Structural changes in the banking sector – driving forces and consequences

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The Riksbank has a statutory responsibility for maintaining a secure and efficient payment system. This is discharged partly through the provision by the Bank of a system for clearing and settlement of large payments (RIX).[1] Given that the banks are the principal members of the payment system, the Riksbank must monitor developments in the banking system on a continuous basis with respect to the profitability of the players, and their ability to withstand financial disturbances. The insights gained in this process serve as a basis for, among other things, assessing how various trends in the financial system affect the strategic risks to which the banks are exposed.

There is a widely-held perception today that the financial markets and the financial institutions in the European countries are facing significant structural changes. The driving forces behind the changes are primarily increased competition in the wake of deregulation, internationalisation, technological development, and the ever more important role being played by financial markets. These changes will, in all likelihood, be of major significance for the financial system, since they affect the process through which the system fulfils its primary functions. As these trends involve greater competition, they also have a significant impact on the ability of the banks to achieve sufficiently high profitability and thereby their ability to withstand financial disturbances. Accordingly, these changes have consequences for the strategic risks faced by the banks in their operations.

The financial institutions in the European countries are facing significant structural changes.

This article attempts to explain the major structural changes to which the

[1] The system also fulfils an important function in the execution of monetary policy operations.

banks will be exposed, and the potential consequences of these changes on the strategic risks in the banking system.

Background

The financial system plays a central role in every market economy, and its principal tasks are:

- to provide payment services
- to convert savings into investment
- to make it possible for households and companies to manage financial uncertainty and risk.

An efficient and secure financial system supports and makes a positive contribution to economic growth, while disturbances in the financial system can retard growth to a significant extent. It can be said that an efficient financial system acts as a lubricant for the real economy, and increases its ability to generate prosperity. Processing of payments is one of the most fundamental functions of the financial system, and the payment system can therefore be seen as one of its most central elements. The importance of the payment system to the national economy is illustrated by the fact that just about every economic transaction requires some form of payment to be made. The base of the payment system is made up, in addition to the legal tender produced by the central bank, i.e. notes and coins, by all the accounts held by companies and private individuals in the banking system. In this way, payments processing is closely linked to the banks' deposits, which means that the banks have a key role in the payment system. As the banks provide both deposits and loans, they also have a key role in the two other main tasks of the financial system: the conversion of savings into investment, and the allocation of risk. For this reason, the authorities have a natural interest in ensuring that the banking system functions as securely and efficiently as possible.

As the banks provide both deposits and loans, they also have a key role in the two other main tasks of the financial system: the conversion of savings into investment, and the allocation of risk.

If a bank were to suspend payment, for example, this could cause a serious disturbance in the payment system if the problem were to spread to other members of the system. If such a course of events came to pass, the stability of the financial system, and thereby the growth of the national economy in general, could be put at risk. The major banking crises which Sweden and other countries

have experienced have shown how expensive disruptions to the banking system can be. Experience has also shown that such crises are in part due to substantial structural changes in the conditions under which banks operate. Increased competition in the wake of deregulation and technological developments are examples of such changes. To gain a deeper insight into the conditions under which the banks operate, it is therefore important to analyse how market conditions for the banks have developed.

Why do banks exist?

In Sweden, as in the rest of Europe, the financial system has been dominated by "universal banks", which offer companies and households a broad spectrum of financial services. The core business of these banks has been to act as intermediaries in payments, and to accept savings in the form of deposits, which are then lent to companies and households in the form of credits. In this way, the funds saved by individuals and companies have been passed on to players with a need to finance consumption and investment.

There are a number of different theories that attempt to explain why banks exist, and the advantages that this form of financial intermediation has compared with saving and borrowing directly on the financial markets or via other financial intermediaries. Various types of information problems linked to risk management and the complicated process involved in converting savings into bank credits are often cited as explanations.

The banks are regarded as having comparative advantages in handling credit risks compared with the capital markets in cases where specific information on a company's operations and projects are difficult to convey to individual investors. It can also be problematic for players on the capital markets to monitor that borrowers are not acting in a way that is detrimental to their debt servicing capacity after the credit has been granted. In this respect, the banks fulfil an important role, since they have the opportunity to monitor and evaluate on a continuous basis the debt servicing capacity of small and medium-sized companies, which is often difficult for an outside observer to assess. Many companies prefer to obtain credits via the banks to avoid – for competitive reasons – informing a wider circle of investors on the capital markets about their operations.

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Monitoring an individual borrower is a relatively expensive activity. Banks are regarded as having two comparative advantages as regards monitoring. The first is the economies of scale which the monitoring of a large number of customers provides, and the second is the diversification of risk which the large number of customers implies (Diamond, 1984).[2] Credits granted on a bilateral basis, by agreement between investor and borrower, would lead to increased costs of monitoring the borrower. A large number of individual, relatively small lenders monitoring a large number of borrowers would probably increase the total expense of monitoring considerably. Credit brokerage through banks is therefore a cost-effective method of generating loans and monitoring the behaviour of borrowers. In the light of this, it is rational for investors (in the form of depositors) to delegate the monitoring of the borrowers' financial behaviour to the banks.

The difficulties involved in entering the payment market also make it difficult to take market shares in the deposit market.

Bank deposits are one of the most liquid assets that savers can hold, and so it is natural for banks to offer payment services in combination with deposits. As a result of this, the banks have established a central role for themselves in acting as intermediaries in both large and small payments. The Swedish banks play an important part in the Riksbank's system for clearing and settling large payments (RIX), but over a long period, they have also invested in and developed systems for the settlement of retail payments. Given that there are substantial economies of scale in such systems, it is difficult for new players to break into this market. It is also difficult to compete in the market for deposits without being able to offer depositors competitive payment services, since these products complement one another.[3] The difficulties involved in entering the payment market also make it difficult to take market shares in the deposit market.

What has proved difficult to explain in theoretical terms is why illiquid lending has come to be combined with highly-liquid deposits in the way that is typical for banks. No generally accepted theory has been developed. A simple explanation may be as follows.

The fact that individuals and companies have deposit accounts with the banks through which they transact payments helps give the banks an information advantage. These accounts provide the banks with access to more detailed infor-

[2] Diamond, D., "Financial intermediation and delegated monitoring", Review of Economic Studies, 1984.

[3] For a more detailed discussion of economies of scale and network effects in the payment system, see Gabriella Guibourg, "Efficiency in the payment system – a network perspective", Quarterly Review, 1998:3.

mation on their customers. The payment transactions that pass through the deposit accounts in this way provide information on the customers' income and wealth, and on their consumption and investment patterns. This allows the banks, more efficiently than other players, to assess credit risks associated with these individuals and companies, and to check that the borrowers' debt servicing capacity is not being compromised.

A more sophisticated explanation has been put forward by Rajan (1996).[4] Rajan's analysis is based on the particular capabilities for carrying credit risks arising from the way the banks finance their credits (deposits). The banks' information advantages, and the resulting greater ability to assess credit risks and monitor borrowers, make deposits an attractive form of financing for an investor. It provides the opportunity to withdraw the invested funds as soon as there is the least doubt about the solvency of the bank. The banks must, accordingly, act with considerable caution – as soon as any doubt arises about their solvency, they risk losing their financing and suffering a liquidity shortfall. Consequently, the banks' intrinsic liquidity risks and the market discipline that these engender, make the banks particularly suitable for bearing difficult-to-assess credit risks. At the same time, this is the origin of the fundamental instability problem of bank runs, which is the principal reason that banks are required to work under a special regulatory framework, and are subject to supervision.

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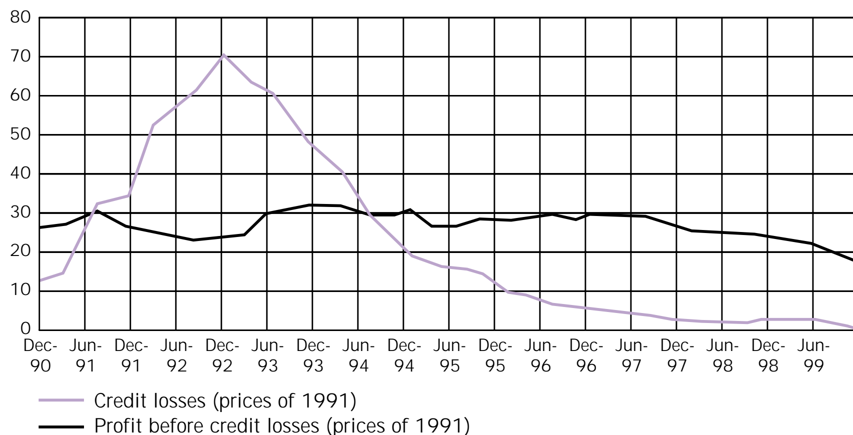
Changed conditions for the banking industry

There are currently many indications that banks will be exposed to fiercer competition, and that their special position will, in part, be weakened. This may mean that the forms of banking operations and the role of the banks will change in the future. There are signs that a number of driving forces are coming together to create pressure for change in the banking sector. An indication that pressure for change is already present to some extent is that profits in the banking sector have been stagnating during most of the 1990s (Diagram 1), after allowing for the extraordinary credit losses resulting from the banking crisis.

Increased competition and a long-term low level of profitability could erode the banks' financial strength, and make them vulnerable to a variety of distur-

[4] Rajan, Raghuram, "Why Banks Have a Future: Toward a New Theory of Commercial Banking", Journal of Applied Corporate Finance, 1996.

Diagram 1. The profits of the major banks before credit losses, adjusted for items affecting comparability, constant prices, rolling 4 quarters, in SEK billion



Source: The Riksbank and the banks' income statements

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bances. This type of strategic risk could also act as an incentive for the banks to increase risk-taking. For example, it would be possible in the short term to increase reported profits through lending to less creditworthy borrowers at high interest.[5] In the slightly longer term, however, such an approach would lead to increased vulnerability, since the debt servicing capacity of this type of borrower is, as a rule, more sensitive to financial disturbances.

Structural changes in a competitive environment are essential for a dynamic development of the financial sector.

It is important to point out, however, that structural changes in a competitive environment are essential for a dynamic development of the financial sector. Increased competition in the banking sector should, in principle, improve the efficiency of the financial system, and this should contribute to economic growth. Nor need there be any conflict between efficiency and stability. Fierce competitive pressure in the banking sector can make a positive contribution to the companies' ability to adapt to, and benefit from, changes, and this contributes to both the efficiency and the stability of the financial system.

The following sections examine how factors such as technological develop-

[5] In the years leading up to the Swedish banking crisis, for example, many banks increased their reported profits as a result of increasing their lending risks, partly by lending greater volumes, and partly by lending to less sound borrowers. When the economy entered a downturn, however, many of these borrowers proved unable to sustain their debt servicing capacity over a business cycle.

ments and disintermediation in combination can result in increased competition and change the underlying conditions for the banks' operations.

The new information technology

The impact of technological developments plays a significant role in assessing the future for a number of industries. This is certainly the case in the banking sector. Due to technological developments, it has been possible to eliminate paper-based and manual processes. One of the many indicators of the large-scale improvements in productivity to which this has contributed is the fact that the number of employees in relation to total assets in the banking sectors in the majority of EU countries fell significantly between 1985 and 1997 (Figure 1 in the Appendix).

Substantial streamlining has also been undertaken in the banks' branch networks, and the number of bank branches in relation to the number of inhabitants has fallen in most western European countries over a long period (Figure 2 in the Appendix). Up to now, this has been due mainly to the introduction of automatic teller machines and telephone banking. Another explanation for this trend is that banks have rationalised their branch networks through acquiring and merging with competitors.

The technological innovation likely to have the greatest impact on the future operations of banks is the Internet. The Internet will increase competition by making it easier for customers to compare prices, as well as by allowing new players to enter the market, since branch networks and other barriers to entry will become less important. These players may be banks or new types of players, either domestic or foreign. Just the threat of such a development can lead to falling prices on bank products.

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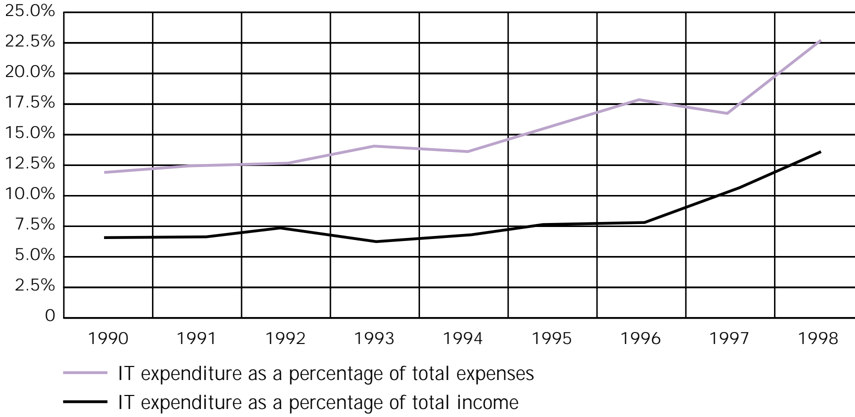
Bank branch networks are a relatively expensive approach to the distribution of financial services, compared with telephone banking or Internet banking. The cost of processing a transaction via the Internet, for example, is only one-tenth of the cost of a transaction processed through a traditional bank branch office.[6] Investment in new technology therefore offers banks a substantial potential for cutting their costs. So far, however, the savings do not appear to have been high enough to cover the substantial investment costs of the new technology. The banks' costs for investment in information technology have increased substantially in recent years (Diagram 2).

[6] See "The effects of technology on the EU banking systems", ECB, 1999.

Diagram 2. IT expenditure of the major Swedish banks as a percentage of income and expenses



Source: The Riksbank and the banks' income statements

The Internet facilitates a separation of production and distribution of financial services.

The Internet facilitates a separation of production and distribution of financial services. This makes it easier for new players in the market to distribute financial services produced by others. The producers may specialise in their own product areas, which allows them to achieve sufficient economies of scale. New players will, accordingly, be able to specialise in distributing different types of financial services from a number of different providers via the Internet. In Sweden, we see examples of specialised players who offer savers mutual funds from different fund managers via the Internet. These companies offer their clients independent advice and brokerage of mutual fund shares from a range of fund managers. The service is free of charge to the client, and the companies make money by charging commission to the fund managers. Share dealing is another niche, in which a number of operators are offering Internet trading in Sweden.

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It should also be possible for an independent distributor to put together the same wide range of financial services as the universal banks, through linking a number of specialised producers of various types of services to one Internet portal.[7] The distributor would be able to bring together the producers who offer the lowest prices within each product group. Connected cus-

[7] See for example "The Internet and Financial Services", Morgan Stanley Dean Witter, August 1999.

tomers can be offered products such as mortgages, consumer credits, deposits, mutual funds, life insurances and stockbroking, all from different producers. There is considerable potential for this approach to force down costs and thereby cut prices.

One type of bank product well-suited to Internet distribution is relatively standardised loans, such as mortgages. Recently, operators offering mortgages via the Internet have set up in Sweden. Credit application and approval, as well as valuation of the property offered as security for the loan, are carried out via the net. The monoitoring of customers, and the administration of interest payments and capital repayments, are carried out by a separate company specialising in these activities. When a sufficiently large pool of loans has been assembled, these are packaged and sold to investors on the market in the form of bonds. According to these new companies, the expenses for distributing and producing mortgages in this way are about 50 per cent lower than through banks/mortgage institutes.

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Information technology is also increasing the opportunities for non-financial companies, such as supermarket chains, to supply their customers with credit cards, which makes it easier for these companies to collect information on the consumption patterns of customers. In addition, these companies have access to networks of stores, through which these services can be distributed. The competition banks face from this type of player is often difficult to meet, since the competitive edge required in the new players' core business – such as the food retailing industry – are not the same as in banking operations. It follows from this that the new players can subsidise the price of the financial services they offer, with the aim of attracting customers into their core area. At the same time, the opportunities for banks to cross-subsidise products is reduced as a result of the increased number of niche providers of deposits and mortgages, for example.

On the other hand, however, the banks should be able to exploit their substantial customer base to offer non-financial companies to distribute their products and services through the banks' websites. An increased element of non-financial services in the banks' Internet-based range should represent an opportunity for the banks to increase their income without increasing their costs to any great extent.

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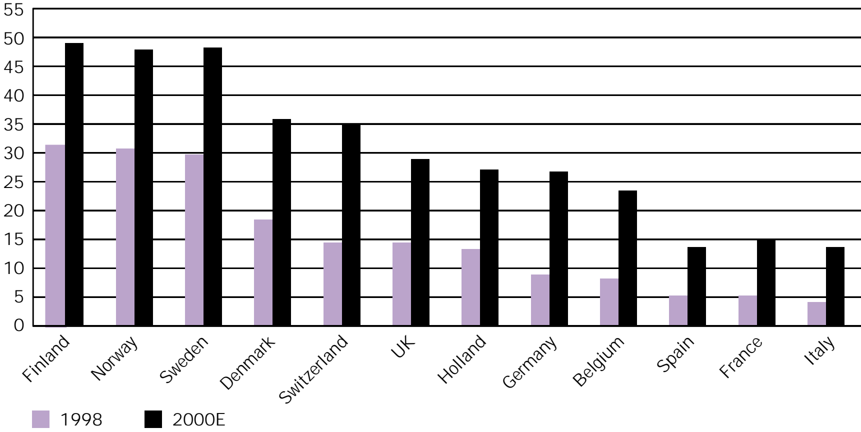
In international terms, the use of the Internet in Sweden is very extensive (Diagram 3). One possible reason for this is that there seems to be a substantial degree

Diagram 3. Number of Internet users as a percentage of the total population in different European countries



Source: Morgan Stanley Dean Witter, "The European Internet Report", June 1999

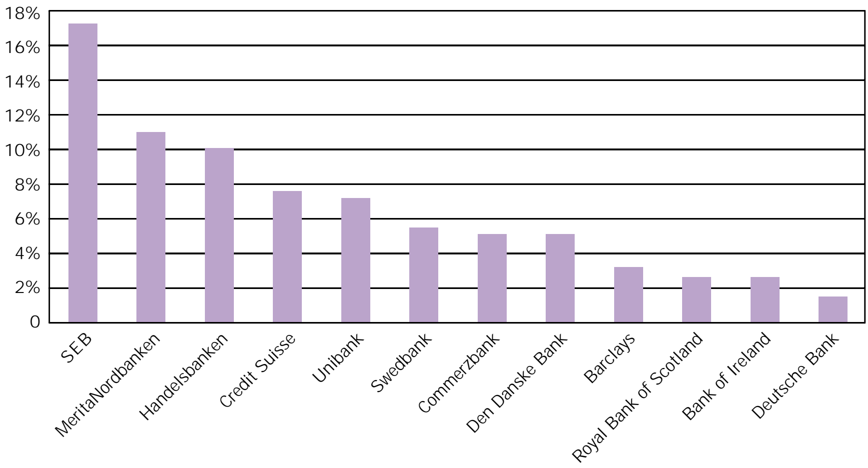
of openness towards new technology in Sweden and in the Nordic region in general. The deregulation of the telecom market is another important factor in the widespread use of the Internet in Sweden. Fierce competition among telecom operators has driven down the cost to consumers of using the Internet. Furthermore, PC-density is very high in Sweden, and this naturally facilitates the use of the Internet. All of these represent major challenges, but also great opportunities for the banks, if they succeed in adapting their business ideas to the new conditions.

Swedish banks are comparatively well-equipped to cope with increased competition both from existing operators and from new types of national and international players.

In comparison with banks abroad, Swedish banks appear to have well-developed strategies for using the Internet. This is reflected in the relatively large number of Swedish bank customers who are connected to the Internet (Diagram 4).[8] Some banks are also attempting to export their expertise in Internet banking to other markets, by acquiring banks in other countries. This should mean that Swedish banks are comparatively well-equipped to cope with increased competition both from existing operators and from new types of national and international players. With the potential efficiency gains stemming from the Swedish banks' significant presence on the Internet, they would be in a favourable position to compete with new players on price, without paying an excessively high penalty in terms of falling profitability.

[8] This survey was carried out during the first half of 1999, but it should be pointed out that all figures rapidly become obsolete due to the speed of developments within this area. The comparison, however, gives an idea of how the Nordic banks appear in an international comparison.

Diagram 4. Percentage of total customers connected to the Internet in the twelve European banks with the most developed Internet service range



Sources: The Banker and Lafferty Business Research

The implementation and development of Internet banks is proceeding very fast. This means that new systems have a relatively short life, which adds significantly to the expense of keeping abreast of developments in the introduction of new generations of Internet banks, and makes it difficult to know which technology will dominate in the future. There is a risk of investing in the wrong technology, and of permanently high investment expenditure. This underlines the importance to the banks of rationalising their existing distribution channels as new ones are introduced. An inability to adapt existing operations to the new conditions could otherwise lead to permanently higher costs and, as a result, poor profitability.

Overall, technological developments in general, and the Internet in particular, create the potential for increased competition and depressed prices in banking, since they can increase competition among existing banks, from non-financial companies and from new types of players. Increased price pressure on banking business puts considerable pressure on every player to reduce costs, not least to maintain sufficient margins to cover future credit losses.

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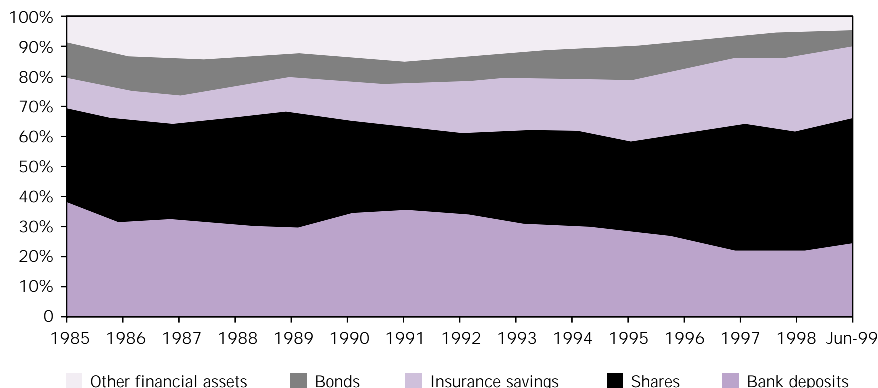
The disintermediation process

As we have already mentioned, there are a number of explanations for the banks' traditionally important role as intermediaries in the conversion of savings into investment. Technological developments may lead to the banks being challenged to a greater extent than before by new types of players. Many commentators believe that several of the special competitive advantages the banks have traditionally enjoyed over the capital markets are declining in importance. This could result in increased competition from the capital markets on deposits and lending. Such a development would add to price pressure and cause the banks to lose market shares to the capital markets. The consequence would be that net interest income/expense, traditionally the banks' most important source of income, would come under pressure.

A large proportion of household savings is transferred from bank deposits to other forms of savings, such as mutual funds and insurance saving.

In Sweden, the increased role of the capital markets has so far expressed itself primarily through the transfer of a large proportion of household savings from bank deposits to other forms of savings, such as mutual funds and insurance saving. These forms of saving are outside the banks' balance sheets (Diagram 5). Since deposits are a relatively cheap form of financing, this will result in higher interest expenses for banks, which squeezes net interest income. The strong market position of the banks in, for example, mutual funds savings and new insurance savings[9] has, however,

Diagram 5. Households' financial assets, percentage distribution



Source: SCB

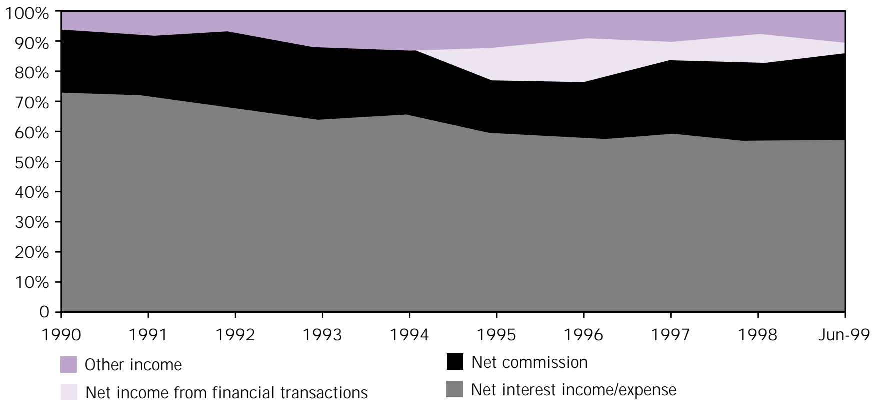
[9] See, for example, Financial Stability Report 1999:1, Figure 3 in the indicator appendix.

largely enabled them to offset a falling net interest income with increased fee income (Diagram 6).

There are also indications that the banks' information advantages in lending to households are becoming less significant. Lending to individuals is becoming increasingly standardised. The continuous expansion in calculation capacity resulting from improved information technology, in combination with the increased accessibility of the necessary information for risk assessment, has facilitated the development and use of credit scoring[10] techniques. Pools of homogenous loans generated in this way can be securitised[11] and sold to investors on the capital markets, given that they can be credit rated by a rating institution. The securitisation of loans means in practice that the process of granting credit can by divided into a number of sub-operations, all of which were traditionally handled by banks (Brennan, 1997).[12] The following operations can be differentiated: brokerage and distribution of loans, risk assessment, monitoring borrowers and the administration of interest payments and capital repayments, as well as financing.

For example, a bank could specialise in distributing and administering mortgages, while a rating agency determines the risk assessment criteria. When a sufficiently large pool of loans has been generated, it can then be financed via the

Diagram 6. The income distribution of the major banks, per cent



Source: The Riksbank and the banks' income statements

[10] "Credit scoring" is the name for the standardised credit assessment methods based on probability assessments of the propensity towards bankruptcy of different types of borrower, given certain parameters such as income, wealth and payment record.

[11] For a more detailed discussion of securitisation, see Blåvarg, M, Lilja, P, "Securitisation – a future form of financing?", Quarterly Review, 1998:3.

[12] Brennan, M,.J., "Developments in the Financial Sector", in " Forces and Implications of Structural Changes in the Financial Sector", Riksbanken 1997.

An increase in securitisation of standardised household loans may allow the banks largely to offset the lost interest income with fee income.

capital markets through securitisation. Securitisation means that the bank shifts the credit risk onto investors on the capital markets. In this case the bank receives fee income, through performing the services of distribution and administration of credits, while those financing the credits, the bondholders, receive the interest income. An increase in securitisation of standardised household loans may, accordingly, allow the banks largely to offset the lost interest income with fee income. Shifting the credit risk would also make their income less dependent on the economic cycle, since credit losses is the item that varies most with macroeconomic trends.

The increased accessibility of information for credit assessment eliminates some of the information advantages traditionally enjoyed by banks.

The division of the credit-granting process into several different sub-operations may increase competition by making it easier for new players to enter and compete in the various sub-activities.[13] It is easier to achieve costefficiency in these sub-activities without the requirement to attain the size traditionally linked with institutions which gather all the activities under a single roof (banks/mortgage institutions). The increased accessibility of information for credit assessment, through the ever greater presence of the ratings institutions, is helping to eliminate some of the information advantages traditionally enjoyed by banks. Reduced barriers to entry can, accordingly, lead to considerable price pressure on standardised credits.

EMU and the role of the capital markets in the financial system

There are some indications that the establishment of EMU may lead to a substantially enhanced role for the bond markets in the allocation of credits to large and medium-sized companies in Europe. An obvious question is why this has taken place to such a limited extent in Sweden and the rest of Europe so far, compared with in the USA. In the USA, the bond markets play a larger role as intermediaries between savers and investors than the banks do. The American experience is partly explained by a regulatory framework which allowed only investment banks to guarantee securities issues. These investment banks have been able to focus on securities-related activities, and this has helped foster the

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development of efficient and liquid capital markets. Limitations of this type have not been established in Europe, and the dominant universal banks have not, therefore, had the same incentive to develop the bond markets.

The difference between the USA and Europe can also be explained in part by the fact that the European markets have not individually comprised sufficient numbers of investors and borrowers to create the required level of efficiency and liquidity in trading in credit instruments. This has probably contributed to increased costs, and so reduced the competitiveness of the capital market relative to the banks. Differing national regulatory frameworks in the European countries and the existence of currency risks have been further obstacles to the development of cross-border trade in corporate bonds.

The introduction of the single European currency, the euro, will probably improve the conditions for an efficient and liquid European market in corporate bonds. A single currency eliminates the currency risk in investing in corporate bonds issued in other EMU countries, which leads to an increased focus on the credit risks. At the same time, the investment rules for European institutional investors are being liberalised, and this makes it easier to invest in different types of assets. The harmonisation of the regulatory framework governing the information to be provided in connection with bond issues within the EU is currently in progress. In addition, European companies are beginning to use international accounting principles to an increasing extent.[14] This makes it easier for investors to compare the credit risks of bonds issued by companies in different countries.

The introduction of the single European currency, the euro, will probably improve the conditions for an efficient and liquid European market in corporate bonds.

There is also increased interest among institutional investors in investing in securities with credit risk. As more companies from different sectors and with varying degrees of creditworthiness turn to the capital markets it is becoming increasingly possible to diversify the credit risks associated with investment in corporate bonds.

Another important trend is that the supply of government securities within the EU will tend to fall, as a result of the improved finances of the European countries. Since long-term private saving in Europe is tending to increase as the pension systems are reformed, institutional investors need to broaden the range of assets in which

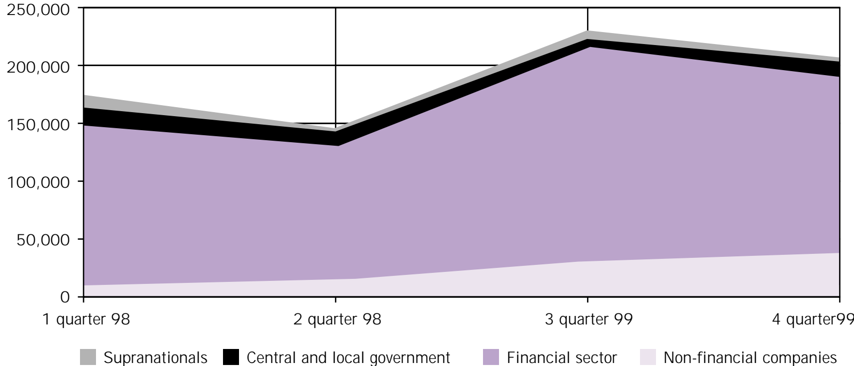
In Europe, in contrast to the USA, a mature market in corporate bonds has been lacking.

[14] Graham, B., "Delivering the Benefits of EMU", Salomon Smith Barney, Occasional Paper, July 1999.

pension funds are invested. In Europe, in contrast to the USA, a mature market in corporate bonds has been lacking. The result is that there are limited alternatives to investment in government securities.

At the same time, there is a need among companies to widen their financing base, both to reduce the cost of borrowing and to make themselves less dependent on bank financing, and thereby achieve greater flexibility in borrowing. European bank shareholders also have an interest in the establishment of an efficient market in corporate bonds, since it is relatively unprofitable for banks to have outstanding loans, above all to large companies. The margins on such loans are usually very low in relation to the amount of capital the current capital adequacy rules oblige the banks to hold for this type of lending.

Diagram 7. Issue volumes per quarter in the market for guaranteed euro-denominated bonds, by category of issuer



Sources: Salomon Smith Barney och Capital Data Bondware

The issue of euro-denominated bonds by non-financial companies grew by almost 170 per cent during the first half of 1999.

Figures for the euro area as a whole show that the development of a European market for corporate bonds has proceeded relatively quickly since the creation of the currency union. The issue of euro-denominated bonds by non-financial companies grew by almost 170 per cent during the first half of 1999, compared with the corresponding period in 1998 (Diagram 7). This can be compared with a reduction of about 25 per cent in the issue of central and local government bonds in the same period.[15] As a result, the share of bond issues by

[15] Source: Capital Data Bondware and Salomon Smith Barney. The figures cover all markets and include all euro-denominated public and non-public bond issues. The figures, however, exclude all domestic central government debt which is allotted by auction.

non-financial companies increased during the second quarter of 1999 to approximately 19 per cent of all issues, an increase of 13 percentage points on the corresponding period in 1998. During the same period, the issue of government securities fell as a percentage of total issues by about 3 percentage points, to just over 6 per cent. The increasing issuance of corporate bonds demonstrates that borrowing directly on the capital markets is beginning to be a competitive alternative to borrowing from banks in Europe.

Competing for fee income on a European corporate bond market requires a large balance sheet.

The trend towards a more capital market-orientated credit brokerage need not, as we have seen, mean a fall in bank income. It is possible that the lost interest income may be offset by increased fee income from acting as intermediaries when corporations issue bonds and commercial paper. The banks may, however, differ in their ability to compete in both these areas of operation. For Swedish banks, which are small in global terms, it would probably not be easy to attract issuers of corporate bonds. Competing for fee income on a European corporate bond market requires a large balance sheet, which can absorb substantial volumes of the issued loans. Moreover, substantial capacity is required to distribute bonds to international institutional investors, which requires a large international network of contacts.

A study of the list of banks with the largest share of the market for new issues of European corporate bonds shows that the 20 banks which dominate this market are of substantial size (Table 1 in the Appendix). Relatively small banks, which concentrate their operations on providing large companies with financial services, can therefore find it difficult to compete in this market. The trend towards a greater proportion of securities financing might depress the margins in the banks' traditional lending to companies, since these customers are increasingly able to use the prices on the financial markets as a yardstick in price negotiations with the banks.

Even though corporate financing directly through the capital markets may increase over time, the banks will probably continue to play an important role in the provision of liquidity. Banks often provide a credit commitment to companies borrowing via the commercial paper market. In these cases, the bank guarantees that the issuing company may borrow from the bank, if an insufficient quantity of commercial paper can be sold on the market to cover the company's financing requirements. The fees charged by the bank for this type of liquidity service should compensate for part of the lost interest income.

Comments and conclusions

Experience from the Swedish banking problems of the early 1990s shows that these can arise as a result of mistaken strategic decisions during periods of significant change in the external climate.

As a central bank with oversight responsibility for the stability of the payment system, the Riksbank must carefully monitor the risks in the banking sector. The strategic risks which arise in connection with substantial structural changes and increased competition are an important component in these assessments. Experience from the Swedish banking problems of the early 1990s shows that these can arise as a result of mistaken strategic decisions during periods of significant change in the external climate. The trend towards increased pressure for change and competition, which has been described above, also opens considerable opportunities for the banks if they succeed in adapting the shape of their operations to meet the new conditions.

In the light of what has been said about the banking business and the significant potential for price pressure on the various services provided by the banks, it is natural to consider whether the banking sector in general is in a stagnation phase. The answer would be no if one examines the demand for financial services in the broad sense. Growing demand is providing an expanding market for the services that banks offer (Figure 3 in the Appendix). On the other hand, these services can, to a considerable extent, be distributed, produced and financed by a larger number of competing players than before. This is a consequence of the fact that the banking business in its traditional form is losing some of its special position. The banks have, however, for a variety of reasons, such a dominating role in the Swedish financial system, particularly with respect to payment intermediation, that they will probably continue to play an important role in the future.

The barriers to entry are probably still substantial in this market. The provision of payment services is closely linked with deposit accounts, and this in turn provides significant access to information about the customers' financial behaviour and position. The banks' important role in the payment system most probably means that they will continue to play an important role in the financial system, as long as the high barriers to entry in the payment market remain.

If the banks can adapt their strategies to the new technological conditions, they should continue to benefit from their large customer bases and relative economies of scale. Technological developments offer potential for rationalisation and cost savings within banking operations, but may also mean that the savings in staff and branch expenses may be counterbalanced to some extent by investment

in IT projects. The connection between these expenses and the savings to the bank may sometimes be difficult to assess, and there is a risk that mistaken investments can hit the banks' earnings hard. The speed of technological change today makes it hard to judge which technology will dominate in the future. It is also vital to make savings in the traditional distribution channels to generate a positive net effect.

If the banks can adapt their strategies to the new technological conditions, they should continue to benefit from their large customer bases and relative economies of scale.

An increase in securities financing may constitute a threat to some banks. Given the relative smallness of Swedish banks in international terms, it may be difficult for them to compete successfully for capital market financing for large companies. In addition, any increase in the securitisation of standardised credits to individuals could lead to increased competition and depressed margins in this market segment. On the other hand banks ought to be able to benefit from the potential cost advantages and increased ability to even out income over the business cycle, which securitisation can lead to.

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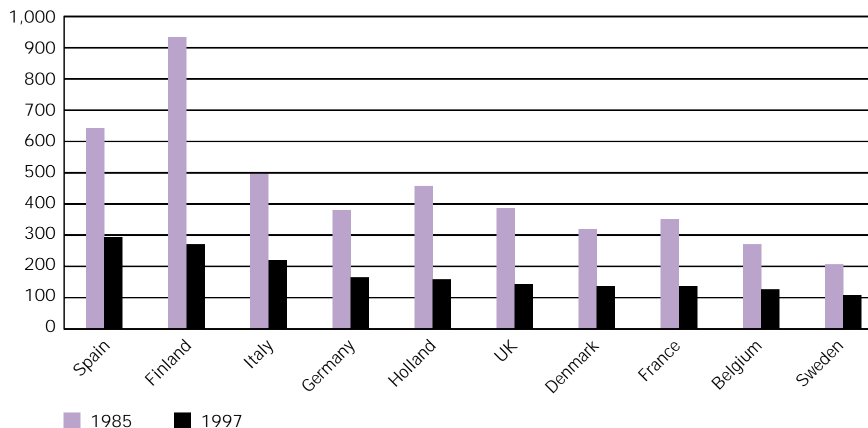
The trend towards an ever-increasing role of the capital markets in the credit allocation process should, in the longer term, help reduce risks in the financial system. There could be increased diversification of credit risks in the financial system through the improved opportunities for investors other than banks to invest in credit risks, and by the banks being able to invest in credit risks originated in geographical areas other than those in which they operate. An increase in bond financing should not, therefore, be seen by the authorities as a negative development, while, at the same time, the risks inherent in a rapid process of change should not be overlooked.

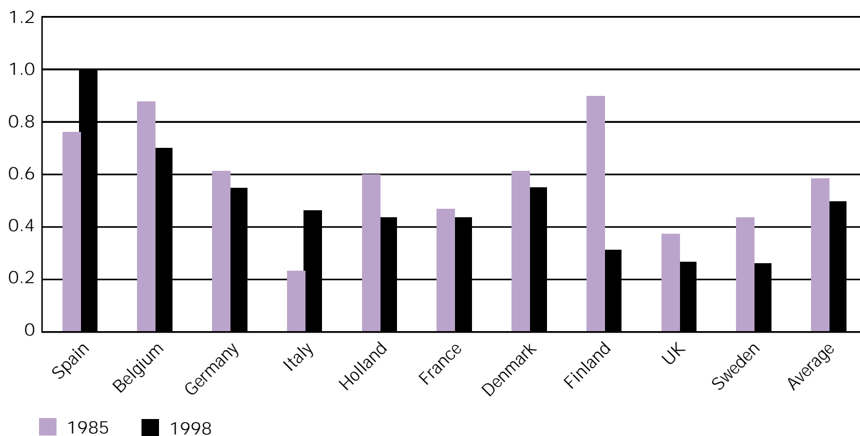
Diagram Appendix

Figure 1. Number of employees per ECU billion of assets in Sweden and a number of other EU countries



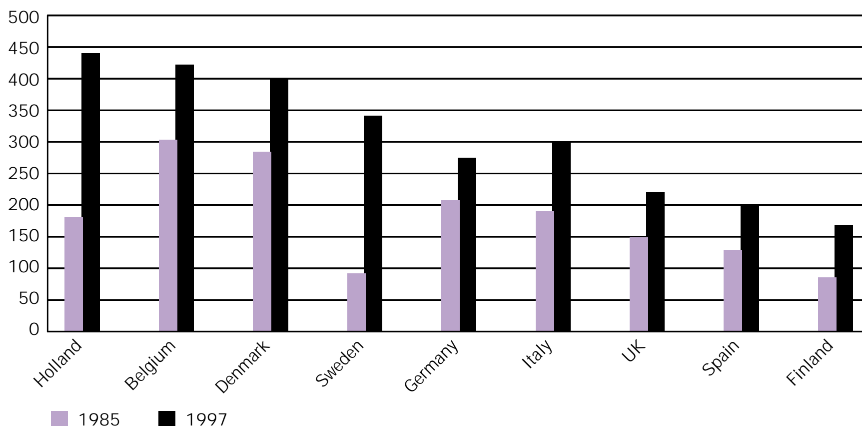
Source: The European Central Bank

Figure 2. Number of bank branch offices per inhabitant in a number of EU countries



Source: The European Central Bank

Figure 3. Outstanding financial assets (loans, shares and bonds) as a percentage of GDP in a number of European countries



Source: The European Central Bank

Table 1. Leading banks in the management of new issues of western European corporate bonds

1 H 1999	Amount (USD million)	Number of issues
Deutsche Bank	8,542	28
Morgan Stanley	8,257	37
Goldman Sachs	7,229	17
Dresdner Kleinwort Benson	6,721	19
Lehman Brothers	6,664	11
Merrill Lynch	6,560	24
Warburg Dillon Read	6,200	29
Société Générale	5,158	9
JP Morgan	5,051	17
Crédit Suisse First Boston	4,294	20
Chase Manhattan	4,160	8
BNP	4,135	12
Barclays Capital	4,004	14
Paribas	3,819	16
ABN	3,763	14
Mediobanka	3,042	5
Donaldson Lufkin & Jenrette	2,694	3
Salomon Smith Barney	2,661	12
Banco Bilbao Vizcaya	2,142	6
Commerzbank	1,826	5

Sources: Euromoney och Capital Data Bondware