Ten years with the Financial Stability Report

MARTIN ANDERSSON[1]

Martin Andersson headed the Riksbank's financial stability work between 1996 and 2007. Today he runs a consultancy company and is a member of the Bank of England's Financial Stability Board.

This autumn it is 10 years since the Riksbank became the first central bank to publish a stability report in the form of an independent publication on the status of the financial system. Since then, 20 of these reports have been published. The Financial Stability Report became the starting point for a more structured and focused analysis of the financial sector by the Riksbank. During the 10 years that have passed since then these issues have become increasingly important in the Riksbank's activities. Today, financial stability is the other main task of the Bank, in addition to the task of maintaining low and stable inflation.

The work on financial stability has also become a matter of an important international profile for the Riksbank. As one of the pioneers of a more structured form of stability analysis the Riksbank has been involved and at the forefront of this field. For example, there are now more than 50 countries producing financial stability reports. The Riksbank was also active at an early stage on questions regarding cross-border banks and crisis management, by identifying problems and possible solutions. These questions have now come under greater focus in Europe.

In this article I describe the Riksbank's work in the field of financial stability over the past ten years. These are personal reflections on why the work was started up and what challenges we faced. In conclusion I shall look ahead over the coming 5–10 years.

The driving forces behind the stability work

THE CRISIS REMINDED US OF THE NECESSITY OF THE WORK

When Sweden suffered a bank crisis at the beginning of the 1990s the Swedish authorities were ill-equipped to handle the situation. As Norway

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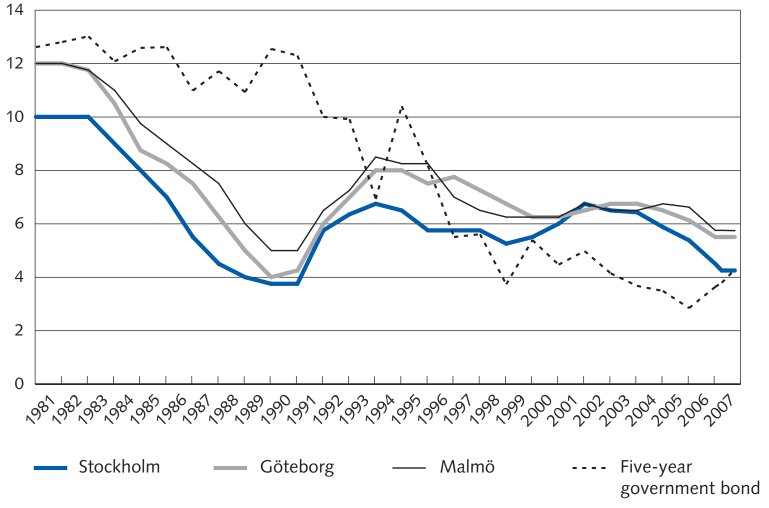
had been afflicted before us, more effort was put into discussing why this could not happen in Sweden than into preparing ourselves to deal with a similar situation. The Riksbank, Finansinspektionen (the Swedish Financial Supervisory Authority) and the Ministry of Finance completely lacked both an analysis to understand the risks building up and a preparedness for dealing with a severe shock to the financial system.

The crisis was one important reason why we at the Riksbank began to systematise our work on financial stability a few years later. Prior to the crisis there was really no one in Sweden who systematically analysed developments in the Swedish financial system. The deregulation of the financial sector led to a sharp increase in credit in the economy at the same time as asset prices rose rapidly. Despite the fact that this development indicated that risks were building up, it received relatively little scope in the analysis and public debate. It was essentially obscured by the focus on the fixed exchange rate policy.

One example of a risk that may appear fairly evident with hindsight is the development in commercial property prices. For several years the direct yield on commercial property was much lower than the risk-free rate. This means that the investors demanded greater compensation to invest in risk-free government securities than in property, despite the latter carrying a higher risk. But no one highlighted the risks inherent in this speculation at the time.

Figure 1. Direct return on commercial property and the risk-free rate
Per cent



Sources: Newsec AB and Reuters EcoWin.

EXPERIENCE OF THE CRISIS AT THE RIKSBANK

When Urban Bäckström became Governor of the Riksbank and Stefan Ingves became Deputy Governor shortly afterwards, there were two people at the Bank who had earlier played a key role in managing the crisis. Urban Bäckström had worked as under-secretary of state to the minister for financial markets and had thus managed the crisis from the political point of view. Stefan Ingves had been General Director of the Swedish Bank Support Authority, which was formed to deal with the practical management of the bank crisis.

The new management thus had greater ambitions in the field and a more structured analysis of the financial sector. But initially this was a question of regularly gathering statistics from the institutions and publishing them in an aggregate form. The analytical ambitions did not extend beyond, with a few exceptions, analysing the statistics that had been gathered. At best, these were then published in the Riksbank's quarterly journal. There was no clear aim to build up an actual preventive analysis to capture potential imbalances.

ANALYTICAL FRAMEWORK ESTABLISHED

While this was happening, the monetary policy analysis was being developed. The new inflation targeting policy that replaced the earlier fixed exchange rate regime and the new management's ambitions for greater openness made much higher demands on the analysis. The Riksbank began to work with an "analytical framework", that is, tried to clearly establish basic principles as to how monetary policy should function. The analytical framework structured the issues and provided a focus for the continued work. The inflation targeting policy also required considerable openness to build up confidence in the ambition of maintaining low inflation. One means of increasing openness was to publish an Inflation Report. However, during the early years the report was more of a bureaucrat's product, and not signed by the management of the Riksbank.

The first analytical framework for analysing the financial sector was established in 1995. This concerned the analysis of the payment system.[2] The Riksbank at this time conducted fairly comprehensive work on issues regarding payment and settlement systems, both in Sweden and abroad. There was a greater need for the Riksbank to systematise a stance in order to pursue a consistent line and prioritise between different tasks. The analytical framework meant that the work should act to promote the various systems having functionality and risk management mechanisms

2 Sveriges Riksbank 1995

that ensure a potential shock could be absorbed or at least would not aggravate the original shock. This can now be regarded as a fairly modest level of ambition, to put it mildly, but at that time it was far from self-evident. Neither VPC AB's system for settlement of securities trading nor Bankgirot's system for retail payments met these requirements at that point in time, in the Riksbank's opinion.

In 1996 we decided to raise the level of ambition by beginning to analyse the banks. I was given the task of producing an analytical framework and then carrying out the analysis. The analytical framework applied both to the task of promoting a safe and efficient payment system and to the role of provider of emergency liquidity assistance. This would help us to avoid blindly rushing into a new crisis – and if a crisis nevertheless arose, we would be prepared to deal with it. Below follows a review of the stances based on this analytical framework, which have become guiding principles for the Riksbank's work on financial stability.

A REPORT HELPED TO DEVELOP THE ANALYSIS

The Riksbank had good experiences of building up its analyses around a publication from the monetary policy field. With the wisdom gained from experience, the Riksbank Governor asked me the rather leading question in 1996, "why do central banks have two tasks, but only (at best) a report on one of them?" I could only agree with him. At that moment we decided to begin working on a stability report. The aim was to begin publishing a report on financial stability twice a year, with effect from 1997.

The first Financial Stability Report was published in autumn 1997. It contained the Riksbank's declaration of intent, or analytical framework, for the work on financial stability. In addition, there was an analysis of the competitive situation for the Swedish banks. To begin with the aim was to further develop the analytical framework regarding the payment system. But this was extended to also cover an analysis of what shocks could potentially affect the payment system. It was then a natural progression to make a more in-depth analysis of the institutions that are the most important participants in the payment system – the major banks.

The banks play a key role in the payment system. As important payment services are offered in the form of transfers between accounts, the banks' deposit accounts are central to the system. Thus, a crisis in the banking system could seriously impair the functioning of the payment system. But banking activities also have an inherent instability. This is because the banks' assets in the form of lending in particular are much less liquid than their financing in the form of deposits and volatile borrowing on the securities markets.

There are also considerable contagion risks if problems should arise in some part of the bank system. At times the banks' have very large exposures to one another. This means that problems in one bank can easily spread to other parts of the financial system. The contagion effects arise not only as a result of the banks having large claims on one another. It may sometimes be sufficient that there are *expectations or considerable uncertainty regarding the banks' exposures*. Initially unfounded rumours and expectations can in this way at worst become self-fulfilling.

Risks that can spread throughout the entire financial system are usually termed systemic risks. Individual participants in the financial markets usually have sufficiently strong motives for assessing and to an appropriate extent protecting themselves against risks that can affect their own activities. However, systemic risks do not only cover a company's own activities, they also encompass the costs to other institutions and society as a whole. The private incentives for avoiding risks related to such systemic risks are not sufficient from the point of view of society. The fact that systemic risks arise is thus an important motive for the government authorities to exercise supervision of and have special laws and regulations applying to the financial sector. Systemic risks are consequently also of central importance in the Riksbank's task of promoting a safe and efficient payment system.

The Riksbank's analysis of stability has therefore been largely focused on the major banks and the markets and participants that are important to the banks' earnings, financing and risk management. This was the starting principle when the Riksbank began its work on stability and it still stands.

FROM EXPLANATORY IDEAS TO ANALYSIS

The analysis was literally based around the Financial Stability Report. It would be untrue to claim that there was a well-thought out idea behind the first analysis dealing with the competitive situation. With the timetable that had been set – to publish the report during the first half of 1997 – it was quite simply the only field where we considered there was time to produce a sustainable analysis. However, the report was not actually published until autumn 1997.

There was also an idea that more energy needed to be put into explaining the reasoning. This was not just so that we at the Riksbank would learn, it was also to teach others how we thought, what we considered important and why. The three first reports were therefore more thematic than the following ones. The first report dealt, as already mentioned, with the competitive situation and its significance for the banks' earnings. The second report dealt with the connection between the macro economy and the banks' credit risks. The third dealt with how the banks' exposures to one another could be mapped to gain a picture of the systemic risk, and that a problem would spread from one bank to others.

From the fourth report onwards there was a framework for regular analysis based on the three parts introduced in the earlier reports and the report then also changed its name to the "Financial Stability Report".

When the Riksbank published its first stability report in 1997, the Swedish banking system was essentially just that: Swedish. The fact that we had a financial system that was not only Swedish but also dominated by a few large banks made the task less complicated and was probably a necessary condition for being able to get started as soon as we did.

The fact that the system was national made it easier to link together the banks with the Riksbank's macroeconomic analysis. This is considerably more difficult today, when the banks' activities are conducted to a greater extent outside of Sweden. Analysing financial stability means analysing the entire operations of the most important participants of the system, regardless of where they conduct them. It is difficult to imagine that in modern banks, where an increasing part of their activities is centralised to one division of a group, a problem in one division would leave the rest of the bank untouched. Today, for instance, liquidity management is often centralised to the main office regardless of what legal form the bank uses to conduct its foreign operations.

A controversial report

As I mentioned earlier, the Riksbank was the first to present a separate financial stability report. The Bank of England had begun publishing its Financial Stability Report one year earlier (1996). But this was in all respects a rather different kind of report. It was a collection of articles on themes linked to the financial sector and gathered over the space of six months. It was not until 1999 that the Bank of England began to publish an analysis and assessment of financial stability in its Financial Stability Report.

Another central bank that developed its stability analysis in parallel to the Riksbank was Norges Bank. In 1997 they published an article containing an assessment of financial stability in their quarterly journal. However, as this analysis was not as visible as the Riksbank's report, it took some time before it received any broader international attention.

The Riksbank, on the other hand, received considerable attention when the Swedish report was published. This was not least because it was an official document right from the start, adopted by the Governing Council of the Riksbank and signed by the Governor.

The fact that we at the Riksbank were pioneers made things more difficult for ourselves. We were not able to borrow good ideas from others and we also had to deal with the controversy of doing something that others had not yet thought of doing. Publishing a Financial Stability Report was very controversial in the international central bank cooperation. There was considerable scepticism from our central bank colleagues. Many even considered it not just silly but downright irresponsible of a central bank to write a Financial Stability Report. The critics considered that, by making our analyses public, we might contribute to the risks actually materialising. They thought that the Riksbank might contribute to creating unrest and instability instead of, as we ourselves believed, promoting stability.

FACILITATES COMMUNICATION

But we stood firm in our assessment that the report would facilitate communication with the financial market participants on the vulnerabilities that might need adjusting. By regularly publishing reports we would also hone our own analysis work and give it a clearer focus. The report would also make it easier for the Riksbank to report back to the Riksdag (the Swedish parliament) on its task of promoting a safe and efficient payment system. In addition it was in line with the regeneration of the Riksbank's methods of working that was implemented during these years in general – and particularly with regard to monetary policy. The former image of the Riksbank as a closed and almost secretive institution was replaced by one where greater openness and transparency were important guiding principles and, not least, an important part of our way of working.

COUNTERACTS THE MARKETS OVERREACTING

The Riksbank considered it useful to be able to warn at an early stage of any tendencies that could lead to excessive risks building up in the financial system. Previous experiences also indicated that the market could easily overreact. It was therefore valuable to be able to provide a balanced and honest picture on the basis of a thorough analysis. Given their competence and presence in the financial sector, central banks can contribute to this. A common denominator for those countries that chose to publish stability reports at an early stage was that they had all relatively recently experienced financial crises of varying scope.

In recent years this subduing effect in troubled times has become more important, which is clearly illustrated by the experiences in Iceland in 2006. When the Icelandic financial sector and krona came under pressure in 2006, this was partly because the participants in the financial markets had substantially overreacted to negative information. The central bank had been publishing a financial stability report for several years, which had a good reputation as fair and credible. This meant that they had an infrastructure for being able to publish an analysis and a more balanced and correct picture of the current situation, without having to sweep the actual problems under the carpet. It also calmed the acute market turmoil.

More than 50 countries now regularly publish financial stability reports and there is broad agreement that this is a good thing.[3] It has also become increasingly common for supervisory authorities to publish similar documents – here Sweden and Norway were also pioneers. Nowadays, international organisations such as the International Monetary Fund (IMF) and the European Central Bank (ECB) also publish financial stability reports.

Analytical framework for financial stability

The ultimate purpose of the Riksbank's analysis of financial stability has been to prevent crises and to be able to manage them if they nevertheless arise. In this way the work naturally follows on from the central banks' role as potential providers of emergency liquidity assistance. The purpose of overseeing financial stability is to reduce the risk of needing to provide emergency liquidity assistance and, if a crisis nevertheless arises, to be able to manage it at the lowest possible cost to society. This requires the Riksbank to be well-prepared to make correct assessments of a situation that has arisen at short notice.

A necessary condition for a stable financial system is that it is efficient. In the short term, increased competition may sometimes be perceived as negative, from the point of view of financial stability, as it reduces profitability and may mean that the financial institutions take greater risks. But all experiences indicate that only an efficient system can remain stable in the long term. Inefficient systems with low competitive pressure lead to a lower innovation rate and increased risk taking. The fact that the financial system functions well is also a necessary condition for being able to implement effective inflation targeting. Even with this view, the purpose of the oversight of the financial system should thus be to limit the risks of an overall crisis.

An area that is often debated is to what degree society's commitment to the regulation and oversight of the financial sector leads to

[3] Cihàk, 2006

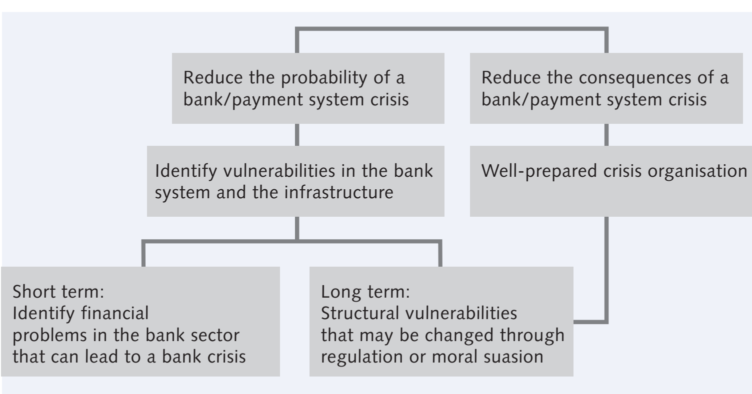
greater risk-taking, what is known as moral hazard. As the financial system is the hub of a modern market economy, it is often unavoidable that the government authorities have some commitment in this area. But it is nevertheless important that there are clear incentives for the participants to manage their risks themselves. One means of achieving this is that there is a clear and credible strategy for managing crises. If the banks' owners and management are aware that they will not be protected in the event of a crisis, they will have reason to manage their risks and the moral hazard declines. In this respect a good ability to manage crises is a necessary condition for economic efficiency.

ANALYTICAL FRAMEWORK FOR THE PREVENTIVE WORK

Compared with most central banks, the Riksbank's stability work is more aimed at the micro level, with an analysis of individual banks. This differs from the purely macro-prudential approach that is most common today, where the focus is on the bank sector on aggregate rather than on individual institutions. The more macro-prudential approach is motivated by the need for an overall analysis of potential imbalances that are built up in the economy and the financial system. The fact that the Riksbank has also chosen the more micro-based approach is a natural consequence of the task of crisis management. To be able to act quickly and decisively in a financial crisis it is important to have good knowledge of the systemically-important institutions.

The preventive stability analysis is based on three pillars. These are the banks, their surrounding world in the form of markets and macroeconomy, and the infrastructure. One of the advantages of writing a financial stability report is that it becomes necessary to link together these parts and to see what risks are related to this whole. Even if the Riksbank,

The Riksbank's view of Financial Stability



or another participant, analyses the various parts separately, a dimension will be missing if the links between them are not also analysed.

The banks are mainly analysed on the basis of credit risk, liquidity risk and strategic risk. Historically, the major bank crises have always concerned credit risks, and this was also the case in the 1990s crisis in Sweden. But on some occasions the banks' liquidity risks have been made visible without this being related to solvency problems. This took place in 1998 during the Russia crisis and when the LTCM hedge fund crashed, in 2001 in connection with the terrorist attacks and during the market turmoil that arose in autumn 2007.

The third risk the Riksbank has emphasised is strategic risk. Put simply, this concerns trying to analyse the banks' long-term earnings capacity and what strategies they may choose to improve their profitability. Characteristic for financial operations is the strong link between risk and return. If profitability is under pressure in the long term, there is always a risk that the company will instead choose to increase its risk, and it is important to monitor this when overseeing financial stability.

To understand the banks' credit risks it is necessary to understand how the payment capacity of the large borrower groups will develop. This means that the Riksbank analyses not only the overall macro-economic developments, but also makes in-depth studies of important borrower categories, such as households and companies. The micro perspective is clear here, too. As Swedish banks lend a substantial amount to the commercial property sector, this sector and its underlying market come under particular scrutiny in the analysis. In recent years the banks' international expansion has meant that the Riksbank has had to spend more time on analysing foreign borrowers in the countries that are the most important to the Swedish banks, that is, the Nordic countries, the Baltic countries and Germany.

The financial markets are interesting from both a liquidity and a credit risk perspective. A relatively large part of the banks' financing is currently directly via the financial markets. The markets can also be used to remove credit risk from the balance sheet through, for instance, securitisation, or to increase risk taking by buying various credit instruments.

The financial infrastructure consists of both the payment system and the legal framework for the financial system. Here the preventive analysis consists of overseeing that central components in the payment system function in a way that promotes financial stability and actively promotes problem-solving. The Riksbank also takes an active part in the commissions and consultation response work regarding the legal framework for the financial sector, not just in Sweden but also abroad under the umbrellas of the EU and Group of Ten.

For a central bank to be well-prepared to manage crises, the bank must first have taken a stance on issues of principle and must have practical routines. The issues of principle concern, for instance, the conditions for emergency liquidity assistance and what terms might be appropriate. They also cover questions regarding the type of collateral the central bank can accept in different situations.

When a crisis actually occurs, all of the statistics are out of date. It is then important to be able to quickly produce the most relevant information. This requires good relations with the banks, but also the ability to know in advance what is needed and to be able to analyse the facts that are presented. It is therefore important to have analysed the individual banks over a long period of time in order to be able to make a decision.

The Riksbank has published a couple of articles on how the Bank sees systemic importance and issues of principle regarding emergency liquidity assistance. The first of these concerns whether a failure in one bank could threat the Swedish payment system.[4] The conclusion of this analysis was that it is doubtful whether any individual bank is systemically-important in itself. But the risk of problems spreading between the banks as a result of their exposures to one another meant that a failure in one of the four major banks could threaten the stability of the Swedish payment system. One consequence of this reasoning was that it was reasonable to assume that none of the smaller banks could be regarded as systemically important. The other article discussed the Riksbank's role as lender of last resort.[5] The article took up issues of principle regarding pricing, collateral and durations.

Clear internal routines and external contacts

One aim in the work on crisis management has been that the Riksbank should be able to make a decision to grant or not to grant an institution emergency liquidity assistance within three hours. This makes considerable demands that both internal routines and external contacts have been clearly defined in advance. Similarly, there needs to be a clear idea of what information is given greatest priority when gathered at extremely short notice. This is of course made easier by the fact that the banks are also well aware of what this information is. One concrete example was that in connection with the market turmoil in 1998 the Riksbank asked all of the banks to report during the day their maturities in foreign currency

4 Sveriges Riksbank 2003a
5 Sveriges Riksbank 2003b

for the coming working week. It took one of the banks 8 days to produce this information! Although the system support is much better these days, this example nevertheless illustrates the importance of discussing in advance what information the Riksbank might need to gather in a crisis. Part of the problem in the example above was that we got into a discussion of statistical definitions, which is of course unfortunate in a crisis situation.

The banks' counterparty exposures are an example of information gathered primarily for the purpose of crisis prevention. The Riksbank collects information quarterly on the banks' major exposures within a number of different fields. This is to be able to gain an idea of how a potential problem could spread from one bank to others. There has been some criticism of the fact that the statistics are only quarterly and that quarter-ends are not representative. There is good reason for this criticism. But the statistics nevertheless provide an *indication* of how things look under normal circumstances, while the cost to the banks of producing the figures is reasonable. In addition, the work on the statistics means that there are routines and definitions for being able to produce these figures quickly if a crisis is imminent.

The practical routines for the Riksbank are gathered in a "crisis folder". This contains schedules, allocation of responsibility, draft contracts and press releases and contact lists of those who need to be reached in the event of a crisis, both in Sweden and abroad.

Regular crisis management exercises

The Riksbank began to hold crisis management exercises at an early stage. From the end of the 1990s the Riksbank has held regular crisis management exercises with the aim of testing its crisis management organisation. Some of the exercises have been purely analytical and others have had a more practical nature. These exercises have enabled the crisis folder to be further developed and adapted to the shortcomings that have been detected. Some of the exercises have been held in cooperation with other Swedish and foreign authorities.

MEASURING FINANCIAL STABILITY

Are there different degrees of financial stability? Several central banks and some academic researchers have tried to create some form of measure of financial stability, such as a stability index. But none of these initiatives has been particularly convincing. A driving force in these countries has been to try to create an analysis of financial stability that is similar to the one on monetary stability that is expressed in the form of changes in the CPI. For many central banks the search for something similar to this is a top priority. But personally I do not regard this as a successful route to take.

Financial stability is a very complex concept, and includes many phenomena. Monetary policy largely concerns anchoring expectations among the general public of a low inflation rate to create behaviour that ensures this will be the case. However, financial stability does not work through the expectations of the general public. The situation is more binary in nature, either everything is fine or there is a crisis. Given this, it is difficult to see the usefulness of a stability index. However, it is unfortunately much easier to see the problems. In weighing together several different variables there is an obvious risk that one will miss seeing how the risks are actually building up

Financial stability analysis is made more difficult by the fact that many indicators are difficult to interpret. What does it mean that the risk premiums in the markets are falling – that the situation is very stable or that the market is underestimating the risk and that there is thus a tangible risk to financial stability? If households increase their indebtedness is this the beginning of a problem situation or a sign of very good future prospects? Do households and the banks have rational expectations of their future earning capacity and interest burden?

What the Riksbank has tried to do is to use established portfolio models to estimate the consequences of one of the identified risks materialising. This approach gives an understanding of the size of various risks, without giving the false security provided by a stability index.[6] The model makes it possible for the Riksbank to measure the approximate scope of the risks identified for individual banks, but also allows it to stress test various scenarios at both aggregate and individual bank level. The Riksbank has chosen to try to measure financial stability in terms of the banks' resilience to unexpected shocks. This model enables the Bank to test how much of the banks' resilience, in the form of earnings and capital, would remain if various risk scenarios were to materialise. Today the link between the macro economy and the input into the model is made through assumptions of how expected default frequencies and degree of recovery will develop. However, in the long term it is possible to estimate empirically how macro economic changes will have a direct impact on the banks' credit portfolios.

The Riksbank's work consists to a large part of making proxies for the banks' credit portfolios. The heavy model work has been avoided by using well-known and transparent models such as CrediRisk+ and KMV's

[6] This approach is described in detail in Sveriges Riksbank (2006)

Merton model. By only working with established models and public data it is also possible for others to make their own analyses. It is even more important that the Riksbank can then report the results at individual bank level in the Financial Stability Report and other public contexts.

The fact that the model is based on individual banks means that it can also be used in the crisis management work. Various stages of a crisis can be simulated, as can the effects of alternative possible solutions. In this way the model can provide valuable support for decision-making in a financial crisis, in a similar way to the bank models actively employed by the Swedish Bank Support Authority during the crisis in the 1990s.

Development tendencies that will shape future analysis

FROM NATIONAL TO INTERNATIONAL SYSTEMS

As the large financial institutions are now becoming increasingly international, the possibilities to conduct stability work with a purely national overtone is declining. The link between the macro economy and the banks is becoming more complex and the possibilities to base the analysis on national sources of statistics is diminishing. The Riksbank's choice of stress model with a focus on banks instead of working with a macro model makes the necessary adjustment of the analysis easier. It also becomes more difficult to isolate a crisis within national borders. This means that the risk increases that a crisis arising in one of the large cross-border institutions would have serious effects in several countries.

It therefore requires more cooperation with the authorities in other countries, both in terms of the preventive analysis work and in crisis situations. Local knowledge of one's own markets is important in the preventive analysis work, as is good knowledge of what statistical sources are available and also knowledge of their shortcomings. By making use of one another's knowledge, the analysis can be improved, although this may in many cases be rather time-consuming.

A necessary condition for the cooperation to work in a crisis situation is that there are well-established forms for cooperation in the preventive work. Even at a national level the crisis work may be hampered if cooperation is required between several different authorities – central banks, financial supervisory authorities, authorities responsible for deposit guarantees and ministries of finance. When a bank with extensive operations in several countries is afflicted by problems, the number of authorities involved increases exponentially. This, together with differences in regulatory frameworks, makes considerable demands with regard to cooperation. It is then important to have channels for cooperation already in place. It is also necessary to have similar ideas on various policy issues – or at least to know in advance where the greatest stumbling-blocks lie.

Is it then reasonable to write national financial stability reports? Yes, I believe so. There are two good reasons for this. Firstly, it is relevant for national authorities to analyse the financial sector's links to developments in the national economy, regardless of which markets the banks operate in. Secondly, the experiences from our international work show that it is difficult to be explicit with regard to the risks envisaged if there are clearly national overtones. There is then a risk that one writes reports that do not say very much, apart from what is politically correct, and that the value of publishing financial stability reports will then be lost.

CHALLENGES FROM A MORE MARKET-DOMINATED SYSTEM[7]

One general international trend is towards greater market orientation. The banks are becoming increasingly dependent on financial markets for their earnings, funding and risk management. Their earnings consist to a rising degree of commission income in various forms. This income is in turn dependent on the developments in the markets where the assets are traded. At the same time, the percentage of funding through deposits from the general public has gradually declined, and an increasing share of the banks' funding consists of borrowing in the financial markets. The interest rate risk and exchange rate risk that arise in these markets are managed in the derivative markets. The banks' increased dependence on markets for their risk management and funding mean that they are also more sensitive to liquidity problems in these markets. This means that the analysis of the banks' financing and the liquidity risks linked to this becomes even more important.

However, other participants than the banks have gained in importance. For instance, institutional investors such as insurance companies and pension funds have become more significant in the financial system. Demand has driven innovation, which has led to a rapid expansion in a number of financial markets. This has created scope for new participants, such as hedge funds and risk capital companies, which have come to play important roles in the financial markets.

But at the same time the market dynamics have become more difficult to predict and market shocks have an increasing rapid sequence of events. Technological advances have created opportunities to link together a large number of financial markets. Many of the largest international

7 This section is largely based on the report in Sveriges Riksbank (2007)

financial institutions are active in almost all of the financial markets and the linking of the markets in principle makes it possible to trade twenty-four hours a day. The financial markets have been linked not only electronically – they are also to a large degree financially linked in that assets sold on one market are used to actively manage risks arising in other markets.

Although it has been possible to spread many risks over a larger number of participants, it has become more difficult to gain an overall view of where the risks lie in the system. The markets have thus become less transparent. The reduced transparency is not least a result of the complexity in many of the new instruments and techniques for trading in credit risk that have arisen in recent years. When the risks are moreover repackaged and sold on through several channels, it becomes more difficult to see which balance sheets contain the final risks. The complexity also makes it difficult to assess the instruments and often demands advanced calculation models. It is therefore necessary to put greater focus on analysing financial markets and the most important participants in these markets to be able to assess financial stability.

Conclusions

The journey that started 10 years ago when the first Financial Stability Report was published has only just begun. A lot of work remains to be done. Old ideas and ambitions still need to be realised. At the same time, we are aiming for a moving target. New innovations and cooperation require constant changes in our methods of working.

The work on financial stability is ultimately a matter of being to influence through good arguments, what is known as moral suasion. A thorough and credible analysis enables central banks to influence financial stability without any actual tools. Not merely by issuing warnings at any early stage that certain phenomena may indicate that excessive risk is building up, but also by providing a modulated, but honest, picture when there is financial turmoil. This makes considerable demands that the analysis is focused on the right areas. It is also important to work actively on trying to spread the analysis to all of the decision-makers who can actually do something about the situation – something that is easier said than done.

In this way, published financial stability reports will promote financial stability and lay an important foundation for the work on creating good crisis preparedness.

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