



Financial Stability Report 2005:2

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■ Foreword

An analysis of the stability of the financial system is presented by the Riksbank twice a year. The purpose of the Financial Stability Report is to identify conceivable risks in the financial system and assess the ability to withstand shocks. Publishing the Report makes its analysis available to players in the financial markets as well as to others who are interested, so that it can contribute to a well-informed debate concerning Sweden's financial system. The Report is also an instrument for demonstrating how the Riksbank works on the objective, assigned to it by the Riksdag, of promoting a safe and efficient payments system.

The analysis of financial stability concerns the ability to withstand unforeseen shocks to financial companies as well as to the financial infrastructure. The analysis of financial companies concentrates on the four major Swedish banking groups because it is these that are of crucial importance for the payments system's stability.

The assessment starts from the external factors that can affect the agents in Sweden's payments system. The first chapter of this report accordingly discusses how the environment for banking operations has developed since the publication of the previous Financial Stability Report in May 2005.

Chapter two presents a survey of how the banks' borrowers have been affected and whether they may act in such a way that the banks become more vulnerable.

As the stability of the payments system can also be affected by the banks' own actions, the third chapter analyses developments in the four major banks more closely. Changes in profitability can indicate the extent to which banks are exposed to strategic risks. The quality of bank assets is evaluated as an indicator of how credit risks might develop, while the banks' funding capacity provides a picture of potential liquidity risks.

The Riksbank also oversees the financial infrastructure in order to obtain a picture of any structural weakness that could generate contagious effects via the payments system. This infrastructure is made up of systems that are required for making payments and for trading, clearing and settlement of financial instruments. However, the term financial infrastructure can also be understood in a wider sense that also includes the regulatory framework for financial transactions, that is, rules, supervision and crisis management. In this Report, the chapter on the infrastructure is devoted to a discussion of the growing tendency for banking operations in the EU to extend across national borders, and of the implications of this for some aspects of the regulatory framework.

Two articles conclude this Report. The first describes the road towards an internal market for financial services. The second analyses the development of house prices in Sweden and other countries.

The Executive Board of the Riksbank discussed this Report at its meetings on 28 October and 10 November.

Stockholm, November 2005

Lars Heikensten

GOVERNOR OF SVERIGES RIKSBANK

■ Summary of the stability assessment

There is nothing at present to indicate that in the years ahead, Swedish banks are likely to have any serious problems with loan losses or profitability. Growth prospects remain firm, in Sweden as well as in the rest of the world, and the debt-servicing ability of the banks' borrowers has continued to improve since the time of the May 2005 Report. On the international scene, long-term interest rates are low and credit spreads are narrow. A rapid adjustment of these conditions cannot be ruled out. However, the financial market turbulence this could generate is likely to have a limited impact on the Swedish banks.

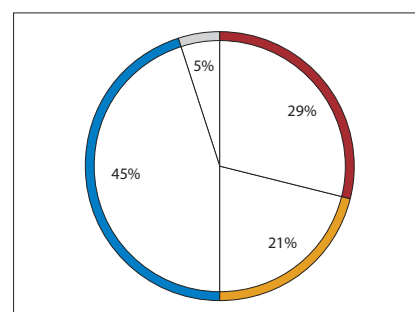
Global economic growth slackened temporarily in the early part of this year but seems to have picked up again after that. The Riksbank's assessment in the Inflation Report on 20 October was that growth will continue to be stable in the years ahead. In Sweden, the upward cyclical phase is now expected to continue, with a growth rate between 2 and 3 per cent in the next few years.

The picture of firm growth is reflected in stock markets. Unexpectedly high corporate profits have led to rising equity prices on exchanges abroad since May. The P/E ratio is now around 15, which corresponds to the average level for the period since the mid 1990s. Stock-market volatility has tended to rise recently but is still comparatively low, which points to market expectations that developments will remain stable.

Long-term nominal interest rates are still low in a longer perspective, even though there has recently been some increase in a number of places. Just why the level is so low is hard to explain but a number of factors can be mentioned. Low and stable inflation has led to less compensation being required for expected price increases and this has brought nominal interest rates down. At the same time, high saving, above all in Asian and oil-producing countries, has exerted downward pressure on the real interest rate. In addition, demand for long-term treasury bonds has been further increased by altered rules for institutional investors, such as pension fund managers, and contributed to the lowering of long-term interest rates.

The credit spreads for long-term bonds with a larger element of risk, issued by corporations and emerging-market economies, have become somewhat wider but in a longer perspective they are still narrow. This is partly explained by rising corporate profits and improved conditions in the emerging-market economies. It is also possible, however, that financial investors have taken greater risks than they normally do for the corresponding return. Experience has shown that under such circumstances, these credit spreads may be rapidly corrected. Recently, moreover, financial institutions have increased their investments in high-risk bonds, various commodities and more complex credit instruments.

Lending to general public in the major banks',
sectoral breakdown.
December 2004



- Non-financial companies (excl. property management companies)
- Household
- Property management companies
- Other lending

Source: Banks reports.

THE CORPORATE SECTOR

The increase in corporate borrowing in Sweden is continuing. The funds are being used in part for investment, which is continuing to rise in 2005 in virtually all industries.

The Riksbank's investment forecast in the October 2005 Inflation Report – annual investment growth of around 5 per cent in the coming two years – points to a continued increase in corporate borrowing. Survey data show that bank managers throughout Sweden share this view. Borrowing is expected to increase mainly among small and medium-sized firms in capital-intensive industries such as manufacturing and property companies.

The increase in aggregated corporate borrowing has been accompanied by increased holdings in bank deposit accounts. The expansion of liquidity and higher dividends from the listed companies may indicate that some firms have funds for investment but lack a sufficient number of profitable projects.

With the improvement in corporate profits, which is now coming more from higher earnings than from cost-cutting, the ability to service debt is substantial. This is also evident from the development of bankruptcies. The number of defaults has decreased and expected default frequencies, calculated from market information and financial statements, point to a continued fall in most industries in the coming year.

The banks' largest exposures are to the real-estate companies. Indebtedness among property companies, which had been falling since the mid 1990s, has started to rise again. The real-estate sector's debt-to-equity ratio is higher than in other industries, which is normal and has to do with the nature of the operations. But it is worth noting that indebtedness here is rising at a time when it is falling in the rest of the corporate sector.

Real-estate companies have increased their interest cover ratio during the first half of 2005 and improved the ability to service debt. Since the time of the May 2005 Report, the listed real-estate companies have become marginally more vulnerable to interest rate movements: the average duration of interest periods is 2.1 years compared with 2.8 years in 2004. With no increase in defaults and the prospect of a decrease in the coming twelve months, the ability to service debt seems likely to remain firm in this industry.

Companies in the other Nordic countries, the Baltic states and Germany are also important borrowers from the major Swedish banks. The picture of developments in the other Nordic countries resembles that in Sweden. Corporate borrowing has started to pick up again and the ability to service debt is substantial. In the Baltic states, corporate borrowing is expanding rapidly but debt ratios are comparatively constant and the ability to service debt is sound. The picture in Germany is different, with weak demand for corporate loans, a low level of investment and an improvement in corporate profits via cost-cutting rather than increased earnings.

THE HOUSEHOLD SECTOR

Borrowing by households in Sweden is continuing to grow at the same high rate as previously. In the twelve months to September 2005, total borrowing rose almost 13 per cent. Most of the loans are used to purchase housing. It is partly the low mortgage rates and rising real disposable incomes that have enabled households to enlarge their debts and buy dwellings.

Households' house purchases have generated a further increase in house prices. Between the first halves of 2004 and 2005 the average national level of house prices rose almost 8 per cent. There are still regional differences; in the Göteborg and Malmö regions the price increases have been above the national average, whereas in Stockholm the increase has slackened and been below the average national rate since 2002.

In this Report the Riksbank presents a closer study of the house price increases that have occurred in Sweden and other countries in the past decade. In this separate article, some explanatory variables, primarily incomes and interest rates, are tested in regression models. The analysis suggests that in Sweden as a whole, house prices are broadly explained by the development of the underlying factors. The abnormally low long-term interest rates at present raise the question of how house prices would be affected by rising mortgage rates. Calculations presented in the article indicate that an interest rate increase in line with market expectations would slow the increase in house prices. An assumption that interest rates rise more markedly than that gives a more pronounced impact on nominal house prices.

The ratio of household debt to disposable income has risen to 127 per cent, which is a higher ratio than the Riksbank assumed in the Stability Report last May. The accumulation of debt is expected to continue in the next two years, but at a diminishing rate.

The ability of households to service debt remains robust. With low interest rates, the ratio of interest expenditure to disposable income continues to be small. The regional differences here are considerable, however, with higher expenditure levels in the metropolitan regions than in other parts of Sweden.

In the Stability Report last May, the Riksbank presented a study of household indebtedness and the debt-servicing ability in different income categories up to the end of 2003. Estimates were presented of households' financial margins, that is, how much of their post-tax income remains when interest expenditure and other living costs have been paid. For all income categories, this margin was sufficient to cover a substantial increase in interest rates or loss of income. A projection of this analysis with more recent data suggests that since 2003 there have been further improvements in these margins.

Households are continuing to borrow more at a variable interest rate, which increases their vulnerability to interest rate movements. Variable interest rates currently apply to approximately 40 per cent of the stock of loans to households. The degree of this vulnerability

is partly dependent on how quickly households change to fixed rates when interest rates start to rise. The available data suggest that when the short-term interest rate starts rising, households are comparatively quick to change to a fixed rate and thereby secure a low rate for a time. However, if interest rates rise more abruptly, the effect might be greater.

Although the household sector is still judged to have the resources to cope with rising interest rates or a temporary loss of income without encountering payment difficulties, problems may arise for individual households. Higher mortgaging and lower repayment requirements have enabled individual borrowers to take larger risks than before. There is reason to monitor this development closely, as well as the effects it might have on households' debt-servicing ability and consumption.

THE BANKS

The analysis of stability in the banking system focuses on the four major Swedish banks on account of their central role in the financial system. The analysis covers profitability, asset quality, funding structure and capital.

Bank profitability, measured by the return on equity, shows a further improvement since the Report last May. In addition to a marginal increase in the largest item, net interest income, the improvement in profitability was mainly due to higher net commission income and an increase in the value of financial instruments. Lower loan losses also contributed.

Increased bank profitability is not necessarily an indication of greater financial strength and thereby an improved ability to cope with unexpected losses. It can also result from a bank taking larger risks. A bank that becomes more profitable as a result of increased profit margins or higher risk-adjusted income will be more resilient if problems arise than a bank that is profitable solely due to increased risks. For the four major Swedish banks, however, the improvement in profitability since the previous Report derives mainly from higher profit margins in connection with increased income. This points to a further improvement in resilience.

The growth of lending by the major banks has continued at around 10 per cent in the latest four-quarter period. As previously, the greater part of the increase consists of loans to households, primarily from mortgage institutions. However, the major banks are not increasing their shares of this market; it is rather the case that their shares are unchanged or falling. Instead, other institutions, such as SBAB and Danske Bank, have started to gain market shares by reducing margins or, as in the case of SBAB, offering higher mortgage limits.

Lending to the corporate sector has also risen, though at only a moderate rate. For all the major banks, the growth of total lending in operations abroad has been higher than in Sweden.

Loan losses have decreased for all the four major banks. Given the Riksbank's current economic forecast, an appreciable increase in loan losses seems unlikely in the coming year. Still, it is worth mentioning some scenarios that could result in higher loan losses. One is the possibility that the strong growth in the Baltic states is broken. Another is greater difficulties for households in Sweden in coping with interest expenditure. Both would probably have to do with an economic slowdown coming sooner or being more marked than expected.

The major Swedish banks have a deposit gap – the public's deposits do not suffice to finance the banks' loans. This gap, which dates from the early 1980s, has widened since then and reached more than SEK 1900 billion in the first half of 2005. The four major banks have accordingly become increasingly dependent on funding in the securities and interbank markets.

Short-term borrowing by the major banks has decreased since 2002, accompanied by an increased proportion of loans with maturities of between twelve and twenty-four months. Approximately half of the borrowing is arranged in foreign currency. The loans are covered to a large extent for exchange risk. The banks borrow in a variety of markets, which is an advantage for stability because it reduces dependence on a particular source of funds. At the same time, the banks have become more vulnerable to problems in financial markets in Sweden and elsewhere.

The improvement in profitability has generated increased capital for the major banks in recent years. At mid 2005 their Tier 1 capital ratios averaged 6.9 per cent. The lower level of this ratio for Föreningsparbanken is a consequence of the acquisition of Hansabank in Estonia.

RISKS FOR THE BANKS AND THEIR BORROWERS

There is nothing at present to indicate that, in general in the years ahead, Swedish banks are likely to have any substantial problems with profitability or risks. The ability to service debt is satisfactory on the whole among the various categories of borrower. Economic conditions are expected to remain stable and prices in financial markets appear to broadly mirror the macroeconomic expectations.

In the previous Report, the Riksbank drew attention to the risk that rapid adjustments to long-term interest rates, credit spreads and exchange rates could lead to turbulence in financial markets. This risk continues to apply.

There are a number of scenarios in which financial market unrest might be generated in this way. One is the possibility that increased oil prices and rising inflation in the United States result in a more abrupt monetary tightening and higher interest rates than markets expected and that in turn leads to increased private saving, subdued house prices and weaker growth. While that would help to reduce

the US saving deficit, it would probably also entail higher long-term interest rates and a falling dollar.

Such an adjustment may well occur in orderly forms but its course could be rapid, at least initially. There is a possibility that the narrow interest rate spreads are partly evidence that, in view of the low long-term treasury bond rates, investors are interested in assets bearing a higher risk without demanding the compensation for this they normally require. Incipient market unrest could then lead to rapid portfolio adjustments in favour of safer assets. Such a course could entail additional turbulence, with substantial price movements and decreased market liquidity. Moreover, if the prices of different categories of asset were to co-vary more than is normal, there could be a rapid increase in exposures to risk.

Neither can one disregard the possibility that the rapid expansion of certain market segments in recent years – credit derivatives of various kinds, for instance – may entail risks that are less apparent in normal times and surface in connection with financial unrest.

So how would the major Swedish banks and hence the Swedish financial system be affected by rapid price adjustments? The direct effects – a fall in the value of the banks' bond portfolios, for example – would probably not be so extensive as to cause the banks serious problems. If interest rates were to rise rapidly by one percentage point right across the yield curve, bank profits would be reduced by between 10 and 30 per cent, assuming that the entire loss were to be realised.

The indirect effects of financial unrest, which have to do with decreased market activity, lower lending and reduced securities trading, are more difficult to estimate. At the same time, it is probably these effects that concern the Swedish banks most because interest and commissions are their largest sources of income. Given the current earnings of the major banks, however, loan losses between 1.4 and 1.6 per cent of the loan stock could be absorbed without operating at a loss that has to be covered from equity. These figures should be seen in relation to the current average level of the banks' losses, which is 0.03 per cent of the loan stock. The banks' ability to cope with unexpected losses accordingly appears to be sound.

The Riksbank's role in work on financial stability

The financial system has three main functions: providing payment services, converting saving into investment and managing financial risks. The system consists of banks and other agents, market-places where they can meet and the financial infrastructure for registering and settling transactions. The efficient day-to-day working of the financial system is a major socioeconomic concern. If the system were to cease functioning, the economic and social consequences could be great. The government therefore has a particular interest in overseeing its functioning.

Considering the huge volume of payments that flows through the system, the greatest economic damage would probably arise from disruptions to the payment function. All economic transactions involve some form of payment. The payment system's central agents are the Riksbank and the commercial banks. The banks distribute notes and coins, keep transaction accounts connected to the giro system and manage card systems. The Riksbank issues notes and coins and provides accounts in the RIX payment system, which banks can use to execute large mutual payments.

In the light of its central role in the payment system, the Riksbank has the Riksdag's mandate to promote safe and efficient payments. Here there is also a clear link to the Riksbank's other primary objective of maintaining the value of money. A stable financial system is a basic premise for an effective inflation targeting policy.

The importance of the banks for the payment system means that the public interest in overseeing financial stability focuses on them.¹ A crisis in the banking system could have serious consequences for payments. Overseeing banks is particularly complicated because the element of risk in banking is greater than in most other

enterprises. Bank liabilities (deposits, interbank loans) are mostly short-term, whereas assets tend to be long-term.

Moreover, a problem in one bank is liable to spread to other banks and thereby develop into a threat to the system as a whole. One reason for this is that banks have mutual obligations connected with lending and securities trading, or simply because they all participate in the payment system. Another reason is that the similarity of their operations means that problems can hit them all in the same way. Contagious effects can also arise simply because other agents suspect that the institutions are interrelated even if that is not the case. Under certain circumstances, such suspicions are liable to be self-fulfilling.

The fact that suspicions alone may suffice to generate contagious effects is characteristic of the financial system. It illustrates the high degree to which financial system stability is dependent on the participants' and the users' confidence that all the system's functions are in working order. A loss of this confidence can make it difficult for banks to conduct operations, which would threaten the workings of the system. An example is to be found in the banking crisis in Sweden in the early 1990s, when the international credit market had little confidence in Swedish banks in general, regardless of the extent of the problems in each particular case. This resulted in funding problems for all the banks and the State was obliged to guarantee all of the banks' liabilities.

However, it is not just confidence in the individual banks that is essential for the proper functioning of the financial system. Participants must have confidence in all the system's components. In practice, oversight therefore has to go beyond the banks in the payment system. In addition, the Riksbank needs to analyse developments in financial markets and the

¹ In this oversight, the Riksbank and Finansinspektionen (the Swedish Financial Supervisory Authority) both have important functions that inevitably overlap in many respects. Together with the Finance Ministry, these two agencies have clarified the division of work and the collaboration on these issues in an agreement, available in an English translation at: www.riksbank.se/upload/Dokument_riksbank/Kat_AFS/overenskommelse_eng.pdf.

factors there that could exacerbate the risks in the financial system. To a growing extent, this is also a joint international issue.

The oversight of systemic stability also extends to the stability of the financial infrastructure, that is, the systems that are required to execute payments and to trade, register and settle financial instruments. The proper functioning of these systems lessens the risk that problems which arise somewhere in financial markets or in some institution, spread to other participants or markets. It also reduces the risk of disruptions occurring in some part of the infrastructure and spreading from there. By continuously evaluating the components of the system on the basis of international norms and standards, the Riksbank can act to make the infrastructure capable of withstanding shocks of various kinds.

In addition, the infrastructure includes the public framework for all financial transactions, that is, rules, supervision and crisis management. Laws and regulations establish the bounds within which financial companies must operate. The Riksbank contributes to this by submitting opinions and by participating in the international work in this field. The development of the regulatory framework is undertaken to a large extent within the Basel Committee and the EU. Matters connected with other aspects of the public framework are also discussed in these contexts.

The Riksbank's assessment of the risks in the financial system and of the banks' ability to withstand shocks is published twice a year in this Financial Stability Report. As the four major

Swedish bank groups have around 80 per cent of the Swedish market, the analysis of bank resilience concentrates on them.

Besides the preventive aspects, the work on stability includes crisis management, that is, a readiness to act if a crisis were actually to occur. Crisis management presupposes that the authorities are in a position to gauge the consequences if an institution were to default. In the event of serious consequences, the authorities must be in a position to take measures to mitigate them. This may involve contributing to an orderly closure of the institution in some cases or providing financial support in others.

In certain cases, it may be up to the Riksbank to provide emergency liquidity assistance. This possibility only arises, however, if one or more institutions have such grave problems that there is a threat to the stability of the system as a whole. Moreover, to qualify for this form of support, the institution in question must be solvent. If the institution is insolvent, any support has to be granted by the Riksdag, because there is then a risk of costs arising for taxpayers.

The preventive oversight and crisis management are closely connected. Oversight is a prerequisite for the ability of the Riksbank to assess whether a crisis threatens stability and whether the particular problem concerns solvency or liquidity. In a critical situation, moreover, the cooperation with Finansinspektionen and the Finance Ministry is especially important.

Since the spring, equity prices in international stock markets have risen, while volatility remains low, though there has been some increase recently. The picture is in line with firm macroeconomic conditions and rising corporate profits. There has been some increase in long-term interest rates during the autumn but seen over a long period, the level is still low. Moreover, spreads for corporate and emerging-market bonds are narrow. A rapid correction of interest rates and spreads cannot be ruled out.

The Riksbank's stability assessment starts from the external factors – real economic conditions as well as the situation in financial markets – that are liable to affect banks and their borrowers. This chapter opens with an account of the Riksbank's real economic assessment in connection with monetary policy decisions. Developments in financial markets are considered next and the chapter concludes with a discussion of the associated risks.

Economic conditions and financial markets

Since the time of the May 2005 Report, economic growth has remained firm in Sweden as well as elsewhere. This is partly due to robust growth in the United States and rapid expansion in China and other Asian countries, which has stimulated world trade.

In the October 2005 Inflation Report, the Riksbank judges that global growth will continue to be comparatively strong. A growth rate of about 4 per cent is expected this year, followed by some slowing. The robust growth in the United States is forecast to continue, with a rate of 3.6 per cent this year and some slackening in the years ahead. The high growth in Asia is also expected to continue.

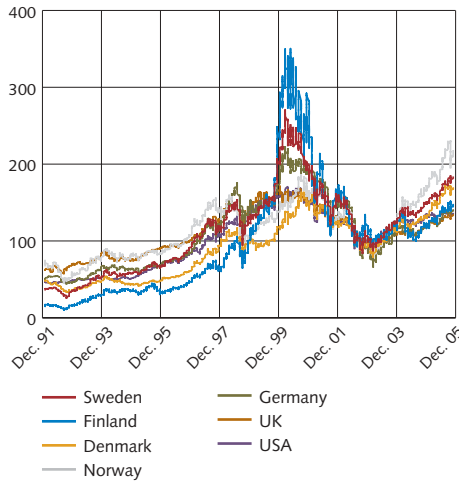
As previously, growth in the euro area has been considerably weaker than elsewhere. A rate of 1.2 per cent is foreseen this year, followed by some increase in 2006. In the Baltic states, recent statistics since the spring show that growth there is still strong mainly on account of powerful domestic demand.

In Sweden, the slowdown early this year was only temporary. GDP growth picked up in the second quarter and household consumption rose rapidly. Firm growth is foreseen in the future for domestic demand as well as exports, with GDP growth forecast to be 2.3 per cent this year and 3.0 per cent in 2006.

STOCK MARKETS

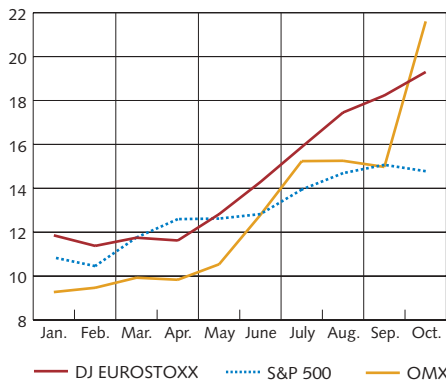
Stock markets abroad fell temporarily last spring, mainly due to weaker economic growth in the United States in particular, but also to company-specific events such as the Ford and General Motors downgradings. Since May, however, stock markets in general have

Figure 1:1. Stock market indices.
Index: September 2002 = 100



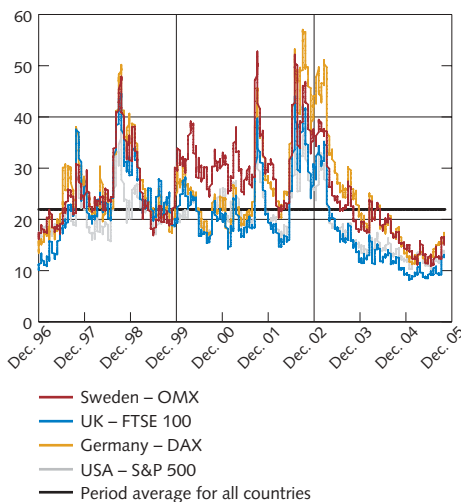
Source: EcoWin.

Figure 1:2. Expected profits.
Percentage increase from 2004



Source: EcoWin.

Figure 1:3. Implied stock-market volatility.
Index



Source: Bloomberg.

strengthened in connection with surprisingly high corporate profits. In the United States, however, stock markets have been somewhat weaker (see Figure 1:1), perhaps partly because of the tightening of monetary policy there.

With the unexpectedly high profits, expectations of future profits have been revised upwards during the year. Last January, profits for S&P 500 companies were expected to be just over 10 per cent higher than in 2004; in October the expected increase was over 14 per cent. Similar revisions have been made to stock markets in Europe, Sweden included (see Figure 1:2). International stock-market valuations in terms of P/E ratios are around 15 per cent, which corresponds to the average for the period since the mid 1990s.

Market uncertainty (measured by implied volatility) about the future for stock markets has remained low, though recently there has been some increase, and the level is much the same as at the time of the previous Report last May. (see Figure 1:3).

INTEREST RATES

During the autumn there has been some increase in long-term interest rates, bringing them back to much the same level as six months earlier (see Figure 1:4). Seen over a longer period, long-term interest rates are still notably low. There are a number of possible explanations for this.

A factor that has probably had a longer lasting effect on interest rates is that the credibility of low and stable inflation is now higher than before. There is confidence that when economic pressure becomes stronger, central banks will act so that inflation remains stable in both the short and the longer run. Moreover, high saving in Asian and oil-producing countries has exerted downward pressure on the real interest rate. In addition, rule changes for institutional investors such as pension fund managers have further increased demand for long-term treasury bonds and this has pushed interest rates down.

A period of greater uncertainty this spring caused corporate bond spreads to widen but they narrowed again thereafter. These spreads have likewise become considerably smaller since 2002 and are low in a longer perspective, indicating a market perception that credit risk is low in the corporate sector. These developments are similar in Europe and the United States (see Figures 1:5 and 1:6).

The picture is much the same in the case of spreads for credit default swaps. In principle, spreads for this type of credit derivative² represent the cost of hedging credit risk and can accordingly serve as an indicator of expectations of future credit risk. Figure 1:7 presents indexes of the average spreads for highly graded companies in North America and Europe.

² Credit default swaps function in principle as an insurance against credit risk. The buyer pays a premium in exchange for compensation in the event of certain specified credit events, e.g. a default. These premiums should therefore mirror expectations of future credit risk.

The spreads for emerging market bonds appear to have been less affected last spring than those in other markets; the increase was not as great and the level fell back more quickly. Except for Asia, these spreads remain small compared with the average for a longer period (see Figure 1: 8). Low funding costs have led to a period of extensive bond borrowing in emerging-market economies, where bond issues in the first two quarters this year were 37 per cent larger than in the same part of 2004.³

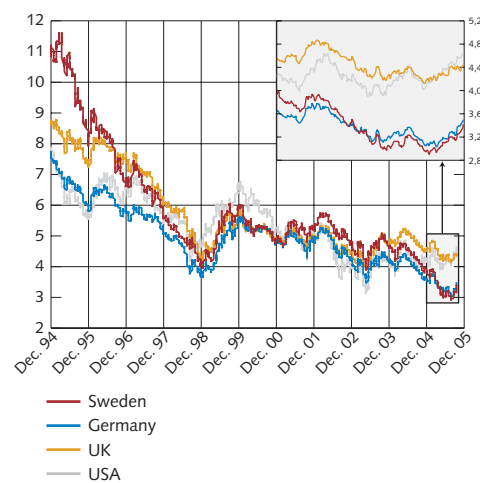
Narrow spreads for corporate bonds and bonds issued by emerging-market economies imply that compensation for risk is low. This is not surprising in view of the propitious picture of the corporate sector and the macroeconomic development in emerging-market economies, many of which have benefited from rising commodity prices. It may also be the case, however, that compensation for risk in these markets is at present unduly low. An indication of credit risk in the corporate sector is provided by the assessments presented by credit rating companies. For some time now, downgrades have outnumbered upgrades in Standard and Poor's assessments of American and European companies, which could indicate an increased credit risk. This continued to be the case in the third quarter in the United States, whereas in Europe the number of downgrades equalled upgrades. In emerging-market economies, however, the opposite has applied, with upgrades outnumbering downgrades for quite some time; in the third quarter, only 2 per cent of all gradings were downgrades.⁴

COMMODITY MARKETS

Commodity prices have generally continued to rise. Since its increase began, the price of oil has more than doubled, which is a considerably more than many observers had expected. Prices for other commodities have also risen (see Figure 1:9). The combination of these price increases and low returns on other assets has prompted hedge funds and other new categories of investors to turn to commodity markets. The low historical correlation between commodities and more traditional financial objects is probably one explanation for this. The assumption, in VaR models, of a low co-variation has made it possible to enlarge exposures without incurring an equivalent increase in the overall level of measured risk in asset portfolios.

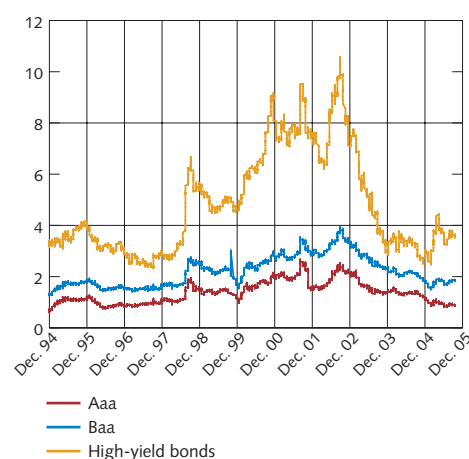
Rising equity prices and low spreads largely mirror the favourable macroeconomic situation and the strength of corporate profits. However, compensation for credit risk appears to be historically low. At the same time, the low long-term treasury bond rates seem to be partly a consequence of temporary factors. Such a situation increases the probability of rapid price adjustments in these markets (see below).

Figure 1:4. Ten-year government bond yields. Per cent



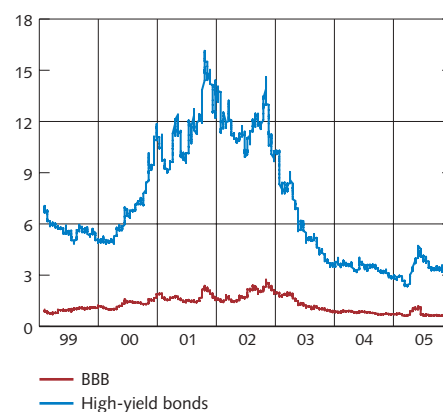
Source: EcoWin.

Figure 1:5. Corporate bond spreads in the USA. Percentage points



Sources: EcoWin, Federal Reserve Board and Merrill Lynch.

Figure 1:6. Corporate bond spreads in Europe. Percentage points

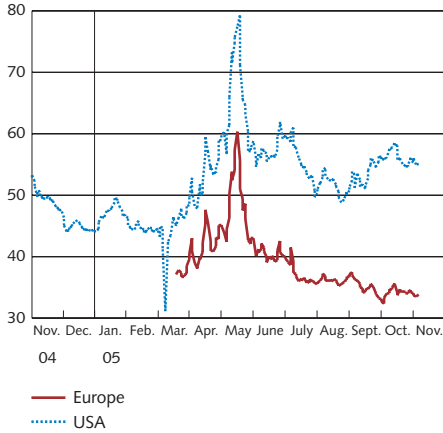


Sources: J.P. Morgan and Merrill Lynch.

³ This refers to gross borrowing. See BIS Quarterly Review, September 2005.

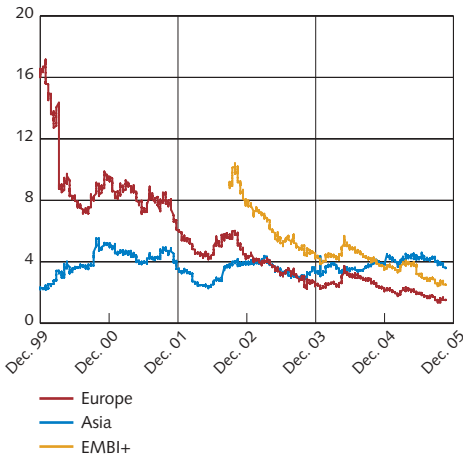
⁴ See *Global Credit Trends: Quarterly Wrap-Up and Forecast Update, Third Quarter 2005*, Standard and Poor's.

Figure 1:7. Credit-default swap spreads.



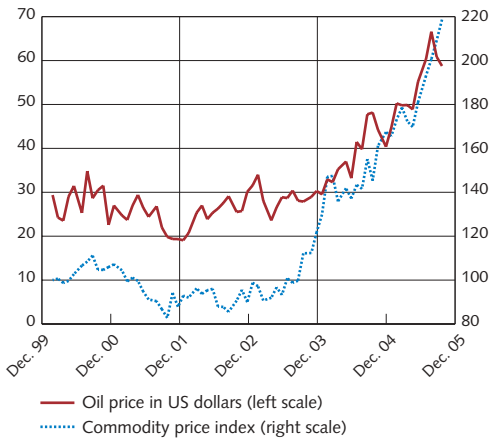
Note. Average of bid and ask spreads.
Source: Bloomberg.

Figure 1:8. Emerging market bond spreads. Percentage points



Source: Bloomberg.

Figure 1:9. Prices for oil and other commodities. USD and index: February 2000=100



Note. The commodity price index is from Merrill Lynch and represents aluminium (30 per cent), copper (60 per cent) and zink (10 per cent).
Sources: The Economist and EcoWin.

Risks for Swedish banks and borrowers

In a situation with low long-term interest rates and narrow credit spreads, the focus here, as in the previous Report, is on the risk that rapid price adjustments could generate financial market unrest.

There are a number of scenarios that might lead to turbulence in financial markets. One is the possibility that increased oil prices and rising inflation in the United States result in monetary policy being tightened more abruptly and earlier than expected, leading in turn to increased private saving and weaker growth. While that would help to reduce the US saving deficit, it would probably also entail higher long-term interest rates and a falling dollar.

Such an adjustment may well occur in orderly forms but its course could be rapid, at least initially. It is possible that, to some extent, the narrow spreads indicate that, on account of the low treasury bond rates, investors are looking for higher-risk assets without demanding the compensation for this they normally require. Incipient market unrest might then lead to rapid portfolio adjustments in favour of safer assets. Such a course could lead to additional instability, with substantial price movements and decreased market liquidity. There would then be an increase in financial agents' total risk exposures, measured by value-at-risk. Given that exposures are tested, however, that should not lead to unexpected losses. But there is a risk of stronger correlations between asset prices that have not co-varied previously. If risk models have not allowed for the probability of unexpected co-variations, losses may be incurred.

Neither can one disregard the possibility that the rapid expansion of certain market segments in recent years – credit derivatives of various kinds, for instance – may entail risks that are less apparent in normal times and surface in connection with financial unrest.

However, rapid adjustments are not expected to affect the Swedish financial system to such an extent that banks have problems with solvency. The market risks of the major Swedish banks are comparatively small. A rapid increase in interest rates and spreads would lower the value of the banks' bond portfolios (see further in Chapter 3). In the somewhat longer run, higher interest rates and spreads could also dampen activity in financial markets and that would weaken the banks' net commission income, but it would hardly result in problems with solvency. The risks accordingly have more to do with possible implications for the distribution of wealth, temporary disturbances in market liquidity and any real economic effects, not least via the impact that rising interest rates and a lower dollar rate would have on households and firms in Sweden (see further in Chapter 2).

The somewhat longer-term indirect effects of financial unrest, which have to do with cancelled investments, reduced lending, lower economic growth and diminished securities trading, are more difficult to estimate. At the same time, it is these effects that concern the Swedish banks most because their operations are still largely in the field of traditional banking, where commissioning and interest are the chief sources of income.

The Directive on Institutions for Occupational Retirement Provisions (the IORP's Directive) will be effective in the EU as of 2006. As a result, the regulation of occupational pensions will be governed to a greater extent by general principles and less by detailed regulations. For example, insurance companies are to value their commitments realistically instead of the present criterion of above market value (sufficient prudence). The new rules will put companies in a better position to manage financial risk by diversifying and matching assets and liabilities.

As a step in the implementation of the new legislation, Finansinspektionen will introduce a new method for identifying life insurance companies and occupational pension funds with financial risks that are so large in relation to their capital that future pension disbursements could be jeopardised.⁵ Previously, companies with a solvency ratio below 3 per cent were subjected to closer inspection. That method, however, does not capture asset risk and primarily looks at developments in the past.

The new method – known as the traffic-light model – measures the extent to which assets and liabilities would be affected in a stress scenario where the interest rate, equity prices and property prices fall substantially independently of each other by a series of predetermined percentages based on historical outcome. A company for which the probability

of solvency exceeds 0.5 per cent during a year is given the red light, which means that the supervisor makes an in-depth review. Thus, the traffic-light model is one of several tools at Finansinspektionen's disposal for identifying companies with problems at an early stage. The Riksbank considers that the new rules are considerably better than the earlier arrangements.

Some critics have argued that when companies match assets and liabilities under the new system, the necessary portfolio adjustments will be so large that they have a substantial impact in the market. Finansinspektionen estimates, however, that only a few companies will need to rearrange portfolios in order to avoid getting a red light and even they will only need to make minor changes.

The effect will be mainly on long-term interest rates. This will probably lead to a flatter yield curve because companies have tended to match long-term pension commitments with short-term fixed interest securities. At total level, Finansinspektionen foresees rearrangements involving some billions of SEK over a considerable period. The Riksbank judges that this will not seriously affect the market.

However, the long-term bond market in Sweden is thin and even relatively small changes in supply and demand are liable to affect interest rates. There is therefore reason to be alert to such changes that may oblige companies to buy or sell long-term bonds.

⁵ For more detailed information, see <http://www.fi.se/>. Similar systems have been introduced in Denmark and the United Kingdom and an introduction is on the way in the Netherlands.

■ The Swedish banks' borrowers

The upswing for investment that began last year has continued during 2005 and caused corporate borrowing to rise at an increasing rate. This is expected to continue. Meanwhile, corporate debt has decreased and profits have improved, which indicates that the ability to service corporate debt remains sound. In the commercial property market, the development of investments and prices remains positive, despite a weak rent market, and property companies have strengthened the ability to service debt. Households are continuing to increase their liabilities in step with house prices. But although debts are rising relative to incomes, seen over a longer period, the ratio of interest expenditure to income remains low.

The corporate sector in Sweden

CORPORATE BORROWING

The increase in corporate borrowing that took off during the second half of 2004 has continued this year. Borrowing from credit market institutions is still rising at an increasing rate. The increase in the twelve months to September 2005 was over 7 per cent, which can be compared with no change in the preceding twelve months (see Figure 2:1). Corporate borrowing in the securities market is also rising.

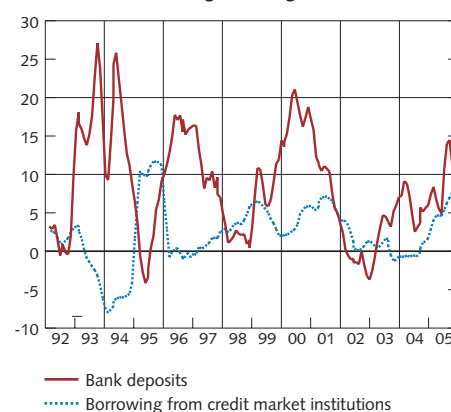
The expansion of corporate borrowing probably has to do with the upswing in investment that began during 2004 and is continuing this year.⁶ Gross fixed investment has risen during 2005 in virtually all industries and been mainly focused on housing, machinery and inventories. Transportation is the only industry where investment in 2005 Q2 was lower than a year earlier.

Private equity companies have also stepped up investment, which more than doubled in the twelve months up to mid 2005. This has probably contributed to the increased demand for credit because private equity companies use loans to finance a large proportion of their acquisitions.⁷

The Riksbank's assessment is that in the coming two years, gross fixed capital formation will continue to rise at an annual rate of approximately 5 per cent. Strong corporate balance sheets, low interest rates and high capacity utilisation in manufacturing are factors that underlie this assessment.⁸ The Riksbank accordingly considers that corporate borrowing will also continue to rise.

The assessment is supported by a survey of 150 managers of bank branches throughout Sweden.⁹ Almost 80 per cent of the respondents foresee increased borrowing in the coming four quarters. The industries that are expected to borrow most include

Figure 2:1. Non-financial companies: borrowing and bank deposits. Twelve-month change, moving three-month average



Source: The Riksbank.

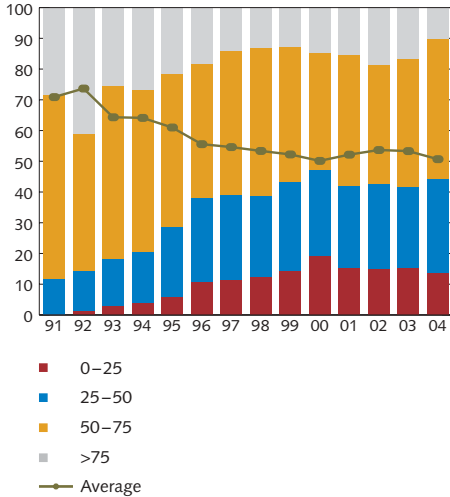
6 Corporate investment and borrowing have been closely related in the past regardless of the state of liquidity. If the investments are located abroad, however, they are most likely to be funded there, in which case the relationship between borrowing in Sweden and investment will not be as close.

7 The number of investment projects has fallen but the amounts invested have risen. See SVCA's (Swedish Private Equity & Venture Capital Association) website: www.svca.se. See also the Riksbank's Financial Stability Report 2005:1, pp. 55–70.

8 The Riksbank's Inflation Report 2005:3.

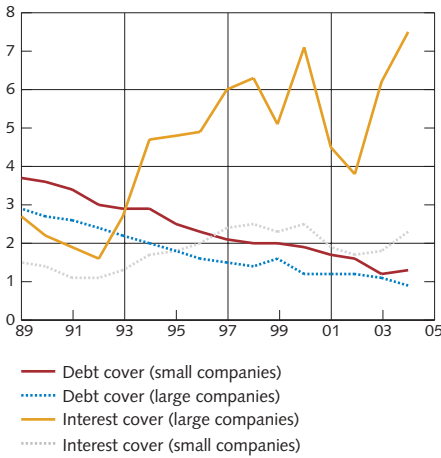
9 Almi's lending indicator, September 3005. See www.almi.se.

Figure 2:2. Ratio of debt to total assets in listed companies.
Per cent of all listed companies



Sources: Bloomberg and the Riksbank.

Figure 2:3. Cover for interest expenditure and debt in small and large companies.
Ratio



Note. Debt cover is the ratio of debt to book equity. Interest cover is calculated as the sum of operating profit and financial income, divided by financial costs.

Sources: UC AB and the Riksbank.

manufacturing and property companies; they have the highest capital intensity and account for the banks' largest exposures. The increased borrowing is expected to occur mainly among small and medium-sized companies – the categories that are probably most dependent on banks for funds.

Corporate borrowing from the banks' finance companies has been rising more rapidly during 2005. This could point to an increased element of factoring and leasing, indicating that the new rules for preferential rights under bankruptcy law have had an impact on bank lending.¹⁰ On the other hand, the growth of this lending is the same as the average for the past five years. According to the survey of bank managers, lending has not been markedly affected by the new rules. Of the respondents, 64 per cent state that lending has not been affected upwards or downwards and about 30 per cent that there has been some fall.

According to another survey, addressed to 3000 small and medium-sized companies, 16 per cent of them had had their loans re-assessed during 2004 and 2005 and been required to provide additional collateral and capital. Almost half of them saw this as a consequence of the new rules for preferential rights.¹¹ Moreover, almost 30 per cent of all companies report that during 2004 and 2005 they have been offered alternative funding in the form of factoring and leasing.

Higher requirements for collateral and increased factoring are also indicated by responses to the Riksbank's survey of loan officers (see the box in Chapter 3). However, the respondents do not believe that the rule changes have led to fewer loans.

Corporate indebtedness has decreased gradually over the past decade and a half. The liabilities of listed companies, on the Stockholm stock exchange, for example, have decreased from an average of 70 per cent of total assets at the beginning of the 1990s to 50 per cent at present (see Figure 2:2). The balance sheets of listed companies have generally become appreciably stronger in this period. Today, the ratio of debt to total assets is below 50 per cent for approximately 40 per cent of the listed companies.

The situation for listed companies mirrors the general picture in the corporate sector, where the ratio of debt to booked equity continues to be low for small as well as large companies (see Figure 2:3).¹²

CORPORATE DEBT-SERVICING ABILITY

The ability to service corporate debt continues to improve. Interim reports from 304 listed companies for the first half of 2005 show that 70 per cent increased their profit and 50 per cent increased turnover as well as profit.

¹⁰ Among other things, the new rules, which have applied in full since the beginning of 2005, impair the position of banks in the recovery of claims from estates in bankruptcy. For further details, see the Riksbank's Financial Stability Report 2004:2, pp. 27–28.

¹¹ Interim report from ITPS (Swedish Institute for Growth Policy Studies) on the task of evaluating various effects of the reform of preferential rights. See www.itps.se.

¹² Small companies are those with an annual turnover of less than SEK 5 million.

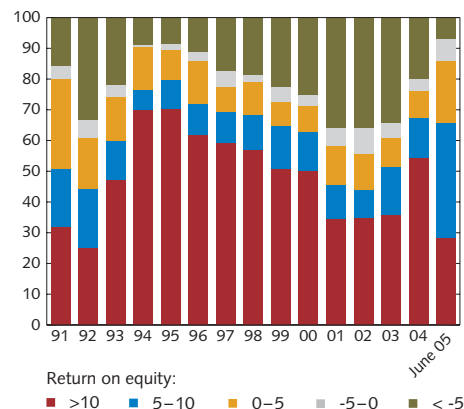
With the improvement in profits, almost 90 per cent of the companies listed on the Stockholm exchange report a positive return on equity, which is a larger proportion than at the beginning of the year (see Figure 2:4). This in turn means that companies are now prepared to borrow more and to invest, besides prompting upward adjustments to market forecasts of 2005 profits¹³ (see also Figure 1:2).

The expansion of borrowing is being accompanied by increased bank deposits. In the twelve months to September 2005, deposits by companies rose 11 per cent, which can be compared with a figure of 5 per cent in the preceding twelve months (see Figure 2:1). It is difficult to identify the companies where both borrowing and cash deposits are growing. A breakdown of aggregated statistics into small companies, large companies and all companies listed on the Stockholm exchange shows that in recent years there has been no appreciable increase in the ratio of liquid assets to total assets. The growth of deposits by some companies may be an indication that they have not yet identified a sufficient number of profitable projects. The increase in distributed profits is another indication of this. The average dividend per share in 2004 was approximately 60 per cent higher than the year before.¹⁴ It is, however, the listed companies that choose to distribute profits.

A better performance and low interest rates have led to an increased interest expenditure cover for small as well as large companies (see Figure 2:3). This is likely to have strengthened the ability of companies to repay debt. The picture of defaults underscores this. To date in 2005 the total number of defaults has fallen by approximately 15 per cent. The defaulting companies are mostly small, with fewer than ten employees (see Figure 2.5). The number of defaults is still rising among hotel and restaurant companies as well as in the transport industry. One explanation for the increase in transport industry defaults may be that oil prices have added to costs and companies have not been able to compensate by increasing prices (see Figure 2:6).

A leading indicator of corporate sector bankruptcies is the expected default frequency (EDF) among listed companies, calculated on the basis of stock-market information and data from financial statements.¹⁵ In the coming twelve months, defaults are expected to go on rising in the transport industry (see Figure 2:7). In the corporate sector as a whole, defaults are expected to fall in the coming year (see Figure 2:8). However, there has recently been some increase in market uncertainty (measured by implied volatility), though this is

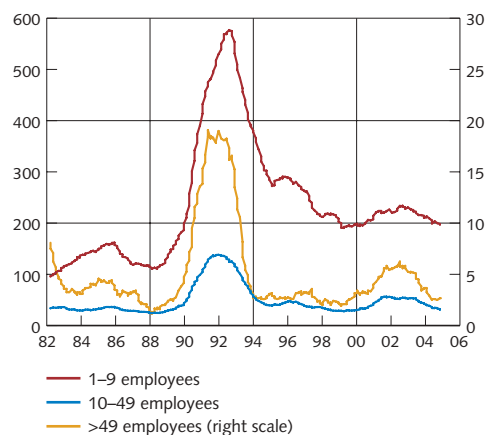
Figure 2:4. Breakdown of returns on equity in listed companies. Per cent of all listed companies



Note. The figure for June 05 represents 57 per cent of the listed companies.

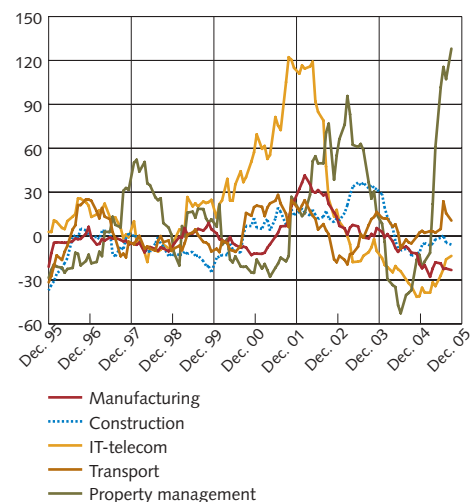
Sources: Bloomberg and the Riksbank.

Figure 2:5. Number of corporate defaults by company size.



Source: Statistics Sweden.

Figure 2:6. Corporate defaults broken down by industry. Percentage 12-month change, moving 12-month average



Note. The recent sharp percentage increase for property management is due to a 12-month increase from 1 to 3 defaulting companies.

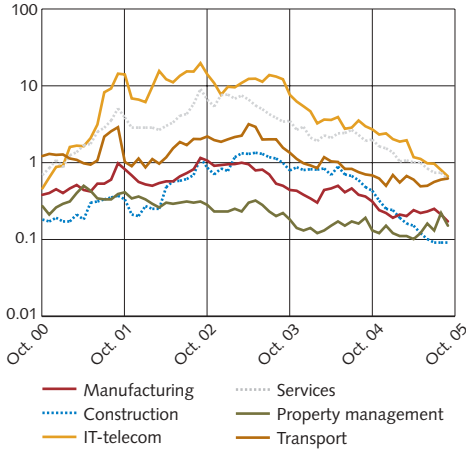
Source: Statistics Sweden.

13 Market forecasts of profits are measured as the expected growth of earnings per share.

14 This refers to the average value-weighted increase for all listed companies. The average unweighted increase is 39 per cent.

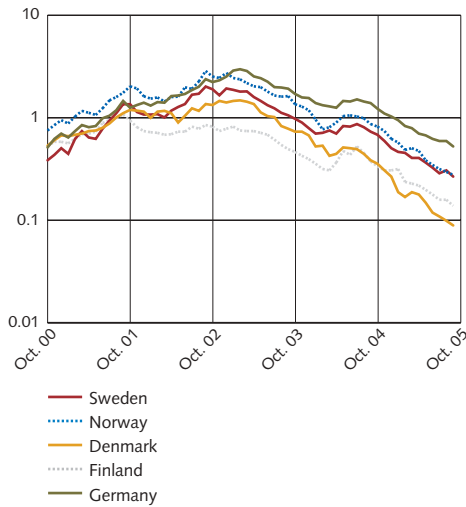
15 Moody's KMV calculates the probability of bankruptcies among limited companies – the expected default frequency (EDF) – within a given time horizon on the basis of equity prices and financial statements. As a calculation of the probability that a company's assets will be smaller than its debts when the latter mature, the EDF represents the estimated risk of a limited company being unable to meet its commitments. The market value and the volatility of a company's assets are derived in turn from the company's stock-market value, using option pricing methods. Higher indebtedness, a lower market value and higher asset volatility all lead to a higher EDF, that is, a greater probability of default within the given time horizon.

Figure 2:7. Expected default frequency (EDF) by industry for listed non-financial companies.
Per cent (logarithmic scale).



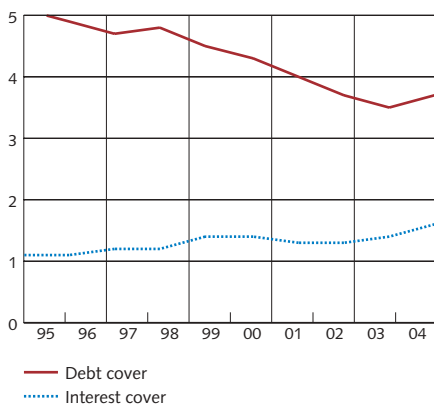
Source: Moody's KMV.

Figure 2:8. Expected default frequency (EDF) for listed non-financial companies.
Per cent (logarithmic scale)



Source: Moody's KMV.

Figure 2:9. Cover for interest expenditure and debt for property companies.
Ratio



Sources: UC AB and the Riksbank.

still low. Taken together, this indicates that credit risk in the corporate sector will remain low.

PROPERTY COMPANIES

Approximately 40 per cent of the total stock of bank loans to the corporate sector consists of loans to firms that manage real estate. The banks' exposures are accordingly largest to this industry, warranting a separate analysis. A large proportion of the bank loans is, however, secured with real estate. The ability of property companies to service debt is largely determined by conditions in the market for commercial real estate (see the box on pp. 26-27).

In contrast to other industries, the debt ratio for property companies has turned upwards after falling since the late 1990s (see Figure 2:9); this may be a consequence of the increased activity in the real-estate market.¹⁶

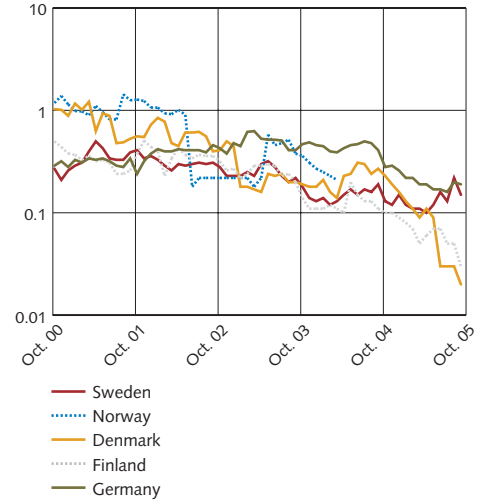
The ability of property companies to service debt has also continued to improve. According to semi-annual reports, 12 out of 13 listed property companies improved their operating result and 9 out of 13 had an increased operating surplus. The reports also show that for companies with a decreased operating surplus, the main explanation is falling rent income. The loss of rent income is attributed in turn to the disposal of properties and to increased vacancies. A stronger debt-servicing ability is also indicated by an increased interest expenditure ratio. Since the time of the May 2005 Report, the listed property companies have become marginally more vulnerable to interest rates; in this industry the duration of interest periods now averages 2.1 years compared with 2.8 years in 2004.¹⁷

The number of defaults in September 2005 was higher than in the same month last year but the increase was only from one company to three (this has a striking effect in Figure 2:6). Stronger solvency and rising equity prices for property companies are mirrored in the expected default frequencies (see Figure 2:10). Defaults are expected to fall in the coming twelve months, which supports the impression of a continued improvement in the ability to service debt.

¹⁶ All property companies, not only those listed on the Stockholm exchange, have been studied for this Report.

¹⁷ Leimdörfer kapitalmarknad AB.

Figure 2:10. Expected default frequency (EDF) for listed property companies. Per cent (logarithmic scale)



Source: Moody's KMV.

The commercial property market

Market conditions for commercial real estate affect property companies' debt-servicing ability. Moreover, loans are frequently secured with the property. The focus here is on office premises and apartment buildings, because they make up the major share of the portfolios of listed property companies.

The Swedish property market has been lively in recent years. Turnover in 2004 totalled SEK 93 billion, which is 9 per cent above the year before and considerably higher than in 2002.¹⁸ Turnover in the first half of 2005 was about SEK 50 billion. Foreign investors contributed 32 per cent of total turnover in 2004 and 51 per cent in the first half of 2005.

Office premises

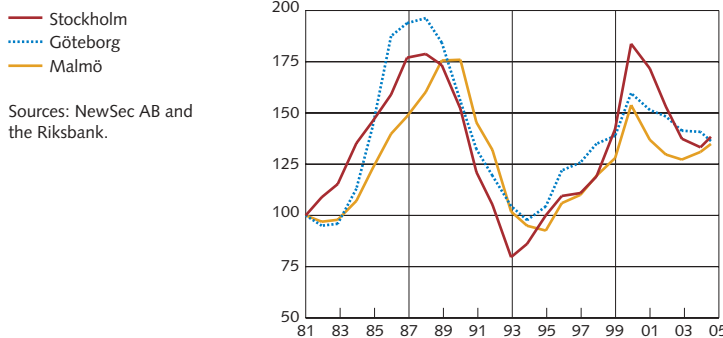
The trend for office rents was downward from 2000 to 2004 in the three metropolitan regions (Stockholm, Göteborg och Malmö). In real terms (rent deflated with the CPI), rents fell by 12–25 per cent, most in Stockholm. During 2004, however, there was some stabilisation and in 2005 there has been some increase in rents in Malmö and Stockholm, while the decline has continued in Göteborg (see Figure B1).

One explanation for the weak development of rent is that demand for office premises has been low in connection with a slack labour market. Another factor is that cost-cutting programs have led companies to look for smaller premises. Thirdly, comparatively high vacancy rates are tending to dampen the development of rents.

Vacancy rates rose in all the metropolitan regions from 2000 onwards (see Figure B2). During 2005, however, vacancies have fallen in Stockholm and stabilised in Malmö but continued to rise in Göteborg. The vacancy rate in Göteborg is probably still being affected by a relatively large increment to office space in 2003 (about 3.5 per cent of the total space). In Malmö, the increase in supply has been comparatively stable, about 1.3 per cent annually, while in Stockholm the decreased vacancy rate is presumably connected with a relatively low increment in recent years, less than 1 per cent of the total space annually.

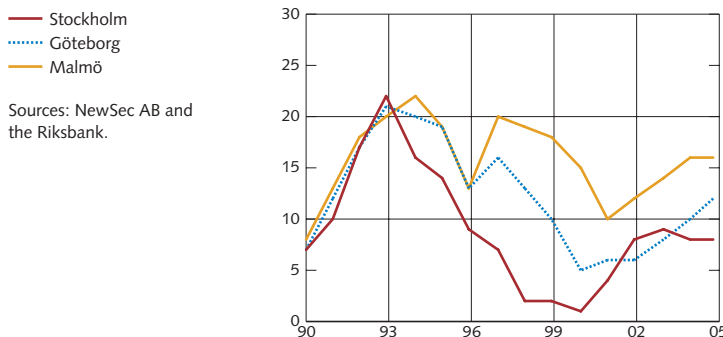
Although the rent market has been weak, prices for commercial office premises are rising. The direct yield requirement has been falling for some time, leading to higher property prices (see Figure B3). The level of the direct yield requirement is dependent on the risk-free interest rate and the risk premium. Factors behind the industry-specific risk for real-estate investment include the mortgaged share, market liquidity, competition from other investors, the property-specific risk of vacancies, rent income and tenants' improved credit status. In the

Figure B1. Real rents for office premises in central locations.
Index 1981 = 100



Sources: NewSec AB and the Riksbank.

Figure B2. Vacancy rates for office premises in central locations.
Per cent



Sources: NewSec AB and the Riksbank.

¹⁸ This does not include transactions involving less than SEK 100 million. Standardised valuations give an estimate of about SEK 1500 billion for the total stock of commercial real estate.

present weak state of the rent market, the fall in the required yield is probably mainly due to low interest rates, higher liquidity, increased competition and a better credit status among tenants. The spread between required yields and the five-year bond rate has increased in recent years, as showed in Figure B3. The wider spread indicates an increased risk premium for commercial real estate.

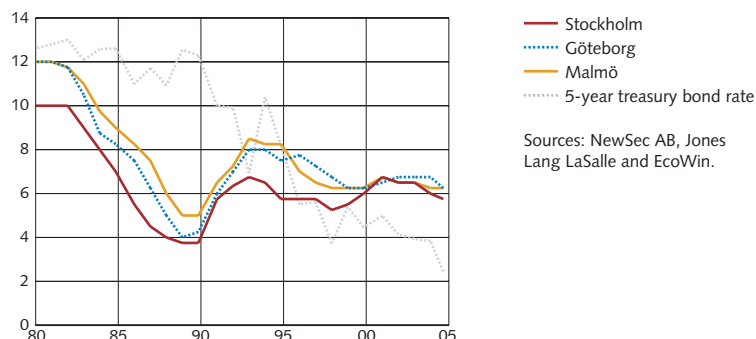
Vacancy rates and rents are affected by the situation in the labour market. The Riksbank foresees a recovery in total employment this year and continued growth in 2006. Assessments by the county labour boards agree with this for Stockholm and Malmö but not for Göteborg (see Figure B4).

Increased employment should lead to rising demand for premises, which may dampen vacancy rates and increase rents. Another factor that could lead to higher rents is the improvement in corporate profits in 2004 and 2005.

Apartment buildings

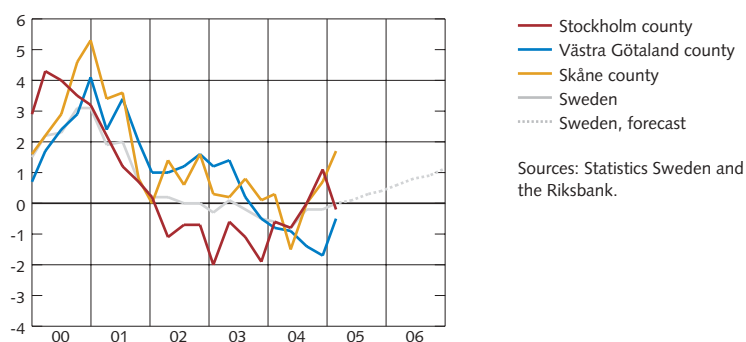
Prices for apartment buildings have also continued to rise. Increases to date this year have been between 5 and 10 per cent. For a long time now, prices have been rising considerably faster than rents. Although some differentiation with respect to location has started, rents are mainly determined by regulation. Prices are influenced by ongoing conversions from rented to collectively-owned housing, price increases for the tenant-owned apartments, low interest rates and relatively low residential construction. In addition, however, it can not be ruled out that prices are currently being formed by speculative factors such as expectations that rent controls may be changed.

Figure B3. Average direct yield requirement for office premises in central locations.
Per cent



Sources: NewSec AB, Jones Lang LaSalle and EcoWin.

Figure B4. Changes in metropolitan and national employment.
Per cent



Sources: Statistics Sweden and the Riksbank.

Corporate sectors in the other Nordic countries, the Baltic states and Germany

The external exposures of Swedish banks are largely located in the other Nordic countries and Germany. There are also major interests in the Baltic states, where Swedish banks account between them for approximately 70 per cent of total lending to the general public.

In the other Nordic countries, the picture largely resembles that in Sweden, with a renewed increase in corporate borrowing. The twelve-month increase in corporate borrowing in June was almost 8 per cent in Finland, 9 per cent in Denmark and 8 per cent in Norway. The ratio of debt to book equity is low in all these countries, though during 2004 there was some increase in Finland. Profits are firm and dividends high. The improved performance has resulted in a higher interest cover ratio, indicating that the ability to service debt remains sound. Further support for this assessment comes from the picture of defaults: the number of defaults has fallen in the past year and a continuation of this tendency is indicated by expectations of a falling default frequency in the coming twelve months (see Figures 2:8 and 2:10).

In Estonia, Latvia and Lithuania, economic growth has been strong for a number of years, with a high rate of corporate borrowing. In all the Baltic countries, corporate borrowing from credit institutions in 2005 Q2 rose in annual terms by approximately 30 per cent. Credit quality is considered to be sound and despite the increased borrowing, debt to equity ratios have not risen appreciably. Indebtedness has increased, however, in the Latvian real-estate industry. The banks have large exposures to this industry. The number of defaults has fallen in the past year in all the Baltic countries, which points to firm corporate profitability.

In Germany, the situation is different. Corporate demand for credit is still falling. In June, borrowing from banks was more than 1 per cent lower than a year earlier. Although profitability has improved, corporate investment is cautious.

Profits have been relatively stronger for export companies compared with the rest of the corporate sector, reflecting increased global demand. In the corporate sector as a whole, however, the development of profits has more to do with cost-cutting than increased earnings. There was a marginal increase in defaults in 2004, but in the coming twelve months the probability of default is expected to fall (see Figure 2:8). For real-estate companies, in recent months the expected frequency of defaults has risen slightly (see Figure 2:10).

The household sector in Sweden

The stock of household debt is still growing, with an increase in the twelve months to September 2005 of close to 13 per cent.

The growth of borrowing in this period remained strongest from mortgage institutions, almost 13 per cent, followed by 12 per cent from banks and 9 per cent from other credit market companies. Household borrowing from banks rose rapidly in the middle of 2005 but this largely had to do with internal rearrangements by individual institutions that provide both bank and house mortgage loans (see Figure 2.11).

Households have used a large proportion of the increased loans to finance house purchases, with the result that house prices have closely matched the growth of debt (see Figure 2.12).¹⁹ House prices in the first half of 2005 were 8 per cent higher than in the same period a year earlier.

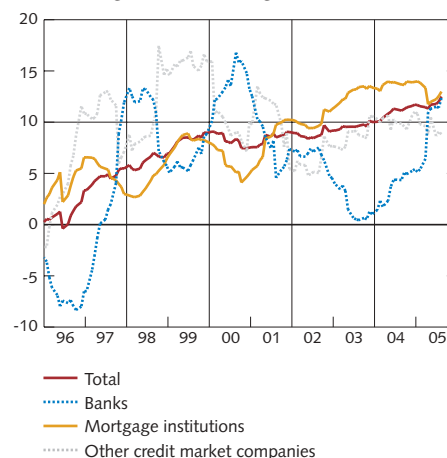
A Riksbank study of house prices in Sweden and elsewhere is presented in a separate article in this issue of the Stability Report.²⁰ A number of explanatory variables for the development of house prices in Sweden have been tested in regression models to assess whether or not the picture can be attributed to some common variables. Briefly, the estimated models indicate that underlying factors, such as rising disposable income and low interest rates, largely serve to explain house prices. That does not rule out the possibility of prices falling in some places if, for example, the economic situation worsens. Neither does the analysis exclude the possibility that house prices represent an over-valuation in certain regions.

With the growth of household debt, the ratio of debt to disposable income is still rising rapidly. In 2005 Q2 this ratio was 127 per cent (see Figure 2:13). In the years ahead, the prospect of debt continuing to rise faster than income points to a further increase in the debt ratio. However, the Riksbank foresees that, if interest rates rise in accordance with market expectations, the debt ratio will not increase as rapidly as before.

Apart from interest rates, factors that may affect indebtedness include the fiscal stance, how competition between mortgage institutions affects their interest rate margins, and innovations as well as changes in the market for housing loans. One such change is the abolition of the top mortgage rates. Another example is sub-prime lending, that is, loans at higher rates to households that normally would not be eligible. This could lead to an increased number of indebted households and thus to a higher debt ratio.

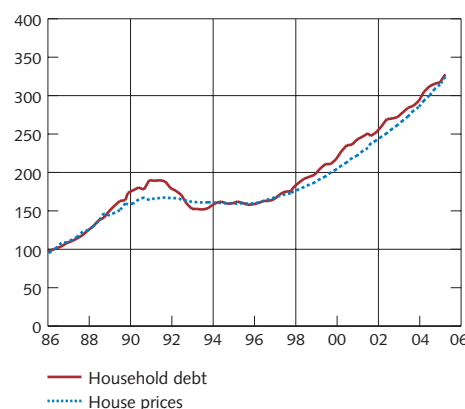
The ability to service household debt remains sound. With low interest rates, the interest ratio (interest expenditure after tax relief as a percentage of disposable income) is at a historically low level below 4 per cent (see Figure 2:13). This ratio has not risen as predicted by the Riksbank because borrowing rates went on falling after the time of the May 2005 Report. The ratio is calculated here

Figure 2:11 Household borrowing by type of institution. Percentage 12-month change



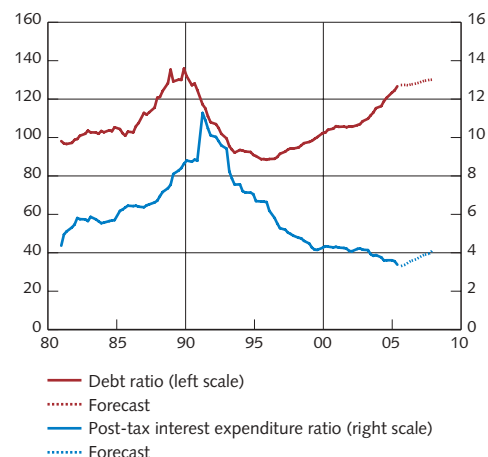
Source: The Riksbank.

Figure 2:12. Household debt and house prices. Index: 1986 = 100



Source: Statistics Sweden.

Figure 2:13. Household debt and post-tax interest expenditure as percentages of disposable income. Per cent

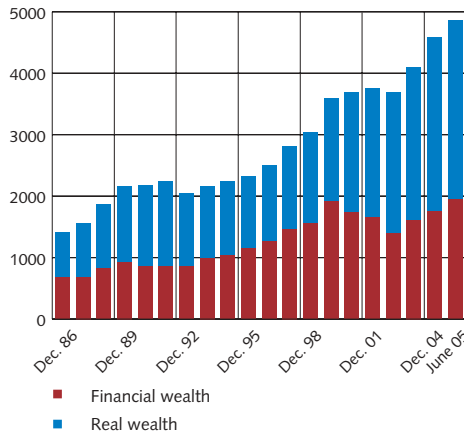


Source: Statistics Sweden and the Riksbank.

19 A matter that has prompted a lively discussion internationally is the concept of Mortgage Equity Withdrawal (MEW), whereby households borrow with their dwellings as collateral to finance other consumption. Studies by the Riksbank of Statistics Sweden's HEK surveys show that borrowing in this form is not particularly important in Sweden.

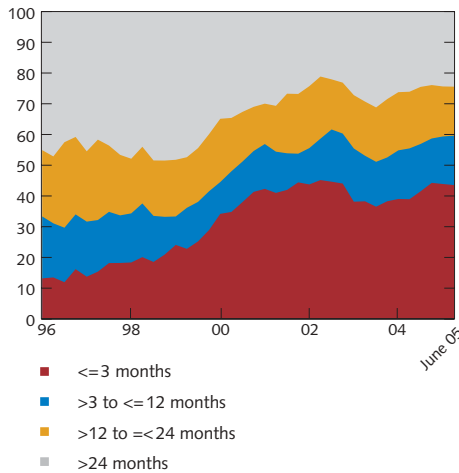
20 See the article on pp. 87-96 in this issue.

Figure 2:14. Household wealth.
SEK billion



Sources: Statistics Sweden and the Riksbank.

Figure 2:15. Length of fixed interest periods for house mortgage loans.
Per cent of total stock



Source: The Riksbank.

in terms of the household sector's aggregated disposable income; a calculation using only the incomes of indebted households gives a ratio that is rather more than one percentage point higher.²¹ The average interest ratio in Figure 2:13 also conceals substantial regional variations. For households in the metropolitan regions, the ratio of interest expenditure to disposable income was higher than in the rest of Sweden in 2003.²²

A study of the debt and debt-servicing ability of households in different income categories up to 2003 was presented in the May 2005 Report. On the whole, the household sector was judged to have substantial resources for coping with persistently higher interest rates without encountering payment problems, not least because the most indebted households also have the highest incomes and the largest assets.

For the present Report the Riksbank has updated the calculations, using disposable income from the national accounts and the change in the average interest rate on the stock of household loans. The results show that since 2003, there has been a further improvement in households' margins in the above sense. However, even if payment difficulties do not arise for the household sector as a whole, rising mortgage rates or a temporary loss of income could lead to problems for individual households. Furthermore, the value of household assets has risen since 2003; in 2005 Q2 the value was equivalent to over 310 per cent of households' liabilities. The increase is mainly in the form of real assets, which has to do with higher house prices. Household wealth can be seen as a buffer for coping with debt, even though the liquidity of the assets varies; real assets, for instance, may be more difficult to realise in order to cover liabilities (see Figure 2:14).

The structure of interest periods for mortgage loans and how it co-varies with interest rate movements can provide additional information about the ability of households to cope with future increases to interest rates. Since 2003 the proportion of loans at variable interest rates has grown again; in 2005 Q2 the level was approximately 40 per cent of the stock of house mortgage loans (see Figure 2:15).²³

With variable interest rates being chosen for such a large proportion of house mortgage loans, it may be asked how households are affected by increases in the general level of interest rates. If interest rates rise gradually (as is normally the case in the business cycle) and households are quick to tie loans, many of them would be able to lock in the currently low rates for some time and increase repayments, or adjust other components of their personal economy, in order to be in a stronger position when the time comes to renew the rates they have just tied. There is a negative correlation between the change in the short-term interest rate in the preceding period and

²¹ According to calculations based on the 2003 HEK survey by Statistics Sweden.

²² According to calculations based on the 2003 HEK survey by Statistics Sweden.

²³ Loans at variable interest rates include those with rates that are fixed for three months.

the change in the proportion of new borrowing that is arranged at variable interest rates.²⁴ This suggests that households actively follow the market for house mortgage loans and tend to switch to a fixed interest rate when the short-term rates start to rise. If interest rates were to rise more abruptly, however, households would clearly have less chance of securing a low rate, in which case the change in interest rates would have a greater impact on households' economy.

Household sectors in the other Nordic countries, the Baltic states and Germany

Lending by the Swedish bank sector to households abroad continues to grow. In 2004, this segment accounted for almost half of total bank lending to households. The Swedish banks' exposures to households abroad are largest in Norway, Finland and Germany.

In Norway, Denmark and Finland, the picture of house prices, debt ratios and debt-servicing ability resembles that in Sweden. In annual terms, household debt rose in 2005 Q2 by 11 per cent in Norway, 13 per cent in Denmark and 14 per cent in Finland. But even though household debt has risen in all three countries, the ability to service household debt is sound and the debt does not constitute a threat to bank solvency.

In Germany, household borrowing is rising considerably more slowly than in the Nordic and Baltic areas. To a large extent this has to do with the weak development of house prices in Germany. Even in Germany, households will probably not occasion sizeable loan losses for the Swedish banks.

In the Baltic states, the combination of strong economic growth and a financial system that previously was less developed has resulted in rapidly rising household debt, both in absolute terms and in relation to disposable income. In 2004, the ratio of household debt to disposable income was highest in Estonia, almost 50 per cent. It should be pointed out, however, that applying traditional indicators of stability to emerging-market economies such as the Baltic states can be misleading because, for historical reasons, household indebtedness has increased from levels that were notably low.

To sum up, the Swedish banks are unlikely to be hit by loan losses abroad on a scale that would affect their solvency.

²⁴ The relationship between the proportion of new lending that is arranged at variable interest rates and the short-term interest rate (rates for maturities up to 3 months, calculated as a weighted average of all mortgage institutions' short-term rates) was studied with a linear regression model in which the change in the proportion of new lending that is arranged at variable interest rates is explained by the change in the short-term interest rate in the preceding quarter. The equation has been estimated for the period 1997 Q3–2005 Q2. The results show that, on average, an increase of one percentage point in the short-term interest rate has reduced the proportion of variable-rate loans by 10 percentage points. However, the regression explains only 9 per cent of the total variation in the proportion of variable-rate loans.

Summary assessment

Corporate borrowing is continuing to rise with the increase in investment and this is expected to continue.

Corporate profits are being generated to a greater extent than earlier and the increased borrowing is being accompanied by increased bank deposits. The ability to service corporate debt is accordingly sound.

Corporate sector defaults have fallen during the year and this is also expected to continue.

Household debt is continuing to grow, in keeping with house prices, and the stock of loans is the largest since the early 1990s. Household debt and house prices are both being driven by increased income and low interest rates.

With low interest rates, households' interest expenditure is also exceptionally low in relation to disposable income. Even with a future increase in interest rates, indicated by market expectations, households are judged to have sufficient resources to avoid more than minor loan losses for banks.

If a future increase in interest rates were to occur gradually, there are empirical indications that households change to fixed interest rates comparatively quickly, so that the low interest rates are locked in initially. If interest rates were to rise rapidly, however, households would have less chance of locking in low rates, in which case the higher interest rates would exert more of a financial strain on households than if interest rates rise gradually.

In the other Nordic countries and the Baltic states, household indebtedness has also risen. However, this is unlikely to constitute a future threat to bank solvency.

■ Developments in the banks

Conditions for the four major banks have been favourable in the latest four-quarter period and resulted in increased profitability. This was partly a result of increased commission income, mainly in connection with rising equity prices. The value of the banks' financial assets also increased, likewise in connection with rising equity prices but also with positive exchange rate movements and falling long-term interest rates. Lower loan losses also contributed to the better performance. The Riksbank judges that the major banks continue to be in a sound position to absorb unexpected losses.

The Riksbank's analysis of banking developments concentrates on the four major Swedish banks – Föreningssparbanken, Handelsbanken, Nordea och SEB – because it is primarily these banks that are of crucial importance for the financial system's stability. All these banks now also operate to some extent in markets abroad. The analysis applies to the bank groups as a whole because what is relevant for financial stability is the systemically important banks' consolidated risk exposure.²⁵

The aspects considered in the analysis are strategic risk with respect to profitability, asset quality, funding structure and capital.

The stock market's appraisal of the stability of the major banks' future earnings has not changed much since the time of the May 2005 Report. This is mirrored in persistently low levels for the implied volatilities of the major banks' equity options (see Figure 3:1). The situation for the banks is accordingly in line with the stock market in general (see Chapter 1).

Profitability – strategic risk

The underlying earnings of the major banks (profit before loan losses at constant prices) rose almost 19 per cent in the latest four-quarter period to over SEK 65 billion (see Figure 3:2).²⁶ This was accompanied by a further reduction of loan losses, which have been historically low since the end of 2004.

The combination of improved earnings and low loan losses resulted in a further increase in the post-tax return on equity, which in the latest four-quarter period was about 17 per cent (see Figure 3:3).²⁷ This return has accordingly been restored to the level during 1999 and 2000, before the stock market fell. The return on equity can be seen in relation to the return predicted on the stock market. The latter is an indication of the return shareholders expect from the banks, given the general level of interest rates, the market price of

²⁵ Unless stated otherwise, the term major bank accordingly refers here to the bank group as a whole.

²⁶ The latest four-quarter period runs to 2005 Q3 (except for OP Bank Group, for which the period ends at mid 2005). All data on performance have been adjusted for sizeable one-off effects and all comparisons, unless stated otherwise, are with the preceding four quarters. As of 2005 the banks present accounts in accordance with IFRS (see the box on pp. 49–51 of *Financial Stability Report 2005:1*). The version of their accounts for 2004 that complies with IFRS has been used here. Thus, accounts that follow the earlier standards have been included for only one quarter in the period used for comparison.

²⁷ In accordance with IFRS, minority interests are included in bank profit as well as equity.

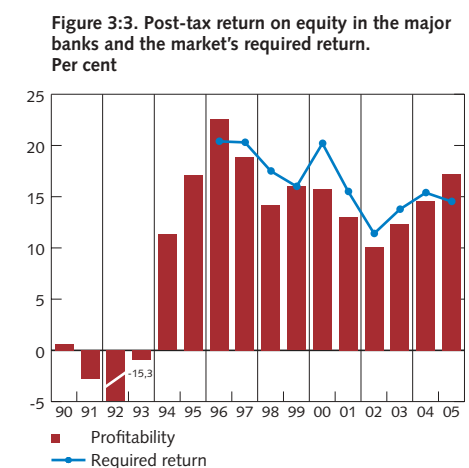
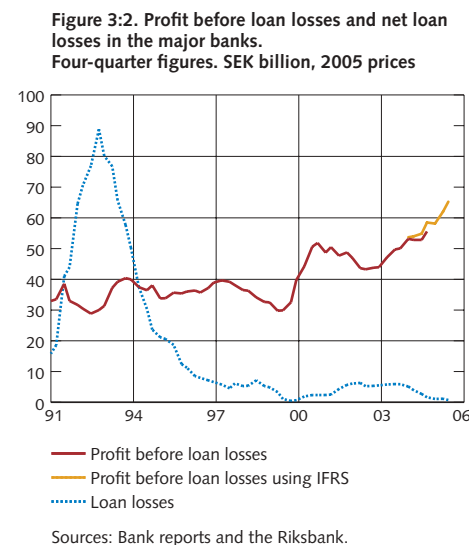
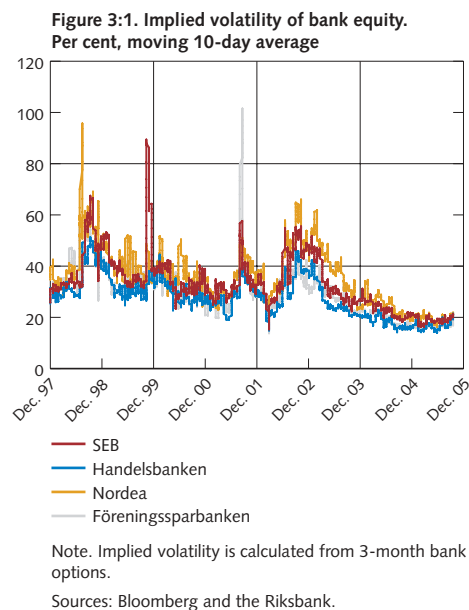
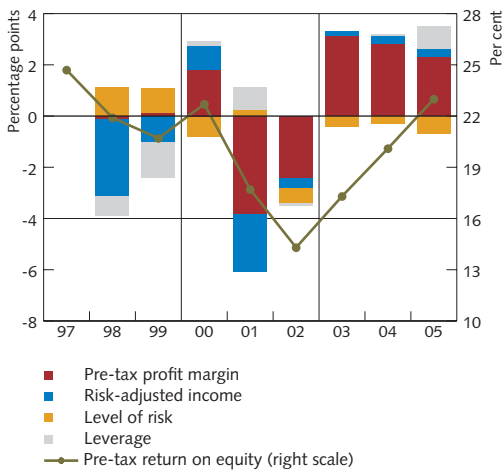


Figure 3:4. Pre-tax return on equity. Percentage points and per cent



Note. The data for 2005 refer to the latest four-quarter period.
Sources: Bank reports and the Riksbank.

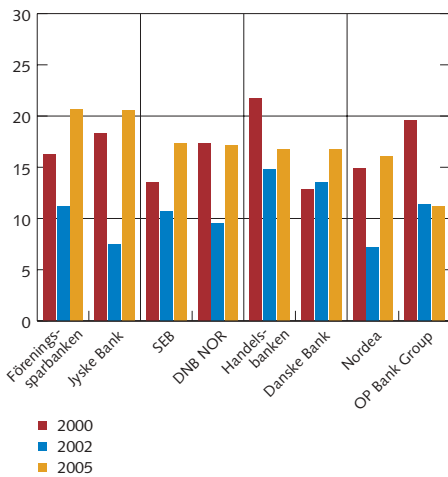
the banks' equity and an assumed risk premium. The banks' return on equity appears at present to be somewhat above the market's expected return.

To assess the driving forces behind profitability, this can be decomposed into profit margin, risk-adjusted income, risk level and leverage.²⁸ An increase in the first two components represents greater resilience, while an increase in the other two may indicate greater risks. If profitability improves via a larger profit margin or higher risk-adjusted income, a bank will have increased its earnings without necessarily taking more risks; it can then be assumed to be less exposed to risk than a bank where profitability has improved because capital is small or risk-weighted assets are large in relation to total assets.

In the latest four-quarter period, the improvement in profitability mainly mirrored higher profit margins, chiefly due to increased income (see Figure 3:4). Increased leverage also contributed to the stronger performance and this could indicate that the banks are taking more risks. The explanation, however, is simply that, in addition to increased lending, with the new accounting standards, additional financial assets are now included in balance sheets (see below under Assets). Moreover, the increased leverage is offset by a lower level of risks. Banks that increase leverage tend to lower the level of risk in order to avoid a lower rating and thereby higher costs for funding. Taken together, this suggests that the improvement in profitability represents some increase in the resilience of the major banks.

Profitability has improved since 2002 for the other Nordic banks, as it has for the Swedish banks.²⁹ In the latest four-quarter period, profitability for a majority of these banks was somewhat above the levels that were reached at the time of the latest peak in 2000 (see Figure 3:5).

Figure 3:5. Post-tax return on equity. Per cent



Note. DNB NOR 2000-03 is pro forma. The data for 2005 represent the latest four-quarter period.
Sources: Bank reports and the Riksbank.

INCOME

In the latest four-quarter period the income of the major banks rose about 10 per cent, mainly as a result of increased net commission income, due above all to rising equity prices and higher turnover. Another factor behind the increased income was positive changes in value, due to a combination of positive exchange rate effects, rising equity prices and falling interest rates.

Net interest income rose approximately 4 per cent in the four-quarter period but this is partly a consequence of the new accounting standards. Excluding these effects, the increase in net interest income was weaker and came mainly from a larger volume of lending, above all in the form of mortgage loans to the household sector (see under Lending). At the same time, net interest income was negatively affected by depressed margins on lending and deposits.

²⁸ The components are explained in more detail in the box on pp. 35-36 in Financial Stability Report 2004:1.

²⁹ The reason for making certain comparisons between the major Swedish banks and four other major Nordic banks is that the former operate abroad and the latter also operate in broadly the same markets, though they are not regarded as systemically important in Sweden.

Deposit margins in the Swedish market have been narrowing since the end of 2002 as a consequence of lower market interest rates. This has been only partly offset by rising margins on loans (see Figure 3:6). There was some narrowing of loan margins around the middle of 2004, partly due to increased competition, above all for mortgage loans to households; during the summer, however, this tendency ceased.

Seen in a longer perspective, lending margins are currently higher than, or on a par with, the levels in the period 2000–02 but this has not made up for the reduction of deposit margins.

Another explanation for the narrower margins on lending, besides increased competition, is probably that house mortgage loans make up a growing share of the bank's credit portfolios. These loans are secured with collateral and their margins are therefore smaller than those on unsecured loans. They do not contribute to profitability to the same extent as other loans but do promote profitability defined as the return on equity because the capital requirement is smaller than for other loans. Net interest income could be strengthened by increasing the proportion of corporate loans, which have larger margins. On the other hand, corporate loans are more costly because banks are required to cover them with more capital than is the case with house mortgage loans. As a result of that effect, an increased proportion of corporate loans could reduce net interest income's contribution to profitability.

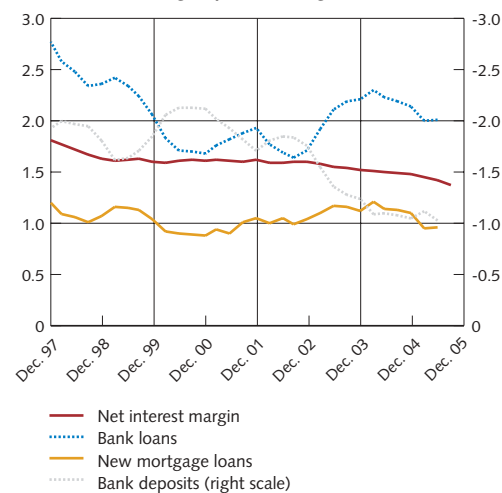
The combination of low interest rates and increased competition makes a major improvement in margins unlikely. Consequently, the future growth of net interest income probably requires a continued increase in volume. The rapid growth of mortgage loans to households is expected to continue, though the rate will presumably slacken if interest rates rise. Lending to the corporate sector has risen recently and a further increase is foreseen (see Chapter 2). Given unchanged margins, a future increase in net interest income should therefore be feasible.

To illustrate the importance of volume growth for increased net interest income, it can be noted that, without the increase in volume in the latest four quarters and given the same pressure on margins, the banks' net interest income – instead of rising by about 4 per cent – would have fallen by between 1 and 10 per cent.³⁰

The net commission income of the major banks rose about 10 per cent.³¹ The main factor behind the improvement was an increase in securities-related commissions in connection with rising stock-market prices and turnover, which led, for example, to higher commission income from securities trading and asset management. Being dependent on stock-market development, securities-related commissions are a relatively volatile source of bank income. In the

Figure 3:6. Net interest margin and spreads for the major banks on deposits, bank loans and mortgage loans in Sweden.

Per cent, moving 4-quarter average



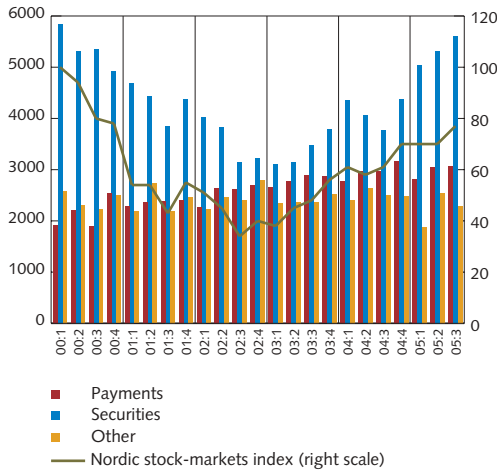
Note. The spreads are the difference between the average bank rate and the six-month treasury bill rate, and between the average mortgage rate and the three-month treasury bill rate. For banks whose operational net interest income differs markedly from the legal figure, the former is used here.

Sources: Bank reports and the Riksbank.

³⁰ This example assumes that neither lending nor holdings of interest-bearing securities increased in volume from the preceding four-quarter period.

³¹ The net commission income of the four major banks does not include either Handelsbanken's insurance item or Nordea's life assurance item.

Figure 3:7. Net commission income in the major banks and Nordic stock-markets index. SEK million and index



Note. Net commission income adjusted pro forma for Plusgirot. Handelsbanken's and Nordea's insurance commissions are not included here. Nordic stock-markets index from Financial Times.

Sources: Bank reports, EcoWin and the Riksbank.

past two years, the improvement in stock markets has resulted in increased securities-related commissions and this item currently generates almost half of net commission income (see Figure 3:7).

Payment commissions also rose in the latest four-quarter period. Being mainly dependent on the extent to which bank customers use bank, payment and credit cards, this source of income is less volatile than the income from securities-related commissions. At present it provides almost a third of total net commission income. Income from other commissions was broadly unchanged in the latest four-quarter period.

The value of the banks' financial instruments will be more volatile than before, because the new accounting standards require, for example, that market valuation is applied to more instruments and that changes in value are to be included in the profit and loss account. In the latest four-quarter period, the market value of the banks' assets rose sharply, though the increase differed between the banks.³² Positive exchange rate movements contributed to the increase, and so did rising equity prices, due to higher turnover as well as positive changes in the value of equity-related instruments. Moreover, the value of bond portfolios rose in connection with falling long-term interest rates in Sweden and other Nordic countries. Yet another explanation for the higher value of financial instruments in the latest four-quarter period is that some banks include insurance-related income and expenditure, which gave a net increase.

There are indications of a somewhat increased risk in trading by the major banks. Value-at-risk (VaR), which measures the capital requirement for a given portfolio, fell during the year for some banks, though it may have risen in a single quarter. However, the lower VaR is partly due to lower market volatility (see Chapter 1).³³ At the same time, the banks' assets weighted for market risk rose. In keeping with the May 2005 Report, this gives a picture of increased bank volumes and positions for market risks, accompanied by decreased volatility in the portfolios. Some of the banks have also increased holdings of interest-bearing securities, which may point to an increased interest rate risk.

Larger holdings of interest-bearing securities with longer maturities make the banks more sensitive to interest rate movements. In a scenario where, all else equal, interest rates rise 100 basis points right across the yield curve from one day to the next, the banks' annual profit for 2004 is reduced by between 10 and 30 per cent. This example does, however, assume that the banks would choose to realise the whole of the loss in value; they do not have to do so because some interest-bearing securities are held to maturity, which means they are booked at original cost. The loss of value would also represent between 2 and 5 per cent of each bank's capital base. Two

³² Comparisons are now more difficult than before because of certain differences between the banks' reporting. Another difficulty is that not every bank has booked financial instruments in 2004 in accordance with IAS 39 (*Finansiella instrument: Redovisning och värdering*).

³³ A picture of how VaR has developed cannot be obtained for all four of the major banks because quarterly data are not available in every case.

of the banks have reported their interest-rate vulnerability during 2005; this vulnerability increased in the latest four-quarter period for one of them and decreased for the other.

Other income rose in the latest four-quarter period.³⁴ Income increased from insurance operations, for example, partly as a result of some minor acquisitions.³⁵

COSTS

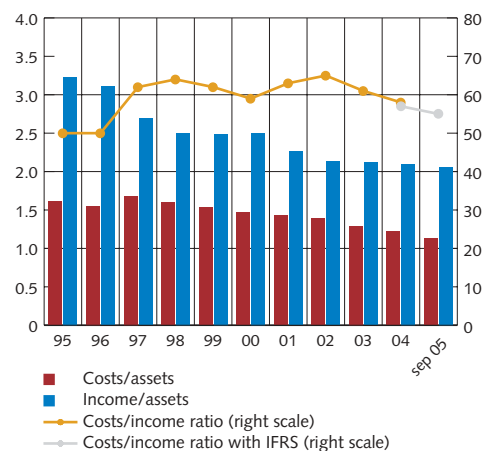
The costs of the major banks rose about 3 per cent in the latest four-quarter period. Staff costs rose about 4 per cent, accompanied by a marginal increase in other (administrative) costs. The increase in staff costs is partly explained by higher performance-related compensation but the banks also employed additional staff in connection with the expansion of operations.

With relatively stable costs and rising income, cost efficiency continued to improve. In the latest four-quarter period, the costs:income ratio was 55 per cent, which can be compared with an annual figure of 57 per cent for 2004 (see Figure 3:8). Even when the effects of the new accounting standards are excluded, the banks are more cost efficient than in 2000, when a reduction of the Costs/income (C/I) ratio was likewise mainly due to increased income.

The improvement in cost efficiency is also evident in a further reduction of the costs:assets ratio. This has been accompanied by a marginal fall in the income:assets ratio despite the increased income. To some extent, however, the explanation for the changes in these two ratios is that the new accounting standards have enlarged balance sheets.

The C/I ratios of the major Swedish banks are spread across the entire range for the major Nordic banks (see Figure 3:9). This is partly explained by differences in the composition of operations, because banking directed at large companies and capital markets tends to entail a relatively higher level of costs than retail banking. In relation to assets, on the other hand, the costs of the major Swedish banks are below the Nordic average, indicating that, compared with the other Nordic banks, the Swedish banks are relatively cost efficient.

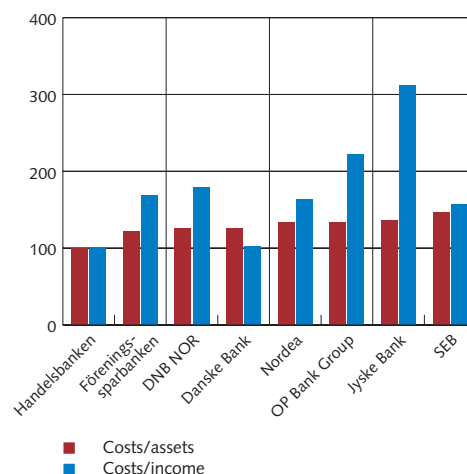
Figure 3:8. Cost efficiency of the major banks. Per cent



Note. The Costs/income ratio is based on all incomes. September 2005 denotes the latest four-quarter period.

Sources: Bank reports and the Riksbank.

Figure 3:9. Ratios of costs and income to assets. Index: Handelsbanken = 100



Note. For the four quarters to September 2005.

Sources: Bank reports and the Riksbank.

³⁴ This includes other equity earnings, insurance and profit shares in associated companies.

³⁵ The new accounting standards stipulate that insurance operations are to be integrated in the profit and loss account. However, the profit and loss account also includes an item for life assurance but the content of this varies between the banks.

Lending by Swedish banks in the Baltic states

The major Swedish banks were early entrants to the bank market in Estonia and have rapidly established a strong position in all the Baltic states. This expansion has benefited from the vigorous economic growth in these countries and been comparatively profitable. In time, the head start which the Swedish banks achieved in this way may be challenged, because the comparatively high profitability here is an additional enticement to others to compete for market share.

Today, this market accounts for almost 3 per cent of the four major banks' total stock of loans to the general public. The share differs between the banks. For Föreningsparbanken, loans to customers in the Baltic states make up about 6 per cent of the group's total stock and the share for SEB is about 5 per cent. Nordea, on the other hand, has less than 1 per cent in these countries and Handelsbanken's operations here are even smaller.

between the countries, with shares of about 90 per cent of the Estonian bank market, 50 per cent in Latvia and 60 per cent in Lithuania.³⁷

Lending in the Baltic states has risen rapidly, with annual rates between 25 and 50 per cent in recent years. Moreover, the margins on lending operations are higher than in Sweden and other Nordic countries. The Baltic states are therefore an increasingly important source of income for the Swedish banks. Föreningsparbanken, the Swedish bank with the largest presence in the Baltic states, can serve as an example: this bank's income from these markets in the first half of 2005 made up about 16 per cent of the group's total income.

The immediate questions are for how long this rapid expansion can continue and how it will affect the major Swedish banks' structure and level of risk.

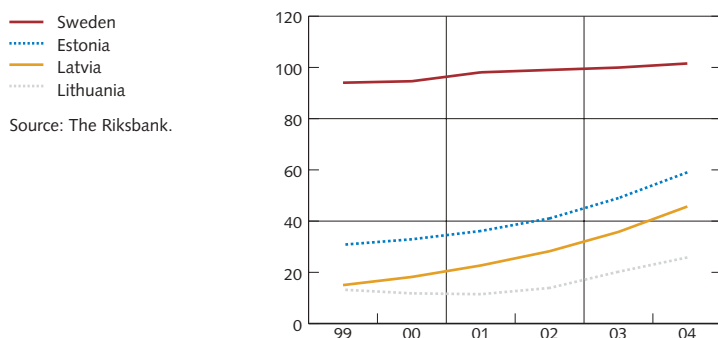
The theoretical growth potential can be gauged by relating loan stocks to GDP.

In Sweden, the total stock of loans from credit institutions has exceeded the size of GDP since 2001. In the Baltic states, on the other hand, loan stocks related to GDP have been considerably smaller. In recent years, however, lending has grown faster than GDP and loan stocks in 2004 corresponded to between 30 and 60 per cent of GDP (see Figure B5). Considering that the ratio is still below the level in Sweden, there is presumably room for the growth of lending to continue at a high rate in the coming years.³⁸

If the future increase in lending, in the Baltic states as well as in the other countries, were to match the latest nominal rate (2003–04) and the banks' market shares are unchanged, the share for the Baltic states would be almost doubled by the end of 2009 (see Figure B6).

For Föreningsparbanken, with about 6 per cent the loan stock in the Baltic states, the development assumed above would make this share increasingly important, raising it in five

Figure B5. Loan stocks in relation to GDP. Per cent



Source: The Riksbank.

The total stock of loans in the Baltic market in 2004 amounted to the equivalent of about SEK 134 billion, of which 48 billion in Estonia, 44 billion in Latvia and 42 billion in Lithuania.³⁶ The Swedish banks have a combined market share of almost 70 per cent. Their dominance differs

³⁶ The figures for lending to the general public and GDP have been obtained from a regular exchange of data between the Nordic and Baltic central banks.

³⁷ The market shares in the Baltic states are based on Föreningsparbanken's annual report for 2004.

³⁸ Note, however, that a lower ratio does not imply that lending will rise "automatically". There are large country differences in this respect in Europe.



years to over 10 per cent. The share for SEB would grow from about 5 per cent to over 8 per cent in 2009, whereas the five-year increase for Nordea would be to little more than 1 per cent.

While these calculations are no more than an illustrative example, operations in the Baltic states will probably make increasingly large contributions to the financial statements of the Swedish banks. This represents a positive diversification that is advantageous for stability.

It can be argued, however, that the development to date cannot continue at the same high rate. Moreover, the positive economic conditions in these countries could encounter at least temporary setbacks. An increased volatility in earnings and more extensive exposures to non-traditional customers must therefore be seen as potential risks.

Figure B6. Potential growth of the major banks' lending in the Baltic states. Per cent

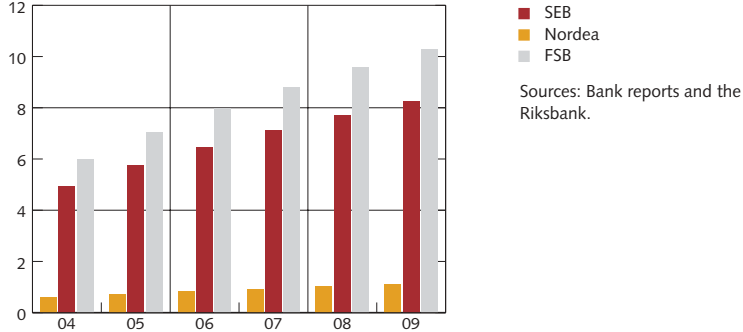
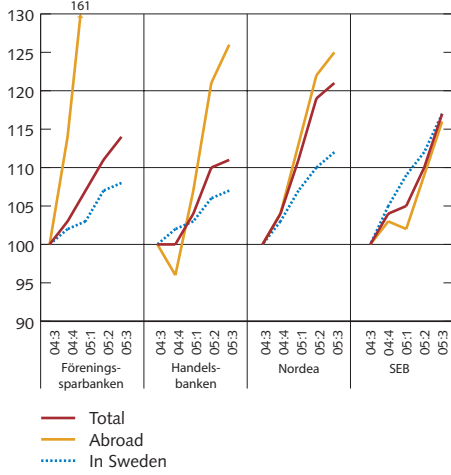
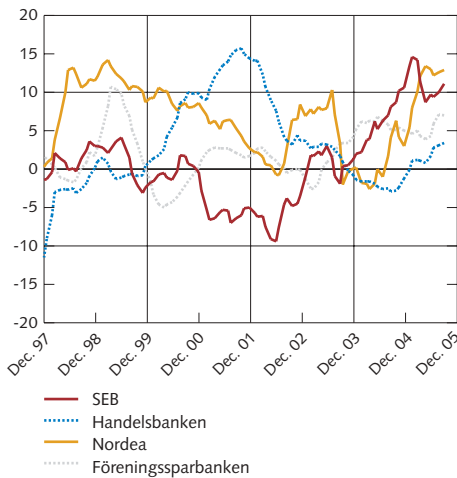


Figure 3:10. Stock of loans to the general public in Sweden and abroad.
Index: 2004 Q3 = 100



Sources: Bank reports and the Riksbank.

Figure 3:11. Lending by credit institutions to companies in Sweden.
Percentage 12-month change, moving 3-month average



Source: The Riksbank.

Assets – credit risk

The assets of the major banks rose by around 20 per cent in the latest four-quarter period and their value in June 2005 totalled over SEK 7400 billion. Increased lending contributed to the rise and so did major increases in the value of interest-bearing securities and other financial assets. The latter was partly because the new accounting standards require more assets to be booked at market value.

LENDING

Historically, crises in the banking sector have often been preceded by a rapid expansion of lending, so this can serve as a signal for closer attention, though high lending growth by no means always leads to greatly increased loan losses.

Lending by the major banks has continued to grow; in the latest four-quarter period the total loan stock rose about 17 per cent. SEB and Nordea achieved the highest annual growth rates, about 17 and 21 per cent, respectively, while growth for Handelsbanken and Förenings-sparbanken was around 11 and 14 per cent, respectively.

In the other Nordic countries, at mid 2005 the twelve-month growth of lending to households was between 11 and 14 per cent. For lending to the corporate sector, the increases lay in the narrower interval of 8 to 9 per cent. In the Baltic states, the growth of lending in annual terms was between 40 and 45 per cent, whereas growth in Germany was negligible.

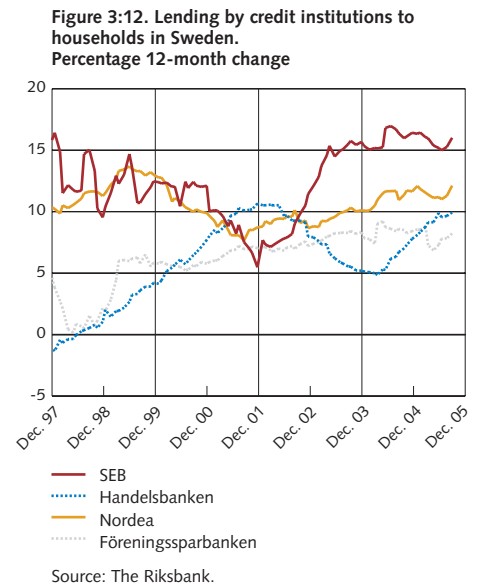
Partly as a consequence of the lack of growth in the German market, lending by SEB rose somewhat more rapidly in Sweden than in operations abroad. In contrast, lending by the other three major banks rose faster abroad (see Figure 3:10). For Förenings-sparbanken, the high growth rate is mainly explained by exposures in the Baltic states, which account for a relatively small share of this bank's total stock of loans (see also the box in this chapter).

The growth of lending by the major banks to the Swedish corporate sector in the latest four-quarter period averaged almost 5 per cent. The picture differs between these banks, with an average increase of about 11 per cent for SEB, lower rates of 5 and 6 per cent, respectively, for Förenings-sparbanken and Nordea, and an increase of little more than 1 per cent for Handelsbanken (see Figure 3:11). However, the pronounced difference is partly explained by SEB having a smaller market share than the other three banks.

Lending to the household sector is still growing at a high rate (see the section on households in Chapter 2). The increases for the major banks in the latest four-quarter period averaged 10 per cent and came almost entirely from mortgage institutions. This means that growth has not slackened since the time of the May 2005 Report and continues to be at the highest level since the early 1990s. Lending by Nordea and SEB rose at average rates of almost 12 and 16 per cent, respectively, while the average rates for Handelsbanken and

Föreningsparbanken were around 8 per cent (see Figure 3:12). Here, too, the higher rates for both SEB and Nordea are partly explained by these banks having relatively smaller shares of the Swedish market.

Even though lending to the household sector is expanding rapidly, in recent years there has been either no change or some fall in the market shares of the major banks apart from SEB. It is mainly SBAB and Danske Bank that have achieved some increase in market share, albeit from a low level.



Screening and monitoring corporate loans – survey responses from credit officers in Swedish banks

Comparatively little research has been done on how the banks actually conduct the business of screening and monitoring loans. To obtain some insight into this, during 2004 the Research Department at the Riksbank carried out a survey of loan officers in Swedish commercial banks. Responses were received from 156 officers.³⁹

Profile of the participants

The survey concentrated on corporate loans because as loans to households are relatively small and homogeneous, handling them is fairly standardised. The respondents were located all over Sweden – 27 per cent in metropolitan cities (Stockholm, Göteborg and Malmö), 57 per cent in medium-sized cities and 17 per cent in more rural areas. The size of their loan portfolios varied greatly, from a couple of million kronor up to SEK 600 million. The number of companies in a portfolio also covered a wide range, from a single (very large) client to several hundred.

It is worth noting that officers whose portfolios consist of large loans tend to have fewer clients, and vice versa, which indicates that it is the size of portfolios rather than the number of clients that determines how the work is shared out between loan officers. The credit limit (the maximum amount that an officer can grant, either independently or together with colleagues and the manager) averaged SEK 8

million. The median officer estimated that he or she received approximately 50 loan applications a year, of which three out of four were ultimately granted.

The work of loan officers

The responses indicated that, on average, loan officers spend (a) 12 per cent of their time on loans to new customers, (b) 29 per cent on new loans to existing customers, (c) 30 per cent on monitoring existing loans, and (d) 29 per cent on other work. When contacted by new customers, all officers in principle collect information from the Credit Information Centre, the Patent & Registration Office and land registers, as well as data on any current loans. The time spent by officers on screening loans (a + b) is spread over various tasks as shown in Figure B7.

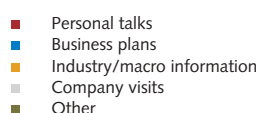
In response to the Riksbank's question as to whether the internal guidelines for screening and monitoring loans had been changed in the past 2, 5 and 10 years, 10 per cent of the participants stated that they had not. Those who stated that guidelines had been changed reported, firstly, that monitoring had become more regular and that better documentation was now required, secondly, that the bank's rules and lending policy were now clearer, and thirdly, that the analysis of companies was now more thorough and forward-looking (that is, more focused on profit and cash-flow forecasts).

Collateral

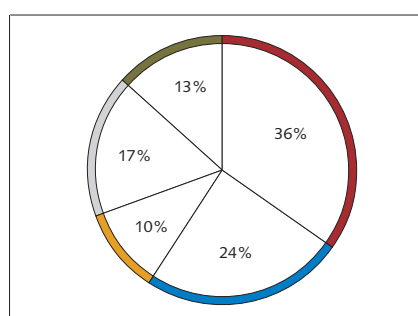
One of the main aims of the survey was to examine the role of collateral in the pricing and monitoring of loans. The average proportions of credit portfolios that are covered by different kinds of collateral are shown in Figure B8.

The officers were asked about the extent to which the price of a loan is affected by not having any collateral. The responses indicate that, on average, officers charge an additional 200 basis points or so in interest on loans with

Figure B7. Breakdown of time spent on loan screening. Per cent



Source: The Riksbank.



³⁹ The participant banks were Föreningssparbanken, Handelsbanken, Nordea, SEB, Den Danske Bank, and a number of independent savings banks. The respondents were guaranteed full anonymity.

no collateral at all and 100 basis points for loans with certain kinds of collateral. As Figure B9 shows, however, the dispersion in this respect is considerable.

A matter of particular interest was to identify any effects of the change, as of 2004, in rules for business mortgages.⁴⁰ This change replaced the earlier mortgage, which gave the total claim special preferential rights, with a new one where, in the event of bankruptcy, only half of the claim has a general preferential right and the other half has no preferential right at all.

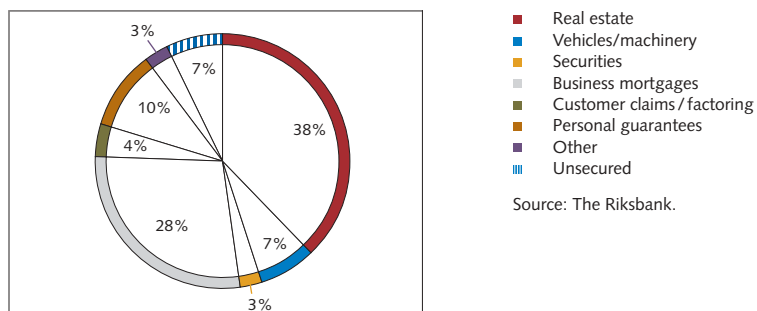
Asked whether the rule change had affected the granting of loans and collateral requirements, 27 per cent of officers stated that lending against receivables had increased, 26 per cent that they now require collateral more frequently, and 19 per cent that they make more use of property funding. However, only a few officers stated that the rule change had led to fewer or smaller loans.

Monitoring loans

If the ultimate purpose of monitoring loans is to reduce the bank's loan losses, then the intensity of monitoring should decline in relation to the extent to which loans are collateralised; at the margin, officers should give priority to loans for which the risk of credit losses is greatest. For 84 per cent of the officers, the level of collateralisation admittedly influenced how much they monitored a company. When asked whether the amount of security was *decisive* for monitoring, however, only 38 per cent stated that it was and as many as 25 per cent that it was not. Factors that were considered more important included the company's profitability, cash flow and risk profile and the size of the loan.

As many as 95 per cent of the officers considered that better monitoring reduces loan losses in the even of default and 64 per cent also held that monitoring loans helps to improve a

Figure B8. Types of collateral in loan portfolios. Per cent

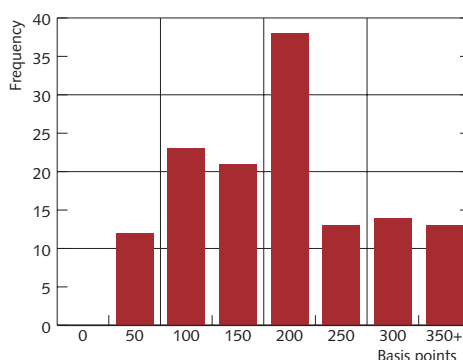


Source: The Riksbank.

company's performance because it disciplines the borrower.

Finally, the officers were asked to rank various risk factors for default. The largest risks were considered to lie in industry-specific or general economic effects, followed by a lack of entrepreneurial competence. Purely personal failings (for example the risk of the entrepreneur embezzling funds) were judged by the officers to be most unusual and were hardly perceived as risks at all.

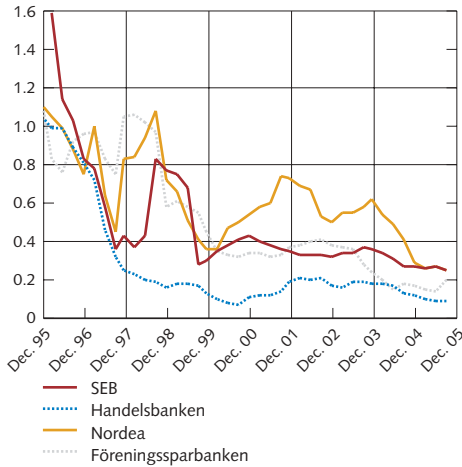
Figure B9. Interest mark-up for unsecured loans. Number of officers



Source: The Riksbank.

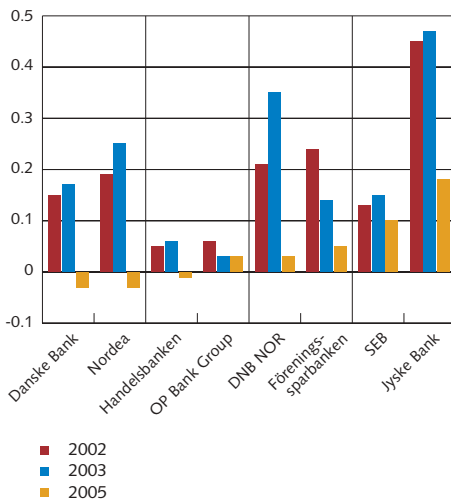
40 Law (2003:528).

Figure 3:13. Provisions for incurred and probable loan losses.
Per cent of lending, accumulated over four quarters



Sources: Bank reports and the Riksbank.

Figure 3:14. Loan losses, net.
Per cent of lending



Note. DNB NOR 2002–03 is pro forma. The data for 2005 represent the latest four-quarter period.

Sources: Bank reports and the Riksbank.

CREDIT QUALITY

An indicator of the quality of a bank's loans is provided by the ratios of impaired loans and loan losses to the total loan stock.⁴¹ Both these ratios concern existing or observable deteriorations in loan quality and therefore say nothing about the probability of further losses in the future. But they do illustrate the historical impact of macroeconomic changes and therefore provide an indication of how the quality of the banks' loans could develop.

The impaired loans ratio continued to fall for all four of the major banks, to under 1 per cent of the loan stock. In the latest four-quarter period there was also a further fall in loan losses, which are negligible. The reduction is entirely explained by lower provisions for existing and expected loan losses (see Figure 3:13). There is nothing in the reports to suggest that loan quality has deteriorated appreciably in the latest four-quarter period. This agrees with the diminishing number of defaults and lower expected default frequencies in the corporate sector (see Chapter 2).

Loan losses in the other Nordic banks have likewise continued to fall (see Figure 3:14). For Danske Bank, like Nordea and Handelsbanken, there was a positive contribution to profits because recoveries and reversals of earlier loan losses exceeded provisions for new losses.

Given the Riksbank's main scenario in the Inflation Report (2005:3), with economic growth in Sweden between 2 and 3 per cent in the years ahead, a marked increase in loan losses for cyclical reasons seems unlikely. If expected default frequencies were to go on rising and become a reality for some industries, loan losses might be affected. Another source of some uncertainty is the risks associated with the rapid growth of house mortgage lending and the higher limits to property mortgages. Together with the fact that, compared with the mid 1990s, a larger proportion of households are now borrowing at variable interest rates, this also makes households more vulnerable to interest rate movements. Although the Riksbank does not consider than possible losses from the household sector could jeopardise the banks, some increase in their loan losses may occur in the event of increased interest rates (the tendency for households to switch to fixed interest rates when the policy rate is increased is discussed in Chapter 2).

As stated before, the strong economic growth in the Baltic states could pose a certain risk. The fact that these countries are becoming increasingly important for some of the major Swedish banks, above all for income, also means that the consequences would be greater if economic growth there were to slacken.

Given the current earnings of the major banks, however, loan losses between 1.4 and 1.7 per cent of the loan stock could be

⁴¹ Impaired claims are gross before accumulated reserves; loan losses are calculated as the net of provisions for actual and expected loan losses after recoveries and reversals.

absorbed without operating at a loss that has to be covered from equity. Moreover, loan losses of 3.6 to 4.6 per cent of the loan stock could be carried without Tier 1 capital ratios falling below the statutory requirement of 4 per cent. These figures should be seen in relation to the current average level of the banks' loan losses, which is 0.02 per cent of the loan stock.

COUNTERPARTY EXPOSURES

The central role of the major banks in the Swedish payment system, as well as in the Swedish markets for securities, currency and derivatives, results in considerable exposures to counterparties and settlements. The probability of default is low as a rule because the exposures are primarily to other financial institutions and large non-financial companies. But if a default were to occur, the consequences for other banks could be serious.

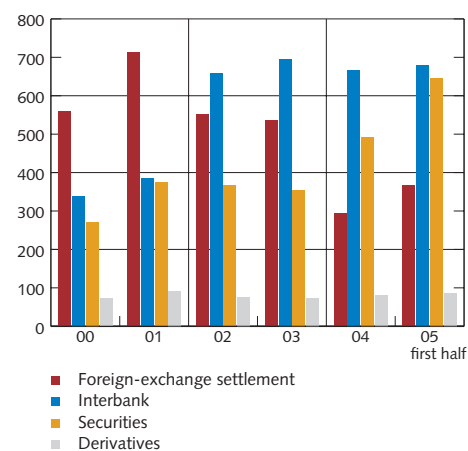
In order to monitor the risks of contagion, both within and from outside the Swedish banking system, since 1999 the Riksbank has compiled data on the counterparty and settlement exposures of the major banks. Foreign exchange settlements made up the single largest exposure item prior to 2002. Since then, these exposures have decreased, while interbank loans have grown in particular, but so have securities exposures. The reduction of settlement exposures from 2003 onwards is mainly a result of the Swedish krona's participation in Continuous Linked Settlement (CLS) (see Figure 3:15).⁴²

The combined counterparty and settlement exposures of the four major banks in the first half of 2005 were about 10 per cent larger than in the same part of 2004.

The loss by one of the major banks of a major exposure could very well lead to problems with solvency. The gravity of the solvency problem in the event of a counterparty failure depends not only on the size of the exposure but also on how much of the original claim the bank ultimately recovers. For stability, exposures to counterparties and settlements are of particular concern when the counterparty is a bank or other financial institution, because there is then a risk of problems for one bank spreading to other banks.

To gauge the risk of contagion between the major banks, tests are conducted on the interbank exposures that the banks report at quarter ends. In each period, a particular bank is assumed to have suspended payments and the effect of this is studied in terms of the Tier 1 capital ratios of the other three banks. For example, given that bank A has failed, Tier 1 capital ratios are calculated for banks B, C and D. The calculations assume that 75 per cent of the exposure to the defaulting bank is lost; a recovery rate of 25 per cent allows for the existence of collateral for a part of the exposure.

Figure 3:15. Counterparty and settlement exposures. SEK billions

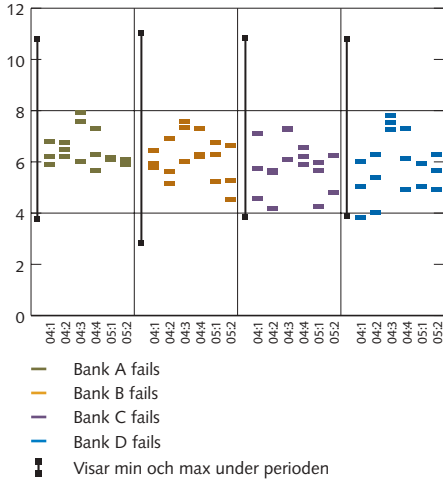


Note. CLS settlements are still included in the reports; foreign-exchange settlements have therefore been adjusted downwards by 35 per cent, which is the lowest level used according to the banks.

Source: The Riksbank.

⁴² CLS Bank provides a system for foreign exchange settlement that markedly reduces the risks that are normally associated with currency trading.

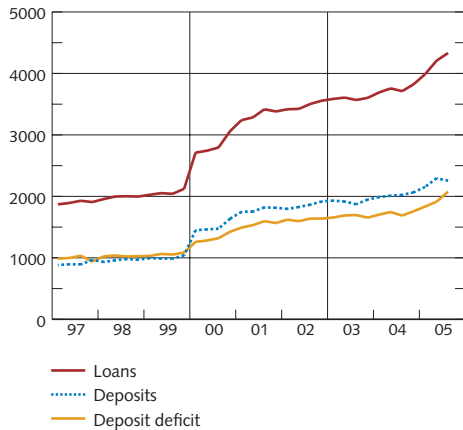
Figure 3:16. Tier 1 capital ratio in the four major Swedish banks after one of them has defaulted. Recovery 25 per cent. Per cent



Note. The effect accordingly represents a situation where a major bank suspends payments with immediate effect and with no advance warning and the possibility of recovery is judged to be comparatively small. The resultant levels of the Tier 1 capital ratios in the figure should therefore be seen as outcomes of an extreme stress test.

Source: The Riksbank.

Figure 3:17. The major banks' deposit and loan stocks. SEK billion



Note. The break at 2000 is a consequence of mergers and acquisitions.

Sources: Bank reports and the Riksbank.

The risk of contagion between the major Swedish banks must be said to be moderate. With the exposures reported for the first half of 2005, the suspension of payments by one of these banks would not have entailed solvency problems for any of the other three. During the past year, there was one occasion when a suspension of payments by bank D would have meant that the Tier 1 capital ratio of one of the other three banks would have fallen below the statutory requirement of 4 per cent (see Figure 3:16).

Besides the risk of contagion within the Swedish banking system, there is a risk of the banks encountering problems because payments are suspended by a large company or a foreign bank. In the period from 2000 to the second half of 2005, if one of the major banks had lost its largest exposure to a major company or a foreign bank, this would have caused problems with solvency in 10 per cent of the cases studied. In the first half of 2005, however, a failure would not have led to solvency problems for any of the banks.

Funding - liquidity

The structure of bank funding is a central issue for stability.⁴³ This is because the nature of banking – with predominantly illiquid assets in the form of loans, and short-term liabilities in the form of deposits and borrowed funds – renders banks vulnerable to problems with funding.

The major Swedish banks have had a deposit deficit in their domestic market since the early 1980s – lending to the public has exceeded deposits. While deposits are traditionally regarded as a stable source of funds, the interbank and securities markets are much more sensitive to confidence. The latter sources of funds are therefore likely to be the first to dry up if a bank's capacity to meet commitments were to be questioned.

The deposit deficit for the four major banks has been widening in recent decades. In 2005 the increase in bank lending has become even stronger and the deposit deficit at the end of the latest four-quarter period was about SEK 2000 billion (see Figure 3:17).

The funding gap – the deposit deficit expressed as a percentage of total lending – represents the proportion of lending that is not covered by deposits and therefore has to be funded in the market. All four of the major banks are dependent for funds on the interbank and securities markets, though to varying degrees. Föreningsparbanken and Handelsbanken fund about 60 per cent of their lending in the market, while the market funding requirements for Nordea and SEB are smaller, about 35 per cent. The requirements differ on account of differences in the composition of the banks' operations. Föreningsparbanken and Handelsbanken have relatively large operations in house mortgage lending, which entails a large securities funding requirement.

⁴³ The structure of bank funding was studied in more detail in a separate article on pp. 83–94 in *Financial Stability Report 2004:2*.

Market funding by the major banks consists to 40 per cent of interbank loans and to 60 per cent of borrowing against securities. The interbank market is used in the first place for short-term liquidity, not to fund the structural deposit deficit. The proportion of funding in the interbank market has been relatively constant since 1998. The banks issue securities to fund lending in excess of deposits. Because the loans have different maturities, the securities are also issued with different maturities, to achieve a match between assets and liabilities. Derivatives are also used for matching.

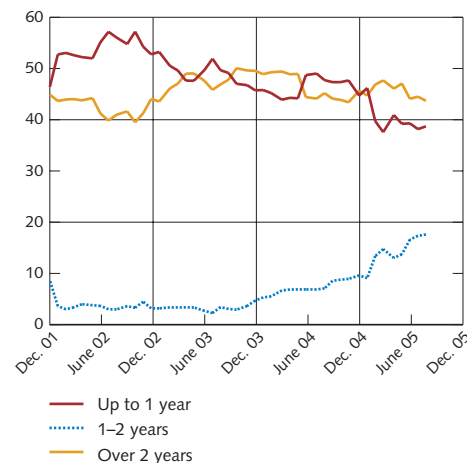
The major banks issue about 75 per cent of the total value of securities issued by Swedish credit institutions.⁴⁴ The stock of securities in the domestic operations of the major Swedish banks in 2004 was worth about SEK 1400 billion. The structure of maturities was: 40 per cent up to twelve months, 20 per cent between one and two years and 40 per cent over two years. Since 2002, the proportion with the shortest maturities (up to twelve months) has decreased and the proportion with the longest (over two years) has been relatively constant. The smallest segment, with maturities between one and two years, has grown since 2004 (see Figure 3:18).

Approximately half of the funding by the major banks is currently arranged in Swedish kronor; the banks use this currency for virtually all security issues with maturities over two years (see Figure 3:19). The second largest currency is the US dollar,⁴⁵ which is mainly used for security issues with maturities up to twelve months. As of 2002, however, the proportion of borrowing against securities denominated in US dollars has decreased in favour of increased borrowing in euro. The euro is also used to a large extent for issuing securities with maturities between one and two years. This pattern – longer maturities in SEK, medium-term mainly in EUR and short-term in USD – applies to three of the four major banks. The reason for arranging short-term borrowing in USD is that a high rating is more remunerative in the US market compared with the Swedish. On account of a high rating, certain major Swedish banks therefore obtain a better price for short-term borrowing in US dollars. For longer maturities, the difference in prices between the US and the Swedish markets is negligible, so SEK borrowing is more usual.

The distribution by currencies provides an indication of the geographic dispersion of the investors. With the introduction of the euro, investors in the major banks have become more internationally diversified. It is mainly large institutional investors, such as mutual funds and pension funds, that buy Swedish bank securities; other purchasers include relatively small savings banks.

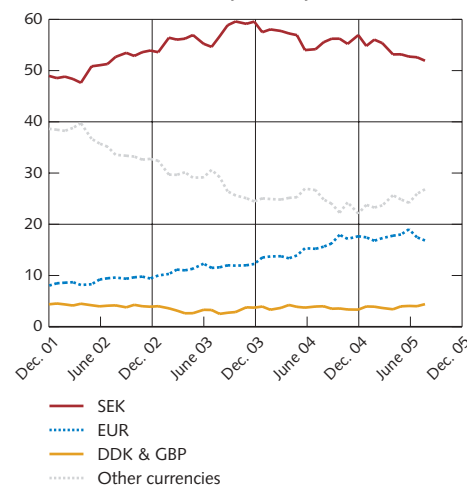
To sum up, since 2002, borrowing against securities by the major Swedish banks has decreased in the segment with the shortest maturities in favour of medium-term maturities. The major banks have also become less dependent on the US fixed-income market and more

Figure 3:18. Borrowing against securities by the Swedish banks and mortgage institutions of the major banks. Broken down by maturity. Per cent



Source: The Riksbank.

Figure 3:19. Borrowing against securities by the Swedish banks and mortgage institutions of the major banks. Broken down by currency. Per cent

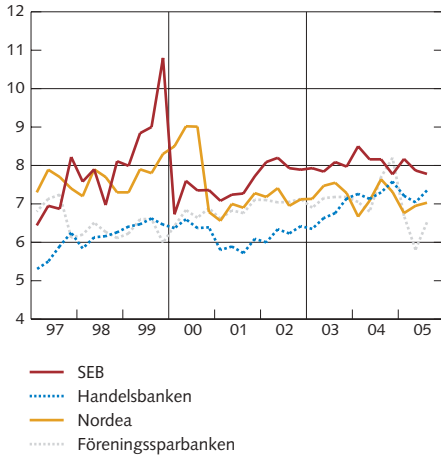


Source: The Riksbank.

44 In this paragraph, the term major banks refers only to the Swedish banks and their mortgage institutions.

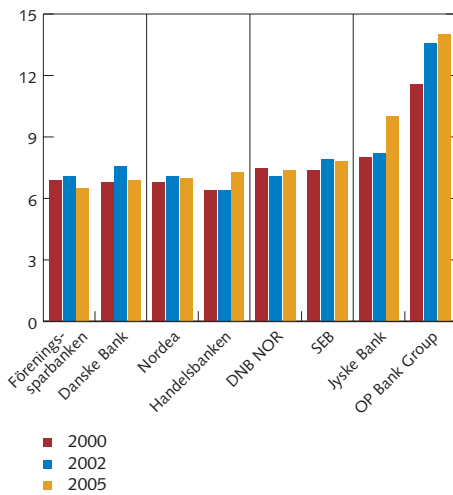
45 The US dollar is included in, but makes up over 90 per cent of, the item labelled "other currencies".

Figure 3:20. Tier 1 capital ratios.
Per cent



Sources: Bank reports and the Riksbank.

Figure 3:21. Tier 1 capital ratios of the major Nordic banks.
Per cent



Note. DNB NOR 2000 and 2002 is pro forma. The data for 2005 represent the latest four-quarter period and include either the total profit or 50 per cent of this.

Sources: Bank reports and the Riksbank.

dependent on the European in particular. The introduction of the euro has also led to a greater geographic diversification of investors. All this renders the banks less dependent on particular money markets, investors and currencies, which is positive for stability.

CAPITAL

The improved profitability of the major banks in recent years has generated increased capital (see Figure 3:20). At the end of the latest four-quarter period, the capital adequacy and Tier 1 capital ratios of these banks averaged 9.9 and 7.2 per cent, respectively.

In order to adjust the structure of capital to lower levels, the banks have distributed increased dividends and bought back equity. For some of these banks, however, the Tier 1 capital ratio is still on the high side in relation to their own objectives. At the same time, in recent years there has been a shift in capital because three of the major banks have increased the Tier 1 share for hybrid capital. The ratio of equity to risk-weighted assets has therefore not risen to the same extent. As these three banks now have only limited room for additional hybrid capital, there are less likely to be further sizeable equity buy-backs where equity is replaced by hybrid capital.⁴⁶ A Tier 1 capital ratio that exceeds the bank's target can also be justified by the banks wanting to be in a position to make acquisitions.

A majority of the major Nordic banks have a Tier 1 capital ratio between 7 and 8 per cent (see Figure 3:21). Jyske Bank in Denmark and OP Bank Group in Finland stand out with somewhat higher ratios. Part of the explanation for OP Bank Group may be that the required return differs from that of the other, listed, banks, making it less pertinent to keep capital as low as possible.

Summary assessment

Favourable conditions have led to a further improvement in the profitability of the major banks since the time of the May 2005 Report. The improvement is largely attributable to increased commission income in connection with rising equity prices and thereby increased stock-market trading. Financial items booked at market values also contributed to the improved performance, reflecting a combination of positive exchange rate movements, rising equity prices and falling long-term interest rates. Another factor behind the improved profitability was lower loan losses.

Given that margins remain small, higher net interest income requires a continued increase in the volume of lending. The growth of lending to the household sector is judged to slacken to some extent but remain high. Lending to the corporate sector has begun to pick up, with the prospect of a further increase. Although net interest is still a dominant source of income for the major banks, sizeable

⁴⁶ Hybrid capital is a form of subordinated debt that resembles equity as well as loans. Finansinspektionen's rules stipulate that not more than 15 per cent of Tier 1 capital is to consist of hybrid capital.

improvements in profitability will no doubt mainly require a continued increase in commission income and that in turn depends on rising equity prices.

Favourable market conditions, such as falling interest rates, also have a positive effect on the value of financial instruments. Some of the major banks have increased their holdings in interest-bearing paper, which indicates a somewhat higher interest rate risk. In a scenario where interest rates rise 100 basis points right across the yield curve from one day to the next and the banks realise the whole of the loss, annual profit for 2004 would be reduced by between 10 and 30 per cent.

Loan losses have continued to fall and the level is very low. Given the Riksbank's main scenario, a major future increase in loan losses seems unlikely. There is a risk of larger loan losses if the rapid economic growth in the Baltic states were to decline. However, given the current earnings of the major banks, loan losses between 3.6 and 4.6 per cent of the loan stock could be carried without falling below the statutory capital adequacy requirement of 4 per cent.

The currencies in which the major banks obtain funds have become more diversified since 2002. The banks' exposures to the US interest market in particular have been reduced, mainly through a shift to the European market. The greater diversification is positive for stability because it renders the banks less dependent on particular markets.

The Riksbank considers that the major banks' capacity for absorbing unexpected losses remains strong.

■ The financial infrastructure – aspects of the framework for banks in the EU

Despite many countries being in agreement on the fundamental objectives for supervision, deposit guarantees and crisis management, there are national differences. As banks and banking groups operate on an increasingly cross-border basis, the demand increases for some form of consolidated supervision and monitoring. In the long term, there is a lot to be said for some form of joint European regulatory framework, but other solutions may be conceivable in the shorter term.

The analysis of financial stability also covers the financial infrastructure. This consists of the systems required for payments to be made, as well as for trading, clearing and settlement of financial instruments. However, the infrastructure can be regarded as a broader concept and to also include the regulatory framework for financial activities. This framework comprises laws and regulations regarding financial activities, supervision of financial institutions and oversight of the financial system, as well as the measures authorities may take to manage crises in the financial system.

This time our chapter on the financial infrastructure is dedicated to a discussion of how the growth of cross-border banks and banking groups within the EU affects three areas of the framework – supervision, deposit guarantee schemes and crisis management.⁴⁷ The outline of the chapter is as follows. After a brief background description, there is a discussion of cross-border aspects in the three areas. This is followed by a description of possible regulatory frameworks for cross-border banking and the Riksbank's views on them.

Background

Different countries have chosen different designs for their regulatory systems. These differences are largely explained by the fact that the countries' financial systems have different structures and traditions. The retail markets have traditionally been strictly national; often with specific national characteristics. The result has been that each system is designed according to the needs of the country to which it applies.

However, several studies have shown that there would be substantial economic gains if the financial sector within the EU were to become more integrated.⁴⁸ An efficient and integrated financial sector is regarded as important for stimulating economic growth throughout the entire EU area. For many years, work within the EU has therefore been aimed at financial market integration, in

⁴⁷ The Riksbank has previously discussed these issues in several contexts, see for instance "Financial integration and responsibility for financial system stability in the EU", *Financial Stability Report 2003:2*, Sveriges Riksbank. See also the article "The road towards an internal market for financial services", *Financial Stability Report 2005:2*, Sveriges riksbank.

⁴⁸ Quantitative estimates of the economic consequences of more integrated securities markets can be found in, for instance, London Economics, (2002), "Quantification of the Macro-Economic Impact of Integration of the EU Financial Markets", November 2002. Estimates of the effects on economic growth of a more general financial integration can be found, for instance, in Guiso, Jappelli, Padula, Pagano, (2004) "Financial Market Integration and Economic Growth in the EU", CEPR Discussion Paper 4395.

accordance with the Financial Services Action Plan (FSAP) from 1999.⁴⁹ The Commission's proposals for future priorities are compiled in the green paper "Financial Services Policy 2005-2010".⁵⁰

At the same time as regulations have been developed within the EU, banking activities have changed. The number of banks with substantial cross-border activities has increased steadily. An ECB study identifies more than 40 banking groups with significant activity in more than three EU countries.⁵¹ It is thus no longer only the largest companies that can choose between domestic and foreign banks. Individuals and small to medium-sized companies now have access to a larger degree to financial services offered by foreign banking groups.⁵²

Most cross-border banking groups have arisen through acquisitions or mergers of different national banks. Initially, these banks often remain as separate and relatively independent national subsidiaries. However, this type of national organisation can make it difficult to benefit from potential synergies within the group. Many groups have therefore started organising their operations according to function; with certain functions being concentrated into centres of excellence. One example is liquidity management, which is often centralised to the parent company. There are also examples where certain subsidiaries take care of a special function for the entire group.

Three typical forms of integration can be identified:

- *Some banking groups have extensive activities in several countries.*

The Italian group Unicredito will, following the proposed merger with the German HypoVereinsbank, become a significant banking group in Austria, the Czech Republic, Germany, Hungary, Italy and Poland. The British group Barclays has extensive operations in Spain, while the Spanish Grupo Santander has substantial activities in the United Kingdom. Nordea is one of the four largest banking groups in Denmark, Finland, Norway and Sweden.

- *In some countries the financial system is dominated by foreign banking groups.*

More than 90 per cent of lending in Estonia is from Swedish and Finnish banking groups. Foreign banking groups also have

49 See: http://www.europa.eu.int/comm/internal_market/finances/docs/actionplan/index/action_en.pdf.

50 See: http://www.europa.eu.int/comm/internal_market/finances/docs/actionplan/index/green_en.pdf. This green paper will become a white paper in December after a round of consultations with member states and will then be adopted by the EU finance ministers in Ecofin. A green paper is a discussion paper published by the commission which after a consultation process can be followed by a white paper.

51 Banking Supervision Committee (2004), "Cross-border banking and its possible policy implications", December.

52 Examples of banking groups with substantial activities in several EEA countries are Barclays, Danske Bank, Erste Bank, Föreningssparbanken, Fortis, Grupo Santander, HSBC, ING, Nordea, SEB and Unicredito. The increasing number of cross-border banking groups in Europe is also described in Schoenmaker and Oosterloo (2005) "Financial Supervision in an Integrating Europe: Measuring Cross-Border Externalities", *International Finance*, 8, 1-27.

a dominant position in the domestic bank markets in the Czech Republic, Finland, Hungary, Lithuania, Poland and Slovakia.⁵³

- *Some banking groups have a significant share of their operations outside of their home country, without these operations being significant to the host country.*

Around 30 per cent of SEB's lending is to German borrowers. Developments in Germany are therefore important to SEB, but lending by SEB is only of marginal significance to the German market. Icelandic Kaupthing has almost 15 per cent of its employees in Sweden, but the group's operations are small in relation to the Swedish bank market.

Integration in the bank market entails several challenges for the regulatory framework. The contagion risks between countries increase. Differences in the design and application of the regulations make it difficult to have effective supervision and crisis management, and it also gives rise to competitive problems. The links between supervision, deposit guarantee systems and crisis management are clear. The purposes of the three areas are also the same – to reduce the risk of crises arising in banks and to reduce the negative consequences for the economy as a whole should a crisis nevertheless arise.

The integration increases demands for harmonisation and joint thinking on how different countries design their supervision, deposit guarantee schemes and crisis management so that the framework can contribute to efficient cross-border banking operations and offer well-balanced protection against shocks to the financial system.

Supervision

Financial supervision ultimately has two fundamental and preventive purposes: to avoid systemic risks – prudential supervision – and to protect consumers – consumer protection. The basic purpose of the prudential supervision of the banks is to ensure that they have properly-functioning risk management systems and that they maintain a good balance between the risks they take on and the capital and liquid funds they have at their disposal for managing potential losses or liquidity shocks. Consumer protection is mainly aimed at ensuring that consumers a) have basic protection for their assets and claims, b) are offered reasonable terms and c) receive clear, correct and relevant information on financial services.

Supervision of banks is carried out in most countries either by financial supervisory authorities, or by the central banks. The work involves several different parts. One important part is to specify rules and establish good practices. Another is to gather, compile and analyse information on the banks' operations, capitalisation and risk-

⁵³ See "EU banking structures", ECB, October 2005.

taking. A third part is to monitor that the rules are observed and in some cases to resort to sanctions.

Central banks have a responsibility for the stability of the financial system. Ultimately this is based on the possibility of quickly providing unlimited liquidity in the event of a crisis. An essential part of the central bank's regular monitoring work is to closely follow the risks borne by the largest and most important agents in the financial markets, namely the banks.

Since 1989 the EU has applied the principle of home country supervision.⁵⁴ This means that Sweden's Finansinspektionen (the Swedish Financial Supervisory Authority) is responsible for supervision of a bank that has its legal domicile in Sweden, even when the bank conducts activities through branches in other countries in the EEA. However, if a Swedish bank has subsidiaries in other countries, it is the supervisory authority in the *host* country that is responsible for the supervision of the subsidiary. Moreover, there are rules regarding consolidated supervision, whereby the home country's supervisory authorities are responsible for the group's activities in terms of solvency, large exposures and internal control mechanisms.⁵⁵

Home country supervision was introduced partly to clarify the supervisory responsibility for cross-border banks. Another purpose was to facilitate cross-border banking activities. In this way, a bank that conducts operations via branches in several EEA countries need not apply for permission in each country.

So far, however, almost all cross-border banks have chosen to conduct their operations in national subsidiaries rather than through branches, despite the greater potential for economies of scale with a branch structure.⁵⁶ The new European company statute, which facilitates the merging of companies from different member states, may possibly influence this choice.⁵⁷ The new legislation will enable public limited companies to be established on a European basis, which the German insurance and banking group Allianz has now decided to implement and which Nordea aims to implement.

CHALLENGES

The emergence of cross-border banks and groups entails a number of challenges for the regulatory framework in its current design.

One of the most important challenges is to limit the regulatory burden stemming from the requirement that banks have contact with and report to several different supervisory authorities. Different rules, implementation, supervisory practices, etc. across countries aggravate the problem. Imposing additional costs on the banks' cross-border operations will probably lead to poorer competition in the domestic

54 See Council Directive 89/646/EEC of 15 December 1989 on the coordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions, and amending Directive 77/780/EEC.

55 See Council Directive 92/30/EEC of 6 April 1992 on the supervision of credit institutions on a consolidated basis.

56 One sign of the major advantages of a branch structure is that it is unusual to have subsidiaries in the domestic market.

57 See Council Regulation (EU) 2157/2001 of 8 October 2001 on the statute for a European company (SE).

bank markets, which could lead to higher prices and a smaller selection of services for the consumers. Differences in regulations and supervisory practice also create differences in costs, which hardly contributes to a level playing field. All in all, there is a risk that the efficiency of the financial sector will deteriorate.

Another challenge is to retain a clear allocation of responsibility. When several authorities are involved, the information flow may be slowed down and responsibility for the entire group may be less clear. Despite EU regulations on consolidated supervision, there is always the risk that no supervisory authority will gain sufficient oversight of and insight into all parts of a banking group. The supervision is also complicated by the functional specialisation within the banks, which does not always follow the national and legal divisions. If, for instance, a banking group with operations in two countries has concentrated all of its credit risk management in its home country, it will probably be difficult for the host country's supervisory authority to assess the total risk in the subsidiary.

In addition, there are questions regarding the legal base for supervision of the cross-border banks and groups. In formal terms, different EC Directives regulate much of this. For many cross-border banking groups there are also Memoranda of Understanding (MoU), which more closely detail the forms for cooperation between the relevant supervisory authorities. However, in practice, not all of the legal problems have been solved. The memoranda usually work well for the regular supervision, but do not entail any legally-binding agreement. Complications can thus arise when issues come to a head, for instance, in a crisis situation.

The above discussion indicates that a more coordinated supervision of banking groups with subsidiaries in several countries is desirable and even necessary.⁵⁸ Where such supervision occurs today, it is based in the home country. This is natural as it is normally where most information is available and where the overall decisions are made. However, there are also disadvantages with increased home country supervision.

- One disadvantage is that the proximity principle may be lost. Prudential supervision requires a good knowledge of how banks and banking groups conduct their operations and manage their risks. If the company under supervision is in the same country as the supervisory authority, it facilitates contacts, information exchanges and the analysis of risks. Proximity does not only apply in a purely geographical sense; it can also refer to fundamental rules, values, language, traditions, etc.
- Another disadvantage is that the consumer protection rules and the related supervision vary between the different countries as

⁵⁸ By coordinated supervision we mean that fewer supervisory authorities are involved in the supervision of a given banking group than is currently the case. The concept is therefore broader than the more established consolidated home country supervision.

a result of different priorities and traditions. If the supervision is coordinated or centralised across borders it may be more difficult to apply consumer protection in a satisfactory manner, at least as long as the consumer protection is not entirely harmonised between the EU countries. A form of cross-border supervision, where different foreign supervisory authorities have responsibility for different banking groups in the local market would also make it more difficult to maintain consistent treatment and interpretation of consumer protection at national level.

- A further disadvantage arises when there is a discrepancy between responsibility and power of authority. From the perspective of the authorities in the host country, it is unclear how to combine responsibility for the payment system and the functioning of the domestic financial system without having the opportunity to exercise full and effective supervision over (some of) the systematically important financial companies. This problem becomes most evident for branches of foreign banks, but the problem also exists with regard to subsidiaries, particularly given the banking groups' increasing functional specialisation. A problem also arises in the home country with a national mandate and responsibility towards the government and electorate, at the same time as the supervision extends across the national borders. It is not self-evident that the supervisory authority in the home country will take into account all relevant aspects in the other countries where the banking group under supervision conducts operations.

THE WORK WITHIN THE EU

The discussions within the EU on cross-border banking activities have intensified in recent years. While the aim has been to remove any regulatory and supervisory obstacles to cross-border banking, the work has focussed on how the cooperation between the supervisory authorities can develop and how the supervision of these increasingly integrated cross-border institutions can be carried out.⁵⁹

An important piece of European legislation that will have consequences for the supervisory work is the coming capital requirements directive (CRD).⁶⁰ One consequence of the directive is namely a clearer centralisation of the prudential supervision for cross-border banking groups. According to the directive, a banking group can make *one* application for approval of its internal rating based system and receive approval for the whole group after consultation with the supervisory authorities concerned. On a group level, it is also

⁵⁹ Work is presently under way in, for instance, the EU's Economic and Financial Committee, the Financial Services Committee (FSC) and the ESCB's Banking Supervision Committee (BSC). An important part of this work is being carried out by the Committee of European Banking Supervisors (CEBS), with the participation of representatives of the supervisory authorities and central banks. One of this committee's mandates is to promote a joint implementation of the European legislation in the banking field. Through its work, the committee contributes to an increased mutual understanding of the supervisory practices in different countries.

⁶⁰ See http://europa.eu.int/comm/internal_market/bank/regcapital/index_en.htm#capitalrequire.

the supervisory authority in the home country that makes the final decision. It thereby receives increased responsibility for the supervision of capital regulation for the entire banking group. In return, there is a requirement that the supervisory authority in the host country is kept informed. However, the trend towards a more coordinated supervision is not complete. The main responsibility for the supervision of liquidity management still lies with the host country's authority.

Deposit guarantee schemes

The primary incentive for a deposit guarantee is to protect consumers. Most people are dependent on deposits in order to make payments, while they have limited opportunities to assess a bank's creditworthiness. Consumer protection is also the major aim behind both the current EC Directive⁶¹ and Swedish legislation. However, there is also a systemic protection motive behind the deposit guarantee, in that the guarantee reduces the risk of a bank run and thereby contributes to safeguarding the payment system.

In addition, the deposit guarantee is in practice part of a financing solution for a bank in crisis and thereby has a close link to both supervision and crisis management. One fundamental question in the formulation of the deposit guarantee is how it will be financed – who will pay for the guarantee and when.

The EC Directive maintains that all countries must have a deposit guarantee system and that this shall be financed by the deposit taking institutions. Since other aspects are left to the countries themselves to decide, the systems differ in several ways. The depositors, accounts and amounts that are covered by the guarantee vary. In some systems the banks pay premiums in advance, *ex ante*, in other systems they pay in arrears, *ex post*. The principles for calculating the banks' premiums also vary and in some systems a special fund is built up to cover damages. In some countries the system is administered publicly and in others it is mutually owned by the banks.

These national systems are likely to function relatively well if a small bank suffers problems. However, if one or more large banks are involved, the normal financing will probably not suffice; the tax-payers will have to bear the costs. This applies to all systems regardless of their scope, financing and administration. It is only the central government, as a consequence of its right to levy taxes, which can credibly and fully guarantee deposits in the event of major crises. Although the central government could go in as explicit insurer and extract premiums in advance on insurance grounds to cover these costs, which has been proposed by the Swedish public enquiry on deposit guarantee schemes,⁶² the present system in Sweden and other EU countries is not designed in this way.

⁶¹ Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit guarantee schemes.

⁶² Reformed system for deposit guarantee scheme, SOU 2005:16 (only available in Swedish).

The current rules for the deposit guarantee with regard to cross-border banking are similar to those applying to supervision. The home country has responsibility for deposits in its banks' foreign branches while the host country is responsible for deposits in subsidiaries.

CHALLENGES

As cross-border banks and groups take on an increasingly important role in the financial systems even outside of the home country, the design of the deposit guarantee system also faces new and more far-reaching challenges. This becomes particularly clear when the possibility to run cross-border operations in branches instead of subsidiaries increases.

One challenge arises as a consequence of differences in the financing of the national systems. As the central government always acts as ultimate guarantor of the system, there is an implied government subsidy unless the central government charges an adequate fee for the guarantee. As the financing solutions differ between countries, the size of the subsidy also varies from one system to another. This distorts competition between banks from different systems. Moreover, the financing difference gives rise to competitive effects when a bank changes system, for instance, when a bank wants to transform subsidiaries into branches. The problem becomes most evident when a bank changes from an ex post system to an ex ante system, as it entails a direct increase in costs. However, nor is entry and exit between two ex ante systems entirely problem-free, as the fees in these systems are often dependent on the relative size of the guarantee fund. The problem became clear in 2003, when Nordea announced that it planned to create a European company, transforming Nordea's current subsidiaries into branches and thereby leaving the host countries' national systems. As Nordea is a relatively large bank, this would lead to a visible reduction in deposits covered by the host countries' systems, which would thus become "over-funded", enabling a reduction in fees for the competitors remaining in these systems. At the same time, deposits in Nordea's branches would be transferred to the new home country's system, in this case in Sweden. Deposits in the home country's system would thus swell substantially and the resulting "under-funding" would necessitate increased fees in this system. If Nordea implemented a reorganisation under the current regulations, its total cost for the deposit guarantee would increase, while some of the competitors would enjoy lower costs.

Another challenge is that large differences between the systems regarding design and scope affect the level playing field. These differences are partly managed since cross-border banks have the possibility to top up their own guarantees. This means that the bank can offer a deposit guarantee equal to those of the domestic banks. However, this is only a solution to the problem when a cross-border bank's guarantee from its home country is less extensive than that

in the host country. When a cross-border bank's guarantee from its home country is more extensive or more generous than that in the host country the bank gains a natural competitive advantage, at least if there are elements of government subsidy in the financing.

These competitive effects risk making the integration of the EU's banking sector more difficult and thereby leading to poorer competition and efficiency. However, the problems should not be exaggerated. Other aspects, such as differences in market potential, capital regulation and taxation are more important factors in a bank's localisation decision. However, the design of the deposit guarantee is one factor among many that in some cases may tip the scale.

Another, completely different, challenge concerns the allocation of responsibility and costs for deposit guarantees between different countries. With regard to cross-border banks with foreign branches, the depositors are covered in the host country by protection that is ultimately provided by another country's tax-payers. This means that depositors in the host country must rely on the home country's tax-payers being able to meet their obligations. At the same time, it may be difficult for the home country's government to explain to its voters why they should pay the bill for a guarantee covering deposits in other countries. This can be a considerable burden to the home country's tax-payers, particularly if the home country is small or the branch abroad is large. All in all, this can have negative consequences for both continued integration and the general public's confidence in the banking sector and the authorities.

THE WORK WITHIN THE EU

At the beginning of this year, the European Commission began a review to analyse whether the current Deposit Guarantee Schemes Directive needs to be adjusted to achieve further harmonisation of the national systems.⁶³ Deposit guarantee issues have thus arrived on the EU agenda. However, the work is still at an early stage and there is as yet no agreement on whether further EU harmonisation is required in this field.

Crisis management

A large part of the regulatory framework for banks aims to prevent bank crises. Fortunately, crises in individual banks are relatively unusual and general banking crises are even rarer. As such systemic crises risk having serious consequences for the entire economy, the authorities must be prepared to act quickly to avoid the crisis spreading and having repercussions on the entire financial system. In the slightly longer term it is also important to find solutions to the crisis. Both parts require good preparations if the work is to be effective.

⁶³ Review of the Deposit Guarantee Schemes Directive DGS 001/2005 http://www.europa.eu.int/comm/internal_market/bank/docs/guarantee/consultationpaper_en.pdf.

The authorities involved in crisis management are primarily financial supervisory authorities, central banks and finance ministries. The financial supervisory authorities work on a prevention basis, supervising individual banks' risk-taking and capital. They can also take measures by levying fines and withdrawing licences. The central bank is the authority that provides emergency liquidity assistance to solvent banks if the stability of the financial system is threatened. If the bank is insolvent, the Ministry of Finance is responsible for providing possible support, as there is a risk of costs for tax-payers. If a bank suffers a crisis, it is very important to have close collaboration between these authorities. Even before a crisis occurs there must be agreement on the different aspects of crisis management, that is, when, how and why the authorities will intervene. As an intervention can be justified on the basis both of consumer protection and of systemic protection, the authorities need to make an overall assessment of the priorities in different situations and of their respective roles.

As the significance of the cross-border banks grows, and the risk of international contagion between the banks increase, a deeper cross-border cooperation among authorities is needed. In the same way as for supervision and the deposit guarantee, it is primarily the home country's authorities that have the formal responsibility to take action in the event of a crisis in a cross-border bank.

CHALLENGES

It is difficult to organise efficient management of a national crisis. The authorities must make rapid decisions, often based on limited information. An additional problem in solving crises is that most EU countries, including Sweden, have no laws regarding the administration of banks in distress. The countries that have experienced a crisis have had to resort to ad hoc solutions. New legislation containing clear regulations for managing banks in distress is needed.

In addition to the national problems arising when a bank is in distress, the situation is more complicated if the bank concerned is a cross-border bank or banking group. Then it is no longer merely the financial supervisory authority, the finance ministry and the central bank in one country that have to agree, but all of these authorities in several countries. Thus further complications arise regarding the exchange of information and coordination of measures. Language differences and different legal structures can often reinforce the problems.

Another problem is that there is a clear cross-border mutual dependence, which means that no single country's authorities are entirely sovereign in implementing a solution to the crisis without the risk of significant repercussions in other countries.

A further complication is that there are conflicts of interest. As bank crises tend to be unique, it is difficult to determine in advance how the costs should be divided. Although it might be possible to reach such an agreement, it is uncertain whether bank customers in

the different countries would rely on the agreement holding once an actual crisis occurred. There is also a risk that the authorities in the home country will not take full account of the economic consequences of a crisis in a bank or group that has a systemically-important branch or subsidiary in another country. The home country's authorities might be less willing to provide emergency liquidity assistance or solvency support to such a bank if it is not systemically-important in the home country.

For the host country's authorities there is a risk that the domestic opinion would not consider that the home country's authorities were doing sufficient to save a cross-border bank or group. Correspondingly, there could be pressure of opinion in the home country if its tax-payers were expected to help finance a rescue mission in a bank which had its main operations in another country. These conflicts of interest create obstacles to international agreements, but also emphasise the importance of being able to make these agreements in advance.

If the authorities in the home country and the host country come to different conclusions regarding the measures to be taken, further problems arise. For example, if the branch or subsidiary is important to the banking system in the host country and the host country's authorities wish to contribute liquidity or capital and the home country's authorities make a different assessment, the situation becomes unclear. If the bank is a branch, it would be very difficult to ensure that the funds remained in the country, but even if it is a subsidiary the possibilities of limiting the rescue action to one part of the group would probably be limited, particularly when groups have introduced a cross-border functional division of their operations. As a consequence, the host country could be forced to save the entire bank or banking group.

THE WORK WITHIN THE EU

The Nordic countries established cooperation in the field of crisis management at an early stage, resulting in an MoU between the Nordic central banks in June 2003. The MoU focuses on concrete issues regarding routines for meetings and exchange of information in connection with a crisis in a cross-border banking group. There are also agreements on how the cooperation should be conducted with regard to certain specific cross-border banking groups.

Traditionally, the EU's work in the financial market area has primarily been focussed on issues concerning competition, efficiency and ongoing supervision. Few EU Directives deal with the management of crises in banks and banking groups. In recent years, however, crisis management issues have attracted more attention and a number of EU committees are discussing these issues.⁶⁴

Examples of this work are the two Brouwer reports, which contained

⁶⁴ Examples of such committees include Ecofin, the EU's Economic and Financial Committee (EFC) the Financial Services Committee (FSC) and the group now called the Joint Task Force on Crisis Management (TFCM) and which reports to both the ESCB's Banking Supervision Committee (BSC) and the Committee of European Banking Supervisors (CEBS).

recommendations for improving the exchange of information and the cooperation between national authorities.⁶⁵ Two MoUs have now been signed by the authorities in the EU countries.⁶⁶ Together these MoUs establish a number of principles and practical details regarding the cooperation, the exchange of information and assessments between authorities and certain issues concerning the delineation of responsibilities. It should be emphasised that the MoUs are not legally binding, but rather statements of intent. The agreements thus give the national authorities considerable scope for discretion in a crisis situation.

Work is currently in progress on making the contents of these MoUs more concrete.⁶⁷ This includes identifying conflicts of interest and working to ensure a smoother exchange of information and coordination of potential measures. In addition, a common crisis management simulation exercise is planned for spring 2006, to see how the cooperation would work in practice, test the tenability of the various agreements and draw conclusions as to how the cooperation can be further developed. However, there is no concrete agreement on how to solve the potential problem of liquidity or solvency support to a cross-border bank or group.

Alternative frameworks

The challenges to supervision, deposit guarantee schemes and crisis management discussed above indicate that the framework for cross-border banking operations needs to be changed. However, there are no simple solutions, as all of the alternatives have their advantages and disadvantages. Although there are many different alternatives in practice, three main frameworks can be discerned. The first is a development of the existing framework. The second is a clearer consolidation of the framework so that supervision, deposit guarantee schemes, crisis management and responsibility will be gathered at one country's authorities for each bank or banking group. The third alternative is to centralise the framework to EU level.

DEVELOPMENT OF THE EXISTING FRAMEWORK

The first solution is to develop the existing framework, which is the goal for the present work within the EU. In practice, it means that banks with foreign branches would continue to be entirely under the supervision of the home country. The home country's deposit guarantee scheme will also continue to apply to deposits in these banks. If a crisis arises, the home country's authorities will have full responsibility for crisis management. In the perhaps more interesting case of banking groups with foreign subsidiaries, this alternative

⁶⁵ Report on financial stability, Number 143, May 2000, Economic and Financial Committee and Report on financial crisis management, Number 156, July 2001, Economic and Financial Committee.

⁶⁶ The first was signed in March 2003 by all of the central banks and supervisory authorities in the then 15 member states. The second is from May this year and covers all 25 EU member states. This time the MoU was also signed by all of the countries' finance ministries.

⁶⁷ For instance in the TFCM (see footnote 64).

entails divided supervision, where the subsidiary is under the supervision of the host country and the parent company is under the supervision of the home country. Deposits in the subsidiary and the parent company fall under the respective country's deposit guarantee scheme, with the possibility of "topping up". A potential crisis in a banking group, or a part of such a group, has to be resolved jointly, even if the national responsibility remains.

However, this solution ignores several of the problems identified. If the system is to function, an efficient system for the exchange of relevant information and assessments between authorities is required. Routines for exchanging information and for regular supervision are needed, as well as for dealing with crisis situations. Moreover, there needs to be agreement on the potential measures that can be taken against the bank. One important aspect is to ensure that both the host country's and the home country's supervisory authorities receive correct and adequate information. However, it is not always possible for all authorities in all of the countries where the banking group has operations to take part in the cooperation without creating excessively complicated and bureaucratic structures. It is therefore important to identify principles on who should participate in the cooperation and the information exchange. One proposal is to include authorities from countries where the bank has a significant share of its operations or where the bank holds a significant market share. Nevertheless, the problem of defining the concept of "significant" still remains.

Harmonisation also needs to comprise supervisory practices. Information exchange and cooperation must also be developed at all levels within the authorities. However, there are considerable practical problems. The various authority cultures mean that it may take time to develop a common practice for financial supervision and to attain a well-functioning and efficient form of cooperation. There is also a risk that poorly-arranged and cumbersome bureaucratic processes will be built up around the information exchange. Another potential problem is the confidentiality issues that arise with this type of exchange.

On the whole, the problems identified regarding the deposit guarantee still remain. It would, however, be possible within the framework of this solution to resolve most of the competitive problems by harmonising the design of the systems and removing the implied subsidies inherent in the financing of the various systems. Although it would be difficult to correctly calculate insurance-type premiums so that the subsidies disappeared entirely, harmonisation of the financing principles would reduce the distorting effects the systems have on competition.

Most of the problems with the crisis management work remain with this solution, even if the cooperation and information exchange between the different authorities concerned would improve and even if joint crisis management exercises were held to train joint information and decision-making structures.

Some of these challenges could potentially be managed by

creating special authority groups (supervisory colleges, central bank colleges, etc.) for each individual cross-border group with significant subsidiaries.⁶⁸ These supervisory groups would include representatives from the respective financial supervisory authorities or central banks. In practice, this would be a formalisation of the cooperation between the authorities. However, there are disadvantages with this structure, too. The more cross-border banks that are established, the more ad hoc groups would need to be appointed, which would risk creating a complicated structure that was difficult to oversee. There is also a risk that the regulatory framework would be less uniform if a unique combination of supervisory authorities was created for each cross-border group. The possibility to hold authorities accountable would decline with such a collective decision-making structure.

CONSOLIDATION OF THE FRAMEWORK

Another solution is to introduce a consequent consolidation of the framework in the home country. This means that supervision, deposit guarantee schemes, crisis management and responsibility would be consolidated to the home country's authorities, even for banking groups with foreign subsidiaries.⁶⁹ The home country's supervisory authority would in this solution have full responsibility for the supervision of the group. To align supervision and responsibility, the home country's deposit guarantee scheme would also apply to deposits in the group's foreign subsidiary banks. The idea of topping up can be retained to achieve a level playing field, but will now be carried out within the home country's, rather than the host country's, guarantee system. Responsibility for crisis management would also lie explicitly with the home country's authorities. In practice, this means that the subsidiary status would converge with the current branch status.

One advantage of this solution is that the authorities in the home country would have overall authority over and responsibility for the entire bank or group. This solves a number of unclear issues, but some problems still remain. It is unclear how the supervision of foreign subsidiaries will be carried out and what powers of authority the home country authorities have, for instance, to implement on site supervision and decide on sanctions against a subsidiary in another country. Strict home country supervision could also create difficulties with regard to consumer protection, as a result of different countries' priorities in this field. Some consumer protection issues could perhaps be retained by the host country's supervisory authority, but it is not clear how such a divided form of supervision would function in practice.

The problem of systemically-important branches remains. The question of to what extent the home country will take into account the stability of the financial system in the host country also remains. Now the problem is being extended to include systemically-important

⁶⁸ This type of authority group already exists, in several cases.

⁶⁹ A similar alternative has been proposed by the European Financial Services Round Table, see "On the Lead Supervisor Model and the Future of Financial Supervision in the EU", June 2005.

subsidiaries in the host country. Although the powers of authority and responsibility are possibly clearer in this solution, in practice it would be necessary to have well-developed cooperation between the different countries' central banks and finance ministries in order to manage a crisis – and share the costs.

The fundamental problem of accountability also remains; the host country's authorities have a responsibility towards their voters, while the home country's authorities' ultimate responsibility is towards the voters in the home country and not those in the host country. Some alternative suggestions have been presented for dealing with these problems. One alternative is to combine the consolidated supervision with agreements to outsource parts of the supervision to the host country's financial supervisory authority. Another alternative is to give the supervisory authority in the home country an explicit European mandate.⁷⁰ According to this alternative, the home country's authorities would have, via cooperation at EU level, an explicit mandate to also take account of the depositors, the financial system and the economies in general of the host countries. However, it is uncertain how this would work in practice.

CENTRALISATION TO EU LEVEL

A third solution is to transfer the regulatory framework for cross-border banks and banking groups to EU level. In principle, this solution would mean that a financial supervisory authority needs to be established at EU level for these cross-border institutions, that a European deposit guarantee scheme must be created and that crisis management issues would be managed by institutions at EU level. Also, those institutions must either be given their own resources in order to resolve a solvency crisis or binding undertakings from the EU countries including predetermined agreements on how to divide the costs of a crisis. With this solution, the ECB would have the explicit right to grant emergency liquidity assistance.

This solution would automatically give the authorities a European mandate, which would resolve some of the responsibility issues in that they would safeguard the payment system throughout the EU. The solution would also entail harmonisation of the treatment of cross-border banks and banking groups regardless of their home country. Uniformity would be attained with regard to regulations, supervision, deposit guarantee schemes and crisis management. Another advantage is that the competence of the supervision and crisis management could be strengthened and the deposit guarantee could spread risks over more depositors. A further advantage is that the banks' costs for observing regulations and supervision requirement would decline. At the same time, this should stimulate cross-border banking operations and thereby benefit both consumers and economic growth.

⁷⁰ This solution has been presented, for instance, in Oosterloo and Schoenmaker (2004), "A Lead Supervisor Model for Europe", *Financial Regulator*, 9, 3, 33-42 and in Schoenmaker and Oosterloo (2004) "Cross-Border Issues in European Financial Supervision", in Mayes and Wood (eds) *The Structure of Financial Regulation*, London, Routledge.

However, a European financial supervisory authority could create problems with the proximity principle for consumer protection, as this is based on national regulations. However, this problem could probably be dealt with by delegating some consumer protection issues to local authorities. The European authorities must also take into account national elements in the payment systems, as the countries have different perspectives regarding which banks are systemically-important.

Although centralisation would appear desirable from an efficiency perspective, there are other important aspects of this alternative. Centralisation means in this case that national powers of authority would be handed over to an EU body. The question of accountability must then be resolved. This requires political agreements. Another important question is how European authorities would be able to act with credibility and efficiency in a banking crisis where costs might need to be divided between the member states. It would require a prior agreement as to what principles should form the basis for burden sharing if a crisis occurs in cross-border banks or banking groups.

This central solution is, as mentioned above, primarily applicable to the cross-border banks and banking groups. That would mean that nationally-biased banks would remain under national financial supervision, under national deposit guarantee schemes and be managed by national authorities in the event of a crisis. Therefore, this type of division does not solve all coordination problems; instead it creates the need for a different type of coordination. Moreover, problems of drawing-up boundaries arise. A crisis in a national bank could easily spread to a cross-border bank or banking group, whereby both the national authorities and the EU authorities would become involved.

Conclusions

The purpose of the regulatory framework in the form of prudential supervision, deposit guarantee scheme and crisis management is partly to prevent a crisis and partly to reduce the costs to society if a crisis nevertheless occurs. There is therefore reason to emphasise how these areas of the framework interact and not merely to analyse them separately.

One basic conclusion from the discussion is that cross-border banks and banking groups require some form of consolidated supervision and oversight. From a financial stability point of view, it is important that some public authority has an overall picture of each banking group, as a bank, regardless of whether it is a bank with foreign branches or a group with foreign subsidiaries, can relatively easily and quickly move its operations, capital, liquidity and risks between its different parts. It is also essential that responsibility and powers of authority are retained at the same level. For instance, combining supervision through a central EU authority with a national responsibility for the deposit guarantee scheme and crisis

management would create an imbalance between responsibility and powers of authority.

It is furthermore important to regard the integration as a process. The solutions outlined above should not necessarily be regarded as different alternative final solutions. Some solutions can – and perhaps should – be regarded as stages in a process towards a more integrated framework.

When banks and other financial companies become increasingly pan-European there are clear economic arguments for introducing, in the long term, a joint regulatory framework, where supervision, deposit guarantee and crisis management are at European level, at least with regard to the cross-border banks. However, there are considerable political considerations that must be made first, in particular with regard to decision-making powers and accountability, which means that this solution will take some time.

There are those who consider the EU to be the wrong forum for greater harmonisation of regulations, as many banks' operations extend far beyond the EU. The same arguments that are used for EU harmonisation could therefore also advocate centralisation of supervision, deposit guarantee schemes and crisis management at a global level. However, this objection is hardly relevant. At global level there is neither the political will to take such a step nor the institutional framework that is required. Nevertheless, these basic conditions do exist at EU level – a joint ambition to create a single market for financial services and an established legislative process.

At present, it is necessary to rapidly find efficient forms for cooperation between the relevant authorities in the different countries so that the challenges of financial integration can be managed with a minimum cost to society, while awaiting more long-term solutions. This means, for instance, that the financial supervisory authorities must continue to deepen their cooperation to achieve an even greater consensus regarding regulation and supervisory practice. Achieving this requires considerable humility and flexibility with regard to the different authorities' traditions and ways of thinking. It is important that the cooperation forms established in the recently-signed MoUs are made concrete, that conflicts of interest are clearly identified and networks of relevant authorities for individual banking groups are created, and that joint crisis management exercises are performed.

It is also essential that the finance ministries are involved in order to clarify questions of responsibility. The discussion also needs to focus on how a bank or banking group with solvency problems should be managed. As crises are unusual and moreover often unpredictable and unique by nature, it is difficult to establish in advance exactly how the costs should be divided. However, it is important to discuss and reach agreements in advance on the underlying principles and the forms and mechanisms for the information exchange, the cooperation and the negotiation model that will be necessary when a crisis actually occurs.

In the Riksbank's opinion, the work within the EU at present should also promote the introduction of consolidated home

country supervision in general. The advantages and disadvantages of clear consolidation of supervisory responsibility should be further analysed. This could mean that a new EC Directive is required. To retain the connection between responsibility and powers of authority, the work should also in the long term aim for a consolidated home country principle for the deposit guarantee scheme and for crisis management.

With regard to the deposit guarantee scheme, the purpose should be to harmonise the different national systems with a focus on financing and fee structures. This could contribute to financial integration, a level playing field and ensure efficient mechanisms for crisis management within the EU. The principles⁷¹ that should apply are that:

- The deposit guarantee should be designed as an insurance policy where it is clear that the fees are premiums for the insurance protection given.
- The insurance has a government guarantee, as it is the central government that acts as ultimate insurer. This means that the tax-payers are compensated for the insurance protection offered by the government.
- The fees (premiums) are paid in advance and are sufficiently large for the system to be self-financing in the long term.
- The fees are risk-based. Higher risk banks should pay a higher premium.

Secondly, it is important to harmonise the scope of the deposit guarantee schemes, by agreeing on which institutions/agents will be exempted from the protection and which types of account will be included. It is less important to achieve consensus on the maximum coverage. However, if the member states cannot agree on the principles for financing, the harmonisation of scope and coverage will become more important.

It is also necessary for Sweden and other EU countries to introduce legislation with clear rules for winding down banks in distress, in order to facilitate the resolution of a crisis. Such legislation is a fundamental element of all crisis management and should be harmonised at EU level. As the legislation process is slow and there is now time to discuss how such a regulatory framework should look, without having an acute crisis to manage, this work should be given priority. Since such laws are virtually non-existent in the EU countries, the chances of harmonisation in this field may increase, as the different countries are less tied by established legislation and practice.

All in all, it is important that all aspects of the framework – supervision, deposit guarantee schemes and crisis management – are analysed together. With regard to financial supervision, the EU countries have already started out on the path towards a more coordinated solution. The work on deposit guarantee schemes has begun, but not yet come very far. Many countries do not wish to see any harmonisation at all. However, the crisis management aspects are the most difficult and the discussions on how the costs of a crisis should be distributed probably lie far in the future. This is where the greatest challenges lie for the EU member states.

⁷¹ In Sweden a government commission has presented these principles with regard to the Swedish deposit guarantee scheme, see SOU 2005:16 (only available in Swedish).

■ PART 2. ARTICLES

■ The road towards an internal market for financial services

There are considerable welfare gains to be realised for Europe's economies by creating more efficient cross-border markets for financial services. Some years ago the EU therefore launched the Financial Services Action Plan (FSAP). Covering a period of six years, the FSAP aimed to implement some forty measures in the financial field, most in the shape of new legislation. Furthermore a new legislative model – the Lamfalussy process – has been developed to meet the requirements for more flexible regulations with better adaptability to the high pace of change in the financial sector. Today the FSAP has been implemented on many fronts and the Lamfalussy process has begun to be applied in a number of legislation projects in the EU. The new legislative process has a number of merits compared with the previous model, but some shortcomings need to be addressed in order for it to work as intended.

Benefits of increased integration

The European financial markets have long been fragmented; each country has largely developed its own special rules, institutions and practices for financial activities. The existence of national differences in the supply of financial services is natural and reflects in large measure the particular performance and needs of each country. Until recently, this arrangement has worked reasonably well.

As Europe's economies have become more integrated, however, the drawbacks of this financial market fragmentation have become increasingly evident. The differences in regulations, conventions and supervisory approaches have entailed significant obstacles to the efficient provision of cross-border financial services. Accordingly, it also has become obvious that Europe's economies risk missing out on a number of potential efficiency gains that could benefit growth in the region.

A more integrated market for financial services could, for instance, lead to stiffer cross-border competition and better opportunities to exploit economies of scale and synergies. Greater competition in turn should result in a wider range of investment and financing services and more efficient pricing of these services. With that, expanding SMEs, for example, could be expected to gain better access to risk capital and incur lower financing costs, in the same way that a more evolved and integrated market for corporate bonds has led to a lower cost of capital for large companies. Consumers, too, would benefit from lower borrowing costs and access to a broader range of financial services. Moreover, both companies and households would have better opportunities to diversify risk. Better exploitation of scale economies should also mean cheaper and more secure ways to pay for goods and services.

The underfinancing of the public pension systems will be a big challenge for many countries in Europe in the coming decades. An increasingly large proportion of pensions have to be covered via personal saving. For society at large, a more efficient cross-border market for long-term savings products could contribute to more efficient management of these higher personal pension savings, while households could achieve a better return on savings.

All these efficiency gains could be expected to boost economic growth and help to increase employment in Europe. Exactly how large the welfare gains from a more integrated European financial sector would be is difficult to calculate. However, attempts have been made to estimate the effects of increased financial integration on the real economy in some notable studies.

In June 2004, Guiso, Jappelli, Padua and Pagano published a study of the relationship between financial integration and growth. Among other things, the study showed that European manufacturing firms would be able to boost growth by 0.6-0.7 percentage points a year if they had the same access to financing services as their American counterparts.⁷²

A study from the end of 2002 by consultancy firm London Economics focused on the efficiency gains of deeper and more liquid securities markets in the EU15 countries. One conclusion was that increased integration could be anticipated to lead to a long-term rise in real GDP of around 1.1 percentage points and to a 0.5 percentage point higher employment rate in the EU15.⁷³

Greater integration could also have positive effects on the stability of the financial system. For instance, more integrated financial markets could improve the financial system's capability to absorb shocks. They also could help to enhance the opportunities for financial institutions to manage and diversify risk. On the other hand, increased cross-border activities could make it easier for financial problems to spill over to other countries.

The Financial Services Action Plan

In the light of the potential for considerable welfare gains, financial integration has been a prioritised policy area in the EU since the end of the 1990s. A fundamental problem was that the member states' regulations differed in so many respects that it made cross-border provision of financial services in the EU difficult. In addition, the regulations were out of date in many ways and needed to be modernised to reflect the changes in the financial sector. To speed up the integration process the Financial Services Action Plan (FSAP) was launched in 1999. Covering the period 2000-2005, the FSAP aimed to implement 42 measures, most in the shape of new directives, in order to increase the harmonisation of the regulations.

⁷² Guiso, Luigi, Tullio Jappelli, Mario Padula and Marco Pagano, "Financial Market Integration and Economic growth in the EU", Centre for Economic Policy Research, *CEPR Discussion Paper Series* No. 4395, June 2004.

⁷³ Quantification of the Macro-Economic Impact of Integration of EU Financial Markets: Final Report to The European Commission - Directorate-General for the Internal Market, London Economics, November 2002.

Since then new European Community legal acts in the financial field have been prepared in rapid succession. With 40 of the 42 measures now ticked off, the FSAP today has been more or less completed. Consequently, the EU integration process for the financial services sector is now entering a new phase, with consolidation and national implementation of the common regulatory framework at the top of the agenda. In fact, it is now that much of the real work begins, not least for the financial institutions that have to adapt their practices and systems to the new rules. According to the European Commission's plans, new common legislation projects will be confined to a few priority areas, such as the market for retail financial services and asset management.⁷⁴

THE HARMONISED RULES AND REGULATIONS

As a result of the FSAP, there has been harmonisation of legislation in a number of areas of great significance for the integration of the market for financial services and for the evolution of the financial markets in Europe in general:

1. *More open and secure retail markets for financial services* through, for example, harmonised rules for remote sales of financial services, cross-border payments, insurance services, insurance broking and e-commerce in financial markets as well as common standards for providing information in connection with the offering of financial services.
2. *More secure banks and insurance companies* through, for example, new common capital adequacy requirements for banks and solvency requirements for insurance companies (the latter are still being worked out in the EU). Furthermore, agreement has been reached on rules for liquidation and other procedures in the event of insolvency in banks and insurance companies, prudential supervision of financial conglomerates and money laundering, measures that help to improve prudential supervision and reduce the risks in the financial system.
3. *More secure pension and fund saving* through harmonised rules for pension funds and other arrangements for collective investment.
4. *More secure and more integrated securities and derivatives markets* through the Market Abuse Directive and the Directive on Markets in Financial Instruments.
5. *Lower risks in securities settlement* through agreements on the pledging of financial collateral. Harmonised rules for clearing and settlement of financial instruments are also being developed.

⁷⁴ *Green Paper on Financial Services Policy (2005 - 2010)*, European Commission, Brussels, May 2005. The green paper is currently being developed into a white paper – *the Financial Services Policy Programme* – which after discussion in the EFC is expected to be adopted by the EU's finance ministers in 2006.

6. *More efficient raising of capital* through the Prospectus Directive and the Transparency Directive, which give more uniform rules for the provision of information in connection with securities issues, and not least through the new financial reporting standards, IAS, which entail more up-to-date and harmonised reporting rules for listed companies in the EU.

7. *Simpler cross-border corporate restructuring* through harmonised rules for company acquisitions. Other aspects of company law have also undergone considerable harmonisation, not least through the creation of a joint statute for a European company, "Societas Europaea". Company law in the EU is continuing to evolve and initiatives have also been taken to establish common standards for corporate governance.

The above points indicate that the harmonisation measures have been important. In terms of fostering integration the agreement on a new common financial reporting standard is presumably the single most important measure. The harmonisation of the regulations has not been unproblematic in all respects, however.

PROBLEMS IN THE HARMONISATION PROCESS

Harmonisation necessarily entails compromise. Unfortunately, the EU member states often do their utmost to ensure that the common rules involve as few changes as possible in relation to their existing national legislation and their established routines. Sweden is not much different to other countries in this regard. Not infrequently, member states try to obtain national derogations of different kinds. In some cases there also are tendencies to attempt to protect from competition financial institutions that have obtained the status of national prestige symbols, "national champions".

Therefore, the efforts to compromise result in common directives that often resemble patchwork quilts of rules with different origins and aims. As a consequence, the wording of directives is often unclear and inconsistent. That makes it difficult to interpret and comply with the common legislation. The reasons for some regulations can also be difficult to understand. It also takes time before case law is established through test cases in the Court of Justice of the European Communities.

Another result of the compromising is that the directives often become unnecessarily extensive and detailed. It seems to be politically easier to reach compromises by adding paragraphs rather than to delete some when a final text has to be agreed upon. Accordingly, there is often a tendency to over-regulate, which benefits neither developments in the financial markets nor society at large.

A third consequence is that in practice the degree of harmonisation may not become as comprehensive as intended. The endeavour to include special, nationally adapted solutions occurs at all levels and at all stages of the process. Even after a common

directive has been adopted there may be tendencies towards gold plating at national level, i.e. to add a number of national regulations to the common legislation. A problem of the exact opposite nature is the lack of zeal that many member states have demonstrated when it comes to transposing commonly agreed regulations into national legislation. It should be said that Sweden by no means is a model country in this respect. Both gold plating and under-implementation of common rules further work to the effect that the end result is not always the harmonisation intended from the outset. In the worst-case scenario it also can lead to the emergence of new barriers to entry.

That is not to say that total harmonisation always is the optimal solution. Differences in the level of development in the financial sector and other conditions mean that regulatory needs in many respects can differ widely across countries. An overly mechanical and uncritical application of the motto "one size fits all" runs the risk of cementing structures rather than increasing the opportunities for change and adjustment. Which legislation that should be harmonised and how far the harmonisation should be brought is something that generally should be given careful consideration. Increased integration can sometimes be better achieved through other solutions than common legislation. In some cases self-regulation coupled with a tougher application of EU competition policy would be more effective.

MEASURES TO ACHIEVE "BETTER REGULATION"

The above discussion shows that the requirements for, and consequences of, new common rules need to be analysed carefully in advance, but also that the regulations have to be subsequently evaluated, if the aim is to attain both high quality in the legislation and the right balance between harmonisation and national solutions.⁷⁵ To date this has not been given enough attention at EU level.

For that reason it is particularly interesting that the quality and focus of the regulation is now being emphasised so strongly under the slogan "better regulation" in the green paper from May 2005 that contains the Commission's proposed new agenda in the financial services field.⁷⁶

To guarantee high quality in regulation the aims include increasing the number of external consultations. In order to receive relevant opinions at an early stage the intention is to engage industry representatives, consumers and various experts in different reference groups, conferences, open hearings, Internet surveys, and so on – all in accordance with the Lamfalussy Committee's wishes to have a more open and transparent legislative process.⁷⁷

⁷⁵ Risks associated with introducing extensive legislation without a careful needs assessment and analysis of the costs and benefits for society at large are discussed, for example, in the article "Economic reasons for regulating the financial sector" in *Financial Stability Report 2005:1*.

⁷⁶ Green Paper on Financial Services Policy (2005 - 2010), European Commission, Brussels, May 2005. The green paper is currently being developed into a white paper, *Financial Services Policy Programme*, which after discussion in the EFC is expected to be adopted by the EU finance ministers in 2006.

⁷⁷ See "A new model for legislation, regulation and prudential supervision" further on in this article.

The Commission has also undertaken not to propose new legislation in the financial field without first carrying out detailed cost-benefit analyses that confirm the value added for European markets and consumers. With the aid of such evidence-based policymaking the Commission hopes to achieve higher quality in the legislation.

Another explicit ambition is to produce simpler legislation. Many European Community legal acts are, as mentioned, unnecessarily complicated and in numerous respects the legislation is badly arranged and difficult to interpret. To simplify and improve existing rules the Commission has declared a willingness to change and possibly remove rules that are so complex that they cause unnecessary problems for the market or have other undesirable effects. The Commission has given an assurance that it will not have any sacred cows when it comes to proposing such measures. To this end the Commission has initiated an evaluation programme that will be implemented for a number of years ahead. Such evaluations will also require extensive consultations with industry representatives and consumer interest groups, among others. The extent to which the Commission will succeed in phasing out already adopted rules remains to be seen, though.

It is essential that the directives for the financial sector are fairly uniform in terms of their approach, terminology, etc. to avoid conflicting interpretations or undue extra work for the institutions. Today, the directives in the financial field greatly lack such uniformity. In its green paper on financial services the Commission has signified an intention to carry out read-across exercises, i.e. to read and compare connected directives to identify shortcomings in consistency and propose changes to make them more coherent.

As a longer-term aim, the Commission has mentioned attempts to achieve a uniform set of rules for all European companies operating in the same industry – a European Rule Book. However, there is considerable uncertainty and differences of opinion over the exact design of such a rule book. So, for the time being there seems to be a fair distance to go before such a project can be realised.

A new model for legislation, regulation and prudential supervision

The initiation of the FSAP highlighted a problem with the normal legislative process in the EU. The process was considered too slow and rigid to handle the rapid changes in the financial sector. According to the normal process, the European Commission presents a proposal for a directive to the European Council and European Parliament. The Council and Parliament make a decision in accordance with the co-decision procedure, which places them on an equal footing.

In practice, the way the process works is that the Commission's proposed legislation is first revised and negotiated in a working group under the Council. When the national representatives in the Council have finished negotiating and arrived at a proposed text

on which they can agree, this is sent to the Parliament for a first reading. Once the Parliament has given its opinion, the text and any proposed changes or amendments is sent back to the Council, which in turn takes a position on the new draft. Following an additional discussion in the Council and its working groups, the text is sent back to the Parliament for a new reading. Not until the Council and Parliament are in agreement can the new directive be adopted. If they fail to agree, a conciliation committee is appointed, consisting of representatives of both institutions, which has to arrive at a text that is acceptable to both. In the event that an agreement still cannot be reached, the legislative process may be discontinued entirely. Normally, it takes two to three years to go from proposal to agreed directive (sometimes considerably longer). In addition there is the time it takes for national transposition, which seldom is less than one and a half years. Even minor changes of a more technical nature in the regulatory framework would need to go through this entire process. Considering the rapid developments in the financial sector, the authorities would constantly find themselves lagging behind with such a lengthy legislative procedure.

To remedy this, about a year after the FSAP had been adopted a Committee of Wise Men was formed, chaired by the Belgian Alexandre Lamfalussy. The Committee's task was to propose measures to enhance the mechanisms for adapting European legislation to the fast pace of change in the financial sector. The Committee of Wise Men presented a number of recommendations that aimed to make the legislative process more efficient.⁷⁸ The recommendations were adopted by the European Council at its meeting in Stockholm in March 2001, and the new model came to be called the Lamfalussy process. In short, the new procedure involves dividing the legislative process into four different levels, where framework principles are adopted at level one in the hierarchy, while rules of a more technical nature and regulations related to the national implementation are prepared and adopted at lower levels (see the box below).

⁷⁸ Committee of Wise Men, Final Report of the Committee of Wise Men on the Regulation of European Securities Markets, Brussels, 15 February 2001.

The Lamfalussy process

Level 1 involves the adoption of directives and regulations based on framework principles. In this part of the process the Commission – normally following extensive consultation with industry representatives, national authorities and consumer interest groups – presents a regulatory framework to the Council and Parliament. The Council and Parliament in turn adopt the legislative proposal by way of the co-decision procedure or in especially urgent cases through a fast-track approach. To further increase the speed and flexibility of the legislative process, the Committee of Wise Men suggested that a larger proportion of the legislative measures than before be implemented in the form of *regulations* instead of *directives*.

Unlike directives, regulations are directly binding for the member states and in principle must not be followed up by national legislation. Transposition of directives at national level usually takes 18 months or more.

Level 2 entails the development of more detailed rules through a comitology procedure. Under such a procedure the Council and Parliament delegate in a legislative act certain legislative decisions to the Commission. The Commission is assisted in its work by special committees which include representatives of the member states. In these committees the member states' representatives vote on the Commission's proposed decisions, after which the Commission can issue secondary legislation. The committees at level 2 include the *European Banking Committee* (EBC), the *European Securities Committee* (ESC), the *European Insurance and Occupational Pensions Committee* (EIOPC) and the *European Financial Conglomerates Committee* (EFCC).

At **level 3** the transposition of the common legislation is ensured and made as consistent as possible. This is achieved through strengthened cooperation and networking between the financial regulators

in the different member states. To this end there are a number of level 3 committees whose task it is to prepare technical guidelines for transposition at national level, specify standards, carry out peer reviews, and draw up interpretative recommendations as well as to set standards in matters that are not covered by the joint EU legislation. The committees at level 3 have no legislative powers, but are advisory bodies in the Commission's level 2 measures.

These level 3 committees include the *Committee of European Banking Supervisors* (CEBS), the *Committee of European Securities Regulators* (CESR) and the *Committee of European Insurance and Occupational Pensions Supervisors* (CEIOPS). The committees can be said to be networks of national financial regulators and central banks in the EU.

Level 4 involves the actual enforcement of the Community rules. This is primarily the Commission's task, but the member states and national regulators are expected, on the basis of the Lamfalussy model, to increase their cooperation in this field as well. Enforcement is being taken more and more seriously in the EU. In August 2005, the Commission announced that it had decided to initiate infringement procedures against a number of member states for failure to implement certain rules on time at national level. The first step in this process is that the Commission sends a formal request to the concerned country to implement the rules in question as soon as possible. If the member state fails to do so within two months or does not provide a satisfactory explanation for the delay, the matter can be referred to the Court of Justice of the European Communities.

The legal basis of the Lamfalussy model today rests on a temporary agreement between the EU Commission, the EU Council and the EU Parliament. This agreement includes sunset clauses, which give the

Commission the right to issue level 2 measures for a limited period, after which the Commission cannot continue to issue such measures without first acquiring renewed delegation from the Parliament and Council. The clauses also give the Parliament the right to revoke level 2 legislation within the sunset period. The purpose of these sunset clauses is to give the Parliament and Council control possibilities for that part of the legislation that has been delegated to the Commission in accordance with a comitology procedure.

The Lamfalussy process was originally intended for the regulation of the securities markets, but through an agreement between the Commission, the Council and the Parliament has been widened to include banking, insurance and mutual fund operations. The first European Community directives to be drawn up with the aid of the Lamfalussy process include the Prospectus Directive, the Market Abuse Directive and the Directive on Markets in Financial Instruments.

APPLICATION OF THE LAMFALUSSY PROCESS

The new regulatory process entails increased cooperation and coordination among national supervisors and a pressure for greater convergence of supervisory methods and detailed rules. This higher cooperation between supervisors in Europe is necessary for effective prudential supervision and is also sure to contribute to many synergies in that field. In the level 3 committees much has already been accomplished to strengthen cooperation. CEBS, i.e. the level 3 committee for banking supervision, has drawn up a common standard for how supervisors in the EU should provide information about laws, rules and supervisory methods. The committee has also agreed on a programme to build a more consistent supervisory culture, among other things with the aid of common training and staff exchange. A concrete example of successful cooperation is the creation of a single format for capital adequacy reports in the EU, which should both reduce banks' reporting costs and facilitate consolidated prudential supervision.

Even though the Lamfalussy process has proved to be a success in many respects, the application of the new legislative model has revealed a number of deficiencies – or teething problems – that need to be addressed if the model is to work fully as intended.

As mentioned earlier, one of the basic ideas behind the Lamfalussy process is that the rules at level 1 are to take the form of framework principles. In spite of that, the directives drawn up with the aid of the new model so far have had a marked tendency to become highly comprehensive and detailed. In the Prospectus Directive, the Market Abuse Directive and the Directive on Markets in Financial Instruments the degree of detail has been far too high. That the Lamfalussy process has not, as planned, resulted in less extensive and less detailed directives is a problem.

At the same time as the level 1 rules have been overly detailed there has sometimes been a tendency to delegate politically controversial matters to level 2, or in practice to officials at level 3. Thus, matters that in reality require higher-level agreement have been passed on to levels at which the mandate, the forms for enforcing accountability and other prospects for resolving them are inadequate. Not least in the Directive on Markets in Financial Instruments a large number of tough issues – for example, the extent to which investment companies are to be affected by the controversial rules for pre-trade transparency – have been temporarily swept under the carpet by referring the solutions to level 2 and the level 3 committee for securities regulation, CESR.⁷⁹

The introduction of level 3 in the legislative process means that the expertise of national supervisors and central banks can be better utilised. That should guarantee higher quality in the legislation. In

⁷⁹ This applies to article 27 of the Directive on Markets in Financial Instruments and investment firms that systematically and frequently execute customers' orders against their own account should have to make a fixed bid in advance.

addition, it seems to mean that urgent measures will also actually be realised. In some cases, though, shortcomings have arisen in the decision-making arrangements because the boundary between the legislator and the object of the legislation has not been kept distinct. For instance, as regards the design of supervisory regulations and solvency requirements for insurance companies, CEIOPS, i.e. the level 3 committee for insurance supervisors, has in practice formulated the Commission's legislative proposals. While utilising the expertise that exists in a certain field to attain high quality in legislation is important, there is a danger when a group that is clearly an interested party in certain legislation also obtains an overly dominant influence over its design. In such a case there is an obvious risk that the legislation will become too focused on specific supervisory objectives and lack the overall view that is needed if it is to benefit the situation in the financial sector as a whole.

For the Lamfalussy process to work as intended it is necessary to seek out ways to achieve a clearer dividing line between the framework principles and the detailed rules.

Another problem is the silo structure according to which the committees at levels 2 and 3 have been organised. These committees have been divided into highly demarcated sectors – banks, securities and insurance – and there is no group with cross-sector responsibility. Integration not only occurs over geographical boundaries, however, but also across industries and sectors. This happens both when companies in different industries are merged to form a conglomerate and through different kinds of cooperation agreement (for example, a bank can conclude an agreement with an insurance company to sell insurance products to its bank customers). The sectoral integration has been met by increased consolidation of supervisory activities at national level, a development that is not reflected in the EU's committee structure.⁸⁰ The silo structure in the EU committees risks counteracting the objectives of consolidated prudential supervision and convergence of supervisory methods across industry boundaries. It also could result in the development of separate regulatory and supervisory approaches for different activities, also in cases where the risks in the activities are fundamentally the same. Moreover, there is a danger that innovation and the generation of synergies in supervision will suffer. There have been some attempts to remedy this problem through increased chairman cooperation in the level 3 committees. To date, though, the resources required to develop this cooperation have been lacking. It should be said that this sector division not only exists at the lower levels in the process. Similar tendencies appear already when working groups are put together to draw up directive proposals.

Another problem concerning the lack of an overall view is that issues risk being overlooked or being brought up in inappropriate

⁸⁰ Austria, Belgium, Denmark, Germany, Ireland, Sweden and the UK are examples of countries that have concentrated the responsibility for their financial supervision in one authority. Finland, Luxembourg and the Netherlands also have achieved a high degree of integration in their supervision, even though they have not come as far as to gather all supervision under one roof.

fora. For example, questions relating to deposit guarantees are raised in committees in which deposit guarantee authorities are not represented. In addition, crisis management matters are dealt with as a separate issue and are not brought up when discussing other parts of the financial sector safety net. In most cases it would be desirable to deal with these questions as a package covering prudential supervision, deposit protection, emergency liquidity assistance and management of insolvent institutions, which normally involves several national authorities.

Also, there is no uniform model for cooperation between supervisory authorities. For instance, in the Directive on Markets in Financial Instruments it is compulsory in some cases to establish cooperation arrangements between the home country's and host country's supervisors. In the Financial Conglomerates Directive the member states must appoint an authority with chief responsibility for coordinating the various supervisors (a co-ordinator). In the Capital Requirements Directive the starting point instead is collegiate discussion, whereby the home country supervisor first tries to reach agreement with the host country counterpart, and second, in the absence of agreement, home country supervision applies. The Market Abuse Directive prescribes the use of a special mediator to resolve conflicts between supervisors. The Prospective Directive provides the opportunity to delegate some responsibility from one supervisor to another. So there are many, different forms of cooperation, a result of the fact that the silo structure already comes into play at directive level. A more uniform structure for cooperation seems desirable, partly to prevent important issues from falling through the cracks and partly so that the concerned institutions meet uniform supervision for the sectors in which they operate.

The new regulatory model means that a large number of supervisors from different countries have to agree on several detailed rules and supervisory methods. This results in pressure – at level 3 as well – to add more regulations to an already detailed and comprehensive directive in order to achieve necessary compromise. It is important to heed the risk of over-regulation and to ensure that the new model is not implemented in a way that simply entails an additional layer of bureaucracy in the European legislative process.

The intention in the EU is to draw up a "roadmap for supervision" until spring 2006, partly to review the possibilities to remedy the lack of an overall view and overall solutions in supervisor cooperation. A number of member states have put forward the idea of a single EU supervisor, while others so far have remained sceptical about the idea.⁸¹ What is important, though, is that the regulatory process and supervisory structure in the EU be regularly evaluated and developed so as to create the best possible conditions for an efficient internal market for financial services.

⁸¹ See also the infrastructure chapter in this Report.

Remaining obstacles to integration

INDIRECT OBSTACLES

That there still exists a large number of implicit and informal obstacles to integration was highlighted at the informal ECOFIN meeting in Scheveningen in September 2004. Among other things, market practices can show considerable differences that hamper integration. These can include the margins that are acceptable for certain financial products, separate fee structures for unit-linked insurance policies, and so on. Differences in language, culture and communication also unavoidably contribute to slower integration in some areas. However, among the more serious problems is national supervisors' use of stricter rules for foreign companies than for domestic ones. Unfortunately, there is no shortage of current, concrete examples of how national authorities have raised obstacles to obstruct foreign establishment.⁸² An important task is to remove this kind of hurdle so that cross-border investment and competition genuinely gather momentum in practice.

DIFFERENCES IN LEGAL SYSTEMS

Even with a far-reaching harmonisation of financial regulations and convergence of prudential supervision, many obstacles remain in the way of a truly functioning internal market. One factor that at times appears to be more crucial for integration than dissimilarities in specific rules is differences in legal systems and legal application in general. The circumstances can differ widely depending on whether the potential investor or the company looking to carry on financial activities meets a legal system based on the Anglo-Saxon legal tradition or on various traditions in mainland Europe, of which French, German and Scandinavian law are particular varieties.⁸³

For those contemplating providing or using a financial service in a different member state, the differences in legal systems can be such a great source of uncertainty that they do not dare take the step over national boundaries. Identifying such sources of uncertainty and strengthening the legal security regarding how laws and rules will be applied is important if cross-border activities are to grow.

DIFFERENCES IN TAX SYSTEMS

One of the biggest obstacles to financial integration is the considerable differences in taxation that exist across different EU countries. The dissimilarities are found in both levels and systems, where differences in tax levels are probably of less significance than differences in the design of tax systems, for example as regards the bases used to calculate tax.

⁸² For example, Italy's central bank governor, Antonio Fazio, recently intervened to stop Dutch attempts to take over an Italian bank.

⁸³ For an overview see, for example, La Porta, Lopez-de-Silanes, Shleifer and Vishny, "Law and Finance", *Journal of Political Economy*, 1998, vol. 106, no. 6. See also Michael Bogdan, *Komparativ rättskunskap, Nordstedts Juridik*, 1993.

Differences in tax systems can be a serious stumbling block for the production of financial services when it comes to, for example, the opportunities to take effective advantage of economies of scale; among other things because the differences contribute to major costs for cross-border mergers. Nor do the big differences between countries in terms of the possibilities to set off losses against profits, taxation of capital gains and yield, etc. facilitate cross-border consolidation. Transferring funds between companies in the same group can involve extensive formalities and sometimes also double taxation. For example, VAT that has been paid in one country is not always tax deductible in another.

Differences in taxation essentially create opportunities for tax arbitrage. Even though for most companies this may undoubtedly be both difficult and costly in practice, tax differences may make it profitable for firms to invest considerable resources in finding the most favourable tax location for their activities. From a European perspective, though, this would hardly be an efficient use of resources. On top of this, there are significant costs for companies associated with having to familiarise themselves with several different tax systems and with developing internal routines for taking account of changing taxation bases and tax rates.

For distribution, too, tax differences constitute major obstacles to an efficient cross-border supply of financial products in retail markets. For instance, differences in taxation on capital income and on returns on securities have a big effect in this regard. The development of financial products in the retail market is not infrequently driven by tax factors. Tax differences make it difficult to offer a uniform range of products over national boundaries. The fact that certain select products sometimes are given favourable tax treatment in some countries also is a factor that hampers effective integration.

COOPERATION BETWEEN THE EU AND OTHER COUNTRIES

In the EU, harmonisation is part of the implementation of the internal market. However, financial activities are very much a global phenomenon, and cross-border financial business is carried on to a great extent between the EU and other countries. Consequently, discussions are being held between the EU and the US and between the EU and some of the Asian countries regarding regulation of the financial markets. Of these dialogues, the one with the US has been going on the longest and some strides have been made, among other things regarding cooperation models for financial conglomerates and the adoption of the Sarbanes-Oxley Act.⁸⁴ Negotiations are also ongoing concerning mutual recognition of the financial reporting standards US GAAP and IAS. An evaluation is planned to take place during the period 2007-2009. A dialogue between the EU and the US

⁸⁴ The Sarbanes-Oxley Act was adopted in the United States in 2002 to strengthen corporate governance and restore investor confidence following a number of publicised corporate scandals.

is also being conducted regarding the coordination of the European Capital Requirements Directive (CRD) and the Basel II agreement, i.e. the G10 countries' capital accord. Other present examples concern the possibility to deregister securities from US securities exchanges, cooperation models for insurance supervision, and accounting supervision.

In the EU, the harmonisation work will of course continue since it is part of achieving an internal market. The discussions with other countries, which do not have the same agenda, must not be allowed to obstruct this. The EU having a common view on these matters also facilitates success in negotiations with other countries.

Conclusions

There are large potential gains to be realised for Europe's economies, companies and citizens from increased integration of the markets for financial services. The financial sector facilitates integration in other areas as well and therefore is essential for growth and welfare in the region. The current efforts to create a well-functioning internal market for financial services are thus important.

The Lamfalussy process has been developed to achieve a more efficient legislative process in the financial field, and it is important to safeguard this new model. That does not mean that there is no room for improvement, however. This article has highlighted a number of shortcomings that need to be rectified if the new process is to work as intended. Not least, there is reason to further clarify the boundaries between the different levels in the process.

Cooperation between supervisors is currently being developed at a fast pace and with concrete results as regards norms and supervisory practices, for example. This is encouraging. At the same time, it is important to widen the overall view in this cooperation, partly to avoid the development of dissimilar approaches for different parts of the financial sector where the risks are fundamentally the same, and partly because integration is fostered by more uniform supervision for institutions. From the Riksbank's perspective, it is important that the cooperation in the field of prudential supervision extends over both day-to-day supervision and cross-border crisis management. The increased integration suggests that the cooperation might need to be supplemented with some kind of common European supervision. The establishment of such supervision raises a number of difficult questions, though, including how decision-making powers and the ability to demand accountability should be transferred. Consequently, this is probably an issue that can only be resolved in the longer term.

Harmonisation requires many, often difficult sacrifices at national level. To achieve all the common positive effects that a more integrated financial services sector can give rise to, a high level of willingness and readiness will be necessary from nations, authorities and individual decision-makers to give up their own cherished ways.

Thus, it is necessary to be disciplined as regards gold plating and national derogations. Without that, the goal of a well-functioning internal market for financial services will not be achieved. Here, the Commission's monitoring of national implementation also plays a significant role.

The EU's common legislation is highly detailed and comprehensive. In addition, large parts of it are complex and difficult to interpret. All the member states and participants in the negotiation process are to blame for these flaws and are now paying the price for them. It is essential that new legislation projects are subjected to well-founded cost-benefit analyses and that all measures for simplifying, clarifying and checking the concordance between the existing regulations really are implemented. The European Commission's explicit objective of better regulation shows that it is aware of the problems, and marks – as it seems – a turnaround in the EU's regulation culture. However, it remains for the Commission to prove that it can turn its intentions into action. If the ambitions for better regulation are to be realised it also is necessary that the European Parliament and the member states themselves give their active support.

The new Constitutional Treaty would have given the Lamfalussy process a firmer legal foundation on which to stand. Without ratification of the constitution the ground will be less stable. It would be unfortunate if the important strides that have been made were to be jeopardised owing to disagreement over the Parliament's role. It also could have adverse consequences for the financial integration process. Therefore, if the Lamfalussy process is to survive in the long run, new ways must be sought to give the Parliament adequate assurances of reasonable influence.

Even with a far-reaching harmonisation of financial regulations and convergence of prudential supervision, many obstacles remain in the way of an efficiently functioning internal market. One of the biggest stumbling blocks for integration is differences in tax systems. Here, it is likely that the structural differences between the systems are more critical than differences in tax levels. Convergence of the tax systems in the EU would foster integration, which in all likelihood also would boost growth and welfare in the region. Tax issues are among the politically most sensitive and most controversial in the EU cooperation and therefore are seldom popular to bring up on the European agenda. In order to attain an internal market that really functions, it is nonetheless inevitable that these issues will need to be discussed in earnest.

■ House price developments in Sweden and abroad

In the past decade, house prices have risen rapidly in many countries, including Sweden. That has given rise to a debate on the sustainability of the price increases and on the consequences of a possible future price decline. Low interest rates and rising disposable incomes are common denominators in many of the countries where house prices have risen. In this article the Riksbank investigates how a number of explanatory factors have contributed to the developments in Swedish house prices. The models show that Swedish house price developments essentially are explained by low interest rates, increasing disposable incomes and low construction activity. Thus, it also follows that the rate of the price increases could slow or that prices could drop if interest rates were to rise or incomes fall.

Since the mid-1990s, house prices have risen rapidly in many countries, including Sweden. Moreover, the upswing in house prices has lasted longer and has been sharper than in previous boom periods. However, for the last year or so the upturn has slowed in some of the countries (see Figures 1 and 2).

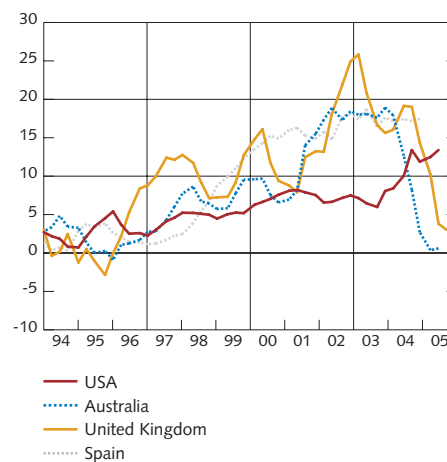
The most marked slowdown has been seen in the United Kingdom and Australia, following rises in interest rates there. In Australia, the slowdown occurred with a lag, however. Even though the Reserve Bank of Australia began monetary tightening in 2002, house prices continued to grow by just over 15 per cent in annual terms and the rate did not slow until early spring 2004. House price increases in Ireland also have slackened somewhat in the past four quarters, and in the Netherlands house prices have increased slower over the last four years.

In Spain, however, house price inflation has continued to pick up since the end of the 1990s, with prices rising by just over 15 per cent in annual terms since the beginning of 2000. In the United States, too, the rate of price increases is continuing to rise. In the second quarter this year, prices increased by just over 13 per cent, which was somewhat faster than in the first quarter and the highest level since the end of the 1970s. Unlike Australia and the United Kingdom, the rate of price increases has picked up in spite of the rise in market interest rates since 2004. That is because mortgage rates have not risen in line with the increase in short-term market rates.

In spite of the fact that the rate of increase in house prices has slowed in some countries recently, the level of house prices is deemed to be comparatively high in many places. A number of commentators have long claimed that the recent years' global upswing in house prices cannot be explained by factors that normally are significant for house price developments, such as interest rates, incomes, construction and demographic factors. If so, this could lead to sharper price adjustments in the period ahead.⁸⁵

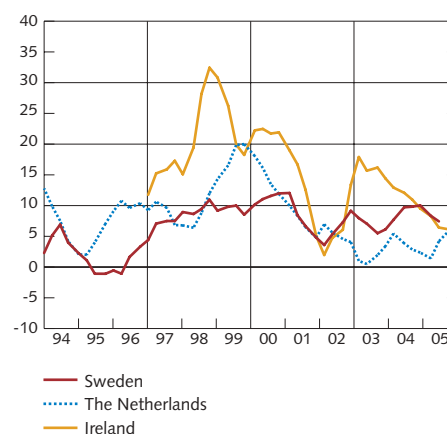
⁸⁵ For the stability analysis, the focus is first and foremost on the effects that such price falls can have on the value of households' collateral. However, house price developments have also been a feature of monetary policy discussions in Sweden in recent years, since the value of housing affects households' wealth and therefore also their consumption.

Figure 1. Nominal house prices. Annual percentage change



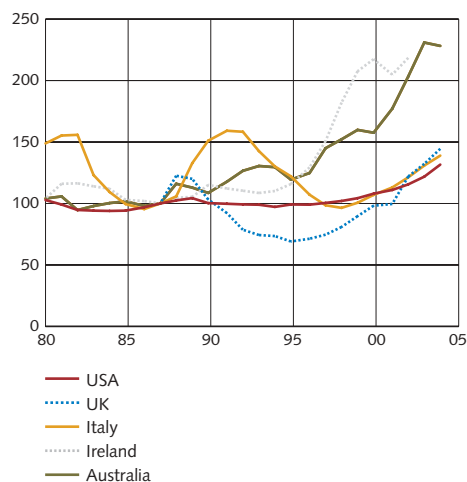
Sources: EcoWin and Australian Property Monitor.

Figure 2. Nominal house prices. Annual percentage change



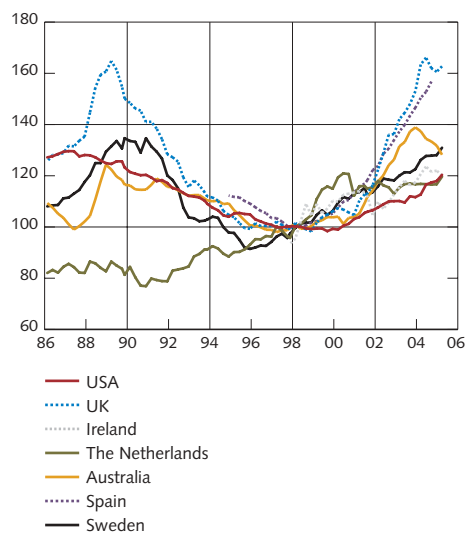
Source: EcoWin.

Figure 3. House prices in relation to rents.
Index: 1987=100



Sources: BIS and CBFSAI Financial Stability Report 2004.

Figure 4. House prices in relation to GDP.
Index: 1998 = 100



Sources: Ecowin and the Riksbank.

One way to assess how reasonable the price developments are is to look at the relationship between prices and housing rents. The idea is that since rents represent the cash flow generated from a housing investment, prices and rents should track one another. For Sweden the measure is not relevant since the rental market is regulated.⁸⁶

In many countries, prices have outpaced rents for a period. Figure 3 shows that prices in the United Kingdom, Australia and Ireland have increased much quicker than rents since the mid-1990s. Similarly, house prices in the United States have risen more rapidly than rents, albeit at a somewhat slower rate compared with other countries. In 2004, prices increased by 11 per cent whereas rents only rose by between 2 and 3 per cent. This trend continued in the first half of 2005 as well.

Another way to assess the reasonableness of the price increases is to study house prices in relation to incomes, because in the long run prices should reasonably rise in line with incomes. Figure 4 shows the developments in this measure in seven countries, including Sweden. Due to a lack of comparable data for household disposable incomes, GDP is used instead.

In the Netherlands, growth in house prices considerably outpaced GDP growth up until the start of 2000. Since then, GDP and house prices have moved in parallel. Developments in the United Kingdom, Australia and Sweden have been comparable since the end of the 1990s, but in the past year the situation has been different. While the ratio rose in Sweden in 2004, it dropped in Australia and the United Kingdom. Similarly, US house prices have increased faster than GDP recently, although the upturn has been somewhat more subdued than in the other countries. That has also been the case in Ireland, where developments since 2000 have followed those in the United States. In Spain, however, house prices have risen much faster than GDP since the end of the 1990s.

WHY HAVE HOUSE PRICES RISEN?

Irrespective of opinions on the level of house prices, there are a number of common factors that in all likelihood have influenced house price developments both in Sweden and other countries.

- Since the mid-1990s, *interest rates* and inflation volatility have dropped sharply. Lower interest rates imply lower financing costs for households. To the extent that lower interest rates are perceived to be permanent, households thus can afford to borrow more, which tends to push up house prices. In many countries, the rise in house prices and build-up of household debt have gone hand in hand.

⁸⁶ For many countries in general the measure has some shortcomings, such as the difficulty in determining what is a long-term equilibrium level, uncertainty over both price and rent data, different rules for the rental market as well as time-dependent transaction costs.

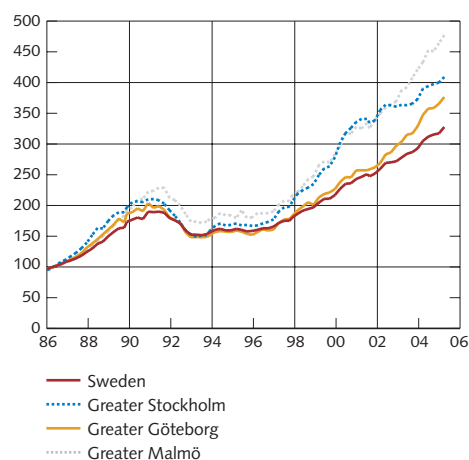
- Rising *disposable incomes* in the household sector in many countries have fuelled house price increases because households can afford to pay more for their homes. Higher incomes in combination with lower interest rates also have meant that more households have gained access to the credit market, thereby helping to boost demand for houses and loans.
- *Demographic factors* may also have influenced house price developments. In the United Kingdom and Denmark, there are signs that the proportion of first-time buyers, in relation to the total population, may have a positive impact on house prices. When a large number of first-time buyers enter the housing market the demand for houses should increase, leading to a rise in prices.⁸⁷
- Furthermore, *changes in the mortgage* market seem to have contributed to the house price developments. Improvements in information technology – advances in computer programs, databases and statistical computation methods – coupled with financial innovations, have created higher efficiency. In combination with increased competition, this has helped to squeeze credit institutions' margins, thus lowering mortgage rates. Technological improvements also have enabled better pricing of risk and return on the underlying collateral and meant that it is easier for borrowers and lenders to obtain information about each other. In addition, to some extent mortgage institutions have increased their loan-to-value ratio. Also, households today can choose between a larger range of mortgage contracts with different terms and conditions. Variable-rate contracts recently have stood out as an attractive option. In some countries there also is growing interest in loans with interest-only payments over a number of years, or even loans that have an initially negative amortization plan. When the total mortgage cost comprises interest payments only there is a greater opportunity to borrow larger amounts.⁸⁸

The countries do differ in some respects, though. That is often due to the fundamental differences that exist between the national housing markets and the housing finance markets. For example, US households have a pre-payment option on mortgages without incurring a penalty fee, an opportunity that is not available to households in most other countries. With no penalty fees, or lower ones, households' flexibility increases and transaction costs fall.

87 For the United Kingdom, see Pain, S and Westaway, P (1997): "Modelling Structural Change in the U.K. Housing Market: A comparison of alternative house price models" *Economic Modelling*, 14, p. 587–560 or Holly, S. and Jones, N (1997): "House prices since the 1940s: cointegration, demography and asymmetries", *Economic Modelling*, 14, 549-565. As regards the proportion of first-time buyers and house prices in Denmark, see: "Pristigninger på boligmarkedet", Økonomisk Tema, No. 1 August 2005, Økonomi- og Erhvervsministeriet.

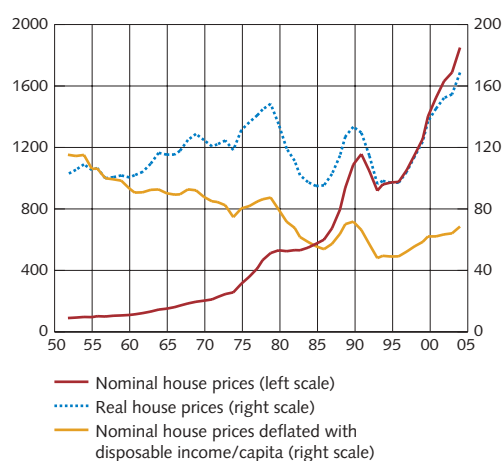
88 See, for example, the European Commission (2005), "The Costs and Benefits of Integration of EU Mortgage Markets".

Figure 5. House prices in Sweden.
Index: 1986 = 100



Source: Statistics Sweden.

Figure 6. Nominal house prices, real house prices and prices in relation to disposable income.
Index: 1957 = 100



Source: Statistics Sweden.

The existence of a buy-to-let market in some countries – where individuals buy a home with a view to letting it – has also probably contributed to house price developments. That applies in particular to Australia, but also to the United Kingdom, the United States and Ireland. If a substantial share of lending to the housing sector is for buy-to-let purposes it increases the chances of speculation in the housing market. In Australia, this kind of investment loan comprises 45 per cent of household lending, whereas the corresponding share in the United Kingdom is around 6 per cent. In the United States, the share is approximately 10 per cent of lending, but that includes purchases of second homes. In Sweden, the phenomenon is essentially unheard of.

Another distinctive feature is the occurrence of sub-prime lending, that is to say, lending to households with low or inadequate creditworthiness. Among the countries in this article, the practice occurs mainly in the United States, but also in the United Kingdom and Australia. It also has been introduced recently in Sweden, although still on a small scale. This kind of lending makes it possible for more households to take mortgages, which is likely to lead to rises in house prices.

House prices in Sweden

In Sweden, house prices have increased more or less constantly since the mid-1990s. In 2005, the prices have risen somewhat slower than in 2004, but the rate of increase is still comparatively high. Quarterly data show that house prices rose by 7.4 per cent between the second quarter this year and the second quarter last year. According to monthly statistics, the prices during the period July to September this year increased by 10 per cent compared with the same period last year.⁸⁹

There are big regional differences, though, especially between the metropolitan regions and the rest of the country. Up to the start of 2000, house prices rose faster in metropolitan areas than in other parts of the country. After 2001, the rate of increase in Stockholm has slackened and prices thereafter have increased at a slower pace than in the country as a whole. In Göteborg and Malmö, however, the rate of increase has accelerated over the same period (see Table 1 and Figure 5).

One possible reason for the slower rise in house prices in Stockholm is that homeowners there have considerably higher debt levels than households elsewhere in Sweden. Higher debt means higher interest expenditure, which limits the ability to borrow more funds.⁹⁰

⁸⁹ In the remainder of this article, house prices refer, unless otherwise specified, to the real estate price index for owner-occupied one- or two-dwelling buildings. Both monthly and quarterly data come from Statistics Sweden. The quarterly data are reported with a lag and are still only available up to and including the second quarter this year. The monthly statistics are reported faster but on the other hand are of somewhat poorer quality.

⁹⁰ Measured as debt in relation to disposable income according to calculations of Statistics Sweden's survey of households' finances in 2003.

Table 1. Annual percentage increase in nominal house prices.

Year	Greater Stockholm	Greater Göteborg	Greater Malmö	Sweden
2000	21.4	11.3	14.6	11.0
2001	9.9	7.5	8.1	8.0
2002	5.6	7.0	7.8	6.3
2003	2.1	12.3	10.4	6.6
2004	7.2	13.2	13.0	9.6
2005 Q2	4.8	8.4	10.1	7.4

Source: Statistics Sweden.

Real house prices – that is to say, house prices deflated using the consumer price index – show three periods with highly elevated prices: one at the end of the 1970s, one around 1990 and the current upswing (see Figure 6). What distinguishes the current upturn from the previous ones is that inflation now is considerably lower, which means that the rises in real house prices follow the nominal increases more clearly. Nominal house prices in relation to household disposable income per capita, however, show that house prices have in fact exhibited a trend fall since the 1950s. The ratio has risen in recent years, but the increase has been weaker than for real house prices and the ratio is still below the peaks seen around 1979 and 1990.

Statistics for prices of tenant-owned apartments

This article focuses on developments in house prices. That is because the price data for tenant-owned apartments are much poorer than for houses, making it difficult to come to any general conclusions about the price developments for them.

Statistics Sweden has data for the median price of sold tenant-owned apartments but gives the following description of the statistics. "It should be pointed out that it is difficult on the strength of the data to draw any conclusion about price developments for tenant-owned apartments. To do this it is necessary to have a better measure than average or median prices only, which do not take account of size, location or other factors that affect the market price. A price per square metre cannot be calculated, however, since there is no information regarding size/area in the data".

Table 2 shows that the median price for tenant-owned apartments, according to

Statistics Sweden's data, has exhibited a sharper increase in Malmö and Göteborg than in Stockholm during the period 2001-2004.

Statistics for tenant-owned apartments also are produced through a cooperation between the Association of Swedish Real Estate Agents, FöreningsSparbanken Fastighetsbyrå and Svensk Fastighetsförmedling. The estate agent data, based on some 38,000 sales throughout the country in the past twelve-month period, give a somewhat different picture than Statistics Sweden's figures up to 2004. Between October 2004 and September 2005, prices of tenant-owned apartments in the whole country rose by 11 per cent. According to these statistics, the prices in all metropolitan areas have risen considerably faster than in the country as a whole. In the past year the prices in Greater Stockholm have risen by 17 per cent, in Greater Göteborg by 21 per cent and in Greater Malmö by 17 per cent.⁹¹

Table 2: Percentage increase in the median of nominal tenant-owned apartment prices.

Year	Greater Stockholm	Greater Göteborg	Greater Malmö	Sweden
2001	11	25	20	30
2002	16	28	25	31
2003	0	23	37	22
2004	10	22	30	25

Source: Statistics Sweden.

⁹¹ According to the Riksbank's money and banking statistics, lending towards purchases of tenant-owned apartments accounts for just over 12 per cent of mortgage institutions' lending. Lending for tenant-owned apartments is increasing faster than that for houses, however.

WHAT EXPLAINS THE DEVELOPMENTS
IN SWEDISH HOUSE PRICES?

To investigate how well a number of variables explain Swedish price developments since the end of the 1980s, we estimate a number of equations. It should be pointed out, however, that econometric estimates are only one of several methods used by the Riksbank to analyse house price developments. Econometric estimates are, of necessity, simplifications of reality and the results can be affected if important explanatory factors have not been included or if the data are insufficient.

The dependent variable in the equations is Statistics Sweden's house price index, hpr_t , (deflated with UND1X and logarithmised) together with the following explanatory variables:

- **Household disposable income** (di_t) – Fixed prices, logarithmised, and seasonally and calendar-adjusted.
- **Real interest rate** (r_t) – The following real interest rates have been tested: 5-year government bond (r_t^{5y}), 2-year government bond, 2-year, 5-year and variable mortgage rate from Statshypotek. The real interest rate has been calculated after tax and using UND1X.
- **Unemployment** (u_t) – Seasonally adjusted open unemployment in per cent.
- **Demography** – Variations of the number of people in different age categories.
- **Supply of housing** – The housing stock in terms of houses.

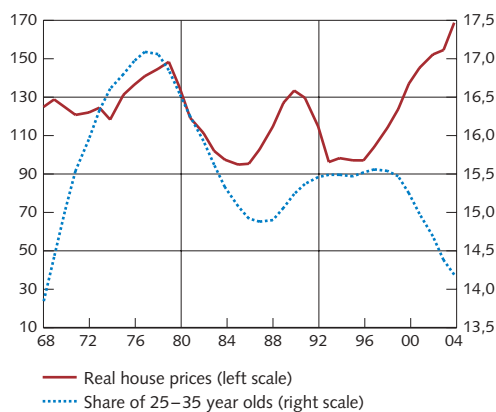
All variables are available quarterly, except the demographic variables and supply of housing, which are calculated from annual data.

First, we estimate an equation in which the level of house prices is explained by the real interest rate and disposable income. This is subsequently expanded with more variables. The equation's long-term relationship is estimated from the first quarter 1987 (which is as far back as the data exist) to the first quarter 2005 (last quarter 2004 for those specifications that require annual data):

$$hpr_t = c + 1.3di_t - 0.06r_t^{5y} + e_t \quad (1)$$

The estimated parameters in equation (1) should be interpreted such that 1 per cent higher disposable income, all other things being equal, increases house prices by 1.3 per cent in the long run, while a 1 percentage point higher real interest rate (based on the 5-year government bond yield), all other things being equal, reduces house

Figure 7. Share of total population in age group 25-35 years (per cent) and real house prices. Index: 1957 = 100



Source: Statistics Sweden.

prices by 6 per cent. Equation (1) has also been estimated using the other interest rates specified above; the interest rate parameter then varies between -0.04 and -0.06.

To expand the equation we also include unemployment, equation (2). Higher unemployment should imply lower house prices mainly because households have less money for house purchases. This effect is already incorporated in disposable income, however, but there may be other ways that unemployment can influence house prices. It is reasonable that households should be less interested in borrowing when the threat of redundancy is perceived to be higher, and similarly one might suspect that banks become more restrictive in their lending to households that risk being hit by unemployment.

$$hpr_t = c + 1.5di_t - 0.02r_t^{5y} - 0.03u_t + e_t \quad (2)$$

In the above equation we estimate the interest rate elasticity at just over 0.02, which means that a 1 percentage point higher real interest rate lowers house prices by fully 2 per cent. The parameter for unemployment has the correct sign and is interpreted such that a 1 percentage point higher unemployment rate reduces house prices by 3 per cent. These estimates are robust regardless of which interest rate is used and the interest rate parameter is always estimated at between -0.02 and -0.01.

As discussed earlier, a number of econometric models have shown that the number of prospective first-time buyers in relation to the total population is positively correlated with house prices. To investigate this, we included the percentage of 25-35 year olds in the total population in equation (1). The parameter had the wrong sign, though – the larger the share of the population in the age group 25-35 years, the lower house prices were. That this was the case is not that surprising since the proportion of prospective buyers and house prices have moved in opposite directions since the end of the 1990s (see Figure 7).

Naturally, the supply of housing (houses and apartments) also plays a significant role for the price mechanism in the housing market. Currently, the housing supply is increasing in Sweden, as seen in a higher number of completed housing units and new housing starts, more approvals for building permits and increased residential investment. In the long run, the strong construction activity will dampen housing prices, although not likely to any great extent. First, some bottlenecks can only be alleviated to a limited degree through construction, for example in central Stockholm, and second, many new housing projects are expensive. One important reason behind the high construction at the moment is that the combination of high housing prices and low interest rates makes it profitable to build new property and sell it. Thus, were prices to fall there would be reason to believe that the interest in producing housing also would decrease.⁹²

In an attempt to control for the size of the housing stock, we divided the stock of housing by the number of people in the age group 16-65 years. The idea is that when there is a high (low) supply of houses in relation to the number of working-age people willing to move, this pushes down (up) prices. The logarithm of this variable, m_t , was included in equation (3).

$$hpr_t = c + 1.1di_t - 0.03r_t^{5y} - 12.2m_t + e_t \quad (3)$$

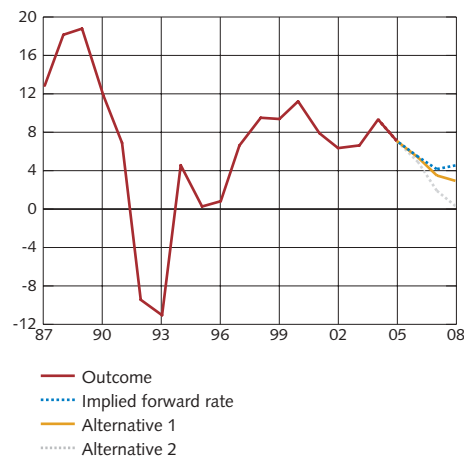
The sign of the new variable is correct and not dependent on whether the period prior to 1992 is included or not. The estimate for the interest rate parameter is also stable as regards the interest rate used and always lies between -0.01 and -0.03.

One way to investigate whether an estimated equation is of use is to see if it can be used to produce forecasts. To test whether the equations studied have any forecasting value we performed a simple forecasting exercise for the period between the first quarter 2002 and the fourth quarter 2004. On the whole, the equations above seemed to have relatively good forecasting capability and the equations that included the supply variable (number of houses divided by the population of age 16-65 years) appeared to give the best results.

All estimated equations show that house price developments in the past decade can chiefly be explained by rising incomes, low interest rates and low construction activity. At the same time, however, house prices during the last estimation periods are somewhat higher than what is implied by these simple models. The average of these deviations is 6 per cent. The estimates are uncertain, though. As an illustrative example, some of the equations signal that over as much as 40 per cent of the studied period the prices are more than 6 per cent higher or lower than what is implied by the model. The precision of the estimates also drops a lot more at the end of the estimation period, partly because some data are preliminary and partly because the filters used to seasonally-adjust data are much less effective at the extreme points of the data set. The results also change somewhat if the turbulent years at the end of the 1980s and beginning of the 1990s are excluded.⁹²

That house prices in general can be explained by the above factors does not rule out the possibility of a slowdown in the rate of price increases, or even of a price decline. The explanatory variables could change and thus contribute to a different price development. In the short run, it is not very likely that the housing supply or demographic factors would change significantly. More probable,

Figure 8. Nominal house prices given a number of interest rate scenarios. Annual percentage change



Note. The estimates are based on the Riksbank's forecasts for disposable income and the estimated interest rate elasticity from a two-year government bond.

Sources: Statistics Sweden and the Riksbank.

92 Another factor that may have contributed to the high housing prices, in particular for tenant-owned apartments in attractive locations, is rent controls. For a discussion of the effects of rent controls on housing prices, see Häckner, J. and Nyberg, S. (2000): "Rent-Control and Prices of Owner-occupied housing", *Scandinavian Journal of Economics*, 102(2), p. 311-324.

93 B. Barot and Z. Yang estimate a more detailed model for real house prices in Sweden and find an interest rate elasticity of -0.021, which is close to our results for equation (2) and (3). See B. Barot and Z. Yang, "House prices and housing investments in Sweden and the United Kingdom. Econometric Analysis for the period 1970-1998", *Review of Urban & Regional Development Studies*, Vol 14:2.

however, is that higher interest rates or lower incomes in the period ahead could give rise to different price developments than those seen in recent years. Were these changes also to occur quickly, the price movements could turn out to be more drastic.

Interest rates at present are at the lower end of the range of 2 to 6 per cent that has been the norm for Swedish nominal long-term interest rates. So it is reasonable to expect higher interest rates in the future. Figure 8 shows developments in nominal house prices given a number of scenarios for interest rates. Implied forward interest rates (as used in the Riksbank's inflation forecast) reflect market expectations regarding future interest rate developments. According to these, the interest rate is expected to rise to 3.6 per cent by the end of 2008. Under alternative 1 in Figure 8, the interest rate is assumed to increase to 4.6 per cent during the same period. Under alternative 2, the interest rate is anticipated to be 6 per cent at the end of 2008. Figure 8 shows that the rate of price increases will slow in the period ahead if interest rates rise in line with market expectations. Under assumptions of larger increases in interest rates, the effects on nominal house prices become bigger, of course.

Conclusions

In a number of countries, house prices have risen faster than growth in the overall economy. Moreover, in many cases house prices have increased more rapidly than rents, which represent the cash flow that reasonably should lie behind price developments. The upswing in house prices is explained by a number of common denominators in these countries. First, interest rates have been low and moving downwards for a period. Furthermore, higher disposable incomes and structural changes in the mortgage market have influenced price developments. However, there are also distinctive national features that separate the countries. For example, the existence of a buy-to-let market and the possibility to borrow despite inadequate creditworthiness has likely been significant for price developments in those countries where this occurs.

Following a period of rapid falls in house prices in the early 1990s, both nominal and real house prices have risen at a fast rate. The estimates presented in this article indicate that house prices in general can be explained by low interest rates, higher disposable incomes and low construction activity.

That today's house price levels can be explained fairly well by the above factors does not rule out the risk of a slowdown in the rate of price increases, however, or even of a price decline. If those factors that have driven the upswing change, it could very well lead to a lower rate of increase or even to a fall in house prices.

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