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Recent Economic and Financial Market Developments

Banking Supervision in Finland

Risk Monitoring at the Bank of Finiana

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RECENT ECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

by **Olli-Pekka Lehmussaari**, M.(Pol. Sc.) Central Bank Policy Department Bank of Finland

ECONOMY COOLING DOWN

conomic activity in Finland cooled down distinctly in the first six months of 1990. Real GDP, which increased by about 5 per cent in both 1988 and 1989, is expected to expand by 1.5 - 2.5 per cent in 1990. The deceleration of economic activity is mainly due to a slowdown in consumer demand and residential construction. A steep fall in exports to the Soviet Union has undoubtedly played a role as well.

A number of factors contributed to the turnaround in economic activity. A sharp rise in interest rates in the second half of 1989 reduced households' willingness to incur more debt and reversed the prospects of windfall gains to private wealth. In addition, policy measures designed to improve private savings, such as the reduced deductibility of interest payments on household borrowing, increased real after-tax interest rates further. Also, expectations about future income developments became more pessimistic.

Preliminary statistics indicate that private consumption, which increased by 4 per cent in 1989, grew by less than one per cent in the first quarter of 1990 compared with the same period in the previous year. In particular, demand for durable goods appears to have fallen sharply, whereas demand for services has followed roughly the same growth trend as in previous years. Recent economic indicators suggest that the slowdown in private consumption may have been even stronger than previously expected. Retail sales of cars fell by about 20 per cent in the January-April period compared with the same period last year. In addition, in the four months to April, the volume of retail sales declined compared with the same period in 1989. These statistics should, however, be interpreted with caution owing to the labour dispute that took place in the banking sector from January 18 to March 2, 1990.

The turnaround in investment activity is most pronounced in residential construction. In the first quarter of 1990, the number of housing starts declined by about 14 per cent compared with the same period a year ago. However, investment in nonresidential construction remained strong in the first half of 1990. With the aim of sustaining investment activity, the Government decided, in July 1990, to release part of companies' investment reserves as from January 1. 1991. The reserves now scheduled for release from the Bank of Finland amount to about FIM 4 billion and they relate to investment reserves set up between 1985 and 1987.

EXTERNAL IMBALANCE REMAINS BUT PRICE STABILITY IMPROVES

The slowdown in domestic demand, coupled with a shift of resources from domestic production to exports, contributed to an improvement in the trade balance in the first half of 1990. After reaching FIM 5 billion in the second half of 1989, the trade account deficit narrowed to FIM 1.1 billion in the first six months of 1990. Nevertheless, as a result of widening deficits in the travel and investment

income accounts, the current account deficit is expected to remain above 4 per cent of GDP in 1990.

As serious strains emerged in the labour market in the late 1980s, wage drift increased and earnings rose faster than in Finland's most important trading partners. In the first guarter of 1990, hourly wage earnings were 8.5 per cent higher than in the same period a year ago. The turnaround in economic activity, together with the current two year comprehensive incomes policy agreement, is expected to moderate pay developments in 1990 and 1991.

The 12-month rate of inflation, which stood at 7.5 per cent in January 1990, decelerated to 5.6 per cent in June, as the overheating in the economy started to abate. Much of the fall in the rate of inflation was due to the decline in the prices of dwellings and to relatively small increases in import prices. In June 1990, unemployment amounted about 3.0 per cent of the total labour force, and labour shortages continued to be a major problem in many industries.

TIGHT MONETARY STANCE CONTINUES

The Bank of Finland attempted to keep domestic interest rates as high as possible within the constraints imposed by the fluctuation range of the currency index. In the first half of 1990, the currency index remained very close to the strong edge of its band, and changes in the value of the currency index were very small.

In the January - June period of 1990, the net capital inflow exceeded the current account

deficit by some FIM 11 billion. The Bank of Finland intervened in the spot and forward exchange markets, purchasing foreign exchange to the value of FIM 21 billion in order to keep the currency index within fluctuation range. The Bank's foreign exchange reserves, including its forward position, rose from FIM 22.7 billion at the beginning of the year to FIM 42.5 billion at the end of June 1990. Although part of the intervention was carried out in the forward exchange market to mitigate liquidity effects in the domestic money market, capital inflows resulted in an increase in liquidity in the banking sector. The increase in bank liquidity gave rise to downward pressure on interest rates.

As the result of the new cash reserve agreement signed between the Bank of Finland and the deposit banks at the end of April, cash reserve deposits totalling some FIM 3 billion were returned to the banks at the end of May. In addition, the non-interest bearing supplementary cash reserve deposits collected between May 1989 and January 1990, which stood at nearly FIM 3 billion at the end of June, will be returned to the banks during the second half of 1990.

The return of cash reserve deposits and the sharp increase in the foreign component of the monetary base, coupled with the fall in domestic interest rates, were reflected in the value of the Bank of Finland's holdings of bank CDs, which declined by about FIM 10 billion in the same period. At the end of June, the Bank of Finland held 26 per cent of all outstanding bank CDs.

The large net capital inflow caused the differential between domestic and foreign interest rates, measured in terms of three-month rates, to narrow from about 5 percentage points at the turn of the year to less than 2 percentage points at the end of July 1990. At the end of July, 3-month HELIBOR stood at 12.2

per cent, down by 4 percentage points from the turn of the year. At the same time long-term bond rates slightly increased, resulting in a more "normal" yield curve. The base rate, to which most deposit and lending rates faced by households are linked - albeit to a diminishing degree - remained unchanged in the first six months of the year, at 8.5 per cent.

Despite the steep decline in money market interest rates bank lending rates have not fallen significantly. This development appears to reflect banks' attempts to remedy the recent weakening in their profitability caused by a sharp rise in funding costs in the latter part of 1989 and by increased credit losses. As a result of relatively high interest rates, a sharp increase in households' indebtedness and weakening economic pects, the demand for credit, which had already started to level off in early 1989, decreased markedly in the first six months of 1990. In particular, in June, the amount of new housing loans granted to households was some 25 per cent lower than a year previously, while the twelve-month change in banks' total markka lending was about 6 per cent.

As from July 1, the Bank of Finland abolished the upper limits on foreign investments by private persons and also allowed individuals to extend loans of over one year's maturity to non-residents. In addition, local authorities were allowed to raise foreign loans and grant loans of over one year to nonresidents (see the list of policy measures). So far, there are no indications that the removal of these exchange controls has increased the volatility of capital flows.

CAPITAL MARKET STAGNANT

Activity in the Finnish bond market during the first six months of the year remained roughly at the same level as in 1989. New debt capital was

raised to the value of some FIM 13 billion, mainly by the private sector. Turnover on the market nevertheless remained low in comparision with most other industrialized countries. The value of foreign currency bond issues increased somewhat compared with the same period in the previous year. The ban on the sales of new markka-denominated bonds non-residents was lifted in February 1990. Since then, markka-denominated bonds totalling some FIM 3 billion have been sold to nonresidents.

As the result of relatively high interest rates and the poor performance of companies' per share, earnings downward trend in prices of shares traded on the Helsinki Stock Exchange continued in the first half of 1990. The Unitas stock price index, which had first started to weaken in the second quarter of 1989, declined by some 10 per cent in the January-June period. Over the year, the index has fallen by nearly 30 per cent. This development is in sharp contrast with the other Nordic countries, where the increase in share prices has been fairly brisk. However, despite the adverse price performance and high money market interest rates, there has not been any major sell off of shares.

Turnover in listed shares decreased some 50 per cent in period January-June compared with the same period in 1989, and listed companies raised only FIM 1.2 billion in new capital on the stock exchange. All new issues were targetted issues, placed with either foreign or domestic investors. Turnover in bonds increased by some 3 per cent in the first six months of the year compared with the same period in 1989.

July 23, 1990

BANKING SUPERVISION IN FINLAND

by **Jorma Aranko,** Director General of the Banking Supervision Office

HISTORICAL PERSPECTIVE

anking supervision in Finland is clearly one facet of the country's Nordic tradition. The tradition traces its roots to the Palmstruch Bank, which operated in Stockholm from 1656 to 1668 and also had a branch in Turku. The bank operated under state supervision. For this purpose. King Carl X Gustaf established the position of senior bank supervisor in April 1659. The position was, however, abolished soon afterwards when the bank ceased operations. When what was perhaps the world's first central bank, the Bank of the Estates of the Realm, was established in 1668 to continue the operations of the Palmstruch Bank, supervisory responsibility was in the hands of six parliamentary bank supervisors.

Much later, in the mid-1800s, a commercial banking system was developed in Finland, and in 1866 the country's first banking law was enacted. This included a system of supervision modelled after the Swedish banking supervisory regulations introduced some two decades earlier. Supervisory regulations were issued by the Senate financial committee. Compliance with the law and the regulations was overseen by special agents assigned to each bank.

This decentralized supervisory system proved to be inadequate from the start, and its weaknesses became more apparent as banking activity increased. The agents lacked either the time or the expertise to do the job. Further, it was

apparent that, when put to the task, the agents were more inclined to paint a rosy picture of the banks' affairs than to hold them to the prescribed solvency requirements.

Attempts were made over a long period of time to centralize the supervisory system. Success first came with the savings bank law of 1895, which included supervisory regulations based on a five-year-old Danish savings bank law. Corresponding supervision of cooperative banks was introduced with a 1920 law that assigned their own central monetary institutions with the responsibility for supervision.

The centralization of commercial bank supervision was achieved both formally and in practice only on the fourth attempt when, in 1922, a law on the supervision of banking company activities came into effect. This law established the present Banking Supervision Office (Bank Inspectorate until 1989) under the Ministry of Finance, and it began its operations in March 1922. Once again, the precedent came from Sweden, where already since the first half of the 1800s the world's most advanced banking supervision system had been in operation.

In Finland too banking supervision became established and expanded as the banking system widened its range of activities. Regulations governing the Banking Supervision Office have been revised several times over the years. Under the banking law reform of 1970 the cooperative and savings banks were also brought under the supervision of the Office, although primary re-

sponsibility for supervision remained with their own respective supervisory bodies. The Office itself maintained its original collegial form all the way up until 1989.

Further expansion in the Office's activities took place in 1988 and 1989 when, first, derivative markets and then the securities markets in their entirety came under its supervisory domain.

BASIS AND OBJECTIVES OF BANKING SUPERVISION

The roots of at least Nordic banking supervision are to be found in the original mercantilist idea that it is in the nature of the state to have not only the right but also the obligation to regulate economic activity. The system presently prevailing in Finland is a kind of compromise between this mode of thinking and free market liberalism.

It is a compromise in yet another sense. One objective of banking supervision, and nowadays of supervision of the entire financial system, is to achieve certain goals of society, notably safeguarding the position of depositors and investors, particularly small investors. On the other hand, care must be taken to avoid creating the impression that the state, in seeking to achieve this objective, should effectively guarantee repayment of depositors' and investors' funds.

The reliable, fast and costeffective intermediation of finance and payments is of central importance for the efficient functioning of the national economy. Through its intermediation function, the financial markets should also help to promote the efficient allocation of economic resources. They should be capable of functioning, without unduly endangering their safety, as a means of natural choice which efficiently collects private sector savings and allocates them in a way that eliminates investments in weak, unproductive projects.

The central position occupied by the financial institutions gives them a good basis for wielding broad economic power which focuses on depositors and investors as well as on users of credit, other economic agents and even the state itself. Banks can change from being impartial grantors of credit to being partial owners. This may lead to the unhealthy restriction of competition.

Keeping deposits in financial institutions specifically established for this purpose, i.e. deposit banks, must be vested with a high degree of safety. Hence the operations of deposit banks are subject to stringent criteria. Other types of investment activities within the private sector entail greater risk of varying degrees, which should be properly reflected in the returns on investment.

The magnitude of the risk attached to an investment and whether or not the risk materializes depend in the first place and ultimately on how the firm implementing the investment and the investment intermediary themselves act.

The body responsible for supervising financial activities should concentrate its efforts on ensuring that those entities under its domain are managed legally, capably, carefully and honestly and that public marketplaces under its domain operate in a similar manner. A further requirement is that enough accurate information on the management and condition of supervised entities and investments alike should

be readily available to depositors and investors.

The supervisory body also has a certain responsibility for the preservation of conditions that are necessary for the proper functioning of the entities falling within its sphere. In this connection, it virtually has to act as a representative for these entities in their relations with government bodies, etc.

Society has laid down rules for the Banking Supervision Office, as well as for the entities supervised by it, in the form of laws and regulations. The most important among these are the act and decree governing banking supervision, as well as the acts on banks, credit companies, unit trusts, securities markets and derivative markets.

PRINCIPLES OF BANKING SUPERVISION

The first task ascribed by law to the Banking Supervision Office is to oversee the legality of activities within its domain. The Office must see to it that the entities in its domain operate according to the law and their own articles of association or rules.

A prerequisite for this stage of supervision is that supervised entities, with the exception of representative offices of foreign banks, obtain a licence in the prescribed manner. These are granted by the Ministry of Finance, which requests an opinion from the Office. In considering, applications for a licence, the Ministry and the Office assess the expediency of granting a licence. The same principle applies, of course, in determining whether to revoke a licence.

The expediency of granting a licence is measured according to the extent to which it is compatible with the public interest. Factors affecting the final decision are the competitive situation in the relevant sector, product range, risk exposure, quality of management, etc. The overriding prin-

ciple is that a licence is neither granted nor cancelled without clear justification.

In practice, an increasingly important area of supervision is an entity's operating risks and its ability to manage them. The Office requires that each entity have reliable risk management systems and an operational plan that extends sufficiently far into the future and in which risk exposure is defined under the worst possible case. Supervision is particularly aimed at the prevention and controlled unwinding of unduly large accumulations of credit and other risk exposures.

Particularly in the area of risk management, the Office works in close cooperation with the Bank of Finland.¹

The Securities Market Act retains the possibility of some degree of self-regulation for organized exchanges. They can in fact include in their regulations provisions that supplement the law. The regulations are, however, subject to confirmation by the Ministry of Finance. As part of the confirmation process, an opinion is requested from the Banking Supervision Office.

The Office also seeks to prevent or dismantle harmful barriers to competition in sectors under its purview. Here it cooperates with the Office of Free Competition.

In matters pertaining to consumer protection, the Office cooperates with the consumer ombudsman.

FUNCTIONS OF THE BANKING SUPERVISION OFFICE

Under the direct supervision of the Office are commercial banks (15), mortgage banks (6), credit companies (5), a mortgage society, trust management companies (8), the Helsinki Stock Exchange and securities brokers (27), options exchanges (2) and

See the article by K.V. Jännäri and Monica Ahlstedt in this issue of the Bulletin.

representative offices of foreign banks (9). In addition, Finnish banks have 10 foreign branch offices, which are subject to separate inspection.

Supervision of the activities of the 162 savings banks and 360 cooperative banks is carried out by their own respective supervisory bodies on the basis of instructions issued by the Banking Supervision Office. In principle, the supervisory bodies of the savings banks and cooperative banks carry out all on-site inspections of these banks sending their reports to the Banking Supervision Office.

Finance companies make up the most important group of financial intermediaries which are not subject to public supervision.

The Office carries out its own supervisory responsibilities through on-site inspections, other continuous contacts and the collection and analysis of monthly, quarterly and annual numerical data.

It is endeavoured to complete scheduled on-site inspections at intervals of less than two years; in addition, unscheduled inspections are made whenever cause arises.

Trading that takes place in the securities and derivative markets is monitored on a realtime basis by means of a fully computerized monitoring system, which also automatically stores and, if necessary, analyzes data received.

In support of its regular supervisory work the Office issues guidelines to entities under its purview regarding accounting and other matters pertaining to its supervisory duties.

The Office is entitled to be present at all the meetings of the governing bodies of supervised entities, convene such meetings and participate in their discussions. Similarly, the Office can prevent the execution or call for the annulment of decisions by such bodies in cases where the Office finds

the decision to be against the law or the articles of association.

The Office also has the right to participate in the auditing process of any entity under its purview and to examine at any time documents that are pertinent to the supervisory function.

If the Office finds that its authority is not otherwise sufficiently heeded, it can, in certain cases, request the limitation of the firm's dividend payments or the imposition of a conditional fine by the respective provincial administration. In addition, the Office can appoint a special agent to monitor the firm's daily operations. In extreme cases, it can propose that the licence be revoked.

If protection of depositors' rights so requires, the Office can sue a bank shareholder or board member for damages.

Complaints against actions taken by the Office can be filed with the Supreme Administrative Court.

In addition to its supervisory functions, the Office also participates in the development of legislation concerning its areas of interest, gives opinions and proposes actions deemed necessary in the light of conditions prevailing in sectors under its supervision.

In addition to answering requests for opinions, the Office increasingly has to respond to requests by customers of entities under its purview to investigate actions or negligence by such entities.

INTERNATIONAL COOPERATION IN BANKING SUPERVISION

Nordic banking supervisors have been meeting together fairly regularly to discuss common problems since 1925. Currently meetings are held annually in each of the Nordic countries in turn. Besides the annual meetings, cooperation is fostered through the work of

various committees. Cooperation has led to, among other things, an agreement in 1988 covering the exchange of pertinent information between the supervisory bodies.

The broader international significance of financial market supervision has been the focus of growing attention since the 1970s. Under the auspices of the Bank for International Settlements (BIS) in Basle, a special committee "Cooke Committee" or Basle Committee on Banking Regulations and Supervisory Practices) was established. It makes worldwide recommendations and appeals concerning banking supervision matters. Banking supervisors of different countries also meet every other vear to discuss these issues. Supervisors of securities markets have their own international organization, the International Organization of Securities Commissions (IOS-CO), which accepted the Office as a member in 1990.

In the European context, acceptance of the "home country supervision" and "single licence" principles will place greater demands on domestic banking supervision regarding its quality and international credibility.

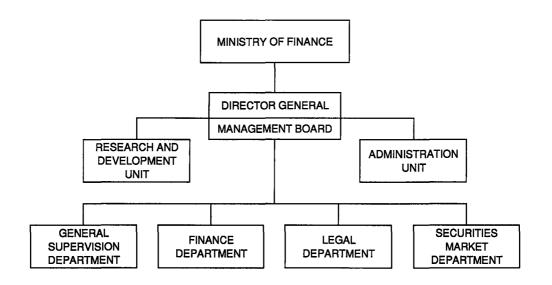
ORGANIZATION OF THE BANKING SUPERVISION OFFICE

The Office operates administratively under the General Department of the Ministry of Finance. It is financed through the budget, but the Government annually collects costs incurred by the Office from the entities under its supervision.

The expansion of its duties and increased international significance of its work forced the Office to completely reorganize in 1989. The new organization took effect from the beginning of November (see Chart).

The most important features of the reorganization were the establishment of new opera-

CHART. ORGANIZATION OF THE BANKING SUPERVISION OFFICE



tional units, the division of the responsibility for international contacts among the various units and the replacement of the 67 year old collegial board by a management board.

The Director General of the Office serves as chairman and each unit manager as a member of the board of management. The board deals with matters separately listed in the decree on the Banking Supervision Office and with other important matters. Final decision-making authority and responsibility rest with the Director General.

There are six operational units altogether. The General Supervision Department directs the on-site inspections of financial institutions and is responsible for overall guidance of savings bank and cooperative bank supervision and for the credit risk monitoring of monetary institutions.

The job of the Finance Department is to monitor the financial position of entities subject to Office purview, especially their liquidity, solvency and risk management as well

as their financial management systems.

The Legal Department oversees the legality of Office decisions and confirms Office positions on legal questions.

The Securities Market Department monitors the securities and derivative markets and is responsible for matters pertaining to their inspection.

The Research and Development unit's special concern is the planning and maintenance of data processing systems that handle supervisory and administrative tasks. It also examines the functional efficiency and reliability of the corresponding systems of entities subject to Office supervision. The unit is also responsible for information, training and general research activities.

The Administration unit handles internal administration and contacts relating thereto, especially with the Ministry of Finance.

The above-mentioned are only the main duties of the units. In addition, they each handle international contacts

in their respective areas of interest, participate in inspection activities and in the preparation of laws, regulations and directives, give opinions and grant licences.

DEVELOPMENTS IN THE NEAR FUTURE

Legislation governing the Finnish financial markets is currently undergoing fundamental reform. Some of the new laws are already being dealt with by Parliament. Their passage into law is expected to be completed by the end of the year in which case they would enter into effect at the beginning of 1991.

In addition to the above mentioned laws, there is a group of laws in various stages of preparation which cover the provision of financial intermediation services outside the banking sphere proper, a book entry securities system, bonds, branches of foreign banks, etc.

Reference was made above to the ongoing process of harmonizing supervisory regulations and procedures regarding monetary institutions and the monitoring of their risks. Because Finland, as a member of EFTA, is participating in the current negotiations on cooperation with the EC, it may not be long before the regulations of the EC directives apply also to Finland.

In addition to the above factors affecting the banking environment, mention should be made of the process of change taking place in banking itself, both in Finland and elsewhere. Therefore, it is clear that the busy period of adaptation for bank supervisors is by no means over.

August 6, 1990

RISK MONITORING AT THE BANK OF FINLAND

by **K.V. Jännäri**, Head of Department and **Monica Ahlstedt**, Lic.Pol.Sc. Risk Monitoring Department Bank of Finland

The Regulations for the Bank of Finland charge it with the maintenance of the stability and security of the Finnish monetary system. In order to carry out this task, the Bank of Finland has deemed it necessary to monitor the profitability and risk taking of the most important institutions in the financial markets. The major operators in the financial markets are the major com-Authorized mercial banks. banks have full rights regarding transactions between Finland and other countries, payments transmission and international activities. In addition to the authorized banks, the Bank of Finland's monitoring covers, on a smaller scale, the local (savings and cooperative) banks, finance companies, special credit institutions and insurance companies that are licensed to engage in foreign business. As the major commercial banks have more extensive rights than other firms in the financial sector, they are also subject to the most extensive monitoring.

This article describes the objectives and principles that underlie the Bank of Finland's risk monitoring of authorized banks, the scope of monitoring in actual practice and the analytical procedures applied to the information reported to the Bank in connection with such monitoring. The Banking Supervision Office, which is, in Finland, a separate body under the Ministry of Finance and whose monitoring is far more extensive than the Bank of Finland's, is dealt with in another article.1 It should be emphasized, however, that the Bank's risk monitoring operations benefit greatly from cooperation and information exchange with the Banking Supervision Office, which form a basis for the task of assuring the stability and security of the entire financial system.

THE BANKS' CHANGING OPERATING ENVIRONMENT AND THE OBJECTIVES OF RISK MONITORING

Globally, the last decade was characterized by a farreaching process of internationalization. Banks attemped extend their activities beyond national markets. This was made possible by stepby-step deregulation and the development of technical facilities and contacts. With the growth of international operations and the increased interdependence of national financial markets that ensued, the effects of economic imbalances in individual countries were transmitted to other countries in the form of increased fluctuations in exchange rates, interest rates and share prices. The significance of these developments for banking was a shift from relatively risk free, assured income to an environment of uncertainty. Along with exchange rate risk, came an increased awareness of the significance of interest rate risk.

The increased uncertainty and the need to limit risk taking set in motion a wave of product innovation. Forward exchange contracts, forward rate agreements (FRAs), currency swaps, interest rate swaps and various

kinds of futures and options are examples of off-balance sheet instruments that were originally developed out of a need to hedge against risks. As the markets have grown, dealing in these instruments has also been carried out for the purpose of arbitrage, which may well have the effect of increasing, rather than decreasing, risk.

This international picture also applies to the Finnish financial markets. The shrinking margins ushered in by increasing competition have not allowed adequate income, and thus specialization and the finding of niches in the markets are now vital. It is also clear that income from risk-exposed activities can be increased only by taking greater risk positions. Risk taking should be balanced by engaging in operations that generate assured income, such as fees for banking services and intermediation, alongside the more risky operations.

The risk monitoring system of the Bank of Finland has been built up piece by piece in such a way that it now covers all essential risk categories. The basic framework must, however, be continually adjusted in accord with changing financial markets. It no longer suffices to analyze the various categories of risk; rather the objective is also to put together a picture of a bank's overall risk profile relative to the macroeconomic environment. Supervision must also extend beyond the confines of the parent bank to embrace the entire group.

¹See the article by Jorma Aranko in this issue of the Bulletin.

The need for supervision and risk monitoring also increases as banks and authorities adjust to tightening international standards regarding the solvency and risk control of financial activities. Just as banks must adjust to cooperation in an increasingly integrated market area, so too must the emphasis in supervision shift to those areas that are of key importance under the new market conditions. Flexibility in adjusting banking strategy, the ability to forecast market trends and staff and management skills are all important elements besides risk positions. Moving into new areas of activity and searching for new sources of income are to be encouraged so long as the risk taking involved can be kept in reasonable relation to the ability to bear risk.

INTERNATIONAL RECOMMENDATIONS ON RISK MONITORING

A bank's micro (company) level risk refers to the uncertainty about income and expenditure flows arising from assets and liabilities that is caused by movements in interest rates, exchange rates and other economic variables. The principal risk categories associated with these flows are liquidity risk, interest rate risk and exchange rate risk, but the term also covers the credit risk associated with assets. In addition to these measurable risks. certain qualitative risks, such as those concerning technical systems and staff, are inherent in banking activities. Macro (system) level risk, on the other hand, refers to the uncertainty associated with changes in the environment in which banks operate that result from structural changes in markets or economic from policy measures.

The supervisory authorities have reacted to growing uncertainty in financial markets by developing micro level risk limitation systems. These systems consist of various procedures at the national level, laid down in legislation and official regulations, which are designed to limit credit and securities market risk.

The Committee on Banking Regulations and Supervisory Practices. which operates under the auspices of the Bank for International Settlements (BIS) in Basle, has focussed its efforts on developing instructions pertaining to banking supervision. The various working groups of the Committee have sought to draw up consistent instructions for the measurement and reporting of credit risk, liquidity risk, interest rate risk, exchange rate risk and securities market risk.

As concerns risk measurement, the basic aim of the Basle Committee has been to limit risk taking either by stipulating that a bank's own funds (capital base) cover a risk position or by setting absolute limits to different risk positions. The target capital adequacy requirement set by the Committee for credit risk is that a bank's own funds should be equal to at least 8 per cent of its risk-weighted assets. The requirement covers only assets because liabilities do not entail. credit risk. The directions for determining capital adequacy take market changes into account in many ways. A bank's own funds should cover not only the credit risk that can be determined from the balance sheet but also the credit risk that is calculated on the basis of off-balance sheet items. In calculating capital adequacy, banks can no longer benefit by shifting activities off the balance sheet. The recommendation concerning own funds applies not only to the parent bank but also to the activities of the entire banking group. In this way an effort has been made to offset attempts by banks to shift risky operations to group firms that are less strictly regulated.

The BIS recommendations concerning banks' solvency ratios have been quickly implemented in different countries. General acceptance and implementation of the recommendations increases the efficiency of interbank competition in world markets by creating uniform frameworks for the measurement of the competitivness and credibility of banks in all countries. Work is proceeding in the BIS on the incorporation of liquidity, interest rate, exchange rate and market risk in the capital adequacy framework.

MONITORING BY THE BANK OF FINLAND

The Bank's monitoring framework is relatively extensive. It comprises the different risk areas of both domestic and foreign currency operations, and it also covers offbalance sheet instruments in such a way that their effects on liquidity, interest rate, exchange rate and market risks are accounted for in the calculation of risk positions. The methodological basis for the monitoring framework based on modern portfolio theory, international equilibrium theory and statistical methods; it has been developed specifically with an emphasis on applicability.

Credit risk

The realization of credit risk in the form of credit losses has been the most important factor in the profit squeeze that Finnish banks have experienced in recent years. The primary indicators of risk exposure are the concentration of lending both by customers and sectors, the sufficiency of collateral and crossownership of companies which can give rise to a domino effect if one of the companies concerned experiences difficulties. These matters are not explicitly monitored by the Bank of Finland; responsibility for the estimation of potential credit risk lies instead with the Banking Supervision Office.

One aspect of credit risk is country risk, and in this regard the Bank of Finland does have a direct role in the monitoring of credit risk. Finnish banks report their country-by-country assets and liabilities quarterly to the Bank of Finland, which passes the aggregated data on to the BIS and the IMF. The BIS compiles the data from all countries and returns it to the reporting countries. As Finnish banks have not made loans in any substantial quantity to the debt-burdened developing countries, their country risks are actually quite small. Recent events have led to the situation where bank receivables from Eastern Europe are now also subject to special scrutiny by the supervisory authorities.

Liquidity risk

Liquidity risk refers to the risk that a bank may not find access to the funds needed to service its debts as payments fall due. Data pertaining to liquidity risk are reported monthly to the Bank of Finland, including both markka and foreign-currency-denominated items. Besides covering balance sheet activities, the reports include all off-balance sheet items that affect liquidity risk. In the evaluation of liquidity risk attention is placed, with regard to the asset side, on the degree of securitization and. with regard to the liability side, on the concentration of funding by source and maturity. In traditional banking activity assets consist mainly of direct lending. Today, banks increasingly attempt to make use of loans in the form of debt instruments which are liquid and tradeable in secondary markets. Tradeability is sought for two reasons. First, it ensures liquidity and, second, it makes possible the adjustment of total assets to conform with capital adequacy requirements.

On the liability side, it is important that borrowing be spread among different

sources. When markets are in a disturbed state, the more funding sources that are available, the more likely will funding be successful. The most important source of funds for Finnish banks is deposits by the public. Deposits have previously constituted the most advantageous source of funds primarily because they have in large part proven to be guite stable in nature. As markets change, the uncertainty attached to them may increase. Increasing public awareness of alternative investment outlets will force the banks to pay competitive interest rates on deposits at the latest when tax exemption of deposits ends and the withholding tax enters into force.

The most important tool in the evaluation of liquidity risk is the breakdown by maturity category of the differences between asset and liability cash flows. This breakdown enables the monitoring of cash flow surpluses and deficits within each maturity category. Liquidity risk is associated with deficits because they require market financing. A broad shift can be detected in the structure of bank funding toward shorter-term funding and occasional heavy reliance on CD and overnight funding. The evaluation of maturity structure mismatches depends to a large extent on how items with contingent maturities are treated. Such items include deposits, in particular. Because these items are theoretically payable on demand but in practice are for the most part fixed, alternative calculations are performed on the basis of different scenarios.

The reporting procedures for the trading asset portfolio also affect the magnitudes of mismatches. In theory, a portfolio of trading assets can be considered quite liquid. In reality, especially in the still partially underdeveloped Finnish markets, a trading asset portfolio may include paper which is difficult to trade.

In the estimation of the relative importance of maturity mismatches, it is important to attempt to ascertain the extent to which open positions derive from the structure of the markets and to what extent from expressly chosen strategy. Thin markets for longterm instruments and the predominance of CDs at the short end of the market are typical of Finland. The stability of the financial system would benefit from increased emphasis on longer-term maturities, but this cannot be achieved without efficiently functioning markets.

Interest rate risk

Interest rate risk can be measured in several ways. An international understanding has been reached, however, that recognizes three dimensions of such risk that should be examined. These are economic risk, interest income risk and investment risk. These three dimensions complement each other and together provide a good picture of a bank's interest rate risk exposure.

Economic risk can be estimated only by means of duration analysis. Economic risk refers to the interest rate sensitivity of a bank's present value, i.e. its own funds. Risk arises from the fact that changes in interest rates affect the present values of assets differently from those of liabilities. Because, by definition, the difference between assets and liabilities is equivalent to own funds, the value of own funds also changes when interest rates change. In the evaluation of economic risk, the maturity distribution of assets and liabilities is used to calculate a bank's present value. This is then used to calculate the duration measure, which shows how sensitive the present value is to changes in interest rates. The calculation of duration requires detailed data on each item. The central bank has not required banks to

undertake such burdensome reporting; thus the Bank of Finland does not calculate the duration that is used in the measurement of economic risk. Duration is not, from the central bank's point of view, a particularly operational concept. The present value of a bank is important only in a crisis situation, when the bank is to be liquidated, and even then the present value is not necessarily equal to the market value. Moreover, duration analysis is based on extremely simplified assumptions, especially in regard to the shape of the vield curve.

The banks report quarterly to the Bank of Finland in regard to their interest rate risks. The main emphasis of the Bank of Finland in the evaluation of interest rate risk is placed on interest income risk and on the investment risk inherent in the market values of securities.

By definition, interest rate risk is composed of two components: the open interest rate position and the volatility of interest rates. By multiplying the two components together. one obtains the risk value. When calculating interest income risk, the open position is measured on the basis of the maturity distribution of assets and liabilities and the interest rate linkages. The undefined nature of deposits is also taken into account in interest rate risk calculations by assuming sevalternative maturities. eral From the mismatches in the maturity categories a weighted sum is calculated, using the time dimensions of the open positions as weights. In this way the exposure of the bank's position to interest changes in both foreign currencies and the domestic currency is obtained.

The basic calculation used in risk evaluation is carried out under the volatility assumption of a one percentage point change in all interest rates. The position thus calculated shows directly the amount of money

that would be lost or gained in the case of a one percentage point change in the same direction in all interest rates. The effect derived by the basic calculation can be multiplied to determine the effects of greater changes in interest rates. Alternative calculations are made using either forecast interest rate changes or confidence intervals based on estimated volatility figures from the recent past.

In addition to interest income risk, investment risk is calculated. This refers to the sensitivity of market prices of debt securities to changes in interest rates. Reports on interest rate risk provide investment portfolio data on bonds and CDs at face value because they are meant to be held to maturity. By contrast, trading assets are continually traded at market prices; thus the debt securities included in the trading asset portfolio are reported at market value. The portfolios are treated separately because the continuous realization of trading assets at changing market prices results in current losses and gains, whereas changes in market values of investment portfolio items are realized only if they are sold before maturity.

Reported data are not sufficient to directly calculate the investment risk attached to debt securities. As in the case of economic risk evaluation. precise calculations based on duration would require the collection and processing of data on each debt security in respect of both assets and liabilities. It is important that the banks themselves make such calculations on the basis of data for individual debt securities. For the central bank it suffices that each bank provide estimates of the average maturities of debt securities in both portfolios. These values can then be used as approximate duration measurements and thus as rough estimates of the interest rate sensitivity of debt securities. It is also attempted to make a rough estimate of the price risk associated with a bank's share portfolio, based on changes in share price indexes.

Exchange rate risk

Exchange rate risk is the only area of risk officially limited by the Bank of Finland. Two limits are employed for this purpose. Authorized foreign exchange banks are subject to a limit on the overall net open foreign exchange position against the markka. The same limit is applicable to net positions in each foreign currency. This limit is proportional to a bank's own funds and is subject to revision three times a year, depending on the amount of own funds reported. The first limit does not strictly limit risk alone, but is also intended to enhance the shortterm effectiveness of central bank policy measures. It restricts the banks' scope to undertake operations on their own behalf that affect foreign exchange reserves.

In contrast, the open position for changes in cross rates between foreign currencies is formed from individual currency positions; thus the limit on the latter is purely a risk limit. This limit restricts foreign exchange risk relative to a bank's risk bearing ability.

Daily reports on foreign exchange positions and spot and forward deals by sector are used to monitor that banks keep within the prescribed limits. In addition, time series data constructed from cross sectional data are used to determine if banks have taken positions against a strengthening or weakening in the markka's currency index. Data on foreign currency trading are used to calculate each bank's daily market share of foreign exchange deals and to monitor changes in the activity of different participants in the foreign exchange markets.

Off-balance sheet

All off-balance sheet instruments used by a bank are reported in connection with each risk category. Thus, currency options, futures and currency swap agreements are reported under exchange rate risk monitoring. Interest rate risk reporting covers FRAs, options and other instruments involving interest rate risk, while liquidity risk reporting covers off-balance sheet items that affect liquidity. On the basis of the reports, it is determined whether such instruments are used for hedging or for trading purposes. If the maturity mismatch arising from the balance sheet is greater than that arising from total activity, it can be presumed that these instruments are used for hedging purposes and thus for reducing risk exposure. If, on the other hand, the total activity mismatch exceeds the balance sheet mismatch, the instruments' aggregate effect is risk-increasing and presumably they have been used intentionally to take a view.

Relative limits

Risk positions taken by banks vis-à-vis the various risk categories must be viewed with respect to the banks' risk bearing ability. Risk bearing ability is measured from balance sheet and profit and loss statement data. Such data are also used to monitor the scope, nature and profitability of a bank's activities and to determine its capital adequacy. It is required that a bank's own funds conform to BIS recommendations. The capital adequacy requirement restricts a bank's risk taking by setting a limit to the growth of risk-exposed lending. lncreased lending requires increased resources in the form of own funds.

In addition to own funds, profitability is used to measure a bank's risk bearing ability. It is important that a bank not be 14 overly dependent on one l source of income. Good profitability is a means of keeping a bank solvent and increasing its own funds. In the longer term, only a profitable bank can attract risk capital from the markets and in this way also increase its capital and volume of lending.

Definition of a bank's risk profile

Different risks are interdependent and overlapping. Thus it is important to examine a bank's overall risk profile. Credit and liquidity risk are overlapping, as are credit and interest rate risk. Realized credit losses can lead to liquidity problems. Passing on interest rate risk to customers through variable rate loans increases credit risk. Efficiently functioning markets guarantee the availability of funds, but risk attaches to their price. Hence liquidity risk can be measured in part within the framework of interest rate risk. Correlation exists between movements in the interest rates of different currencies and in their exchange rates relative to each other and hence between exchange rate risk and interest rate risk. By combining open positions in different risk areas. the overall risk effect and balance sheet and profit and loss statement data, a picture can be drawn of the efficiency of a bank's operations, interest rate and exchange rate sensitivity and vulnerability to market disruptions.

CONCLUDING REMARKS

From the point of view of its supervisory function, the risk monitoring system developed by the Bank of Finland provides it with a reasonable picture of the banks' risk profiles, operational strategies and risk bearing abilities. The banks themselves obviously more detailed systems which enable their management to evaluate open risk positions on a continuous basis. They need to make more accurate calcu-

lations than those required by the central bank using data on individual claims and liabilities and, in the case of liquidity and interest rate risk, more refined maturity distributions. For the central bank, it suffices that the reports provide the basis for obtaining a picture of the losses that the balance sheet structure at the moment of reporting would generate under different economic scenarios. One objective of monitoring is to ensure that no bank is so exposed to risk as to hamper the pursuit of central bank policy. The banks can in their own calculations simulate the closing out or changing of risk positions using alternative funding and investment policies. The Achilles' heel of the analysis, from the points of view of both the central bank and the banks themselves, is the reliability of processing such masses of data, i.e. the validity of the data underlying the analysis.

The responsibility for risk management lies with the banks themselves. Responsible banking requires internal reporting systems that identify risk positions. On the basis of data provided by such a system, management must then make decisions that, by means of controlled risk taking. should lead to results that are positive in terms of both profitability and solvency.

August 8, 1990

PUBLICATION OF THE BANK OF FINLAND

The following publication has appeared in series D:73: The BOF4 Quarterly Model of the Finnish Economy, Helsinki 1990, 327 pp. ISBN 951-686-248-9, ISSN 0355-6042.

The book consists of a comprehensive documentation of BOF4, the fourth generation of the Bank of Finland's quarterly economic model. The macroeconomic foundations of the model are presented and the properties of the model are illustrated with the aid of several simulation experiments. The model specifications and estimation results are reviewed block by block in seven chapters, starting from consumption and investment and ending with financial markets. A complete list of equations is presented in the appendix.

The building of a largescale, quarterly macroeconometric model got under way at the Bank of Finland in 1970, and the aim has been to incorporate empirical research results on the Finnish economy in the BOF4 model. The model has, over the years, developed into a central tool of forecasting and economic analysis at the Bank. It is also used as an analytical tool in various applied research projects. Since 1973, the BOF model has been a part of the global econometric model of the international project LINK.

The present generation of the model contains about 270 equations. Its macrotheoretical foundations are in the conventional IS-LM-AS framework adapted for the analysis of an open economy. After the liberalization of the Finnish financial markets in the 1980s, it has been possible to construct the financial sector of the model in the mainstream "monetary" tradition of macroeconomic modelling. The simulation results reveal that the short-run properties of the model are characteristically demand-determined, while the supply side influences dominate in the long run.

The present publication was compiled from a series of reports written by Hanna-Leena Männistö, Chris-Marie Rasi, Juha Tarkka and Alpo Willman, which first appeared in the Bank of Finland Discussion Papers in 1988-1990.

MONETARY AND FOREIGN EXCHANGE POLICY MEASURES FROM AUGUST 1989 TO JULY 1990

1989

AUGUST

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

the cash reserve base in July.

SEPTEMBER

Foreign Exchange **Regulations.** The Bank of Finland relaxes the foreign exchange regulations concerning foreign investments and capital imports. The amendments enter into force on September 1, 1989, except for those applying to private individuals. For tax control reasons, the decisions regarding capital exports by private individuals will enter into force on a later date, however not later than July 1, 1990. Capital exports. Acquisitions of dwellings and real estate abroad no longer require authorization; previously, permission was necessary if the purchase price exceeded FIM 1 million. Investments in the form of foreign securities, deposits held in accounts with foreign monetary institutions and merchandise held abroad are permitted without the permission of the Bank of Finland or quantitative restrictions. In addition, credit of more than one year's maturity may be granted to non-residents

without the Bank of Finland's permission.

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

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Base rate. The Bank of Finland raises the base rate from 7.5 per cent to 8.5 per cent as from November 1 Call money market. With effect from November 6. 1989, the Bank of Finland amends the terms of the call money credit system so that the 5-day moving average of a bank's position may be negative but in this case the call money credit rate will be charged at doub the normal rate. It was a condition of the revision of June 1989 that the movin average of a bank's 5-day call money position should not be negative. The call money credit rate remains unchanged at 15 per cent and the call money deposit rate at 4 per cent.

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1990

JANUARY

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

Money market operations.

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

Cash reserve requirement.

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

at about 9.1 per cent of the cash reserve base in December.

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

FEBRUARY

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

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

MARCH

Finance companies accorded the right to intermediate foreign

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

APRIL

Cash reserve agreement.

The Bank of Finland signs a new cash reserve agreement with the deposit banks on April 26, 1990. According to the new agreement, the cash reserve base comprises domestic deposits by the public and the rate of interest payable on cash reserve deposits is the 3-month HELIBOR rate less three percentage points, not however less than 8 per cent. The new cash reserve base is applied for the first time to deposits in April and interest will be paid at the new rate with effect from May 1, 1990.

MAY

Cash reserve requirement.

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

JULY

Foreign Exchange
Regulations. The Bank
of Finland allows private
persons to undertake foreign
investments and grant loans
of over one year's maturity
to non-residents without
upper limit as from July 1,
1990. This liberalization
measure also applies to
corporate entities, such

as housing and real estate companies, considered comparable to private persons. Furthermore, local authorities are allowed to make foreign investments, grant loans of over one vear's maturity to nonresidents and raise foreign loans of over one year's maturity for financing their own operations. The Bank of Finland also increases the opportunities of financial sector enterprises to engage in foreign operations. In addition to banks, mortgage banks and credit companies are. with effect from July 1, 1990,

able to apply for the right to intermediate and raise foreign loans and the right to make foreign investments within the limits of their foreign currency positions. Financecompanies have been able to apply for the right to intermediate foreign loans since March 1, 1990.

Government cash funds.

The Ministry of Finance decides to authorize the State Treasury Office to run down government cash funds totalling FIM 5 020 million held in a special account (government pension fund account) at the Bank of Finland as from July 9.

The funds will be withdrawn in weekly instalments by the end of 1990. **Investment funds.** The Goverment decides that investment funds set up for accounting periods ended before 1979 may be used in the period from January 1, 1991 to December 31, 1992.

Investment reserves. On July 12, the Government decides to release, as from January 1, 1991, companies' investment reserves set up in respect of profits earned in 1985-1987. These reserves are to be used by the end of 1992.

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LAND, CLIMATE AND POPULATION

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

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

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

FORM OF GOVERNMENT

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

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

Parliament, comprising 200 members, is elected by universal suffrage for a period of four years. Following the parliamentary elections of 1987, the seats of the various parties in Parliament are distributed as follows: Social Democratic Party 56; National Coalition Party 53; Centre Party 40; Left-Wing Alliance 17; Swedish People's Party 13; Rural Party 9; Christian League 5; the Greens 4; and the Democratic Alternative 3.

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 selfgoverning municipalities. Members of the municipal council are elected by universal suffrage for a period of four years.

INTERNATIONAL RELATIONS

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

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

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

THE ECONOMY

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

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

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

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

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

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

Forest resources. Finland has fairly abundant forest resources, but

only limited amounts of other raw materials. The growing stock comprises 1660 million cubic metres, of which 45% is pine, 37% spruce and 18% broad-leaved species, chiefly birch. The annual growth increment totals 68 million cubic metres and the total drain calculated on the basis of commercial fellings was 59 million cubic metres in 1989.

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

FINANCE AND BANKING

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

International payments.

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

Outward direct investment is permitted without the Bank of Finland's authorization except for direct investments in the Soviet Union and Bulgaria. Similarly, inward direct investment is permitted without the Bank of Finland's authorization except for direct investments in enterprises in the financial sector and direct investments by the Soviet Union and Bulgaria. Foreign investors may also buy Finnish shares

and markka-denominated bonds. Finnish companies may freely raise foreign credits of over one year's maturity and grant credits of over one year's maturity to non-residents. Finnish residents may invest freely in foreign securities and real estate.

Commercial payments with the Soviet Union and Bulgaria are carried out mainly on a bilateral basis and 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

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

Financial markets. Of the total stock of FIM 580 billion in outstanding domestic credit at the end of 1988, 64% was provided by deposit banks, 4% by mortgage banks, 15% by insurance companies, 8% by other credit institutions and 9% by the state, local authorities and social security funds. There are no quantitative restrictions or interest rate limitations on lending. Regulation of bank lending rates was progressively relaxed earlier in the

1980s and finally abolished in 1986.

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

There are 83 listed companies on the Helsinki Stock Exchange, with a market capitalization value of FIM 125 billion (at end-1989). Four foreign companies are also quoted. Domestic bonds and debentures in circulation at end-1989 totalled FIM 105 billion; government bonds made up 28 % of the total. Turnover on the Stock Exchange in 1989 amounted to FIM 41 billion; the share of shares and subscription rights in the total was approximately 82 %.

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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

MILL. FIM		19	89		199	90	
	-	July 31	Dec. 31	June 29	July 13	July 23	July 31
ASSETS							
Gold and foreign currency claims		30 100	23 009	34 649	35 587	35 707	35 353
Gold		2 128	2 179	2 180	2 180	2 180	2 180
Special drawing rights IMF reserve tranche		854 919	966 950	778 865	<i>777</i> 865	<i>7</i> 74 861	771 858
Convertible currencies		25 345	18 822	30 583	31 524	31 649	31 305
Tied currencies		854	92	243	241	243	240
Other foreign claims		4 061	3 300	2814	2810	2 808	2 805
Markka subscription to Finland's IMF quota		2 195	2 103	2 1 1 5	2 1 1 5	2 115	2 115
Term credit		1 866	1 198	700	696	693	690
Claims on financial institutions		23 721	39 054	28 623	27 333	26 307	26 275
Call money credits		17.000	38	3	3	12	10
Certificates of deposit Term credits		17 332 250	33 230	22 91 1	21 611	20 105	20 057
Till-money credits		2 936	3 3 1 0	3 207	3 232	3 734	3 752
Financing of crop failure loans		611	-	-	-	_	-
Bonds		2 343	2 238	2 263	2 249	2 2 1 8	2 218
Other claims on financial institutions		238	238	238	238	238	238
Claims on the public sector		1 113	1 137	1 285	1 266	1 266	1 266
Treasury notes and bills		10	_	_		_	_
Bonds		29	1 100	25	1 250	7	7 1 259
Total coinage Other claims on the public sector		1 074	1 129	1 259	1 259	1 259	1 239
Other claims on the public sector Claims on corporations		2 466	2 207	1 916	1 888	1 878	1 871
Financing of exports		36	2 207	0	000	1 0/0	0
Financing of domestic deliveries (KTR)		1 935	1 697	1 428	1 404	1 393	1 390
Bonds: KTR credits		281	302	278	275	275	272
Bonds: Other		28	21	15	15	15	15
Other claims on corporations		187	186	195	195	195	195
Other assets		100	571	112	107	108	114
Accrued items Other assets		100	464 107	112	107	108	114
	otal	61 562	69 279	69 399	68 992	68 074	67 684
LIABILITIES Foreign currency liabilities		164	697	1 341	1 263	1 053	967
Convertible currencies		27	42	33	34	33	33
Tied currencies		137	656	1 308	1 229	1 020	934
Other foreign liabilities		2 967	2 860	2 854	2 854	2 851	2 848
IMF markka accounts		2 195	2 103	2 115	2115	2 115	2 1 1 5
Allocations of special drawing rights		772	758	739	739	736	733
Notes and coin in circulation		11 <i>7</i> 74	13 129	13 655	13 <i>7</i> 15	13 <i>7</i> 05	13 592
Notes		10 <i>7</i> 75	12 073	12 551	12 609	12 596	12 484
Coin		999	1 056	1 104	1 107	1 109	1 108
Certificates of deposit		160	04 202	40	40	40 22 074	40 23 21 4
Liabilities to financial institutions Call money deposits		25 229 739	26 303 569	23 424 483	23 358 567	22 974 183	495
Term deposits		739	309	403	307	105	473
Cash reserve deposits		24 116	25 506	22 750	22 750	22 750	22 679
Capital import deposits		340	190	150			
Other liabilities to financial institutions		35	38	41	41	41	40
Liabilities to the public sector		1 472	5 325	7 205	7 01 <i>5</i>	6 825	6 635
Cheque accounts		0	0	1	0	0]
Cash fund deposits		-	3 <i>7</i> 70	 	E 401	F 21.1	5 001
Pension fund deposits Counter-cyclical deposits		1 319	1 319	5 591 1 319	5 401 1 319	5 21 1 1 319	5 021 1 319
Export deposits		152	235	292	292	292	292
Other liabilities to the public sector		132	2 03	2,2	3	2,2	2,2
Liabilities to corporations		10 654	10 810	10 436	10 373	10 356	10 375
Deposits for investment and ship purchase		10 137	10 228	10 436	10 373	10 356	10 375
Capital import deposits		<i>5</i> 1 <i>7</i>	583	_	_	_	_
Other liabilities to corporations		_0					
Other liabilities		55	1 294	63	55	62	58
Accrued items			1 241	-		-	-
Other liabilities		55	53	63	55	62	58 2.701
Valuation account and reserves		3 250	2 696	4 218	4 156	4 044	3 <i>7</i> 91 400
SITRA's capital Capital accounts		400 5 436	400 5 764	400 5 764	400 5 764	400 5 764	5 764
Primary capital		5 000	5 000	5 000	5 000	5 000	5 000
Reserve fund		436	436	764	764	764	764
Profit/loss for the accounting year		-	328		_	_	_
- ·	otal	61 562	69 279	69 399	68 992	68 074	67 684
	~ I # I	O1 302	U7 2/7	07 377	QU 77Z	00 0/ 4	0/ 004

1.2 TIME SERIES FOR THE BALANCE SHEET ITEMS OF THE BANK OF FINLAND,

End of				F	oreign secto	or_				Public sec Claims Liabil- ities	xtor			
period	Gold	Special drawing rights	IMF reserve tranche	ible curren-	Convert- ible curren- cies, total (1+2+3+4	Tied curren- cies, net	Foreign exchange reserves, total (5+6)	Other claims, net	Net daims (7+8)	Claims		Net liabil- ities (11-10)		
	1	2	3	4	5	6	7	8	9	10	11	12		
1985	2 081	931	775	18 572	22 359	—285	22 074	-849	21 225	1 023	4 300	3 277		
1986	2 081	983	793	6 <i>77</i> 8	10 635	3 421	14 056	838	13 218	1 002	2 001	999		
1987	2 128	899	793	23 571	27 391	1 212	28 603	1 131	29 734	977	901	 76		
1988	2 128	1 120	940	24 373	28 561	945	29 506	1 117	30 623	1 128	1 903	<i>775</i>		
1989	2 179	966	950	18 <i>7</i> 80	22 875	—564	22 311	440	22 751	1 137	5 325	4 188		
1989														
July	2 128	854	919	25 318	29 219	<i>717</i>	29 936	1 094	31 030	1 113	1 472	359		
Aug.	2 128	882	934	25 545	29 489	706	30 195	1 117	31 312	1113	1 486	373		
Sept.	2 129	878	952	23 568	27 527	-826	26 701	1 107	27 808	1 135	1 504	369		
Oct.	2 129	1 055	927	21 841	25 952	-307	25 645	772	26 417	1 112	2 683	1 571		
Nov.	2 129	851	967	19 826	23 773	—38 1	23 392	769	24 161	1 126	4 150	3 024		
Dec.	2 179	966	950	18 <i>7</i> 80	22 875	 564	22 311	440	22 751	1 137	5 325	4 188		
1990														
Jan.	2 179	900	954	26 179	30 212	584	29 628	432	30 060	1 168	6 384	5 216		
Feb.	2 179	846	913	26 289	30 227	-311	29 916	433	30 349	1 185	6 523	5 338		
March	2 180	<i>7</i> 91	910	29 685	33 566	962	32 604	273	32 877	1 203	6 655	5 452		
April	2 180	<i>7</i> 79	899	30 034	33 892	-920	32 972	—40	32 932	1 217	6 950	5 733		
May	2 180	<i>7</i> 96	902	30 875	34 753 ·	— 1 163	33 590	—39	33 551	1 229	7 205	5 976		
June	2 180	778	865	30 550	34 373	—1 065	33 308	—40	33 268	1 285	7 205	5 920		
July	2 180	<i>7</i> 71	858	31 272	35 081	694	34 387	—43	34 344	1 266	6 635	5 369		

End of		D	omestic fin	ancial secto)T		Ce	rporate sec	tor		
period	Term claims on deposit banks	Call money claims on deposit banks, not	Cash reserve deposits of deposit banks	deposit	Other lia- bilities to financial institu- tions, net	Net daims (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 circu- lation	Out- standing CDs issued by the Bani of Finland
	13	14	15	16	17	18	19	20	21	22	23
1985		4014	10 222	1 925	—1 386	—2 897	4 525	4 1 1 3	412	8 072	
1986	2 381	6 687	9 270	2 305	-2 240	4 343	4 581	4 757	176	8 668	
1987	_	—757	10 941	2 730	-2 350	 6 618	3 449	4 782	-1333	9 990	4 970
1988	7 187	335	19 039	2 920	— 3 733	4 864	2 823	6 579	-3 756	11 550	1 130
1989	33 230	<i>—5</i> 31	25 506	3 310	2 248	12 <i>7</i> 51	2 000	10 604	 8 604	13 129	-
1989											
July	17 582	727	24 116	2 936	-2817	-1508	2 252	10 439	— 8 187	11 <i>7</i> 74	160
Aug.	18 641	-839	24 639	2 899	-2833	—1 105	2 214	10 587	-8373	11 651	60
Sept.	22 152	-133	25 089	2 569	-2 781	2 280	2 184	10 617	 8 433	11 <i>7</i> 39	20
Oct.	25 623	-419	25 377	3 023	-2 374	5 224	2 096	10 597	<u>—8 501</u>	11 <i>7</i> 75	-
Nov.	29 475	261	25 581	2 925	<u>2 170</u>	9 250	2 066	10 590	-8524	11 894	
Dec.	33 230	531	25 506	3 310	—2 248	12 751	2 000	10 604	 8 604	13 129	-
1990											
Jan.	34 050	-3243	25 441	8 099	-2377	15 842	1 950	10 453	-8503	22 760	-
Feb.	33 720	—1 367	26 068	7 677	-2378	16 340	1919	10 460	-8 541	23 178	-
March	25 994	696	26 465	4 002	-2397	6 624	1 857	10 415	-8558	14 <i>7</i> 82	1 050
April	24 818	855	26 069	3 770	-2374	5 748	1 809	10 480	—8 67 1	13 <i>7</i> 62	690
May	23 498	— 1 008	22 855	3 627	-2357	5 6 1 9	1 761	10 388	-8 627	13 501	630
June	22 911	-480	22 750	3 207	-2310	5 198	1 706	10 226	-8520	13 655	40
July	20 057	—485	22 679	3 752	-2 416	3 061	1 662	10 165	-8503	13 592	40

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	Cali money deposits	Total net change (4+5-6)
	1	2	3	4	5	6	7
1985					201	-1011	1 212
1986					1 599	-1 074	2 673
1987	1 263	23 658	—17 520	4 875	6818	626	-12319
1988	13 840	19 190	-16 850	11 500	463	-629	12 592
1989	131 110	3 855	99 245	28 010	425	441	27 144
1989							
July	16 <i>7</i> 90	240	15 1 <i>7</i> 0	1 380	7	166	1 221
Aug.	14 560	_	13 160	1 400	—10	102	1 288
Sept.	14 260	_	9 950	4 310	73	-633	5 016
Oct.	16 <i>7</i> 20	-	13 920	2 800	—72	214	2 5 1 4
Nov.	18 220	350	13 560	4 310	510	—170	4 990
Dec.	10 850	530	6 <i>7</i> 70	3 550	—475	317	2 <i>7</i> 58
1990							
Jan.	18 660	4 <i>7</i> 10	13 750	200	14	2 726	-2512
Feb.	31 <i>775</i>	14 350	18 020	—595	—46	—1 922	1 281
March	24 81 1	4 739	27 905	<i>—7</i> 833	698	—1 36 5	5 <i>77</i> 0
April	16 470	150	16 762	—442	305	146	-283
May	15 510	1 610	16 250	—2 350	—998	865	—4 213
June	15 310	250	13 <i>57</i> 0	1 490	- 8	—536	2 018
July	7 290	_	11 520	-4 230	7	12	4 235

2.2 FORWARD EXCHANGE MARKET, MILL. FIM

End of period			Banks' for	vard positions with		
perioa	Domest	ic companies		Foreign banks, net	Bank of Finland, net	Total, net (3+4+5)
	Forward exchange bought by banks	Forward exchange sold by banks	Net (1-2)	panks, ner	or Amana, ner	(37473)
	1	2	3	4	5	6
1985	16 982	1 733	15 249	<i>7</i> 08	9 005	6 951
1986	11 446	1 319	10 127	2 461	-92	7 574
1 987	21 671	1 158	20 513	-233	—1 287	18 994
1988	16 488	1 543	14 946	9 086	—377	23 654
1989	<u>10 531</u>	<u>3 563</u>	<u>6 967</u>	<u>8 031</u>	<u>205</u>	<u>15 204</u>
1989						
June	12 859	1 408	11 451	9 78 1	-306	20 926
July	13 125	1 393	11 731	9 870	—39 5	21 207
Aug.	12 652	1 187	11 465	15 126	-220	26 371
Sept.	11 78 2	1 669	10 113	13 261	_	23 374
Oct.	11 323	2 260	9 063	10 <i>7</i> 74	_	19 836
Nov.	11 487	2 934	8 552	8 784	_	17 336
Dec.	<u>10 531</u>	<u>3 563</u>	<u>6 967</u>	<u>8 031</u>	<u>205</u>	<u>15 204</u>
1990						
Jan.	9 339	3 793	5 545	11 854	125	17 524
Feb.	9 073	3 764	5 309	8 215	—1 741	11 783
March	10 328	3 418	6 910	14 739	—2 323	19 326
April	11 327	3 403	7 924	14 493	— 5 546	16 871
May	12 591	3 029	9 562	15 073	—8 339	16 296
June	11 86 7	3 149	8 <i>7</i> 17	15 692	 8 229	16 180

2.3 BANKS' CENTRAL BANK POSITION. MILI. 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
1 9 85	5812		5 812	4 527		9 578	14 105	8 293
1986	7 117	120	7 237	1 256		9 189	10 445	-3 208
1987	481	1 581	2 062	703	4 705	10 092	1 <i>5 5</i> 01	13 439
1988	128	2 190	2319	621	5 044	15 1 <i>5</i> 9	20 824	—18 505
1989	373	15 146	15 519	403	465	23 035	23 903	8 384
1989								
July	46	17 049	17 095	714	160	23 520	24 394	7 299
Aug.	46	17 384	17 431	507	116	24 132	24 755	—7 325
Sept.	41	19 <i>7</i> 38	19 <i>77</i> 9	446	47	24 669	25 161	-5382
Oct.	62	24 529	24 591	483	11	25 098	25 592	—1 001
Nov.	360	26 702	27 062	363	_	25 384	25 747	1 315
Dec.	328	31 497	31 824	462	-	25 574	26 036	5 788
1990								
Jan.	308	34 151	34 459	1 200	860	25 504	27 564	6 895
Feb.	367	43 675	44 043	1 01 <i>7</i>	12 978	25 463	39 459	4 584
March	131	36 855	36 987	1 885	7 299	26 094	35 278	1 709
April	222	26 291	26 513	406	908	26 452	27 766	—1 254
May	1 <i>75</i>	26 112	26 287	700	654	25 965	27 319	— 1 032
June	79	22 624	22 703	534	290	22 848	23 671	—969
July	3	21 435	21 438	542	40	22 748	23 330	—1 892

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

Average of daily ob-	overnight		HELL	BOR			lank of Finlan	ı d		eserve irement
servations	rate	1 month	3 months	6 months	12 months	Call money credit rate	Call money deposit rate	Base rate	Ordinary	Additional (average)
	1	2	3	4	5	6	7	8	9	10
1985						13.37	13.37	9.04	5.6	
1986	11.87					13.43	11.34	7.46	4.8	
1987	9.16	9.90	10.02	10.14	10.40	11.71	<i>7.7</i> 8	7.00	4.8	
1988	8.47	9.77	9.97	10.16	10.50	11.50	7.04	7.63	6.5	
1989	10.21	12.32	12.53	12.61	12.72	13.40	4.00	7.67	8.0	0.5
1989										
July	10.56	11.64	11 <i>.7</i> 9	11.94	12.11	15.00	4.00	7.50	8.0	0.5
Aug.	8.86	11.87	12.06	12.22	12.35	15.00	4.00	7.50	8.0	0.7
Sept.	8.56	12.69	13.09	13.30	13.40	15.00	4.00	7.50	8.0	0.8
Oct.	10.31	14.06	14.19	14.22	14.19	15.00	4.00	7.50	8.0	1.0
Nov.	12.78	14.78	14.77	14.66	14.51	15.00	4.00	8.50	8.0	1.1
Dec.	15.03	16.23	16.08	15.56	15.17	15.00	4.00	8.50	8.0	1.1
1990										
Jan.	S	16.01	16.05	1 <i>5.7</i> 3	15.45	15.00	4.00	8.50	8.0	1.1
Feb.	S	16.01	16.01	15.73	15.39	15.00	4.00	8.50	8.0	
March	8.97	15.08	15.38	15.40	15.37	15.00	4.00	8.50	8.0	
April	8.86	13.16	13.94	14.33	14.70	15.00	4.00	8.50	8.0	
May	9.47	12.25	12.77	13.17	13.74	15.00	4.00	8.50	8.0	
June	8.22	12.07	12.52	13.17	13. <i>7</i> 9	15.00	4.00	8.50	8.0	
July	8.23	11.69	12.45	13.01	13.63	15.00	4.00	8.50	8.0	

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

3.3 COVERED EURO-DOLLAR RATE, PER CENT

Average		3 curre	encies¹			12 cyr	rendes²		Average	•			
of daily obser- vations	1 month	3 months	6 months	12 months	1 month	3 months	6 months	12 months	of daily obser- vations	1 month	3 months	6 months	12 menths
	1	2	3	4	5	6	7	8		1	2	3	4
1985	6.8	6.9	7.0	7.2					1985	12.9	12.8	12.8	12.6
1986	5.9	5.9	5.9	5.8					1986	12.1	11.7	11.5	11.1
1987	5.4	5.6	5.7	5.8	7.9	8.0	8.1	8.2	1987	9.8	9.9	9.9	10.1
1988	5.9	6.0	6.2	6.4	7.8	8.0	8.1	8.3	1988	9.6	9.8	10.0	10.3
1989	8.3	8.4	8.5	8.5	9.7	9.8	9.9	9.9	1989	11.8	12.1	12.2	12.2
1989									1989				
July	8.3	8.2	8.2	8.1	9.7	9.8	9.7	9.7	July	11.1	11.3	11.5	11.5
Aug.	8.3	8.3	8.2	8.2	9.7	9.8	9.7	9.7	Aug.	11.1	11.5	11.7	11.8
Sept.	8.5	8.6	8.6	8.6	9.9	10.0	10.0	9.9	Sept.	11.9	12.5	12.8	12.9
Oct.	8.9	9.0	8.9	8.8	10.4	10.5	10.4	10.4	Oct.	13.6	13.8	13.8	13.7
Nov.	8.8	9.0	9.0	8.9	10.5	10.7	10.7	10.7	Nov.	14.2	14.3	14.3	14.1
Dec.	9.0	9.0	9.0	8.9	10.8	10.9	10.9	10.9	Dec.	15.3	15.2	14.8	14.5
1990									1990				
Jan.	8.8	9.0	9.2	9.2	10.8	11.0	11.2	11.3	Jan.	14.9	15.4	15.1	15.0
Feb.	8.9	9.1	9.3	9.6	11.1	11.3	11.5	11.7	Feb.	15.0	15.0	14.9	14.7
March	8.9	9.1	9.4	9.7	11.2	11.4	11.6	11.8	March	14.3	14.7	14.8	14.7
April	8.8	9.1	9.3	9.7	10.9	11.1	11.3	11.6	April	12.7	13.6	13.9	14.4
May	8.8	9.0	9.2	9.5	10.6	10.7	10.9	11.2	May	12.0	12.6	13.0	13.5
June	8.8	8.9	9.1	9.4	10.5	10.6	10.8	11.0	June	11.9	12.5	13.1	13. <i>7</i>
July	8.9	8.9	9.1	9.2	10.4	10.6	10.7	10.9	July	11.6	12.5	13.0	13.6

¹DEM 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			Lei	nding		Deposits						
of pe- riod		New	credits1		Average	Of which:	Savings	12-	24-		Average	
riod	Cheque account and post al giro credits	Bills of ex- - change	Loans	New lending, total	lending rate	Com- mer- cial banks	accounts and ordinary deposit accounts	month time deposits	month time deposits	rate of in- terest on regu- lated deposits	rate of interest on unregu- lated deposits	rate of interest on total deposits
	1	2	3	4	5	6	7	8	9	10	11	12
1985	12.04	12.94	10.62	11.55	10.37	10.37	4.75	7.50	8.75	5.91	13.24	6.81
1986	10.89	12.30	9.76	10.64	8.82	8.81	2.75	5.75	7.00	4.43	11.84	5.35
1987	10.50	12.31	10.01	10.62	9.12	8.99	2.75	5.75	7.00	4.56	10.13	5.29
1988	10.22	12.27	10.50	10.72	10.37	10.25	3.75	6.75	8.00	5.87	9.80	6.20
1989	12.97	13.47	11.58	12.07	11.86	11.80	4.50		7.50	6.60	11.92	7.37
1989												
June	12.46	13.12	11.43	11.83	10.35	10.18	3.50		5.50	5.48	11.55	7.06
July	12.60	13.25	11.59	12.03	10.34	10.18	3.50		5.50	5.46	11.53	7.04
Aug.	12.67	13.36	11.33	11.79	10.37	10.20	3.50		5.50	5.48	11.60	7.07
Sept.	12.28	13.54	11.84	12.21	10.46	10.31	3.50		5.50	5.53	11.92	7.29
Oct.	14.08	14.12	12.09	12.72	10.72	10.59	3.50		5.50	5.57	12.56	7.56
Nov.	14.99	14.77	12.90	13.58	11.60	11.44	4.50		6.50	6.40	13.27	8.35
Dec.	16.36	15.37	13.28	14.02	11.86	11.80	4.50		7.50	6.60	14.18	8.77
1990*												
Jan	13.55	15.71	13.02	13.73	11.99	11.91	4.50		7.50	6.45	14.40	8.66
Feb.	S	S	S	S	12.00	11.89	4.50		7.50	6.36	14.35	8.50
March	14.71	15.64	12.99	13.84	11.94	11.76	4.50		7.50	6.52	14.52	8.53
April	11.92	15.56	13.29	13.61	11 <i>.77</i>	11.53	4.50		7.50	6.49	14.05	8.66
May	12.86	15.40	13.17	13.61	11.71	11.44	4.50		7.50	6.40	13.60	8.50
June	13.25	15.36	13.19	13.73	11.66	11.41	4.50		7.50	6.34	13.01	8.26

¹ Average rate of interest for period.

3.5 RATES OF INTEREST ON BONDS AND DEBENTURES, PER CENT

Period			Secon	dary market	rates			Rates at issue		
	Long-term rate		Taxable govern-	Taxable public	Issue	d by:	Taxfree public	Taxable public	Taxfree public issues	
	3 years	5 years	ment bonds	issues	Financial institu- tions	Corpo- rations	issues	issues		
	1	2	3	4	5	6	7	8	9	
1985				12.7			10.1	12.7	10.6	
1986				11.7			8.3	11.3	8.8	
1987			-	11.2	11.1	11.2	8.1	10 <i>.7</i>	7.9	
1988	10.7	10.8	10.6	10.6	10.6	10.6	7.8	10.4	7.3	
1989	12.2	12.0	12.1	11.9	12.0	12.0	8.1	11.7	6.6	
1989										
June	11.9	11. <i>7</i>	12.3	11.8	11.8	11 <i>.7</i>	8.1	11.5	6.5	
July	11.8	11.7	12.1	11.8	12.0	11.6	8.2	11.6	6.5	
Aug.	11.9	11. <i>7</i>	11.9	11.9	11.8	12.0	8.5	11.5	6.5	
Sept.	12.5	12.0	12.2	12.1	12.0	12.2	8.4	11.9	6.5	
Oct.	13.3	12.8	12.4	12.4	12.6	12.3	8.4	11.9	6.5	
Nov.	13.3	12.9	12.6	12.4	12.2	12.6	8.7	12.2	6.5	
Dec.	13.5	13.0	12.9	12.4	12.1	12.6	8.9	12.5	7.5	
1990										
Jan.	13.5	13.0	12.7	12.7	12.9	12.4	8.7	11.3		
Feb.	13.5	13.0	S	S	S	S	S	12.9	8.5	
March	13.8	13.4	13.2	13.2	13.3	13.1	8.6	13.0		
April	13.8	13.5	13.4	13.3	13.5	13.1	8.7	12.7		
May	13.8	13.7	13.1	13.5	13.6	13.5	8.8	13.3		
June	13.8	13.7	13.1	13.3	13.3	13.6	8.7	13.1		

4. RATES OF EXCHANGE
4.1 AVERAGE SPOT SELLING RATES, FIM

Average of daily auo-	New York	Montreal	London	Dublin	Stockholm	Oslo	Copen- hagen	Frankfurt a.M.	Amster- dam	Brussels	Zurich
quo- tations	1 USD	1 CAD	1 GBP	1 ÆP	1 SEK	1 NOK	1 DKK	1 DEM	1 NLG	1 BEF	1 CHF
	1	2	3	4	5	6	7	8	9	10	11
1985	6.206	4.554	8.000	6.590	0.7222	0.7231	0.5871	2.1142	1.8745	0.10483	2.5360
1986	5.077	3.659	7.459	6.816	0.7138	0.6882	0.6290	2.3454	2.0789	0.11399	2.8349
1987	4.404	3.325	7.213	6.556	0.6952	0.6547	0.6444	2.4514	2.1755	0.11806	2.9563
1988	4.191	3.412	7.466	6.397	0.6848	0.6444	0.6235	2.3895	2.1233	0.11421	2.8700
1989	4.295	3.632	7.051	6.104	0.6673	0.6234	0.5886	2.2879	2.0281	0.10925	2.6306
1989											
July	4.278	3.602	6.947	6.043	0.6622	0.6164	0.5818	2.2601	2.0043	0.10803	2.6243
Aug.	4.348	3.703	6.950	6.036	0.6657	0.6186	0.5814	2.2582	2.0029	0.10802	2.6201
Sept.	4.419	3.744	6.952	6.050	0.6698	0.6215	0.5830	2.2650	2.0088	0.10827	2.6202
Oct.	4.281	3.649	6.809	6.115	0.6648	0.61 <i>7</i> 7	0.5892	2.2951	2.0326	0.10933	2.6260
Nov.	4.262	3.649	6.715	6.180	0.6644	0.6190	0.6001	2.3302	2.0648	0.11108	2.6348
Dec.	4.125	3.556	6.597	6.262	0.6569	0.6167	0.6107	2.3725	2.1016	0.11294	2.6339
1990											
Jan.	4.010	3.431	6.632	6.270	0.6508	0.6139	0.6117	2.3708	2.1018	0.11317	2.6457
Feb.	3.960	3.315	6.724	6.277	0.6482	0.6129	0.6128	2.3635	2.0966	0.11322	2.6625
March	4.030	3.416	6.561	6.308	0.6548	0.6125	0.6177	2.3648	2.1001	0.11399	2.6677
April	4.000	3.439	6.557	6.362	0.6546	0.6117	0.6217	2.3704	2.1060	0.11472	2.6899
May	3.931	3.351	6.612	6.351	0.6503	0.6111	0.6213	2.3666	2.1041	0.11469	2.7738
June	3.966	3.385	6.780	6.318	0.6516	0.6133	0.6186	2.3540	2.0913	0.11461	2.7822
July	3.848	3.328	6.959	6.300	0.6473	0.6112	0.6166	2.3463	2.0824	0.11404	2.7628

Average of daily auo-	Paris	Rome	Vienna	Lisbon	Reykjavik	Madrid	Tokyo	Moscow	Mel- bourne	ECU	SDR
tations	1 FRF	1 ML	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
1985	0.6940	0.00327	0.3012	0.0367	0.1520	0.0366	0.02610	7.419			6.27879
1986	0.7355	0.00343	0.3339	0.0343	0.1259	0.0364	0.03028	7.228			5.94432
1 987	0.7345	0.00341	0.3488	0.0315	0.1163	0.0358	0.03050	6.965	3.106	5.075	5.68010
1988	0.7060	0.00324	0.3401	0.0294	0.1006	0.0361	0.03273	6.891	3.309	4.954	5.61826
1989	0.6757	0.00315	0.3254	0.0276	0.0782	0.0364	0.03122	6.817	3.423	4.731	5.49375
1989											
July	0.6679	0.00314	0.3214	0.0273	0.0762	0.0361	0.03047	6.759	3.260	4.678	5.42928
Aug.	0.6700	0.00316	0.3211	0.0273	0.0751	0.0362	0.03079	6.821	3.336	4.678	5.47435
Sept.	0.6723	0.00316	0.3220	0.0273	0.0740	0.0363	0.03047	6.870	3.435	4.694	5.49998
Oct.	0.6776	0.00314	0.3263	0.0272	0.0717	0.0362	0.03014	6.801	3.338	4.710	5.43586
Nov.	0.6868	0.00319	0.3312	0.0273	0.0705	0.0367	0.02971	6.799	3.359	4.765	5.43347
Dec.	0.6959	0.00321	0.3371	0.0273	0.0691	0.0369	0.02872	6.716	3.263	4.810	5.35882
1990											
Jan.	0.6980	0.00319	0.3371	0.0272	0.0684	0.0367	0.02768	6.640	3.159	4.812	5.27623
Feb.	0.6975	0.00320	0.3359	0.0271	0.0684	0.0367	0.02723	6.591	3.029	4.829	5.24250
March	0.7021	0.00322	0.3362	0.0270	0.0682	0.0370	0.02634	6.610	3.067	4.827	5.23570
April	0.7072	0.00324	0.3372	0.0270	0.0680	0.0375	0.02528	6.582	3.075	4.847	5.19392
May	0.7044	0.00323	0.3366	0.0270	0.0679	0.0380	0.02562	6.575	3.017	4.849	5.17416
June	0.7011	0.00322	0.3348	0.0271	0.0683	0.0382	0.02582	6.620	3.105	4.850	5.20247
July	0.7009	0.00322	0.3338	0.0270	0.0680	0.0384	0.02581	6.549	3.068	4.856	5.16136

4.2 CURRENCY INDICES, 1982=100

Average		Other curre	ncy indices	Currency	Weights of the Bank of
of daily observa- tions	Bank of Finland — currency index	Payments currency index	MERM index		Finland currency index As frem July 6, 1990
	1	2	3		4
1985	102.5	109.4	112.5	USD	8.8
1986	103.9	106.3	110.4	GBP	13.1
1987	103.3	103.2	106.1	SEK	19.0
1988	102.0	101.1	104.7	NOK	3.8
1989	98.4	98.4	102.8	DKK	4.4
				DEM	19.0
1989				NLG	4.8
July	97.4	97.5	101 <i>.7</i>	BEF	3.1
Aug.	97.7	98.0	102.6	CHF	2.4
Sept.	98.0	98.6	103.1	FRF	6.7
0a.	97.7	97.9	102.0	m.	5.1
Nov.	98.1	98.2	102.1	ATS	1.6
Dec.	97.9	97.6	100.9	ESP	2.0
				JPY	6.2
1990					
Jan.	97.2	96.7	99.2		
Feb.	97.1	96.4	98.4		
March	97.0	96.7	98.7		
April	97.0	96.6	98.0		
May	96.9	96.2	97.5		
June	97.2	96.6	97.9		
July	97.1	95.9	96.9		

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
1985	19 268	125 366	1 781	146 415	6 184	13 998	166 597
1986	18 393	137 521	3 423	159 337	4 259	17 271	180 866
1987	20 377	155 115	5 243	180 735	3 915	17 892	202 542
1988*	24 831	194 181	5 089	224 102	4 561	41 028	269 690
1989*	28 503	201 392	10 176	240 071	7 133	75 522	322 725
1989*							
April	25 872	195 207	7 408	228 487	5 323	55 898	289 707
May	26 969	194 708	7 672	229 349	5 627	51 275	286 250
June	29 176	196 927	8 080	234 182	6 499	57 898	298 580
July	29 608	195 487	8 371	233 465	6 745	<i>5</i> 8 <i>7</i> 1 <i>5</i>	298 925
Aug.	28 191	195 844	8 6 1 2	232 647	6 633	62 039	301 319
Sept.	27 588	196 169	9 2 1 9	232 975	6 235	67 5 15	306 724
Oct.	28 296	195 743	9 667	233 706	6 591	71 <i>7</i> 27	312 023
Nov.	27 687	195 226	9 9 1 3	232 825	6 504	80 414	319 743
Dec.	28 503	201 392	10 176	240 071	7 133	75 522	322 725
1990°							
Jan.	32 607	199 <i>7</i> 71	10 692	243 071	11 237	82 920	337 228
Feb.	33 833	201 002	10 645	245 480	10 439	S	S
March	29 236	205 151	10 687	245 073	9 300	73 595	327 968
April	29 354	205 732	11 005	246 091	7 571	72 984	326 646

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)
	7	2	3	4	5	6
1985	6313	7 47 1	132 668	146 451	24 236	170 687
1986	7 542	6 354	152 335	166 231	24 450	190 68
1987	8 507	5 1 <i>7</i> 7	178 698	192 382	36 475	228 857
1988*	11 358	5 920	234 268	251 545	49 910	301 455
1989*	15 270	5 651	261 847	282 768	71 323	354 09
1989*						
April	12 836	5 129	244 581	262 546	57 233	319 <i>77</i> 9
May	12 926	5 195	246 520	264 641	59 553	324 194
June	13 422	5 347	248 921	267 691	60 671	328 36
July	14 052	5 305	250 961	270 318	59 621	329 939
Aug.	13 931	5 358	253 401	272 691	60 892	333 585
Sept.	14 691	5 436	256 014	276 141	62 836	338 978
Oct.	15 190	5 471	256 958	277 619	65 326	342 94
Nov.	15 584	5 465	257 252	278 300	67 947	346 246
Dec.	15 270	5 651	261 847	282 768	71 323	354 09
1990*						
Jan.	17 098	5 545	257 211	279 853	78 553	358 407
Feb.	17 489	5 528	257 444	280 460	78 896	359 357
March	16 <i>7</i> 66	5 629	256 786	279 181	82 101	361 282
April	17 095	5 666	255 254	278 014	85 607	363 62

5.3 MONEY SUPPLY AND MONETARY AGGREGATES, MILL. FIM

End of	Foreign		Domestic credit		Other		
period	assets, n ot	Claims on the central government	Claims on the public	Total (2+3)	items, net	M,	M ₂ (1+4+5)
	1	2	3	4	5	6	7
1985	<u>6 641</u>	 8 694	209 231	200 537	-27 244	27 694	166 652
1986	—16 <i>7</i> 84	-13884	237 514	223 630	27 522	27 838	179 324
1987	-25 484	—1 4 977	277 068	262 090	— 36 145	30 342	200 461
1988	-40 670	—15 356	352 371	337 015	-50 306	35 232	246 039
1989*	— 59 049	—18 868	407 433	388 565	—58 985	41 444	270 531
1989*							
April	-45 413	—13 377	372 511	359 134	61 684	37 559	252 037
May	-47 950	—10 <i>5</i> 75	377 748	367 173	65 853	38 966	253 370
June	-50 499	—11 982	384 021	372 039	—58 889	42 526	262 651
July	-49 924	—13 556	385 135	371 579	—59 946	41 333	261 708
Aug.	—51 975	—14 5 4 9	390 251	375 703	-62 613	40 01 <i>7</i>	261 115
Sept.	-53 458	—1 5 38 1	396 292	380 911	66 143	39 625	261 310
Oct.	55 551	—15 567	399 696	384 128	—66 557	40 176	262 020
Nov.	—57 974	—18 <i>7</i> 66	403 920	385 154	65 808	39 730	261 372
Dec.	—59 049	—18 868	407 433	388 565	—58 985	41 444	270 531
1990*							
Jan.	-55 383	—16 <i>7</i> 76	420 643	403 866	-64 208	54 151	284 275
Feb.	-55 962	18 534	421 808	403 274	60 253	56 924	287 060
March	-62 202	— 19 004	424 958	405 954	-65 532	44 397	278 220
April	66 857	—16 136	426 742	410 606	-67 451	43 428	276 298

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

End of period		Foreig	n debt			Dome	stic debt		— contral st	Out-	Cash funds
perioa	Bonds	Other bonds and deben- tures	Long- term promis- sory notes	Total (1+2+3)	Public bends	Other long- term liabil- ities	Treasury notes and bills	Total (5+6+7)	govern- ment debt (4+8)	stand- ing lending	TUNGS
	1	2	3	4	5	6	7	8	9	10	11
1985	17 316	2 703	5 658	25 677	14 994	4 107	2 203	21 304	46 981	36 032	6 383
1986	17 905	3 038	6 038	26 981	18 059	4 481	2 474	25 013	51 994	38 028	11 686
1 987	20 407	2 697	5 576	28 680	22 121	4 692	3 018	29 831	58 511	40 035	11 553
1988	20 202	1 804	4 273	26 279	24 243	5 272	2 290	31 805	58 084	42 990	15 858
1989	18 505	852	3 429	22 786	24 126	5 750	250	30 126	52 912	45 356	21 248
1989											
June	18 <i>75</i> 9	1 249	3 400	23 408	24 539	4810	<i>7</i> 80	30 129	53 537	44 595	14 598
July	18 587	1 229	3 370	23 186	24 526	4812	660	29 998	53 184	44 848	16 <i>7</i> 01
Aug.	18 809	1 166	3 390	23 365	24 352	4 798	420	29 570	52 935	44 786	17 363
Sept.	18 764	1 160	3 377	23 301	24 404	4 799	280	29 483	52 784	45 032	17 846
Oct.	18 591	1 138	3 385	23 114	23 998	4 801	250	29 049	52 163	45 371	17 788
Nov.	18 601	853	3 319	22 773	23 988	4 798	250	29 036	51 809	45 471	21 445
Dec.	18 505	852	3 429	22 786	24 126	5 750	250	30 126	52 912	45 356	21 248
1990											
Jan.	18 353	851	3 350	22 554	23 172	5 747	100	29 019	51 573	45 808	19 182
Feb.	18 322	729	3 303	22 354	23 122	5 728	_	28 850	51 204	46 061	20715
March	18 310	663	3 155	22 128	22 403	5 723		28 126	50 254	46 432	22 657
April	17 508	666	3 143	21 317	22 136	5 360		27 496	48 813	46 854	18 457
May	17 501	503	3 122	21 126	21 734	5 185	_	26 919	48 045	47 207	17 268
June	17 537	502	3 061	21 100	21 827	5 182	_	27 009	48 109		

5.5 MARKKA BOND MARKET

A) ISSUES, MILL. FIM

During period			By sector				Total - (1+2+3+4+5)		
perioa	Corpo-	Financial	Central	Local	Others	Public	: issues	Private	= (1+2+3+4+3) = (6+7+8)
	rations	institutions	government	government		Taxable	Taxfree	- placings	(07/70)
	1	2	3	4	5	6	7	8	9
1985	4 799	9 112	5 994	435	33	8 070	6 394	5 909	20 373
1986	4 976	10 638	6 532	422	105	5 987	7 487	9 199	22 674
1987	4 477	9 510	8 119	206	69	9 409	8 830	4 142	22 380
1988	3 027	8 418	6 889	268	61	7 861	6 522	4 280	18 663
1989	4 204	11 022	5 <i>7</i> 1 <i>7</i>	233	13	11 146	2 997	7 046	21 189
1989									
June	502	2 407	_	15	_	916	_	2 008	2 924
July	58	100	_	8	3	100	_	69	169
Aug.	247	103	450	35	_	507	200	128	835
Sept.	789	663	800	7	3	1 210	273	779	2 262
Oct.	72	1 040	160	8	7	974	_	313	1 287
Nov.	150	875	_	23	_	<i>7</i> 61	_	288	1 048
Dec.	258	850	_	9	_	665	_	452	1 11 <i>7</i>
1990*									
Jan.	399	818	_	_	_	110	_	1 107	1 217
Feb.	437	2 888	_	_	_	1 976	357	992	3 325
March	602	2 242	_	_	_	980	_	1 864	2 844
April	162	<i>7</i> 30	_	_	_	620		272	892
May	350	631	1 400	340	8	2 198		531	2 729
June	273	1 436		_	500	1 140	_	1 069	2 209

B) STOCK, MILL. FIM

End of period			By sector			ı	By type of loan			
periou	Corpo-	Financial	Central	Local	Others	Publi	c issues	Private	- (1+2+3+4+5) =	
	rations	institutions	government	government		Taxable	Taxfree	placings	(6+7+8)	
	1	2	3	4	5	6	7	8	9	
1985	10 482	26 173	18 <i>5</i> 75	661	56	10 967	19 002	25 977	55 947	
1986	14 075	31 902	22 091	1 042	1 <i>7</i> 7	16 432	23 314	29 541	69 287	
1987	17 509	36 773	26 518	1 200	232	24 831	28 229	29 172	82 232	
1988*	19 195	42 892	28 953	1 413	292	32 028	30 054	30 663	92 745	
1989*	21 463	50 216	29 381	1 555	290	41 162	27 742	34 001	102 906	
1989*										
ı	20 327	45 <i>7</i> 21	29 061	1 457	292	35 808	29 424	31 626	96 858	
11	20 841	48 406	28 843	1 519	283	38 183	28 877	32 831	99 892	
III	21 537	48 392	28 714	1 539	288	39 154	28 279	33 036	100 470	
IA	21 463	50 216	29 381	1 555	290	41 162	27 742	34 001	102 906	
1990*										
1	21 865	55 500	27 631	1 531	296	43 578	25 730	37 515	106 823	

5.6 HELSINKI STOCK EXCHANGE

During period		Turnover, mill.FIM		Un	Share prices itas index¹, 1975=	100
	Shares and subscription rights	Bonds and debentures	Total (1+2)	Banks	Industry	Overall index
	1	2	3	4	5	6
1985	3 1 1 4	9 046	12 160	184	234	229
1986	9 488	6 479	15 968	254	357	350
1987	26 641	4 604	31 245	319	603	546
1988	31 734	5 <i>7</i> 18	37 452	404	734	677
1989	33 160	7 375	40 536	441	793	742
1989						
July	1 344	303	1 647	473	823	776
Aug.	3 198	ī 171	4 370	466	829	776
Sept.	2 265	400	2 665	429	786	732
Oct.	1 304	689	1 993	397	727	677
Nov.	1 081	876	1 957	369	674	627
Dec.	2 929	1 471	4 400	354	669	619
1990						
Jan.	4 475	709	5 184	332	<i>7</i> 01	633
Feb.	1 324	15	1 339	319	745	661
March	1 520	599	2 120	320	715	638
April	850	250	1 100	314	660	594
May	1 199	632	1 831	308	632	572
June	804	341	1 145	306	628	567
July	468	166	634	291	598	538

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.	Trans- port receipts	Travel receipts	Other services receipts	receipts, total	Exports of goods and services (1+5)		Trans- fers and other income	Current account receipts (6+7+8)	of goods,	Trans- port ex- pendi- ture	Travel ex- pendi- ture	Other services ex- pendi- ture
	1	2	3	4	5	6	7	8	9	10	11	12	13
1985	82 475	6 216	3 258	6 224	15 698	98 173	5 847	3 <i>7</i> 91	107 811	80 764	2 545	5 031	6 554
1986	81 066	5 757	3 195	5 6 1 6	14 568	95 634	4 510	3 609	103 752	76 736	2 160	5 587	5 415
1987	83 826	6 370	3 736	6 099	16 204	100 030	5 075	3 231	108 336	81 867	2610	6811	6 488
1988	91 313	7 026	4 280	6 132	17 438	108 750	7 836	4 415	121 002	91 232	3 338	7 907	7 390
1989*	98 265	7 700	4 484	6611	18 796	117 061	10 446	3714	131 221	104 385	3 685	8 958	8 509
1987													
Ш	21 638	1 554	808	1 890	4 252	25 890	1 659	777	28 325	21 573	694	1 741	2 019
1988*													
	20 516	1 623	776	1 583	3 982	24 498	1 863	1 083	27 443	19 684	671	1 829	2011
II.	22 569	1 752	1 041	1 379	4 172	26 740	1 890	1 119	29 750	23 184	780	1 916	1 730
111	21 621	1 880	1 486	1 264	4 631	26 251	1 978	1 133	29 363	23 767	943	2 2 1 0	1 789
IV	26 608	1 <i>77</i> 1	977	1 905	4 653	31 261	2 105	1 080	34 446	24 597	944	1 951	1 860
1989*													
1	24 944	1 851	869	1 335	4 055	28 998	2 505	867	32 370	24 290	824	1 977	2 109
Н	23 370	1 946	1 076	1 568	4 590	27 960	2 488	946	31 394	24 759	951	2 148	2 173
н	22 534	2 004	1 420	1 673	5 098	27 632	2 567	942	31 141	25 634	957	2 409	2 008
IV	27 418	1 899	1 120	2 034	5 053	32 471	2 886	958	36 315	29 702	954	2 424	2 218
1990*													
1	24 413	2 088	889	1 363	4 341	28 753	3 072	1 146	32 971	24 857	909	2 412	2 189

During period	expendi ture, total	- of goods	ment ex- pendi- ture		account		port	Travel (3-12)	services	account (20+21 +22)		ment income, net	net	account (24+25 +26) =
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1985	14 130	94 893	12 134	5 300	112 327	1711	3 671	—1 <i>77</i> 3	-330	1 568	3 279	-6 28	37—1 509	-4 517
1986	13 162	89 898	11719	5 964	107 580	4 3 2 9	3 597	-2392	201	1 406	5 735	-7 20	9-2 355	-3 828
1987	15 909	97 775	12617	5 860	116 251	1 960	3 760	—3 075	390	296	2 255	-75	2-2 629	7 -7 915
1988	18 634	109 866	15 769	6 975	132 610	80	3 689	—3 627	-1258	-1 196	-1116	5 — 7 93	3-2 560	11 608
1989*	21 152	125 537	20 500	7 184	153 221	- 6 120	4 015	—4 473	—1 898	—2 356	—8 47 <i>6</i>	5—10 05	54—3 470	22 000
1987														
IV	4 455	26 027	3 431	1 523	30 982	65	860	—933	—129	-203	—138	3 —1 <i>7</i> 7	'3 —747	7 —2 657
1988														
1	4 510	24 194	3 882	1 974	30 050	832	952	-1053	-428	-529	303	3 -201	9 -89	—2 606
H	4 426	27 610	3 863	1 556	33 029	–6 16	972	875	-351	-254	<u>—870</u>	—1 97	⁷ 2 –437	7 3 279
111	4 942	28 709	3 511	1 558	33 778	-2146	937	—723	525	-311	-2457	7 —1 53	33 -424	4 -4 415
IV	4 756	29 353	4 514	1 888	35 754	2 010	827	— 975	45	— 102	1 908	3 —2 40	9 —808	3 —1 308
1989*														
1	4 909	29 199	4 080	1 956	35 236	654	1 028	1 108	—774	-855	201	—1 <i>5</i> 7	75—1 089	-2 865
II	5 272	30 031	5 514	1 815	37 360	-1390	995	—1 072	605	-682	-2 071	-3 02	26 —869	-5 966
III	5 374	31 008	5 113	1 656	37 777	-3 100	1 047	—989	-335	—276	—3 37 <i>6</i>	-254	6 -714	4 6 636
IV	5 596	35 298	5 793	1 756	42 847	—2 284	945	—1 3 05	— 184	—543	—2 828	3 -290	798	-6 532
1990*														
1	5 510	30 367	5 543	2 061	37 971	-444	1 179	—1 523	-826	-1170	— 1 614	1 — 2 47	'I —915	5 —5 000

During	Direct	Port-		Long-teri	m credits	;		Imports		Port-	Long-		Exports	
period	invest- ment in Finland	folio invest- ment in Finland	govern-	Author- ized banks	Others	Total (3+4 +5)	or omei long- term capital	r of long- term capital (1+2+ 6+7)	ment abroad	folio invest- ment abroad	term export credits	or omer long- term capital	of long- term capital (9+10+ 11+12)	capital account
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1985	392	4 264	1 556	1 489	442	3 487	140	8 283	2 073	1 329	—1 313	3 1 0 2 6	3 115	5 168
1986	1 627	646	—63	5 935	-482	5 390	87	7 750	3 641	2 347	-381	702	6 309	1 441
1987	424	179	2 284	5 700	2 526	10 510	91	11 204	3 <i>7</i> 41	2 434	158	3 103	9 436	1 768
1988	1 164	245	-1682	9 781	9 073	17 172	85	18 666	7 935	1 347	1 369	1 898	12 550	6 11 <i>7</i>
1989*	1 353	548	3 —1 854	14 659	10 854	23 659	79	25 639	11 900	187	2 934	778	15 799	9 840
1987 IV	51	—30	2 108	3 1 471	—1 <i>5</i> 7	3 422	55	3 498	1 346	484	65	5 482	2 247	1 252
1988														
1	63	347	7 —857	361	3 231	2 735	89	3 234	1 113	900	8	3 572	2 593	642
11	313	-313	3 1 179	2 3 5 6	1 592	5 127	-42	5 085	2 972	139	218	3 432	3 761	1 324
Ш	107	21	—1 <i>5</i> 71	3 011	887	2 327	—19	2 436	1 677	170	67	7 379	2 293	143
IV	681	190	—433	4 053	3 363	6 983	57	7911	2 173	138	1 076	5 515	3 902	4 009
1989*														
1	—165	695	<u> —</u> 141	5 951	2 199	8 009	42	8 581	3 173	-372	1 395	1 057	5 253	3 328
II	176	-241	<u>—1 197</u>	1 491	2 951	3 245	-22	3 158	1 785	430	543	3 160	2918	240
H	484	87	7 —93	2 452	1 938	4 297	—16	4 852	3 237	333	225	5 158	3 953	899
IV	858	7	–423	4 765	3 766	8 108	75	9 048	3 705	-204	771	—597	3 675	5 373
1990*		904	5 241	9 OF0	10.260	20 072	104	21 500	1 004	204	EO3	2 407	2 290	18 319
ı	505	895	5 —341	8 U52	12 362	20 0/3	126	21 599	1 984	296	593	3 407	3 280	18

During period	Basic balance	Short- term capital	Import liabil- ities	Imports of short- term	term capital	Export receiv- ables	Exports of short-		Short- term capital	Overall balance excl.	central	Of w	hich:
		imports of au- thorized banks	and prepay- ments related to ex- ports	capital (16+17)	of au- thorized banks	and prepay- ments related to imports	term capital (19+20)	ind.	account (18- 21+22)	reserve move- ments (15+23)	bank's foreign ex- change reserves (26+27)	Convert- ible reserves	Tied reserves
	15	16	17	18	19	20	21	22	23	24	25	26	27
1985 1986	65 2 38		0 350 9—3 796	7 240 2 222			2 05: 9 84	5 —2 092 1 2 075	3 093 5 544	3 744 7 930	-3 744 7 930	4 —3 <mark>72</mark> 9 0 11 678	—15 —3 748
1987	 614		4 —665	18 659			—7 52 6	5 —4 302	21 883		—15 <i>7</i> 3	5—17 817	2 081
1988	— 5 49		0 —399	10 55		-	6 614		5 674		—183		
1989	—12 16	0 518	5 1 437	6 622	2 2 641	1 167	3 807	7 3 384	6 199	<u>-5 961</u>	5 96	4 455	1 506
1987 IV	—1 40	5 —76	3—1 468	—2 23 0	—6 4 36	27	-6 410) —1 <i>47</i>	4 032	2 627	—2 62 2	7 —2 820	193
1988													
	—1 96		4—1 632			—692 400						1 —1 295	
)] 	—1 95 —4 27			14 094 1 269			4 419	3750	6 673	4 718 7 088	-4718 7088	3 —4 662 3 6 337	
IV	,	0 -876			4 -4 764				-2 488				
1989*													
1	46	3 670	7 —263	6 444	4 685	705	5 390	303	1 357	1 820	-1820	0 —1 372	<u>-449</u>
Ш	-572		8-2 086				5 35			<u>-1 174</u>	1 17		
Ш	—5 <i>7</i> 3					—121	4 62			<u> —2 987 </u>	2 987		
IV	—1 15	9—15 93	9 2700	—13 239	—11 439	—121	—11 560	782	2 461	<u></u> 3 620	3 620	3 873	—253
1990*		0 1/01	0 700	17.01	10.400		10.00		0.470	10047	1004	7 11 05	400
I	1331	9 1631	9 700	17 019	12 400	900	13 300	0 -6 191	-24/2	1084/	-10.84	7—11 254	408

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

End of			L	ng-term	liabilitie	s			Long-term assets					Long-
period	Direct	Port-		Long-ten	m cr edi ts	.	Other long-	Total (1+2+	Direct	Port-	Long- term	Other long-	Total (9+10+	term debt, net
	ment in Finland		govern-	Author- ized banks	Others	Total (3+4 +5)	term capital	6+7)	ment abroad	invest- ment abroad	export credits	term capital	11+12)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1985	3 274	6313	25 678	6 410	34 276	66 364	652	76 603	10 524	2 350	6 539	3 053	22 466	54 137
1986	4 892	7 992	26 292	11 992	32 044	70 330	739	83 953	13 727	4 697	5 649	3 685	27 758	56 195
1987	5 285	6 382	27 861	17 365	33 088	78 314	830	90 810	16 651	7 131	5 240	6 607	35 629	55 181
1988	6 438	6 848	26 011	27 427	41 787	95 226	915	109 427	24 562	8 478	6 686	8.543	48 269	61 158
1989*	7 738	8 556	23 118	39 946	51 211	114 276	994	131 564	35 7 51	8 665	9 501	9 303	63 220	68 344
1987														
IV	5 285	6 382	27 861	17 365	33 088	78 314	830	90 810	16 651	7 131	5 240	6 607	35 629	55 181
1988														
ı	5 340	7 406	26 637	17 594	35 883	80 114	919	93 779	17 730	8 031	5 248	7 171	38 180	55 599
H	5 664	6 471	28 390	20 464	38 232	87 084	877	100 096	21 168	8 170	5 685	7 701	42 724	57 372
Ш	5 768	5 557	26 991	23 697	39 248	89 935	858	102 118	22 852	8 340	5 787	8 111	45 090	57 028
IV	6 438	6 848	26 011	27 427	41 787	95 226	915	109 427	24 562	8 478	6 686	8 543	48 269	61 158
1989*														
ı	6 233	7 833	25 357	32 799	43 289	101 448	957	116 471	25 355	8 106	8 025	9 579	51 065	65 406
II	6 421	7 881	24 178	34 097	46 669	104 943	935	120 180	28 044	8 536	8 674	9 784	55 038	65 142
Ш	6 740	8 258	23 893	36 200	48 032	108 124	919	124 041	30 773	8 869	8 830	9 922	58 394	65 647
IV	7 738	8 556	23 118	39 946	51 211	114 276	994	131 564	35 751	8 665	9 501	9 303	63 220	68 344
1990* I	8 036	9 451	21 920	44 907	62 177	129 006	1 120	147 613	37 264	8 961	9 894	9 675	65 794	81 819

	Bank of Finland's short- term liabil- ities		Trade credits and	Total	Bank of		_		term	net	service	Of	service
	m 105	of author- ized banks	other La- bilities	+17)	Finland's short- term assets	Short- sterm assets of author- ized banks	Trade credits and other assets	+21)	liabil- ities, net (18-22)	(14+23)		which: repay- ments	ratio
	15	16	17	18	19	20	21	22	23	24	25	26	27
1985	4 070	51 374	17 474	72 918	25 183	36 208	18 450	79 841	6 922	47 215	11 287	4 808	10.5
1986	3 455	56 881	14 483	74 819	16 613	46 141	19 279	82 034	— 7 215	48 980	13 462	6 018	13.0
1 98 7	3 362	73 132	16 898	93 392	31 134	38 798	18 060	87 993	5 400	60 581	14 203	6 5 1 6	13.1
1988	3 341	83 828	15919	103 088	32 037	44 768	20 830	97 635	5 452	66 610	11 760	3 750	9.7
1989*	3 558	89 013	19 351	111 922	25 113	47 409	22 874	95 395	16 527	84 871	11 405	1 255	8.7
1987													
IV	3 362	73 132	16 898	93 392	31 134	38 798	18 060	87 993	5 400	60 581	4 236	2 392	15.0
1988													
I	3 467	79 633	14 053	97 153	33 515	41 764	18 861	94 140	3 013	58 612	2 416	378	8.8
11	3 1 <i>77</i>	91 364	14 577	109 118	39 025	46 127	1 <i>7</i> 560	102 711	6 407	63 779	2 779	788	9.3
III	3 539	90 827	17 297		32 750	49 532	20 090	102 372		66 319	3 812		
₩	3 341	83 828	15 919	103 088	32 037	44 768	20 830	97 635	5 452	66 610	2 752	324	8.0
1989*													
I	3 278		16771		33 376		21 539	104 368		71 622	2 337		
11	3 136	100323			32 142	54 101	23 415	109 658			4 563		
	3 9 1 9		16 731		29 839	58 848	23 541	112 228		79 021	3 226		
IV	3 558	89 013	19 351	111 922	25 113	47 409	22 874	95 395	16 527	84 871	1 279	—1 652	3.5
1990° I	4 036	105 201	18 909	100.07/	35 895	59 809	25 257	120 961	7 315	89 134	4 688	3 2 053	3 14.:

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

End of period		Long-	term liabili	ties			Lon	g-term ass	ets		Long- term
	Corporate sector	Financial institu- tions	Central govern- ment	Local govern- ment	Total (1+2+ 3+4)	Corporate sector	Pinancial institu- tions	Central govern- ment	Other	Total (6+7+8 + 9)	liabil- ities, net (5-10)
	1	2	3	4	5	6	7	8	9	10	11
1985	35 709	13 980	26 330	585	76 603	17 102	3 131	1 955	279	22 466	54 137
1986	36 243	20 169	27 031	509	83 953	19 209	5 721	2 309	520	27 758	56 195
1987	34 876	26 734	28 691	511	90 810	22 517	9 740	2 653	719	35 629	55 181
1988	40 875	41 127	26 926	499	109 427	31 168	12 977	3 101	1 024	48 269	61 158
1989*	50 292	56 584	24 112	575	131 564	42 127	15 070	3 651	2 372	63 220	68 344
1987											
IV	34 876	26 734	28 691	511	90 810	22 517	9 740	2 653	719	35 629	55 181
1988											
1	37 623	28 095	27 556	506	93 779	23 808	10716	2 851	806	38 180	55 599
II	38 856	31 463	29 267	513	100 096	27 482	11 455	2 887	901	42 724	57 372
	38 060	35 695	27 849	516	102 118	29 354	11 830	2 938	968	45 090	57 028
IA	40 875	41 127	26 926	499	109 427	31 168	12 977	3 101	1 024	48 268	61 158
1989*											
i .	41 662	47 978	26 314	515	116 471	32 212	14 288	3 299	1 266	51 065	65 406
11	43 121	51 447	25 113	501	120 180	35 327	14 978	3 331	1 402	55 038	65 142
IH	45 516	53 224	24 812	491	124 041	37 332	15 906	3 374	1 <i>7</i> 82	58 394	65 647
IV	50 292	56 584	24 112	575	131 564	42 127	15 070	3 651	2 372	63 220	68 344
1990*											
I	61 010	62 957	23 040	604	147 613	44 119	15 218	3 833	2 624	65 794	81 819

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

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

	_	_		Period	Vol	vme	Unit	value	Terms of
During period	Exports, f.o.b.	Imports, c.i.f.	Balance (1-2)		Exports	Imports	Exports	Imports	Trage
	1	2	3		1	2	3	4	5
1985	84 028	81 520	2 508	1985	115	104	138	135	102
1986	82 579	<i>77</i> 601	4 978	1986	116	110	135	121	111
1987	85 516	82 807	2 709	1 987	118	119	138	119	116
1988	92 902	92 118	784	1988	121	130	145	122	119
1989*	99 794	105 288	5 494	1989*	121	144	156	126	123
1989*1				1987					
May	7 681	8 635	 954	I76/	121	128	140	119	117
June	7 145	8 032	—887		121	120	140	117	117
July	7 485	7 424	61	1000					
Aug.	7 885	9 858	—1 <i>97</i> 3	1988	114	11/	1.40	120	117
Sept.	7 553	8 596	—1 043	I.	114	116	140		
Oct.	10 390	10 873	—483	<u>ii</u>	123	133	141	121	117
Nov.	9 431	9 920	489	HI	113	134	147	123	119
Dec.	7 978	9 018	— 1 040	IV	136	137	150	124	121
1990*				1989*					
Jan.	8 538	8 300	238	1	123	132	156	128	122
Feb.	8 037	8 110	 73	II	116	136	155	126	123
March	8 228	8 566	-338		112	141	155	126	124
April	9 050	9 953	—903	IV	134	163	1 <i>57</i>	126	125
Mary	9 038	9 474	-436						
summer m months of the Board	nonths 1989 the foreign tr of Customs i the cumulativ	the figures f ade statistics nay contain	ies during the for individual compiled by inaccuracies. 89 should not	1990* I	122	134	154	128	120

7.3 FOREIGN TRADE BY MAIN GROUPS, MILL. FIM

During period		Exports	by industri	es, f.o.b.			Import	by use of g	ods, c.i.f.	
periou	Wood	Paper industry	Chemical industry	Metal and engineering	Other	Raw materials	Crude oil,	Finished	l goods	Other
	products	products	products	industry products	goods	(excl. crude oil)		Investment goods	Consumer goods	goods
	1	2	3	4	5	6	7	8	9	10
1985	6 728	25 030	9 803	24 412	18 055	38 676	1 <i>7 77</i> 0	11 675	12 967	432
1986	6 947	24 600	7 8 <i>5</i> 8	26 115	17 059	39 292	10 070	12 898	15 069	272
1987	7 470	27 058	<i>7 77</i> 0	26 230	16 988	41 174	9 406	14 138	1 <i>7 47</i> 8	611
1988	7 567	30 474	8 450	29 225	17 186	45 790	7 533	17 274	20 828	693
1989*	<i>7</i> 418	32 520	8 843	32 684	18 329	51 726	8 283	20 462	24 056	<i>7</i> 61
1989*2										
May	669	2712	633	2 198	1 469	4 1 73	678	1 825	1 833	126
June	598	2 518	587	1 99 1	1 451	3 926	595	1 <i>7</i> 91	1 706	14
July	551	2 5 1 0	737	2 47 1	1 216	3 527	925	1 447	1 <i>517</i>	8
Aug.	477	2 978	668	2 379	1 383	5 009	862	1 748	2 189	50
Sept.	597	2 598	648	2 223	1 487	3 941	<i>75</i> 3	1 <i>77</i> 8	2 003	121
Oct.	<i>7</i> 19	2913	967	3 866	1 925	5 463	733	2 055	2 546	76
Nov.	700	2 859	844	3 318	1710	4 697	903	1 996	2 284	40
Dec.	618	2 552	684	2 805	1 319	4 326	796	1 867	1 963	66
1 99 0*										
Jan.	617	2 327	824	3 426	1 344	4 028	498	1 782	1 963	29
Feb.	667	2 447	829	2 597	1 497	4 053	428	1 <i>57</i> 9	1 984	66
March	623	2 803	753	2 6 1 6	1 433	4 199	483	1 666	2 180	38
April	682	2816	804	3 303	1 445	4 582	764	2 006	2 412	189
May	848	2 835	808	3 075	1 472	4 634	779	1 <i>77</i> 9	2 198	84

7.4 FOREIGN TRADE BY REGIONS AND COUNTRIES

Region and		Exports	, f.o.b.			Impor	ts, c.i.f.	
country	19	89*	14 Janu	990° ary—May	19	89*	1º Janu	990° ary—May
	Mill. FIM	Percentage share	MIR. FIM	Percentage change from the corre- sponding period on the previous year	MIII. FIM	Percentage share	Mill. FIM	Percentage change from the corre- sponding period of the previous year
	1	2	3	4	5	6	7	8
All OECD countries	75 493	75.6	33 666	6.4	82 767	78.6	35 952	9.6
OECD Europe	64 393	64.5	28 885	6.4	67 056	63.7	29 323	10.7
Of which: Austria Belgium and	1 175	1.2	464	1.4	1 295	1.2	580	18.2
Luxembourg Denmark France	1 947 3 257 5 453	2.0 3.3 5.5	918 1 366 2 897	5.6 2.9 26.6	2 932 3 290 4 418	2.8 3.1 4.2	1 242 1 465 2 088	5.3 20.6 28.0
Federal Republic of Germany	10 <i>7</i> 85 2 <i>9</i> 89	10.8 3.0	5 021 1 423	13.1 8.2	18 234 4 900	17.3 4.7	7 926 2 175	8.7 12.8
Italy Netherlands Norway	3 961 2 920	4.0 2.9	1 915 1 325	15.9 10.6	3 416 2 457	3.2 2.3	1 375 1 261	2.1 27.1
Spain Sweden Switzerland	1 831 14 314 1 680	1.8 14.3 1.7	893 6 395 737	19.2 6.7 9.3	1 129 14 314 1 829	1.1 13.6 1 <i>.7</i>	525 5 937 733	11.5 4.7 0.9
United Kingdom	11 958	12.0	4 574	—13.9	6 898	6.6	2 982	8.3
Other OECD	11 100	11.1	4 782	6.4	15711	14.9	6 629	4.8
Of which: Canada Japan United States	1 359 2 033 6 388	1.4 2.0 6.4	577 619 3 095	-3.9 -27.5 25.2	919 7 695 6 669	0.9 7.3 6.3	299 3 187 3 018	—16.1 0.4 14.4
CMEA countries	16 248	16.3	5616	—21.6	14 907	14.2	5 339	—5.9
Of which: Soviet Union	14 496	14.5	4 861	—24.7	12 152	11.5	4 194	-8.0
Developing countries	7 224	7.2	3 181	16.1	6612	6.3	2 697	0.2
OPEC countries	1 558	1.6	682	13.3	680	0.6	250	43.6
Other	5 666	5.7	2 498	16.9	5 932	5.6	2 447	-2.8
Other countries	829	0.8	428	16.6	1 002	1.0	415	6.8
TOTAL	99 794	100.0	42 891	2.3	105 288	100.0	44 403	6.8
Of which: EEC countries	43 869	44.0	19 790	5.9	46 903	44.5	20 703	12.0
EFTA countries	20 195	20.2	8 960	7.0	20 006	19.0	8 558	7.6

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

Period	Consur expen		Fix inve	ed stment	Change in stocks,	Domestic demand (1+2+3+4+5)	Exports	Imports	GDP (6+7-8)
	Private	Public	Private	Public	incl. statistical discrepancy	(1+2+3+4+5)			
	1	2	3	4	5	6	7	8	9
1985	181 664	68 218	69 599	10 453	1 <i>77</i> 2	331 706	98 173	94 893	334 986
1986	189 113	70 325	69 328	10 738	810	340 314	99 498	97 795	342 017
1987	199 981	73 458	72 761	11 654	2 246	360 100	102 127	106 568	355 659
1988*	209 956	75 190	81 839	11 446	9 062	387 493	105 897	118 405	374 985
1989*	218 243	77 255	93 766	11 174	14 533	414 971	107 815	128 440	394 346
1987									
IA	51 303	18 615	18 643	2916	1 641	93 118	24 350	27 308	90 160
1988*									
1	51 974	18 573	19 <i>7</i> 64	2 864	1 384	94 559	25 534	27 984	92 108
	51 869	18 <i>7</i> 27	19 975	2 729	3 052	96 351	26 727	29 789	93 290
m	52 767	18 887	20 975	3 008	2 203	97 839	26 324	30 760	93 403
IA	53 346	19 004	21 125	2 845	2 423	98 743	27 312	29 871	96 184
1989*									
I	53 819	19 108	21 785	2 728	3 243	100 682	27 750	31 660	96 773
H	54 819	19 235	23 326	2 787	2 301	102 470	26 314	30 529	98 255
Ш	54 839	19 385	23 816	2 769	3 7 05	104 513	26 614	31 826	99 301
IV	54 766	19 526	24 839	2 890	5 284	107 306	27 137	34 425	100 018
1990*									
•	54 175	19 <i>7</i> 05	24 063	2 946	3 529	104 418	26 930	32 622	98 726

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

Period	Total industry	Mining and quarrying	Manu- facturing	Wood and paper industries	Metal and engineering industries	Other manu- facturing	Energy and wate supply
	(100.0)	(1.6)	(87.9)	(16.5)	(30.0)	(41.4)	(10.5)
	1	2	3	4	. 5	6	7
1985	100.4	99.8	100.4	100.1	100.6	100.3	100.2
1986	101.9	102.8	102.0	102.3	103.0	101.2	100.4
1987	107.2	99.9	107.2	106.5	110.2	105.4	107.8
1988*	111.1	110.6	111.2	114.5	114.8	107.3	110.3
1989*	114.5	114.8	115.1	118.1	123.9	107.5	109.1
1989*							
May	115.4	113.9	116.0	122.1	122.6	108.7	111.6
June	115.3	116.5	115.5	117.6	124.2	108.2	11 <i>4.7</i>
July	114.3	109.8	115.6	116.8	125.0	109.1	105.8
Aug.	116.3	103.6	117.6	118.3	131.4	108.1	105.7
Sept.	115.0	110.2	116.3	118.6	126.6	108.1	103.7
Oct.	114.3	117.9	115.2	115.8	1 25.7	107.1	105.8
Nov.	114.4	116.2	115.2	117.6	124.1	107.4	110.7
Dec.	113.6	117.1	113.2	112.7	123.5	105.1	115.6
1990*							
Jan.	114.4	116.1	112.8	117.5	119.8	106.4	122.2
Feb.	114. <i>7</i>	121 <i>.7</i>	114.8	118. <i>7</i>	125.1	105.6	112.7
March	114.1	107.7	114.3	118.6	119.3	107.2	113.0
April	117.1	110.2	1 <i>17.7</i>	122.9	126.1	109.5	113.2
May	114.6	146.0	114.4	117.5	121.3	108.3	111.3

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

Period	Volume of wholesale	Volume of retail	Volume of construction		Of which:		Imports of investment	Monthly
	wnoiesaie trade	trade	of buildings	Residential buildings	Industrial buildings	Other buildings	goods	of GDP
	1	2	3	4	5	6	7	8
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986	104.7	102.5	94.0	88.4	99.9	99.5	105.2	102.0
1987	111.3	107.7	95.6	89.0	101.0	102.6	114.3	106.8
1988*	116.7	113.0	108.6	106.0	113.4	110.6	135.0	110.6
1989*	124.2	117.0	130.3	132.9	137.6	125.2	160.3	114.9
1989*								
April	121.4	117.4						113.9
May	128.2	119.8						115.0
June	121.1	118.2						115.2
July	120.6	116.5						114.8
Aug.	1 26.7	117.4						116.0
Sept.	124.9	117.5						115.5
Oct.	130.4	116.0						116.0
Nov.	130.9	117.7						116.4
Dec.	122.3	112.7						115.2
ı	121.2	116.8	118.6	120.5	127.9	110.2	134.0	113.6
11	123.6	118.5	128.5	131.2	148.8	119.6	167.4	1 14.7
111	124.1	117.2	128.0	133.0	137.7	138.4	151.7	115.4
IV	127.8	115.5	133.6	142.8	131.9	132.3	189.8	115.9
19 9 0*								
Jan.	127.9	112.9						116.3
Feb.	119.5	101.8						115.1
March	124.9	121.8						117.0
April	123.5	116.9	• •	• •	• •		• •	117.5
1	124.1	112.1	141.6	134.2	168.1	131.1	148.4	116.1

Period	Index of wage and		By sectors					Basic price index	By origin		Produc- er price index	by marketing		Building cost index
	salary earnings		Of which: Manufac- turing (SIC 3)	-	Local gov- ern- ment	Non- profit insti- tutions	price index	for domestic supply		import- ed goods		Export- ed goods	Home market goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986	106.9	106.6	106.2	106.6	107.8	107.2	102.9	97.0	98.6	91.0	96.5	96.7	96.4	104.3
1987	114.4	11.4.5	113.4	115.7	113.3	115.2	107.2	97.9	100.2	89.3	97.3	98.1	96.8	109.1
1988	124.7	124.6	122.7	128.8	122.0	128.0	112.6	101.5	104.9	89.1	101.7	103.8	100.7	116.3
19891	135.7	136.4	133.8	137.4	132.2	136.4	120.0	107.3	111.3	92.6	107.8	110.5	106.4	125.5
1989¹														
June							120.6	107.4	111.4	92.6	107.9	110.4	106.8	124.6
July							120.5	107.4	111.4	92.6	108.2	110.5	107.1	124.8
Aug.							120.6	107.6	111.8	92.3	108.3	110.6	107.3	125.8
Sept.							121.9	108.1	112.4	92.3	108.8	111.3	107.6	127.6
Oct.							122.4	108.7	113.2	92.5	109.2	111 <i>.7</i>	108.0	128.2
Nov.							122.3	108.9	113.5	92.3	109.1	111.2	108.0	128.6
Dec.	• •					• •	123.0	109.0	113.6	92.4	109.3	111.5	108.2	129.8
ı	131.7	131.6	129.4	135.0	129.7	134.4	116.9	105.4	108.9	92.5	105.8	109.4	104.0	122.3
Ш	135.8	136.8	134.3	137.0	131.4	136.3	119.7	107.3	111.1	93.1	107.6	110.1	106.4	124.6
111	136.2	137.3	134.3	137.5	131.7	136.4	121.0	107.7	111.9	92.4	108.4	110.8	107.3	126.1
IA	139.0	139.8	137.1	140.0	135.8	138.5	122.5	108.9	113.4	92.4	109.2	111.5	108.1	128.9
19901														
Jan.							124.8	109.4	113.9	93.0	109.4	111.5	108.4	130.4
Feb.							125.3	109.2	113.8	92.5	108.9	110.2	108.2	130.8
March							125.7	109.3	114.1	91.9	109.0	110.1	108.5	131.7
April							126.4	109.7	114.7	91.4	109.6	110.4	109.2	134.7
May							127.0	110.5	115.8	91.2	109.8	110.6	109.5	135.0
June	• •	• •	• •	• •	• •		127.3	110.5	115.8	91.3	109.9	110.4	109.6	135.2
1	142.0	142.4	139.8	145.5	138.4	143.8	125.2	109.3	113.9	92.5	109.1	110.6	108.4	131.0

¹ Preliminary figures for columns 1—6.

8.5 LABOUR, EMPLOYMENT AND UNEMPLOYMENT (seasonally adjusted figures)

Labour force	Labour force	Total employ-	By indust	rial status		By in	dustry		Unem- ployed	Unem- ployment
partici- pation rate among 15-74 year olds		(4+5) =		Wage and salary earners	Agri- culture and forestry	industry	Con- struction	Service industries		rate
					1000 pers	ons				%
1	2	3	4	5	6	7	8	9	10	11
69.2	2 566	2 437	361	2 076	280	597	178	1 380	129	5.0
69.1	2 569	2 431	359	2 071	266	589	185	1 391	138	5.4
68.6	2 554	2 423	372	2 051	251	569	184	1 419	130	5.1
68.4	2 546	2 431	368	2 062	238	553	188	1 452	116	4.6
68.7	2 559	2 470	367	2 104	218	561	199	1 492	89	3.5
69.1	2 574	2 486	370	2 116	223	577	189	1 496	89	3.4
68.7	2 557	2 471	361	2 110	216	565	198	1 492	86	3.4
68.6	2 557	2 467	368	2 099	206	562	195	1 504	90	3.5
68.3	2 543	2 451	347	2 104	199	567	194	1 491	92	3.6
68.4	2 551	2 463	364	2 099	216	574	205	1 468	87	3.4
68.6	2 558	2 485	379	2 105	219	557	201	1 507	73	2.9
68.7	2 561	2 473	373	2 101	213	563	194	1 504	88	3.4
68.9	2 568	2 478	369	2 109	213	566	208	1 491	89	3.5
68.6	2 557	2 487	377	2 110	221	563	202	1 501	70	2.7
69.0	2 573	2 492	370	2 122	216	559	212	1 504	81	3.2
68.4	2 549	2 476	358	2 118	212	551	207	1 507	73	2.9
68.5	2 557	2 469	363	2 106	214	560	201	1 494	88	3.4
68.5	2 556	2 481	358	2 123	203	549	215	1 513	<i>7</i> 5	2.9
	force participation rate among 15-74 year olds % 1 69.2 69.1 68.6 68.4 68.7 68.6 68.7 68.6 68.4 68.7 68.6 68.7 68.9	force participation rate among 15-74 year olds 1 2 69.2 2 566 69.1 2 569 68.6 2 554 68.4 2 546 68.7 2 557 68.6 2 557 68.6 2 557 68.6 2 558 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 568 68.7 2 561 68.9 2 558 68.7 2 561 68.9 2 558 68.7 2 561 68.9 2 558 68.7 2 561 68.9 2 558 68.7 2 561 68.9 2 558 68.7 2 561 68.9 2 558 68.7 2 561 68.9 2 557 69.0 2 573 68.4 2 549 68.5 2 557	force participation rate among 15-74 year olds 1 2 3 (6+7+8+9) (6+7+8+9) (6+7+8+9) (15-74) (2-56) (2-437) (2-56) (2-437) (2-56) (2-437) (2-56) (2-56) (2-437) (2-56) (2-5	force participar	Corce participation rate among 15-74 Year olds Year	Corce participation rate among 15-74 Year olds Y	Corce participation rate among 15-74 year olds Self-employed Self-empl	Torce participation rate among 15-74 year olds Self-grane Self	Participation rate among 15-74 Participation rate among 15-74	Participanticipant Participant Partici

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

During				Expenditure							
period	Direct taxes	indirect taxes	Other taxes and similar	Other revenue	Rev- enue before	Redemp-	Revenue before borrowing	Consump- tion	Trans- fers and sub-	Of v	which:
			revenue		financial trans- actions (1+2+3+4)	of loans granted by the state	(5+6)		sidies	Local govern- ment	Other de- mestic sectors
	1	2	3	4	5	6	7	8	9	10	11
1985	25 750	47 578	546	10 415	84 290	2 071	86 361	24 835	49 269	21 183	26 866
1986	28 079	51 733	323	11 640	91 <i>77</i> 4	2 209	93 983	26 354	52 845	23 215	28 131
1987	29 454	57 312	491	12 391	99 648	2 482	102 129	29 419	59 498	26 456	30 964
1988	35 339	66 348	473	13 629	11 <i>5 7</i> 89	2 557	118 346	32 266	65 502	29 757	33 108
1989	39 397	76 458	471	15 990	132 316	3 926	136 241	35 082	72 008	33 244	35 <i>7</i> 15
1989											
May	2 927	6 045	38	2 349	11 359	300	11 658	3 135	6 870	2 881	3 544
June	3 185	6 347	13	1 156	10 700	264	10 964	3 034	5 632	3 033	2 447
July	3 938	7 353	62	945	12 298	115	12 412	3 453	5 043	2 594	2 203
Aug.	3 211	6 455	119	1 065	10 850	488	11 338	2 780	5 768	2 685	2918
Sept.	3 172	5 474	46	1 354	10 046	210	10 256	2 792	5 100	2 659	2312
Oct.	3 108	6 457	46	969	10 <i>5</i> 81	101	10 682	2 950	6 203	3 001	3 058
Nov.	3 199	7 013	47	1 396	11 655	391	12 045	2 942	6 912	2817	3 944
Dec.	3 518	7 813	60	2 471	13 742	209	13 951	2 877	7315	2 752	3 831
1990											
Jan.	3 134	6 036	76	1 244	10 490	4	10 494	3 290	5 810	2 890	2813
Feb.	3 287	5 579	50	908	9 824	49	9 873	3 170	6 209	2717	3 181
March	3 073	6 407	50	1 151	10 681	87	10 768	3 274	6 215	3 084	2 937
April	4 165	5 511	53	2 051	11 <i>7</i> 80	1 567	13 347	3 412	6 995	3 337	3 129
May	3 107	7 593	62	1 650	12 412	337	12 749	3 547	6 974	2 982	3718

During period			Expenditure	Financial balance					
penod	Fixed invest- ment	Other expendi- ture	Expenditure before financial transactions (8+9+ 12+13)	Lending and other financial investment	Expenditure before redemptions of state debt (14+15)	Rev- enue sur- plus (5-14)	Net bor- rowing requirement (7-16)	Net bor- rowing	Cash sur- plus (18+19)
	12	13	14	15	16	17	18	19	20
1985	5 700	4 936	84 739	4 982	89 722	-449	-3 361	3 506	145
1986	6 111	5 058	90 368	4 913	95 281	1 406	—1 298	4 203	2 905
1987	7 089	4 732	100 738	5 672	106 410	-1 090	-4 280	7 604	3 324
1988	7 565	5 614	110 946	6 529	117 476	4 842	870	2 417	3 287
1989	8 393	5 343	120 826	7 566	128 390	11 490	7 852	—4 010	3 842
1989									
May	670	642	11 317	639	11 956	42	—297	189	-109
June	839	316	9 821	515	10 336	879	629	708	—79
July	619	—13	9 103	414	9 517	3 195	2 895	-151	2 744
Aug.	634	309	9 490	467	9 957	1 359	1 381	519	862
Sept.	740	649	9 282	470	9 752	765	505	—75	429
Oct.	<i>77</i> 9	671	10 604	617	11 221	-23	-539	-532	-1072
Nov.	758	193	10 805	503	11 308	850	<i>7</i> 37	—387	351
Dec.	1 107	—4 1	11 258	479	11 <i>7</i> 36	2 484	2 215	1 063	3 277
1990									
Jan.	371	590	10 061	673	10 <i>7</i> 35	429	—241	—1 141	-1382
Feb.	361	150	9 890	382	10 272	-66	-399	-365	—76 3
March	377	537	10 403	504	10 907	278	—139	949	1 08
April	392	639	11 438	2 021	13 459	342	-112	—1 216	-132
May	501	930	11 952	772	12 <i>7</i> 24	460	25	-802	—77

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
- Revised
- 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 + newexport credits + financing of domestic deliveries. Special deposits, net (Column 20) = deposits for investment and ship purchase + capital import deposits + export deposits + other liabilities to corporations - bonds - other claims on corporations.

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

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

Table 2.2 As from the beginning of 1990, the statistics on the forward exchange market are based on data on individual contracts against the Finnish markka as reported by banks (excluding Columns 5 and 6). The new statistical system covers all authorized banks and contracts. The rates of exchange used in the statistics are the forward rates on the contract date.

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

3 RATES OF INTEREST

Table 3.1 HELIBOR (<u>Hel</u>sinki Inter<u>b</u>ank <u>Offered Rate</u>) (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 vields for columns 3-7 once a week on the basis of the trading quotations of the Helsinki Stock Exchange. Monthly observations are the averages of weekly observations and annual observations the averages of monthly observations. Rates at issue on taxable public bonds and debentures (Column 8) are the average rates of interest weighted by issue amounts - in the case of government bonds by sales amounts - on ordinary bonds, debentures and other bonds (excl. zero coupon loans. bonds with equity warrants and convertible debentures) issued during the period.

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

4 RATES OF EXCHANGE

Table 4.1 The quotation of the noncommercial rate for the Belgian franc, BEL, was terminated on March 2, 1990. Since then there has been only one rate for the Belgian franc. As from the beginning of May 1990 the standard abbreviation is BEF. Prior to that date, the quotations given in Column 10 are those of BEC (the commercial rate). The time series for BEC and BEL are shown separately for the last time in the May 1990 issue of the Bulletin.

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 com- S25

prises 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). M₁ (Column 6) = notes and coin in circulation - till money held by banks + cheque and postal giro account deposits held by the pub-S26 lic. M_2 (Column 7) = M_1 + quasi-money (time deposits held by the public, incl. deposits with the Bank of Finland).

Table 5.4 Source: State Treasury Office. Foreign debt. Other bonds and debentures (Column 2) are so-called private placings. Long-term promissory notes (Column 3) are bank loans. Outstanding lending (Column 10) comprises the stock of central loans granted from the central government budget and from extra-budgetary funds. Cash funds (Column 11) comprise the cash funds held in central government accounting offices, funds held in cheque and postal giro accounts, as well as placements of central government cash funds. The main part of the latter is reserved for covering transferable allocations budgeted in previous years (for details, see the article "State Borrowing and Cash Management" by Pekka Laajanen and Pekka Saarinen in the August 1987 issue of the Bulletin). Transferable allocations amounted to FIM 8.1 billion at the end of 1988.

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

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

6 BALANCE OF PAYMENTS, FOREIGN LIABILITIES AND ASSETS

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

Table 6.2 Columns 1-8: Net change in long-term liabilities. Columns 9-13: Net change in long-term assets. Portfolio investment in Finland (Column 2) and abroad (Column 10): Secondary market transactions in securities and share issues. As from the June-July 1989 issue of the Bulletin, portfolio investment abroad (Column 10) also includes investments in longterm bonds and shares by Finnish authorized banks. These were previously included in short-term capital exports of authorized banks. Longterm 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 debtservice ratio (Column 27) = service charges on net foreign debt as a percentage of current account earnings.

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

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

7 FOREIGN TRADE

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

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

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

8 DOMESTIC ECONOMIC **DEVELOPMENTS**

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

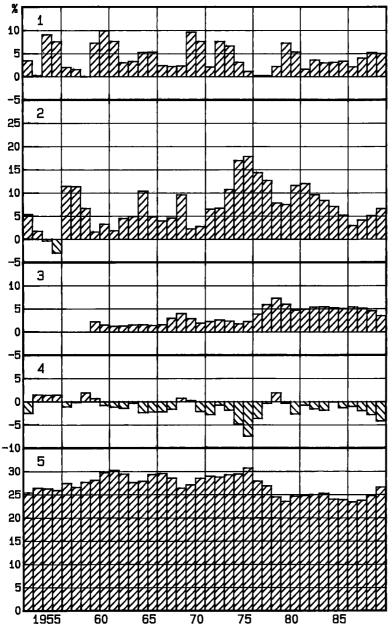
Table 8.3 The monthly indicator of GDP (Column 8) is weighted together from 11 readily available indicators of developments in output in various

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

Table 8.6 Source: Ministry of Finance.

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

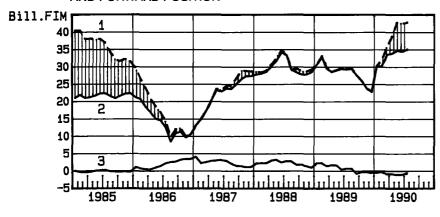
1. LONG-TERM INDICATORS



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

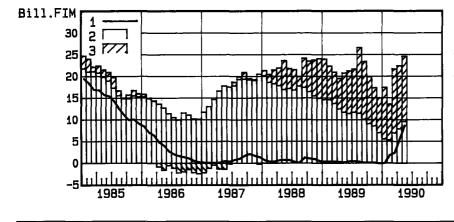
 5. Fixed investment, as a percentage of GDP

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



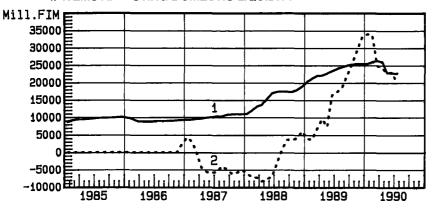
- Convertible foreign exchange reserves plus forward position
- Convertible foreign exchange reserves
- 3. Tied currencies

3. FORWARD MARKET



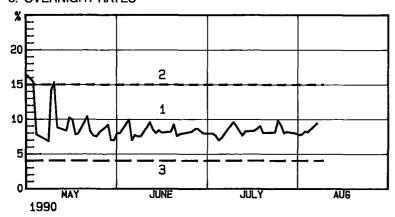
- Forward exchange purchased by the Bank of Finland from banks
- 2. Forward exchange sold by companies to banks
- 3. Forward exchange sold by foreign banks to banks

4. ITEMS AFFECTING DOMESTIC LIQUIDITY



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

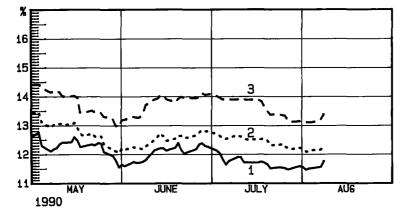
5. OVERNIGHT RATES



- Inter-bank overnight rate
 Call money credit rate
 Call money deposit rate

Daily observations

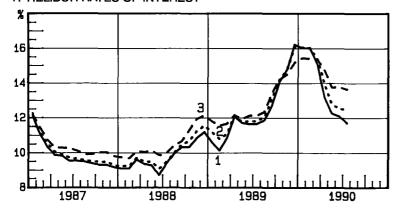
6. HELIBOR RATES OF INTEREST



- 1-month HELIBOR
- 3-month HELIBOR
 12-month HELIBOR

Daily observations

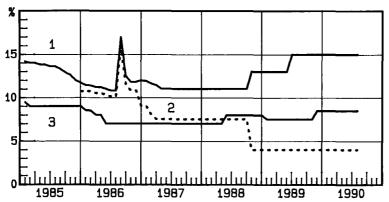
7. HELIBOR RATES OF INTEREST



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

Monthly averages

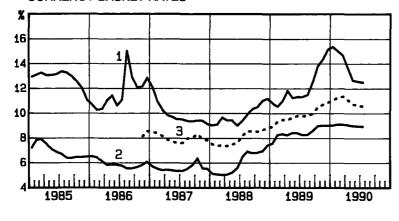
8. RATES OF INTEREST APPLIED BY THE BANK OF FINLAND



- 1. Call money credit rate
- 2. Call money deposit rate
- Base rate

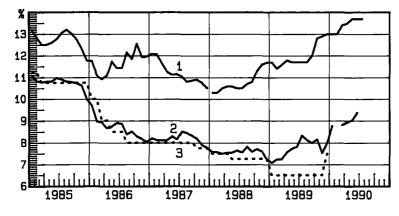
End-of-month observations

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



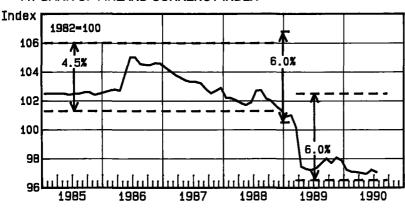
- 1. Covered Eurodollar rate
- 2. 3-currency basket rate (DEM 60 %, USD 30 %, GBP 10 %)
- 14-currency basket rate (Bank of Finland currency index weights)

10. RATES ON BONDS AND DEBENTURES



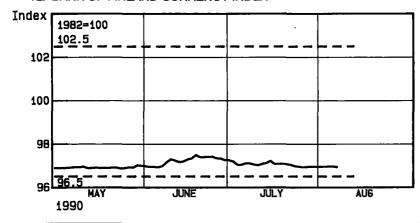
- Long-term (5-year) market rate (before 1988 rate on (3-6 year) fixed-rate debentures)
- 2. Rate on (9-10 year) taxfree government bonds
- Rate at issue on new 10year taxfree government bonds

11. BANK OF FINLAND CURRENCY INDEX



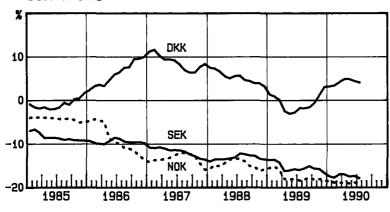
4.5 % and 6.0 % = fluctuation range of the index Monthly averages

12. BANK OF FINLAND CURRENCY INDEX



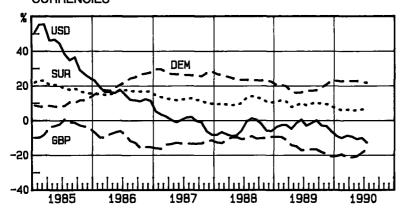
Daily observations

13. CHANGES IN THE EXCHANGE RATES OF SELECTED NORDIC CURRENCIES



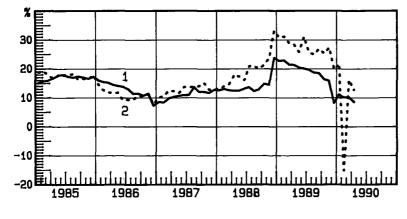
Monthly changes in markka selling rates calculated from the average rates for January 1982

14. CHANGES IN THE EXCHANGE RATES OF SELECTED MAJOR **CURRENCIES**



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

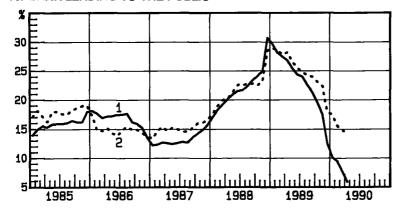
15. BANK DEPOSITS FROM THE PUBLIC



1. Regulated deposits 2. Total deposits

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

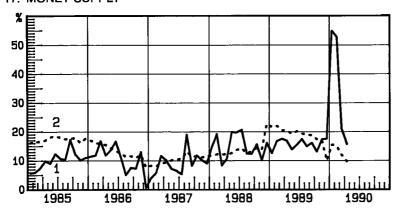
16. BANK LENDING TO THE PUBLIC



Markka lending Total lending

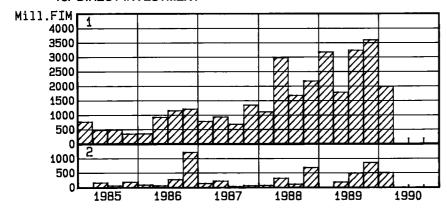
Change from the corresponding month of the previous year, per cent

17. MONEY SUPPLY



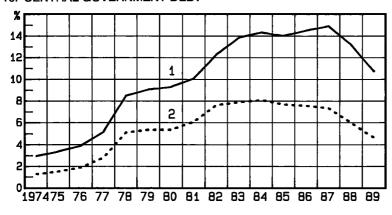
- Narrow money supply (M1)
- Broad money supply (M2) Change from the corresponding month of the previous year, per cent

18. DIRECT INVESTMENT



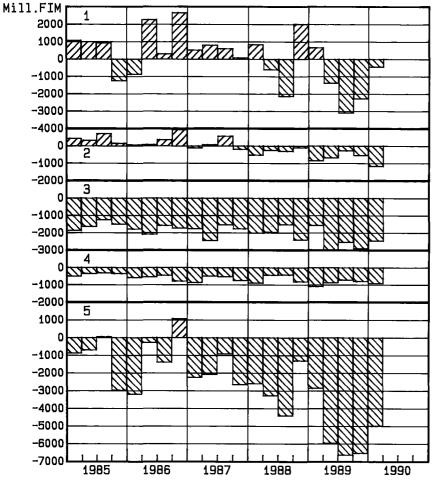
- Finnish direct investment abroad, net
- Foreign direct investment in Finland, net

19. CENTRAL GOVERNMENT DEBT



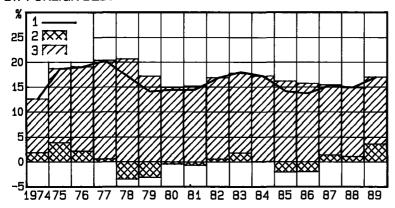
- 1. Total debt
- Of which: foreign debtAs a percentage of GDP

20. CURRENT ACCOUNT



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

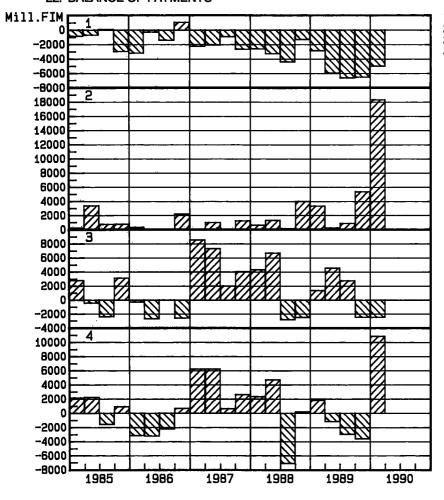
21. FOREIGN DEBT



- 1. Total foreign net debt
- 2. Short-term net debt
- 3. Long-term net debt

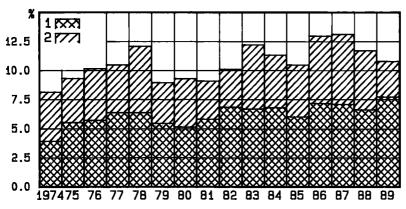
As a percentage of GDP

22. BALANCE OF PAYMENTS



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

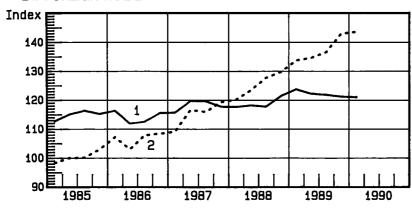
23. DEBT SERVICE RATIO



- 1. Interest payments
- 2. Redemptions

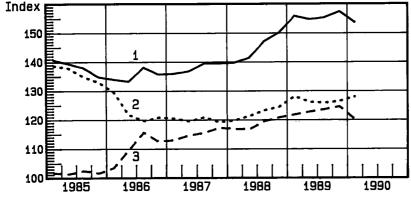
As a percentage of current account earnings

24. FOREIGN TRADE



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

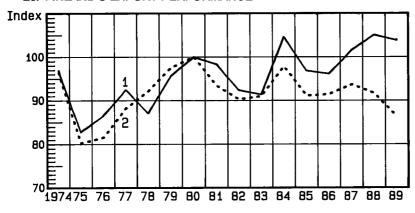
25. FOREIGN TRADE: PRICES AND TERMS OF TRADE



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

1980 = 100

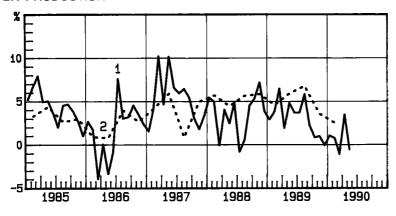
26. FINLAND'S EXPORT PERFORMANCE



- Value of exports to western countries in relation to exports of OECD Europe
 Volume of western exports
- Volume of western exports in relation to exports of OECD Europe

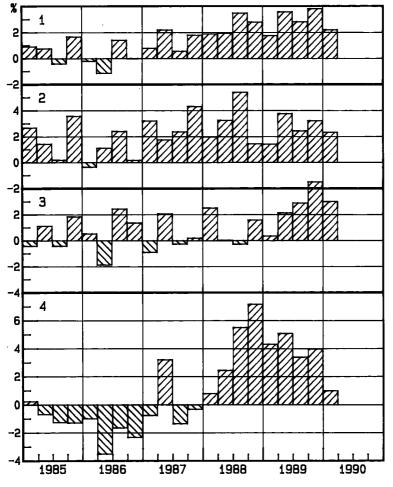
1980 = 100

27. PRODUCTION



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

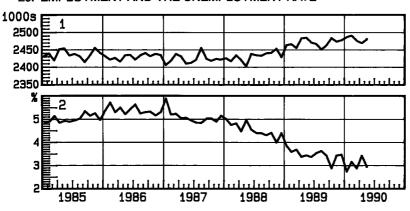
28. FIXED INVESTMENT



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

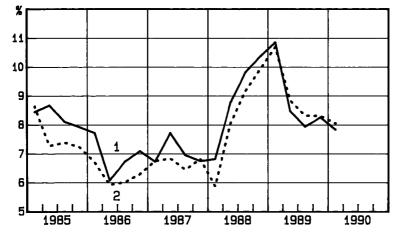
Volume changes calculated from four-quarter moving totals and shown as at the last quarter, per cent

29. EMPLOYMENT AND THE UNEMPLOYMENT RATE



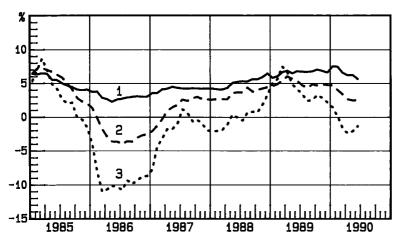
- 1. Employment, 1000 persons
- Unemployment rate, per cent

30. PRICES AND WAGES



- Index of wage and salary earnings, all wage and salary earners
- Index of wage and salary earnings, manufacturing workers

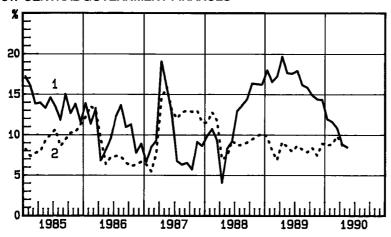
Change from the corresponding quarter of the previous year, per cent



- 1. Consumer price index
- 2. Wholesale price index
- 3. Import price index

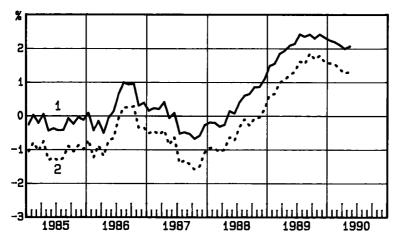
Change from the corresponding month of the previous year

31. CENTRAL GOVERNMENT FINANCES



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

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



- Revenue surplus (revenue less expenditure excl. financial transactions) (surplus = +)
- 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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