21.9
Developing countries	6 992	7.5	603	32.7	6 067	6.6	470	3.9
OPEC countries	1 486	1.6	137	30.6	589	0.6	27	-75.1
Other	5 506	5.9	466	33.3	5 478	5.9	443	28.8
Other countries	944	1.0	123	42.6	1 205	1.3	99	62.6
TOTAL	93 117	100.0	8 263	20.1	92 085	100.0	8 223	19.6
Of which:								
EEC countries	41 116	44.2	3 843	12.8	40 090	43.5	3 661	27.3
EFTA countries	19 089	20.5	1 692	12.4	17 394	18.9	1 700	34.4

¹The trade values and volumes for December 1987 and January 1988 differ from those in the official statistics. For details, see Notes and Explanations on page S26.

8. DOMESTIC ECONOMIC DEVELOPMENTS

8.1 SUPPLY AND USE OF RESOURCES, MILL. FIM, 1985 PRICES (seasonally adjusted figures)

Period	Consumption expenditure		Fixed investment		Change in stocks, incl. statistical discrepancy	Domestic demand (1+2+3+4+5)	Exports	Imports	GDP (6+7-8)
	Private	Public	Private	Public					
	1	2	3	4	5	6	7	8	9
1984	176 038	64 872	67 584	10 202	-1 327	317 369	96 993	88 857	325 505
1985	181 664	68 218	69 599	10 453	3 610	333 544	98 173	94 893	336 824
1986	189 113	70 325	69 329	10 738	3 255	342 760	99 498	97 795	344 463
1987*	198 828	73 444	72 126	11 529	7 023	362 950	101 181	106 569	357 562
1988*	208 698	75 888	80 589	11 864	9 574	386 613	105 462	117 365	374 710
1986									
III	47 642	17 737	17 795	2 847	1 896	87 916	26 247	26 846	87 317
IV	47 741	17 898	17 519	2 783	-9	85 932	26 518	24 842	87 608
1987*									
I	48 595	18 069	17 631	2 825	1 726	88 847	25 296	26 422	87 722
II	49 581	18 277	18 152	2 723	1 434	90 167	25 698	25 830	90 034
III	49 789	18 475	17 856	3 028	257	89 406	26 105	26 470	89 041
IV	50 863	18 623	18 486	2 953	3 606	94 530	24 082	27 847	90 765
1988*									
I	51 465	18 684	19 152	2 861	2 069	94 230	25 884	28 013	92 101
II	51 625	18 896	19 734	2 848	3 136	96 238	26 235	29 459	93 015
III	52 695	19 083	20 809	3 078	3 144	98 809	25 890	31 065	93 634
IV	52 913	19 225	20 895	3 077	1 226	97 336	27 453	28 829	95 961

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

Period	Industry (SIC):						
	2-4 Total industry (100.0)	2 Mining and quarrying (1.5)	3 Manufacturing (89.5)	331,341 Wood and paper industries (20.5)	37,38 Metal and engineering industries (28.3)	4 Other manufacturing (40.7)	4 Electricity, gas and water (9.0)
	1	2	3	4	5	6	7
1984	96.1	96.3	96.6	101.7	92.5	97.6	91.8
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986*	100.8	101.7	100.8	101.8	101.3	99.9	100.1
1987*	105.0	79.0	105.2	107.9	106.2	103.0	108.0
1988*	109.2	89.6	109.5	114.7	112.8	104.1	109.1
1987*							
Dec.	102.8	67.3	105.5	105.4	108.4	100.1	108.4
1988*							
Jan.	108.0	64.7	110.9	115.9	110.9	106.6	94.5
Feb.	107.8	70.4	109.4	112.8	110.7	104.0	102.6
March	105.5	74.0	106.3	110.2	104.2	102.8	105.7
April	108.8	88.9	107.2	114.2	111.1	102.4	110.2
May	109.0	102.3	108.7	110.5	113.2	107.4	103.6
June	112.1	100.1	110.4	116.4	111.2	106.6	110.5
July	114.3	95.4	110.4	107.8	122.7	104.5	110.8
Aug.	108.3	82.5	107.3	113.5	114.2	101.6	111.9
Sept.	109.8	93.7	109.8	115.8	117.3	105.4	109.0
Oct.	109.8	86.5	112.2	119.6	114.0	106.3	111.7
Nov.	109.6	98.2	112.0	123.6	116.4	103.4	122.0
Dec.	107.4	93.9	108.7	115.5	112.7	98.1	120.4

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
1984	97.2	96.8	101.8	104.1	112.8	96.2	98.6	96.9
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986*	104.7	102.5	94.0	88.4	99.9	99.5	105.2	101.8
1987*	111.3	107.7	95.6	89.0	101.0	102.6	113.8	106.1
1988*	117.0	113.2	108.6	106.4	112.2	108.3	135.5	109.7
1987*								
Dec.	110.3	112.2	..	..	..	..	..	107.7
IV	113.2	109.5	96.2	85.5	96.9	105.1	120.9	107.2
1988*								
Jan.	114.8	112.5	..	..	..	..	..	107.9
Feb.	113.6	110.9	..	..	..	..	..	108.3
March	112.6	114.2	..	..	..	..	..	108.1
April	116.3	108.7	..	..	..	..	..	107.7
May	111.8	114.7	..	..	..	..	..	109.3
June	115.8	111.1	..	..	..	..	..	109.4
July	117.2	110.5	..	..	..	..	..	109.5
Aug.	118.3	116.6	..	..	..	..	..	110.5
Sept.	122.4	111.2	..	..	..	..	..	111.1
Oct.	120.0	115.3	..	..	..	..	..	110.8
Nov.	118.5	117.6	..	..	..	..	..	112.4
Dec.	122.5	114.7	..	..	..	..	..	111.8
I	113.7	112.5	104.4	92.3	112.5	113.7	112.2	108.1
II	114.6	111.5	104.2	101.8	102.4	110.6	138.6	108.8
III	119.3	112.8	108.6	110.4	105.0	102.0	139.4	110.4
IV	120.3	115.9	117.0	121.0	128.9	106.8	141.8	111.7

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
1984	92.2	92.0	92.9	92.6	92.8	92.1	95.1	95.3	94.8	97.1	96.0	98.1	95.1	94.6
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986	106.9	106.7	106.2	106.6	107.8	107.2	102.9	97.0	98.6	91.0	96.5	96.7	96.4	104.3
1987¹	114.4	114.5	113.4	115.7	113.4	115.2	107.2	97.9	100.2	89.3	97.3	98.1	96.8	109.1
1988¹	124.7	124.5	122.7	128.7	122.4	127.5	112.6	101.5	104.9	89.1	101.7	103.8	100.7	116.3
1987¹														
IV	116.6	116.8	115.2	117.3	115.0	117.8	108.3	98.8	101.6	88.4	98.4	99.2	98.0	110.6
1988¹														
Feb.	..	..	..	..	..	..	110.0	99.6	102.7	87.9	99.5	100.1	99.2	111.9
March	..	..	..	..	..	..	110.6	99.7	103.0	87.5	100.0	101.1	99.4	112.3
April	..	..	..	..	..	..	111.4	99.9	103.1	88.3	100.1	101.5	99.4	115.0
May	..	..	..	..	..	..	112.3	100.9	104.1	89.3	100.8	102.6	100.0	116.2
June	..	..	..	..	..	..	112.9	101.3	104.7	89.1	101.1	103.1	100.2	116.6
July	..	..	..	..	..	..	112.9	102.0	105.4	89.6	102.1	104.3	101.1	117.0
Aug.	..	..	..	..	..	..	113.1	102.4	105.8	90.3	102.7	105.5	101.4	117.5
Sept.	..	..	..	..	..	..	114.2	102.4	105.7	90.0	102.9	105.7	101.5	118.7
Oct.	..	..	..	..	..	..	114.3	103.2	106.9	89.7	103.8	107.0	102.3	119.2
Nov.	..	..	..	..	..	..	114.5	103.5	107.2	89.8	103.9	106.9	102.5	119.8
Dec.	..	..	..	..	..	..	115.4	104.0	107.7	90.5	104.3	107.4	102.8	119.9
I	118.8	118.4	116.9	122.7	117.1	121.8	110.1	99.5	102.7	87.7	99.5	100.4	99.1	112.0
II	125.3	125.0	123.4	130.1	122.7	129.1	112.2	100.7	104.0	88.9	100.7	102.4	99.9	115.9
III	126.2	126.1	124.0	130.1	124.0	129.2	113.4	102.3	105.6	90.0	102.6	105.2	101.3	117.7
IV	128.3	128.4	126.4	132.0	125.6	129.9	114.7	103.6	107.3	90.0	104.0	107.1	102.5	119.6
1989¹														
Jan.	..	..	..	..	..	..	116.0	104.8	108.4	91.7	105.2	108.4	103.6	121.6
Feb.	..	..	..	..	..	..	116.6	105.5	109.0	92.4	105.8	109.6	103.9	121.9

¹Preliminary figures for columns 1—6.

8.5 LABOUR, EMPLOYMENT AND UNEMPLOYMENT (seasonally adjusted figures)

Period	Labour force participation rate among 15-74 year olds	Labour force	Total employment (4+5) = (6+7+8+9)	By industrial status		By industry			Unemployed	Unemployment rate	
				Self-employed	Wage and salary earners	Agri-culture and forestry	Industry	Con-struction			Service indus-tries
				1000 persons							%
	%										
	1	2	3	4	5	6	7	8	9	10	11
1984	68.9	2546	2414	378	2035	294	600	183	1337	132	5.2
1985	69.2	2566	2437	361	2076	280	597	178	1380	129	5.0
1986	69.1	2569	2431	359	2071	266	589	185	1391	138	5.4
1987	68.6	2554	2423	372	2051	251	569	184	1419	130	5.1
1988	68.4	2546	2431	368	2062	238	553	188	1452	116	4.5
1988											
Jan.	68.7	2557	2435	377	2058	248	572	189	1426	122	4.8
Feb.	68.4	2547	2428	372	2056	252	552	176	1448	119	4.7
March	68.5	2546	2426	370	2056	239	559	182	1445	120	4.7
April	68.3	2540	2424	369	2056	241	553	194	1437	116	4.6
May	68.3	2540	2415	369	2046	243	546	178	1449	125	4.9
June	68.7	2557	2440	368	2072	232	552	195	1462	117	4.6
July	68.5	2547	2431	366	2065	229	552	200	1450	115	4.5
Aug.	68.0	2531	2409	354	2055	245	562	174	1428	121	4.8
Sept.	68.4	2545	2438	368	2070	231	538	201	1468	107	4.2
Oct.	68.7	2554	2448	375	2072	225	544	201	1478	106	4.1
Nov.	68.6	2553	2438	360	2077	231	559	166	1481	115	4.5
Dec.	68.2	2539	2436	370	2065	234	550	196	1456	103	4.1
1989											
Jan.	69.0	2567	2479	370	2109	224	553	204	1497	88	3.4

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

During period	Revenue								Expenditure				
	Direct taxes	Indirect taxes	Other taxes and similar revenue	Other revenue	Revenue before financial transactions (1+2+3+4)	Redemptions of loans granted by the state	Revenue before borrowing (5+6)	Borrowing	Total revenue (7+8)	Consumption	Transfers and subsidies	Of which:	
												Local government	Other domestic sectors
	1	2	3	4	5	6	7	8	9	10	11	12	13
1983	19565	36183	531	8284	64563	1854	66416	11378	77794	20984	39411	15717	22817
1984	22526	42737	598	9711	75572	1894	77466	10752	88218	22155	44333	18444	24836
1985	25750	47578	546	10415	84290	2071	86361	11189	97550	24835	49269	21183	26866
1986	28079	51733	323	11640	91774	2209	93983	14744	108727	26354	52845	23215	28131
1987	29454	57312	455	12437	99658	2482	102139	17484	119623	29419	59498	26456	30964
1987													
Nov.	2545	5465	29	1024	9062	266	9329	2397	11726	2366	5746	2336	3306
Dec.	1995	7294	65	1454	10809	680	11488	1496	12984	2731	5271	2239	2720
1988													
Jan.	2495	3188	12	958	6654	21	6674	1680	8354	2367	5494	2221	3145
Feb.	2203	6490	38	837	9568	53	9622	1017	10639	2449	6390	2304	3948
March	3084	4470	49	998	8601	96	8698	1291	9989	2520	5301	2325	2552
April	3203	4517	44	1122	8886	85	8971	2089	11060	2341	4958	2682	2141
May	2659	5470	21	1787	9936	302	10238	834	11072	2760	6409	2640	3405
June	2994	5733	46	1012	9785	132	9917	1490	11407	2842	5368	2755	2376
July	3488	5896	35	871	10290	70	10360	109	10469	3191	4617	2370	2090
Aug.	3333	6295	62	1022	10712	488	11200	589	11789	2607	5279	2361	2801
Sept.	2811	5242	23	896	8972	145	9117	1667	10784	2665	4689	2359	2211
Oct.	3052	5247	41	1294	9634	234	9868	657	10525	2759	5088	2487	2451
Nov.	2900	6315	45	1277	10536	394	10931	355	11286	2753	6717	2711	3846

During period	Expenditure							Financial balance			
	Fixed investment	Other expenditure	Expenditure before financial transactions (10+11+14+15)	Lending and other financial investment	Expenditure before redemptions of state debt (16+17)	Redemptions of state debt	Total expenditure, (18+19)	Revenue surplus (5-16)	Net borrowing requirement (7-18)	Gross borrowing requirement (7-20)	Cash surplus (9-20)
1983	5454	4095	69944	4999	74943	3939	78881	-5381	-8527	-12465	-1088
1984	5455	4220	76162	4717	80878	5552	86430	-590	-3412	-8964	1788
1985	5700	4936	84739	4982	89722	7682	97404	-449	-3361	-11043	145
1986	6111	5058	90368	4913	95281	10541	105822	1406	-1298	-11839	2905
1987	7089	4732	100738	5672	106410	9880	116289	-1080	-4270	-14150	3334
1987											
Nov.	550	199	8861	407	9267	252	9519	202	62	-190	2207
Dec.	878	-6	8874	483	9357	109	9466	1935	2131	2022	3518
1988											
Jan.	502	764	9127	372	9499	1279	10778	-2473	-2824	-4103	-2423
Feb.	535	324	9699	397	10096	512	10608	-130	-474	-986	31
March	641	833	9296	427	9723	825	10548	-694	-1025	-1850	-559
April	492	617	8407	341	8747	674	9421	479	224	-450	1639
May	690	760	10619	623	11242	1044	12286	-684	-1004	-2048	-1214
June	660	317	9186	603	9789	818	10607	598	128	-690	800
July	568	112	8487	467	8954	787	9741	1803	1406	619	728
Aug.	609	478	8972	450	9422	1177	10599	1740	1778	601	1190
Sept.	772	445	8570	1623	10193	866	11059	402	-1076	-1942	-275
Oct.	642	558	9047	483	9531	672	10203	587	337	-335	322
Nov.	645	199	10313	428	10741	1594	12335	223	190	-1404	-1049

NOTES AND EXPLANATIONS TO THE STATISTICAL SECTION

GENERAL

Source

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

Symbols used

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

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

NOTES AND EXPLANATIONS TO TABLES

1 THE BALANCE SHEET OF THE BANK OF FINLAND

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

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

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

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

term liabilities from February to July 1987.

3 RATES OF INTEREST

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

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 bonds and debentures (Columns 8 and 9) 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.

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 7.7 billion at the end of 1986.

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

6 BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS

Table 6.1 The figures for the trade and goods and services accounts are compiled in accordance with the 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. Long-term credits (Columns 3-6): Financial loans, import credits and leasing credits. Others (Column 5): Long-term credits of enterprises, financial institutions other than authorized banks and local government. Imports of other long-term capital (Column 7): Finland's subscriptions to international financial institutions paid in the form of promissory notes. Exports of other long-term capital (Column 12) = financial loans abroad + development credits + purchases of real estate and other acquisitions by private persons + Finland's subscriptions to international financial institutions.

Table 6.3 Net foreign debt (Columns 1-24) at the end of a period is classified in the same way as the corresponding data on changes in the capital account (Table 6.2). The items included in net foreign debt have been translated into markkaa using the spot rates for each date. Thus the figures include the impact of changes in exchange rates. Debt service payments (Column 25): the total of net payments of interest, dividends and remunerations relating to long- and short-term foreign liabilities and assets plus net repayments relating to long-term foreign liabilities and assets. Repayments do not include early repayments of loans, repatriations of equity capital included under direct investment, repurchases of shares included under portfolio investment (since 1986), repayments of the Bank of Finland's reserve tranche and oil facility credits, or repayments of rouble-denominated assets included under loan assets. The debt-service ratio (Column 27) = service charges on net foreign debt as a percentage of current account earnings.

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

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

7 FOREIGN TRADE

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

On January 1, 1988, the new international harmonized commodity description and coding system was introduced in the compilation of the official foreign trade statistics. Because of the changeover, the trade value figures in the customs statistics are exceptionally high for December 1987 and exceptionally low for January 1988 as compared with the old system. For the sake of comparability, the customs statistics figures for December 1987 and January 1988 have been adjusted in the Bulletin to comply with the old system. For this reason the total trade values for 1987 as a whole also differ from the customs statistics. The Bulletin follows the same practice as in the balance of payments statistics. Adjustments have been made to all value and volume figures for exports and imports. Unit values correspond to those of the customs statistics. The adjustments have been made by the Economics Department of the Bank of Finland.

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

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

8 DOMESTIC ECONOMIC DEVELOPMENTS

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

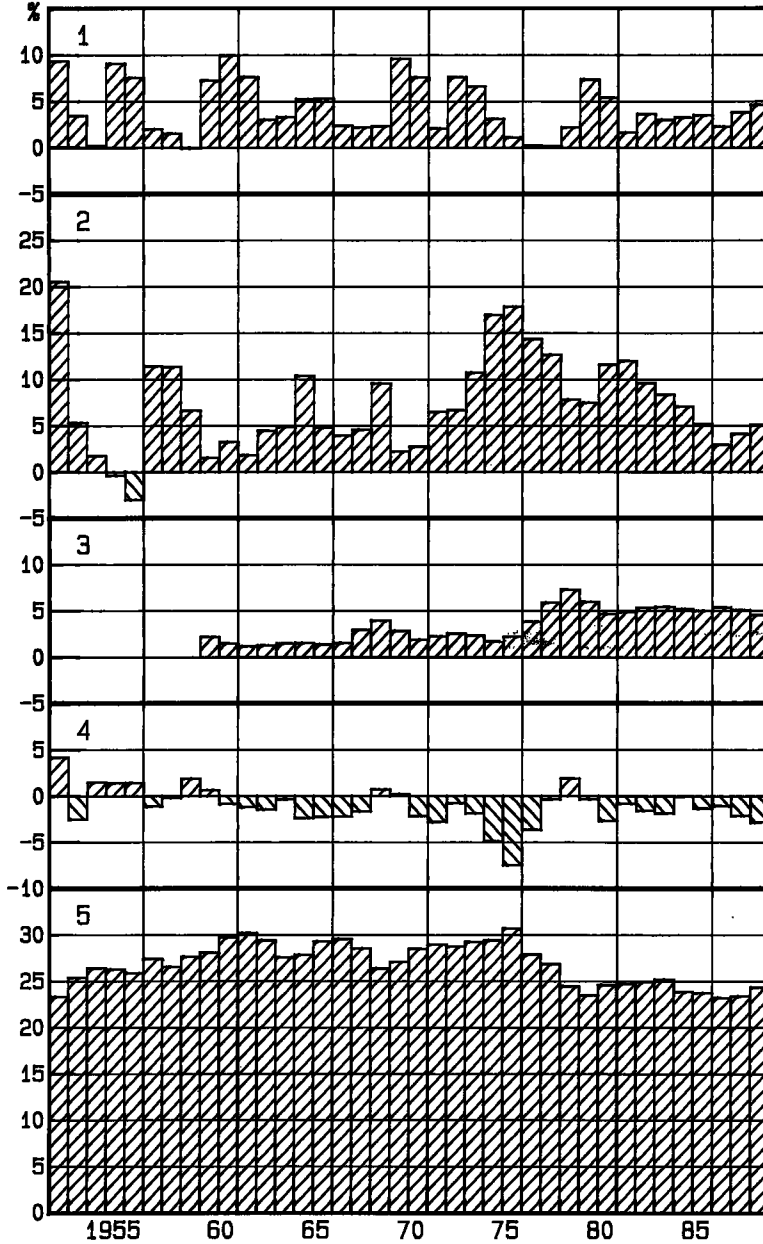
Table 8.3 The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various industries.

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

Table 8.6 Source: Ministry of Finance.

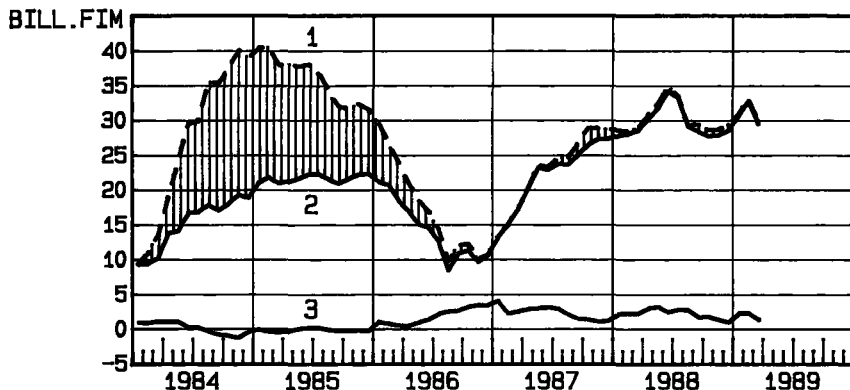
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34. Central government finances	S41

1. LONG-TERM INDICATORS



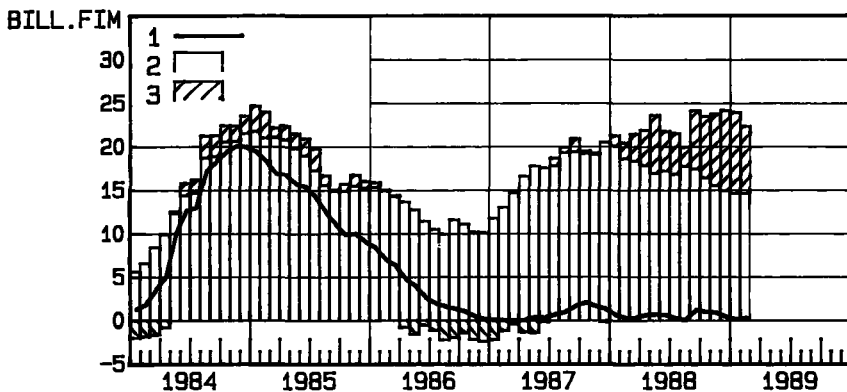
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

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



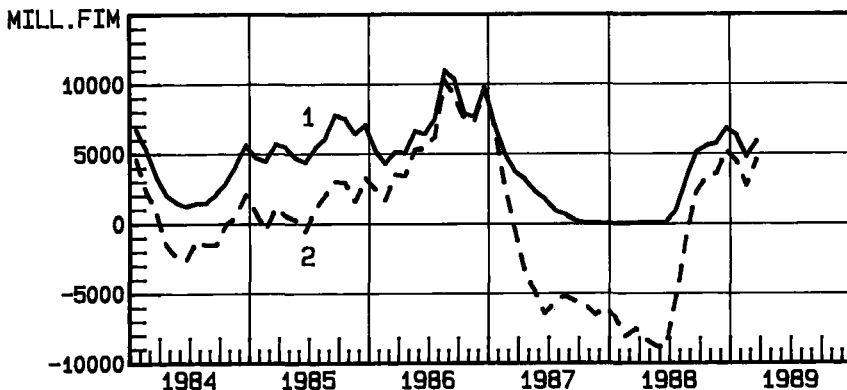
1. Convertible foreign exchange reserves plus forward position
2. Convertible foreign exchange reserves
3. Tied currencies

3. FORWARD MARKET



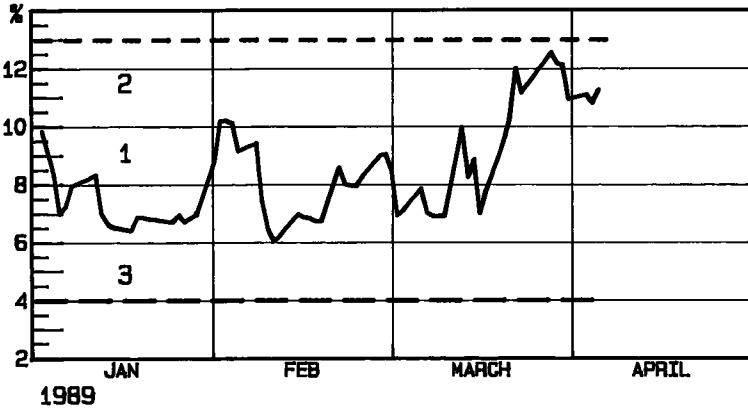
1. Forward exchange purchased by the Bank of Finland from banks
2. Forward exchange sold by companies to banks
3. Forward exchange sold by foreign banks to banks

4. BANKS' CENTRAL BANK POSITION



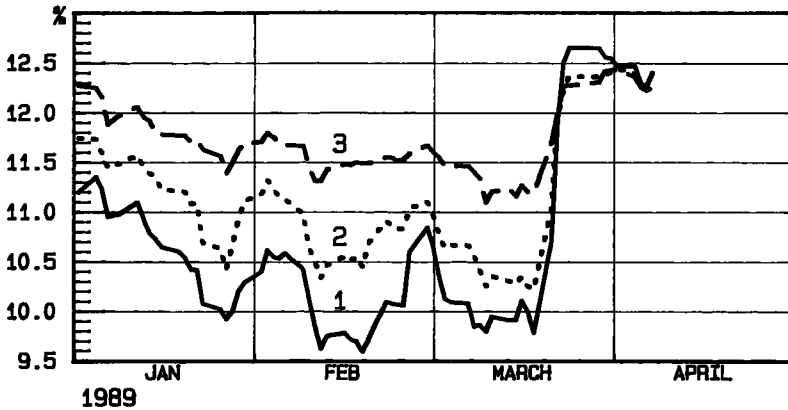
1. Gross debt to the Bank of Finland
2. Net debt to the Bank of Finland (excl. cash reserve deposits)

5. OVERNIGHT RATES



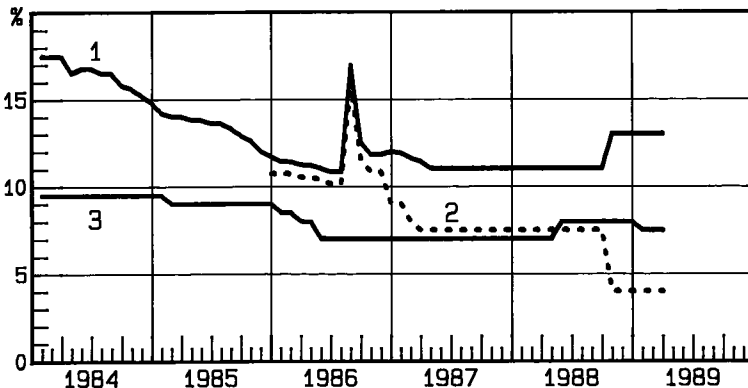
- 1. Inter-bank overnight rate
 - 2. Call money credit rate
 - 3. Call money deposit rate
- Daily observations

6. HELIBOR RATES OF INTEREST



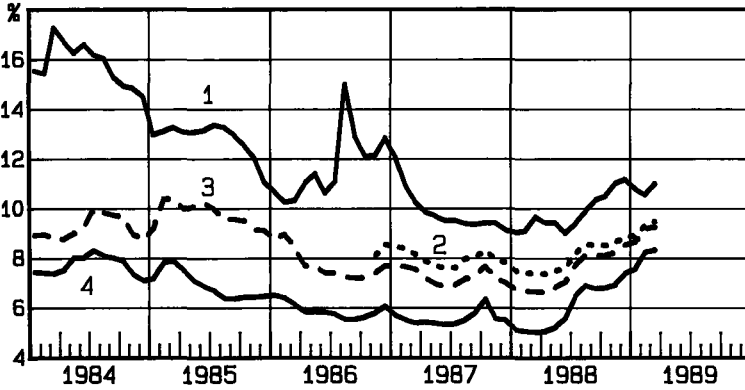
- 1. 1-month HELIBOR
 - 2. 3-month HELIBOR
 - 3. 12-month HELIBOR
- Daily observations

7. RATES OF INTEREST APPLIED BY THE BANK OF FINLAND



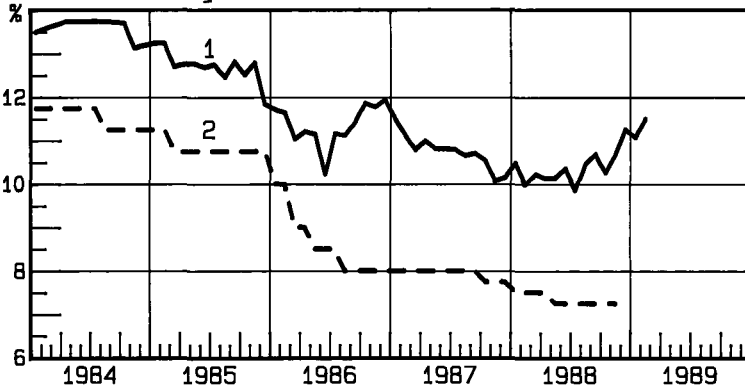
- 1. Call money credit rate
 - 2. Call money deposit rate
 - 3. Base rate
- End-of-month observations

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



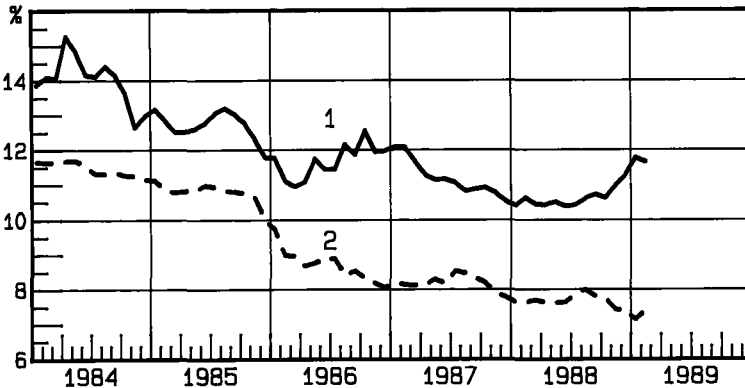
- 1. Covered Eurodollar rate
- 2. 12-currency basket rate
- 3. 8-currency basket rate
- 4. 3-currency basket rate

9. RATES ON NEW ISSUES OF BONDS AND DEBENTURES



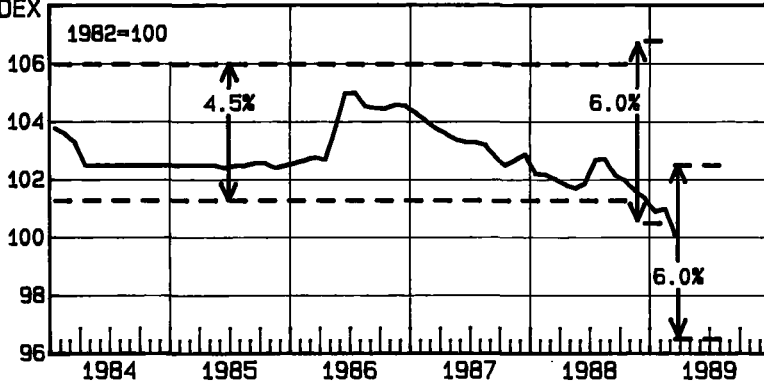
- 1. Rates on new fixed-rate debentures
- 2. Rates on new 10-year tax-free government bonds

10. SECONDARY MARKET RATES ON BONDS AND DEBENTURES



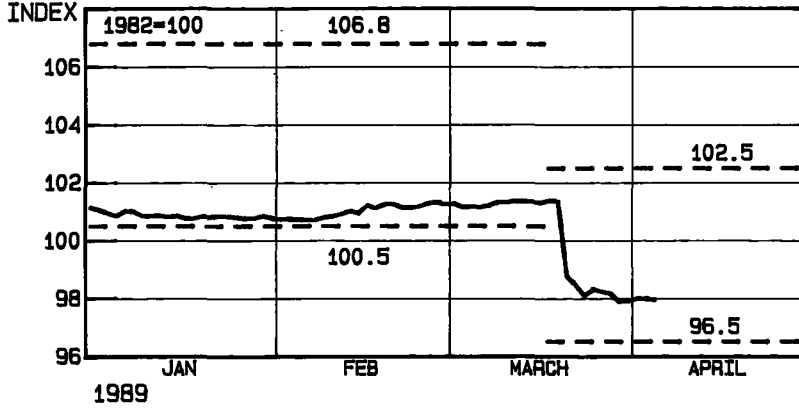
- 1. Secondary market rate on (3-6 year) fixed-rate debentures
- 2. Secondary market rate on (9-10 year) taxfree government bonds

11. BANK OF FINLAND CURRENCY INDEX



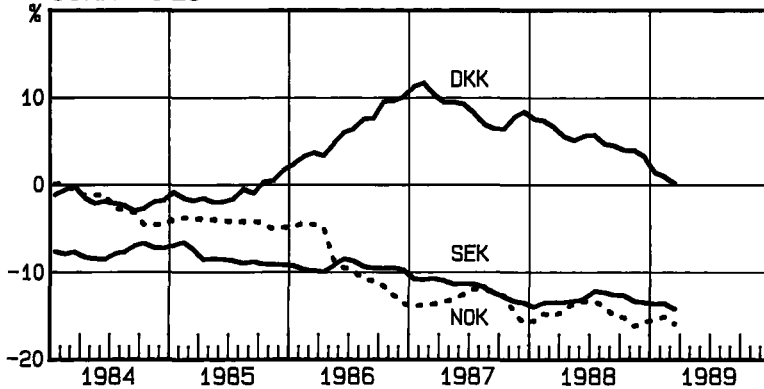
4.5 % and 6.0 % = fluctuation range of the index
Monthly averages

12. BANK OF FINLAND CURRENCY INDEX



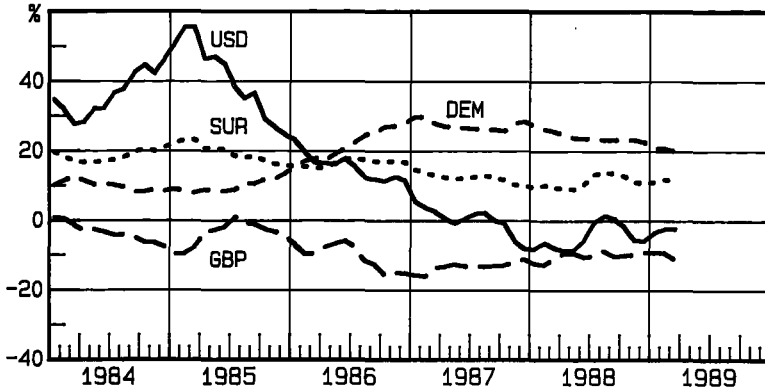
Daily observations

13. CHANGES IN THE EXCHANGE RATES OF SELECTED NORDIC CURRENCIES



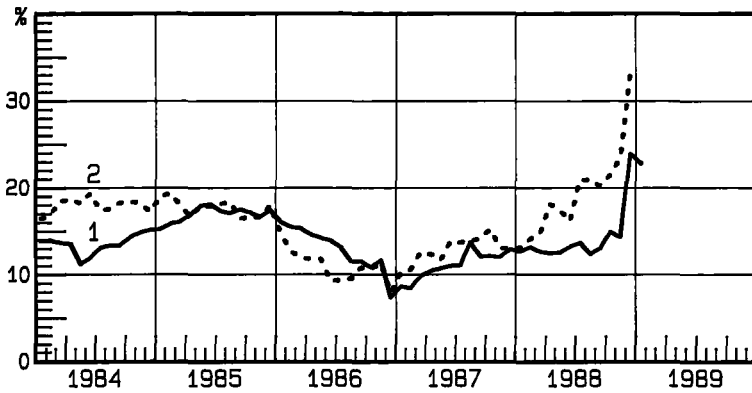
Monthly changes in markka selling rates calculated from the average rates for January 1982

14. CHANGES IN THE EXCHANGE RATES OF SELECTED MAJOR CURRENCIES



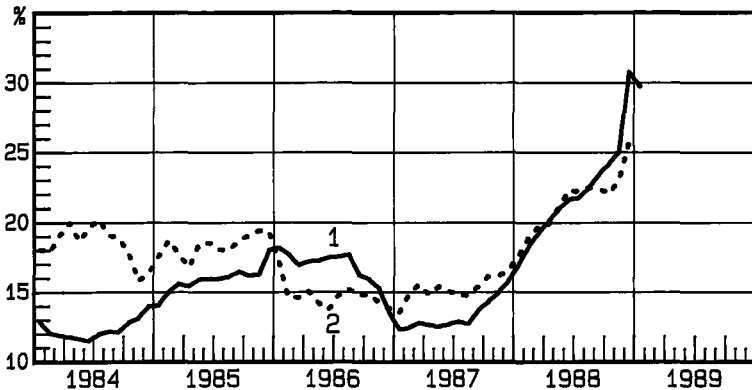
Monthly changes in markka selling rates calculated from the average rates for January 1982

15. BANK DEPOSITS FROM THE PUBLIC



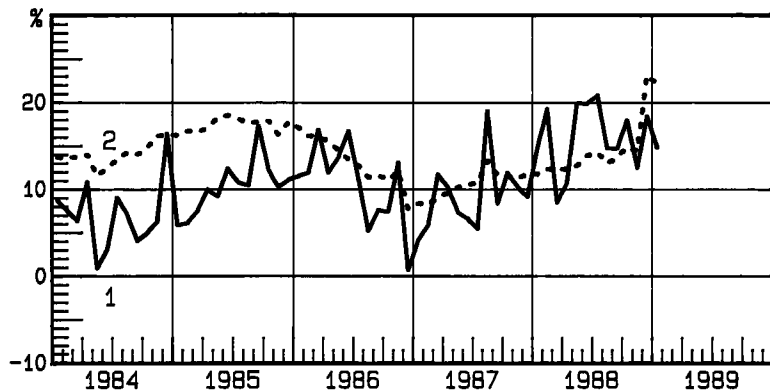
1. Regulated deposits
2. Total deposits
Change from the corresponding month of the previous year, per cent

16. BANK LENDING TO THE PUBLIC



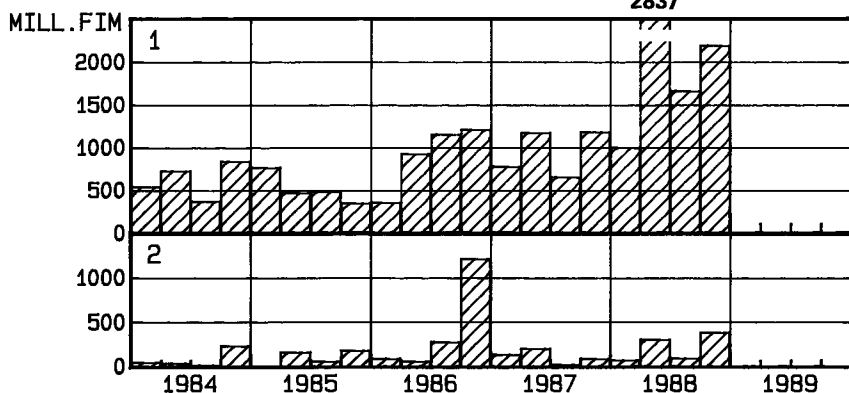
1. Markka lending
2. Total lending
Change from the corresponding month of the previous year, per cent

17. MONEY SUPPLY



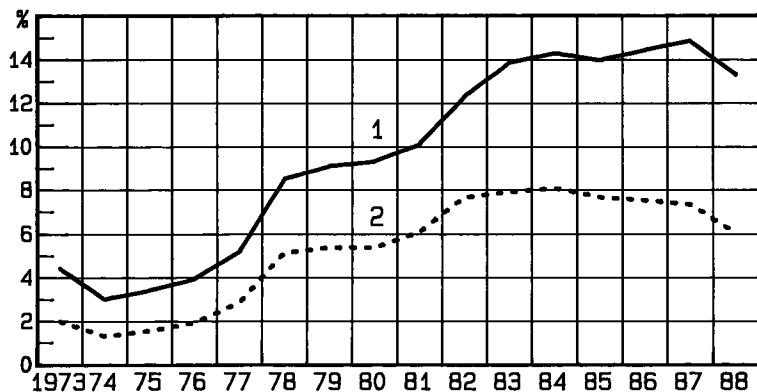
1. Narrow money supply (M1)
 2. Broad money supply (M2)
- Change from the corresponding month of the previous year, per cent

18. DIRECT INVESTMENT



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

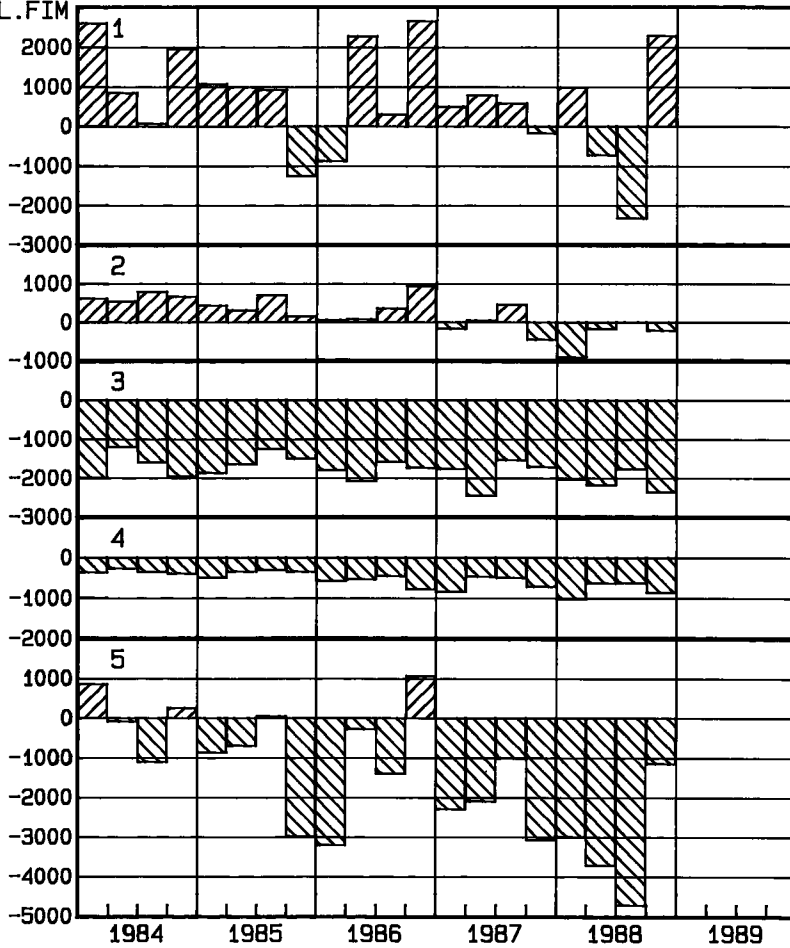
19. CENTRAL GOVERNMENT DEBT



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

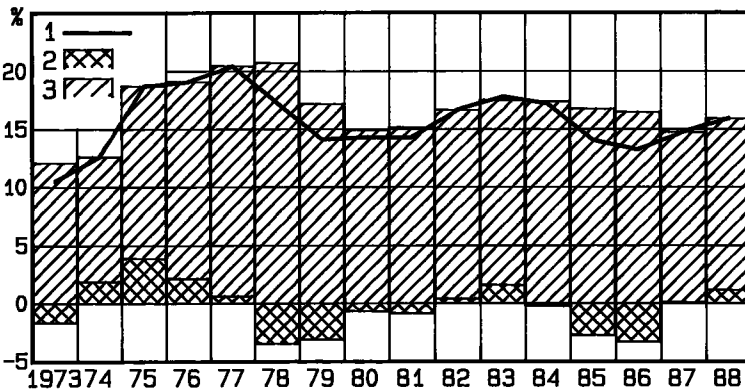
20. CURRENT ACCOUNT

MILL. FIM



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

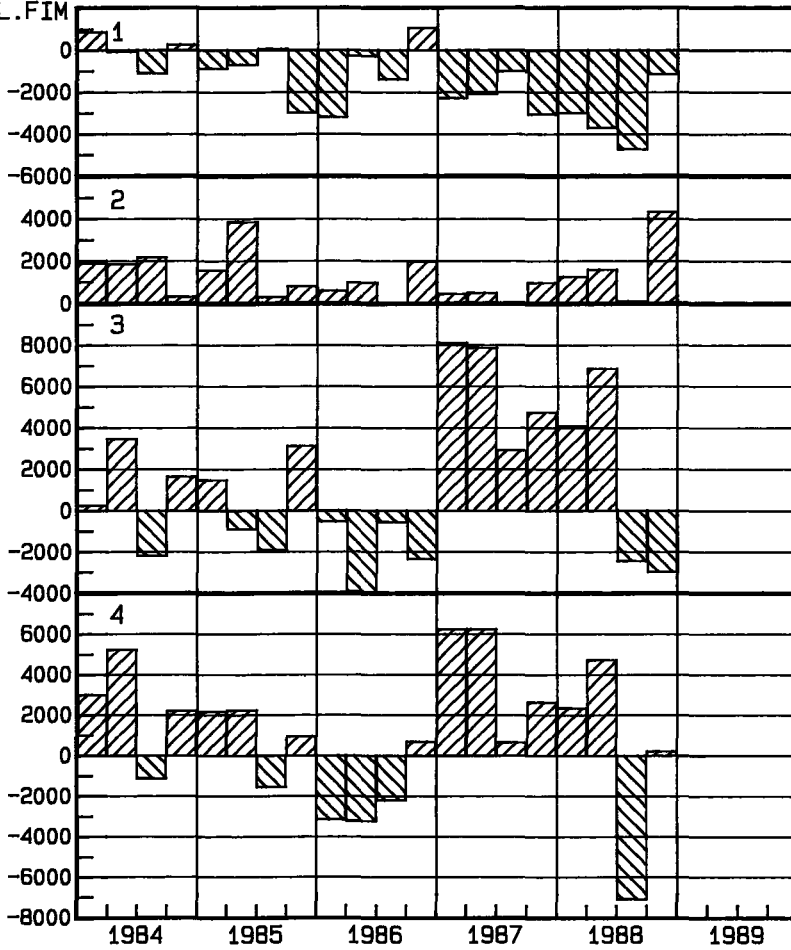
21. FOREIGN DEBT



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

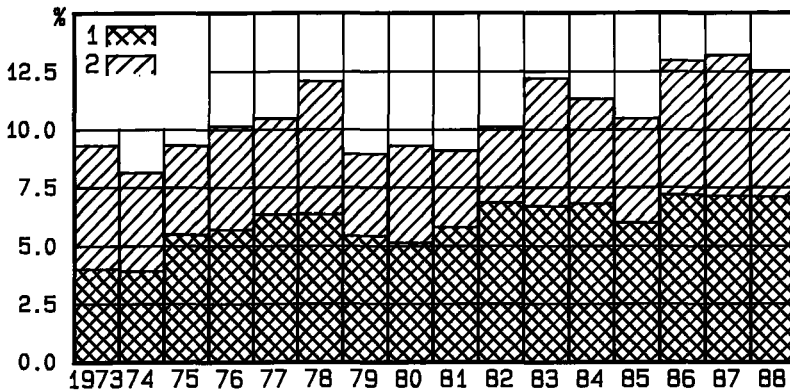
22. BALANCE OF PAYMENTS

MILL. FIM



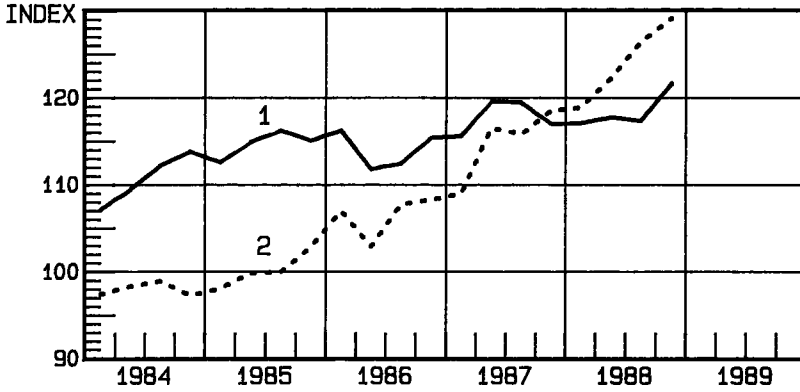
1. Current account
2. Long-term capital account
3. Short-term capital account
4. Overall balance = change in the foreign exchange reserves of the Bank of Finland

23. DEBT SERVICE RATIO



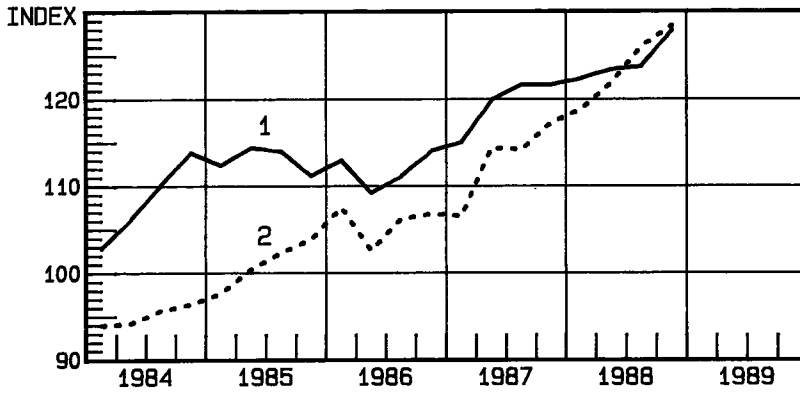
1. Interest payments
 2. Redemptions
- As a percentage of current account earnings

24. FOREIGN TRADE



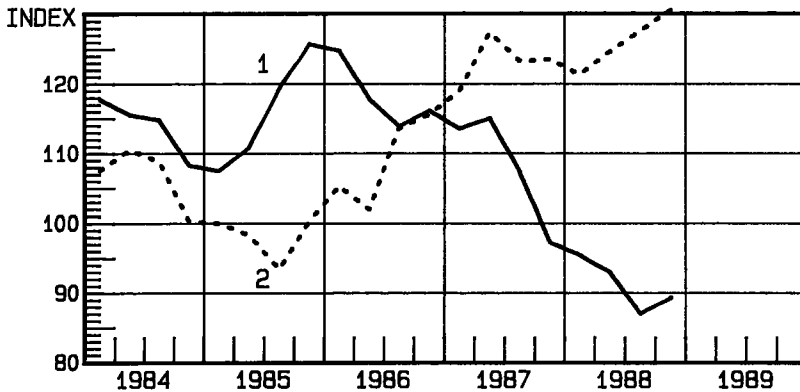
1. Total exports
2. Total imports
Volume index, 1980 = 100,
four-quarter moving average
shown as at the last quarter

25. WESTERN TRADE



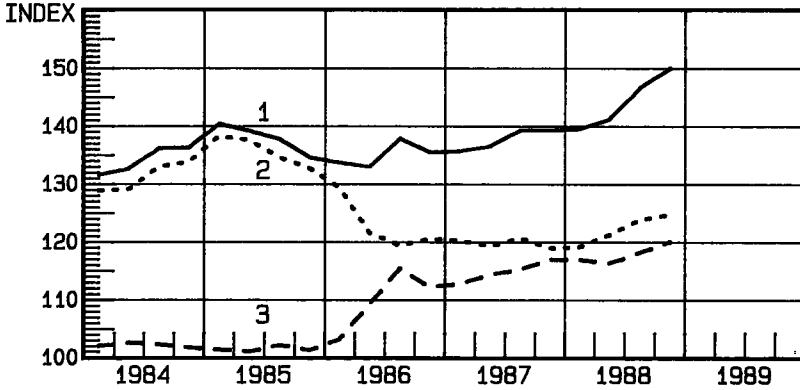
1. Western exports
2. Western imports
Volume index, 1980 = 100,
four-quarter moving average
shown as at the last quarter

26. BILATERAL TRADE



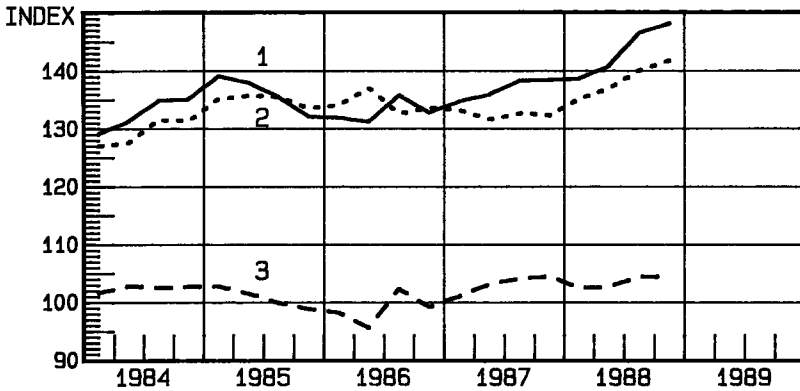
1. Bilateral exports
2. Bilateral imports
Volume index, 1980 = 100,
four-quarter moving average
shown as at the last quarter

27. FOREIGN TRADE: PRICES AND TERMS OF TRADE



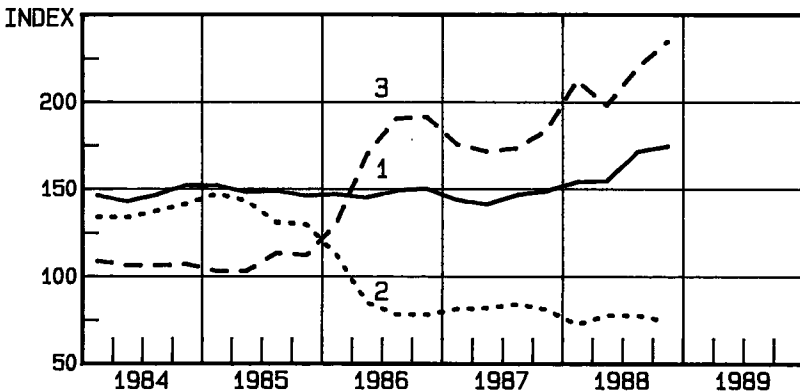
- 1. Unit value index of exports
 - 2. Unit value index of imports
 - 3. Terms of trade
- 1980 = 100

28. WESTERN TRADE: PRICES AND TERMS OF TRADE



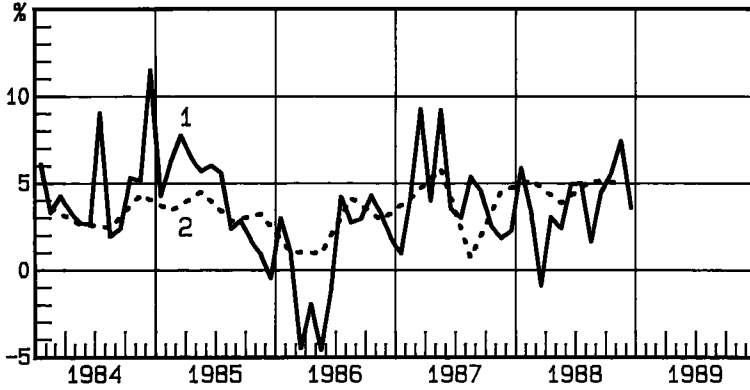
- 1. Unit value index of western exports
 - 2. Unit value index of western imports
 - 3. Terms of trade in western trade
- 1980 = 100

29. BILATERAL TRADE: PRICES AND TERMS OF TRADE



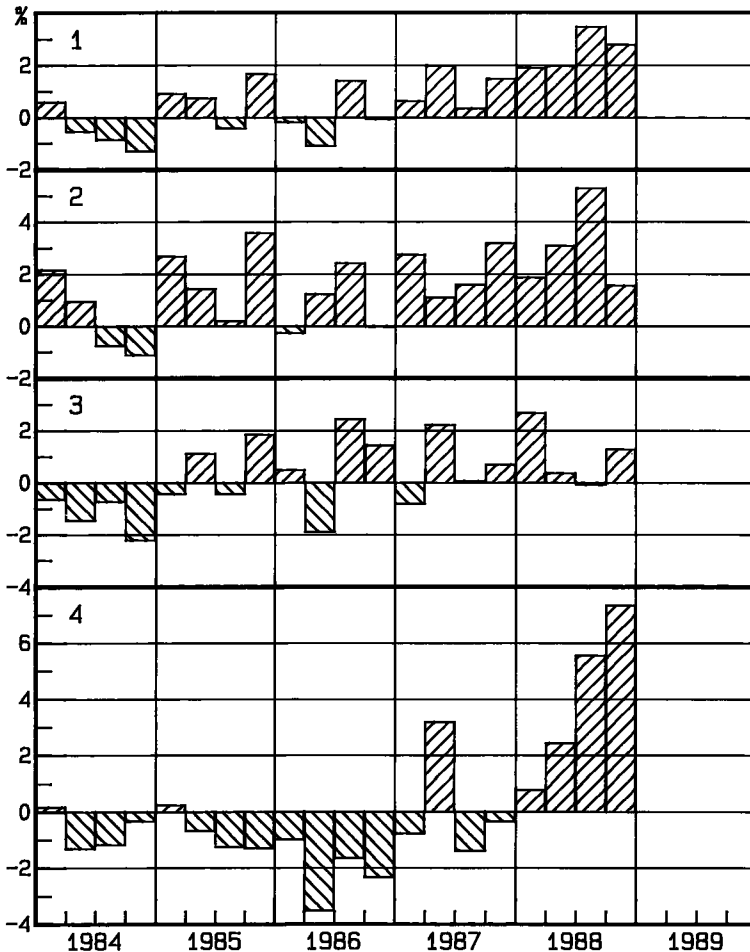
- 1. Unit value index of bilateral exports
 - 2. Unit value index of bilateral imports
 - 3. Terms of trade in bilateral trade
- 1980 = 100

30. PRODUCTION



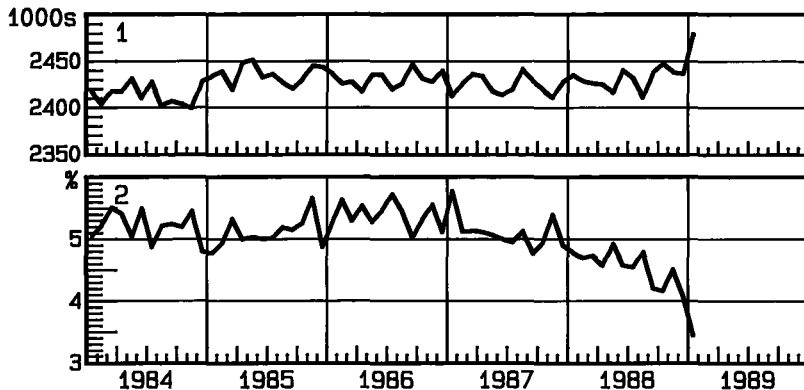
1. Industrial production, change in volume from the corresponding month of the previous year, per cent
2. GDP, change in volume from the corresponding quarter of the previous year, per cent

31. FIXED INVESTMENT



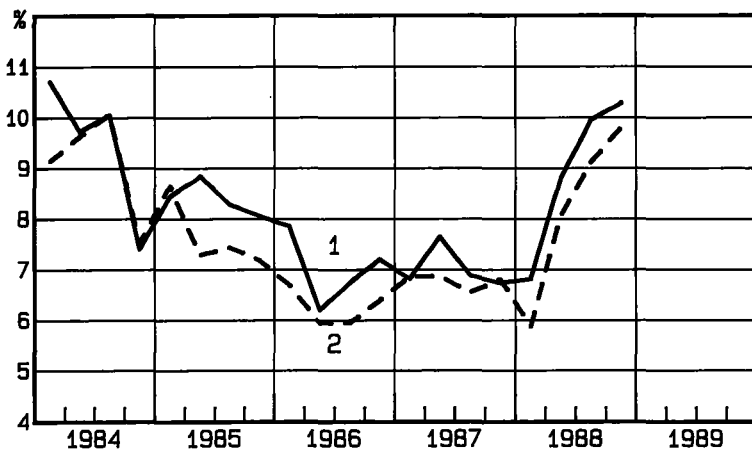
1. Total fixed investment
 2. Investment in machinery and equipment
 3. Building investment, excl. residential buildings
 4. Residential buildings
- Volume changes calculated from four-quarter moving totals and shown as at the last quarter, per cent

32. EMPLOYMENT AND THE UNEMPLOYMENT RATE

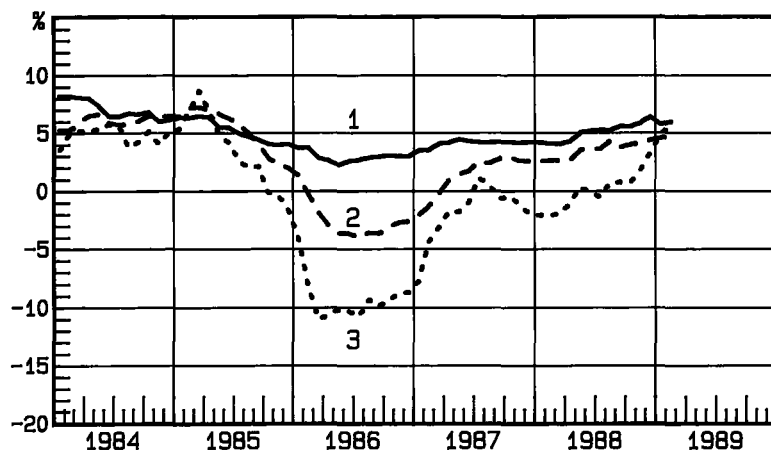


- 1. Employment, 1000 persons
- 2. Unemployment rate, per cent

33. PRICES AND WAGES

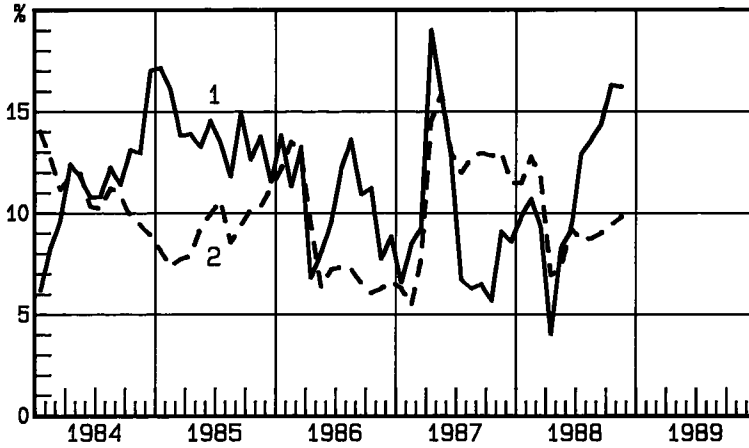


- 1. Index of wage and salary earnings, all wage and salary earners
 - 2. Index of wage and salary earnings, manufacturing workers
- Change from the corresponding quarter of the previous year, per cent



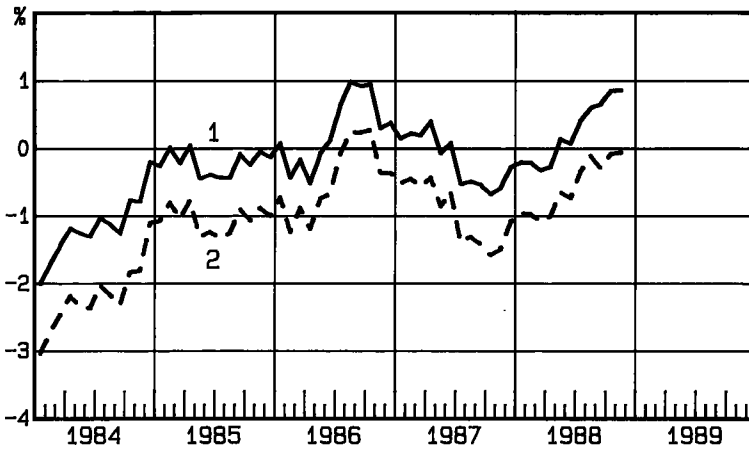
- 1. Consumer price index
 - 2. Wholesale price index
 - 3. Import price index
- Change from the corresponding month of the previous year

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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