

Financial Markets in the Nordic Countries

by Tore Horvei (IØI), Lars Jagrén (IUI),
Lars Mitek (IFF) and Sinikka Salo (ETLA)

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Financial Markets in the Nordic Countries

1. Introduction

1.1 The aim of the study

During the last 5–10 years the Nordic economies have been characterized by rapid change in the financial systems. This development has been especially typical of the short-term money markets, but also of the equity market whose role is becoming increasingly important.

The aim of this special study is to give an overview of these changes which of course, are not a unique phenomenon. During the past 10–20 years major changes have taken place in banking and finance in all industrialized countries.

In the following we give a short introduction to the background of these financial market changes both on the international level and, more specifically, on the Nordic level. The first introductory section also includes descriptions of the financial system in each country. Thereafter, in section 2, we compare recent short-term money market developments in the Nordic countries. Section 3 reviews the bond markets and in section 4 the risk capital raising through the equity market is taken under review. Concluding remarks in section 5 deal with policy implications and implications for corporate finance.

1.2 Factors behind recent developments in the financial markets

There is no single driving force behind the international financial innovation process which has swept across a number of countries during recent years.¹⁾ Many interrelated factors have been at work. There are, however, similarities that also apply to the Nordic countries.

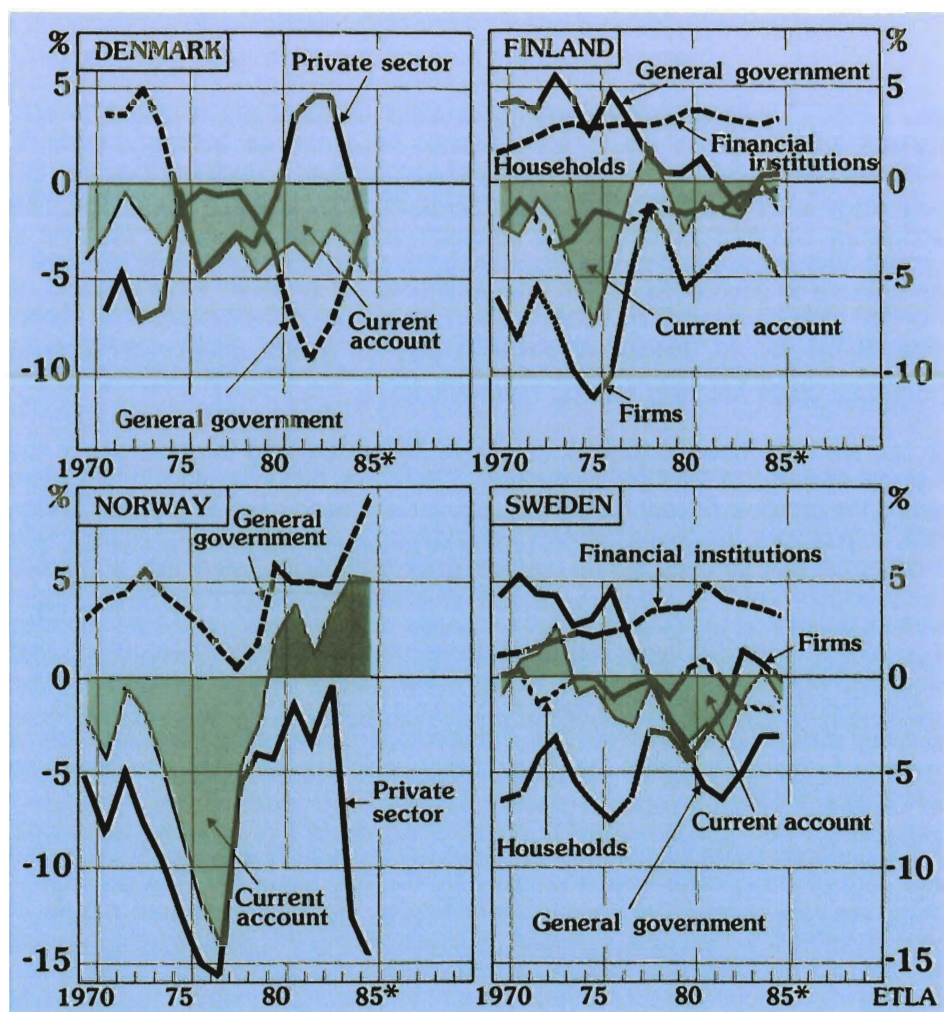
The mid-1970s crisis as a background

The development in the financial systems can be traced back to changes in the economic environment after the first oil crisis. The rise of inflation and its increased volatility, as well as the volatility of the exchange rates, created uncertainty. The economic growth in the industrialized countries slowed down. Another factor that altered the financial position of various sectors was the expansive fiscal policy that was maintained in many countries. Among the Nordic countries Denmark, Norway, and Sweden pursued such policies. Public sector deficits grew rapidly, and were not turned around until 1982 in Denmark and Sweden. In Norway the oil revenues had begun to balance the deficit from the late 1970s. In Finland fiscal policies were not so demand-oriented as in the neighbouring countries, and the deficit stayed at a lower level.

¹⁾ See e.g. "Financial innovation and monetary policy", Bank for International Settlements (1984).

The international financial system also changed markedly during the same period due to increased use of flexible exchange rates, and due to the expansion of the Euromarket. On the other hand, the growing internationalization of business and banking in the Nordic countries created a new demand for currency related services. The financial behaviour of firms and banks became more closely tied to what happened in the leading finance centers of the world. With the internationalization firms also learned how to better handle the risks attached to flexible exchange rates.

Figure 1 Net lending by sectors in the Nordic economies
Per cent of GDP



Source: National Accounts.

Among the Nordic countries Denmark has traditionally been most strongly integrated in the international economy, and has developed the most sophisticated financial system. During the last few years the Danish system of currency controls has been liberalized. It can now be regarded as one of the most liberal in the world. This relates to the close connections between monetary policy and exchange rate policy, and their influence on financial conditions of a country. The Danish governments have consistently tried to avoid devaluations in the 1980s, which traditionally have been used in all Nordic countries to solve the problems of foreign trade and current account imbalance. To keep the exchange rate stable, the domestic interest rate has largely been determined by foreign factors.

The international integration of Nordic financial markets can be regarded as the single most important factor when considering the recent financial market changes in the small Nordic economies. Without the growing internationalization of business and banking the demand for financial intermediation would probably have stayed at a too low level to create a basis for these changes. Larger amounts intermediated at lower profit margins imply increased efficiency.

New technology offers new possibilities

In the background of the financial market changes there is naturally also the new technology which provides much better possibilities for financial operations. This technology has totally changed the communication and information systems in banking and made the financial intermediation technically faster and cheaper.

Traditional credit rationing was no more successful

So far, we have been looking at long-term factors causing the changes in the financial systems of the Nordic countries. There are, however, additional factors behind the process. Except for Norway, the general trend towards growing foreign debt, both private and public, caused a change in the economic policies, especially in countries that pursued strong demand-oriented policies. Monetary and credit policy targets became more focused on guaranteeing the financing of current account deficit and the stability of the exchange rate. Monetary and credit policies in all Nordic countries were tightened to reduce the growth of liquidity in the economy, which again except for Norway, was mainly due to permanent state budget deficits. Around 1979–1980 economic growth in all Nordic countries was relatively strong, but at the same time the inflation rate was rising. This also added pressure to maintain a tight monetary policy, which traditionally was based on direct regulations.

Due to changes in the financial environment, and especially due to changes in the behaviour of firms, credit rationing was not effective. Liquidity in the economies had grown very rapidly. The low interest rate policy that was carried out in three of these countries – Denmark excluded – by regulating the lending rate in credit markets, did not clear the markets. There was excess demand for loans, which was met in unregulated markets that emerged in Sweden, Norway, and Finland. (It is interesting to note that in the beginning of the 1970s "a grey credit market" existed, for a period also in Denmark).

These phenomena relate to "a law" implying that the rationing of a financial market is efficient only for as long as it takes the actors to learn how to get around the rules. This happens when the incentives to escape the rules are sufficiently strong. Thus, the regulative actions themselves induce to innovations which aim at getting around the rules. Generally, the process of liberalization of financial markets depends on the efficiency of the existing financial system. Mature conditions and competition like e.g. in the US financial market continuously produce sophisticated innovations, while concentrated oligopolistic and rationed financial systems, typical of the Nordic countries, are not conducive to innovations. Increased competition usually means that banks lose an inexpensive funding source.

The emergence of this grey market, as a parallel market to the rationed market, added pressure towards deregulation and liberalization in the early 80s. Recently the trend in Nordic authorities policies is a movement towards deregulation and liberalization of the rules concerning financial intermediation in domestic markets, as well as currency related services.

Changes have been most significant in the money market

The changes in the financial systems of the Nordic countries started in the short-term market as a natural consequence of the change in the financial behaviour of the firms. The tendency towards increased market oriented systems, also in household markets, is likely to become stronger.

The financial surplus of the household sector in the Nordic economies contributes in creating extra demand for securities, and the attractiveness of equities and bonds as a corporate funding source has increased, as the costs of debt financing have grown. Along with a growing international interest for the Nordic stock exchanges this has added pressure for further development of the equity markets.

1.3 Introduction to the financial systems in each country

1.3.1 Denmark – Are there limits to liberalization?

Although starting from a more mature stage of development of the financial markets than the other Nordic countries, the Danish markets have witnessed dramatic changes in the last decade. In Denmark (like in the other small and open Nordic economies) liberalizations have been intimately connected with the process of internationalization. Among the factors of particular significance for Denmark is the objective of stabilization of the exchange rate of the Danish krone. This objective led to Danish participation in the exchange rate management system of the European Monetary System (the EMS was established in 1979), and to a series of domestic policy adjustments in the first half of the 1980s. Furthermore, the EEC membership has compelled Denmark to gradually open up the factor markets, i.e. including the financial markets.

Key features of the changes are:

- Deregulation of foreign exchange control and credit markets, resulting in internationalization.

- Integration of financial submarkets; i.e. traditional institutions move into activities of already existing institutions or into newly established activities and products.
- Liberalization increases competition in financial markets – leading, among other things, to institutional adjustments like mergers, exits and creation of new types of financial institutions (often rather specialized).
- Gradual elimination of most monetary policy instruments of quantitative regulation in favour of market-oriented instruments.

Institutions and markets

The financial sector in Denmark has traditionally distinguished itself from those of the other Nordic countries by being more market oriented, i.e. a sophisticated bond markets has existed for a long time and monetary policy has been market oriented. Quantitative restrictions have been used only to a limited extent.

Bond markets occupy the central position in the overall credit stock with outstanding debt amounting to 1–1.5 times GDP in the first half of the 1980s. In 1986, however, total bond credit stood at 2 times GDP, following the very rapid credit expansion associated with the economic upswing.

Traditionally, the bond market has been dominated by private institutions that issue bonds with security in real estate or other real assets. Mortgage institutions possess a monopoly in issuing bonds with security in real estate. There are two groups of mortgage institutions. Three "general" institutions extend loans primarily for residential construction, and two "specialized" institutions provide credit for the business sector. The regulations governing mortgage credit (ceilings on lending per property, restrictions on purposes etc.) are politically determined and often utilized as instruments of economic policy, as witnessed several times in 1985–86.

Since the mid-1970s, the capital markets have been increasingly dominated by government treasuries. In 1982 the share of government bonds in the net growth of bond debt reached 75 %, raising the share of government bonds in the total stock to 1/3. In the last couple of years the issuance of treasuries has been declining, due to the drastic reduction of public sector deficits.

Following the global trend, large Danish companies have increasingly invested in financial assets, and government notes have proven very attractive for companies' cash-flow management. Another important feature of the bond market is the large sales of krone-denominated treasuries abroad, which started in the mid-1970s and expanded rapidly since 1982, when the temporary suspension of sales from 1979 was lifted again. The large stock of bonds currently owned by foreigners (by the end of 1985 around 40 billion DKK) may be a potential threat to the policy of a stable exchange rate and low interest rates.

Equity markets have grown rapidly in the 1980s – both when measured by the amount of issues and by volume of trade. This development has generally been welcomed as a means of increasing "productive" investments and as a means of providing risk capital to the private sector. Smaller companies are increasingly getting access to risk capital, and investors have been ready to absorb new shares at high prices. In fact, share prices for small and new companies have tended to be

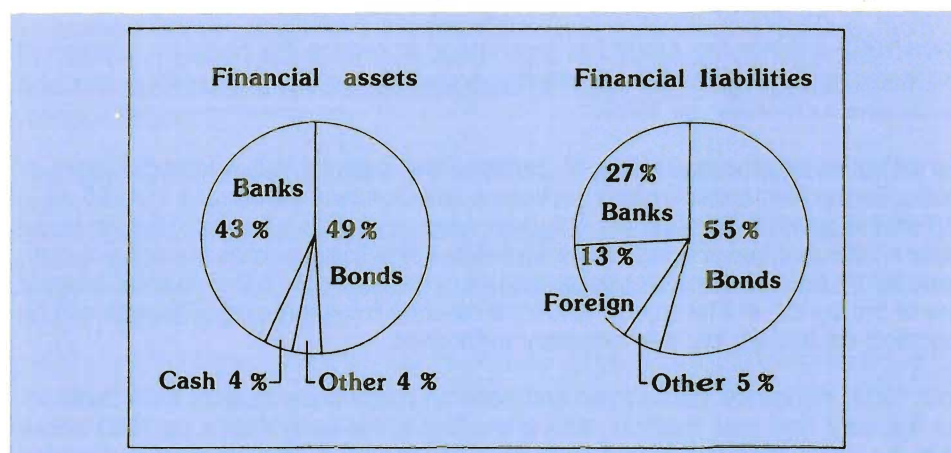
inflated due to a general excess demand for shares. Due to the liberalizations of residents' purchases of foreign shares in 1984, imports of shares have increased, which may reflect both a general domestic excess demand for shares and a weakening of confidence in the domestic market.

Accommodating the rapid growth of stock trading, a stock exchange reform is under way. The reform will provide for a decentralization of trade in that auctions at the stock exchange floor are substituted with OTC-trading. At the same time, the reform will bring the majority of all trading (about 90–95%) that currently takes place outside the stock exchange into an official information system, since deals must be reported to the stock exchange. These changes are expected to bring the Danish markets closer to international markets. The reform will be fully implemented by mid-1987.

The *banking sector* in Denmark has traditionally been relatively insignificant compared to the situation in the other Nordic countries. In recent years total lending by foreign sources has reached approximately the same magnitude as total lending of the banking sector.

In the mid-1980s, the banking sector consisted of about 75 commercial banks and 150 savings banks with a network of about 3 600 branches. The banking sector exhibits a long-term trend towards concentration, and with growing competition in the sector, the number of mergers and exits is likely to increase in the coming years.² Foreign banks have been allowed to operate in Denmark since the early 1970s, and by the end of 1984 the total number of foreign banks with branches or representation offices was 8.

Figure 2 Financial assets and liabilities of households and firms at the end of 1984



Source: IFF.

²) Concentration is also motivated by returns to scale, see Erik Cørstensen: Den fremtidige arbejdsdeling på penge- og kapitalmarkedet, *Nationaløkonomisk Tidsskrift*, no 1, 1986.

Taxation

Personal and corporate taxation have been very influential in shaping the financial markets in the Nordic countries. High tax rates, complex tax rules, differences in tax treatment of legal entities and recurrent changes in tax rules provide incentive for financial services to reduce or circumvent tax payment (i.e. to so-called "tax-thinking").

An comparative overview of personal tax rules in the four Nordic countries is available in the appendix of this chapter.

Interest payments are deductible from taxable income (and interest earnings are taxable). This taxation principle has provided an incentive for borrowing. The political aim has been to aid households in acquiring private homes, and the corresponding cost may be identified as the low incentive for saving. Alternative taxation systems with less incentive for households to borrow, have been considered. In principle, such a tax system should motivate household savings and still provide easy access for corporate sector credit. However, these objectives are not easily met. Most importantly, it is administratively difficult to impose general disincentives for households' borrowing since the majority of the electorate owns private real estate financed by issuance of bonds through mortgage societies.

However, in June 1985, a substantial majority in the Folketing adopted a *major tax reform* to be implemented gradually from 1987 (certain parts of the reform are effective already from 1985). The reform will equalize and reduce the subsidy element inherent in the tax deductibility of interest payments. In the future the "tax value" of interest payments will be about 50–56% for all income groups, i.e. irrespective of the marginal tax rate. Similarly, interest income will be taxed like other capital income (dividends, rental value etc.) at a flat rate of 50–56%.

Another problem addressed by the tax reform is the *double taxation* of dividends. Currently, dividends are taxed both as corporate income (up from 40 to 50% beginning in 1985 as a part of the tax reform) and as personal income. The double taxation is generally considered detrimental to "productive" investments, and since 1982 a minor tax credit has been used to reduce the personal taxation of dividends. According to the tax reform, however, the double taxation is to be eliminated completely by 1990.

Capital gains on stocks are free of taxation if the ownership has lasted 3 years or more. Concerning capital gains on bonds, taxation was introduced in 1985 as a part of the general tax reform. The new rules will reduce the incentive to issue papers with nominal interest rates that differ significantly from the market rate. Henceforth, tax freedom on capital gains are granted only if the nominal interest rate of the bonds at the time of issuance meets a minimum rate. This rate will be specified continually by the monetary authorities.

Until 1984, insurance companies and pension funds were exempt from taxation. But the very high real interest rates prevailing in the early 1980s (in 1982 about 10% p.a.) provoked the introduction of the so-called "*real-interest-tax*", which ensures that yields of bonds and shares do not exceed 3.5% p.a. in real terms. This tax was introduced to reduce the large capital accumulations in these financial institutions, primarily in order to prevent unproportionally large pension payments after the turn of the century. An additional motive behind this taxation

was the large public revenue to be tapped by the public sector. Extensions of this law may be introduced, since the 3.5 % real interest allowed may still be relatively high compared with the long-term growth potential of the economy. Perhaps even more important, however, are the distortions created by uneven taxation of alternative investments which has tended to favour "passive" and unproductive investments in real estate or bonds rather than in shares etc.

Finally, the tax reform will broaden the *tax base* to cover also foundations, societies, associations, mortgage institutions and other hitherto untaxed financial institutions.

Credit policy and public control

The first and primary policy objective of the monetary policy in Denmark has been the need to accommodate the persistent deficit on the current account of the balance of payments, i.e. to ensure the continued availability of foreign reserves. As a clear political choice, it was decided to provide the needed foreign reserves by ensuring a private capital import by keeping interest rates high.

Capital imports are, however, sensitive to the risk of exchange rate shifts, and significant interest rate differentials had to be observed to provide a risk premium. As the international interest level increased to unprecedented levels in the late 1970s, the Danish rates followed suit with a (growing) differential added to international rates. Together with a gradual liberalization of currency regulations during the 1960s and 1970s, this resulted in very high interest rates in Denmark, in contrast to the policy of low interest rates pursued in the other Nordic countries (c.f. real interest rates in Figure 10).

The high interest rates contributed to turning an international recession into a strong domestic investment down-turn in the second half of the 1970s and early 1980s, and the credit policy thus caused a relatively strong down-turn in Denmark.³⁾ The investment crisis was accompanied by low and negative after-tax yields on real investments on the one hand and increasingly attractive financial investment opportunities on the other hand. Since the late 1970s, a number of taxation and credit measures have been taken to enhance real investments, but until the strong recovery of overall demand in 1983–84, these measures were of marginal effect.

The second important objective of the monetary policy was to accommodate the public sector deficits since 1975. In order to minimize the negative consequences on domestic interest rates, government treasuries were sold both on domestic and foreign markets, and papers were issued with a short-term maturity, partly in order to diversify the markets and to minimize the consequences for the existing markets of long-term maturity bonds.

³⁾ A discussion and comparison of Nordic countries is available in: Jespersen, Jesper: Sammenhængen mellem statens budgetunderskud og renteutviklingen i de nordiske lande, Nordisk Økonomisk Forskningsråd, Årbok 1983.

The third objective emanated directly from the complications caused by the two first policy objectives. Because international real rates of interest were already high, the continued need for capital import could no longer be met by providing the needed interest rate differential. The cost in terms of domestic recession were too high. In 1980–81 the Government embarked on a different policy, involving increased public sector borrowing in international markets which in principle should allow for a reduction of the interest rate differential. By 1982, however, this approach had not produced significant results.

But in late 1982 international interest rates fell sharply, and the Danish policy choices were considerably and unexpectedly simplified. During 1983–86, the fiscal deficit has been gradually eliminated, and despite continued high real interest rates the differential needed for stabilizing the currency reserves has not prevented an investment boom from materializing.

Instruments of monetary and credit policy in the early 1980s were geared to meet the needs created by the recession in the 1970s. One area of concern was the traditional choice between private or public capital imports when international real interest rates are high. The possibility of diversifying the term structure of interest to relieve long-term interest rates from the restriction of being the main instrument in controlling short-term international capital movements has often been addressed. Some progress has been made by the creation of large markets for short-term maturity papers but the long-term interest rate is still sensitive to fluctuations in the foreign currency reserve.

More generally, the instruments of credit and monetary policy have gradually been transformed to meet the demands of financial liberalization. Up till 1985, day-to-day regulation of bank liquidity was conducted primarily through a system of quantitative regulation of bank lending. The use of such instruments was, however, partly ineffective due to the emerging liberalizations and internationalization. Additional liquidity adjustments (primarily changes in the general level of interest etc.) were performed through central bank open market operations in bond markets.

In connection with the various capital market liberalizations during the 1980s it has proven difficult for the central bank to control the increases in bank lending. It was increasingly felt that the old control system was worn down by company borrowing abroad and by increased bank circumvention of the existing framework of bank lending control. This prompted the introduction in the summer of 1985 of two new systems for controlling overall liquidity and individual banks' lending:

- A more market oriented system of bank liquidity control was introduced, based on sales to banks of 3-months certificates of deposits. Money market interest rates are controlled by setting the yield of, and borrowing costs on these certificates.
- The ceiling of bank lending was replaced by a system of placement requirements related to increases in deposits, where interest payments by the central bank is set on a day-to-day basis.

Despite these changes, private sector borrowing for consumption is still difficult to restrict. One important reason is the easier access to foreign sources of credit — notably the so-called "finance-loans" (company borrowing abroad).

Due to the serious balance-of-payment problems, a certain measure of re-regulation has taken place in the bond markets. Mortgage credit regulations have been tightened (credit facilities withdrawn for some construction purposes and reduced for other etc.) and corporate sector access to foreign credit has been reduced marginally in 1986 by reimposed clauses of the use of "finance loans".

But the control attempts have not been successful, and at times the central bank has relied heavily on simply asking the banks to moderate credit expansion. The difficulties experienced in controlling credit is evident also in the austerity measures introduced during 1985–86. In particular, reduced availability of mortgage credit and a tightening of hire-purchase rules have been remarkable.

In compliance with both OECD and EEC agreements, it has been a policy objective in itself to integrate the Danish financial markets with international markets, in order to improve their overall functioning. Liberalizations of *international capital movements* have been particularly far-reaching during 1983–85. There are several reasons for this, but many of the restrictions had already become obsolete.

- 1983 – Residents allowed to buy foreign bonds quoted on stock exchanges and with initial maturity of no less than 2 years.
 - Non-residents allowed to buy non-listed Danish shares.
 - Finance loans to be taken up without any quantitative restrictions and control on use of funds.
 - Higher ceilings for amounts involved in regulated transactions (e.g. direct investments) and easing of rules for intra-company loans.
- 1984 – Residents allowed to buy foreign shares listed on stock exchanges abroad.
- 1985 – Although non-listed foreign bonds and shares may be purchased only with the accept from the central bank, the administration of this is very lenient.
 - Quantitative limits on a number of transactions raised. The minimal maturity for "finance-loans" reduced from 5 years to 1.

From the summer of 1985, only a few restrictions remain on international capital transactions of individuals and private non-financial businesses, and the remaining restrictions relate primarily to capital exports. The distinction between private and corporate credit has, however, been difficult to administer, and private consumption has benefited directly and indirectly (e.g. by large-scale relending of foreign loans through investment institutions etc.) from the easy access to "finance loans" without control on the usage. In March 1986 restrictions were reimposed on the use of "finance loans", but this move is not expected to be very effective in reducing credit available for private consumption.

Issues in the development of the financial sector

An important factor behind the surge in financial market activity has been the increased propensity of *households* to invest in financial assets. The growing interest in financial assets and portfolio management has been reflected first of all in the private sector investments in government treasuries as they emerged in the

second half of the 1970s. In the early 1980s, equity shares gained importance and attractiveness as objects of financial investment, and the very large demand caused share indices to rise. Also, domestic investors turned the excess demand towards foreign share markets, when such investments were allowed in the mid-1980s. The growing interest in portfolio management is also evident in the dramatic increase in the number of investment companies and societies. Generally, this behaviour of the private sector has been welcomed as rational and beneficial but there have been indications of an emerging "casino society" with wide-spread financial speculation based on borrowed funds.

Another issue in the development of the financial markets is the growing importance of *institutional investors*, represented primarily by insurance companies and pension funds with assets amounting to 145 billion DKK by the end of 1983. Additionally two large semi-public funds are important investors. Already in 1964 a compulsory pension scheme, the "Arbejdsmarkedets Tillægspension" (ATP) was established, and in 1979 the "Lønmodtagernes Dyrtdsfond" (LD) was created. Together the two funds had assets of about 46 billion DKK in late 1983.

According to present legislation, pension funds may invest up to 25 % of their capital in stocks, and by pooling resources through an investment company pension funds and insurance companies may acquire more than 50 % of a given company. The two semi-public funds have stricter placement rules. Only 20 % of assets may be invested in shares, and the two funds together may not own more than 20 % of a company. These limits may ease in the coming years. Changing the rules may be beneficial in that these investors may move funds from bonds to shares. Nevertheless, the risk aversion of these funds is likely to stay high, thus limiting investments to solid and already well situated business.

The semi-public funds are not different from ordinary pension funds in their objectives of high rates of return and long-term security. But in addition to that, the boards of governors consist of employee and public representatives (ILD) and employer and employee representatives (ATP). These may have additional objectives such as distributions or resources and employment etc. that may conflict with the pure pension maximizing objective.

Further development of the financial markets will occur with the spreading of *profit sharing* schemes in private enterprises. This is happening already on a decentralized level, but it may acquire significant proportions if introduced as a part of a pension reform (for blue-collar workers, primarily). These changes may considerably alter the present composition of supply and demand for long-term credit.

Some anxiety about policy implications

The *integration of financial submarkets* and the process of internationalization create an interconnected system of credit sources, resulting in increased availability of credit for almost any purpose. This poses a challenge to policy makers since traditional instruments become obsolete. Thus, the integration of markets has prompted a search for new instruments in the first half of the 1980s.

The increased interdependence of domestic and international financial markets, and the fundamental shift in the policy regime in 1982 (with the introduction of

stable exchange rates, liberalizations of capital transfers, and gradual reduction of interest rates) is likely to further reduce the autonomy of monetary policy by making monetary variables even more dependent on international markets than they are already.

Since 1982, there has been a shift away from the heavy reliance on monetary policy of the 1970s when fiscal policy was loose. The Danish currency has been kept relatively stable, and the declared policy aim of the Government has been to abstain from devaluations and continue to gradually force the rate of interest downwards. Instead, the burden of adjustment should be placed on tight fiscal and incomes policies. This policy has been relatively successful so far, but so have the conditions in terms of the international economic recovery.

If, in the coming years these policy objectives cannot be met with the chosen set-up of instruments, the close relationship between domestic and international financial markets may make it difficult to apply discretionary monetary policy in solving the fundamental economic problems. In conclusion, the changing features of the Danish financial markets have not yet been tested in more adverse economic settings than those prevailing during the first half of the 1980s.

1.3.2 Finland – Deregulation brings about further integration

Bank domination in financial intermediation is one of the main characteristics of the traditional Finnish financial system. Banks account for over half of total domestic financial sector credits to the public. This importance compared to the minor role of the securities' market is at least partly due to the tax exemption for households of interest on bank deposits and the generous tax provisions which the deductibility of interest costs brings for both households and firms. Bank loans have been, and still are, an important source of finance for business investment as well as for household housing investments, and bank deposits are the predominant financial asset of the households. The banks have a central position in the intermediation of both short-term and long-term financing.

The banking sector consists of a few large national banks (six private commercial banks and the state-owned Postipankki), who have access to central bank borrowing, and over 600 local savings and cooperative banks. The local banks are linked to the national banking system via their own "central banks", which enjoy status as commercial banks. The number of bank branches in Finland is altogether over 3 500 (in addition there are about 3 200 post offices) which is very high, 0.7 per 1 000 inhabitants.

Since 1982, foreign banks have been allowed to establish in Finland. For the time being there are four foreign bank subsidiaries and two representative offices in Finland. Since the mid-1970s, the Finnish banks have been participating in international consortium banks and establishing subsidiaries and more recently, branches in financial centres abroad.

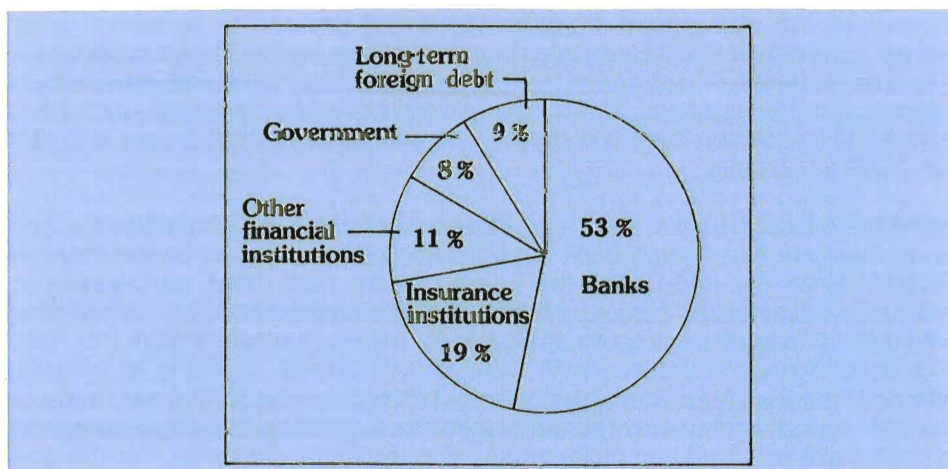
All Finnish banks offer similar types of deposits, on which the same interest rate is paid by a mutual agreement. This cartel agreement guarantees the tax-exemption to households provided that uniform rates are applied by the banks. For the time being, the agreement is valid until the end of 1988, but there is much pressure to modify the law which is a prerequisite for this agreement. The cartel is preventing

the competition between banks and the tax-exemption is widely regarded as a hindrance to the growth of the equity and bond markets. It is regarded very likely that the cartel will break by the end of 1980s.

The lending rate of banks has traditionally reflected the interest rate regulation of the Bank of Finland. The control of banks' average lending rate was, however, finally relaxed in August 1986. Due to the variable interest rate system, most deposit and loan rates are tied to the base rate of the Bank of Finland, a rate which has rarely been changed.

From 1962 on, after the creation of the compulsory employment pension system, the role of *insurance institutions and pension funds* in the financial intermediation has been increasing. Today their share of loans granted to the public is 20%. Other financial institutions consist of *mortgage banks and development credit institutions* which fund their loans by issuing long-term bonds. To the same group belong also *financial companies* (the hire purchase, credit card, factoring and leasing companies), which have expanded rapidly during last few years. The growth of the finance companies reflects, however, only partly an increased demand for the type of lending and services they provide. An at least equally important factor was the use of bank-owned finance companies as a means of circumventing interest rate regulation. This group of other financial institutions supply 15% of the total domestic credits to the public. Also, the Bank of Finland grants some loans directly to firms. The share of the government lending, mainly for housing investments, is decreasing. Approximately ninety percent of total credits to the public is supplied by the financial institutions and the general government, direct long-term *foreign credits* making a remaining ten percent.

Figure 3 Outstanding credits to firms and households from various sources at the end of 1984



Source: ETLA, Credit Stock Statistics & Central Statistical Office.

The Finnish *bond market* is dominated by government long-term bonds. The rapid development of the bond market is mainly a result of an increase in the government bond issues. As mentioned above, they are tax free and with the high real interest rate prevailing during the last few years they have been quite profitable. Government and private sector bond rates and other issue terms are controlled by the authorities. Bond issuance permits are granted by the government. Debentures and other bonds, on the other hand, are only registered in the Bank of Finland. The government also grants tax-free status for bonds separately. In addition to the state, the mortgage banks which grant credits for the energy and other infrastructural investments, have also issued tax-free bonds. Companies have appeared only on the taxable bond market and their role has been minor.

With the adoption of and increase in property income deduction, in respect of taxable capital income, the demand for taxable securities has, however, grown. This is particularly true for corporate debentures. The growth of bond and debenture issues by industrial and financial companies was especially rapid in the first half of 1985, when foreign investors began to show interest for these loans due to their high and fixed interest rates. The foreign portfolio investment into these securities was quite large until the Bank of Finland put a ban on this type of capital imports at the end of June 1985. At present this prohibition is still in force.

The maturities of Finnish bonds and debentures are usually 5–10 years. Until late 1970s, before the expansion of the bond market, there did not exist any secondary market. Thereafter the development of such a market has been rapid, and, as an example, the share of bonds and debentures of the total turnover of the Helsinki Stock Exchange is very high (two thirds in 1984 and three quarters in 1985).

So far the *equity market* is rather undeveloped. The market value of the 50 companies quoted on The Helsinki Stock Exchange, the only one in the country, is 31.7 bill. FIM (as of end 1985). In addition to these firms, shares of about 35–40 firms are quoted on a so called brokers' list, the number of the firms on the OTC-list being so far (autumn 1986) only four. There are 18 brokers - 8 banks and 10 stock broker firms – participating at the Stock Exchange. The rapid growth of the stock exchange turnover in the 1980s – in 1985 it was over 17-fold compared to the turnover in 1980 – is mainly due to the increased markets for government bonds and corporate debentures, as mentioned above.

Taxation

Taxation has greatly influenced the structure of the Finnish financial system. Interest payments are deductible in taxable income for both households and corporations. Bank deposits and the interests on them are not as a rule taxable for households. Also government bonds, together with some other bonds (to a minor extent) are not taxed. Dividends are taxed both as a corporate income and as personal income, although some deductions can be made in personal taxation. Capital gains on financial assets are tax-free in general if the securities are held for more than five years.⁴⁾ Against this background it is easy to understand that the markets for shares and company bonds play only a minor role in the Finnish

⁴⁾ For further details see appendix.

financial system. The prevailing high real rate of interest and the increased need for risk financing, due to changes in the structure of investment, e.g. towards increasing intangible capital spending, add pressure to develop the securities market. Accordingly, taxation is being reconsidered. It is most likely that these reforms, if realized, will make the development of the securities market more favourable. In 1987 the corporate income tax will be somewhat reduced. We can also mention a proposed law which would give more easy access for the investment funds activities. Increasing financial wealth in the household sector could also in this way be diverted to risk bearing investments.

Policy targets and public control

The system of credit rationing is today giving way to more market-oriented policy measures. Until the mid- or late-1970s, the primary target of the monetary and exchange rate policy was to support investments and the rapid growth of industrial production. This was pursued by keeping the interest rate level low through credit rationing and by directing capital import to investments which were regarded as growth-supporting. Chronic excess demand for credit until recently were the most eminent features of the financial market.

The main instrument of traditional monetary policy was the regulation of central bank borrowing of commercial banks. By raising the cost of this borrowing, which until 1975 (the foundation of a call money market) was regulated in the form of quotas for individual commercial banks, the central bank could influence the profitability of the banks and so their willingness to grant loans. To maintain the banks' central bank borrowing high enough for policy purposes, reserve requirements were introduced in 1979. The efficiency of this kind of policy very much depends on currency regulations. Until the early 1980s the control was successful in quaranteeing a relatively autonomous monetary system.

In the early 1980s the monetary and exchange rate policy targets were reconsidered to better fit in the changing economic and institutional environment. Policy was targeted to avoid the devaluations that traditionally were used to speed up exports when the inflation had undermined the competitiveness of export industries. This meant a tighter monetary policy stance in general.

Since then, with the broadening of the money market, the interventions in the call money market as well as in the foreign exchange forward market have become major instruments of the monetary policy. The Bank of Finland's call money rate, which from 1984 on is the same for all banks, to a large extent determines all short-term rates, and has a significant effect on the formation of other rates of interest, especially after the abolishing of the ceiling for interest rate on bank loans in the beginning of 1986, and the final abandoning of the control of the banks' average lending rates in August 1986.¹⁾ The Bank of Finland's interventions in the foreign exchange forward market had a significant impact on the liquidity in the economy in 1984.

¹⁾ Late 1986 the central bank allowed banks to convert their day-to-day borrowing to three month negotiable loans. Accordingly, the three month rate is replacing the role of the call money rate.

At present the traditional way of conducting monetary policy through rationing has given way to an interest rate based mechanism; the effects of the monetary policy on the real economy are transmitted through changes in interest rates rather than through changes in the degree of credit rationing. Accordingly the interest rate has risen, partly due to the conscious policy to lower inflation, and more recently – from summer 1986 – to ensure a sufficient level of foreign reserves. This relates partly to the increased international integration of Finnish financial markets, and thus a diminished monetary autonomy.

Foreign exchange policy

As mentioned before, the goal of the exchange rate policy has been set firmly to avoid devaluations. This really means *pursuing a policy of a fixed exchange rate* with respect to an average exchange rate between the FIM and other currencies. The target has been to keep the currency index set by the Bank of Finland unchanged, although the exchange rate relationships between individual currencies change continuously.

This has proved to be no easy task as the experiences of the summer 1986 show. The Bank of Finland has been forced to defend the FIM against speculative attacks by raising quite steeply the call money rate, first in May and then again in August. In May the Bank of Finland also devaluated the FIM about 2 %, which it could do within the normal limits (4.5 %) given to the currency index. However, the fixed exchange rate policy conducted by the Bank of Finland is given a large priority in the economy, and the Government has declared its support to it. In this connection an institutional fact deserves mentioning: The Bank of Finland decides the value of the currency index within the limits mentioned above. Major revisions can only be carried out by the Government, who decides the limits of the currency index on the proposition made by the Bank supervisors delegated by the Parliament.

Capital control regulations

The control of capital movement has been slightly liberalized. The new law defining the framework for foreign exchange regulations in the beginning of 1986 did not bring about any major changes: As a rule capital flows between Finland and foreign countries are regulated by the Bank of Finland and are to a large extent subject to the Bank of Finland's approval. Current foreign exchange transactions, i.e. short-term capital flows associated with foreign trade, are exempt from regulations, whereas long-term loans raised abroad or investments abroad require the Bank of Finland's approval.

The guidelines of the currency rules have, however, been recently liberalized, e.g.:

- The households can to a minor extent invest in foreign bonds and shares or deposit funds with the foreign banks.
- As from August 1986 the long-term foreign borrowing (maturities over 5 years) of the manufacturing firms and the shipyards were released from the control of the Bank of Finland, and banks were given right to intermediate these funds.

The Bank of Finland has declared its purpose to continue favouring cautious liberalizations of the capital movements.

Future trends – Cautious deregulation and liberalization likely to continue

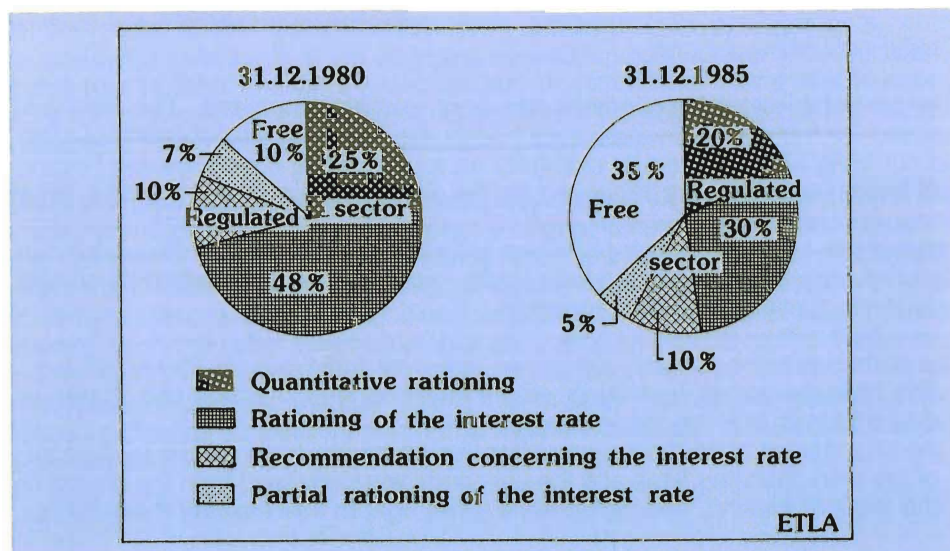
The Finnish financial system has undergone a number of changes during the last few years. The role of credit rationing has diminished rapidly, and the traditional view of the Finnish financial markets as undeveloped, bank-dominated and strongly regulated markets is rapidly changing in the 1980s.

Key features of changes are:

- The emergence of an unregulated short-term money market and the closer integration of the whole financial system.
- The international integration of the Finnish financial system as a result of increased internationalization of banking and business, and cautious liberalization of capital movements.
- Changes in the monetary policy targets and instrument towards utilizing more market-oriented measures.
- Changes in the monetary policy instruments towards utilizing more market oriented measures and the implied change in the transmission mechanism.

The properly functioning Finnish *money market*, which gradually started as a "grey market" between firms in the 1980s, is still in the intermediate phase. So far, the amount of securities handled in the short-term market – certificates of deposits issued by banks, government short-term loan bills and the commercial papers – is too small to create a basis for a functioning secondary market. The short-term money market plays, however, an important role in the financial intermediation as a whole. The short-term interest rate is increasingly influencing bank interest rates

Figure 4 Sources of finance of firms and households from regulated and non-regulated sectors of the financial market, %-shares



Source: ETLA, Data from Central Statistical Office – figures are rough estimates.

on all new loans. The final abandoning in August 1986 of the control of the average lending rate of the banks, removed the corner stone of the Finnish financial system.

The increasing competition among the banks is also reflected in the lending policies of other financial institutions, the activities of which are also slightly deregulated; e.g. in spring 1986 the Bank of Finland stopped giving recommendations concerning the lending rates of the insurance companies. So, the regulated and unregulated sectors of the financial market, which are presented in the adjoining chart, cannot be as easily defined as before.

Although the regulation has been dismantled as far as banks' lending rates of interest are concerned, the fact that bank deposits continue to be exempted from taxation will keep deposit rates largely subject to the cartel arrangement between banks. Of all bank deposits, 90 % is under the cartel agreement, and of all the time deposits only 1–2 % are outside this agreement (as of the end of 1985). The tax law, which is a prerequisite for the agreement, is valid at least until the end of 1988.

In general, the increased effectiveness of the financial intermediation has, *ceteris paribus*, expansive impacts on the economy. This is because, with a given monetary policy stance the credit terms get better for investors in real capital. The financial market changes have, so far, resulted in higher average financing costs for the Finnish corporations. But, on the other hand, the credit availability has improved.

Leaving aside the present situation, where the real rate of interest is generally regarded to be too high (7–8 % for new loans, in Autumn 1986), there is agreement that a positive and stable real interest rate will improve the effectiveness and profitability of investments in the long run. This is especially true when keeping in mind the indebtedness of Finnish corporations which is high in international comparison. Improving this situation, among other things, adds pressure to further develop the direct financing of the corporations in the form of both bonds and debentures, and shares. The taxation of interest payments and dividends, in contrast to the tax exemption of bank deposits and government bonds, is widely regarded as the most important reason for the rather undeveloped corporate *bond market* as well as the narrow *equity market*. There is, however, much pressure to amend the law, mentioned above, to imply a more equal tax treatment of the financial assets of households.

International integration and increased foreign capital movements affect the autonomy of the financial system and monetary policy. Also in Finland the short-term capital flows – which in practice are free – have been quite large. Although speculative capital flows cause disruptions, it is believed that with a better functioning domestic money market the authorities would have more flexibility to take counter-measures, and the trend towards cautious liberalizations of capital movements will continue.

1.3.3 Norway – Will market-orientation and deregulation proceed?

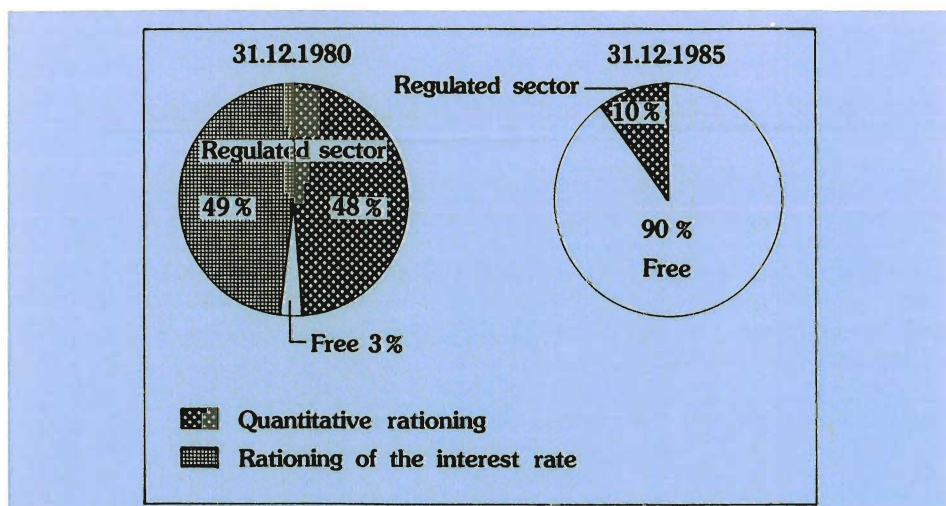
The general trend in the Norwegian financial market in the 1980s has been deregulation and liberalization. This goes for money markets, as well as capital and equity markets. Government policy is today based on more market oriented behaviour than before. This may be seen from the following figure showing the development in sources of finance for enterprises and households from regulated and non-regulated sectors of the financial market.

Institutions and markets

The *banking sector* dominates the Norwegian financial system to a large extent. Banks lend money to both households, the corporate sector and municipalities. In the last 10 years, banks have, on the average, supplied approx. 70 % of all domestic credit. However, inside the banking sector we have seen considerable changes since the late 1970s. The sector consists of private banks (commercial, savings and foreign banks (since 1985)), and state banks.

In 1979 the state banks were supplying almost 50 % of all domestic credit. Today their share of the market is reduced to under 10 %. The private banks have, on the other hand, increased their share of the market from 25–30 % to more than 60 % last year (sharp increase since 1983 and particularly for the commercial banks). So far, we have seen a quite distinct tendency to concentration in the private part of the banking sector in the 1970s and the 1980s.

Figure 5 Sources of finance of firms and households from regulated and non-regulated sectors of the financial market, %-shares



Source: Bank of Norway and OECD Economic Survey.

Since January 1985, foreign commercial banks have been allowed to conduct banking services in Norway on an ordinary basis. Seven banks have established in Norway. Due to various government regulations, the volume of their business is very limited so far.

The Norwegian *bond market* comprises of government bonds and bonds issued by municipalities, state banks, the corporate sector and various loan associations. Bond market institutions in Norway are not lending money to the household sector as in Denmark and Sweden. Historically, up to 1980 the bond market in Norway was heavily regulated, both on the supply (issuance regulations) and the demand side (allocations of quotas through the Credit Budget) and also regarding the terms associated to the securities.

Because of government regulations in the 1970s, which resulted in lower bond yields than market conditions should imply, the bond market's share of domestic credit supply decreased to some 6–10 % in the late 1970s. The lifting of issuance regulations in 1980 gave a real boost to bond issuing in the following years, but from late 1982 new regulations were introduced. These lasted to autumn 1985. In recent years the bond market has accounted for 10–15 % of domestic credit supply.

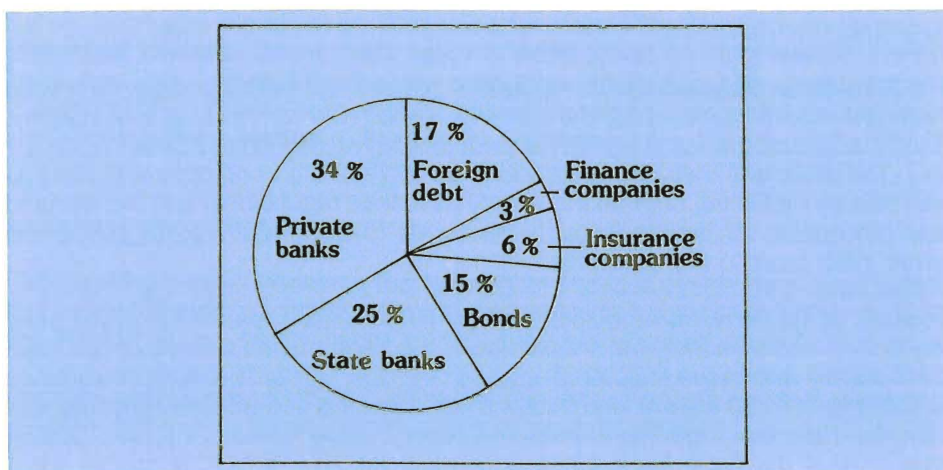
Other financial market institutions which are lending money to households and firms, are *insurance companies (including various pension funds) and finance companies*. These have had quite small and rather stable market shares in the past 10 years. This is mostly due to government regulations concerning lending volume and interest rate on loans. Today insurance and finance companies have a 10 % share of domestic credit supply.

Since 1982, the *equity market* in Norway has become more important in the credit supply. The market share has increased from some 2–3 % to 6–7 % in 1985. The vitalization of the equity market has brought more private risk capital to Norwegian companies and may be regarded as a result of the efforts and ambitions to strengthen the equity base of the Norwegian corporate sector. This is highly required when the ambition is to compete for new markets and in order to face increased competition on existing ones.

Foreign sources contribute to a considerable degree to the total credit stock available for domestic sectors. In 1984 the net foreign sources accounted for 16 % of the total credit stock. The figure has diminished considerably in the 80s from a maximum in 1978 (end of the period of oil-related borrowing). Today almost all Norwegian foreign borrowing is related to actors in the private sector of the economy, mainly financial institutions, oil-related industry and shipping.

In the period with credit rationing, an unregulated credit market, the so-called *grey market*, evolved in Norway like in the other Nordic countries. The outstanding volume of grey market loans is considerable (some NOK 27.5 bill. by end of 1985), accounting for as much as 10 % of outstanding loans from banks. As a result of the more market oriented credit policy and a less regulated interest rate, the terms on grey market loans (that is loans where neither lender nor borrower is a finance institution) are now more in accordance with the ordinary credit market. The fast increase in grey market loans also seems to have slowed down.

Figure 6 Outstanding credits to firms and households from various sources at the end of 1984



Source: NOU 1986:5 and Credit Market Statistics.

Credit policy and public control

The main objective of Norwegian policy regarding money and credit, has for a long time been to shelter the domestic money and credit supply against international disturbances. However, this is no easy task considering the fact that the Norwegian economy to a large extent depends on foreign trade in goods and services (most evident in shipping, the petroleum sector and the process industry, and with regard to import of consumer goods). In the 1980s we have also seen a growing internationalization of the Norwegian financial system, a process lead by Norwegian commercial banks following and guiding important customers out on the international market scene.

Important policy instruments have been regulation of credit supply and interest rates, exchange rate policy and capital controls.

Up to the end of the 1970s the Norwegian credit market and the credit policy was characterized by severe regulations both regarding volume of lending from different financial institutions and the interest rate on loans and credits. The result of this was a very segmented and complex credit market where the *low-interest rate policy and credit rationing* became genuine features.

However, over the time period 1979–83 have been given three important recommendations from various committees regarding Norwegian credit policy; one concerning problems with the structure and the control of the credit market (1979), one about the interest rate policy (1980) and one dealing with objectives and means in the credit policy (1983). All three concluded with the *need for a more liberalized credit market and a more market-oriented credit policy*. Even though it took some time from the committees finished their work to any changes took place,

it is obvious that their recommendations have had considerable influence on the deregulation and liberalization we have seen in the Norwegian financial system in the 1980s. This process has increased in pace the last three years, and by the end of 1985 almost no sectors, apart from the State Banks of course, are left with heavy Government regulations.

The most prominent changes in the Norwegian credit policy since 1980 are:

- Reduced influence for the State Banks
- A less segmented credit market.
- Policy objectives more related to total domestic liquidity and money supply than to credit supply from each market sector.
- A more flexible interest rate policy where the system of interest rate declarations is replaced with a surveillance system where the Bank of Norway is to use market operation tools like certificates and government bonds to control the money and credit supply.

Some credit policy elements still remain little market oriented. Most important are the primary and supplementary reserve regulations on private banks.

In the process towards a more market-oriented credit policy we have experienced some undesirable effects. The process of market deregulation so far has been characterized by a step-by-step reduction of the credit rationing. The result is a credit expansion considerably overshooting official targets because of the unwillingness to let the interest rate rise enough for a market equilibrium. However, this is also due to expansive effects of the fiscal policy with an increasing deficit on government budgets when petroleum is excluded.

After the abolishing of the interest rate declaration in September 1985 and Bank of Norway raising interest rates on government bonds and certificates, the interest rate level has increased somewhat. Still, this does not seem to be enough to reach equilibrium. This is mainly due to persistent interest rate differentials between Norway and other countries, capital movements and features of the Norwegian tax system. The real after-tax interest rate on borrowing is quite low compared with the international situation.

Foreign exchange regulations and capital controls

The aim of foreign exchange regulations and capital controls has been to ensure sufficient reserves to finance imports of indispensable items in case of a sharp drop in export revenues. The growing oil-revenue from the late 70s and the emergence of more developed and less restricted international financial markets, has reduced the need for capital controls for balance of payments reasons.

Today foreign exchange regulations and capital control are *aimed at improving the possibilities for being able to conduct an autonomous monetary and credit policy* in Norway. If regulations contribute to a reduction in foreign capital movements, this could make domestic policy more effective.

Trade-related capital transactions have been freed from control as the Norwegian economy has become more open. Other capital transactions have also been deregulated, though slowly, in accordance with the requirements by the IMF and the OECD's Code for the Liberalization of Capital Movements.

Direct investment has been subject to authorisation, but since 1979 virtually no application for outward investment has been refused. The currency licence has been granted automatically to foreign direct investment into Norway provided that it conformed with domestic legal requirements, and in mid-1984 the currency licence requirement was dropped.

Purchases of foreign securities by residents have been under strict regulation. The controls were loosened in June 1984 for shares and in January 1985 for bonds. The purchase of Norwegian shares by non-residents has been progressively liberalized since 1973. In contrast to these developments, there has been no clear trend towards liberalization of long-term borrowing from abroad. Exceptions are financing of investments in the petroleum and shipping sectors. Because of the large financial needs of these sectors, it has always been a pronounced policy to have these financed abroad.⁵⁾

Present foreign exchange regulations and capital controls seem to function as intended with regard to the long-term capital movements. This is indicated by higher yields on domestic bonds than Euro-NOK bonds. It is more *difficult to control short-term capital movements*. This is due to quite large interest rate differentials between Norway and most other countries where rates are considerably lower. This attracts foreign capital inflow to Norway.

Foreign capital is mostly channelled through the Norwegian foreign exchange forward market. The existence of this market implies that foreign investors may place claims in NOK at a high interest rate (by buying NOK forward) in order to make a profit on the interest rate differential between the Norwegian financial market and international markets. Such "speculation" is difficult to control, but affects the Norwegian money market and the liquidity supply.

Taxation

In Norway there is unlimited tax deductibility of interest payments by households. Combined with relatively high marginal tax rates this renders the real after-tax interest rate close to zero. This strengthens the *demand for credits by households in general*. With credit quite easily available from banks lately, it is reasonable to believe that households may have blown up their financial asset and debt structure by making financial investments with borrowed funds in order to obtain an after-tax profit.

A tax reform (based on the "Tax Commission Report") will most likely be implemented in Norway. This is, however, not a sudden change, but a more gradual adjustment over time. Personal income is to a larger degree to be taxed at a gross basis, i.e. before various deductions. This will make it less favourable for the household sector to borrow. We may also see that only real interest payments are deductible.

⁵⁾ This does not apply to Statoil, which in periods has been instructed to finance investments by issuing bonds in the Norwegian market.

Today, yields on *various financial assets are taxed differently*. Interest payment on bank deposits and bonds is taxed at the same rates as ordinary wage income. Dividends on shares are more favorably taxed. Capital gains on shares are taxed favorably and according to how long the assets have been owned. Losses are tax deductible only in respect to capital gains. Capital gains on bonds are free of tax. The same goes for capital gains on life insurance saving, but here changes may occur pretty soon. Household saving in banks and shares (through approved equity funds) give tax reductions within certain limits.

Traditionally it was more favorable for the corporate sector to finance investments by loan capital than by equity because interest payments are tax deductible while dividends to share holders are payed out of the after tax profit. The low interest rate policy also favoured loan capital at the expense of equity financing. Various tax reliefs are, however, introduced in the 1980s which have made *equity financing more competitive*. Financial investments by actors in the corporate sector are in general taxed as ordinary corporate income.

Present financial market status and the outlook for the years to come

In some areas the process of deregulation and liberalization may have been too fast. We should therefore expect reintroduction of regulatory measures in financial markets for some time. The current capital market development can be seen as an example of such reactions.

The *money market* has developed from being a strictly bank dominated market into a market with a wide range of participants. The connection between the ordinary money market and the grey market is more evident. Today the corporate sector is placing surplus funds in the short-term money market as part of their daily operations. This development has obviously increased the importance of the money market in the Norwegian economy.

From 1985 certificates has become an important part of the money market. With the introduction of certificates as part of the Norwegian money market, the authorities intend to involve the public more directly in the Norwegian money market. This is done in order to increase control with the liquidity supply, and thereby making the monetary and credit policy more effective.

The Norwegian certificate market has had a modest start. Although total issues of certificates amounted to as much as 41.5 bill. NOK in 1985 (of which 32.3 bill. NOK was in treasury certificates), the market turnover in the secondary market has been low. Only finance companies and a few larger Norwegian corporations seem to have adopted this new instrument as an important source of funding so far.

The main buyer of certificates is Bank of Norway together with private banks in certain periods. The modest turnover in certificates is due to a very tight liquidity in the financial market at present. The banks have little ample funds for placing in certificates, and funding is cheaper by using the market for deposit on special terms. Despite these liquidity problems in the money market, the Bank of Norway intends to develop the certificate market in a way which makes it an effective tool to control liquidity in the banking sector.

The *bond market* has also been liberalized in the 1980's. The obligation of banks and insurance companies to hold a certain proportion of their capital in bonds was entirely abolished during 1985. Issuance regulations are also liberalized, but still some sectors are not allowed unrestricted access to the market. This goes for foreigners, households and also municipalities, as well as banks, finance companies and loan associations engaged in the housing sector. The process of deregulation has resulted in a considerable increase in turnover in bonds quoted at the Oslo Stock Exchange.

Not only banks and insurance companies, but also other financial institutions, the corporate sector and to some degree households have become important investors in bonds. This is mainly due to increasing yields on financial investments compared to real investments and to favourable taxation of capital gains on bond investments.

Bank of Norway has also been an important actor in the revitalization of the Norwegian bond market. Today the bank is active in the secondary market as a market maker in selected series of government bonds and by market operations. The objective is to influence liquidity supply and long-term interest rate development through participation in the bond market.

From 1982 to the beginning of 1986 the development of the Norwegian *equity market* and the Oslo Stock Exchange has been very similar to that of the other Nordic countries. Both turnover, market value of shares, the number of listed companies and the amount of new equity capital raised on the Stock Exchange increased considerably. This was due to government incentives, entry of foreign investors in the Norwegian equity market, the need for a strengthening of the equity base of Norwegian companies, and to an undervaluation of the companies listed on the Stock Exchange.

Since the beginning of 1986 the development in Norway has been somewhat different from that of most other countries. The sharp fall in the oil price, uncertainty with regard to the foreign exchange policy, decreasing competitiveness of Norwegian industries and the current account turning into a deficit, are all factors which have affected the equity market in a negative way. The Stock Exchange turnover has come down somewhat, the market value of shares in companies listed on the Stock Exchange is reduced, and the amount of new equity capital raised by Stock Exchange companies are lower than in recent years. Foreign investors also seem to be more negative to the Norwegian market than to equity markets in other European countries for the time being.

The future of the Norwegian equity market seems to a large extent to depend on the future oil price development, as this is a crucial factor for the corporate sector development in a short and medium term perspective.

With a more flexible Norwegian interest rate policy and the use of open market operations in certificates and government bonds, a more interrelated money and capital market is emerging. This process may be strengthened by a planned introduction of a new range of certificates with maturity up to three years. The use of convertible bonds and bonds with warrants to buy shares at a predetermined price, are other examples of closer links between financial submarkets. Corporate finance activities in general are becoming an important function in the financial markets.

Generally speaking, it seems right to say that the whole process of financial market deregulation and increasing competition is leading to a more integrated financial system in Norway. An implication of this development is the need for increased financial know-how and competence, both in the corporate sector, in the financial institutions and in government bodies.

1.3.4 Sweden – The largest financial system, but still in the melting pot

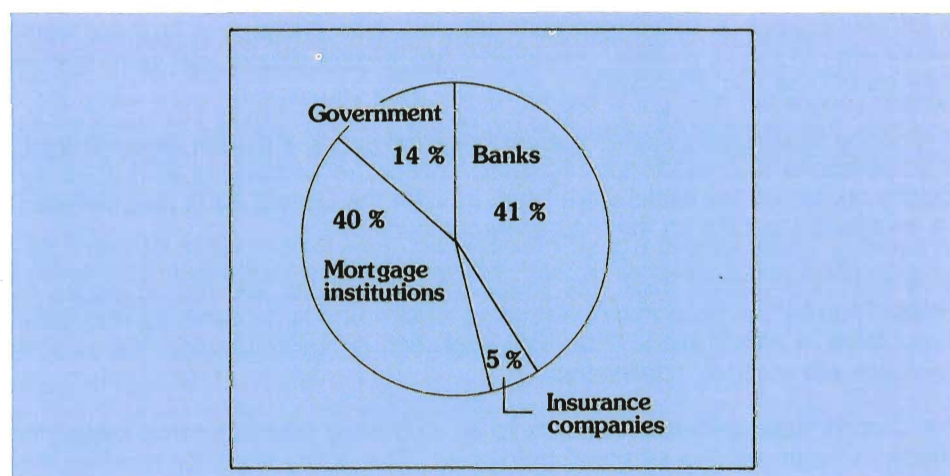
Institutions

The credit market institutions in Sweden can be grouped into *two main categories*. On the one hand are the *banking institutions*, dominating the money and short term credit markets, whose activities are based mainly on deposits from the public and whose credits are principally short-term. On the other hand are the *long-term capital market institutions*, whose lending is financed either by public or private insurance savings or by borrowed funds, e.g. through bond issues.

Besides the Central Bank there are three types of banks: commercial banks, savings banks and co-operative banks, accounting for 62, 30 and 8 per cent respectively of total bank deposits. The total number of commercial banks is 14, of savings-banks ca. 150 and of co-operative banks ca. 390 local banks organized in 12 regional banks. In 1986 foreign banks were allowed to establish subsidiaries in Sweden.

On the credit market an important role is played by the National Pension Insurance Fund and a few dominant insurance companies. Other capital market institutions are the state-owned Swedish Investment Bank, the mortgage institutions for housing and shipping and some specialized credit institutions for export credits and long-term credits to manufacturing industry, farmers and local authorities.

Figure 7 Outstanding credits to firms and households from various sources at the end of 1984



Source: IUI and Financial Market Statistics.

These institutions act as financial intermediaries, i.e. they procure capital by borrowing on the long-term market.

The stock market in Sweden is dominated by the Stockholm Stock Exchange, the only one in Sweden. The total number of registered stock brokers are 28, 14 banks and 14 stock broker firms. Investments in the Swedish stock market are to an increasing extent dominated by large institutions (insurance and investment companies and pension funds), while the retail investors' share has decreased trendwise during a long period.

Public control and credit policy

The Government and its agencies exercise a thorough control of the financial markets. Besides the control of the volume and direction of credits exercised through a great number of monetary policy instruments, there are special laws and charters required for practically all types of financial institutions. However, the dramatic changes in the Swedish credit markets during the last years will probably necessitate a revision of rules. The present laws are in some cases not covering the new type of institutions that have emerged.

The Swedish *monetary policy*, executed by the Central Bank, has *traditionally* been *operated through quantitative regulations* and has thus often been referred to as credit policy. To keep the total amount of credit within tolerable limits, the Central Bank has imposed liquidity and cash quotas, and at times lending limits on the banks and investment quotas on other institutes on the credit market. These formal quantitative regulations have been supplemented by informal agreements and so called moral persuasion in contacts between the Central Bank and the banks.

To avoid interest rate rises following the credit rationing, the Central Bank has also regulated the lending rates, at first informally by agreements, but in the years 1980–1984 formal regulation of interest rates was in force.

In 1982 the rising budget deficit forced the Central Bank and the Public Debt office to introduce what is called non-bank treasury bills (there is a limit for bank investments in them), 6- and 12-month money market papers that were sold in large quantities from the start.

In 1983 the Government started issuing long-term bonds at market rates, directed at corporations and other non-regulated entities. In connection with this, the liquidity quotas on the banks were lifted. In 1984 the Central Bank also changed the investment quotas on the insurance companies.

In addition, the Central Bank has lifted some regulations applying to issues of bonds. Thereby the bond market including most of the large investors has been deregulated in recent years. The main exception is housing bonds, the sale of which are still centrally administered.

The Central Bank generally adheres to an *exchange rate fixed to a basket of Sweden's major trading partners' currencies*. This policy implicitly dictates the limits for the expansion of the money supply and/or the level of the Swedish interest rate.

The deregulation of the credit market and the new market-rate Government papers has given the Central Bank the opportunity to *influence interest rates through open market operations* affecting bank liquidity. Furthermore, the worsening external balance and the need to refinance Sweden's foreign debt has brought about a heavy dependence on international interest rates and a considerable liberalization of exchange regulations on capital imports. Still, however, the *regulations on capital exports is one of the strictest among the industrialized countries.*

Taxation

In principle, for household and individuals all kinds of dividends and interest payments received are taxable. Capital gains on shares and bonds are taxed according to the number of years the items have been owned. Capital losses are tax deductible only in respect to capital gains. Interest rates payments are deductible up to a certain amount. Net wealth tax is levied on all individuals whose net wealth exceeds 400 000 SEK. However, in 1982 a tax free saving in bank and in shares (through bank funds) of maximum 800 SEK per month was introduced.

For institutional actors on the financial markets the tax laws are more complex and more difficult to overview. However, in general the rules are more favorable than those for individuals.¹⁾

Summary of a financial market changes in recent years

Starting from virtually nothing in 1980, *a vivid money market* has emerged in Sweden. The development started when banks were permitted to issue certificates of deposit. The real take-off for the money market was the introduction of a new short-term market-rate government paper, the so-called non-bank treasury bills, in the middle of 1982. The booming trade in government papers stimulated the creation of new instruments for other borrowers as well, for example non-financial companies, municipalities and public corporations. There are plenty of examples of how the short-term market has generated new financing models.

The bond market has revived mainly through the stimulating effect from the money market. When the government started issuing long-term market-rate bonds in late 1983, they were immediately traded and quoted along with the money market instruments. In addition, some of the industrial bonds are being quoted, and new forms of housing bonds are marketed in smaller amounts aimed at households and smaller institutions.

The Swedish *stock market* was characterized by low activity, small volumes of trading and new issues and little investor interest throughout the 1970's, apart from a temporary upturn in 1975/1976. Starting in 1980, there has been a rapid

¹⁾ For a description of the Swedish tax law, see SE-Banken (1985).

development mainly resulting from increased profitability, changed tax rules, the occurrence of new, potent domestic and foreign investors and the establishment of the OTC-list as well as a former undervaluation of shares. During the last years the stock exchange has become a realistic alternative to the bond market for external finance.

2. The Money Markets

The money market is usually defined as a market for short-term capital. In a well functioning money market the actors -firms, banks, financial companies, government and other official institutions; households act as lenders generally only via various institutions – can quickly and at a low transaction cost acquire or place short-term capital in securities that have a publicly quoted price. The efficient money market thus includes a secondary market. Money market instruments typically have rather short maturities (approx. up to one year). However, also instruments with longer maturities (e.g. bonds) are used in the money market.

In a developed financial system monetary policy is conducted through market oriented measures (mostly open market operations). Accordingly the day-to-day loans between the banks, or between the banks and the central bank are also included in the money market. Also the foreign exchange forward market is often included in the money market. Excluding Denmark, the Nordic financial systems until recently have been rather undeveloped. For many reasons a functioning short-term money market had not been established. Now such a market exists in each country's financial system, although its efficiency varies. In the following we give a short comparison of the developments and systems in each country.

In Table 1 the various submarkets of the money market in each country are listed. The schedule illustrates the recent establishment and the fast changes of the money markets in the Nordic countries except for Denmark which traditionally has been most strongly integrated in the international economy. However, the growing internationalization of business and banking since mid-1970s has increased the demand for the financial intermediation to create a basis for changes also in these countries. Common to all these markets is that their development started outside the banks as a "grey market", when firms began to avoid the prevailing strong rationing of a financial market. From the prephase of a grey market to the present situation the development has been rather fast. The Swedish money market already has many of the characteristics of a market-oriented system described above. In Finland and Norway, the money market is more or less in starting phase. However, the various submarkets, although small, already exist.

In Figure 8 the size and development of the money market in each country is illustrated. The Danish system, as well as the Swedish money market, includes various types of securities whereas in the Finnish and Norwegian market the volume of different securities is not yet big enough to create a functioning system with e.g. secondary markets. In Figure 8 the money market includes the instruments that are available to the public (i.e. firms) and financial institutions.

Table 1 Development of the money markets in the Nordic countries

Submarket	Denmark	Finland	Norway	Sweden
Interbank-market	since 1970	since 1986	since 1971	since 1982
<i>Market for:</i>				
Treasury bills or certificates	since 1975	since 1985 ¹⁾	since 1985 ¹⁾	since 1982
Certificates of deposits issued by banks and other financial institutions	since 1985 ²⁾	since 1982 ¹⁾	since 1985 ¹⁾	since 1980
Commercial papers (securities)	since 1985	since 1986 ¹⁾	since 1985 ¹⁾	since 1983
Deposits on special terms (negotiated deposits) with banks	since 1973	since 1982	since mid-1970s	since mid-1970s
"Grey market" ³⁾	—	since late 1970s	since 1979	since early 1970s

¹⁾ So far no secondary market or markets starting.

²⁾ Issued by the central bank and dealt only in the interbank-market.

³⁾ Transactions between non-financial institutions, often guaranteed by e.g. banks or insurance institutions.

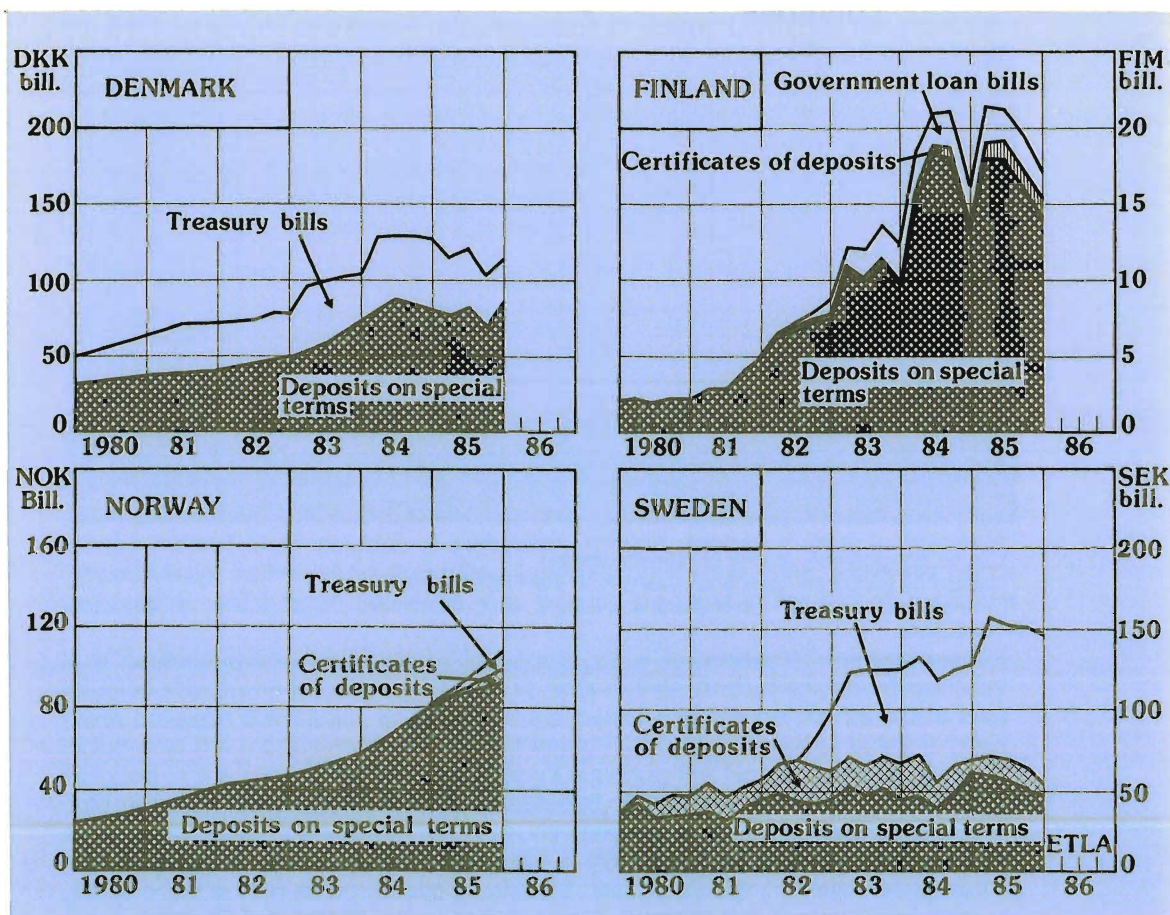
E.g. certificates of deposits used only in the interbank market are not included (as in the Danish system). Excluded are the forward exchange market and the "grey market" which are of rather great importance e.g. in Finland and Norway.

Figure 9 illustrates the high short-term money market rates in the Nordic countries during most of the 1980s compared to the international interest rate level. This is partly related to decreased monetary autonomy which in the fixed exchange rate regime results in rising domestic interest rates especially when there are devaluation speculations.

The Danish money market: Traditionally most sophisticated

As mentioned before, the Danish financial system differs from the other Nordic ones. The money market there can be regarded as the most developed one in the sense that it already has long traditions in having functioning secondary markets. There are several actors in the market, and also securities with longer maturities are part of the market. The Danish monetary policy is market oriented. The market expanded in the late-1970s and in the beginning of the 1980s, when the large public deficits were almost totally financed by the issuing of bonds and treasury bills at prevailing market terms.

Figure 8 The money markets in the Nordic countries ¹⁾

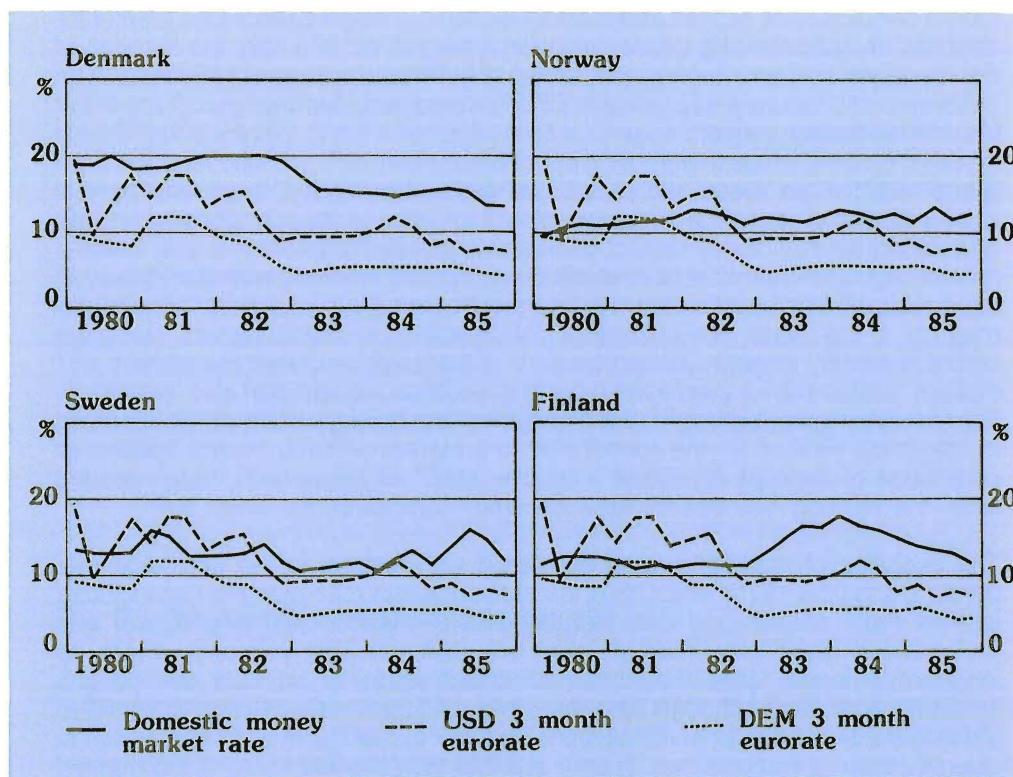


Source: ETLA, IFF, IUI, IØI.

¹⁾ The size of the money market, as % of GDP, at the end of 1985 was in Denmark 19 %, Norway 22 %, Finland 8 % and Sweden 17 %.

Note: Figures for Danish deposits on special terms prior to 1982 are rough estimates.

Figure 9 Short-term money market interest rates in the Nordic countries



Source: ETLA, IFF, IUI, IØI. Data from central bank publications, World Financial Markets, Morgan Guaranty Trust Company of New York.

Especially the Danish interbank market is free and unregulated except for the central bank interventions. All major banks participate in this market. The interest rate in the interbank market is controlled by the Central Bank, by means of new 3.5 month certificates of deposit that were introduced in August 1985. The market for deposits on special terms (aftalemarkedet) emerged in 1973 after the abolition of the contract between banks concerning the interest rates on deposits. The creation of the treasury bill market in 1975 further intensified the functioning of the short-term money market.

Since 1983, when the public deficit has decreased rapidly, there has been a declining rate of growth in treasury notes. In 1985–86 this temporarily created uncertainty among money market participants and institutional investors, that the market would decline in size and efficiency. These worries have not, however, been realized since public debt has been restructured into treasuries with shorter maturity. In the future, new short-term instruments (commercial papers, mortgage credit) are likely to grow in importance in order to accommodate the market.

For monetary policy purposes, the money markets have gradually been improved in efficiency. First of all, the recent shift to a market oriented control system for certificates of deposits constitute a "rejuvenation" of instruments, much needed since the existing instruments were generally considered as "worn out".

The evolution of markets is also of interest with respect to the exchange rate policy. During the 1970s and 1980s the exchange rate management has included interest rates on the long-term maturity end of the markets. In principle, it is preferable if short-term interest rates are used for this purpose, where as long-term interest rates should remain more stable to improve the general investment climate. Although long-term interest rates are still very sensitive to developments on the external account and the exchange rate of the DKK, the diversification of markets may in time stabilize the long-term end of the market.

The Swedish money market: 20 years' evolution in a couple of years

The Swedish money market development is an interesting example of a rapid evolution with the driving force being the unexploited profit opportunities that the regulated monetary system created in a changing economic environment.

The reasons behind the development of the Swedish financial system, which started in the mid-1970s, are mainly similar to those mentioned in section 1.2. The economic environment had become more uncertain, the competitiveness of the Swedish firms deteriorated drastically, profitability collapsed and the growth rate of investments slowed down. Among others these factors changed the behaviour of the firms, who started more intensively than before to plan their liquidity. Firms even established their own departments for the financial management, and their traditional links to a "house bank" loosened. Thus the competition among banks and financial companies increased. In the beginning of 1980s the investment activity of Swedish firms remained low and their cash reserves were on high level. Simultaneously the government deficit grew significantly and the incentives to direct firms' excess funds to the government, grew. This created the conditions for the emergence of the money market in Sweden.

The development of the short-term money market was, however, started at the initiative of the banking sector. First the banks began taking funds from firms in the form of special deposits and later in March 1980, to issue certificates of deposits. This is regarded as a starting point of the Swedish money market.

In 1980–1982 the central bank tried to resist the rapid growth of the liquidity in the economy through various measures which however did not work in the expected way. Simultaneously, there were difficulties to finance the government deficit from the traditional sources. For these reasons the government started issuing treasury bills and became thus one of the participants in the money market in summer 1982. Along with the introduction of the treasury bills the secondary market was created. The development has been rapid also afterwards, now papers issued by firms, financial companies and municipalities are dealt in the market, together with the treasury bills.

The dramatic expansion of the Swedish money market, especially the introduction of treasury bills has made it possible and even necessary for the central bank to begin to influence the interest rate level and banks' liquidity through open market operations.

The Finnish money market: Just taking off

In the Finnish money market development the public sector deficit – that has been rather central in the innovation and deregulation process in other Nordic countries – has not had any major role. Otherwise the process has been similar, especially resembling the Swedish developments.

In the late 1970s the monetary policy was tight and there was constant excess demand for bank loans at the prevailing regulated interest rate. Because the investment activity was low and the profitability of the Finnish firms had turned better after the recession years, the liquidity of the firms grew. There was even "excess liquidity" due to the prepayment arrangements in the Eastern trade in the beginning of the 1980s. The grey market that step by step emerged between the firms a couple of years earlier expanded rapidly. The banks were eager to participate in this market, because during the tight monetary policy the central bank borrowing of the banks was on a high level and the marginal cost was high.

The competition for grey market funds by means of the interest rate was, however, prevented by the contract which Finnish banks traditionally have had concerning the interest rates on various bank deposits (see section 1.3). However, banks could act as intermediators of these funds by using their trust departments and through the financial companies, owned by banks, whose balances in the 1980s grew rapidly. Gradually the banks started to slip from this cartel and to take in free market funds in the form of special deposit contracts. In 1982 banks got the permission to issue certificates of deposits, but so far they have not gained a significant role.

Also the Bank of Finland has favoured deregulation. In the beginning of May 1983, banks were allowed to transfer part of their funding costs of these so called free market funds into their lending rate. This can be regarded as the birth of the

short-term money market. The market was further developed in May 1983, when the call money market was changed to have only one common interest rate for all banks (the tranche system was abolished).

The establishing of foreign banks in Finland in 1982 and the deregulation of their activities has increased the competition among the banks, and thus also greatly influenced on the development of the money market in Finland.

At present the Finnish money market consists of the free funds market (responds deposits and loans on special terms) between banks and firms, the forward exchange market, and the call money market between the central bank and banks. The call money rate was the same for deposits and loans until the beginning of 1986, when the Bank of Finland started to pay lower interest on the banks' deposits. This led to the creation of an interbank market. The above submarkets have become internally more integrated. The short-term money market including the forward exchange market has grown substantially.

The Finnish money market as described above, has taken only the first steps towards market-orientation. There is practically no secondary market, and the short-term interest rate is directly determined by the central bank's call money rate. However, towards the end of 1986 the central bank introduced a three months' borrowing facility for banks as an alternative for day-to-day borrowing. The three month rate is largely determined by the credit bids given by the banks. The market-oriented development is strong, the system of two interests (unregulated and regulated) has become more and more diffused. Especially after the abolishment of the ceiling for the highest lending rate in the beginning of 1986 and the final abandoning of the controlling of banks average lending rate in August 1986.

It is largely believed that the short-term money market will further expand and become increasingly diversified. One possibility to create a functioning secondary market may be increased issuing of bank certificates. The need for institutional changes is also widely recognized.

The Norwegian money market: No functioning secondary markets

The Norwegian money market has changed remarkably during the past few years, although it still – like the Finnish one – is rather undeveloped. The origins of the changes date back in the mid seventies when during the international recession the fiscal policy was turned expansive and future oil revenues were made use of in advance. The government spending and lending were increased. This resulted both in government deficit and deficit on the external balance. In 1977–78 the fiscal policy turned restrictive and the interest rate policy led to higher interest rates. In 1978 the monetary policy was strenghtened. The lending ceilings of commercial and savings banks were lowered. In the autumn 1978, however, the price and income clause was introduced. The interest rates were at first included in the clause but were liberated in 1980 at the same time when the bond market was partly liberalized.

After the abolition of the price and income clause there was great pressure for higher prices and costs in the economy. These factors turned the minds against

liberalization. New regulative forms were again introduced. Regulation was at its highest in 1983 when direct control was applied practically in all markets.

But regulation was not effective. The innovative ability to intermediate funds was high in spite of rules. Due to large oil income the current account had turned into surplus. The supply of money in the economy increased and there was excess demand for credits. These factors led to the emergence of an unregulated grey market. The structure of the market was unsettled, which, together with the ineffectiveness of the regulatory policy, made it even more difficult to exercise monetary policy.

By the beginning of 1984 it was evident that deregulation of the financial market was needed and the authorities have since then favoured deregulation. The market-oriented interest rate policy is designed to influence the demand side in the credit market. The lending ceilings of commercial and savings banks have been abolished. There is no more obligation to invest in government bonds and also the new emission regulation has been liberalized. Further the foreign capital movements are liberalized, but only with regard to trade related capital flows (see section 1.3.3).

Until 1985 the money market in Norway included an interbank market with the banks' borrowing facilities in the Bank of Norway, deposits on special terms and the grey market. The interbank market is partly in NOK and partly in foreign currency (the swap market since 1979). The interbank market gained importance after 1971 when the Bank of Norway reduced its interventions in the exchange market. Like in Finland, the foreign exchange forward market has recently gained an important role in the short-term money market due to the increased interest rate differential between domestic and foreign markets. The certificate market gained importance in 1985 when short-term negotiable treasury certificates were issued, and banks, finance companies and business enterprises were allowed to issue deposits and loan certificates. Simultaneously the issuing of money market paper (by the central bank) was abolished. The treasury certificates immediately became important instruments of the market oriented monetary policy, along with the purchases and sales of bonds. The Norwegian Government is since 1985 using the interest rate on treasury certificates as a signal rate for the short-term money market and the rate on government bonds as a signal for long-term interest rates. This has brought about a closer link between the money market and the capital market in Norway.

As a summary we can conclude that the Norwegian money market has, along with the deregulation process, developed from being a market strictly concentrated on the banking system, into a market with a wide range of participants. As a consequence, a steadily rising proportion of bank deposits carry interest matching the money market rates.

3. The Capital Markets

The institutional setting for long-term credit varies greatly between individual Nordic countries. This is due primarily to different traditions with respect to the division of functions in the financial sector.

Whereas banks have played a leading role in Finland, Norway and Sweden, mortgage credit (by mortgage institutions' issuance of bonds) has been the dominant source of long-term credit in Denmark.

Over the last 10 years, however, the importance and characteristics of bond markets in the four countries considered have been converging – due, both to common external developments, similar domestic economic problems, and also due to conscious attempts to improve the functioning of bond markets.

Although large differences still exist, all countries seem to have the following general development features in common:

- Creation, diversification and sophistication of bond markets and growing importance of trade.
- In the 1970s, government issuance of bonds came to dominate the bond markets completely.
- Creation and growth of the bond markets with shorter maturity, prompted by the financing of public sector deficits since the mid-1970s. Increased interest among investors in the short-term bond market for the purpose of liquidity management.
- Increased interest on the part of large companies in the bonds markets – as a means of credit and financial investment.
- Deregulation on both issuance and investment obligations has been extensive in the 1980s, and there is an increased reliance on market forces in regulation.
- Increasing internationalization of the bond markets, although it was initially asymmetrical in favour of capital import rather than export.

3.1 Institutional features

Bond issuance:

In Sweden and Denmark, the traditional borrowers in the bond markets have been private persons and to some extent private enterprises, and mortgage institutions providing funding for private residential construction have been dominating the markets. In Finland and Norway, however, housing credit has been channeled through banks, and the relative importance of the bond markets in the overall credit systems have been correspondingly smaller.

In all countries, state borrowing acquired overwhelming significance from the mid-1970s and onward. In Finland, the creation of a bond market is almost exclusively due to government borrowing.

Long-term credit to private enterprises through specialized mortgage institutions have generally been important, but in the 1980s, enterprises have increasingly turned directly to capital markets by issuing corporate bonds. Their general importance is still very limited, however.

Bond investment:

In Norway and Sweden the investments in bonds have been heavily regulated by investment obligations. Traditionally, this regulation served purposes of controlling banks, pension funds etc., but in relation with growing public sector bond issuance, these investment obligations proved useful in providing domestic sources of credit (relatively inexpensive) for the public sector. Placement rules account for some of the intra-Nordic difference in the distribution of the total stock of bonds. Thus, by the mid-1980s, the private sector's share in Denmark was about 1/3, in Finland about 50 %, in Norway about 20 % and in Sweden about 15 %.

In recent years there has been a tendency for the corporate sector to invest in bonds. The increased interest of the corporate sector for using bonds as financial assets, is due both to relatively high rates of interest (compared by yields on real investments), and (in the 1980s) to a general speculation in continually declining interest rates. Government notes have been attractive to private companies in cash flow management as a highly liquid and low-risk asset.

Markets and trade

Until recently, only Denmark and (to a lesser extent) Sweden had a well developed secondary market for trade in bonds, i.e. trade after issuance. In Norway and Finland, secondary markets have practically come into being since the late 1970s.

In some countries, the bond markets have been somehow segmented in order to suit political aims of credit policy. The most evident example is Sweden, where the bond market is divided into a priority sector (bond issuance for housing and private business) and a non-priority sector. The priority market is subsidized in the sense that it receives preferential treatment with respect to tax etc. In Finland, a similar segmentation of the market has existed for many years since tax freedom is granted for some bonds, such as government bonds, whereas commercial bonds and debentures are generally taxed. Furthermore, the Government may grant tax free status to issuers.

3.2 Interest rate developments

Policies with regard to the availability and price of long-term credit differ significantly among the Nordic countries. While on the one hand, Finland, Norway and Sweden have conducted low interest rate policies (based on quantitative regulation), the Danish policy has been to keep interest rates high (primarily through open-market operations of the central bank) in order to ensure sufficient private capital import to finance the balance of payments deficit.

While balance of payments problems have also been serious for the other countries (though relatively smaller), the Danish choice of relying heavily on private capital import has been a distinctive feature.

As evident from Figure 10, the real rate of interest in Denmark has been increasing up till 1982 and throughout this period the rate has been considerably higher than in the other Nordic countries. The interest rate differential vis-a-vis the internation-

Table 2 Bond markets in the Nordic countries

	Denmark		Finland ¹⁾		Norway		Sweden	
	1980	1984	1980	1984	1980	1984	1980	1984
Total circulating bonds at nominal values	Bill. units of national currency							
	499	838	17	44	86	147	323	560
	%-shares							
Share issued by:								
- State	20	39	39	38	44	40	41	49
- Mortgage inst	75	56	26	20	13	20	46	40
- Banks, municipalities, firms	5	5	35	42	43 ²⁾	40	13	11
Share placed with:								
- Banks etc ³⁾	18	21	37	44	51	42	31	32
- Insurance comp.	25	25	9	7	21	21	18	22
- Pension funds	16	18			21	16	37	32
- Other ⁴⁾	41	36	54	49	7	21	14	14

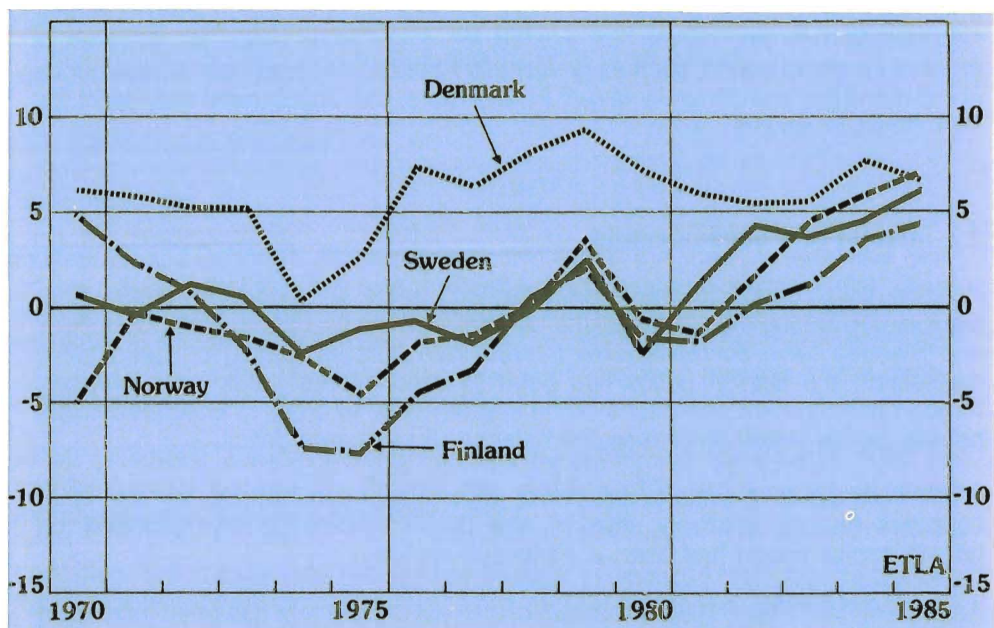
Source: national sources.

¹⁾ Bonds and debentures.

²⁾ Incl. state banks and non-listed bonds.

³⁾ Incl. the central bank.

⁴⁾ Incl. postal giro and postal banks.

Figure 10 Real rates of interest 1973-85¹⁾

¹⁾ Real interest rates calculated from data available in the Statistical Appendix.

al market rates has also been considerable in order to ensure the needed private capital import. The policy objective of private rather than public capital import was generally successful, but the high real interest rates contributed to a serious investment downturn in the late 1970s and early 1980s. Since the economic policy changes in 1982, the interest rate differential has been gradually reduced. The need for capital import is still present, but the greater confidence in a stable value of the Danish krone has allowed for a significant narrowing of the interest rate differential without serious difficulties in providing the needed foreign exchange reserves. In the mid-1980s, however, the balance of payments deficit has caused a renewed increase in this differential.

A major reason behind the lower Swedish interest rates (despite comparable public sector deficits) was the continued issuance control and investment obligations. These regulations have, however, been gradually eliminated in the 1980s which has caused the interest rate to rise and approach the Danish level.

3.3 Public sector deficit and borrowing

Of the four Nordic countries considered here, only Denmark and Sweden have experienced a serious problem of public sector financial deficit. In Norway the public deficit (excluding oil revenue) has been considerable and increasing, but oil revenue has prevented this from causing difficulties with respect to the financial markets. In Finland the public sector deficit has caused some government borrowing, but at a much lower level than in the other countries.

Despite the similar relative size of the deficit in Denmark and Sweden, the economic implications have differed considerably due to the different institutional set-up and to alternative ways of *financing the deficits*.

For all countries considered, debt financing has been conducted with issuance of bonds in domestic markets. At the same time monetary policy in the second half of the 1970s was generally tight (partly inspired by "monetarism", but also directed at eliminating or reducing the liquidity expansion, inherent in the fiscal deficit). The overall aim (particularly for Denmark) was to control interest rate developments, whereas the monetarist principles of controlling money supply was much less dominant. Hence, the bond financing of public sector deficits was generally accommodated with counterweighting increases in the liquidity, leaving interest rates unaffected.

In Denmark, the large bond market is governed by market forces, i.e. demand and supply must be balanced by the interest rate. There is no investment obligation for financial institutions and the government bonds have to compete with private bonds. The large amounts of government bonds issued in the early 1980s (in 1982 75 % of net additions of bonds) are not generally considered to have caused serious crowding out, a conclusion that also holds for the other Nordic countries since monetary policy was directed at interest rate management and thus accommodated bond issuance. Furthermore, potential crowding out was countered by the establishment during the late 1970s of several large institutional investors such as pension funds etc.

The growth in public sector debt between the mid-1970s and the mid-1980s also entailed increasing foreign borrowing. Thus, by 1984 the share of foreign debt in

total central government debt had reached about 56 % in Finland, 40 % in Sweden, 23 % in Denmark, and for Norway the public foreign debt was almost non-existent.

In the 1980s the central government deficits have gradually come under control in the Nordic countries. Since 1982 the Danish public sector deficit has been declining, and the public budgets are likely to balance by 1986 or 1987, although deficits may occur occasionally through the rest of the 1980s.

3.4 Recent liberalizations and possible re-regulation

In all countries the bond markets have been regulated on the supply side (by issuance control) and (except Finland) on the demand side (by investment obligations of banks etc.). In Denmark, however, the degree of regulation has been distinctively lower than in the other countries. In recent years, the Nordic credit markets have been subject to wide ranging changes in regulations. Generally the changes have enhanced liberalizations – with a few (temporary) re-regulations:

Denmark:

- 1978 – Residents allowed to buy bonds issued by international organisations, of which Denmark is a member.
- 1979 – Suspension of sales of kronebonds to non-residents.
- 1983 – Suspension lifted on foreign sales of kronebonds.
 - Residents may freely buy foreign bonds provided that the original maturity exceeds 2 years.
- 1985 – Although residents' purchases of un-listed foreign bonds and shares are still subject to approval from the central bank, since June 1985, however, this is administered in a liberal way.
- 1989 – Planned abolishment of issuance control of mortgage credit.

Finland:

- 1985 – Temporary ban on non-residents' purchase of domestic bonds and debentures. This is still in force by the end of 1986, although in a somewhat relaxed form.

Norway:

- 1980 – Relaxation of bond issuance controls.
- 1982 – Re-regulation of issuance control.
 - Access for foreigners to buy Norwegian bonds.
- 1984 – Foreigners' access to purchase Norwegian bonds (including government bonds) suspended.
- 1985 – Bond investment obligations virtually eliminated for all financial institutions (and acquisitions drastically reduced).
 - Loan associations allowed to freely issue bonds in order to grant loans to the business sector.
 - Eurobonds may be traded freely in the secondary market.

Sweden:

- 1983 – Issuance controls liberalized.
- 1984 – Placements obligations of insurance companies changed from the a net basis to a gross basis, i.e. placement obligation only for current issues, whereas the obligation to hold on to them is discontinued.
- 1985 – Placement obligations of insurance companies (except life insurance) lifted.
- 1986 – Banks' placement obligations for priority housing bonds abolished.

The heavy dependence on foreign financing of public sector deficits in the 1970s and the gradual liberalizations of bond markets, have made the bond markets important channels for international capital transactions. It is especially the surge in recent years in sales abroad of bonds denominated in national currencies ("kronebonds"), that have opened up the Nordic capital markets.

In *Denmark* sales of kronebonds have increased rapidly in conjunction with the growing confidence in the fixed rate policy of the government. From 1979 to early 1983 the access for foreigners to acquire Danish government bonds was suspended. But the liberalization in 1983 was followed by large net sales, increasing from about 3 billion in 1983 to 9 billion in 1984 and 17 billion in 1985. In 1986 the interest of foreign investors has moderated somewhat which may be attributed to the mounting balance of payments problems.

The rapidly growing stock of kronebonds owned by foreigners has caused some uneasiness about a possible rush of returning papers in case of impending depreciation of the DKK. One such period of uncertainty during the latest months of 1985 and early 1986 reversed the direction of capital movements as krone bonds were returned and as private residents invested heavily in foreign shares (liberalized in 1984). A rise in interest rate differentials in March 1986 stopped the outflux of capital – at least temporarily.

While the trend has clearly been towards further liberalizations, it appears that the process of deregulation may turn into a *process of re-regulation*. The bond markets provide examples of both reversal of liberalization initiatives and of increased control to counterweight deregulations in other parts of the financial market.

An example of the need to reverse deregulatory initiatives is available from *Norway*, where the elimination of (parts of) the emission control of bonds with long maturity caused an boom in private issuance. The move caused several problems: first the Norwegian economy was then operating close to capacity levels and hence in no need of further credit expansion. Secondly, the move caused difficulties for sales of Government bonds, since the government was unwilling to raise the interest level sufficiently. Similarly, the access for non-residents to buy treasuries has been reversed again since sales progressed too rapidly.

In *Denmark*, it appears that bond markets are one of the few remaining areas amenable to traditional quantitative control. In particular mortgage credit has come to bear a rather large burden as a policy instrument. Thus, recent policy interventions to reduce the private consumption and the trade deficit have employed quantitative reductions in credit availability.

4. The Equity Markets 1970–1985

4.1 Introduction

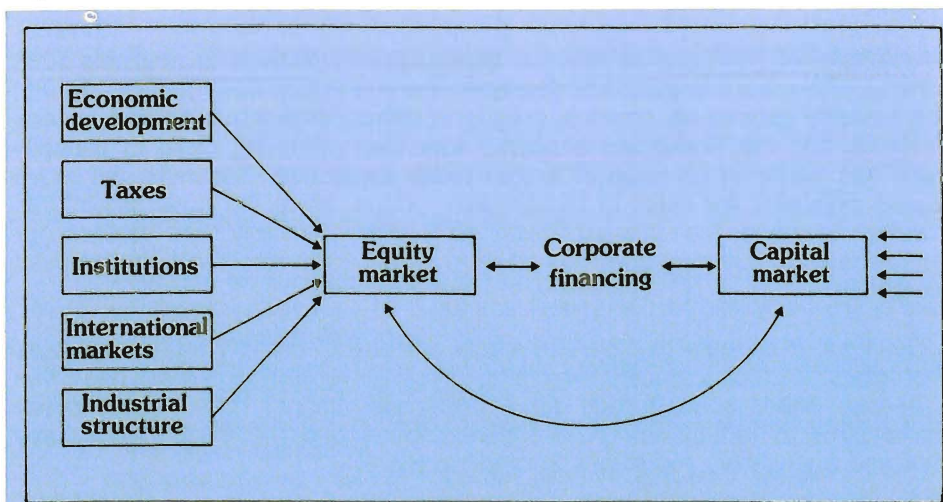
A firm acquires finance from different sources. It generates an internal cash flow, it can borrow from banks, credit institutions and from the public, or it can acquire finance in the equity market. The source of finance chosen depends on the cost and availability, which in turns depends on a number of different, but interrelated, factors such as the interest rate, expectations about future profits and growth, strategies and institutional factors and taxes. Thus, there is a very close connection between the money, capital and equity markets.

The main tasks of the equity markets is a) to generate new risk capital and allocate the resources in an efficient way so that new and profitable companies are able to attract resources, b) to value firms adequately, and c) to work as a market for corporate control.

By issuing shares for sale to the public a company acquires financing which need not to be repaid during its operating life. Investors receive a return on their investment in the form of dividends or by increasing value of their shares. Share ownership is also accompanied by administrative power, exercised by shareholders in deciding matters at the General Meeting.

Share financing is in many cases more expensive for a company than credit financing. To be able to pay a dividend a company must show a profit on which a tax is payable. The costs of credit financing, on the other hand, are tax-deductible.

Figure 11 The equity market



According to Teigen¹⁾ the amount of new equity issues as a share of GDP was during 1965–72 approximately as large in the Nordic countries as in the USA. Teigen draws the conclusion that the Nordic countries had relatively well-developed and active equity markets. During the 1970s, new share issues on the stock exchange accounted only for some 2–5 % of total funds furnished to the stock exchange companies. During the 1980s the importance of the equity markets seems to have increased.

All Nordic equity markets – except the Danish one – are still regulated, and we are a long way from a common Nordic stock exchange. In Table 3 the intra Nordic ownership of large corporations is listed. As can be seen, the number of large Nordic companies owned to more than 10 % by owners from other Nordic countries is very limited. In international comparison, the Nordic equity markets are rather small. This may cause market inefficiencies and is another argument in favour of a common Nordic market.

As matters now stand it may be easier for a firm in any Nordic country to negotiate a business deal, for example a direct acquisition, with a firm outside the Nordic countries than with another Nordic firm. In the first case, there is only one regulatory agency to contact; the one in the firm's host country. On the other hand, if two Nordic companies see a mutually beneficial business combination that involves equity arrangements, there are two regulatory bodies to deal with, that may not be in agreement or incline to make decisions fast. In ETLA et.al.²⁾ it was argued that this situation makes it relatively more easy for Nordic firms to look outwards for new business combinations. The effects can be observed in the form of lower intra Nordic industrial cooperation than the extent of industrial activity in the Nordic countries should suggest. This slows down, or prevents, the forming of efficient business combinations on a Nordic basis. During the last years, however, we have witnessed an upswing in inter Nordic acquisitions.

Table 3 Number of large companies in which more than 10 % of equity capital is owned by owners in other Nordic countries, 1984

	Number of companies in					
	Denmark	Finland	Island	Norway	Sweden	Total
Owners in						
Denmark	–	0	0	0	1	1
Finland	0	–	0	0	0	0
Island	0	0	–	0	0	0
Norway	1	0	1	–	1	3
Sweden	1	1	0	5	–	7
Total	2	1	1	5	2	11

Source: ETLA, IFF, IUI, IØI (1985), Samhandel og eierforbindelser i Norden. Situasjon og utviklingstrekk, Bergen.

¹⁾ See Teigen (1975), Financial development and stabilization policy: A study of the Scandinavian Economies, Stockholm.

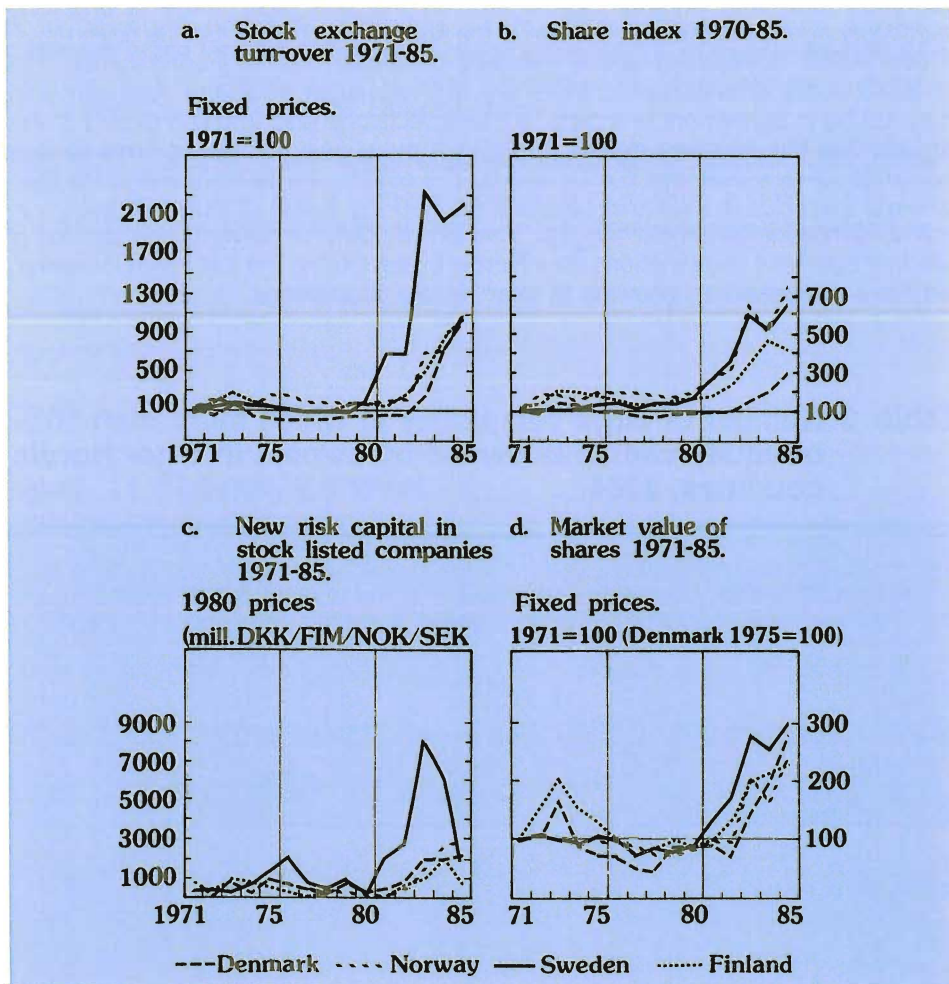
²⁾ ETLA, IFF, DØR, IUI, IØI (1984) Economic Growth in a Nordic Perspective, Helsinki.

The main purpose of this study is to *describe and analyze* the development of the Nordic stock exchanges, with regard to turn over, market value of shares, entry and exit of firms, new capital issues and export of shares. One important question is whether the differences between the countries in terms of industrial structure, institutions, taxes etc. also can be noticed in different developments of the equity markets, or if the development is similar in all countries due to some more general explanation (Figure 11). We will also discuss the importance of the creation of new "small company" stock exchanges, and venture capital markets.

4.2 The development of the stock exchanges 1970–85

The development of the stock exchanges has been quite similar in the different Nordic countries. After a stagnant period following a peak in the mid 1970s, all

Figure 12 The Nordic stock exchanges 1971–85



countries have witnessed a fast expansion during the last years in terms of value of shares, turnover and new issues of shares. Generally speaking, the stock exchanges have been vitalized (Figures 12a-d). The upswing in the Nordic countries have been rapid also in an international comparison (Figure 13).

In *Denmark* the equity market was rather passive until the beginning of the 1980s. After a peak in 1975/76 both stock exchange turn over, market value of shares, and share index decreased due to lowered profitability and competitiveness. In 1981/82 the trend was reversed and a period of very fast growth followed. In 1984 there was a setback, foremost due to an "overvaluation" in the beginning of the 1980s of new stock exchange companies. In 1985 the expansion continued but the development during 1986 has been characterized by large set backs. In 1985 total turnover was 13.5 billion DKK and total market value of shares 135.4 billion DKK (excluding Unit Trusts).

The number of companies listed on the stock exchange was in 1975 252. The number fell continuously until 1982 when it was down to 210. Since then it has increased to 249 (in 1985). The amount of new share issues shows a u-formed development, with large increases from 1983 onwards.

The foreign demand for Danish shares has increased during the last decade, due among other things to a relaxation in the rules restricting trading of shares (and capital). From 1975 to 1979 Denmark was a net importer of shares, but from 1980 onwards (except 1984) a net exporter. The 1984 change was caused by a complete liberalization of foreign share imports. Denmark has free capital movements and a free export of shares and securities to abroad.

In 1982 the s.c. Børs III (Stock Exchange 3) was established for small and medium sized companies. In 1985 28 companies were listed on this exchange. At present, a stock exchange reform is underway. The reform, which will be fully implemented in 1987, will decentralize stock exchange trading.

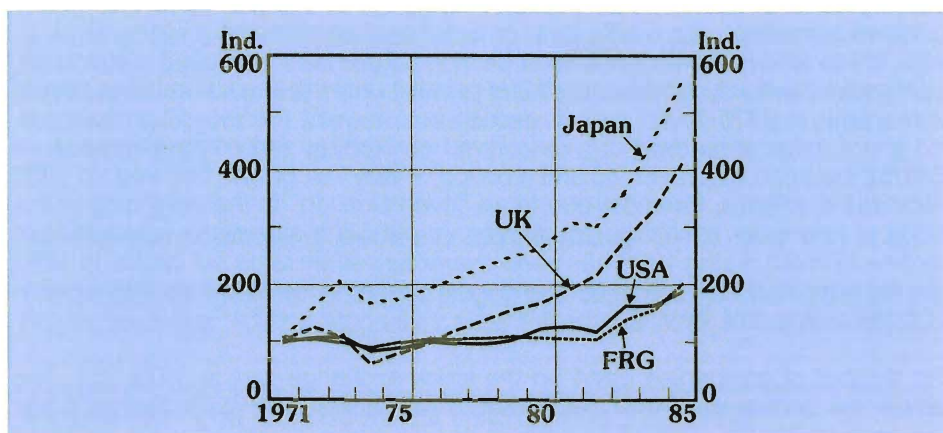
The *Finnish* stock market differs somewhat from those in the other Nordic countries in that the peak of 1973 was much higher, and that the improvement began already in 1978/79 (with a small rest in 1980). In 1985 total turnover was 3.1 billion FIM, total market value of shares 31.7 billion FIM.⁶⁾

An interesting feature is that turnover in unrestricted shares, i.e., shares which can be freely acquired by foreigners (see below), has been clearly greater than that of restricted shares, the latter making up for at least 80 % of all shares. To promote sales of unrestricted shares the Helsinki Stock Exchange also started to quote them separately. Data regarding the export of shares are few and unreliable. However, they seem to indicate a fast increase in gross and net export of Finnish shares.

Except the shares of Finnish insurance companies which are freely available, a foreigner may purchase only the unrestricted shares of the corporations. A company or bank can issue this kind of shares up to 20 % of its total share capital. A proposal to amend the legislation to allow the amount of free shares to

⁶⁾ This does not include the stock brokers' list, which legally doesn't form a part of the stock exchange. On this list 27 companies are included (1985).

Figure 13 Share index in Germany, Japan, UK and USA 1971–85
1971=100



rise up to 40 % (the limit to the shares giving also full voting rights to foreigners remaining the present 20 %) has been given to the Parliament. Furthermore, in January 1986, Finns were allowed to acquire a limited amount of foreign financial assets.

One important factor regarding households' ownership of shares is that interest on governments bonds and bank deposits is tax free (until 1988 at least), while dividends on shares and the yield of most other bonds and debentures are taxed progressively (after some minor deductions). This, has diminished households' role in the development of the Finnish stock exchange, although their interest in stocks and bonds has increased.

In contrast to the other Nordic countries the number of companies listed on the Finish stock exchange has been rather constant: in 1970 45 companies were listed, in 1980 50 and 1985 51.

In 1984 an OTC-list was established in Finland for companies with at least 1.5 million FIM in share capital, 200 share holders of whom no one owns more than 90 % – and sales of at least 25 million FIM. In 1984 only one company was on the list, but during 1985 the number increased to 4. Daily trading takes place.

The *Norwegian* stock market has also been vitalized during the last years.⁷⁾ In terms of turn over, share index and market value of shares there was a peak in 1973 followed by a decline with a trough in 1977/78. Since then growth has been very rapid. The development of the Norwegian stock exchange is heavily influenced by the developments in the oil market. The recent fall in oil price has therefore affected the stock market negatively. In 1985 total turnover was 31.8 billion NOK and, total market value of shares 77.1 billion NOK.

⁷⁾ Furthermore, there exists some small local stock exchanges in Norway. Their positions will be further strengthened during the coming years.

In accordance with the great fluctuations in turn over and market value, the number of companies listed has varied considerably. In 1970, 152 companies were listed on the stock exchange, in 1974 the number had increased to 159 but fell to 115 in 1981. Since then the number has grown to 163 in 1985, including the small business stock exchange (33 companies). Exits for other reasons than mergers have been more common in Norway than in the other countries. The considerable fall in the number of listed companies between 1974 and 1981 was primarily caused by the worldwide shipping crisis. A total of 38 shipping companies were forced to exit the stock exchange. These companies accounted for more than 60 % of all exiting firms. In 1985/86, however, several companies have exited because of mergers and acquisitions.

The amount of new share issues has also increased during the last five years and was in 1985 more than twice as large as on the previous peak of 1975. At the same time export of shares has increased fast. Generally speaking, the limits to foreign ownership are 10 per cent in banks, 15 per cent in insurance companies, 20 per cent in industry and 40 per cent in shipping. The export of shares is controlled by the Bank of Norway. Within the limits mentioned above, there are in practice no control of foreign ownership of shares.

In 1984 a small business stock exchange (Børs 2) was established in Norway. During its first two years 33 companies were introduced to the exchange. A majority of the companies were formerly listed on the un-official stock brokers list. The amount of capital raised was in 1984 about 600 million NOK, in 1985 approx. 250 million NOK. Total market value of shares was 4 300 million NOK in 1985 and total turnover 2 600 million NOK. To be listed on Børs 2 a company must have an equity capital of at least 2 million NOK, and 200 owners of a certain size.

The development of the stock exchange in *Sweden* – larger than the other three put together – resembles very much that of the other Nordic countries. In 1980 the stagnation, following a peak in 1975, was followed by a very fast and steady growth in trading activities and corporate values. Even in international terms, the Swedish stock exchange has been an outstanding price performer during the last years. The number of companies listed on the stock exchange has increased from 96 in 1979 to 170 (including OTC 242) in 1985.⁸⁾ Total turnover was 83 billion SEK in 1985 and total market value of shares 288 billion SEK.

The growing importance of the stock exchange can, apart from the number of companies entering the exchange, also be illustrated by the increasing number of new share issues during the last years. After a peak in 1983, however, the amount of new risk capital has decreased by some 75 %. At the same time the export of shares has grown rapidly. Until 1981 Sweden was a net importer of Swedish shares. After a liberalization of rules in 1980, the equity imports in the form of foreign issues or sales of Swedish shares abroad increased rapidly, and Sweden became a net exporter of shares (net importer of equity capital). During 1987 deregulation of the rules concerning acquisitions of foreign shares will probably take place.

⁸⁾ Until 1981 the equity market also consisted of the s.c. fondhandlarlistan (stock brokers' list). Due to a change in the rules of the stock exchange a majority of those companies were transferred to the newly established A:l list, where the rules regarding e.g. the distribution of share, are somewhat relaxed. In total some 40 companies were listed on the stock brokers list during the 70s. Out of these 6 was introduced to the stock exchange in 1980 and 26 in 1981. Thus, these companies account for a large part of the number of introductions these years. The market value of shares on the stock brokers' list was in 1980 ca. 7 billion SEK.

In 1982, a small business stock exchange (OTC) was established in Sweden to facilitate the raising of funds for small and medium sized companies. The terms for being listed on the OTC-market are at least 2 million SEK share capital and 200 owners of whom no one owns more than 90 %. This concept proved an immediate success. The total number of listed firms was in 1985 72. The amount of capital raised was 415 million SEK in 1983, 460 million SEK in 1984, and 75 million SEK in 1985.

Among the factors that have a bearing on this vigorous development of the stock exchanges in all Nordic countries are both common and country specific ones. Among the common ones are:

- tax relaxation on unit trust savings and/or tax relaxation on dividends and capital income. A more positive attitude towards equity financing and savings in shares from both politicians and the business community.
- growth in domestic demand due to increased profitability and competitiveness in business.
- entry of foreign investors, in some cases after liberalization of rules. Nordic shares relatively cheap in comparison to those abroad.
- increased liquidity.
- favourable economic developments, and developments of the entire financial market.
- an increased undervaluation of shares during the 1970s.
- higher investments, changed structure of investment and a necessity of a higher share of equity capital.
- international stock market upswing.

Among the country specific explanatory factors are:

- entry of new companies, and the establishing of special stock exchanges for smaller companies (Norway, Sweden, Denmark).
- tax changes made premium bonds less attractive, why capital moved into shares (Sweden).
- decreased tax on capital gains (Norway).
- decreased transaction costs with regard to new issues of shares (Norway).
- improved possibilities of households to borrow money for investments in shares (Norway).
- improved profitability and brighter future expectations following the devaluations in 1981 and 1982 (Sweden).
- diversification of financial portfolios (Denmark).

4.3 Venture capital

The supply of venture capital for small or medium sized companies has expanded rapidly during the last years, and the number of venture capital companies has increased. The purpose of the venture capital company is to supply financial resources to small and medium sized firms with good growth potentials and to influence their future development. In practice, this means that the venture company buys a significant (but usually not majority) part of the firm and thereby a considerably influence.

Thus, the business strategy is to select and invest money in a lot of different, potentially very profitable, but high risk companies. The investment spread allows

the venture company to support high risk companies. The investments are in most cases on a long-term basis, i.e., at least 7–8 years.

The main advantage from the small companies point of view, is that the return on the money invested is not expected now in form of dividends or interests, but rather as long-term growth in corporate value. More capital can be kept within the company financing its different investments. So, venture capital is a cheap way for the entrepreneur of financing growth, but at the price of loss of influence. In most cases the venture capital firms elect one or two members of the board. One important prerequisite for an efficient venture capital market is the existence of small business stock exchanges, through which the venture capital company can capitalize the value of its shares in due time.

Apart from the primary role as supplier of capital, most venture companies also intend supplying the small companies with managerial and marketing expertise.

The first venture capital companies in the Nordic area were established in Sweden during the 1970s, but the development did not take off until 1982, when the taxation on dividends from companies not listed on the stock exchange was reduced and the "OTC"-list established. Today there are ca. 55 private or public companies with a total capital of more than 1.5 billion SEK in Sweden. Most companies are small with a capital of some 10 million SEK. The companies have invested in 500–600 different projects.

Recent studies of the Swedish venture capital market report that the national venture capital companies in Sweden mostly buy a smaller owner share than 25 %, while the regional companies in many cases have acquired a majority part. The typical receiver company is less than 3 years old, producing industrial input- and investment goods or operating within high tech areas like computers, electronics and communications. In most cases the venture capital company investment was less than 1 million SEK.

In Norway the first venture capital firms were established in 1983. The number increased rapidly and has reached ca. 35 in the middle of 1986. The companies administer funds exceeding 1500 million NOK. The companies have become minority shareholders in some 250 different projects. The typical receiver company is operating within the information technology sector (computers, micro-electronics, information systems etc.). However, many are active in areas like engineering, finance and aquaculture. In Denmark there exists some 10 larger venture capital companies with funds exceeding 750 million DKK.

In Finland venture capital companies have not played any significant role. The reasons relate mainly to the scarcity of investors who are willing to invest on a long term basis and the difficulties to liquidate the investments. The latter difficulty is diminishing with the emergence of the OTC-market. In Finland there are today about 20 venture capital firms, with total funds of 300 mill. FIM (1985). Their strategies can be broadly characterized to buy medium-sized profitable firms with favourable markets to achieve market-dominance and to introduce them into the Stock Exchange or to buy low profit firms and reorganize them into one profitable unit.

A common Nordic venture capital company – Euroventure Nordica - was formed during 1985/86 as a practical result of the "Gyllenhammar-Sundqvist" group's work.

As the venture capital companies still only have been in operation for less than 10 years, it is much too early to evaluate their effects. The recent development in Sweden (the oldest Nordic market) has since 1984 been rather calm, and the rapid expansion has come to a stop. The market has been characterized by consolidation and restructuring, and a somewhat changed investment pattern can be noticed. A larger share of total investment is going to big, well established companies and to financial activities. The difference between venture capital companies and investment/financial companies has become less distinct. This may be due to limitations in the capital base of some venture capital companies, and for some companies the cash-flow situation is pretty tight.

4.4 Summary

The equity market is one of the main markets for supplying capital to the corporate sector. During the 1970s, the importance of the market was in this sense rather limited in comparison to debt financing.

During the 1980s the picture has changed following the increased real interest rates on debt financing, the rapidly increasing demand for shares, higher share values and the establishment of special small company stock exchanges and venture capital companies. Thus, equity financing has become more competitive. This was for many companies absolutely necessary as a continued decrease in solidity because of extensive debt financing wasn't possible in order to maintain growth. The growing importance of the equity market as a supplier of risk capital for industrial growth can be illustrated either by the amounts of new share issues, or by the number of companies entering the stock exchanges. On both accounts the development during the last years has been very fast. Especially the establishment of small business stock exchanges has made it possible also for small and medium-sized companies to obtain new risk capital.

In all Nordic countries there was a "stock exchange" peak around 1972–75, followed by a decline up until 1980–82. Since 1980 the growth has been extremely rapid, foremost due to a favourable economic development, higher profits and increased expectations, increased liquidity and a vigorous growth in the foreign demand for Nordic shares. Other important factors have been changes in tax rules and liberalized capital control regulations. The factors explaining the vigorous development are very much the same in all Nordic countries. Country specific factors, such as changes in tax rules, seem to have acted as catalysts and "triggered off" the development. Furthermore, the linkages between the Nordic markets, and between the Nordic and international markets seem strong.

The development in the different countries have been very similar. However, there are some differences. For example, Finland and Norway have had, in terms of stock exchange turn over and market value of shares, considerably more fluctuations than Denmark and Sweden. The Swedish and Norwegian exchanges have been more "booming" concerning the number of firms entering the stock exchange.

In all countries except Norway, the main reason for exiting the stock exchange has been mergers or acquisitions between stock exchange companies. Very few companies have been forced to exit because of bankruptcy. In Norway, the international shipping crises forced almost 40 shipping companies to exit the stock exchange.

5. Conclusions

5.1 Policy implications of liberalization

The changes that have taken place in the financial markets over the last decade, and in particular since the early 1980s, have wide implications for economic policy in the Nordic countries. The new policy setting results from changes in the economic climate, as well as from an evolution of the monetary policy instruments.

First of all, the basic policy problems confronting the Nordic countries have changed during the last 5–10 years. Most notably, public deficits are now under control, and inflation is low. These factors influence many fundamental features of the financial markets: overall demand for credit, real rates of interest, etc. The evolution of financial markets have been accompanied by new economic challenges. For instance, fundamental changes have occurred in the first half of the 1980s with respect to borrowing/lending position of various sectors, and the distribution of wealth and income. These developments may be attractive from some political points of view, but they also run counter to other established political ideals.

Second, the changing market conditions alter the availability of policy instruments and the effectiveness of traditional instruments. Changes occur particularly in the area of monetary policy, and this has important consequences for the role of fiscal policy, incomes policy etc. Furthermore, the legal and institutional framework of financial activity is being reconsidered and updated in all the Nordic countries. In the following discussion attention will be focused on this instrumental question.

Exchange rate policy

Except for Denmark, all the Nordic countries presently conduct a partially fixed exchange rate policy with the exchange rate of the national currency being determined by a basket of international currencies. For all three countries, the U.S. dollar weighs prominently in the baskets, and the three countries may be considered as belonging to the dollar-dependent group of currencies.

Denmark, on the other hand, is a member of the European Monetary System (EMS) where exchange rates and margins for fluctuations are negotiated and supported by a concerted-action system. The EMS currencies are heavily dominated by the West German Mark, and may be considered as belonging to the DM-dependent group of currencies.

During the 1970s and 1980s all the countries have used occasional devaluations to adjust export/import performance. This type of policy becomes increasingly difficult to manage as liberalizations of financial markets, and especially of currency regulations are introduced. Integrated financial markets are characterized by extensive short term capital movements. Thus, it is almost impossible for an individual country to defend a given exchange rate of the national currencies.

The question confronting the Nordic countries is then: For how long can continued financial liberalizations be combined with a traditional exchange rate policy?

So far, the most radical adjustment to these new conditions appear to have taken place in Denmark, who has embarked on a policy of stable exchange rate of the krone (within the EMS). By eliminating the possibility of devaluations, Denmark had to rely on alternative policies. Danish fiscal and incomes policies have been tight in the 1980s. Despite a deteriorating balance of payments through 1985–86, the policy of stable exchange rates (and a moderate revaluation within the EMS) has been upheld (so far until September 1986). The confidence in the Danish krone has been surprisingly strong, allowing for gradually declining interest rates during most of the period. (In the second quarter of 1986 the decline stopped and interest rates increased slightly during 3. quarter). However, the future success of this policy is widely questioned, and if the external account is not quickly improved, it remains an open question for how much longer confidence in the currency can be upheld. Should confidence erode, then considerable upward pressure on domestic interest rates and eventually major adjustments of the exchange rate of the Danish krone may be difficult to avoid.

Norway, on the other hand, is a country which has been rather prone to the use of devaluations as a central part of her exchange rate policy. With the close relation between the NOK development and the US dollar development (due to the considerable revenue in US dollar from petroleum and shipping) the exchange rate of the NOK must occasionally be adjusted to control the export/import performance with respect to the European economies. Extensive short-term capital movements, associated with the swap and foreign exchange forward markets, make it difficult to avoid exchange rate adjustments.

Interest rate policy

The liberalization and internationalization of financial markets should in principle bring about a closer relationship between international and domestic interest rates, and the increased competition will in principle tend to result in lower interest rates. However, these relationships are only partially reflected in actual developments, as interest rates have been influenced by other and more specific factors such as capital control measures etc. (in several respects, the theoretical relationship outlined above has proven to be contradicted by reality).

In the previously regulated economies of Sweden, Norway and Finland, changes in financial markets have resulted in increases of the interest rates. In Denmark, the opposite development has occurred, as previously high domestic interest rates have fallen, due to the substantial decline in international interest rates in 1982. Since then, the interest rate differential has gradually declined as a result of increased confidence in the Danish currency accompanied with liberalization of capital controls.

From a policy point of view there has been a growing interest in a differentiation of monetary policy instruments that would allow a sophistication of monetary policy. Not surprisingly, the problems of improving the monetary policy instruments started in Denmark, the financially most liberalized Nordic country, but the other countries have all faced the same type of challenges in the 1980s. One important problem has been to combine the long-term objective of obtaining and keeping low interest rates to promote investments, with the short-term objective of maintaining a high interest rate to promote the necessary private capital import, induced by the external-account deficit. In all Nordic countries, the creation of various submarkets

has improved the possibility of meeting both purposes by allowing volatile (and generally high) interest rates on short-term maturities, without strongly affecting the interest on long-term maturities. Thereby, various financial submarkets may serve different policy objectives separately.

Internationalization and autonomy of monetary policy

The recent liberalizations in financial markets have brought forward the question of autonomy of monetary policy – particularly in Denmark. The alleged loss of autonomy occurs when the policy choice in setting domestic interest rates and credit availability is limited.

However, autonomy of monetary policy in most of the Nordic countries has in fact been limited in varying degrees for decades due to the external and fiscal deficits. These imbalances restricted the room for policy manoeuvring severely.

In Denmark private capital imports were encouraged in order to finance the external deficits by maintaining interest rate differentials vis-a-vis international markets. Fiscal deficits in Sweden and Denmark forced the monetary policy to accommodate the heavy state borrowing – with consequent dangers of inflation and/or crowding out.

Thus, restrictions on policy autonomy have existed in various forms for many years. However, the novel feature in current restrictions on monetary policy autonomy is the deregulation of both domestic markets and capital controls.

The greater dependence on international markets is visible e.g. with respect to interest rate policy. Small, open economies with fixed exchange rate regimes will find it difficult to lower the rates of interest to enhance domestic investment because free capital flows will tend to equalize domestic and international rates. Similarly, controlling overall credit availability (in particular for specific purposes such as private consumption) becomes almost impossible. In countries, where private consumption induces a growth in imports the need for direct control of consumption may be a necessity.

Naturally, the reduced autonomy of monetary policy will increase the burden placed on other policy instruments. Fiscal policy and incomes policy must play a stronger role in regulating overall activity and price developments. With respect to enhancing structural development and improving international competitiveness, incomes policy and industrial policies are natural alternatives. Taxation policy occupies a central role as a successor of certain parts of the traditional monetary policy.

Changes in the financial markets and in the monetary policy options may have limited the policy choices available to a yet unknown extent. In many ways, the limitations may even be welcomed as incentives for policy makers not to create large imbalances or otherwise divert from the paths that are compatible with freely functioning financial markets.

However, should serious imbalances develop, the reduced autonomy of monetary policy may prove to be a very inconvenient restriction on policy choices. Thus, discretionary rules and selective policies – also in the areas of financial intermediation – pose a temptation to politicians, and with moderate growth

prospects for the rest of the 1980s, there is a risk that such policies may be pursued.

Possible re-regulation

Despite the general and strong trend of liberalization, integration and sophistication of the Nordic financial markets, some doubts as to the future development may be advanced.

The process of liberalization and integration seems to create two types of difficulties for the policy authorities: first, the process of change itself is difficult to administer and it may result in *unforeseen difficulties and abrupt adjustments*. To bring financial developments back under control, temporary reversals of recent liberalization measures have been witnessed in all 4 Nordic countries since the late 1970s. For instance, Denmark (1979) and Norway (1984) were both forced to suspend the access for foreigners to buy domestic bonds or shares. In most cases, the reintroduction of restrictions were specifically declared to be temporary as the underlying difficulties were seen to be temporary, caused by passing complications of the very rapid introduction of a new financial regime.

A second and more fundamental control problem occurs when the liberalized financial markets cause *long-term problems in the allocation of resources*, e.g. massive out-flux of capital, volatile or very high interest rates etc. In the financially most liberalized countries, the general availability of policy instruments is affected, and depending on the economic tasks confronting these countries, re-regulation may seem inadvertent to redress basic economic problems and to conduct stabilization policy. Examples are primarily available from Denmark and Sweden where measures have already occurred in the areas of capital controls and overall credit availability. In particular for private consumption, control of credit facilities for this purpose are likely to develop in the direction of quantitative and discretionary intervention. In Denmark, several quantitative re-regulations have been introduced in 1985–86, aimed directly at consumer credit and at mortgage credit availability. However, the effect of such measures is generally acknowledged to be low (due to the integration of financial markets and the existence of unregulated credit markets acting as buffers) but alternative avenues of curbing private consumption have either been less attractive or not available.

Additional potential for re-regulation may be found in long-term structural policies, such as credit support for selected sectors, employee ownership funds and their investment patterns etc.

While it is still true that the general trend in the Nordic countries goes in the direction of further liberalization and integration of the financial markets, the possibility of re-regulatory intervention is not very remote – particularly in the financially most internationalized countries, where the long-term control problems are still unknown.

Furthermore, the recent history of financial liberalization has been favoured by the international economic recovery. A deterioration in the international economic climate may bring about problems in the Nordic countries that presently appear remote.

5.2 Changes in the financial markets – implications for the corporate sector

When discussing changes in financial markets and their implications for the corporate sector, we must keep in mind that the characteristics of this sector vary between the Nordic countries with regard to productivity, technological competence, economic performance, market orientation and future outlooks. However, the financial aspect seems to gain increasing importance for corporate sector development in all countries. This is only natural since the process of financial market liberalization originates from the corporate sector. Evidence for this can be found in the creation of various "grey markets" in the late 1970s in order to bypass existing, but outdated, regulations.

In this context, effects on equity and liquidity positions, corporate investment strategies and more liberalized capital movements, seem to be of special interest for corporate sector development. Most of the financial market changes with direct implications for the corporate sector seem to have emerged in the equity market. However, a growing integration of the various financial markets (notably the money market, the capital market and the equity market) makes it necessary to consider the entire financial market when discussing corporate sector implications.

Corporate sector equity position

The vitalization of Nordic equity markets, which has taken place in the 1980s, has clearly improved the equity position of Nordic companies. Increasing share prices and turnover on the stock exchanges have made it more easy to generate new equity capital. Introduction of small business stock exchanges, and a growing venture capital industry, have supplied small and medium sized companies with new risk capital. This improves the financial position and strenghtens the growth potential in fast developing industries.

One negative effect of the rapid development of the Nordic equity markets may, however, be an increasing focus on short-term profit (as reported in quarterly returns) at the expense of long-term considerations. The development of the Nordic equity markets seems to move more in the direction of U.S. standards, than towards the more long-term equity markets in West-Germany and Japan. This may not be the best way to stimulate corporate sector growth in the Nordic countries.

Structural changes in the corporate sector

A result of the stock exchange development in the 1980s is a more unstable structure in the corporate sector. One of the main qualities of a well functioning equity market is to make it possible to value companies adequately. It is quite evident that the equity market development in recent years has contributed positively in this respect.

This has opened up for more mergers and aquisitions, both between companies listed on the stock exchange, and between stock exchange companies and un-listed companies. We have also seen a growing number of company spin-offs where company units are established as independent companies. This corporate sector restructuring should be seen as a positive result of the financial market liberalization. However, corporate sector restructuring may imply more unstable

labor relations, because some employees find their jobs threatened. This may be balanced by the increasing degree of employee ownership of shares in many Nordic companies. Employee ownership should be viewed as a positive effect of the equity market development. Company employees may become important participants in the development of Nordic firms in the future.

Corporate sector liquidity position

Even though the equity position of the corporate sector is improving, corporate liquidity positions in some countries seem to deteriorate. This is partly due to an unsatisfactory economic performance in some industries, but may also be viewed as an effect of financial market liberalization and deregulation.

Traditionally the Nordic countries (except Denmark) have pursued a monetary and credit policies aimed at low interest rates and quantitative rationing. These policies have gradually been abolished in all countries, resulting in expanding credit demand and increasing interest rates. This has put a heavy burden on companies with regard to payment of interest and installments on corporate debt.

All in all the net financial result in the corporate sector therefore may diminish. Moreover, excess liquidity seems to be concentrated in large volumes in a rather limited number of Nordic companies. These companies experience high financial flexibility and are becoming increasingly important as institutional investors. In Norway, for instance, industrial corporations have become the dominant shareholders, and their role in the equity market is increasing. Moreover, some of the largest Nordic companies, like Volvo and Norsk Hydro, have established their own banking and investment companies, which are pursuing large-scale operations in the financial markets.

A more developed market for short term financial transactions has made cash management more important for the corporate sector. Those companies which possess financial expertise, may improve their economic results considerably by participating in the money market. The number of companies participating in this market is increasing, but it takes time and resources to acquire the necessary skills. This seems to increase the difference between the large companies and the smaller ones with regard to financial performance.

Availability of special corporate financial services has also increased strongly. A large number of new financial institutions, aimed at serving new and growing corporate sector needs for financial assistance, have been established. Particularly, leasing and factoring have been strengthening their position in the financial market. The creation of a leasing industry has, however, also implied a need for public control in this sector. In Denmark, for instance, taxation of leasing has become an important policy control instrument.

Allocation of investment capital and corporate investment policy

When we are discussing implications of more liberalized financial markets for allocation of investment capital, we are in fact dealing with various kinds of investment options.

One is the question of real versus financial investments. This is closely linked to the development in the nominal and the real rate of interest, but also to the taxation of real versus financial investments. Traditionally, there is a tendency for tax rules to encourage real investments, but in periods with high interest rates financial investments seem more profitable. Denmark experienced this particularly in the period of high interest rates, and the other Nordic countries have been facing the same development when interest rates started rising as a result of the financial market deregulation and liberalization in the 1980s.

On the other hand, tax rules in all Nordic countries today favour investment in the own company instead of transferring resources to other, maybe more efficient, parts of the corporate sector. There is, thus, a risk that capital is locked into previously successful, but today stagnating companies and not into growth industries. The growth of the venture capital industry in most Nordic countries may improve this situation, if the venture capital companies have the necessary financial strength, the managerial and technological competence, and a strong market orientation.

The emergence of more efficient equity markets and a venture capital industry, is very important for the distribution of "hard" versus "soft" investments. During the last decade we have witnessed a shift from material to immaterial resources in many industries, especially in the fast growing high technology companies. Knowledge intensive operations, such as marketing, R&D and different kinds of services have become more important. These "soft investments" have to be financed by equity capital, either internally generated through operating profits, or by supply of new risk capital. In this respect the liberalization and vitalization of the Nordic equity markets are of great importance.

With the liberalization of Nordic financial markets, we have developed more sophisticated financial instruments. Efficient utilization of these new financial opportunities require corporate investments in new equipment and qualified personnel. This is more easily acceptable in larger companies because financial economies of scale seem to exist. Large companies may therefore improve their financial position, while smaller ones with scarce resources and less opportunities of using the potential economies of scale, may have problems adjusting to the rapid financial market development.

Financial market integration and increasing capital mobility

The liberalization process has meant an internationalization of Nordic financial markets, most notably the money and equity markets, but also the capital market to some degree. This makes it easier for the corporate sector to acquire capital from the most profitable sources, either domestic or foreign. The corporate sector is also to some degree (in Denmark to a large degree) allowed to invest capital abroad if this seems more profitable. However, capital control regulations still restrict financial investments abroad for many purposes. Sweden is perhaps the best example in this respect. Regulations on Swedish capital exports are still among the strictest in the industrialized countries.

One effect of a closer link between Nordic financial markets and foreign capital markets may be a reduced investment basis for domestic purposes. Such outflux of capital for financial investments abroad has been observed in most Nordic countries in the 1980s.

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APPENDIX

PERSONAL INCOME AND WEALTH TAXATION OF FINANCIAL ASSETS AND REAL ESTATE.

The following should be observed in connection to the matrix on taxation of income from financial assets and real estate:

The Tax Reform in Denmark

As of January 1st 1987, the tax reform adopted in 1985 comes into force – with some transitional provisions.

The basic features of the reform is the separation of *personal income* (wages, pensions etc.) and *capital income*. The latter will include *net* interest income, dividends and rental value. Personal income will still be taxed with a progressive rate (although lower than previously), but capital income will be taxed at a flat rate of approximately 50 % (for income above 200.000 DKK the rate will be 62 %).

If interest payments exceed interest income, the income tax will be reduced by approximately 50 % of the deficit.

Taxation of financial assets in Finland

Capital income (interest income, dividends, capital gains and rental income) is as a rule taxed progressively (joint taxation by the marginal rate of the spouse with the highest income) in the state taxation and proportionally in the municipality taxation.

For the financial securities, the deduction is 3.800 FIM, and for the rental income from housing 6.000 FIM, the total tax free capital income being 6.000 FIM (1985 figures). Interest payments are deductible until 25.000 FIM per year, of which at most 10.000 FIM per year on loans for other purposes than the purchase of a house.

Personal income tax treatment of financial assets and real estate

	DENMARK	DENMARK (AFTER TAX REFORM)	FINLAND	NORWAY	SWEDEN
Bonds:					
– Interest income:	Taxed as ordinary income.	Enters into calculation of overall <i>net</i> interest income, which then enters into capital income.	Government bonds are tax free, corporate and mortgage institutions ¹⁾ bond yields are taxed as ordinary income.	Taxed as ordinary personal income. Government premium bonds are tax free.	Taxed as ordinary income. Government lottery bonds are tax free.
– Capital gains:	Tax free only if the nominal interest rate of bonds at the time of issuance meets a minimum rate, specified by the monetary authorities. If bonds are issued with nominal interest rate below market level, the consequent larger capital gains are subjected to income taxation.	Taxed according to previous rules.	Included in taxable income unless the security is held for more than 5 years. ²⁾	Tax free at present, but new rules are under consideration by the authorities.	All capital gains are taxed as income if the bonds have been held for less than 2 years – when held for more than 2 years, only 40 % of the gains are taxed.
Shares:					
– Dividends:	Taxed as ordinary income. Prior to personal taxation, corporate tax has already been levied on profits (50 %). This double taxation is temporarily alleviated by a tax rebate of 25 % of the pre-tax dividend.	Dividends enter into capital income.	Taxed as ordinary income.	Taxed as ordinary income by the state, but tax free with regard to municipality tax. 40 % of personal savings in approved equity funds, max 2000/4000 NOK per individual/family, are deductible in income.	Taxed as ordinary income. Saving through special bank funds is tax free within a maximum of 800 SEK per month.
– Capital gains:	Tax free, if shares have been in the possession for no less than 3 years. Commercial traders are taxed on capital gains and may deduct losses.	Taxed according to previous rules.	Tax free if the shares have been in possession for no less than 5 years. ²⁾	Tax free if shares have been held for no less than 3 years, otherwise taxed at a flat rate of 35 %. Losses are deductible in gains.	Taxed at the same rules as for bonds, i.e. 100 % or 40 % of the gains are taxed according to the time of possession. Losses are deductible against gains.

	DENMARK	DENMARK (AFTER TAX REFORM)	FINLAND	NORWAY	SWEDEN
Bank deposits:	Interest on ordinary bank deposits are included in the tax base as any other interest earnings. In addition, many different deposits on special terms exist with favourable tax treatment, e.g. personal pension savings, investment savings etc.	interest income enters into calculation of overall <i>net</i> interest income, which then enters into capital income. Deposits on special terms continue unaffected.	As a rule tax free.	Interest exceeding certain amounts, in 1985 this was 2100/4200 NOK for individuals/families, are taxed as personal income. 40 % of savings on special bank accounts, max 4000/8000 NOK for individuals/families are deductible in personal income tax.	Interest taxed as ordinary income. Tax free savings through bank funds are possible within 800 SEK per month.
Real estate:					
– Income tax:	Based on a calculated " <i>rental value</i> ". The tax base is the market value of the property (both land and buildings), and the tax rate is progressive with one kink at 0.85 mill DKK. Property value below this sum is taxed at a rate of 2.5 % and above that at a flat rate of 7.5 %.	" <i>Rental value</i> " enters into capital income.	Rental income is included in taxable income.	Residential premises are income taxed on basis of a calculated " <i>rental value</i> ", at a flat rate of 2.5 % of the taxable value of the premises.	Depending on the debt situation, ca. 2–4 % of the taxation value is taxed as income.
– Capital gains:	Tax free if the property has been in possession for no less than 2 years – losses cannot be deducted. Otherwise, capital gains are taxed as income. Commercial traders are taxed on capital gains and may deduct losses.	Capital gains are taxed according to previous rules.	Included in taxable income unless the property is held for more than 10 years. ²⁾ Gains on flats in apartment houses are tax free when held for more than 5 years.	Tax free if the property has been in possession for at least 10 years or in personal use the last 5 years. Tax freedom is also granted if the gain is reinvested in a new property within 4 years. Rules will be simplified in 1987.	Taxed as income depending on the number of years the estate has been owned.

¹⁾ Government has occasionally granted a tax free status to bonds issued by mortgage institutions.

²⁾ If capital gains exceed 1 mill. FIM, 20 % of the gains are included in taxable income. Acquisition value is accepted at least to 50 % of the sales price

Personal wealth taxation of financial assets and real estate

	DENMARK	FINLAND	NORWAY	SWEDEN
	Wealth tax is levied on wealth above 1.3 mill DKK with a flat rate of 2.2 %.	As a rule, the net wealth of households is taxed progressively if the tax value exceeds 800.000 FIM (1985 figures).	Wealth tax by municipalities are levied on net wealth exceeding 60.000 NOK, at a flat rate of 1 %, and by the state on net wealth exceeding 110.000/140.000 NOK (1985 figures) for individuals/families at progressive rates varying from 0.2–1.3 % (1985).	Tax is levied on all net wealth exceeding 400.000 SEK. The tax rate is 1.5 % in the interval 400.000–600.000 SEK, 3.000 SEK +2 % in the interval 600.000–800.000 SEK, 7.000 SEK +2.5 % in the interval 800.000–1.800.000 SEK, and 32.000 SEK +2.5 % for wealth exceeding 1.800.000 SEK.
Bonds:	Market value enters into the tax base of wealth taxation.	Government bonds are tax free. Corporate bonds are included in the tax base for wealth taxation at current valuation. Bonds issued by mortgage institutions are taxed as corporate bonds, but the authorities have occasionally granted tax free status.	Included in tax base of wealth taxation. The current value is used for bonds quoted on the stock exchange; for other bonds the estimated sales value are used as market value.	Valued according to market values per 31st December.

	DENMARK	FINLAND	NORWAY	SWEDEN
Shares:	Market value enters into tax base of wealth taxation.	Included in the tax base of wealth taxation at 80 % of current valuation for companies listed on the stock exchange. Shares in companies not listed on the stock exchange are mostly undervalued.	Market value enters into the tax base of wealth taxation. The current value is used for shares quoted on the stock exchange. Shares in companies not quoted, are given market values by the authorities. Usually these values are more favourable.	Valued according to market values per 31st December. Small company shares have a more favourable valuation.
Bank deposits:	Nominal deposits enters into tax base of wealth taxation.	As a rule tax free.	Nominal deposits by 31st December enter into the tax base of wealth taxation.	Valued at nominal values of 31st December each year.
Real estate:	Market value enters into tax base of wealth taxation. Additionally, property tax is levied (on land only) by municipalities at varying tax rates (averaging 1.0–1.5 %).	Included in tax base of wealth taxation, but usually undervalued (approx. 50–75 % of current values).	Taxation value (approx. 30–50 % of market value) enters into the tax base of wealth taxation. In addition, property tax is levied by municipalities at varying tax rates (averaging 0.3 % of taxation value).	Valued according to taxation value (approx. 75 % of market value).