FINANCIAL MARKETS IN FINLAND

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PREFACE

In 1972, the Bank of Finland published a series of articles on financial markets in Finland. Later, in 1978, the articles were updated and republished in a revised edition.

Since then, fundamental changes have taken place in financial markets both in Finland and elsewhere. The need for a new edition has been felt for some years. Now a completely new series of articles is published, with the obvious risk that, being written in the middle of change, some of the material may soon become outdated.

The approach employed in the present publication differs from that in the previous editions. Detailed descriptions of different institutions have been given less attention, while the changes in the markets and in the transmission mechanism, the ongoing process of internationalization and the consequences of these developments for monetary policy have received more attention.

Though the articles examine Finnish financial markets from different angles, each of them can also be read independently. One of the articles (Koskenkylä) was published in the February 1986 issue of the Monthly Bulletin and is simply reproduced here. The other eight articles reflect the state of affairs as of November 1986.

In the first article, *Vesa Vihriälä* discusses financial markets in Finland from the point of view of the far-reaching changes that have occurred in the markets and the transmission mechanism during the past few years.

Antero Arimo and *Veikko Saarinen* describe the role of the Bank of Finland, outlining both the Bank's formal position as the country's central bank, and its role in economic policy. They also briefly discuss the position of the central bank as a financial institution.

Jyrki Laakso describes the institutions in the financial markets. The emphasis is on the banking sector, but an overview of the other institutions is also given. In addition, he examines the stock of credit by lenders and borrowers, housing finance and the securities market.

Esko Aurikko discusses the increased internationalization of Finnish financial markets, its causes and the implications for central bank policy. The problems posed by combining increased international mobility of capital with a stable exchange rate are also considered.

Jyrki Laakso and *Ralf Pauli* describe the internationalization of Finnish banking. Domestic banks first established a presence abroad in 1960s, but it is only in the 1980s that they have started to set up branches abroad. The first foreign-owned banks started operations in Finland in 1982.

Jussi Linnamo examines bank inspection in Finland, describing its methods and organization. He also deals with the problems and challenges emanating from the rapid changes in banking at home and abroad.

Hannele Luukkainen and *Kjell Peter Söderlund* give a macro-level analysis of saving and investment in Finland in 1960–1985. Major changes have taken place in sectoral savings and investment during this period, and the authors discuss the main factors behind these changes.

Heikki Koskenkylä discusses, on the basis of in-depth quantitative research, the effect of the rate of interest and other financial factors on investment in Finland. The analysis is based on data up to 1984, which means that many of the changes in financial conditions and regulations show up in the results only to a limited extent.

Finally, *Sixten Korkman* discusses the monetary policy of the Bank of Finland. He examines the instruments and goals of policy, and reviews the changes in the policy environment and in policy itself. He then goes on to describe the present planning framework for monetary policy in Finland and considers some of the problems which lie ahead.

FINNISH FINANCIAL MARKETS

by **Vesa Vihriälä**, Research Officer
Bank of Finland

Financial markets in most market economies have undergone far-reaching changes in the past decade. The main factors behind these changes have been rapid and sharply fluctuating inflation, marked shifts in sector financial balances, the internationalization of business and advances in information technology. However, the process of change in the financial system has varied from country to country, in part because of different starting points. The aim in this article is to describe the most important features of the financial system in Finland and the changes which have occurred in it over the past ten years.

SCALE AND PATTERN OF FINANCIAL INTERMEDIATION

The basic function of a financial system is to channel financial resources from economic units with a financial surplus to units with a financial deficit. Hence, the scale of intermediation obviously depends on the size of the financial balances of economic units. In addition, the volume of financial transactions is affected by, among other things, efforts by economic agents to diversify risks, differences in risk preferences between economic agents and the profitability of arbitrage transactions between different market segments.

The volume of financial transactions has grown at a relatively rapid rate in Finland. While total financial assets in the statistics for 1975 amounted to FIM 240 billion, the corresponding figure for 1983 was FIM 760 billion. The increase is notably faster than the growth of nominal GDP (218 % v. 164 %) (Table 1).

Such a rapid expansion in financial intermediation is not due to any fundamental increase in the financial balances of the four basic sectors into which the economy is normally classified - enterprises, households, the public sector and financial institutions. On the contrary, the financial balances of the first three sectors have clearly declined, while the surplus of financial institutions has remained at approximately the same level. In relation to GDP, the sum of the absolute values of the financial surpluses/deficits of these four sectors fell from 19.9 per cent to 9 per cent between 1975 and 1983.

Nor can the expansion in financial intermediation simply be ascribed to an increase in the net wealth of the economy. Rather, the explanation for the increase in the volume of financial transactions is to be found in efforts by economic agents to improve the structure of their assets and liabilities, an aim which has been facilitated by a decline in the relative

TABLE 1. SECTORAL DISTRIBUTION OF ASSETS AND LIABILITIES

	Assets				Liabilities				Net assets		
	1975	1983	Change	Change %	1975	1983	Change	Change %	1975	1983	Change
	bill. FIM				bill. FIM				bill. FIM		
Bank of Finland	9.3	27.9	18.6	200.0	6.8	20.0	13.2	193.0	2.5	7.9	5.4
Banks	60.0	210.6	150.6	251.0	59.9	209.0	149.1	249.0	0.1	1.6	1.5
Insurance institutions*	16.9	71.4	54.5	322.0	6.0	4.0	−2.0	−33.0	10.9	67.4	56.5
Other financial institutions	9.1	30.9	21.8	240.0	8.9	32.3	23.4	263.0	0.2	−1.4	−1.6
Government sector*	31.5	96.7	65.2	208.0	16.1	76.9	60.8	379.0	15.4	19.8	4.4
The public	78.9	204.6	125.7	159.0	127.8	352.6	223.8	175.0	−48.9	−148.0	−99.1
Foreign sector	34.3	121.8	87.5	255.0	14.5	69.1	54.6	376.0	19.8	52.7	32.9
Total	240.0	763.9	523.9	218.0	240.0	763.9	523.9	218.0	–	–	–

* Certain social security funds formerly included in the "government sector" were transferred to the sector "insurance institutions" in 1981.

importance of credit rationing. By simultaneously increasing their assets and liabilities – through arbitrage operations – economic units have evidently sought to obtain a better diversification of risks, to take advantage of various tax incentives and subsidies and to exploit differences in their relative positions in the credit market (differences in access to credit) etc. Sectorally, the biggest increases in assets and liabilities have occurred in the non-financial private sector (enterprises, households, non-profit institutions), conventionally referred to as "the public". However, in relative terms, the rate of growth in the assets and liabilities of this sector has differed very little from the rate of growth of GDP, and has thus been clearly below the overall average. By contrast, greater-than-average increases have been recorded for the assets and liabilities of banks, other financial institutions and the foreign sector and for the assets of insurance institutions and the liabilities of the public sector. Hence, the increase in financial transactions seems to have been concentrated in sectors other than that of the public.

Sector financial balances have undergone substantial changes since the mid-1970s. The sizeable surplus in central and local government finances has disappeared, and at present investment by the government sector roughly equals its saving. At the same time, the financial deficit of the household sector has decreased in a trendwise fashion and is now in approximate balance. The deficits of the corporate sector have varied quite sharply, but they, too, have declined on average from the level of ten years ago. The financial surpluses of financial institutions have remained substantial, primarily reflecting an accumulation in the funds of insurance institutions (incl. social security funds).[1]

TRADITIONAL FINANCIAL SYSTEM

The functions of a financial system are essentially the same regardless of time and place. Nevertheless, financial systems have functioned in quite different ways in different countries and at different times. There have been great variations in the range of instruments used in financial intermediation, the principles applied in allocating finance and the role and character of financial institutions.

One of the major characteristics of the financial system in Finland is the dominant role which financial institutions, and especially banks, play in financial intermediation. Other typical features are the prominence of financial instruments of the promissory note -type, the regulation of interest rates and certain important financial flows, such as capital imports and exports and bond issues, and the consequent importance of credit rationing in the allocation of finance. Money markets, which play an active role in many countries, have been almost entirely lacking in Finland.

The narrowness of the equity and bond market in Finland becomes apparent when the market value of the outstanding stock of securities is compared with, for example, the claims of financial institutions on the public or with GDP. In the case of both shares and bonds, these ratios are distinctly lower in Finland than in the other Nordic countries or in the United States. However, even these comparisons may give an exaggerated picture of the role played by shares and bonds in the allocation of finance in Finland. Because of the thinness of the secondary market (measured, for example, as the ratio of turnover to market value of shares), investors' opportunities to adjust their portfolios profitably in line with changes in market conditions have been more limited in Finland than in the other countries in the comparison (Table 2).

Interest rate regulation in Finland has been very comprehensive and fairly strict. Banks' deposit and lending rates have been subject to regulation by the Bank of Finland. Likewise, the lending rates of other financial institutions, such as insurance companies, have been controlled, as, too, have rates of interest on bonds and debentures. Although the exact form of,

[1] For a more detailed account of developments in sector financial balances see the article by Luukkainen and Söderlund in this publication.

TABLE 2. THE SIGNIFICANCE OF CAPITAL MARKETS IN THE NORDIC COUNTRIES AND THE UNITED STATES

	Finland	Sweden	Norway	Denmark	USA
Market value of the outstanding stock of listed securities as a percentage of financial institutions' claims on the public[1], 1983					
Shares	10.6	34.0	11.1	18.7	49.2
Bonds and debentures	5.9	68.3	23.7	108.0	31.2
Bonds and debentures issued by the private sector	1.8	4.2	8.4	65.2	8.0
Market value of the outstanding stock of listed securities as a percentage of GDP, 1984					
Shares	8.9	29.4	11.8	15.1	42.2
Bonds and debentures	5.7	63.0	21.5	120.3	29.9
Bonds and debentures issued by the private sector	1.8	4.6	7.7	68.7	8.1
Turnover of shares as a percentage of market value, 1984	9.2	30.6	37.8	2.1	50.0

[1] Includes domestic sectors other than the government sector and "other financial institutions".

for example, regulation of banks' lending rates has varied from time to time, most rates of interest on banks' financial claims were, in practice, administratively controlled up to the beginning of the 1980s. In addition, the level of regulated interest rates has been low. Indeed, banks' average lending rates were lower than the rate of inflation virtually throughout the 1970s. The average real rate of interest on bank deposits was therefore clearly negative.

As a rule, capital imports and exports have been subject to permission in Finland. Most long-term capital imports, as well as investments abroad, require the permission of the Bank of Finland. Short-term capital flows are permitted, provided that they are trade-related. Until recently, the regulation of capital movements has efficiently restricted borrowing abroad and interest arbitrage between Finland and other countries.

With interest rates kept low through administrative control and access to foreign finance efficiently restricted through regulation, the demand for finance has almost permanently exceeded the supply. Under such circumstances, availability of credit has assumed an important role in balancing supply and demand in financial markets and in the transmission of monetary policy measures. Close customer relationships have constituted the main criterion for obtaining credit. Since financial institutions have not been able to charge as high a rate of interest in individual contracts as customers have been willing to pay, they have had to resort to other means of earning profits. Bank deposits, which have been underpriced because of regulation, have served this purpose. Access to credit has been linked to borrowers' prior savings and the use of other banking services.

Similarly, the banks have played a prominent role in smoothing temporary fluctuations in economic units' liquidity. Given the almost complete absence of a money market, firms' short-term financial surpluses have tended to accumulate in cheque accounts and other bank accounts, while their short-term financial requirements have been met by an expansion of credit in the form of bills and cheque account overdrafts. Moreover, banks have evened out variations in their own liquidity positions through direct transactions with the central bank, rather than in the money market. There has been no need for an interbank market, since banks have been able to vary the volume of their central bank debt as desired.

There are several reasons for the predominance of financial institutions, especially banks, and hence of credit financing in general, but certainly the single most important factor is the preferential tax treatment of bank deposits in relation to other forms of investment, with the exception of government bonds. Rates of interest on bank deposits and government bonds held by households are exempt from tax in Finland, whereas other capital income is normally subject to tax. Because of tax exemption, bank deposits constituted the superior financial asset in conditions where the rate of inflation was low. Thus, in the postwar period up till the early 1970s, depositors, especially households, had no incentives to seek out other investment outlets. Consequently, there were no pressures from private sector investors for developing the capital market. On the other hand, the amount of private bond issues was restricted by official regulation of interest rates and other issue terms. Since, moreover, public sector deficits have not been large (in fact, the public sector has generally been a net saver), the outstanding stock of public sector bonds has not attained major proportions.

In the course of time, historical developments have also reinforced the barriers to an expansion in the capital market. Customer relationships established as a result of credit rationing have tied both borrowers and depositors to individual financial institutions, and thereby reduced their opportunities to channel investments to the capital market. In addition, interbank competition has (given the limited scope for price competition) focussed on services, and especially on the development of branch networks, thus further enhancing the competitiveness of bank deposits in relation to other types of investment. Moreover, the narrowness of the securities market and the thinness of the secondary market, in particular, have undoubtedly weakened the attractiveness of risk-bearing investments in shares and bonds in relation to bank deposits.

THE EMERGENCE OF UNREGULATED MARKET RATES

No major pressures on the established mechanism of allocating finance arose as long as inflation remained moderate in relation to regulated rates of interest. As late as the early 1970s, when practically all regulated real rates of interest were negative owing to inflation, the functioning of financial markets remained virtually unchanged. One reason for this was apparently the lack of readily available alternative investment outlets. In addition, the linking of access to credit to deposits implied by close customer relationships and the continuation of the tax exemption of deposits served to perpetuate the position of bank deposits as the predominant form of investment despite their poor yield. Naturally, given these circumstances, excess demand for credit increased, thereby further emphasizing the role of credit rationing in the allocation of finance.

In the latter half of the 1970s, persistently rapid inflation coupled with the relatively favourable income developments of many economic units led to increased pressures for the introduction of higher-yielding financial instruments. The main result of these pressures was a marked expansion in short-term lending between firms at unregulated interest rates. The bulk of this finance was probably channelled through the banks, albeit outside their balance sheets as trust department loans and deposits. Since it was evident that financial intermediation outside the scope of interest rate controls could not be checked by administrative means, the Bank of Finland judged it wise to seek to incorporate it in banks' balance sheets. This was achieved by relaxing the regulation of banks' average lending rates so that banks were allowed to pass through part of the cost of their unregulated funding to lending rates. Hence, the greater the amount of unregulated deposits recorded in their balance sheets, the higher the interest rate banks could charge on their lending. And, indeed, these deposits grew at a very rapid rate from May 1983 onwards. This development was also associated with a change in terminology: whereas finance intermediated through banks' trust departments and other unregulated short-term funds had previously been referred to as "grey money", from then on they were increasingly known as "market money".

The emergence of an unregulated market meant an important change in principle; for the first time during the post-war period, financial institutions were allowed to intermediate finance at market-determined rates, which were substantially higher than regulated rates. However, the expansion of the unregulated financial market was not confined merely to a rapid increase in the banks' unregulated deposits and a rise in banks' lending rates to close to market-clearing levels made possible by the "pass through" right. Of central importance was a simultaneous rapid increase in forms of lending outside the scope of traditional interest rate regulation. Apart from the intermediation of finance through banks' trust departments mentioned above, these channels include the provision of factoring, leasing and hire purchase services by bank-owned finance companies and purchases of corporate bonds and debentures. Foreign currency loans extended by banks were also outside official interest rate controls.

With the expansion of unregulated lending from 1982 onwards, there was a fundamental decline in the significance of the regulation of banks' lending rates. The banks were able to provide loan packages combining different kinds of credit, the average lending rate on which was not subject to regulation by the authorities. The commercial banking groups, in particular, were well placed to circumvent lending rate controls by channelling funds through their finance companies.

With the erosion in the predominance of lending rate regulation, there has been a major change in the way in which the volume and allocation of bank credit is determined. Unlike before, when in conditions of excess demand for credit lending rate regulation made it necessary to ration credit, the total volume of bank credit and its allocation are now also clearly dependent on demand. Furthermore, monetary policy is to a large extent transmitted through changes in interest rates, whereas formerly changes in monetary policy acted almost exclusively on the degree of credit rationing.

The changes in the financial markets have also resulted in a certain degree of market segmentation, with individual segments providing different kinds of financial services. Since the banks are able to collect the yield due under individual credit contracts directly, they find it less necessary to maintain long-term customer relationships on the same scale as before. On the other hand, the emergence of high-yielding investment outlets in the unregulated market has reduced the incentive of the public, and especially companies, to place funds at low rates of interest in tax-free bank accounts subject to interest rate regulation. This holds true at least for those economic agents which do not have any immediate need for credit to finance real investment. The prominent role played by customer relationships has also tended to diminish as a result of competition from foreign-owned banks, which have been permitted to operate in Finland since the beginning of 1982.

The four foreign-owned banks which have so far been established in Finland extend practically no long-term credit, specializing instead in the provision of international services to Finnish companies and also operating in the money market. Hence, from the outset, they have had no need to compensate for the low return on lending by exorbitant pricing of other services. This and tougher competition in general have resulted in a fall since 1981 in the fees charged to companies for banking services. This has been particularly evident in banks' earnings from foreign exchange dealing.

The weakening in the links between different market segments has not, however, resulted in perfectly competitive pricing for financial services. The banks have maintained their dominant position in the provision of various kinds of financial services, and it is clear that the fees charged to customers for various financial services are still to a large extent determined on the basis of the "overall customer relationship".

ONLY A PARTIAL CHANGE

Unregulated finance and the reduced role of interest rate regulation have undoubtedly had a major impact on the functioning of financial markets in Finland. The price of credit is now typically determined by market forces and companies can also invest in instruments bearing market rates of interest. However, "market orientation" is partial in several respects. One indication of this is the limited role which the capital market still plays. Another is the absence of a secondary market for short-term instruments. In addition a large proportion of financial assets, i.e. tax-free deposits, remain entirely untouched by market forces.

Regulation and the interbank agreement on interest rates still determine the rates paid on tax-free deposit accounts, the main holders of which are households. The law on the tax exemption of deposits, which requires that uniform terms are applied to the accounts of at least two different bank categories (commercial banks, savings banks, cooperative banks and Postipankki), has impeded product development and effectively eliminated deposit rate competition. Whereas previously tax exemption placed bank deposits in a superior position as investment outlets, the absence of interest rate competition in the present conditions limits depositors' chances to earn the kind of returns that, for example, companies have earned on their investments in the unregulated market. Moreover, banks' interest rate margins have widened along with deregulation. In part, the low level of deposit rates has been compensated to depositors in the form of "underpriced" loan facilities on the basis of established customer relationships. Habit and the limited range of instruments in the capital market have also guaranteed the continuing popularity of bank deposits. Nor should one underestimate the fact that the positive real rates of interest which the most common time deposits have borne in recent years may seem fairly satisfactory to many households.

The past few years have witnessed a marked increase in activity in the capital market. Volumes of both shares and bonds and debentures issued in the domestic market have grown at a brisk rate and trading has also picked up substantially in the secondary market. Similarly, there has been a rapid increase in the amount of bonds and debentures issued abroad by financial institutions and companies. A contributory factor to the expansion of the securities market has been the capital income deduction introduced in taxation from 1982. There are, however, other factors of a more transitory nature which have swelled the growth figures, and hence volume increases alone may give a somewhat misleading picture of the change in the role of the capital market.

A large proportion of the growth in issue and turnover volumes is attributable to the issue of securities by financial institutions and the public sector. Moreover, for example, the major part of the debt instruments issued by companies have been private placings subscribed by a single financial institution, the main purpose of which has apparently been to avoid interest rate regulation or stamp duty. The dramatic growth in early 1985 in public issues of corporate debentures and the concurrent increase in the turnover of bonds and debentures on the Stock Exchange were associated with capital imports by firms which took place through the sale of these securities abroad. Underlying these transactions, which were prohibited by the Bank of Finland in June 1985, was a large interest rate differential between Finland and the rest of the world. Indeed, it would seem that the increased activity in the capital market is due more to other factors than to the fact that the corporate sector has clearly increased its borrowing from other domestic sectors through the capital market (Table 3).

Despite the rapid growth in volumes in the unregulated market for short-term funds, the institutional framework and the range of instruments in the market remain fairly undeveloped. Most of the funds channelled into the unregulated market are placed as deposits with banks, either as a non-negotiable deposit instruments of varying maturities and on varying terms or as trust department deposits. Certificates of deposit issued by banks have not gained widespread popularity, while companies have only just recently begun to issue commercial paper. Since, moreover, the issue of short-term paper by the central government, contrary to the practice in many other countries, is of little significance, the market still lacks homogenous instruments in the volumes necessary for a well-functioning secondary market.

TABLE 3. THE FINNISH CAPITAL MARKET, 1980—1985

Bonds and debentures, bill. FIM

	Issues in Finland: Total issues, All	Issues in Finland: Total issues, Public issues	Issues in Finland: Issues by companies, All	Issues in Finland: Issues by companies, Public issues	Turnover on the Stock Exchange: All bonds and debentures	Turnover on the Stock Exchange: Debentures and "other bonds"
1980	4.9	2.8	0.3	0.0	0.3	0.0
1981	4.5	2.7	0.3	0.1	1.0	0.1
1982	7.8	3.6	1.3	0.2	2.4	0.2
1983	12.9	5.0	2.0	0.4	2.4	0.7
1984	14.9	7.2	2.6	0.5	5.0	3.1
1985	22.0	14.5	4.8	3.1	9.0	6.1

Shares, bill. FIM

	Domestic issues by listed companies[1]: All	Domestic issues by listed companies[1]: Non-banks	Turnover on the Stock Exchange[2]: All	Turnover on the Stock Exchange[2]: Non-banks
1980	0.4	0.3	0.4	0.3
1981	0.1	0.1	0.4	0.3
1982	0.9	0.6	0.7	0.6
1983	0.9	0.3	1.4	1.2
1984	2.3	1.1	2.6	2.2
1985	1.0	0.8	3.1	2.7

[1] New risk capital (new issues and capital surplus); does not include bonus issues.
[2] Includes subscription rights.

DETERMINATION OF INTEREST RATES IN "DUAL-RATE" MARKETS

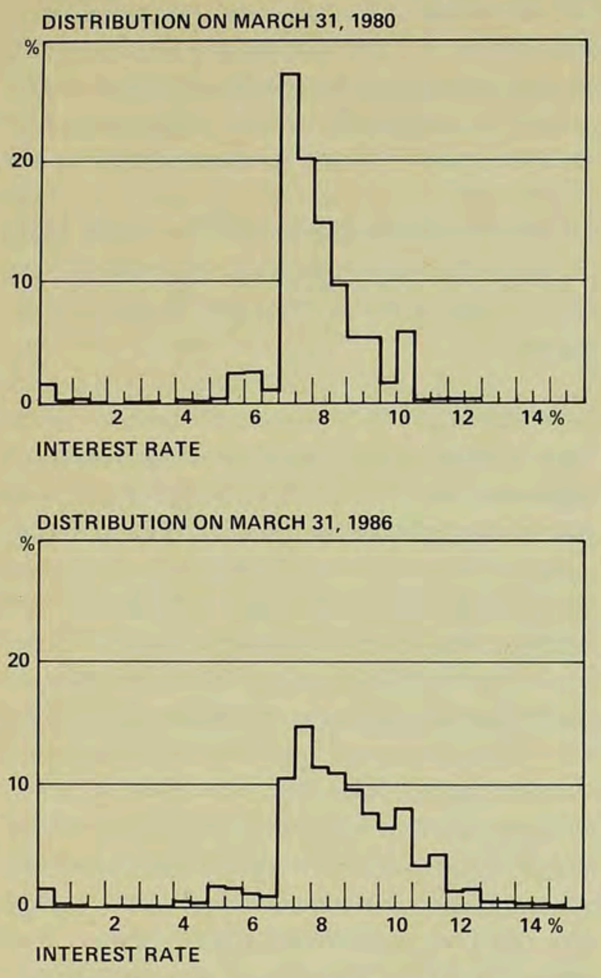
As is evident from above, the essence of the recent changes in financial markets in Finland is a change in the manner in which interest rates are determined. Where formerly practically all rates of interest were set administratively, many rates are now determined on the basis of market forces. Nevertheless, the process by which interest rates are determined is not particularly clear-cut, since the market still includes some regulated segments.

At present, the rates of interest on the banks' tax-free deposits are regulated. The banks are required to adjust these interest rates, in coordination with each other, as stipulated in the law on tax exemption, in line with changes in the Bank of Finland's base rate. The regulation of banks' average lending rates was finally abolished on July 31, 1986. However, the Bank of Finland continues to regulate rates on loans granted prior to this date; as a rule, these rates may be adjusted only in line with changes in the base rate. Moreover, the Bank of Finland has recommended that new long-term loans should bear a fixed rate of interest or a rate which is linked to the base rate. The central bank has decided that it no longer wishes to interfere in the banks' pricing of short-term credits. So far, it has been common in these contracts to link the interest rate to the Bank of Finland's call money rate, which has become the key reference rate in the money market.

Until recently, the structure of banks' interest rates was also subject to a fairly high degree of regulation. Apart from controlling banks' average lending rates, the Bank of Finland set an upper limit for rates on individual loans. At the end of 1985, when the upper limit on banks' lending rates was last applied, it was 13.5 per cent. This practice was gradually abandoned, and since the beginning of 1986 no restrictions have been imposed on the distribution of interest rates. The Bank of Finland does, however, continue to issue recommendations on the level of interest rates to be applied to housing loans. The relaxation of both average and the maximum lending rate controls has been reflected in the interest rate structure of lending subject to regulation. The dispersion of lending rates has clearly widened, and particularly the share of credit at high rates has risen (Chart 1).

As the term "market money" implies, the rate of interest on unregulated finance is determined according to supply and demand. In practice, however, since the spring of 1984 (when the interest rate cartel which the banks had maintained for about six months collapsed) the unregulated rate has closely followed the Bank of Finland's call money rate. This is due to the fact that the Bank of Finland has applied a very flexible rule in its intervention in the call money market: it has supplied credit without limit and been willing to receive deposits without limit at a constant rate of interest. Up till the end of 1985, the same rate of interest was applied to both call money credits and call money deposits. Since the

CHART 1. DISTRIBUTION OF INTEREST RATES ON COMMERCIAL BANK CREDITS[1]



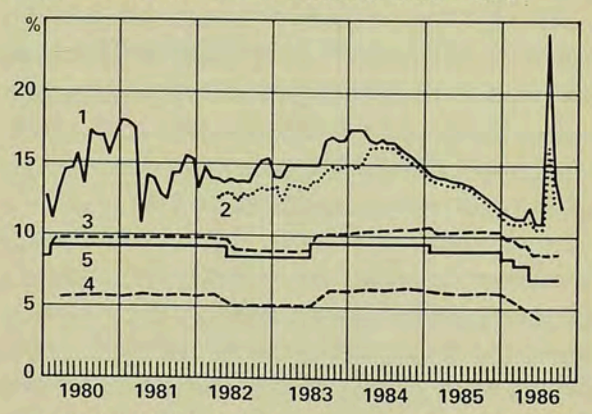
1) Adjusted to correspond to a base rate of 7 per cent

beginning of 1986, the Bank of Finland has paid a slightly lower rate of interest on deposits than it has charged on call money credits. This change was motivated by the Bank of Finland's desire to promote the development of an interbank market which would serve as the primary market for evening out variations in banks' liquidity positions.

The interest rate controls applied to financial intermediation outside the banking sector have also been eased to a large degree. Among other things, the linking of insurance companies' lending rates to the base rate was abolished in May 1986. On the other hand, the interest rates charged on credits granted under special financing schemes are not determined according to market forces. The significance of the finance extended to the public under these financing arrangements, such as, for example, those operated by the Regional Development Fund, various government departments and the Bank of Finland, rests mainly on the low interest rates which these credits bear. Also subject to regulation are many rates of interest applied to credits which fall under the central government's interest subsidy schemes. Likewise, the rates of interest applied to credit granted under the domestic suppliers' credit scheme, which is partly financed by the banks and partly by the Bank of Finland, are subject to regulation.

In financial markets where regulated rates exist side by side with unregulated rates, there are bound to be opportunities for interest arbitrage between the two segments. Economic agents who have access to credit at low interest rates (because of established customer relationships, government-subsidized credit or capital imports), seek to exploit this opportunity by reinvesting funds in the unregulated market. This has given rise to fairly extensive arbitrage operations, which, apart from swelling monetary and credit aggregates, have to some extent tied up resources in the financial system. However, no great loss in efficiency is involved. Moreover, with deregulation and a fall in the level unregulated rates, the "duality" of the system has recently diminished (Chart 2).

CHART 2. RATES OF INTEREST, 1980 - 1986



1. CALL MONEY RATE (MARGINAL RATE UNTIL MARCH 1984)
2. RATE OF INTEREST ON NEW CERTIFICATES OF DEPOSIT ISSUED BY COMMERCIAL BANKS
3. COMMERCIAL BANKS' AVERAGE LENDING RATE
4. COMMERCIAL BANKS' AVERAGE DEPOSIT RATE
5. BANK OF FINLAND'S BASE RATE

THE BANK OF FINLAND

by **Antero Arimo**, Head of Office
and **Veikko Saarinen**, Head of Office
Bank of Finland

THE POSITION AND FUNCTIONS OF THE CENTRAL BANK

The Bank of Finland was founded in 1811, two years after Sweden, on losing the war against Russia, had ceded Finland to Russia and Finland had been incorporated into the Russian Empire as an autonomous Grand Duchy. In 1868, the Bank of Finland was placed under the supervision of the Estates (the Diet); prior to that, the Bank had been subordinate to the Senate (the Government). Significant for its development into a fully-fledged central bank was the fact that Finland obtained her own monetary unit, the markka, in 1860 and that the Bank of Finland was granted the sole right to issue banknotes in 1886.

When Finland became independent in 1917, the Bank of Finland's position as the central bank and a bank under the supervision of the Parliament was confirmed in the Constitution (1919) and in the Rules for the Diet (1928), which are fundamental law in Finland. The Regulations for the Bank of Finland, which were passed by Parliament according to normal legislative procedure, entered into force in 1925. These Regulations and the many amendments subsequently made to them define the administrative bodies, functions and the basic rules of operation of the Bank.

The Bank of Finland is a public institution and as such part of the machinery of government. It is independent of the central administration, being a separate administrative and financial unit. For example, the connection between the Bank of Finland and the State Budget arises from the fact that part (generally half) of the Bank's annual profit is entered as revenue to the State.

ADMINISTRATIVE POSITION

The administration and management of the Bank are superintended by the Parlamentary Bank Supervisors, of whom there are nine. The Bank Supervisors are elected by Parliament for one parliamentary period at a time so that their party affiliations reflect the relative strength of the different parties in Parliament. At the same time, three of the Bank Supervisors are appointed members of the so-called Council of Bank Supervisors. The Bank Supervisors elect a Chairman and a Vice-chairman for themselves from among the three members of the Council. The Council of Bank Supervisors prepares the matters to be dealt with by the Supervisors. A Bank Supervisor does not necessarily have to be a member of Parliament. A Bank Supervisor who is appointed to be a member of the Government is obliged to resign from his post as a Bank Supervisor.

The tasks of the Bank Supervisors are defined in the Regulations for the Bank of Finland. More detailed rules on the supervision of the Bank of Finland are set forth in the Rules approved by Parliament for the Bank Supervisors. The decisions reserved for the Bank Supervisors include, inter alia, the determination of the Bank of Finland's base rate and other rates of interest applied by the Bank and the limits on these rates. They also decide on borrowing abroad by the Bank of Finland and the terms of such borrowing, confirm the principles according to which the Bank's financial statements are prepared, appoint the Bank's directors and branch office managers and deal with matters involving remuneration of Bank staff. Under the Currency Act, the Bank Supervisors are also empowered to propose changes in the external value of the Finnish markka to the Government. In addition, the Bank Supervisors are obliged to submit an annual report on the operations of the Bank of Finland to the Parliamentary Banking Committee.

The Parliamentary Banking Committee deals with matters concerning the Bank of Finland which come before Parliament. Each year, it presents a report to Parliament on the administration and state of the Bank. The Banking Committee makes proposals as required and prepares Government bills to be submitted to Parliament concerning changes in the Regulations for the Bank of Finland, the Rules for the Bank Supervisors and other provisions pertaining to the Bank of Finland.

The Board of Management of the Bank of Finland comprises the Chairman (the Governor) and a maximum of five other Members, all appointed by the President of Finland on the proposal of the Bank Supervisors. However, the President is not bound to follow the Bank Supervisors' suggestions. The President may dismiss a Member of the Board of Management, if it is considered to be in the public interest.

The Board of Management decides on all matters which have not been expressly entrusted to the Bank Supervisors. The Bank Supervisors normally meet at least once a month. The Bank's wide range of economic policy duties and the Board's authority to make decisions on many important central bank policy issues accord the Board of Management a central role in the Finnish economy. The independent position of the Board is further underlined by the manner in which the Members of the Board are appointed and the fact that they are appointed for an indefinite period and not, as is the case in most other central banks, for a fixed term.

The central bank's independence of the Government tends to be enhanced by the fact that the members of its highest executive bodies are appointed by Parliament or the President and not by the Government. In this respect, the Bank of Finland is unique among the Nordic countries and somewhat of a rarity in the world as a whole.

FUNCTIONS

The Bank of Finland has the sole right to issue banknotes in Finland. Banknotes are manufactured by the Bank of Finland Security Printing House in its works at Vantaa near Helsinki. The note issue constitutes part of the maintenance of the currency supply, in which the other banking institutions cooperate with the Bank of Finland. Coins are also put into circulation by the Bank, but are struck at the Finnish Mint, which is subordinate to the Ministry of Finance.

Under Finnish law, the central bank is the country's main foreign exchange authority. It manages Finland's official foreign exchange reserves and quotes the exchange rates for the markka against the most important foreign currencies. The Bank of Finland participates actively in the foreign exchange market and is responsible for keeping the currency index used to express the external value of the markka within the limits set for it by the Government on the proposal of the Bank. The central bank has wide exchange control powers, on the basis of which it monitors and, if necessary, regulates foreign payments.

The Bank of Finland handles Finland's relations with the International Monetary Fund (IMF), which Finland is a member of. The Bank is responsible for the bilateral payments arrangements on which Finland has agreements with certain Socialist countries. In addition, the Bank of Finland is a shareholder of the Bank for International Settlements (BIS) in Basle. The Bank maintains close contacts of various kinds with many international financial institutions and organizations as well as with central banks in other countries.

The Bank of Finland acts as banker to the banks, which means that it stands ready to grant credit to banks experiencing temporary disturbances in their liquidity. At present, the commercial banks and Postipankki (Post Office Bank) have access to credit in the Bank of Finland's call money market. Likewise, they can deposit funds in excess of their liquidity requirements at any given time in the call money market.

Unlike central banks in most industrial countries, the Bank of Finland does not handle the central government's monetary transactions. Rather, these are the responsibility of the State Treasury Office and the state-owned Postipankki. Admittedly, government balances are held with the Bank of Finland for temporary periods and, on occasions, as blocked funds for counter-cyclical reasons. Although there are no formal provisions preventing the central government from borrowing from the central bank, in practice the Bank of Finland has, in keeping with the spirit of the Regulations for the Bank, granted the central government credit only in exceptional cases.

The functions described above have been entrusted to the Bank on the basis of legislation and other provisions. By their nature they relate to the day-to-day management of Finland's monetary and foreign exchange systems. In economic policy, the Bank's major area of responsibility lies in making decisions on central bank policy.

THE BANK AS AN ECONOMIC POLICY DECISION-MAKER

The main objectives of central bank policy, as prescribed in law, are the maintenance of the value of the currency and the management of the country's foreign liquidity. The prerequisites for attaining these goals have changed radically along with the development of the economy. Thus, in setting economic targets, major attention has had to be paid to the aim of maintaining the internal and external balance of the whole economy. In setting targets for central bank policy, which is part of overall economic policy, account is also taken of such aspects as rapid and stable growth, the objective of full employment and issues relating to income distribution.

The management of overall economic policy lies in the hands of the Government, the economic policy stance of which is essentially reflected in its fiscal policy, as embodied in the annual budget and the amendments thereto. Central bank policy, for which the Bank of Finland is responsible, i.e. monetary and foreign exchange policy, constitutes another important segment of economic policy. A precondition for the successful implementation of economic policy is the close coordination of fiscal and central bank policies.

In most western market economies, the problem of coordination has been solved so that the central bank is subordinate to the Ministry of Finance (the Government) and hence implements monetary and foreign exchange policies in accordance with the Government's instructions. In Finland, the central bank is formally independent of the Government. It has its own organization for the preparation of information and the monitoring of economic developments, including the production of macroeconomic forecasts serving as a basis for decision-making.

In practice, fiscal and central bank policies are coordinated through close contacts between the Government and the Bank of Finland. This arrangement has worked so well that it has not been necessary to put it on a formal basis. A change in the external value of the markka is the most important decision requiring formal cooperation between the central bank and the Government. At the suggestion of the Board of Management of the Bank of Finland, the Bank Supervisors make a proposal for changing the external value of the markka to the Government, which may either approve the proposal as it stands or reject it.

Monetary policy is used as means of influencing the behaviour of economic agents through the financial markets so as to achieve the macroeconomic targets set at any time. Monetary policy has mostly focussed on counter-cyclical measures, but in recent years long-term structural considerations have attracted increasing attention.

Monetary policy was for long based on relatively low and stable nominal rates of interest, as a consequence of which there was almost permanent excess demand for credit. The Bank of Finland regulated the terms of the banks' central bank finance and thereby the banks' capacity to lend. The major part of credit was channelled through the banks, which in these circumstances had to screen credit applications.

Over the past few years, financial market operations in Finland, as in many other countries, have been undergoing radical change. There has been a high degree of integration of international money and credit markets along with the increased scale of foreign transactions and the relaxation of controls on capital movements. Exchange rate fluctuations have become sharper, companies and banks have become more internationally orientated and interest rate and yield awareness has increased. Moreover, technological advances have made the transmission of information and payments faster and cheaper than before.

In the allocation of credit, there has been an increasingly clear shift away from the credit rationing mechanism towards a system based on the price of credit, i.e. the rate of interest. Over the past few years, the Bank of Finland has relaxed its regulation of interest rates considerably and, at the same time, the share of financing not subject to interest rate regulation has grown very rapidly. Gradual deregulation has reduced the imbalance between the supply of and demand for credit by bringing interest rates close to market-clearing levels. With the fundamental easing of the regulation of banks' lending rates, monetary policy now has a direct impact on the demand for credit. The changes are expected to have far-reaching effects on both monetary policy and the behaviour of economic agents, thereby contributing to the more efficient allocation of resources.

Foreign exchange policy can be divided into exchange rate policy and the regulation of foreign capital movements. The cornerstone of Finnish exchange rate policy is the maintenance of a stable markka. Under the Currency Act, the external value of the markka is expressed as a currency index number. The index number is calculated on the basis of the convertible currencies of the countries most important for Finland's foreign trade, weighted according to the countries' respective shares in Finland's trade. The use of an index system implies that the authorities seek to keep the external value of the markka stable, on average, even when foreign exchange rates are fluctuating sharply.

The fixed exchange rate policy is complemented by regulation of foreign capital movements. Previously, capital controls were considered necessary, in particular, so as to prevent excessive external indebtedness but also for reasons relating to structural change in the economy. At present, regulation is justified primarily on the grounds that it enhances the opportunities for pursuing an independent monetary policy. The regulation of foreign capital flows has been relaxed substantially in the past few years.

Economic research has a fairly long tradition at the Bank of Finland. Today, research is carried out at the Bank on an extensive scale, with the emphasis on issues relating to central bank policy. The various departments of the Bank carry out research within their respective areas of responsibility. More demanding and time-consuming research work takes place in the Research Department, where researchers on secondment from other departments can, under expert guidance, devote themselves to research away from their normal duties. Many of the studies and reports - some of which are academic theses - are published in the Bank of Finland publication series.

THE CENTRAL BANK AS A FINANCIAL INSTITUTION

The Bank of Finland's financial links with the home country and abroad can be seen from the Bank's balance sheet, which is published four times a month. It shows the assets and liabilities of the Bank of Finland. In Table 1 the balance-sheet items are classified into four main sectors: foreign sector, financial institutions, public sector and corporations. Also shown as separate items are notes and coin in circulation, capital accounts, other assets and other liabilities. The asset items relate mainly to the following functions of the central bank: the management of the country's official foreign exchange reserves, the smoothing out of the banking institutions' liquidity, the control of developments in the money market, and the Bank's role as a centre for the clearing of payments and a grantor of credit to companies under special financing schemes.

From the point of view of central bank policy, the most important balance-sheet items are those relating to the foreign exchange reserves and the banks' position vis-à-vis the central bank. Changes in these and also in some other items are subject to constant monitoring and analysis at the Bank, which constitutes a significant part of the system of preparing and monitoring central bank policy decisions.

TABLE 1. THE BALANCE SHEET OF THE BANK OF FINLAND FOR 1980 and 1985, MILLION FIM

	Dec. 31, 1980	Dec. 31, 1985
Assets		
Foreign sector	9 564	25 296
Financial institutions	5 350	9 256
Public sector	1 225	1 023
Corporations	3 399	4 679
Other assets	80	145
Total	19 618	40 399
Liabilities		
Foreign sector	3 413	4 070
Notes and coin in circulation	4 954	8 072
Financial institutions	3 739	12 153
Public sector	2 491	4 301
Corporations	978	4 267
Other liabilities	1 780	2 051
Capital accounts	2 263	5 485
Total	19 618	40 399

The items on the liabilities side refer to, inter alia, the Bank of Finland's sole right to put notes and coin into circulation, the banks' cash reserve deposits, government deposits and corporations' special counter-cyclical deposits. At the end of 1985, the balance sheet total of the Bank of Finland amounted to about 13 per cent of the combined balance sheet total of the deposit banks.

At the end of 1985, notes and coin in circulation accounted for about 30 per cent of the narrow measure of the money supply (M1), i.e. currency in circulation and demand deposits. The corresponding share of the broad measure of the money supply (M3), i.e. M1 plus time deposits, was about 5 per cent. The demand for notes and coin has declined with the more widespread use of various substitutes for currency, such as cheques and debit and charge cards. The ratio of currency in circulation to GDP is much lower in Finland than in many other market economies.

By varying the level of cash reserve deposits collected from the deposit banks, the Bank of Finland seeks to counter excess ease or tightness in the financial markets and thus to stabilize developments in the markets over the longer term. During periods of economic upswing, special counter-cyclical deposits are collected from corporations and the government so as to check overheating in the economy. Similarly, during recessions deposits are released to promote the recovery of economic activity.

Nowadays, the Bank of Finland's lending to financial institutions consists only of call money advances to commercial banks. At the end of 1985, call money credit accounted for about 3 per cent of the deposit banks' outstanding stock of credits to the public. The banks even out fluctuations in their liquidity by resorting to the call money market or the inter-bank market. Changes in the call money rate affect the banks' willingness to raise call money credit and thereby money market developments in general. The Bank of Finland grants credit to corporations under special financing schemes. This type of credit, which has become less important over the years, constituted about 3 per cent of the deposit banks' outstanding stock of credits to the public at the end of 1985.

The result of the Bank's operations and the factors affecting it are presented in the profit and loss account for each calendar year.

TABLE 2. THE PROFIT AND LOSS ACCOUNT OF THE BANK OF FINLAND FOR 1980 AND 1985, MILL. FIM

	1980	1985
Interest income	+1 494	+2 973
Interest expense	−615	−2 611
Interest margin	+879	+362
Agios and valuation for exchange rate changes	+296	–
Other income	+20	+108
Total income	+1 195	+470
Agios and valuation for exchange rate changes	–	−461
Other expenses	−173	−289
Transfer to reserves	−600	–
Profit/loss for the accounting year	+422	−280

Like other banks, the major part of the Bank of Finland's income arises from the difference between interest income and expense, i.e. the interest margin. Interest income largely consists of earnings from foreign exchange reserves, interest on call money advances, earnings from special financing schemes and holdings of bonds. The major part of interest expense is derived from interest paid on the banks' cash reserve and call money deposits and the deposits made by the government and corporations.

Balance sheet items denominated in foreign currency are converted into Finnish markkaa using the rate of exchange as of the date of the balance sheet. Thus, exchange rate changes may, depending on the direction of change, increase the Bank's income or expense entered under the item "agios and valuation for exchange rate changes", causing substantial variations in the Bank's financial result. Reserves can be set up in the profit and loss account in order to even out these fluctuations and thus preserve the real value of the Bank's equity capital. Of the Bank's annual profit, half is normally transferred to the Treasury and the other half used to increase the Bank's equity capital.

In addition to the premises on which it operates, the Bank of Finland owns SITRA (The Finnish National Fund for Research and Development). The Bank also owns shares in the Industrialization Fund of Finland Ltd and in certain industrial companies.

ORGANIZATION AND PERSONNEL

In addition to its head office, the Bank of Finland has 12 branches in different parts of the country. They maintain the currency supply and exercise exchange control to some extent in their respective regions.

The Bank of Finland Security Printing House, which in addition to banknotes prints securities and cheques is a separate unit for accounting purposes. It has its own board of management and managing director.

At the beginning of 1986, the head office had 16 departments. Some are engaged in making preparations for central bank policy decisions and carrying out research (e.g. the Monetary Policy Department, the Exchange Policy Department and the Economics Department). Others are executive units (e.g. the Foreign Exchange Department and the Domestic Financing Department), while the rest perform banking or administrative tasks (e.g. the Administration Department and the Data Processing Department). Directly under the Board of Management are five directors, each of whom is responsible for managing a group of departments and for cooperation between the different groups.

FINANCIAL INSTITUTIONS IN FINLAND

by **Jyrki Laakso**, Director
The Finnish Bankers' Association

INTRODUCTION

Deposit banks have traditionally played a dominant role in financial intermediation in Finland, and they still account for more than half of the official stock of credits. Administrative regulation of lending rates and the tax exemption of deposits have, for decades, largely precluded inter-bank price competition and acted as a brake on the development of the capital market. At the same time, exchange controls have protected banks against international competition. In the absence of price competition, inter-bank competition has taken the form of competition for market shares, as reflected, inter alia, in various free services and the establishment of a dense branch network.

In recent years, however, Finnish financial markets have been undergoing rapid change. The relative importance of financial markets based on administratively regulated lending rates and the tax exemption of deposits has begun to decline, while the unregulated market for short-term funds and the securities market have expanded rapidly.

Inter-bank competition for short-term taxable financial assets, i.e., unregulated deposits, has become very intense. Banks' unregulated deposits, the interest rate on which closely follows the Bank of Finland's call money rate, have grown to the extent that banks' funding costs have started to rise. Moreover, unregulated deposits have become a partial alternative to central bank finance.

The Bank of Finland has gradually relaxed its interest rate and exchange controls and accorded market forces an enhanced role in financial intermediation. Hence, the rate of interest is becoming increasingly important both for investment decisions and as a monetary policy instrument. Tougher competition is forcing banks to improve their efficiency, implying far-reaching structural change in the activities of deposit banks in the course of time.

In earlier years, financial markets were dominated by almost permanent excess demand for credit, and banks, in particular, had to ration credit. The relaxation of interest rate regulation[1] and the enhanced role of unregulated interest rates have reduced the significance of credit rationing and increased interest rate awareness among investors and borrowers alike. The simultaneous shift towards positive real rates of interest has implied an increase in the efficiency requirements placed on investments. Potential borrowers are now obliged to consider more carefully than before to what extent and at what price they are willing to raise credit. The setting up of new institutions and the introduction of new financial instruments have increased financial planning. Together, these factors have brought about changes in the behaviour of households, companies and financial institutions.

Also contributing to structural change in the financial system have been the entry of new institutions to the markets and the internationalization of Finnish banks. Foreign-owned commercial banks have been operating in Finland since 1982. The sharpening in bank competition has occurred both in the provision of foreign banking services and in the intermediation of unregulated short-term funds.

Domestic banks have set up finance companies to take advantage of the unregulated money market. In keeping with international

[1] The regulation of deposit banks' average lending rates was abolished as of August 1, 1986.

trends, development companies and investment trusts have also begun operations in Finland.

With the transformation of financial markets, banking legislation has become outdated. There is therefore a real need not only to update the existing legislation but also to formulate new laws. A comprehensive reform of banking legislation is expected within the next few years; the committee appointed to prepare this reform submitted its report in February 1986. Bills concerning finance companies and unit trusts are currently awaiting deliberation by the Government and Parliament.

THE FUNCTIONS OF THE BANKING SYSTEM

One of the major functions of the banking system is to collect funds from economic agents with a financial surplus and to intermediate them in the form of credit to borrowers with a financial deficit. In a sparsely-populated country such as Finland, this has also meant the need to collect the savings of small savers, i.e. households. Facilitating this task have been, inter alia, a branch network which is one of the densest in the world and the system introduced in the early 1960s of paying wages and salaries directly into bank accounts.

In Finland, deposit banks have traditionally handled payment transactions. Private banks, which consist of commercial banks, savings banks and cooperative banks, operate a joint bank giro system. Postipankki, which is owned by the State, maintains postal giro services. Although these systems compete with each other, payments between the two systems are possible.

Rapid advances in automation, the increasing prevalence of real-time systems and the introduction of new instruments in payment transactions have reduced the need to maintain the present dense branch network. At the end of 1985, there were two automated cash dispenser networks operating more than 700 cash dispensers. Finland has been a pioneer in the introduction of home and office terminals.

BANKS AND OTHER CREDIT INSTITUTIONS

BANK OF FINLAND[2]

The Bank of Finland is the country's central bank, the authority responsible for the conduct of monetary and foreign exchange policies. The central bank operates "under the guarantee and care of Parliament, and under the supervision of the Bank Supervisors delegated by Parliament". Hence, the Bank of Finland has a fairly independent position with regard to the Council of State (Government).

DEPOSIT BANKS

Deposit banks engage in a complete range of retail banking activities. Under banking legislation, they are authorized to take deposits from the public, and they also play a dominant role in the provision of financing and banking services to the corporate sector. Table 1 gives some salient figures for deposit banks.

TABLE 1. DEPOSIT BANKS AS AT DECEMBER 31, 1985

	Number of banks	Number of branches	Employers (in 1000s)	Total deposits from the public FIM bill	Total lending to the public FIM bill	Balance sheet total FIM bill
Commercial banks	10	967	17.7	69.5	84.7	176.1
Savings banks	254	1 316	10.5	42.8	37.0	52.4
Cooperative banks	370	1 224	8.9	36.4	35.8	47.6
Postipankki	1	48	4.8	19.2	17.3	36.0
Deposit banks, total	635	3 555	41.8	167.9	174.8	312.1

There are four categories of deposit bank in Finland: commercial banks, savings banks, cooperative banks and Postipankki. At present, each category is regulated by a separate act.

[2] See the article by Arimo and Saarinen in this publication.

The largest category of deposit banks consists of commercial banks, of which there are ten in all. Of these, two are national and four foreign-owned banks. However, the latter concentrate exclusively on wholesale banking business. Commercial banks also include the central banking institutions of the savings and cooperative banks. Commercial banks are incorporated as limited companies (See Table 2).

Savings banks and cooperative banks are local banks. Savings banks are corporations similar to trusts, the management of which is supervised by trustees appointed by depositors. Cooperative banks are cooperative societies, the capital of which has been contributed by the holders of shares. Savings banks and cooperative banks provide banking services to mainly households and farmers. Particularly, the number of savings banks has declined in recent years owing to the trend towards mergers. The savings bank category comprises one national savings bank and a great number of large regional savings banks.

TABLE 2. COMMERCIAL BANKS AS AT DECEMBER 31, 1985

	Number of branches	Employees (in 1000s)	Total deposits by the public FIM bill.	Total lending to the public FIM bill.	Balance sheet total FIM bill.
Kansallis-Osake-Pankki	459	7.0	31.0	35.6	67.4
Union Bank of Finland Ltd	362	6.8	28.5	32.4	60.5
Bank of Helsinki Ltd[1]	117	1.4	5.0	5.7	10.7
Ålandsbanken Ab	21	0.2	0.7	0.9	1.5
Peruspankki	1	0.0	0.1	0.2	0.7
Domestic commercial banks, proper, total	960	15.4	65.3	74.8	140.9
The Central Bank of the Savings Banks	3	1.1	2.2	5.0	17.3
The Central Bank of the Cooperative Banks of Finland Ltd	1	1.0	1.9	4.4	15.9
The central banking institutions of savings and cooperative banks, total	4	2.1	4.1	9.4	33.2
Chase Manhattan Bank Ltd	1	0.0	0.0	0.0	0.4
Citibank Ltd	1	0.0	0.0	0.2	1.1
Indosuez Osakepankki	1	0.0	0.1	0.3	0.6
Samuel Montagu Ltd[2]					
Foreign-owned commercial banks, total	3	0.1	0.1	0.5	2.0
Commercial banks, grand total	967	17.7	69.5	84.7	176.1

[1] Merged with Union Bank of Finland Ltd in 1986.
[2] Started operations in 1986.

Postipankki is owned by the central government, which is also responsible for its operations. Postipankki's special task is to manage all payments by and to the central government and to invest the central government's cash funds. In other respects, its activities are similar to those of the commercial banks. The commercial banks and Postipankki also operate as authorized foreign exchange banks. Financial flows relating to foreign trade and the bulk of capital flows are effected through them.

Apart from the provision of corporate finance, Finnish commercial banks are also active in the household sector, particularly the financing of housing. Both loans granted to companies to finance investment and housing loans represent long-term lending which in most other countries takes place in the capital market and/or through institutions similar to merchant banks. The emphasis in the lending of savings and cooperative banks is on extending credit to agriculture, forestry and households, although these banks have begun to participate in corporate financing on a growing scale.

Besides structural change in financial markets, the increasing similarity of banking activities, the more uniform operating conditions facing banks and the promotion of competition are all important reasons for seeking to standardize banking legislation in the coming years.

Each banking category has its own cooperative organ. The Finnish Bankers' Association founded in 1914 looks after the interests of the commercial banks. The corresponding bodies of the local banks are the Finnish Savings Banks' Association and the Central Union of the Cooperative Banks of Finland, which operate in close cooperation with their respective central banking institutions.

The deposit banks' cooperative body is the Joint Delegation of the Banking Institutions, which, among other things, decides on common rates of interest to be applied by the banks to tax-exempt deposits from the public. Cooperation takes place in various committees, of which the most important are the Legal Committee, the Deposit Committee, the Lending Committee and the Banking Technology Committee. Foreign-owned commercial banks are not members of the Finnish Bankers' Association or of the Joint Delegation of the Banking Institutions.

Operations of Deposit Banks

There are differences in the activities of deposit banks reflecting mainly differences in customer groups, interest rates and the scale of business.

The dominant role played by the commercial banks in the corporate sector is indicated by the large shares of cheque account funds and foreign-currency deposits in their balance sheets. At the end of 1985, commercial banks accounted for almost 70 per cent of total unregulated deposits, which consist mainly of short-term (and taxable) deposits. Table 3 shows deposits by category of bank.

In Finland, deposit banks have been the major source of finance for business. Mainly because of tax factors and the low level of regulated interest rates, companies have been willing to make extensive use of external financing. As a result, the share of equity capital in balance sheet totals has been rather low by international standards, i.e. only just over 20 per cent on average.

The deposit banks' lending to the corporate sector has mainly taken the form of promissory notes. Bills of exchange and cheque account overdrafts have also been extended to finance working capital needs. With the expansion in international trade, the significance of foreign currency credits has greatly increased in recent years.

TABLE 3. DEPOSITS FROM THE PUBLIC BY TYPE OF CLAIM AND CATEGORY OF BANK AS AT DECEMBER 31, 1985

	Commercial banks FIM bill.	Savings banks FIM bill.	Co-operative banks FIM bill.	Postipankki FIM bill.	Total FIM bill.	Breakdown Per cent
1-6 months' deposits	0.7	0.5	0.3	0.1	1.6	0.9
12 months' deposits	2.7	1.7	1.7	0.5	6.6	3.9
24 months' deposits	18.9	12.6	10.4	2.0	43.9	26.1
Ordinary deposit accounts and savings accounts	18.1	18.4	14.4	7.6	58.4	34.8
Deposit accounts with cheque facility	1.5	2.8	3.8	1.1	9.1	5.4
Other deposit accounts[1]	3.7	2.4	1.4	1.0	8.5	5.1
Term deposit accounts	45.6	38.2	32.1	12.3	128.1	76.3
Cheque accounts	9.0	3.4	2.7	5.1	20.2	12.0
Markka-denominated deposits	54.6	41.6	34.7	17.4	148.3	88.3
Foreign-currency deposits	6.0	–	0.1	0.5	6.6	3.9
Deposits by the public	60.6	41.6	34.9	17.9	154.8	92.2
Unregulated deposits	8.9	1.2*	1.6*	1.3	13.0	7.8
Total deposits	69.5	42.8	36.4	19.2	167.9	100.0
Percentage breakdown	41.4	25.5	21.7	11.4	100.0	

[1] Includes mainly corporate deposits.
* Unregulated deposits are equivalent to the balance sheet item "Other liabilities".

TABLE 4. LENDING TO THE PUBLIC BY CLAIM AND CATEGORY OF BANK AS AT DECEMBER 31, 1985

	Commercial banks FIM bill	Savings banks FIM bill	Co-operative banks FIM bill	Postipankki FIM bill	Total FIM bill	Breakdown Per cent
Cheque account overdrafts	4.4	0.9	1.2	0.5	7.0	4.0
Bills of exchange	2.5	2.6	2.0	0.3	7.5	4.3
Loans	55.8	31.9	29.1	13.5	130.3	74.5
Loans granted from state funds	0.2	1.6	3.2	–	5.0	2.9
Foreign currency credits	21.8	0.0	0.2	3.0	24.9	14.3
Total	84.7	37.0	35.8	17.3	174.8	100.0
Percentage breakdown	48.5	21.2	20.5	9.8	100.0	

The large share of commercial banks in lending to the corporate sector is particularly evident in short-term and foreign-currency credits. Table 4 shows lending by claim and category of bank. It should be noted, however, that the figures do not include lending in the form of bonds and debentures.

OTHER CREDIT INSTITUTIONS

Mortgage Credit Institutions

The mortgage credit institutions carry on wholesale banking business. At present, there are seven of these institutions in Finland, most of which are subsidiaries of deposit banks. They fund their lending primarily through bond issues to the public or similar debt instruments. They also raise finance in international capital markets. Two-thirds of their lending is in the form of long-term loans to the corporate sector. In recent years, the significance of mortgage credit institutions has diminished as companies have, to an ever-increasing extent, issued their own bonds and debentures.

TABLE 5. MORTGAGE CREDIT INSTITUTIONS AND SPECIAL CREDIT INSTITUTIONS AS AT DECEMBER 31, 1985

	Stock of outstanding credits FIM bill.	Balance sheet total FIM bill.
Industrial Bank of Finland Ltd	3.9	4.4
Finnish Real Estate Bank Ltd	3.6	4.1
Land and Industrial Mortgage Bank Ltd	3.2	3.6
Mortgage Bank of Finland Ltd	2.7	2.9
PSP-Kuntapankki Oy	0.2	0.2
Kansallisluottopankki Oy[1]		
Finnish Mortgage Society	0.6	0.6
Finnish Export Credit Ltd	5.5	7.5
Industrialization Fund of Finland Ltd	2.5	3.0
Regional Development Fund	2.3	2.8
Investment Fund of Finland (Inra)	1.7	1.9

[1] Started operations in 1986.

Special Credit Institutions

Special credit institutions have been set up in Finland according to international models. They specialize in providing finance for a specific purpose or for a particular sector of the economy, such as export credits for industrial exports, the promotion of the financing of small and medium-sized industries and the reduction in regional inequalities in the supply of finance.

Special credit institutions channel the bulk of their resources to the corporate sector and particularly industry. In the case of certain credits, lending by the special credit institutions is on more favourable terms than normal financing. International practice is observed in setting the terms of export credits. A number of special credit institutions have been set up at the instigation of the business sector and banks, although the central government has also played a very active role in their establishment.

Structural change in the financial markets – in particular, the entry of new institutions and the introduction of new financial assets – has progressed to the point where the purpose of some special credit institutions needs to be reassessed.

Finance Companies

Finance companies were set up in 1960s and 1970s to provide factoring, leasing and hire-purchase services. The major Finnish finance companies are subsidiaries of banks. Their operations expanded rapidly in the early 1980s. Apart from an increase in the demand for finance of this kind, this was due to the fact that banks were able to circumvent the Bank of Finland's lending rate regulations by channelling funds through finance companies.

TABLE 6. MAJOR FINANCE COMPANIES AS AT DECEMBER 31, 1985

	Stock of outstanding credits[1] FIM bill	Balance sheet total FIM bill
Finnish Corporate Finance Ltd	4.3	4.6
Kansallisrahoitus Oy	3.3	3.8
Asiakasrahoitus Oy	0.5	0.5
Ålands Factoring Ab	0.1	0.1
Ålands Leasing Ab	0.0	0.0
Skop-Finance Ltd	3.4	3.6
OP-Financing Centre Ltd	1.9	2.0
PSP-Finance Ltd	1.6	1.8
STS-Finance Ltd	0.3	0.3

[1] Factoring, leasing, financing of hire-purchase, cofinancing and other similar claims.

Development Companies and Investment Trusts

Structural change and rapid growth in the financial markets have led to the establishment of new credit institutions and units spezializing in the provision of financial services. The past few years have seen the setting up of numerous development companies, the primary function of which is to improve the financing opportunities of small and medium-sized companies by investing in their share capital. Development companies have been set up particularly by financial institutions in co-operation with experts in various fields.

Investment trusts have also been established to promote small and medium-sized companies as well as to provide new investment outlets for households. The rapid expansion of the securities market and the diversification of household asset behaviour have provided the main impetus to the setting up of investment trusts in Finland. Ongoing structural change in the financial markets is likely to ensure that innovation in investment services will also continue at brisk pace in the years to come.

Insurance Institutions

Insurance companies play a prominent role in the Finnish credit market, which is due, in particular, to the increased importance of compulsory forms of insurance. A statutory employment pension scheme covering the private sector was introduced in the early 1960s and - unlike in many other countries - it is operated by private insurance companies. A special feature of this scheme is the practice whereby a major part of the funds is automatically relent to participating firms. As a result, the share of the industrial sector in the lending of insurance companies is very large, about half of their total lending at the end of 1985. Together with banks, insurance companies constitute the main source of finance for industry in Finland.

The activities of insurance companies can be classified into three main categories according to the type of insurance: pension insurance, life assurance and non-life insurance. At the end of 1985, there were more than 40 insurance companies in Finland, in addition to numerous insurance associations; the latter are, however, of relatively little significance.

Insurance business is centred around five groups of institutions, whose premium income accounts for more than 90 per cent of total premium income. The institutions belonging to the groups are either limited companies or mutual associations. The figures given in Table 7 refer to these five groups, with life and non-life companies shown in the upper line and pension companies in the lower line of each group.

TABLE 7. GROUPS OF INSURANCE INSTITUTIONS AS AT DECEMBER 31, 1985

	Stock of outstanding credits FIM bill.	Balance sheet total FIM bill.
Pohjola Companies	3.5	7.8
Ilmarinen	10.4	12.7
Sampo Companies	2.3	5.3
Eläke-Sampo	6.4	8.0
Tapiola Companies	1.9	4.1
Eläke-Tapiola	4.2	4.9
Industrial Insurance — Yrittäjäin Fennia	1.7	3.9
Eläke-Varma	12.0	13.7
Kansa Companies	0.4	4.1
Eläke-Kansa	1.8	2.3

THE STOCK OF OUTSTANDING CREDITS OF FINANCIAL INSTITUTIONS BY CATEGORY OF LENDERS AND BORROWERS

LENDERS

At the end of 1985, the stock of outstanding credits in Finland amounted to about FIM 380 billion. This amount includes outstanding credits granted by the various financial institutions and the central government. Defined in this way the stock of credits does not include direct borrowing abroad by companies. More than half of the total represents credits granted by deposit banks. The largest category of lender was commercial banks, accounting for 30 per cent of the total. They were followed by the savings banks and the cooperative banks, each with a share of 10 per cent, and Postipankki with a share of 6 per cent.

Insurance institutions accounted for 18 per cent of the stock of outstanding credits and other credit institutions for 14 per cent. Direct and indirect lending by the central government accounted for 13 per cent. The breakdown of total credits by category of lender is shown in Chart 1.

BORROWERS

At the end of 1985, the corporate sector accounted for 43 per cent or almost half of all the credits outstanding. The share of the household sector was 29 per cent, the major part of which consisted of housing loans. The share of credits granted to other financial institutions was 13 per cent, while that of public corporations was 7 per cent (see Chart 2).

CHART 1. OUTSTANDING STOCK OF CREDITS BY LENDER GROUP AS AT DECEMBER 31, 1985, FIM 377.8 BILLION

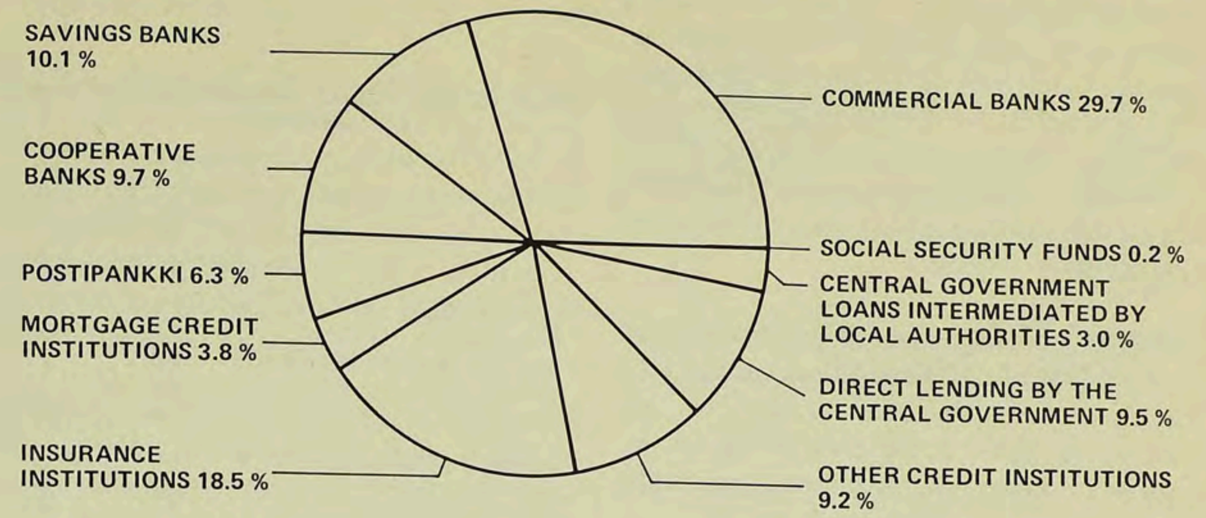
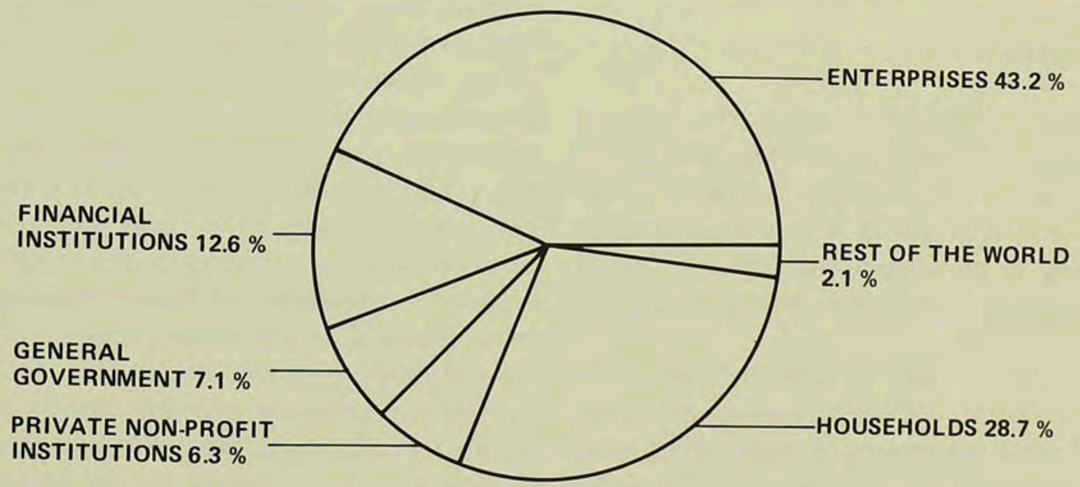


CHART 2. OUTSTANDING STOCK OF CREDITS BY SECTOR AS AT DECEMBER 31, 1985, FIM 377.8 BILLION



FINANCING OF HOUSING

Housing production in Finland is financed mainly from three sources: households' own savings, loans granted by deposit banks and loans granted by the central government either directly or indirectly through local authorities. At the end of 1985, housing loans totalled FIM 86 billion, which was about one-quarter of the total stock of credits.

The loans granted by deposit banks amounted to about FIM 57 billion, or 67 per cent of total housing loans. Insurance institutions accounted for about 6 per cent, while the remainder were loan granted out of public funds. Housing loans are shown in Table 8.

TABLE 8. HOUSING LOANS AS AT DECEMBER 31, 1985

	Borrower Households	Societies, corporations, other	Total	Breakdown
	FIM bill.	FIM bill.	FIM bill.	Per cent
Credit institution				
Commercial banks	16.4	3.6	20.0	23.3
Savings banks	14.6	2.5	17.1	19.9
Cooperative banks	12.9	1.5	14.4	16.8
Postipankki	4.3	1.7	6.0	7.0
Deposit banks, total	48.2	9.3	57.5	67.0
Mortgage banks	0.6	0.4	1.0	1.2
Insurance institutions	1.2	3.5	4.7	5.5
Other credit institutions	0.1	0.2	0.3	0.3
Credit institutions, total	50.1	13.4	63.5	74.0
Central government	0.0	11.0	11.1	12.9
Local authorities	11.2	–	11.2	13.1
Social security funds	–	0.0	0.0	0.0
Grand total	61.3	24.5	85.8	100.0

PUBLIC LENDING

In addition to the loans granted for housing production, the central government also grants credits out of its budgeted funds for other purposes. These credits have been extended, inter alia, to agriculture and forestry, certain manufacturing sectors and energy supply.

At the end of 1985, broadly defined public lending, which includes lending by state-owned credit institutions, accounted for more than one-quarter of the total stock of credits (Table 9). In recent years, the share of public lending in the credit market has declined slightly.

TABLE 9. THE PUBLIC SECTOR IN THE CREDIT MARKET

	Stock of outstanding credits as at December 31, 1985 FIM billion	Share in the total stock of outstanding credits, Per cent
Bank of Finland	12.4	3.3
Postipankki	23.8	6.3
Mortgage Bank of Finland Ltd	2.9	0.8
Others	8.0	2.1
Total	47.2	12.5
Central government	36.0	9.5
Local government	11.2	3.0
Social security funds	0.7	0.2
Total	48.0	12.7
Grand total	95.1	25.2

SECURITIES MARKET

The Finnish securities market has for long been underdeveloped and narrow in scope as a result of the tax system applied in Finland. Bank deposits and interest income on them are tax-exempt, whereas shares and dividends and other capital income are taxable. Double taxation has thus rendered equity capital a less favourable source of finance to companies in comparison to borrowed capital. Over the long term, this has distorted the capital structures of companies so that debt/equity ratios in Finnish firms are very high by international standards.

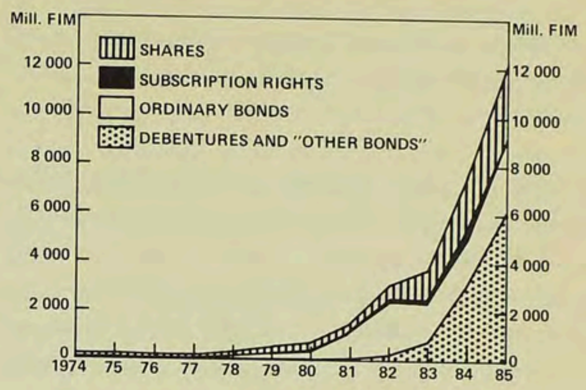
In recent years, the process of change in the financial markets has also affected the capital market, which has expanded rapidly. This can be particularly ascribed to an improvement in the wealth position of households, the tax deductibility of capital income up to a certain limit, the availability of a wider range of alternative savings instruments and a general increase in knowledge of finance. Saving for home purchase, which previously was the only form of saving for many households, has lost its relative importance with the growth in the stock of dwellings and the rise in the standard of housing. Savers have, to an increasing extent, turned their interest to securities, which constitute an alternative to particularly ordinary bank deposits.

Similarly, improved liquidity and greater yield awareness in the corporate sector in the early 1980s made investments in financial assets an increasingly attractive outlet to firms in relation to investments in real assets. This was a factor contributing to the rise in the real rate of interest to a very high level as inflation began to slow down.

Reflecting the strong interest in securities, total turnover on the Helsinki Stock Exchange multiplied many times over in the space of a few years (Chart 3).

The market value of the share capital of the 52 companies quoted on the Stock Exchange amounted to about FIM 32 billion at the end of 1985. In addition, 137 bonds, 49 debenture loans and 135 other loans were listed on the Stock Exchange. The capital value of the bonds and debentures quoted on the Stock Exchange totalled FIM 30 billion. Of this amount, bonds accounted for FIM 19 billion, with government bonds amounting to FIM 15 billion and bonds issued by mortgage banks to

CHART 3. ANNUAL TURNOVER OF THE HELSINKI STOCK EXCHANGE, 1974–1985, MILLION FIM



FIM 4 billion. At the end of 1985, the total capital value of debentures amounted to FIM 3 billion and that of other loans to FIM 8 billion.

The Finnish securities market still remains very small in relation to the volume of lending by credit institutions. Indicative of the narrowness of the market is the lack of well-functioning secondary markets and the marked dependence of primary markets on prevailing conditions in the money market. This has been a contributory factor to the sharp fluctuations in share prices which the market has experienced.

THE INCREASED INTERNATIONALIZATION OF FINNISH FINANCIAL MARKETS

by **Esko Aurikko**, Research Officer
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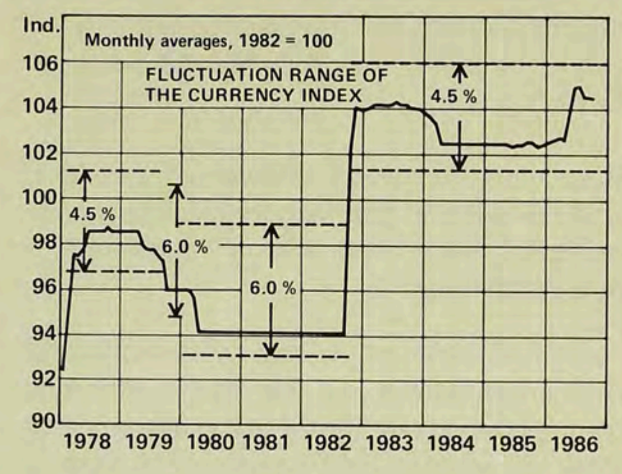
Finnish financial markets were for long highly isolated, largely because of their underdeveloped state. However, during the past few years the dependence of Finnish financial markets on international markets has increased substantially. The growing internationalization of Finnish financial markets has been particularly evident in the increased sensitivity of capital movements to differentials between domestic and foreign interest rates and to exchange rate expectations. This article examines the domestic and international background to the internationalization of Finnish financial markets, the salient features of this process, the policy pursued and policy alternatives.

DOMESTIC BACKGROUND

Throughout the postwar period, Finland has pursued a fixed exchange rate policy. Up to the early 1970s, this took place under an international monetary system based on fixed exchange rates. With the subsequent shift to a system under which market forces have been accorded a greater role in determining the exchange rates of the major currencies, Finnish exchange rate policy has been based on pegging to a currency basket. Under an amendment to the Currency Act of 1977, the external value of the markka is expressed in terms of a currency index which indicates the average change in the exchange rates of the convertible currencies most important for Finland's foreign trade. On the proposal of the Bank of Finland, the Council of State (Government) confirms the basis for calculating the index and its fluctuation limits. The decision to make the proposal is taken by the Parliamentary Bank Supervisors at the suggestion of the Board of Management of the Bank of Finland. Hence, the currency index can be changed by

CHART 1. MOVEMENTS IN THE EXTERNAL VALUE OF THE MARKKA



a decision of the Bank of Finland only within the permitted fluctuation range. With the exception of the 1982 devaluation, the currency index has been kept relatively stable in the 1980s (Chart 1).

As is explained in more detail elsewhere in this publication,[1] Finnish financial markets have traditionally been characterized by three basic features. First, banks have occupied a dominant position in financial intermediation. Secondly, both deposit and lending rates have been administratively regulated. Thirdly, exchange control has been fairly effective. As in many other countries, albeit somewhat later, the role of market forces has been enhanced in Finnish financial markets, especially during the current decade. Interest rates have become more important in clearing markets and in the transmission of monetary policy effects. These developments are largely the consequence of the emergence and rapid growth of an unregulated market for short-term funds. Contributing to this has been the rapid development of the forward exchange market following the

[1] See the article by Vihriälä.

withdrawal of the Bank of Finland from the market in 1980. Since then, the forward market has provided a flexible channel for short-term capital flows. In addition, the call money market between banks and the central bank has been actively developed.

Apart from the increased sensitivity of capital movements, the growing internationalization of Finnish financial markets has also been evident in the greater potential for capital flows. This has been partly due to the increased use of foreign finance in the domestic economy and the wider use of the markka abroad. On the other hand, the regulations serving as the basis for the central bank's exchange control remained virtually unchanged until very recently.

INTERNATIONAL BACKGROUND

The last ten years have witnessed major changes in the rapidly expanding international financial and capital markets. These developments have been spurred by the current account imbalances generated by the two oil shocks, the large public sector deficits in some countries, persistent differences in rates of inflation between countries, the expansion of world trade and ongoing technological change, which has permitted the rapid transmission of information from one country to another. Additional factors have been the rapid internationalization of business and a marked relaxation of capital controls in most industrial countries. As a consequence, the sensitivity and volatility of capital movements have grown significantly.

Reflecting these developments, there have been far-reaching structural changes in international financial markets. Sharpened competition, coupled with growing exchange and interest rate risks, has brought with it innovations of various kinds and new financial instruments. A further impetus to this development has been provided by the debt crisis of certain developing countries, which has forced banks to rearrange a large number of credits and thereby reduced the scope for granting new loans. As a consequence, new instruments, such as interest rate and currency swap contracts and various short-term borrowing facilities for companies, have rapidly increased in importance and blurred the traditional differences between international capital markets and bank credit markets and between banks proper and other financial institutions.

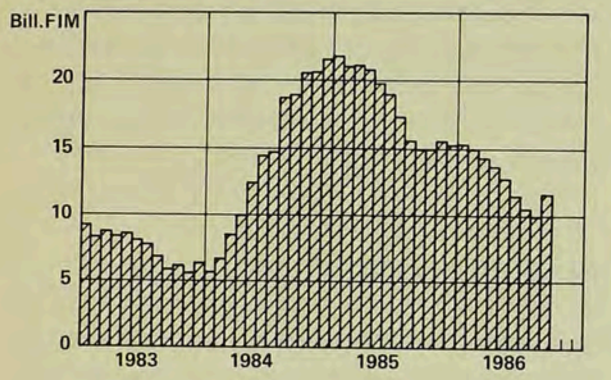
Naturally, developments in international financial markets have affected Finnish financial markets both directly and indirectly. However, it is domestic factors which have played a key role in the deregulation of Finnish financial markets and in accentuating the significance of market forces.

DOMESTIC MARKET PRESSURES

The evolution of domestic financial markets and recurrent disturbances in international foreign exchange markets, together with sharp fluctuations in exchange and interest rates, created a need to improve financial management. With the rise in real rates of interest in the late 1970s and the early 1980s, cost and yield awareness increased among economic agents. The favourable developments in the liquidity of the Finnish corporate sector at the end of the 1970s also exerted a powerful boost to the growth of an unregulated market for short-term finance.

The development of the forward exchange market in the 1980s proved to be very important for the growth of the unregulated market. The necessity of a forward exchange market came to the fore in the early 1970s when the international system based on fixed exchange rates was abandoned. Initially, however, the Bank of Finland covered banks' forward contracts with companies, and, in practice, the Bank of Finland determined developments in forward exchange rates. It was with the withdrawal of the Bank of Finland from the forward market for convertible currencies in 1980 that the forward market really began to grow. In that connection, banks were granted permission to use foreign credits or deposits to cover their forward purchases or sales. Since then, forward exchange rates have, under normal circumstances, been determined on the basis of differentials between domestic and foreign rates of interest, and hence the forward market has provided a flexible channel for short-term capital movements (Chart 2).

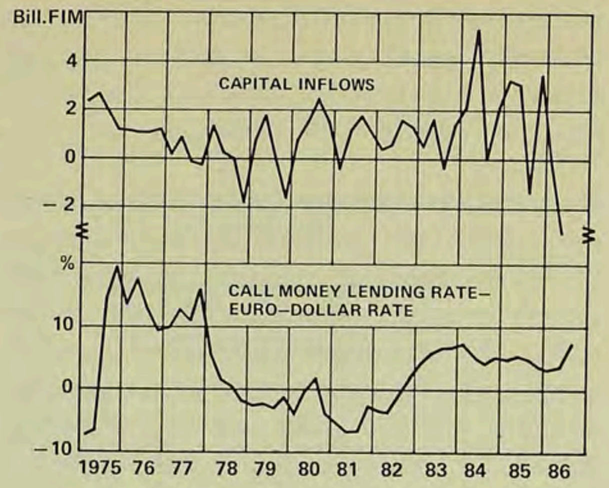
CHART 2. THE BANKS' FORWARD EXPOSURE AGAINST DOMESTIC COMPANIES



Competitive conditions in domestic financial markets also intensified as a result of the rapid expansion in the international operations of Finnish business and banks. As regards banking, the authorities implemented a number of measures promoting the internationalization of Finnish financial markets. In the mid-1960s, the establishment of the first consortium banks was allowed in cooperation with other Nordic banks. In the 1970s, Finnish banks expanded their international operations by setting up subsidiaries abroad. Since 1985, banks have also been permitted to establish foreign branches. Foreign-owned banks were allowed to set up subsidiaries in Finland in 1982.

The increased internationalization of Finnish banks and companies and the more efficient exploitation of interest rate and yield differentials have greatly enhanced the sensitivity of capital movements to interest rate and exchange rate expectations. This was clearly demonstrated in the autumn of 1983 when the call money rate was raised to quell exchange rate expectations. The differential that was opened up between domestic and foreign interest rates as a result of this measure induced capital inflows on an unprecedented scale in 1984, even though the differential was not particularly large from the long-term point of view (Chart 3). Similarly, in the spring of 1986, the temporary raising of the call money rate in connection with an adjustment of the currency index checked a speculative currency outflow. After a resurgence of speculative pressures in the late summer of 1986, it was not until the call money rates had been kept at a high level for a relatively long period that the situation calmed down and interest rates could be gradually lowered.

CHART 3. CAPITAL INFLOWS AND THE INTEREST RATE DIFFERENTIAL



CHANGES IN EXCHANGE CONTROL

Thus, capital mobility has increased in spite of the fact that, until recently, the Bank of Finland has not relaxed the regulation of capital movements to any significant degree. Exchange control has been more stringent in Finland than in many other industrial countries. In addition, a number of leading industrial countries have reduced their remaining barriers to capital movements. Similar measures have also been implemented in many smaller countries.

For several decades, exchange control in Finland has largely been based on a system under which long-term capital movements have been subject to case-by-case authorization, whereas customary trade-related short-term flows have generally been permissible when intermediated through authorized banks.

One of the aims of exchange control has been to secure the adequacy of convertible foreign exchange reserves in conditions where the current account has traditionally been in deficit. On the other hand, exchange control has also served the objective of keeping regulated interest rates at a low level. This has been reflected in the less stringent regulation of capital inflows in comparison to capital outflows.

This more liberal approach has been applied to, for example, direct investment and particularly long-term foreign loans. Occasionally, however, capital controls have been used for monetary policy purposes to curb domestic credit expansion. Especially in 1976–1977 and the early 1980s, imports of long-term capital were cut back heavily so as to regulate liquidity. Similarly, in June 1985 the Bank of Finland prohibited the sale to non-residents of bonds and debentures quoted on the Helsinki Stock Exchange in order to ensure the efficiency of the regulation of long-term capital inflows and the conditions necessary for the pursuit of a tight monetary policy.

In recent years, the Bank of Finland has cautiously modified the foreign exchange regulations. Many of the measures undertaken can be ascribed to the fact that regulation has lost its importance in certain respects as a result of the development of domestic financial markets and the introduction of new financial instruments. Hence, the foreign exchange regulations based on the new Foreign Exchange Act which entered into force at the beginning of 1986 were designed to update and simplify the existing controls. Although exchange control was partially relaxed in this context, most capital movements still remained subject to the permission of the Bank of Finland.

However, one of the main aims of the revision of exchange control was to enhance competitive conditions and efficiency in financial markets. In addition to the partial liberalization of the import of long-term capital for financing purposes implemented in August 1986, the decisions taken in May 1986 concerning the abolition of the quotas applied to credits raised for financing imports and the increased opportunities allowed for refinancing exports were aimed at the same goals. The purpose of the liberalization of foreign credits of at least five years duration raised by manufacturing and shipping companies for financing their own operations was to increase the range of alternative forms of financing and hence competition in financial markets.

The bank-specific credit quotas for financing imports introduced at the beginning of 1981 were designed to check the expansion of liquidity and to secure the competitiveness of domestic production competing with imports. As recourse to alternative sources of foreign financing became more prevalent, the quota restrictions were circumvented to an increasing extent and regulation lost its importance in this respect. The use of quotas also reduced competition in the intermediation of finance, so that at times the rates of interest applied to import credits clearly exceeded market rates. So as to increase competition, the upper limit on short-term credits for financing imports intermediated by banks was abolished.

The opportunities to refinance long-term export credits abroad were increased by permitting authorized banks to also refinance long-term export receivables with foreign credit. Furthermore, exporters were granted permits to use long-term foreign credits raised on their own account for financing their export receivables. Increasing the number of alternative sources of finance available to exporters also enhanced competition and efficiency in financial markets.

With the continuing modification of capital controls and the ongoing development of domestic financial markets and their integration with international markets, the effectiveness of exchange control is tending to diminish. This has been reflected to a growing extent both in the increased volatility of short-term capital movements and in marked changes in the composition of capital flows. Traditionally, the bulk of capital imports subject to regulation have taken place on the basis of case-by-case authorizations. In recent years, however, the share of the private sector's capital flows based on general permits and intermediated through the balance sheets of authorized banks has grown substantially. In 1975–1979, an average of 70 per cent of the total capital inflow subject to permission took place on the basis of individual authorization. During 1980–1984, the corresponding share fell to 16 per cent.

The rise in the share of capital imports subject to general permits is not so much due to a fundamental change in the system of exchange control or its application as to the increased competition and internationalization of authorized banks. In particular, the forward exchange market has provided banks and companies with a flexible channel for short-term capital transactions. There may still be pressures for increasing capital imports based on general permits. One indication of this is the exceptionally rapid growth in the sale of domestic bonds and debentures to non-residents in early 1985, even though such transactions had for long been permitted.

PROBLEMS RELATING TO THE AUTONOMY OF MONETARY POLICY

The internationalization of Finnish financial markets can be expected to continue. As a consequence, the scope for pursuing an independent domestic monetary policy under a fixed exchange rate regime, that is, for maintaining, whenever necessary, a degree of domestic monetary tightness which differs from that in other countries, is likely to diminish permanently. In the extreme case, a small open economy which adheres to a fixed exchange rate and whose foreign capital movements are either not controlled at all or inefficiently controlled is unable to pursue an independent monetary policy even in the short run.

However, largely because of exchange control and the underdeveloped state of domestic markets, Finland has so far been able to maintain some scope for the pursuit of a monetary policy which is at least to some extent independent of other countries. This was demonstrated by the developments in 1984–1985, when domestic interest rates were higher than in other countries. Nevertheless, the interest rate differential induced a heavy capital inflow and the convertible foreign exchange reserves of the Bank of Finland grew rapidly, rising by FIM 10.6 billion in the course of 1984 to total FIM 18.8 billion at the end of the year. In addition, the Bank of Finland intervened in the forward market for convertible currencies by purchasing forward exchange from banks to the equivalent of almost FIM 20 billion. The purpose of intervention was to curb the rapid growth of the foreign exchange reserves and domestic liquidity. By contrast, in 1985 and 1986, the forward position of the Bank of Finland decreased substantially, mainly because of a decline in banks' purchases of forward exchange abroad and from companies.

When considering the autonomy of monetary policy it should be noted that autonomy can be supported in the short run by attempting to reduce the possibilities of substituting foreign for domestic assets, thereby separating domestic and foreign financial markets. This can be achieved both through a flexible exchange rate policy and through a tightening of capital controls.

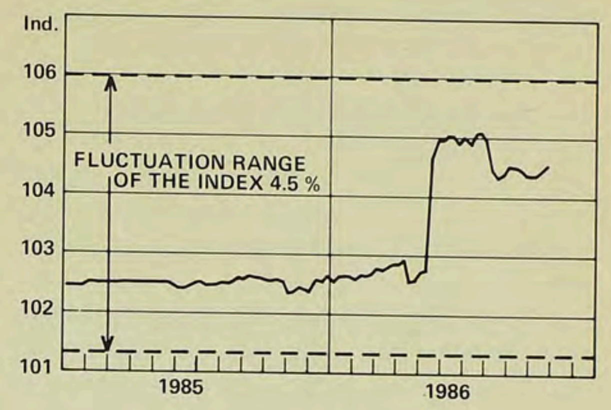
As was stressed above, Finland has traditionally maintained a fixed exchange rate regime, at present in the form of a basket peg. Under this system, the currency index has been kept stable and adjusted only rarely. The adoption of a more active exchange rate policy would enhance the scope for pursuing an independent monetary policy. If the currency index and hence exchange rates were determined quite freely on the basis of supply and demand, this could result in large and sharp fluctuations in exchange rates reflecting the relative narrowness of the domestic foreign exchange market.

These fluctuations would, in turn, have adverse effects on the competitiveness of industry and inflation and thus give rise to severe adjustment problems for the economy.

A fixed exchange rate policy does not, however, rule out the possibility of somewhat larger daily fluctuations in the index than has been the case hitherto. Exchange rate uncertainty would then increase and the willingness of companies and banks to accumulate foreign assets and liabilities would decrease, thereby reducing the sensitivity of capital movements. Having for long kept the index stable, the Bank of Finland widened its intervention margins to some extent in the spring of 1985 (Chart 4). As a result, the currency index began to fluctuate within its fluctuation range and there was a marked decline in both the scale and frequency of intervention.

Increased interest rate and yield awareness, the internationalization of Finnish banks and companies and financial innovations have substantially reduced the effectiveness of capital controls. According to studies carried out by the Bank of Finland, more than half of the changes in the domestic money supply in the 1970s were offset through short-term capital flows. At present, this proportion seems to be distinctly higher.

CHART 4. BANK OF FINLAND CURRENCY INDEX (1982 = 100)



Hence, the tightening of capital controls would not seem to be efficient under present circumstances and could, at worst, only serve to weaken the functioning of the economy. It would appear that essentially a choice has to be made between the relative degrees of monetary autonomy and exchange rate flexibility. The more strictly it is desired to adhere to a basket peg, the more it is necessary to accept a reduction in the scope for pursuing an independent monetary policy.

THE INTERNATIONALIZATION OF BANKING

by **Jyrki Laakso**, Director,
The Finnish Bankers' Association,

and **Ralf Pauli**, Head of Department,
Bank of Finland

INTRODUCTION

A very intensive phase in the internationalization of banking got under way in Finland in the mid-1970s and has subsequently proceeded at a rapid rate. At that time, Finnish commercial banks set up their first subsidiaries abroad. This was part of a trend that had begun earlier under the influence of largely the same general factors as in other countries. The first foreign banks established subsidiaries in Finland in 1982.

After the currencies of western industrial countries had become convertible in the 1950s, international trade grew vigorously in the 1960s. As trade-related payment flows expanded, the financing needs of both import and export companies increased. International capital movements picked up, and as a natural consequence of these trends international integration expanded to embrace capital markets and banking itself.

With the growth of trade, companies set up sales and marketing units abroad. In recent years, Finnish companies have, to an increasing extent, transferred their manufacturing operations abroad by setting up production plants in foreign markets or acquiring existing production facilities. Companies' demand for financial services has grown and assumed new forms. Finnish banks have actively participated in the internationalization of Finnish companies by developing their own operations abroad and diversifying the range of services they provide to companies.

During the past decade, financial markets have developed very rapidly in virtually all countries. The needs and demands of both investors and borrowers have changed. Advances in information technology have decisively reduced the cost of transmitting data and facilitated methods of calculation. Today, exchange and interest rate risks require more versatile and sophisticated hedging techniques than in the past. In addition, the slowdown in economic growth in the 1970s and deregulation of financial markets have sharpened competition in financial markets. These structural changes made the direct presence of banks in the major markets essential. Hence, the foreign operations of Finnish banks, like those of banks in other countries, have evolved from a network of correspondent banks into consortium banks and, during the last ten years, into foreign subsidiaries and branches.

The main factors behind the internationalization of banking have been changes in the economic environment, international trade and technology. However, in the course of the 1970s, the authorities in Finland, as in most other countries, adopted a positive approach towards these developments. It could be seen that removing obstacles to international competition offered a means of improving the intermediation of finance both at home and across borders. Consequently, the Finnish authorities have actively supported these developments and taken a favourable attitude towards applications by foreign banks to set up subsidiaries in Finland.

The first part of this article examines the various stages, present forms and importance of the foreign operations of Finnish banks. The second part deals with the establishment of foreign banks in Finland, the legislation governing them and the operations of these banks. An attempt is also made to assess the effects of these activities.

FINNISH BANKS ABROAD

LEGISLATION

The internationalization of commercial banks has been retarded by a stipulation in the Commercial Bank Act according to which a bank may, with the permission of the Ministry of Finance, invest in the shares of foreign credit and financial institutions up to a total amount not exceeding 20 per cent of the bank's equity capital. However, in the spring of 1985, this limit was raised by an amendment to the act to 40 per cent of a bank's equity capital. Previously, this stipulation had been a factor increasing the need of banks to raise their share capital. The amendment to the act and the establishment of branches instead of subsidiaries have facilitated the internationalization of Finnish banks.

The Finnish Foreign Exchange Regulations are applied equally to all foreign exchange operations between Finland and abroad. Accordingly, the foreign currency operations of a foreign branch of a Finnish bank with a Finnish resident, even if the latter is the parent bank, are subject to the Foreign Exchange Regulations. The Foreign Exchange Act and the decisions and regulations of the Bank of Finland pertaining thereto were revised at the beginning of 1986. These revisions and the subsequent amendments to the Foreign Exchange Regulations have simplified and partially liberalized exchange control.

OPERATIONS

The changes in the banks' operating environment have been strongly reflected in their foreign operations. Initially, their main tasks were to participate in the financing of foreign trade and in the arranging of foreign credits for Finnish companies. A network of correspondent banks covering thousands of banks still plays an important role in the handling of routine trade-related transactions.

During the 1960s, the demand of Finnish companies for financial services relating to foreign trade and investment grew and diversified. International banking developed rapidly and major financial centres grew up in Europe. The Euromarket, operating outside the scope of national regulations, offered new sources of finance for banks. So as to be able to participate more closely in these developments, Finnish banks strengthened their presence in international financial centres by setting up consortium banks, usually together with other Nordic banks. Consortium banks extended their operations to the Euromarket by participating in syndicated loan arrangements. Hence, Finnish companies also gained access to the financial opportunities offered by the Euromarket.

The internationalization of banking and business continued at a rapid pace in the 1970s. In Finland, foreign operations assumed a more prominent position in the business philosophy of banks. Units operating abroad were employed increasingly for the purpose of generating profits for parent banks and groups of banks. The trend towards forms of operation centred more closely on parent banks continued.

The establishment of subsidiaries and, later, branches abroad was facilitated by the knowledge and expertise accumulated in consortium banks. Business expanded to cater increasingly for the individual needs of corporate customers, such as the implementation of their share issues abroad. Operations also expanded to encompass areas which were not directly connected with the activities of Finnish companies or their subsidiaries abroad.

The foreign operations of Finnish banks are based on the utilization of their special know-how in the servicing of Finnish customers, on the one hand, and on the exploitation of narrow market niches, on the other. By contrast, in Finland parent banks are universal banks providing a comprehensive range of services to households and companies alike. If parent banks are comparable to department stores, then their foreign units are highly specialized specialty shops. As such, they support developments in the profits of the group and serve as channels through which information on the latest developments in financial markets and instruments is rapidly conveyed to the parent bank.

ESTABLISHMENTS OPERATING ABROAD

Table 1 shows the consortium banks in which Finnish banks participate. The most important of the consortium banks is Scandinavian Bank Ltd, which was set up at the end of the 1960s. It seems likely to remain virtually the only consortium bank of the two biggest commercial banks; nowadays, Kansallis-Osake-Pankki operates on its own in major international financial centres all over the world.

Union Bank of Finland Ltd has intensified its cooperation with the Nordic commercial banks, SE-banken, Bergen Bank and Privatbanken, particularly in Scandinavia in connection with the so-called Scandinavian Banking Partners agreement on cooperation. As soon as legislation permits, the banks will complete their respective investments in each other's share capital. By means of cooperation, the banks aim to meet the challenge of sharpening competition in the Nordic countries, all of which are open to international banking.

TABLE 1. CONSORTIUM BANKS WITH FINNISH PARTICIPATION

	Year of establishment/acquisition	Finnish shareholder	Finnish shareholding, per cent	Balance sheet as at Dec. 31, 1985, mill. FIM
Scandinavian Bank Limited, London	1969	UBF	27	25 502
Manufacturers Hanover Banque Nordique, Paris	1967	KOP	10	3 910
Arbuthnot Latham Bank Ltd, London[1]	1981	BoH[2]	13.6	4 409
Banque Transatlantique S.A., Paris	1971	BoH[2]	1	2 349
Skandinaviska Enskilda Banken Luxembourg S.A., Luxembourg	1980	Bank of Åland	1	5 482
Banque Nordeurope S.A., Luxembourg	1973	Skopbank	43.75	3 996[3]
FennoScandia Ltd, London	1983	Skopbank	50	1 221
London & Continental Bankers Ltd, London	1973	OKObank	2.5	4 182[3]
B.E.G. Bank Europäischer Genossenschaftsbanken, Zurich	1980	OKObank	1.5	2 815
Banque Indosuez Sverige Ab, Stockholm	1986	Postipankki	20	

[1] Investment relinquished in 1986.
[2] Bank of Helsinki merged with Union Bank of Finland in 1986.
[3] Balance sheet as at March 31, 1986.

In recent years, consortium banks have been set up by particularly the smaller Finnish commercial banks, such as Skopbank and OKObank, mainly in London but also in Luxembourg. Entry has often been gained by acquiring a minority shareholding in a bank already well-established in the market.

In many cases, a representative office has marked the first step towards starting actual banking operations abroad. The first representative offices were opened in the early 1970s. More have been set up during the 1980s so as to supplement the existing network of offices and also in countries where full-scale banking is either not practicable or not possible. Table 2 shows the representative offices of Finnish commercial banks.

The two biggest commercial banks set up their first subsidiaries in Luxembourg in 1976 (UBF) and 1977 (KOP). In addition, they both have subsidiaries in Singapore and Nassau.

In the spring of 1984, Kansallis-Osake-Pankki acquired a majority shareholding in Nordfinanz-Bank in Zurich, in which Nordic Bank Limited had previously been the majority shareholder. With the opening of its branch in New York, Kansallis-Osake-Pankki relinquished its shareholding in the Nordic American Banking Corporation. Union Bank of Finland, in turn, acquired total ownership in the American Scandinavian Banking Corporation.

Only Kansallis-Osake-Pankki and Union Bank of Finland have branches abroad. They are located in London, New York and the Cayman Islands. Kansallis-Osake-Pankki also has a branch in Singapore. The setting up of a

TABLE 2. REPRESENTATIVE OFFICES OF FINNISH BANKS

	Year of establishment	Form of ownership
Kansallis-Osake-Pankki		
Moscow	1973	Fully owned
Tokyo	1981	Joint Nordic Office
Stockholm	1985	Fully owned
Hong Kong	1985	Fully owned
Union Bank of Finland		
Moscow	1975	Fully owned
Representative office for the Federal Republic of Germany and the Benelux Countries, Luxembourg	1978	Fully owned
Tokyo	1972	Joint Nordic Office
Sao Paolo	1980	Joint Nordic Office
Los Angeles	1983	Fully owned through participation in SBL[1]
Zurich	1985	Fully owned through participation in Scandfinanz AG
Hong Kong	1986	Fully owned
Scandinavian Banking Partners: SE-Banken, Stockholm Bergen Bank, Bergen and Oslo Privatbanken, Copenhagen		
Postipankki		
Moscow	1984	Jointly with PK banken
Tokyo	1985	Fully owned
Stockholm	1986	Fully owned
Skopbank		
London	1979	Fully owned
Moscow	1982	Fully owned
Stockholm	1984	Joint Nordic Office
Oslo	1984	Joint Nordic Office
Copenhagen	1984	Joint Nordic Office
New York	1986	Fully owned
OKObank		
Moscow	1986	Fully owned
Bank of Helsinki[2]		
Tromsø	1985	Fully owned
Umeå	1985	Fully owned

[1] SBL = Scandinavian Bank Ltd
[2] Bank of Helsinki merged with Union Bank of Finland in 1986.

foreign branch does not generally require an investment in share capital abroad, because in many countries the equity of the parent will be sufficient to meet the capital adequacy requirements stipulated for the establishment of a branch. The opening of foreign branches has made the provision of services more flexible and rapid. This has contributed to reducing the operating costs of branches and hence strengthened their competitive power.

The first Finnish subsidiary to gain recognized bank status in London was Postipankki (U.K.) Ltd. Apart from the state-owned Postipankki, Ålandsbanken Ab and the Pohjola Group (insurance) have minority holdings in the bank. The foreign branches and subsidiaries of Finnish commercial banks are shown in Table 3.

TABLE 3. FOREIGN BRANCHES AND SUBSIDIARIES OF FINNISH BANKS

	Year of establishment/acquisition	Finnish shareholder	Finnish share holding, per cent	Balance sheet as at Dec. 31, 1985, mill. FIM
Branches				
Kansallis-Osake-Pankki, London	1984	KOP	100	5 643
Kansallis-Osake-Pankki, New York	1985	KOP	100	343
Kansallis-Osake-Pankki, Singapore	1986	KOP	100	.
Kansallis-Osake-Pankki, Cayman Islands	1986	KOP	100	.
Union Bank of Finland Ltd, London	1984	UBF	100	5 248
Union Bank of Finland Ltd, New York	1986	UBF	100	.
Union Bank of Finland Ltd, Cayman Islands	1986	UBF	100	.
Subsidiaries				
Union Bank of Finland International S.A., Luxembourg	1976	UBF	100	9 648
American Scandinavian Banking Corporation, New York	1985	UBF	100	2 698
Union Bank of Finland (Singapore) Ltd, Singapore	1980	UBF	100	3 695
Nordfinanz-Bank Zürich, Zurich	1984	KOP	63,16	7 825
Kansallis International Bank S.A., Luxembourg	1977	KOP Pohjola Group	85 15	4 960
Kansallis International Bank (Asia-Pacific) Ltd, Singapore	1984	KOP	100	1 336
Kansallis Overseas Bank Limited, Nassau	1983	KOP	100	231
Kansallisbanken, Stockholm	1986	KOP	100	.
Bank of Helsinki (Overseas) Ltd, Nassau	1985	BoH[1]	100	167
OKObank Ab, Stockholm	1986	OKObank	100	.
OKObank (Cayman Islands) Ltd	1986	OKObank	100	.
Postipankki (U.K.) Limited, London	1981	Postipankki Bank of Åland Pohjola Group	90 2 8	3 250

[1] Bank of Helsinki merged with Union Bank of Finland in 1986.

FOREIGN BANKING OPERATIONS IN FINLAND

LEGISLATION

The same legislation governing commercial banking is applied to foreign-owned banks as to domestic-owned banks. According to this legislation, the permission of the Ministry of Finance is always required for the carrying on of banking business. Permission is granted if the establishment of a bank serves the general interest. The establishment of a branch network in Finland is subject to the permission of the Bank Inspectorate.

Legislation governing a foreigner's right to carry on banking business in Finland entered into force in 1979. Prior to that, foreigners were only allowed to set up representative offices. Under the legislation, a foreign bank may set up or purchase a commercial bank, a mortgage bank or some other credit institution. A foreign bank is not allowed to engage in savings or cooperative banking business in Finland. Nor can a foreign bank set up a branch in Finland.

A foreigner may, without the permission of the Ministry of Finance, acquire and hold unrestricted shares in a Finnish commercial bank provided that the total amount of shares held by foreigners does not exceed 20 per cent of the bank's equity. Shareholdings in excess of this amount as well as the acquisition of restricted shares are subject to the permission of the Council of State (Government). Permission may be granted to a foreign financial institution in special cases. The opinion of the Bank of Finland must be obtained in connection with all applications.

In addition, under the foreign exchange regulations, the transfer of capital needed for the setting up of a subsidiary requires the approval of the Bank of Finland. In granting approval, the Bank of Finland is entitled to impose certain conditions on banks, and has in fact exercised this right. Those banks which have been granted permission have, among other things, been required to observe the Bank of Finland's interest rate, credit and foreign exchange policy guidelines. The Bank of Finland has also placed these banks under the same obligation to report as other banks. Furthermore, the Bank of Finland has required foreign-owned banks to join the cash reserve agreement concluded between the Bank of Finland and the banks. In keeping with its overall policy, the Bank of Finland has set limits on the banks' open foreign exchange positions.

Initially, the foreign-owned banks were not granted access to central bank credit or the right to participate in the Bank of Finland's call money market. The reason for this departure from the general principle of equality of rights and obligations was the desire of the authorities to first gain some idea of the nature and scale of the operations of the new banks. This special treatment was abandoned at the beginning of 1984.

According to the conditions laid down by the Ministry of Finance, foreign-owned banks are allowed to own real estate only to the extent that it is necessary for their immediate banking operations. Direct investments in other companies are subject to the approval of the Bank of Finland. The commercial banking legislation also restricts investments of this type.

ESTABLISHMENT AND OPERATIONS

Prior to the establishment of foreign-owned banks, two banks, Hambros Bank Ltd (1973) and Citibank N.A. (1977), had representative offices in Finland. After the new legislation had entered into force in 1979, three banks - Citibank, Chase Manhattan Bank and Banque de l'Indochine et de Suez (Indosuez) - applied for permission to set up a subsidiary in Finland. All three were granted permission and they commenced operations in 1982. The first two are fully owned by their respective parent banks, whereas Postipankki has a 20 per cent stake in Indosuez. Citibank closed its representative office after the establishment of its subsidiary. Montagu International Holdings

was granted permission to set up a subsidiary bank in Finland in 1985, and Samuel Montagu Osakepankki commenced operations in 1986.

In addition to Hambros Bank Ltd, several Nordic banks have representative offices in Finland (Table 4).

TABLE 4. REPRESENTATIVE OFFICES OF FOREIGN BANKS IN FINLAND

Bank	Year of establishment
Hambros Bank Ltd	1973
Faellesbanken for Danmarks Sparekasser A/S	1984
Skandinaviska Enskilda Banken	1984
Svenska Handelsbanken	1984
Swedbank	1984
Union Bank of Norway Ltd	1984
Bergen Bank A/S	1985
Nordbanken	1986

The combined balance sheet total of the foreign-owned banks has settled at about 2 per cent of the combined balance sheet total of the commercial banks. A distinctive feature of the business of these banks is the large share in their balance sheets of foreign banking operations and transactions in the unregulated money market. In 1985, foreign liabilities accounted for between 50 and 75 per cent of the banks' working capital. Their domestic funding consisted almost entirely of unregulated corporate deposits. These banks lend large amounts in the form of off-balance-sheet loans intermediated through their trust departments. This largely reflects distortions in the allocation of credit caused by tax rules and, to some extent, monetary policy regulations. These banks do not have branch networks necessary for the taking of standard tax-free – and hence low interest rate – deposits from households.

Loans to the public are granted exclusively to firms and are for the most part denominated in foreign currency. Also typical of these banks is the large proportion of claims on other banks in their portfolios. Short-term funds raised in the unregulated market, the rates of interest on which are determined by market conditions are placed either in the Bank of Finland's call money market or the interbank market. The interest rate system applied in the call money market was revised at the beginning of 1986, when the call money rate was split into two: one rate for deposits and one for borrowing from the central bank. This acted as a spur to the development of the interbank market.

The setting of a ceiling on banks' average lending rates has constituted an essential component of monetary policy throughout the post-war period. Lacking traditional deposit-taking from the household sector and with only a minimal volume of cheque account business with the corporate sector, the foreign-owned banks had very limited opportunities during this period of strict regulation of average interest rates to carry on markka-denominated lending subject to interest rate regulation by the Bank of Finland.

As markets developed and the belief in a greater role for market forces in monetary policy gradually strengthened, the Bank of Finland began to relax its interest rate controls in 1983. The upper limit on lending rates was abolished at the end of 1985 and the regulation of average lending rates was abandoned at the beginning of August 1986.

Initially, the liberalization measures did not alleviate the position of foreign-owned banks, since the interest rate ceiling in the wholesale money market remained well below the level of unregulated interest rates. A subsequent revision of regulations allowed the intermediation of unregulated funds at a positive interest rate margin. Nevertheless, the lack of household deposits at low rates of interest limits the chances of these banks to engage in domestic lending, because they are unable to offer finance on more favourable terms as part of their loan packages.

EXPERIENCES

In the discussions conducted with the authorities in connection with the first applications for the establishment of foreign banks, special attention was paid, on the one hand, to the long-term implications under competitive conditions of the establishment of foreign-owned banks, and, on the other hand, to the utilization of resources in the banking sector. The judgement was that the effects would be largely beneficial. It was also pointed out that the effects on product diversification in the banking sector would be favourable. All in all, the decision of the authorities to permit foreign banks to operate in Finland should be seen against the background of the trend towards the increasing openness of the Finnish economy during the previous two decades. Although demands for reciprocity had not hampered the internationalization of Finnish banks, the authorities considered it was only fair to offer foreign banks the same opportunities in Finland.

The Finnish banking sector is characterized by a small number of competing banks, with a strong inclination to reach mutual agreements on interest rates, banking charges and other methods of competition easy to copy. Traditionally, competition has centred on payment services and other services provided free of charge or reasonably priced in relation to costs. Another distinctive feature of banks in Finland is the highly developed branch network. Hence, competitive considerations have tended to make the intermediation of loans fairly expensive, which has been reflected as relatively wide interest rate margins.

It is difficult to assess to what extent the presence of foreign-owned banks has affected competitive conditions. In recent years, there have been other fundamental factors promoting closer integration of the markets.[1]

The unregulated market for short-term funds, which has expanded rapidly in terms of both deposit-taking and lending, was already in existence when the foreign-owned banks started operations in Finland. The growth of this market has been boosted by the activities of the new banks. Their transactions in domestic currency take place almost exclusively in the interbank market and the unregulated money market.

The opportunities for intermediating unregulated deposits to other banks and the public have improved. This is a consequence of the right accorded to the foreign-owned banks to place funds in the Bank of Finland's call money market, the decision to differentiate the call money lending and deposit rates and the relaxation of interest rate controls. The rate of interest applied to short-term finance is determined in the market on the basis of the Bank of Finland's call money lending and deposit rates. The domestic banks are no longer able to influence the level of interest rates in the markets through mutual agreement.

The effects on banks' foreign currency operations accompanied and possibly enhanced changes which had already started prior to the entry of foreign banks to Finland, i.e. sharpening competition in foreign exchange dealing, foreign payment services and the intermediation of loans raised abroad. Guarantee charges and margins on foreign-currency loans and other services have been squeezed. Consensus and agreements had made it possible to maintain these charges at a fairly high level. The subsidiaries of foreign banks have contributed to the development of financial risk management throughout the banking sector.

In conclusion it can be said that the admission of foreign banks to Finland has constituted part of the deregulation of financial markets aimed at fostering competition. Indeed, their presence has probably strengthened the trend in the banking sector towards greater market-dominance in competition.

[1] See the article by Korkman in this publication.

BANK INSPECTION IN FINLAND

by Jussi Linnamo
Chief Director of the Bank Inspectorate

REGULATION OF BANKING IN FINLAND

A bank is a corporation which provides liquid and generally riskless claims to the public against cash payment on agreed terms and in agreed amounts and converts the funds so obtained into more or less risky claims of agreed liquidity. A deposit bank offers its claims mainly to a group of people which is undetermined beforehand, i.e. the public. As a rule, the public is not able to acquire directly on its own account riskless and liquid assets easily divisible into small portions at the same cost, on the same terms and to the same extent.

From the point of view of the efficiency of the economy and the confidence felt in the banking system it is of crucial importance that the public is able to consider its claims on banks riskless. From the point of view of the continuity of a bank's operations, it is essential that the interest income received from its assets and the bank's other earnings exceed the interest and other expenses on its deposit-taking. Measured in this way, a bank's profitability is rarely negative. A loss is likely to occur only as a result of excessive unit prices of factors of production or of external services in relation to overall profits. In general, a bank cannot operate at a loss.

Unprofitability may arise as a result of a fundamental mismatching of fixed-rate and variable-rate lending and funding, the realization of the risks inherent in open foreign exchange exposures, the incurrence of losses in lending and securities trading or because of criminal action.

The losses arising in a bank's activities are mostly loan and guarantee losses and losses incurred in foreign exchange and securities transactions. Apart from the generally poor quality of a bank's financial assets, the most common reasons for loan and guarantee losses are the excessive concentration of the bank's assets and liabilities with the same customers, with customers belonging to essentially the same community of interest (customer risks) or with customers representing the same economic sector (sectoral risks). It is also possible to include in the last-mentioned category the excessive concentration of assets and guarantees with countries whose debt-servicing ability is, irrespective of the creditworthiness of private customers, poor (country risks). The terms exchange rate risk, interest rate risk and investment risk denote the nature of the risk involved.

For the reasons presented above, the main techniques of bank supervision are as follows: licences, restrictions on ownership, restrictions on areas of business, solvency and liquidity requirements, restrictions on large exposures, and an efficient insurance system for deposits. Technically, these techniques of supervision are applicable, if the supervisory authorities have the power to influence the information contained in banks' financial statements and their reporting systems.

All the techniques mentioned above fall within the ambit of prudential supervision at the individual bank level. In Finland, it is implemented by the Bank Inspectorate, which is subordinate to the Ministry of Finance.

In its capacity as the country's central bank, the Bank of Finland is responsible for protecting the internal and external value of the markka and maintaining the country's financial system on a stable and secure footing. Consequently, the Bank of Finland keeps a close watch over developments in the entire banking system and acts as lender of last resort to banks. The Bank of Finland monitors banks' risk behaviour particularly with regard to their foreign operations. Hence, the Bank Inspectorate and the Bank of Finland cooperate in bank supervision. The Bank of Finland is primarily responsible for supervising compliance with its monetary policy directives and foreign exchange regulations. The Bank Inspectorate is, however, entitled to report the findings of its inspection to the Bank of Finland for possible action.

TECHNIQUES OF BANK INSPECTION

LICENCES

In Finland, there are 10 commercial banks, some 250 savings banks, 360 cooperative banks, 6 mortgage banks, 4 credit companies and one mortgage society, all of which are supervised by the Bank Inspectorate. Also included in the system of banking institutions are the Bank of Finland, which is supervised by Parliament, Postipankki, which is supervised by the Ministry of Finance, as well as 15 to 20 finance companies, some 10 credit card companies, about 10 investment trusts and some 15 stock exchange agencies, which are not subject to public supervision.

Commercial banks, savings banks, cooperative banks, mortgage banks, credit companies and mortgage societies must have a licence granted by the Ministry of Finance. A condition for a licence is that the founders of the bank are Finnish corporate entities or Finnish nationals residing in Finland. The share capital of a commercial bank, a mortgage bank or a credit company must not be less than FIM 5 million, while the basic capital of a savings bank and the cooperative capital of a cooperative bank must not be less than FIM 500 000.

RESTRICTIONS ON THE RIGHT OF OWNERSHIP

Foreigners are allowed to own up to 20 per cent of the shares of a commercial bank, a mortgage bank or a credit company. The Council of State may, in special cases, authorize a foreign credit institution to acquire up to a 100 per cent shareholding in the aforementioned Finnish banks and credit companies.

Only Finnish nationals are allowed to acquire shares in a cooperative bank or to be a member of a mortgage society. Unless otherwise authorized by the Ministry of Finance, only a Finnish national residing in Finland can act as a member of the board of administration or the board of directors, the chief general manager, a senior clerk or an auditor of a commercial bank or a mortgage bank. A foreigner cannot be appointed as a member of the board of administration, the chief general manager or an auditor of a savings bank, a cooperative bank or a mortgage society.

The Ministry of Finance is required to grant a licence to a bank or a credit company if the establishment of the institution is in the general interest. The Ministry of Finance also confirms the articles of association or rules of a bank, a mortgage society or a credit company.

RESTRICTIONS ON AREAS OF BUSINESS

Areas of banking business and the restrictions placed on them are defined in legislation. Only commercial banks, savings banks, cooperative banks and Postipankki are entitled to receive deposits from the public. With the permission of the Ministry of Finance, they can also issue obligations made out to bearer. Deposit banks are not allowed to raise loans through bond issues secured on the assets of the issuer.

The mortgage banks, the mortgage society and the credit companies acquire their funds principally in the form of bonds and other similar long-term debt instruments. The mortgage banks and the mortgage society extend mainly long-term mortgages and loans to public corporations.

Banks are not allowed to undertake business activities which cannot be regarded as falling under banking, nor can they carry on insurance business. Banks are allowed to own either directly or through subsidiaries or holding companies up to 20 per cent of the share or cooperative capital of enterprises which are engaged in business other than banking. The mortgage banks and the mortgage society are allowed to own shares in non-banking companies only if ownership is necessary from the point of view of the bank's operations. There are no such restrictions on the shareholdings of the credit companies.

Any bank may own shares and certificates of participation in the business and commercial undertakings mentioned above up to a total of 10 per cent of the bank's equity capital. For credit companies, this limit is equal to equity capital.

A commercial bank is allowed to own shares in other domestic credit and financial institutions and, with the permission of the Ministry of Finance, in foreign credit and financial institutions up to 40 per cent of its equity capital. For mortgage banks, this limit is 20 per cent. Savings and cooperative banks may own shares only in domestic credit and financial institutions, up to 25 per cent of their equity capital.

Commercial banks, savings banks and cooperative banks may, without the permission of the Bank Inspectorate, invest in bank real estate and shares of real estate companies up to 10 per cent of their balance sheets and, in addition, up to 3 per cent of their balance sheets in real estate other than bank premises and shares in real estate companies.

No restrictions in respect of the value of equity capital or the balance sheet have been placed on the shareholdings of Postipankki.

The establishment of a domestic branch by a commercial bank, a savings bank, a cooperative bank, a mortgage bank or a mortgage society requires permission.

Only commercial banks may, subject to the permission of the Ministry of Finance, set up branches abroad. By contrast, foreign banks are not allowed to establish branches in Finland. A foreign credit institution may, with the permission of the Ministry of Finance, own up to 20 per cent of the share capital of a Finnish bank or open a representative office in Finland. Subject to the permission of the Council of State (Government) a foreign credit institution is allowed to establish a subsidiary in Finland.

SOLVENCY AND LIQUIDITY REQUIREMENTS

The solvency of Finnish banks is generally examined in terms of the ratio of a bank's liabilities and commitments to its equity capital. A bank's equity capital is considered to comprise share or cooperative capital, basic capital, reserves and net profits for the accounting year and preceding accounting years. The Bank Inspectorate may, on application by a bank, grant permission for a specified term to consider unsecured debentures issued by the bank as ranking on a par with equity capital, up to a maximum of half the value of the bank's equity capital. A bank's equity capital may also include up to half of the general provisions for bad debts which are used only to cover the bank's loan losses.

Equity capital and other comparable items are compared with the total of a bank's balance-sheet liabilities and its off-balance-sheet commitments, the latter being included at half their values. Assets that can be regarded as fully riskless may be deducted from the obligations.

The equity capital and other comparable items of a commercial bank, a mortgage bank or a mortgage society must amount to at least 4 per cent of the bank's total liabilities. In the case of savings banks and cooperative banks, the capital ratio, calculated in the same way, is 2 per cent, whereas in the case of credit companies it is 20 per cent. Savings banks and cooperative banks are generally allowed to extend credit or give guarantees only if backed by sufficient security.

A cash reserve system for safeguarding liquidity has been stipulated only for commercial banks, savings banks and cooperative banks. A commercial bank's cash reserves, i.e. the total of its liquid assets, must equal 20 per cent of its liabilities payable on demand and 5 per cent of other liabilities. For savings banks and cooperative banks, the corresponding minimum liquidity requirements are 20 and 10 per cent, respectively.

There are no specific liquidity provisions governing the mortgage banks, the mortgage society or the credit companies. Postipankki is not subject to any minimum capital or liquidity requirements.

There are no specific minimum capital or liquidity requirements concerning the consolidated operations of banking groups. Only the commercial banks, the mortgage banks, the credit companies and Postipankki publish consolidated income statements and balance sheets.

RESTRICTIONS ON LARGE EXPOSURES

All banking acts prohibit banks from concentrating their claims and commitments with the same borrowers. However, there are no formal lending limits laid down in the banking acts restricting the ratio of large exposures to equity capital.

DEPOSIT PROTECTION SCHEMES

The commercial banks, the savings banks and the cooperative banks are required to belong to their own guarantee funds, the rules of which are confirmed by the Ministry of Finance. The banks belonging to each fund appoint a delegation, which, in turn, appoints a board of management.

The banks participating in the three guarantee funds pay an annual premium, which must be sufficient with respect to the duties and tasks of the funds. The Bank Inspectorate approves the size of the premium.

In the event of a bank failing, that part of depositors' claims held in deposit accounts with the bank which cannot be met out of the bank's own assets must be paid for out of the assets of the guarantee fund. The assets of the fund can be used for discharging liabilities to depositors in the course of the bankruptcy or liquidation proceedings.

The guarantee fund may also grant support loans or subsidies to a bank which has incurred heavy losses or otherwise run into difficulties to the extent that financial assistance of this kind is necessary for safeguarding its further operations. If the bank encountering difficulties is merged with another bank, the support loan or subsidy can also be extended to the recipient bank.

THE FORMS OF BANK INSPECTION

The Bank Inspectorate is administratively subordinate to the Ministry of Finance. It is headed by the Chief Director and is made up of three departments — the Accounting, Legal and Credit Departments — and the Administrative Office. The Inspectorate examines the operations of the commercial banks, the savings banks, the cooperative banks, the mortgage banks, the mortgage society and the credit companies, as well as the banks' guarantee funds and the representative offices of foreign credit institutions operating in Finland.

Bank inspection is conducted by collecting monthly, quarterly and semiannual data from banks, in addition to financial statement data. Data on banks' total commitments to their major customers are collected on an individual customer basis. In addition, the Bank Inspectorate carries out on-site inspections in the banks at least every other year. Representatives of the largest banks have consultations with the Bank Inspectorate each year before the confirmation of their financial statements and, if necessary, at more frequent intervals.

Operating under the supervision of the Bank Inspectorate are two other supervisory authorities, the Savings Bank Inspectorate, appointed by the Finnish Savings Bank Association, and the Cooperative Bank Inspectorate, appointed by the Central Union of the

Cooperative Banks of Finland, which also carry out bank inspection in the member banks of their respective associations. The inspection reports made by these two bodies and the banks' replies to them, are sent to the Bank Inspectorate, which can then decide upon possible further steps. The remedial measures employed by the Bank Inspectorate range from issuing a guideline to reversing an illegal decision or making a proposal to the Ministry of Finance for withdrawing a bank's licence.

Most of the requirements set out in the so-called Basel Concordat concerning the disclosure of information to the bank inspection authorities of other countries have been implemented in Finnish legislation. The Bank Inspectorate maintains regular contacts with countries whose parent banks have subsidiaries in Finland or in which Finnish banks have branches, subsidiaries, associates or representative offices.

NEW FEATURES OF BANKING AND THEIR IMPLICATIONS FOR BANK INSPECTION

Finnish banking legislation dates back mainly to 1969. Though it has subsequently been amended several times, it has nevertheless become outdated to some degree.

Because of rapid advances in banking, including, inter alia, automation, the emergence of new money market instruments and internationalization, some forms of inspection have been rendered obsolete, whereas in certain areas supervision does not have sufficiently rapid means of response at its disposal.

Until quite recently, the Finnish bank credit market has been characterized by a fairly strict degree of regulation. In these circumstances, no actual interest rate competition has arisen between banks. Up till the end of July 1986, the Bank of Finland set ceilings on banks' average domestic lending rates and, up till the end of 1985, on their lending rates. The Bank of Finland also decides on call money rates. Under temporary tax relief legislation, which has nevertheless been continually renewed, deposits by the public have been tax-exempt. Tax exemption has been conditional on uniform rates of interest and terms of notice based on interest rate agreements between the banks and on unrestricted withdrawal rights. The issue of bonds has been dependent on permission given by the Council of State.

Banks compete for funds in domestic and international inter-bank markets, in the acquisition of tax-exempt deposits and in domestic and international securities markets. In the markets for domestic taxable deposits and short-term obligations, rates of interest are determined on the basis of the Bank of Finland's call money rate.

In addition to lending, banks have diversified their portfolios to include holdings of other kinds of assets such as bonds, debentures and shares issued by customers, certificates of deposit and other similar money market instruments.

With the increasing openness of the Finnish economy, there has been a growing demand for foreign-currency loans by Finnish companies. Finnish banks intermediate foreign loans to companies and also domestic foreign-currency loans. Finnish companies' efforts to hedge against foreign currency risks have led to an expansion in the forward exchange markets. In addition to forward contracts, the use of futures and option contracts is also increasing in Finland. Since there are no futures or option markets in Finland, Finnish banks utilize international centres. Similarly, interest rate and currency swaps are assuming increased importance.

In the late 1960s, Finnish banks became shareholders in a number of foreign banks. The principle of participation in consortium banks, mainly in cooperation with certain other Nordic banks, and the establishment of representative offices abroad continued until the late 1970s. In the course of the same decade, Finnish banks set up their first foreign subsidiaries and this was followed by the establishment of foreign branches in the early 1980s.

At home, Finnish banks had, prior to this, owned Finnish mortgage banks and credit companies as subsidiaries or associates. From a fairly modest start, bank-owned finance companies developed rapidly in the late 1970s and early 1980s. During the current decade, banks have also set up subsidiaries in the form of credit card companies, stockbroking firms and investment trusts. These trends have led to the gradual emergence of large banking groups embracing a wide range of activities.

The developments mentioned above have given rise to shifts of emphasis in bank supervision. In addition to credit, liquidity and profitability risks, banks now have to cope with foreign exchange risks, country risks, and rate of interest and maturity mismatching. Similarly, the increase in off-balance-sheet items, which apart from bank guarantees also include forward contracts, futures, options, stand-by agreements, revolving issue facilities etc., has made it necessary for banks to reassess their risks.

In the supervision of the risks associated with banks' foreign activities, the Bank Inspectorate works in cooperation with the Bank of Finland. The Bank of Finland monitors banks' currency and country risks on a regular basis. A monitoring system for supervising interest rate and maturity risks and the risks attaching to off-balance-sheet items is currently being created. In addition, discussions are conducted with banks on the development of their own internal control systems. Efforts are made in monitoring and supervising to take into account the latest international developments in this area.

As a consequence of the expansion in the number and significance of banks' subsidiaries and associates, the parent bank's capital and liquidity ratios do not necessarily any longer give a sufficiently reliable picture of the risk-bearing capacity of the consolidated group.

The committee appointed to make proposals for reforming and unifying Finnish legislation on deposit banks submitted its report in February 1986. The reform and unification of the regulations safeguarding banks' solvency occupied a prominent position in the committee's recommendations. Special attention was also paid to the risks relating to the internationalization of banking and the formation of banking groups. The formulation of actual legislation still requires detailed preparation, which is likely to take some years.

THE FUTURE OF BANK INSPECTION

The last bank failure in Finland occurred in the 1930s. Seen in this light, Finnish banking institutions can be regarded as very stable. Up to the 1970s, the Bank Inspectorate could remain an institution granting permits in a market which was governed by strict interest rate regulation and exchange control. However, now that the nature of banking and the factors impinging on the banking environment are undergoing fundamental change, the techniques of bank inspection are also changing. Ensuring the soundness of the banking system is still the overall aim, but to an ever-increasing extent the techniques of bank inspection consist of securing the efficiency of banks' own risk management methods and safeguarding the adequacy of banks' equity capital.

Apart from the management of the risks inherent in their activities, banks are having to pay increasing attention to the reliability and protection of their own ADP arrangements and techniques for the electronic transfer of funds.

In Finland, as in other countries, the issue of the relation of bank inspection to consumer protection and competition policy authorities has come to the fore. Not only banking itself but also bank inspection is undergoing radical change.

SAVING AND INVESTMENT IN FINLAND

by **Hannele Luukkainen**, Research Officer,
and **Kjell Peter Söderlund**, Research Officer,
Bank of Finland

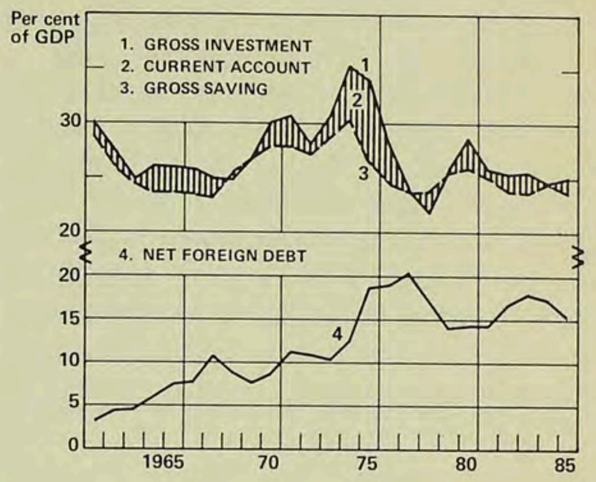
Finnish economic performance during the first half of the 1980s was more balanced in relation both to past experience and to performance in other countries on average. The growth of total output was faster and more stable, the rate of unemployment lower and the external balance better than in the other OECD countries. Although this favourable performance was in part due to external factors of a temporary character, economic policy was also more successful than in the past. Another important factor was the high level of investment in the 1960s and 1970s, the benefits of which are being reaped in the 1980s.

GENERAL FEATURES

The Finnish investment ratio has long been one the highest in the industrial countries (Chart 1). When making international comparisons it should be remembered that industrialization started later in Finland than in most other industrial countries. Up to the mid-1970s, a high level of investment activity was necessary because of far-reaching structural change in the economy, a process which was supported by keeping interest rates at a low level through administrative control. Basic investments included large-scale construction not only in industry (e.g. power plants) but also in roads and housing. Associated with structural change was heavy internal migration and substantial emigration to Sweden, especially in the late 1960s.

Owing to the massive scale of basic investments the investment ratio did not fall as sharply in Finland as it did in other countries in the immediate aftermath of the first oil crisis. Moreover, rapid inflation stimulated investment through a negative real rate of interest, giving rise to disturbances in the current account of the balance of payments. With the onset of recession, domestic saving was inadequate to finance investment, despite the fact that the Finnish saving ratio was still one of the highest in the world. As a consequence, Finland's foreign debt grew to record figures.

CHART 1. SAVING, INVESTMENT AND NET FOREIGN DEBT



The Finnish economy was adjusted to the changed world economic situation following the first oil crisis more rapidly than many other countries. After the deep recession of the mid-1970s, the authorities sought to stimulate the economy and restore external balance through economic policies supporting particularly open sector. Monetary policy was gradually eased and the Finnish markka was devalued by a total of just over 16 per cent between 1977 and 1978. Fiscal policy measures were aimed at strengthening the financial position of the private sector and lowering costs, especially labour costs. Tax concessions made possible an increase in saving in the private sector. As, at the same time, the investment ratio fell slightly to the level of the 1960s, domestic saving was more or less adequate to cover the financing of investment. Indeed, the external balance of the economy has subsequently been better than in the past and the external debt has not grown in relation to GDP for several years.

In the period since the first oil crisis, the emphasis of economic growth in Finland has been on the open sector whereas in many other countries growth was at first sustained by the demand of the public sector and a marked increase in borrowing. The underlying structure of the Finnish economy seems to have strengthened, which partly explains the improved trade-off between internal and external balance in Finland in the 1980s as compared to other countries. Moreover, faster growth in Finland no longer seems to give rise to disturbances in the external balance as easily as before (Chart 2). However, it should be pointed out that several exceptional factors complicate the interpretation of developments over the past few years.

CHART 2. RELATIVE ECONOMIC ACTIVITY AND EXTERNAL BALANCE

SECTORAL DEVELOPMENTS

In addition to an improved balance between saving and investment, developments over the past few decades have been characterized by certain clearly discernible trends. One is the fluctuations in the investment ratio and financial position of the corporate sector. These, in turn, have dominated fluctuations in the economy as a whole and in the current account. Another striking feature is the strengthening in the financial position of the public sector up to the middle of the 1970s and its subsequent weakening. As a mirror image of this development, the deterioration in the financial position of the private sector has been succeeded since the mid-1970s by a period during which the financial position of companies and households has strengthened.

At first, saving by the public sector for long took the form of, perhaps partly deliberate, "forced saving" and funds were channelled back into the private sector as low interest rate loans. On the other hand, public saving was also partly unintended owing to the automatic tightening of taxation, in particular during the rapid inflation of the mid-1970s. It was not until the inflation-adjustment of tax scales was introduced in 1977 and the lowering of the tax ratio was adopted as an economic policy goal that there was a change of trend in the financial positions of the public and private sectors. Thus the public sector deliberately weakened its financial position in favour of the private sector in accordance with its chosen economic policy strategy.

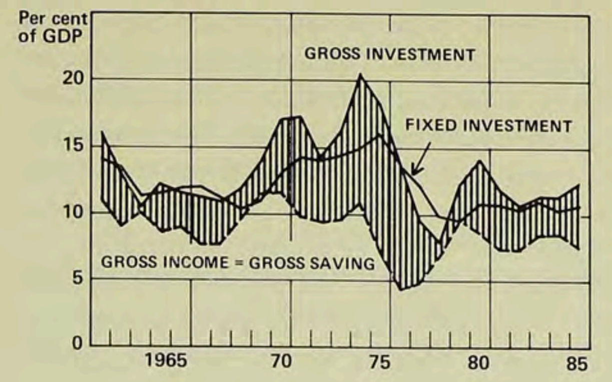
It is worth noting that in Finland the weakening in the financial position of the public sector has not led to a deterioration in the external balance as has been the case in many other countries. Rather, the decline in public saving has been offset by increased saving by the private sector.

In the following a closer examination is made of the developments in the financial positions of the various sectors and in the factors influencing them. The analysis does not take into account the effects which inflation and exchange rate changes have had on sector financial balances through their impact on the assets and liabilities of economic agents.

CORPORATE SECTOR

Developments in corporate investment and changes in the financial position of the corporate sector have largely dictated developments in the corresponding items for the economy as a whole during the past few decades (Chart 3). The share of corporate investment in total investment has averaged more than 45 per cent over the past 25 years

CHART 3. FINANCING OF THE CORPORATE SECTOR

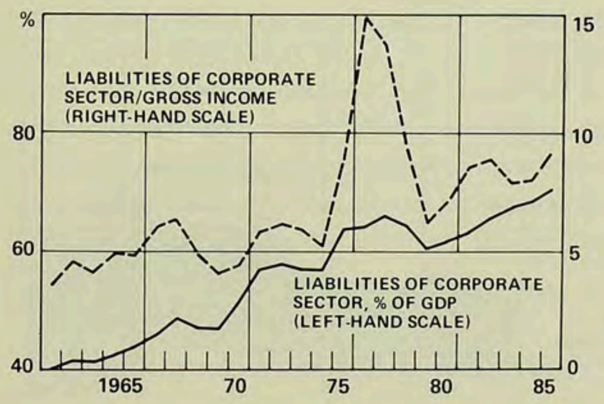


whereas the sector's share of total saving has been slightly less than 35 per cent. Companies have been in deficit throughout and are thus highly indebted (Chart 4).

In the inflationary conditions of the 1970s a low nominal and negative real rate of interest induced companies to borrow extensively both at home and abroad. In the mid-1970s, the gross debt of the corporate sector exceeded 60 per cent of GDP. The level of indebtedness decreased somewhat in the second half of the 1970s as investment slowed down, but has climbed again in the 1980s.

The high level of corporate indebtedness in the 1980s is partly attributable to a new factor. Recent changes in financial markets have been closely connected with developments in the business sector due to, among other things, internationalization, advances in technology and corporate financial management and increased interest rate awareness. Interest rate differentials between the regulated and unregulated markets have led to an increase in financial operations which are quite independent of actual business activities. These financial operations have resulted in a rapid increase in assets and liabilities in corporate balance sheets; on the other hand, the financial deficit of the sector has remained relatively stable.

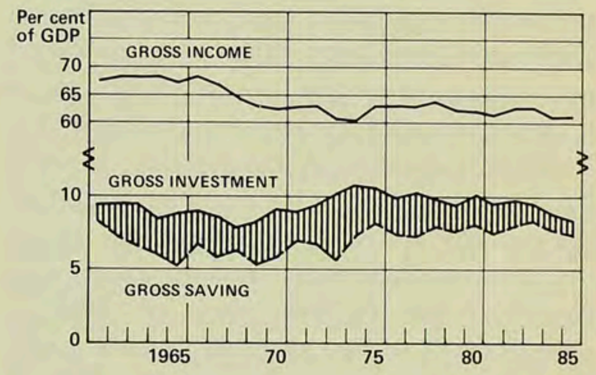
CHART 4. CORPORATE SECTOR INDEBTEDNESS



HOUSEHOLDS

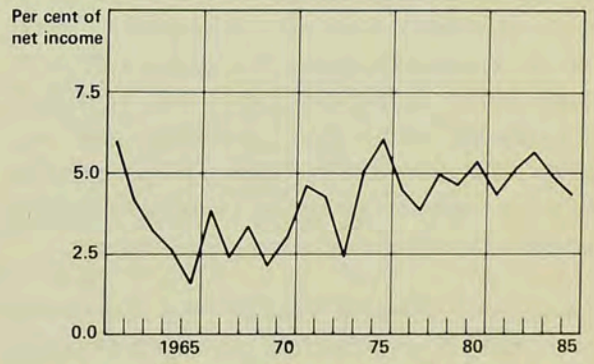
The share of household income in GDP has fallen by nearly 10 percentage points during the past 25 years (Chart 5). The share decreased sharply up to the mid-1970s, in part because of increased taxation. Following the introduction of the inflation-adjustment of tax scales, the rate of decline has slowed appreciably.

CHART 5. FINANCING OF THE HOUSEHOLD SECTOR



Owing to the fall in the income share, saving by households has grown only slightly in relation to GDP, although the share of the sector's net saving in net disposable income has clearly increased (Chart 6). While the share of

CHART 6. HOUSEHOLDS' PROPENSITY TO SAVE



household saving in total saving was just over one fifth in the early 1970s, it has been as much as one third in the 1980s.

In addition to households, the sector also includes non-profit organizations, such as foundations, associations and political parties, as well as housing companies. The different behavioural patterns of these subsectors influence the financial position of the sector. Although households proper have had a financial surplus, the sector as a whole has been in permanent deficit on account of the high level of investment by housing companies. However, the deficit has recently shrunk and is now very small. International comparisons, which as such should be approached with some caution, show that the propensity to save of the Finnish household sector is, along with that of the Swedish household sector, one of the lowest in the western industrial countries.

Up to the mid-1970s, the rise in household saving and investment ratios was associated with a sharp increase in housing investment as a consequence of far-reaching change in the structure of production and the need to meet the increased demand for housing created by the postwar "baby boom" generation. Given the limited availability of long-term government housing loans at low rates of interest, households have had to resort to bank loans, the terms on which have been rather strict. A fairly large proportion of the purchase price has had to be met out of prior savings and repayment periods have been relatively short.

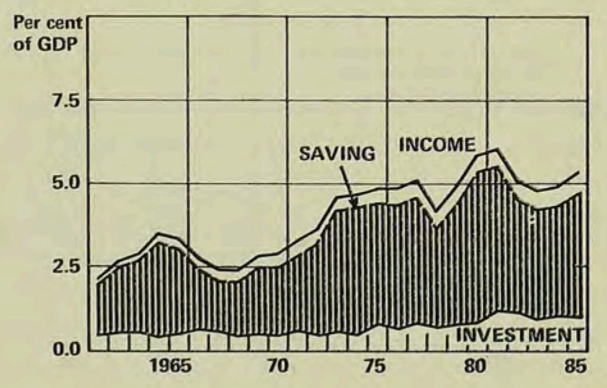
Since the mid-1970s, the household saving ratio has remained unchanged despite a marked fall in investment. Low real rates of interest on loans and the extensive tax deductibility of interest payments have tempted people to accumulate debt. The gross indebtedness of the household sector has increased dramatically since the mid-1970s, and the gross debt ratio is approaching 40 per cent of GDP. In relation to income, household indebtedness has increased even more sharply.

The relation between indebtedness and saving also explains why the real growth of financial assets has remained positive except in the years of highest inflation. Since the mid-1970s, households' financial assets have grown more rapidly than their liabilities, which probably partly reflects a slowdown in the growth of housing investment. Recently, the composition of household portfolios has become more diversified: in addition to bank deposits households have also been fairly active in investing in bonds, debentures and shares. Securities now account for about a quarter of households' financial assets. However, greater diversification of households' portfolios is being held back by the tax exemption of traditional deposits and government bonds and the taxability of capital income from other securities above a certain limit.

FINANCIAL INSTITUTIONS

Part of the saving of financial institutions consists of the national pension and sickness insurance contributions of the Social Insurance Institution, which belong to the public sector. The share of these contributions in the total saving of the financial institutions sector has been extremely small during the past few years. In some periods during the 1960s and 1970s, however, the share was well over 10 per cent, and in some years even as high as 30 per cent. Previously, more (now less) than half of the total saving of financial institutions was composed of the growth of compulsory, but privately-operated, insurance funds, mainly pension insurance funds (Chart 7). The major part of social insurance saving is thus managed

CHART 7. FINANCING OF FINANCIAL INSTITUTIONS



by private companies, foundations and societies. Slightly more than half of the contributions collected from employers is, however, automatically relent to them, usually on more favourable terms than prevailing market rates. The rest of the employment pension funds is invested as loans.

Although the public sector receives only a relatively modest share of the financing flows of the employment pensions funds, it nevertheless regulates the accumulation of these funds by fixing the size of compulsory contribution rates.

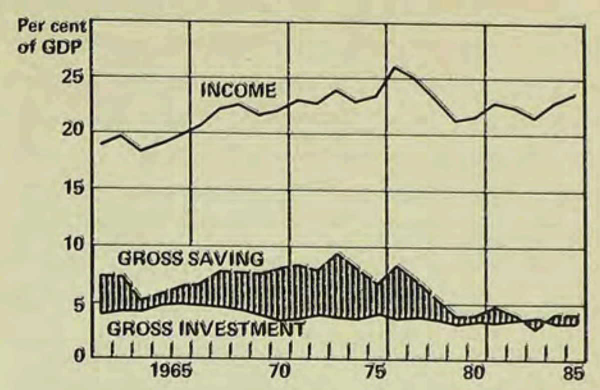
Initially, the pensions scheme channelled funds on a fairly large scale to financial institutions. However, this stage of development is now in the past. The authorities have endeavoured to keep firms' labour costs in check by lowering contribution rates from time to time. Admittedly, contribution rates have recently risen again. The rate of growth of the funds has slowed down, in particular because of a fairly rapid increase in benefits paid out.

THE PUBLIC SECTOR[1]

The public sector's share of total saving in Finland has generally been high by international standards. Among the industrial countries only Sweden has a bigger share but there the entire employment pensions scheme is public. The saving ratio of central and local government in Sweden is noticeably lower than that in Finland. Since the mid-1970s, there has, however, been a clear downtrend in saving by the public sector in Finland (Chart 8). From 30 per cent in the 1960s and the first half of the 1970s, the public sector's share of total saving has fallen to 15 per cent in the 1980s. As public investment has remained at more or less the same level, the financial position of the sector has weakened substantially; in the 1980s the central and local government sectors have even been in deficit on occasion.

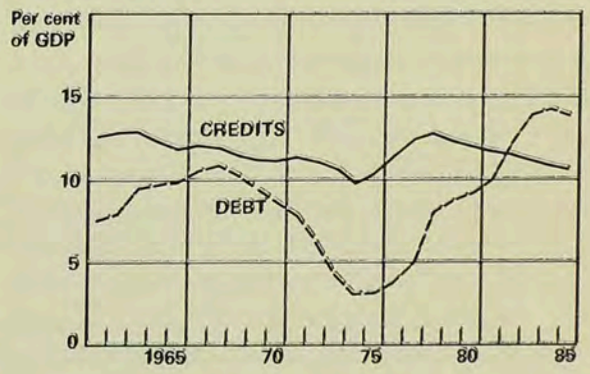
[1] The public sector here comprises central and local government only, as public social security funds are included under financial institutions.

CHART 8. FINANCING OF CENTRAL AND LOCAL GOVERNMENT



At the same time, the importance of the central government as a lender has declined (Chart 9). All in all, however, the financing requirement of the public sector, in practice mainly the central government, has grown to some extent. In spite of this, central government debt in relation to GDP has not, even at its highest point, exceeded 15 per cent, which is low by international standards. The central government has borrowed both at home and abroad, and at the end of 1985 slightly more than half of the outstanding stock of central government debt consisted of foreign loans. In Finland, the central bank does not participate in the permanent financing of the central government as is the custom in many countries. Government paper is purchased primarily by households and banks, and in recent years the latter have undertaken to take up any unsold portions of public issues and have also purchased Treasury notes. Part of the State's domestic borrowing consists of loans from other financial institutions.

CHART 9. CENTRAL GOVERNMENT DEBT AND CREDITS



TRENDS

Real GDP in Finland has grown at an average annual rate of about 4 per cent over the past 25 years. However, a decline is evident in the trend rate of growth reflecting developments in the international environment; from 4.5 per cent in the 1960s, average annual GDP growth fell to 4 per cent in the 1970s and to less than 3.5 per cent in the first half of the 1980s. Now, in the middle of the 1980s, the economy has entered an adjustment process, which has temporarily pushed Finnish growth figures below the OECD average.

The investment ratio has fallen as a natural consequence of the slowdown in economic growth, but it has also been affected by structural change in investment. During the past 10 years there has been an increasingly marked shift away from heavy basic investments towards lighter investments - the capital-output ratio has dropped. At the same time, investments have been made in such investment-related fields as training and research, which are not, however, classified as investment in the national accounts. In addition, with growing internationalization, companies have been making direct investments abroad on an increasing scale.

Recently, Finnish financial markets have undergone fundamental change with the emergence of an unregulated market alongside the regulated market. The developments in financial markets have been mirrored throughout the economy. The changes started in the corporate sector, where big differences in the liquidity positions of individual firms led to the rise of the so-called grey market for the channelling of funds from surplus to deficit companies. In other countries, the development of short-term money markets and financial innovations have been spurred mainly by the need to finance large public sector deficits.

As a consequence partly of structural change and partly of deliberate aim, real interest rates in Finland have risen during the past few years and are now clearly positive. This has contributed towards a better balance between saving and investment and to the channelling of capital to more efficient investments.

THE IMPACT OF THE RATE OF INTEREST AND OTHER FINANCIAL FACTORS ON INVESTMENT IN FINLAND

by **Heikki Koskenkylä**, Head of Department
Research Department
Bank of Finland

BACKGROUND

In the 1960s and 1970s, the investment ratio (investment as a proportion of total output) in Finland was one of the highest among the OECD countries. Cyclical variations in investment were nevertheless exceptionally sharp, particularly in manufacturing. Since the latter half of the 1970s, however, the investment ratio has fallen in Finland as in other parts of the world. Moreover, the growth of investment seems to have remained fairly sluggish during the latest upswing. On the other hand, investment did not decline to any marked extent during the downswing of the early 1980s.

In recent years, the factors affecting investment, and particularly the role of financial and taxation factors, have been the subject of a spirited debate in Finland as elsewhere. Accordingly, the discussion and research have been primarily addressed to the question of what is the role of monetary and fiscal policies from the point of view of changes in investment over time. The debate has also been fuelled by the high real rates of interest prevailing in western industrial countries.

Interest rates in Finland have also risen to historically-high levels during the past few years (see below), partly as a result of the monetary policy pursued and partly because of the diminishing importance of interest rate regulation. Consequently, both the household sector and, in particular, the corporate sector have sought to strengthen their financial positions. At least to some extent this has been achieved at the expense of fixed investment and inventory investment. Thus, it seems that the recent developments in investment activity have been partly affected by the rise in the level of real interest rates and other changes in financial markets.

FINANCIAL FACTORS AND INVESTMENT BEHAVIOUR IN THE LIGHT OF SOME THEORETICAL CONSIDERATIONS

In general microeconomic theory relating to the behaviour of the corporate and household sectors, financial factors can influence investment activity through a number of different channels. As a rule, the analysis sets out from the assumption that financial factors affect investment decisions primarily through the rate of interest. The rate of interest is also a key variable entering into firms' own investment appraisal calculations, such as the methods of net present value and the internal rate of return. Together with other factors like taxes and the rate of inflation, it determines the rate of return required from an investment project. Other financial factors, by contrast, comprise a highly heterogenous and partly overlapping set of variables and concepts, among which are commonly included credit terms other than the rate of interest, the availability of debt finance and internal financing i.e. retained earnings. Their impact on investment is generally thought to arise in financial and capital markets which function imperfectly and thus under restricted competition. Such conditions are considered to have prevailed in Finland until very recently.

The rate of interest affects investment mainly through the cost of capital services, frequently referred to as the user cost of capital. The user cost of capital takes into account the interest earnings forgone because of the tying up of monetary assets - i.e. the opportunity cost - the economic and physical depreciation of capital goods as well as capital gains and losses, of which the most important in conditions of inflation is the inflation gain deriving from a fall in the real value of liabilities. The standard formula for the user cost of capital is:

$$c = q\,(r - g + \delta),$$

where
q = price index for investment goods
r = rate of interest
δ = economic depreciation rate
g = expected rate of inflation

This formula for the user cost of capital (c) includes only the so-called basic factors. In addition to these, the cost of capital services is affected by various taxation factors and investment incentives (see, e.g., Koskenkylä, 1985). In Finland, it has generally been concluded that variations in the user cost of capital depend primarily on the rate of inflation and to a much lesser degree on taxation factors, even if the latter are not insignificant. According to the investment theory of the firm, the user cost of capital affects mainly the long-run optimal level of the capital stock.

In imperfect capital markets, the role of the rate of interest with respect to investment activity may differ somewhat from that presented above. Interest rates may, for example, rise in line with the level of indebtedness. The costs of alternative financial sources may also differ from each other, in which case the interest rate component of the user cost of capital is calculated as a weighted average rate of interest, with the relative shares of different financial sources as the weights. In the case of debt finance, the relevant rate of interest for investment decisions is usually the rate of interest on new loans. In Finland, however, bank loans bear variable interest rates, and therefore the relevant rate is the expected average rate of interest over the loan period.

If the firm or the household is subject to a binding credit constraint, the total amount of finance available depends on lenders (banks). In that case, investment activity is subject to liquidity constraints and the firm is not necessarily able to implement all the projects it would like to.

In Finland, the availability of loans or external finance in general has been measured by some kind of variable describing the overall tightness of financial and capital markets. As a rule, either the marginal rate of interest on the commercial banks' central bank debt or the difference between the marginal rate of interest and the average lending rate has been chosen for this purpose. Because the average lending rate is administratively controlled and usually below the market clearing level, the demand for credit exceeds the supply and banks have to resort to credit rationing to protect their profitability. In this framework, the marginal rate of interest is also thought to indirectly measure the impact of credit rationing on investment, and thus its effect should be distinguished from the usual effect of interest rates, which is manifested through the user cost of capital variable and affects the rate of return required from an investment project.

In practice, the importance of credit rationing in Finland is diminished by the fact that particularly firms have access to other financial sources besides debt finance, such as, for example, retained earnings and equity finance. If the constraint on the availability of bank loans can be circumvented, then credit rationing has only an indirect effect on investment. A company or a household might utilize other sources of finance to a greater extent than planned. The cost of this alternative finance could, however, differ from the rate of interest on rationed credit. In that case, credit rationing might indirectly increase the total financial costs of investment, even though it does not prevent the implementation of desired investment.

Assessing the importance of credit and liquidity constraints for investment activity is not a straightforward issue. The significance of other credit terms is perhaps an even more difficult question to tackle. Other credit terms include such things as required prior savings, the repayment schedules of loans and credit costs other than the rate of interest (guarantees, commissions, service charges). Their importance for investment decisions has been studied very little in Finland or elsewhere. A tightening in other credit terms may be man-

ifested partly as a rise in debt costs and partly as reduced credit availability.

Together with the rate of interest, other financial factors may also affect both the long-term optimal capital stock as well as short-term cyclical fluctuations in investment and the timing of investment projects. Credit availability and retained earnings are often regarded as factors affecting primarily the timing of investment over the business cycle.

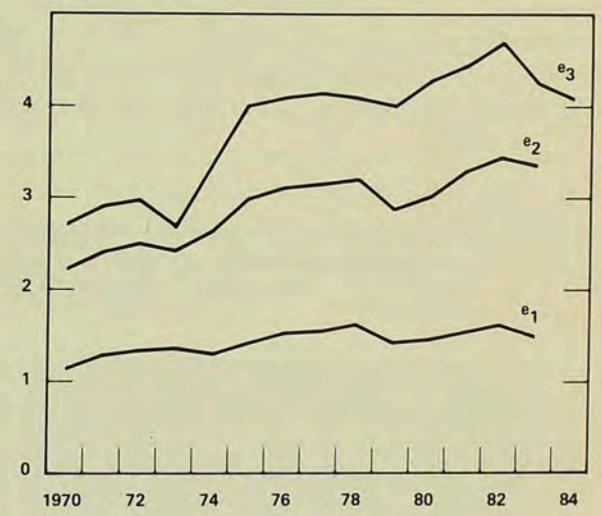
The influence of financial factors on investment also depends on expectations. For example, attempts can be made to avoid liquidity constraints expected in the future either by bringing forward the implementation of some projects or by accumulating internal finance, i.e. by investing in liquid assets. On the other hand, expectations concerning inflation are also of fundamental importance for the real rate of interest since they determine the expected long-term level of real interest rates important for investment decisions.

The effects of interest rates and other financial factors on investment activity are very complex. Individual economic agents can face very different conditions in financial and capital markets, where the availability of debt finance, the rate of interest and other credit terms vary according to, for example, the length of the credit period, the income and solvency position of the prospective borrower and even to the size of the firm. Indeed, the complexity and diversity of financial markets is one of the major problems in the empirical analysis of the importance of financial factors for investment. Moreover, both the deregulation of financial and foreign exchange markets and financial innovations may have altered and could further alter in the future the linkages between financial factors and investment.

TRENDS IN SOME FINANCIAL VARIABLES IN MANUFACTURING AND THE TOTAL CORPORATE SECTOR

Chart 1 shows three different estimates of the ratio of debt to shareholders' equity (net worth) in the Finnish manufacturing sector over the period 1970 - 1984. As can be seen, the ratio receives its highest value when debt and equity are measured using their book (balance sheet) values (e_3). Much lower values are obtained when equity incorporates various "hidden reserves" created as a result of tax allowances and valuation adjustments (see Koskenkylä, 1985). In the case of e_1, all reserves and valuation adjustments are included in equity, while in the case of e_2, about half of these items are added to debt and the other half to equity. All three debt-equity ratios have certain features in common, however. They have all shown an upward trend but they also display cyclical variations. During the most recent upswing phase, the ratios have declined somewhat because of improved profitability and rather modest developments in investment activity.

CHART 1. ESTIMATES OF THE RATIO OF DEBT TO EQUITY IN MANUFACTURING 1970—1984.



e_1 = Ratio of book value of debt to maximum value of equity
e_2 = Ratio of book value of debt plus »tax credits» to »adjusted» value of equity
e_3 = Ratio of book value of debt to book value of equity

Table 1 presents some other financial ratios for the manufacturing sector. The debt to sales ratio has risen secularly as have also the ratios of interest expenses and interest income to sales. The most rapid increase in relative terms

TABLE 1. VARIOUS FINANCIAL RATIOS IN MANUFACTURING 1974 - 1984, PER CENT

	Debt/Sales	Interest Expenses/ Sales	Interest Income/ Sales	Net Interest Expenses/ Sales
1974	66.0	3.5	0.8	2.7
1975	74.0	4.1	0.9	3.2
1976	75.3	4.4	1.0	3.4
1977	76.0	4.8	1.1	3.7
1978	74.1	4.8	1.1	3.7
1979	67.4	4.2	1.0	3.2
1980	65.9	4.3	1.0	3.3
1981	66.9	4.8	1.1	3.6
1982	72.6	4.9	1.3	3.6
1983	74.4	5.2	1.6	3.6
1984	71.8	5.2	2.0	3.2

has been in the interest income to sales ratio, reflecting the sharp rise in the nominal short-term (marginal) interest rate. In fact, this ratio has doubled in the first half of the 1980s and this also explains why the ratio of net interest expenses to sales has not been rising recently. Clearly, high nominal interest rates have motivated firms to increase their financial investments and this has partly been at the expense of investments in physical assets.

Chart 2 shows the percentage distribution of operating income into its three components, which are net profit, taxes and net interest payments. Operating income is estimated using current cost true economic depreciation values. There have been very large fluctuations, especially in the shares of net profit and net interest expenses. The share of net profit has shown a downward trend while that of net interest expenses has been rising. The high level obtained by the net profit share in the 1969–70 and 1973–74 upswings was not repeated during the last two upswings in 1979–80 and 1983–84.

CHART 2. DISTRIBUTION OF OPERATING INCOME IN MANUFACTURING INTO ITS COMPONENTS 1970–1984, PERCENTAGE SHARES.

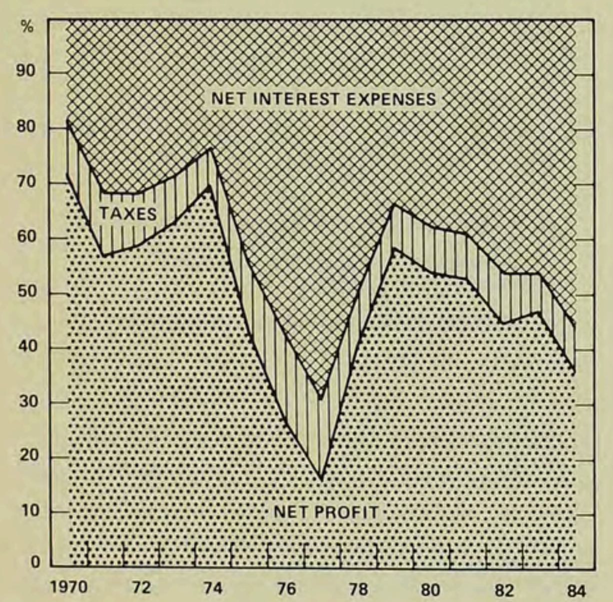


Table 2 shows movements in various nominal and real interest rates in the period 1960 – 1984. These interest rates can be thought to be relevant for both manufacturing and the total corporate sector. The average bank lending rate (r_L) has been on an upward trend with only small fluctuations owing to the administrative (controlled) nature of this rate. By contrast, the marginal interest rate (i.e. short-term interest rate) on the central bank financing of the commercial banks has fluctuated very heavily and no clear trend is discernible. During the 1960s and 1970s, it was commonly thought that these two interest rates affected investment behaviour in quite different ways. The average interest rate r_L was the concept relevant for the capital cost variable of companies whereas the marginal interest rate r_m was assumed to influence the banks' optimal supply of credit and hence it had only an indirect effect on investment decisions through the credit rationing channel.

TABLE 2. VARIOUS INTEREST RATES 1960 - 1984, PER CENT

	Nominal interest rates		Real interest rates		Real after-tax interest rates	
Year	r_L	r_m	r_L-g	r_m-g	(1-u)r_L-g	(1-u)r_m-g
1960	6.9	8.2	–	–	–	–
1961	7.0	9.6	4.9	7.5	1.4	2.7
1962	7.0	13.8	1.0	7.8	–2.8	0.2
1963	7.1	12.3	3.9	9.1	0.4	2.9
1964	7.3	12.2	3.8	8.7	–0.4	1.7
1965	7.5	8.7	3.5	4.7	–1.1	–0.6
1966	7.5	20.0	4.1	16.6	–0.5	4.4
1967	7.6	7.0	2.1	1.5	–2.6	–2.9
1968	7.7	7.0	–4.9	–5.6	–10.4	–10.6
1969	7.7	7.1	• 3.8	3.2	–1.0	–1.2
1970	7.8	15.1	–1.2	6.1	–5.9	–3.1
1971	8.7	8.8	–2.1	–2.0	–7.1	–7.1
1972	8.2	7.9	–3.9	–4.2	–8.6	–8.8
1973	9.0	13.9	–5.1	–0.2	–10.3	–8.2
1974	9.8	18.6	–14.7	–6.0	–20.4	–16.8
1975	10.0	22.3	–6.9	5.4	–12.8	–7.7
1976	10.1	19.3	–0.8	8.3	–6.8	–3.1
1977	10.0	19.4	–3.2	6.2	–9.1	–5.2
1978	8.5	13.1	2.7	7.2	–2.4	–0.5
1979	8.5	9.5	0.5	1.5	–4.5	–4.1
1980	10.2	14.9	–3.6	1.1	–9.6	–7.7
1981	10.2	14.8	2.4	7.0	-3.7	–1.9
1982	9.6	14.2	1.9	6.5	–3.8	–2.1
1983	9.9	15.4	3.3	8.9	–2.6	–0.4
1984	10.6	16.5	4.8	10.7	–1.6	0.8

r_L = average bank lending rate
r_m = marginal rate on central bank financing
g = rate of inflation (investment goods prices)
u = corporate income tax rate
(1-u)r_L–g and (1–u)r_m–g are real after-tax interest rates

During recent years, however, Finnish financial markets have been undergoing structural change towards a more market-oriented system and the marginal interest rate or call money rate has largely dictated the level of market interest rates in Finland. The financial system has had a dual-rate character and it is likely that many companies have obtained part of their bank loans at the administered rate (r_L) and part at the market rate (r_m). For some companies, however, it is possible that all their borrowing from banks has been at one or other of the extreme rates. Furthermore, the marginal interest rate may still capture some credit rationing effects.

The real interest rates r_L-g and r_m-g have displayed very large fluctuations, with the average real rate recently regaining the level (about 4–5 per cent) it had in the 1960s. Particularly the real marginal rate has risen to a very high level. Nevertheless, neither of the two real interest rates are at an exceptionally high level as compared with the 1960s.

The most striking fact to emerge from Table 2 is that real after-tax interest rates, i.e. (1-u)r_L-g and (1-u)r_m-g, are still at a rather low level. They have, however, shown a clearly rising trend in recent years. For companies which are sufficiently profitable and which can thus deduct all interest payments when calculating their taxable income, the relevant interest rate concept is the real after-tax form. For companies which cannot deduct all interest costs, the relevant concept is probably the before-tax form, i.e. r_L-g or r_m-g. Hence it seems likely that firms are very heterogenous with respect to the relevant interest rate level, which may vary from the very high value of r_m-g to the still fairly low value of (1-u)r_L-g. Furthermore, the marginal interest rate, r_m, has become relevant for firms as a measure of interest costs only in the last few years.

All in all, the foregoing statistical analysis reveals many important and interesting aspects concerning developments in financial variables which may be thought to be significant for the investment decisions of Finnish firms. However, the quantitative impact of such factors on investment can only be assessed with the aid of econometric investment equations.

THE QUANTITATIVE IMPACT OF INTEREST RATES AND OTHER FINANCIAL FACTORS ON INVESTMENT IN FINLAND

The contribution of interest rates, capital costs and other financial factors to variations in investment has been examined in a fairly large number of studies in Finland. The results of some recent empirical investment studies carried out mainly at the Bank of Finland (see Koskenkylä 1985, Tarkka and Willman (eds.) 1985, Peisa and Solttila 1985) are briefly reviewed here. A more detailed analysis can be found in the Bank of Finland publication series A:61, 1985.

On the whole, the estimates, particularly of the effect of interest rates, differ very little from each other in different studies, although exceptional estimates do appear. The empirical results show very clearly that a rise in interest rates reduces both investment and the long-run demand for capital. The research results also indicate that the interest rate sensitivity of investment decisions does not differ significantly according to the institutional sector or type of capital goods examined.

The impact of the rate of interest on corporate investment is usually captured through the user cost variable c and hence it is normally estimated jointly with corporate tax factors and the rate of inflation. An increase in the rate of inflation is thought to capture the impact of the decrease in the real indebtedness of firms (i.e. capital gains), which has been of considerable magnitude. The relevant interest rate concept for corporate investment decisions has usually been assumed to be the expected after-tax real rate.

Most of the empirical estimates of the interest rate effect are also quite close to each other. A typical estimation result is that a rise of one percentage point in the real rate of interest will reduce firms' fixed investment in the short run by one to two per cent and the long-run optimal capital stock by about one per cent. However, an impact of this magnitude arises only when the interest rate operates through the user cost variable (i.e. rate of return effect). If the empirical investment equations also contain a cash flow (profit) variable, then especially the short-run impact may be larger. In this case, the increase in the interest rate reduces the financial liquidity of firms (i.e. the liquidity effect). In sum, the size of the overall effect of a rise in interest rates on investment may be substantial in the short run.

The empirical studies indicate, however, that the most important determinant of investment decisions is the expected demand (output) for the firm's products. Some results also show that the impact of wage costs on investment may be larger than that of capital costs.

The average level of interest rates also has a significant effect on inventory investment and housing investment by the household sector. The impact on inventories is generally greater than that on fixed investment. A rather unexpected finding in the empirical studies is that the marginal interest rate has only a negligible effect on companies' inventory purchases. Statistical deficiencies have, however, seriously hampered research on inventories in Finland.

As regards financial factors other than the rate of interest, the empirical studies give a rather varied picture. Attention has centered mainly on the effect of cash flow (internal finance) and of the availability of debt finance or more generally of the tightness of financial markets. The problems relating to the formulation of theory and statistical data are even greater in the case of other financial factors than they are for interest rates. The overall tightness of financial markets as measured by the marginal rate of interest on central bank borrowing by commercial banks would seem to have only a fairly modest effect on corporate fixed investment and scarcely any impact at all on inventory accumulation. Moreover, these credit rationing effects are generally felt with a fairly long lag. The results also indicate that a tightening in credit availability has a greater impact on investment by the service sectors, i.e. commerce, trade, transportation etc., than on the investment decisions of manufacturing firms. The effects may also diverge between large and small companies, being greater in the latter case.

The tightness of financial markets has a more significant influence on the prices of dwellings and housing investment. It is possible that households have, on average, been in a weaker negotiating position vis-à-vis banks than have firms and furthermore that companies have had recourse to various alternative sources for financing their investment when credit conditions have tightened.

The empirical results cited above indicate that monetary policies have had a significant effect on capital formation in Finland both through the traditional interest rate channel and through the credit rationing effect. It is, however, possible that the effects of monetary policy changes have been felt only with a considerable lag and that the impact is concentrated more on the household sector than on the corporate sector. In recent years, the significance of the interest rate channel has increased relative to the credit rationing channel. The increase in fixed interest rate contracts in relation to variable rate contracts may have increased the importance of the expectational aspects of interest rate policy. Deregulation of financial markets and financial innovations may also have increased the interest rate sensitivity of investment behaviour in general in the Finnish economy.

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MONETARY POLICY IN FINLAND

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Monetary policy consists of measures undertaken by the central bank for the purpose of influencing the state of the financial markets — credit expansion, interest rates, and the money stock — and thereby overall economic development — the balance of payments, the rate of inflation and the growth of output and employment. The general framework for the pursuit of monetary policy is largely determined by the relationship between the central bank and the Government and the adopted exchange rate regime. In Finland, the basis of monetary policy has for long rested on the high degree of independence of the Bank of Finland provided in the Constitution, an independence which is also remarkable from an international viewpoint, as well as on the aim laid down in the Currency Act of maintaining the external stability of the Finnish markka. On the other hand, the available monetary policy measures and their nature essentially depend on the functioning and development of financial markets. In this respect, the situation in Finland has changed rapidly in recent years.

The purpose of this article is to give a general picture of the instruments and goals of monetary policy in Finland. I begin by briefly reviewing the recent changes in financial markets, which have had far-reaching implications for the pursuit of monetary policy. Next, I describe the instruments of monetary policy currently used by the Bank of Finland, the most important of which are the call money rate, the base rate and the cash reserve deposit scheme. I then discuss the principles applied in the planning of monetary policy and the objectives of monetary policy. To conclude the article, I briefly consider the problems arising in monetary policy and the prospects for future development.

FRAMEWORK

For most of the postwar period, the Finnish financial system has been characterized by the dominance of banks in financial intermediation, administratively controlled deposit and lending rates, which have generally been low in relation to inflation, and a relatively wide range of exchange controls.

Especially in the 1970s, the policy of low interest rates sustained an almost permanent excess demand for credit. Under these conditions, rationing of the quantity of credit has served as the mechanism for clearing financial markets, and the banks' central bank position has traditionally played a key role in the implementation of monetary control. The commercial banks have been almost continuously in debt to the Bank of Finland, which by regulating the costs of central bank finance has been able to directly influence the profitability of bank lending and indirectly — through the availability of credit — expenditure on consumption and investment by the public. Regulation of capital movements has to a large degree reduced the dependence of domestic financial conditions on international interest rates and currency movements.

Ongoing changes in financial markets have partly undermined the foundations of the traditional framework of monetary analysis. Underlying this development are the internationalization of financial markets, advances in information technology (ADP), the rapid inflation of the 1970s and the increased interest rate sensitivity of the public. Changes in the financial surpluses/deficits of the various sectors of the economy have also been a contributory factor;[1] the financial deficits of the business sector have diminished and at times firms have accumulated substantial liquid funds for which they have actively sought high-yielding investment outlets. At the same time the central government's financing requirement has increased — although not to the extent that it has constituted a major constraint on monetary policy.

[1] See the article by Luukkainen and Söderlund in this publication.

The most important changes as regards the functioning of financial markets are as follows:[2]

1 The significance of administrative regulation of interest rates has diminished in bank lending and deposits. On the deposit side, the interbank agreement on unregulated deposit rates broke down in 1984, although it remains in force for tax-free deposits. On the lending side, the Bank of Finland gradually removed the controls on bank lending rates, and rates on new bank advances are now largely determined according to supply and demand.

2 The money markets, which previously comprised mainly the call money market operated by the Bank of Finland, have expanded through the growth of unregulated-rate funds (unregulated deposits, off-balance-sheet lending through trust departments etc.) and the forward exchange market. Despite rapid growth, Finland still lacks well-functioning secondary markets in which bearer paper can be traded on a large scale at rates of interest dictated by prevailing market conditions.

3 The capital market has expanded, spurred, inter alia, by the tax allowance for capital income introduced at the beginning of the decade and increased interest on the part of foreign investors.

The chief significance of the developments sketched above lies in the change in the mechanism through which financial markets are brought into equilibrium. The relative significance of quantitative credit rationing has been reduced, while the allocative role of interest rates has increased. The enhanced role of the interest rate mechanism has reduced the significance of central bank debt in the system of monetary control. At the same time, the ongoing process of change has rendered the interpretation of financial market developments more difficult (see below). Naturally, the changes in financial markets have also been reflected in the transmission channels of monetary policy: policy effects are now largely transmitted through interest rates rather than the availability of credit.

[2] See the article by Vihriälä in this publication.

INSTRUMENTS

The Bank of Finland has not resorted to direct controls on bank lending (credit ceilings, compulsory asset holding etc.) in its monetary policy. On the other hand, the underdeveloped state of the financial markets has precluded the use of open market operations as an instrument of monetary policy. The range of available monetary policy instruments has thus been rather narrow. Interest rate policy plays a key role and the call money rate has become the most important instrument of monetary policy.

THE CALL MONEY RATE

The call money market operated by the Bank of Finland offers the commercial banks a flexible channel for evening out fluctuations in their liquidity. Banks may deposit and borrow funds in the call money market at the rate set by the Bank of Finland at any time. Call money borrowing is nevertheless subject to a bank-specific surveillance limit, which, if exceeded, brings the bank under tightened liquidity monitoring (extended reporting duty to the Bank of Finland). Decisions on changes in the call money rate are made by the Board of Management of the Bank of Finland within a range determined by the Parliamentary Bank Supervisors. The same rate of interest was applied to both call money deposits and call money borrowing until the beginning of 1986, since when the Bank of Finland has charged a somewhat higher rate on call money credits than it pays on deposits. The differential has so far varied between 0.7 and 1.0 percentage point. The differentiation of the call money rate soon had the desired effect of activating the interbank market.

The chief significance of the call money rate for monetary policy lies in its indirect effects. The direct effect is limited to the fact that the call money rate determines the yield on banks' call money deposits made at the Bank of Finland and the cost of their borrowing from the central bank. However, banks can alternatively alter their liquidity position by recourse to the interbank market, by accepting unregulated deposits from the public or by making forward transactions in foreign currency. It is therefore not surprising that the rates prevailing in these markets (the interbank rate, rates on unregulated deposits and the Euromarkka rate, i.e. the yield on or cost of liquidity acquired in connection with forward deals) tend towards uniformity and to settle at a level corresponding to the expected level of the call money rate in the near term.

The call money rate acts on firms' investment behaviour via the financial markets, influencing both the composition of financial assets and liabilities and the level and timing of physical investment. This takes place in mainly two ways. First, a low (high) call money rate increases (decreases) the willingness of banks to extend credit, which is reflected as an acceleration (deceleration) in the growth of credit volumes and a fall (rise) in the interest rates which they bear. Money market rates thus influence the extent of financial and real investment activity both directly and via bank lending.

The call money rate has become a reference rate not only for the money market and new bank lending but also for credits granted by, inter alia, finance companies. In part, the call money rate and expectations concerning future movements in it are also reflected in the capital market in yields on bonds and debentures. Different investment outlets and sources of finance are at least partly alternatives for each other, and hence in present conditions the call money rate influences financing costs and yields on financial assets to a fairly large extent. Experience suggests that changes in the call money rate have an important effect on both capital movements and foreign exchange reserves, on the one hand, and on developments in investment and domestic demand, on the other.

THE BASE RATE

The Bank of Finland no longer extends credit to banks at the base rate (formerly the discount rate) but rather at the call money rate. Today, the base rate merely serves as a reference rate. Its importance is due to the fact that discretionary changes in the base rate lead in practice to changes of corresponding magnitude in both rates on tax-free deposits covered by the interbank interest rate agreement and rates on virtually all bank loans. Bank loans in Finland are usually variable-rate contracts, which are linked to the base rate either directly or via deposit rates. Previously, the Bank of Finland also required that banks' average lending rates were lower than the ceiling set for these rates. It can be noted that the linkage of bank lending to the base rate and thus the significance of the base rate as an instrument of monetary control are likely to decrease during the next few years.

Decisions on changes in the base rate are made by the Parliamentary Bank Supervisors on the proposal of the Board of Management. Since the indirect effect of the base rate on interest income and costs is large, the base rate attracts considerable political attention. This, in turn, has reduced the flexibility of interest rate policy, and as a result the use of the base rate as a monetary policy instrument has remained fairly modest.

The significance of the base rate for monetary policy stems partly from the fact that it has been widely regarded as an indicator of the underlying stance of monetary policy. Changes in the base rate are infrequent and are generally, and in most cases justifiably, regarded as signalling a change in policy stance; thus in this way the base rate has a bearing upon expectations prevailing in financial markets. The base rate can also be used via interest costs to influence price pressures to a certain extent. By contrast, the direct impact of the base rate on the availability and cost of finance is nowadays rather limited.

THE CASH RESERVE REQUIREMENT

A law was passed in Finland in 1966 on the basis of which the Government and the Bank of Finland may require the banks to make temporary cash reserve deposits with the Bank of Finland, depending on the growth of their deposits. However, the law has not been applied. Instead, a cash reserve agreement was concluded with the banks in 1979 under which the Bank of Finland may oblige the banks to make cash reserve deposits in proportion to their total funding (defined to comprise deposits and, with certain deductions, net foreign liabilities). The Bank of Finland pays interest on cash reserve deposits at a rate which is generally 0.25 percentage point below the base rate.

The cash reserve system provides the Bank of Finland with a means of influencing mainly bank liquidity. When the cash reserve requirement is raised banks either have to reduce their lending or finance the additional cash reserve deposits, for instance, by increasing their call money borrowing. This weakens bank profitability (provided that the rate of interest paid on cash reserve deposits is lower than that on call money credits) and increases banks' interest rate risk because of the greater reliance on the call money rate in their funding. Cash reserve deposits may, through bank liquidity, also have some effect on whether the interbank rate settles closer to the call money deposit rate (bank liquidity generally good) or the call money lending rate (banks in debt on average to the Bank of Finland in the call money market).

OTHER INSTRUMENTS

Nowadays, *exchange control* serves primarily monetary policy ends. Through restrictions on portfolio investment and regulation of capital exports and imports, the authorities seek to reduce the dependence of domestic financial markets on foreign financial markets, thereby allowing more autonomy in monetary policy. Capital import deposits are designed to even out the liquidity effects of large foreign loans. The principal objective of *foreign exchange policy* is to maintain the stability of the external value of the markka, i.e. to keep the index number measuring the value of the markka in foreign currencies within the fluctuation range determined by the Government. On a few occasions, this goal has been departed from by revaluing or devaluing the markka by a decision of the Government taken on the proposal of the Board of Management of the Bank of Finland.[3] In this setting the exchange rate is not so much an instrument of central bank policy as an intermediate target, the stability of which the authorities strive to maintain primarily through call money rate policy, supplemented by exchange control.

In recent years, the Bank of Finland has influenced both the foreign exchange reserves and liquidity by entering into forward exchange deals with banks, i.e. *forward intervention.*[3] The liquidity effects of forward intervention derive from the fact that banks hedge against exchange rate risk and avoid exceeding the limits set for their forward positions by the Bank of Finland by covering their forward transactions through offsetting changes in their spot positions (increases in assets or liabilities in foreign currencies). By intervening as a buyer in the forward exchange market, the Bank of Finland reduces the need of banks to take up additional foreign debt (or increases their need to acquire foreign assets) in order to cover their exchange rate risk. The counterpart to a reduction in banks' liabilities is a reduction in their call money deposits or an increase in their call money borrowing. Thus, through its forward transactions, the Bank of Finland influences both the foreign exchange reserves and the banks' call money market position. Forward intervention is comparable in its liquidity effects to open market operations.

Apart from its effect on the financial position of the borrower, the *Bank of Finland's lending*

[3] See the article by Aurikko in this publication.

to non-banks influences developments in liquidity more generally. Direct lending to firms under the Bank of Finland's special financing facilities consists of domestic suppliers' credits, short-term export credits and new-export credits. The rate of interest applied under these financing arrangements is lower than the market rate, reflecting the primary aim of promoting structural change in the economy. The same is true for the funds which the Bank of Finland channels through special credit institutions (the Mortgage Bank of Finland, the Industrialization Fund of Finland etc.). Other economic policy measures that have a monetary policy dimension include special counter-cyclical arrangements (deposit and payments schemes applied to investment and exports) and regulation of the terms of hire-purchase credit. In addition, the Bank of Finland has at times issued credit policy guidelines or directives to banks.

PLANNING FRAMEWORK

The terms 'instrument' or 'operational target' and 'indicator' and 'intermediate target' are often used in analyzing problems encountered in monetary policy.

Instruments are operational parameters in decision-making, such as the call money rate, the base rate and the cash reserve requirement. An operational target is an instrument variable which can only be controlled indirectly (e.g. the banks' call money market position).

Indicators are variables which are used to interpret the state of the financial markets. Among the most widely used indicators for financial markets and monetary policy are the volume or rate of growth of lending and the money stock and the nominal and real interest rate level.

The term *intermediate target* is used when the monetary policy authorities seek to maintain, e.g. some target rate of growth in lending or the money stock. The authorities are not interested in intermediate targets *per se*, but rather because it is believed that setting them can contribute to the attainment of ultimate policy goals or targets, i.e. favourable or balanced economic development in some sense. The usefulness of intermediate targets may lie, for instance, in the fact that information on them is more readily available than on ultimate targets. The use of intermediate targets for decision-making in monetary policy may be perceived as a two-stage process: in the first stage the authorities set an intermediate target which is in harmony with the goals of economic policy and in the second stage they manipulate monetary policy instruments in order to attain the intermediate target.

Traditionally, regulation of the terms of the banks' central bank debt has been the means used by the Bank of Finland to influence the tightness of financial markets and particularly the availability of credit, and thereby domestic demand. While the terms of central bank debt have been the major instrument of monetary policy, the volume and cost of central bank debt have functioned as operational targets. Indicators of financial markets and monetary policy have typically included the growth of bank lending and total credit expansion (which in addition to bank lending includes lending by other financial institutions and the central government as well as imports of foreign capital). On the other hand, it has not been the practice in Finland to actually set intermediate monetary policy targets. In this respect, the practice in Finland, as in other small open economies generally, has differed from the monetary policy of the big OECD countries.

The development of financial markets has had important implications for the planning and implementation of monetary policy in Finland. The transmission mechanism of monetary policy has changed, and the significance of the banks' central bank position in monetary control has diminished. The quota system for central bank debt has been abolished, and hence the terms of central bank debt have — with the exception of the call money rate — been discarded from the set of monetary policy instruments. The central role of interest rate

policy, and particularly the call money rate, has been accentuated in the new conditions. The most important changes for the planning of monetary policy are as follows:

1 The interpretation of growth figures for monetary and credit aggregates has become more difficult. The channels of financial intermediation have changed quickly in response to interest rate regulation, the cash reserve requirement and taxation (e.g. stamp duty). In recent years, credits have on occasion been used to a far greater degree than previously for the acquisition of financial assets rather than for the financing of physical investment. New financial phenomena can affect the demand for credit and money as well as their income and interest rate elasticities. Changes and the uncertainty associated with them thus complicate the measurement of money and credit aggregates and the monitoring of financial markets. Interpretational difficulties have arisen, for instance, from the fact that money and credit aggregates have from time to time grown very rapidly even though the financial markets, as measured by interest rates and other indicators, have been tight. It is well known that financial innovations have in many countries seriously hampered the use of the money stock as an intermediate target of monetary policy.

2 The interest rate can now — unlike previously — be regarded as the true alternative cost of using finance. Financial market change has thus increased the informational value of the interest rate for both the financial decisions of economic units and the monitoring of financial markets. Consequently, interest rates now play a prominent role in the monetary policy of the Bank of Finland both as an instrument (call money rate and base rate) and as a financial market indicator. Attention is focussed on money market rates of different maturities, yields on bonds and debentures and bank lending rates, in particular, the average rate on new loans. Other information utilized in the assessment of the state of the financial markets includes the growth of credit and money aggregates, changes in the prices of certain wealth assets (dwellings, shares etc.) and many aspects of macroeconomic development.

3 The internationalization of Finnish financial markets has proceeded at a rapid pace in recent years and the real significance of exchange control has declined. International capital movements have expanded and they now react more sensitively than before to the differential between domestic and foreign interest rates and expectations concerning exchange rates. As a result, fluctuations in the international interest rate level and exchange rate expectations are felt increasingly strongly as pressures in Finnish financial markets and in domestic interest rates. The external dependence of the money markets has increased and the room for manoeuvre of monetary policy has diminished.

The present monetary policy of the Bank of Finland can be characterized as interest-rate-orientated in the sense that interest rates are the major instrument of monetary policy and close attention is paid to interest rates in the monitoring of financial markets. However, despite its importance, the interest rate level does not serve as an intermediate target in the monetary policy of the Bank of Finland. There are several reasons for this. First, it can be noted that maintaining the stability of the external value of the markka is an intermediate target alongside which it is neither appropriate nor possible to set other intermediate targets. The call money rate has to be adjusted to the extent required to maintain the foreign exchange reserves at the level necessary to support a stable markka. The second problem concerns the diversity of interest rates and the partial deficiency of statistics. Thirdly, the deductibility of interest payments in taxation frequently gives rise to a large gap between pre- and after-tax rates. Fourthly, it is clear that the key interest rate is the expected real rate; the measurement of inflation expectations is, however, an unresolved problem. Furthermore, the determination of a "natural" or "correct" interest rate level is a virtually impossible task, even if it is clear that under fixed exchange rates the domestic interest rate level is closely linked to international interest rates in the long run.

OBJECTIVES

The goals of monetary policy have changed less than the financial environment and the available instruments. The main objectives of the Bank of Finland are to secure the stability of the financial system and to promote balanced economic development. The latter consists of curbing inflation, supporting growth and the maintenance of satisfactory external stability, the emphasis placed on each varying from one situation to another. Despite an established set of goals, it is nevertheless natural that the priority attached to individual policy objectives in the 1980s differs to some extent from that in the 1970s.

Thus, it is obvious that bringing inflation permanently down to the level of competitor countries has become accentuated in the central banks' hierarchy of goals. The anti-inflationary interest rate and monetary policy carried out by the Bank of Finland in recent years differs fairly clearly from the former policy of low interest rates, which sought to reduce cost pressures and to support growth. The shift in emphasis is partly due to changes in the financial markets, as a result of which it has become difficult to maintain a low interest rate with regulatory instruments. On the other hand, the policy shift also reflects the fact that many features of economic development in the 1970s were felt to be indicative of the harmful effects of inflation generated by easy monetary policy or permitted by passive monetary policy.

International price developments have calmed down noticeably in the current decade and it is thus evident that a conflict between the internal and external value of the markka can only be avoided with the support of stable and sufficiently moderate domestic price developments. Low inflation and a stable markka are also factors making for greater efficiency in financial markets and especially the capital market. This same consideration has recently attracted increasing attention, inter alia, to the significance of the tax treatment of financial assets and liabilities for the functioning of financial markets.

The emphasis given in policy to combatting inflation and keeping the external value of the markka stable has not meant that efforts to even out cyclical fluctuations in economic activity have been abandoned. The timing of both monetary and fiscal policies for stabilization purposes was more successful in the early 1980s than generally in the past. However, the international integration of financial markets and the expansion of capital movements have inevitably led to monetary policy assuming a far more prominent role in the securing of external liquidity. Other areas of economic policy will to an ever-increasing extent have to bear the main responsibility for smoothing out cyclical variations and for the maintenance of economic activity and employment at satisfactory levels.

PROBLEMS AND FUTURE DEVELOPMENT

The rapidly changing financial environment of the past few years has presented a host of challenges to monetary policy. Although techniques of monetary control have been reformed and the efficiency of interest rate policy enhanced, the authorities have nevertheless had to conduct monetary policy under conflicting pressures of many kinds. The rigidity of the base rate and the tension between regulated rates and unregulated rates have at times encouraged arbitrage operations exploiting the interest rate differential, which has not been desirable from the point of view of the functioning of the financial markets. The situation has improved in this respect with the abolition of interest rate regulation. More serious problems have arisen when the Bank of Finland has kept (short-term) interest rates notably higher or lower than the international

level or when confidence in the value of the markka has faltered. In such cases expected yield differentials have been manifested as major changes in capital movements and foreign exchange reserves. International interdependence via capital movements sets stricter limits than before on monetary policy pursued in Finland.

Despite the changes that have taken place in recent years, Finnish financial markets remain rather underdeveloped in some respects. The capital market, in particular, is still narrow. A necessary condition for the expansion and diversification of the capital market is increased equality in taxation. At present, the exceptional and fairly extensive tax exemption of bank deposits, together with the deductibility of interest payments (up to a certain limit), clearly favours finance intermediated by banks in comparison to bonds and debentures and equity capital.

The preconditions for the pursuit of monetary policy as well as the flexibility of policy could be enhanced to some extent by expanding the range of available money market instruments (certificates of deposit, commercial paper, Treasury bills etc.) in a way that would facilitate the functioning of the secondary market. In a well-functioning money market, the Bank of Finland could use open market operations as a means of regulating liquidity. There is also reason to assume that the problems of monitoring financial markets and planning will ease once the current phase of structural change in the financial markets has come to an end and as economic agents adapt to a financial system based on interest rates. Changes in financial markets and the development of the tools of monetary policy do not of course change the fundamental fact that the goals set for monetary policy can only be reached with support from the other segments of economic policy.