# Can the authorities manage crises in the financial system?

## JOHAN MOLIN AND STEFAN INGVES<sup>1</sup>

Stefan Ingves is Governor of Sveriges Riksbank and Johan Molin is Adviser at the Financial Stability Department at Sveriges Riksbank.

There are a number of parallels between the current financial turmoil and the Swedish bank crisis of the 1990s. To cope with financial institutions in distress, effective regulations and institutions need to be put in place. The banks' increasing cross-border activities mean that international cooperation must also be intensified.

## Introduction

Since the summer of 2007, there has periodically been considerable turmoil in the financial markets. The fact that financial markets experience upswings and downswings is scarcely remarkable or unusual, and there are almost always some countries in the world experiencing problems in their financial sector. This is a fact of life that we have become used to.

This time, however, there appears to be much greater nervousness than we have seen in a long time. Central banks have followed developments with great interest, and, for instance, the European Central Bank (ECB), the Federal Reserve and the Bank of England have taken a number of well-publicised measures.

This article aims to shed some light on what all the commotion is about this time and to discuss the regulations for managing financial institutions in distress and the challenges facing the authorities – in Sweden and internationally. But before this, it could be useful to say a little about financial crises on the basis of the current turbulence and the bank crisis Sweden experienced at the beginning of the 1990s.

The article is based on a speech by Stefan Ingves at the Swedish Economics Association on 13 March 2008.

# The problems began in the subprime market

The recent credit turmoil began with problems on the US mortgage market, in particular in the segment offering subprime loans. These are loans to mortgage customers with lower creditworthiness - often households without a documented credit history and with a lower income than the average household. These loans doubled between 1996 and 2006, although they still comprise a relatively small part of the US credit market. The problems began to affect many borrowers back in 2005, in connection with the rise in interest rates.

When loans were renewed at the higher interest rates, the loan costs for these borrowers rose substantially. And when real estate prices fell in many areas, there was no scope to increase house mortgages so householders could borrow their way out of their problems. This was otherwise a common – albeit dubious – strategy during the years of rising property prices. Many borrowers could no longer make the interest and mortgage payments on their loans. This led in turn to substantial credit losses for many mortgage institutions. But the loan losses did not merely affect the banks and mortgage institutions that had originally issued the loans. The problems came to have a much wider spread.

#### AND THE PROBLEMS SPREAD AS THE RISKS WERE SOLD ON

The reason why the problems spread is the extensive securitisation of mortgages. This special form of financial engineering has made it possible for lenders to sell credit risk together with the right to the payment streams from the loans to prospective investors around the world. Essentially, this means that a number of loans are combined and put into an investment vehicle created especially for this purpose, which is in turn financed by issuing securities, what are known as mortgage-backed securities. In principle, this is a way of making illiquid assets liquid.

This strategy has become increasingly common among banks and other credit institutions around the world. One can say that they have thus increasingly moved away from their traditional role as monitors of credit risk. Instead they have to a greater degree originated loans, where the inherent credit risks have immediately been distributed to investors in the financial markets willing to take the risks. Their business strategy has changed from focusing on long-term customer relations to repackaging and selling. Having said this, securitisation is not necessarily a bad thing in itself.

What has been new and something of a problem this time has been the way in which the securitised loans have been repackaged and resold

through several stages. The structured credit risk products that were created often included a large portion of subprime loans. The variety of these products has been impressive. Often one product has been included as a component in another product, which in turn has been repackaged and included as a component in a new product. One can equate this to Russian dolls: a large one that contains a smaller one, which in turn contains an even smaller one, and so on. This has been a means of creating assets that suit investors with differing risk appetites, particularly assets with a high return and a corresponding high risk level.

#### A COMPLICATED STRUCTURE EMERGED

There has also been substantial variation among the special investment vehicles used by banks and other credit institutions for their securitisation. Without going into detail, what these conduits and SIVs and suchlike have in common is that they invest in high-yield assets with long durations, often structured credit-risk products with a subprime content. They have been financed, at least partially, by issuing certificates in the fixed income market for short durations, what are known as asset-backed commercial papers. The special vehicles have thus to a greater or lesser degree been dependent on the liquidity in the market for these securities for their funding.

Even if these special vehicles are in principle independent from the banks, it is common that the banks supply some form of liquidity guarantee. In other words, if a special vehicle for some reason is unable to issue new certificates when the old ones fall due, the bank guarantees the ability to pay, wholly or partly. Such guarantees need not only consist of formal obligations. They may also be of a purely informal nature. This is because the bank may be disinclined to abandon its special vehicle in order to protect its name and reputation. Whatever the case, it means that the financing problems that affect the special vehicles can easily lead back into the bank. What one has regarded as a true sale may in reality not always have been so.

#### CREDIT RATINGS ATTRACTED INVESTORS BUT WERE MISUSED

The result has been an extremely complicated structure. Many asset classes have arisen, each with their own unique conditions and idiosyncrasies in pricing. This has in turn made it difficult to assess the different products. For this, one has instead relied heavily upon the services provided by credit rating agencies. Using credit ratings as comfort, investors have been persuaded to invest in the products.

Credit ratings are excellent aids that measure the probability of default or the expected loss. But they do not take into account how the risks are otherwise distributed or how risks covary. Unfortunately, many investors appear to have disregarded these limitations. In addition, all of the repackaging, special intermediaries, and more or less visible guarantees have made it difficult to gain insight into where the risks are. In particular the geographical spread appears to have been greater than in earlier episodes of financial turbulence.

#### UNCERTAINTY INCREASED AND LIQUIDITY DISAPPEARED

When the problems in the subprime market began to surface here and there, this caused great uncertainty. It was quite simply impossible to know who was directly or indirectly exposed to the subprime loans. This led to liquidity waning in parts of the interbank market. It therefore became more difficult and more expensive for the banks to refinance themselves. When many banks experienced problems, a number of central banks chose to take measures to increase liquidity in the interbank market.

The unease in the credit markets has continued during the winter and spring of 2008. Many large and established banks have been gradually forced to write down the book value of their subprime-related assets. This has led to some major financial groups requiring new capital. At the same time, there has been increased uncertainty over international economic activity. This has in turn contributed to major fluctuations on the world's stock markets.

Given the free movement of capital, increased interest rates in the international credit markets of course also affect Swedish interbank rates. But higher interest rates in the interbank market do not by definition mean that the banks will experience liquidity problems. The Swedish banks have had good liquidity throughout the entire period of turmoil. They have not been exposed to subprime-related securities to any great extent. Their solidity was and remains good and their loan losses are at present very small. Nevertheless, the Swedish banks have not been able to entirely escape the effects of these events.

## There are similarities between today's financial turmoil and the Swedish bank crisis

The current financial turmoil and the Swedish bank crisis actually have a number of common denominators. Carmen Reinhart and Kenneth Rogoff have pointed to a number of similarities between the US mortgage turmoil and a number of earlier financial crises, including the Swedish bank crisis at the beginning of the 1990s.<sup>2</sup> Some common denominators for the period prior to the outbreak of the crisis include a rapid increase in property and share prices, the fact that the current account deficit was large and growing and that economic growth had declined from an earlier high level. One important difference is that the exchange rate regime has not played a prominent role in the US case.

#### TOO LOW RISK PREMIUMS AND ABSTRUSE RISKS

It is also possible to find more specific parallels to the Swedish bank crisis - apart from the obvious connection to the real estate market. In both cases, lending has increased rapidly at the same time as the banks have underestimated and therefore not sufficiently priced the credit risks. In Sweden this was linked to the banks - after decades of credit regulation - lacking a developed strategy for managing and pricing credit risk. When deregulation came in the mid-1980s, they were quite simply unused to loan losses. But such tendencies could also be seen prior to the recent market turmoil. For a long time, risk premiums for credit-risk related securities were remarkably low. The uncertainty has led to an increase.

But, there are also other parallels. This includes in particular the arrangements that made the banks' real risk-taking more abstruse. The banks' formal and informal promises of loans to special investment vehicles meant that the problems quickly bounced back into the banks' balance sheets.

In the Swedish bank crisis one can say that the finance companies in some respects played a corresponding role to the special investment vehicles. It was the finance companies that primarily financed the expansion in the construction and real estate markets. The finance companies largely financed themselves in the short term by issuing commercial papers in the fixed income market. When the property market folded, it was a finance company, Nyckeln, which in September 1990 was the first to throw in the towel when it could not renew its financing. Other finance companies then followed suit.

<sup>&</sup>lt;sup>2</sup> Reinhart & Rogoff (2008).

Many of the finance companies were in fact owned by the banks. And the banks were tied by both formal and informal commitments. The losses therefore soon returned to the bank system. In 1991, it became apparent that the banks had substantial problem loans through their exposures to the real estate market both directly and indirectly through the finance companies they supported. The bank crisis had become a reality.

## THE STRUCTURES WERE A SIDE-EFFECT OF REGULATORY ARBITRAGE

It is also interesting that the abstruse structures, which led to the current financial turmoil and the bank crisis in the 1990s, were in both cases partly due to regulatory arbitrage. The most recent wave of securitisation of the banks' credit portfolios was partly propelled by deficiencies in the capital adequacy rules. Through securitisation the banks could easily avoid a lot of expensive capital charges. Since 2004, there is a new capital adequacy regime, Basel II. This is more finely meshed and does not allow the same possibilities to avoid capital charges through securitisation. However, it has not yet been implemented in all countries, such as the United States, for instance.

The Swedish finance companies were in their day the result of regulatory arbitrage. Prior to the abolition of credit regulation in Sweden, the finance companies were often used as a means for the banks to get round the credit restrictions. This "grey" credit market was once substantial and an important source of additional income for the banks.

## CREDIT INSURANCES EXISTED THEN AS NOW

One can also observe another similarity, namely the occurrence of financial guarantors insuring credit. One company that sold credit insurance to the Swedish banks in the 1980s and 1990s was Svenska Kredit. Many banks bought insurances against losses from their loans to property companies from this company. When the real estate market crashed, Svenska Kredit was unable to meet all of its obligations and consequently went bankrupt. This in turn fuelled the problems for the banks.

There are parallels to the current monoline insurance companies. These are large insurance companies that specialise in insuring various types of bond loan. Those who have bought the companies' insurances have traditionally been municipalities, federal states and other bond issuers with poorer credit ratings. The insurance has meant that the bond loans have received better credit ratings and it has been possible to sell

them at better rates. In July 2007, the outstanding volume of bonds insured by monolines amounted to a value of USD 3.3 trillion.

In recent years, these monolines have increasingly been used to insure securities issues with a subprime content. This has meant that they have also begun to experience problems. This risks in turn having repercussions for the securities they have insured and ultimately for those who have invested in them.

Of course, there are also some essential differences between the most recent financial turbulence and the Swedish bank crisis. This applies to both the nature and the scope of the crisis. But, as we have seen, there are many and striking similarities in the way people have acted. Or as Voltaire is supposed to have said "While history may never repeat itself - man always does!"

## Financial crises arise as a result of imbalances in the balance sheet

So why do financial crises arise? The root of most financial crises can quite simply be found in the imbalance between assets and financing. The simplest way to illustrate this is to look at a stylised bank's balance sheet. On the asset side there is lending to companies and households. These are assets that cannot be realised quickly without a substantial discount. In other words, they are illiquid. The bank's financing on the other hand largely consists of deposits from the general public and short-term borrowing on the interbank and securities markets. Their financing is thus very liquid.

In normal circumstances this is not a problem, as we do not expect all depositors and other financiers to withdraw their money or their financing at the same time. But at the same time, this liquidity transformation makes the bank sensitive to its financiers' confidence in its ability to meet its obligations. Suspicions that the bank has financial problems could very quickly lead to a bank run.

There have been many bank runs in the past. Stockholms Banco, which was founded by Johan Palmstruch in 1656, was hit by a bank run in the 1660s when the depositors lost confidence in the notes issued by the bank. The bank was taken over by the estates of the realm, and is the precursor to the Riksbank, which was founded in 1668. There were countless bank runs in the United States at the end of the 1920s and the beginning of the 1930s. Argentina and Indonesia were hit at the end of the 1990s and the beginning of the 2000s. And as recently as September 2007, the British building society Northern Rock suffered a bank run.

It is clear that even the most recent financial turmoil is a question of a mismatch between assets and liabilities, although the assets and liabilities have come to look slightly different than in the fictitious example. In essence, this is a matter of the same phenomenon, namely lending at long durations that is funded in short durations. The awareness of this inherent instability and the difficulty in seeing where the risks lie meant that liquidity sometimes dried out in parts of the money market. What is new is that banks around the world have become much more dependent on the securities markets for managing risks and financing themselves. In 2007, we had concrete evidence of how sensitive the banks have become to liquidity shocks in these markets. Problems in the securities markets have rarely ever before returned to the bank systems with such force.

# The importance of financial stability

When Northern Rock experienced problems, the British authorities took a number of exceptional measures. For instance, the Bank of England granted the building society emergency liquidity assistance. And HM Treasury abandoned the limits of the existing deposit guarantee, extending the guarantee to cover all deposits in Northern Rock without limitation.

The question that many people are probably asking is why so much effort was made for one individual financial institution. Public measures of this type would hardly have been mobilised if it had been a question of an ordinary engineering company or retail chain that was in financial straits. Why are banks so special? One could reply in the same way as John Dillinger, designated by the FBI in the 1930s as public enemy number one, when asked why he robbed banks: "Because that's where the money is." But there is also a more qualified answer involving two specific aspects. Firstly, it concerns the special role played by the banks and the bank system as a whole in the economy. Secondly, it concerns the special contagion risks in the financial system. In a central bank context, these are usually called systemic risks.

Banks and other intermediaries in the credit market who receive deposits from the general public play a central role in the financial system. They contribute, for instance, to the more efficient distribution of capital by acting as intermediaries between depositors and borrowers.

They also create the conditions for the more efficient mediation of payments in the economy. The banks' deposit accounts are of central importance to the use of payment cards, credit cards and credit transfers. Many banks also participate in the system for the settlement of largevalue payments supplied by the central bank. The banks and their account systems are therefore a vital part of the payment system.

At the same time, problems that arise in one bank can easily spread to other banks. This spread can occur in different ways. Firstly, there can be a direct contagion, through the exposures the banks have to one another in the payment systems and in connection with foreign exchange and securities trading. Severe chain effects can arise if the customers of a bank that is experiencing problems have their means of payment tied up in the bank. This makes it difficult to make payments to other households and companies. It can lead to liquidity problems that can in turn give rise to loan losses and payment problems for these customers' banks.

Secondly, the banks are often exposed to the same sorts of risk. This increases the probability that, for instance, a macroeconomic shock may affect more than one bank. The contagion of problems between banks can thus also arise as an indirect effect, through expectations that other banks may suffer similar problems to the one first affected, or via more well-founded suspicions of the banks' exposures to one another.

The contagion risks mean that problems in one bank can easily lead to problems for the entire bank system. The costs to society of a crisis affecting the entire bank system can be substantial. It is, of course, difficult to calculate these costs. Some surveys have indicated that an average production loss resulting from a bank crisis could be around 15-20 per cent of GDP.3 According to some calculations, the collapse of the Swedish bank market cost around 5 per cent of GDP in terms of a loss in output.

Seen from society's point of view, the individual agents' incentives are not sufficient to take protective measures against crises that affect the financial system as a whole. The shareholders can never lose more capital than they have put in and individual depositors find it difficult to monitor a bank with widespread operations. There are, to use economic terminology, considerable adverse externalities. In addition to the consumer protection aspects, this is a decisive motive for having a financial safety net in the form of special regulation, supervision and a deposit guarantee. It is also the reason why central banks have the possibility to provide emergency liquidity assistance. Such emergency liquidity assistance shall in principle only be granted if the institution in question has temporary liquidity problems, but is essentially viable and if there are systemic contagion risks.

It was exactly this risk of domino effects in the rest of the financial system that meant that Northern Rock, which can hardly be said to be of critical significance to the bank system, became the object of a number of measures taken by the British authorities. It was probably similar consid-

<sup>3</sup> Hoggarth & Saporta (2001).

erations that motivated the measures taken in Germany to save IKB and Sachsen Landesbank.

Now one has seen that it was not so easy for the British authorities to manage the problems in Northern Rock. The existing regulations and arrangements did not prove particularly effective. Despite the measures taken, they did not manage to avoid a bank run. This has led to the authorities in the UK drawing up, in an impressively short time, proposals for a number of improvements in the regulatory framework for managing institutions in distress. In February, the Chancellor of the Exchequer announced the decision to nationalise Northern Rock, as there was otherwise a risk that the cost to the taxpayers would be too high.

# The regulations for managing institutions in distress are inadequate

For the Riksbank, as a body partially responsible for the stability of the financial system, it is relevant to ask how things are in Sweden. Do we have the regulatory framework required to manage possible future problems? Unfortunately, the answer to that question must probably be no, at least at present.

During the Swedish bank crisis at the beginning of the 1990s, a number of extraordinary measures were taken. These included issuing the bank deposit guarantee. This was a general declaration that the banks' creditors would be protected. In addition, a special crisis management authority was established, Bankstödsnämnden (the Swedish Bank Support Authority). In connection with this, a number of provisions of a compulsory nature were introduced to prevent the possibility of the state being placed in a blackmail situation. For instance, an act was introduced that meant in principle that the Swedish Bank Support Authority could make decisions in the bank through a state compulsory purchase of the shares if the bank's capital adequacy fell below two per cent.

But these temporary provisions, like the general bank guarantee, ceased to apply in 1996. The Bank Support Authority was transformed into the Deposit Guarantee Board (Insättningsgarantinämnden), which was given the task of managing the deposit guarantee and investor protection.

Since then, it is in principle only the general regulations for bankruptcy and liquidation and the system for the deposit guarantee that are available for managing institutions with problems. Unfortunately, it is not particularly appropriate – if even possible – to apply the general insolvency regulations to banks. The regulations on bankruptcy and liquidation are primarily to protect the interests of the creditors. They are not particularly

well-adapted to take into account society's interest in maintaining the stability of the financial system. The primary task of a receiver in a bankruptcy is to safeguard the interests of the creditors. He or she has neither the authority, nor can be expected to have the skills required, to take the measures needed to safeguard the stability of the financial system.

Problems that threaten stability require immediate action. Bankruptcies usually take years to resolve. Some elements of the general bankruptcy procedure, such as freezing balance sheets, may in some cases be directly harmful if applied to a systemically-important institution. For example, the banks' central role in the payment system means that one cannot merely stop payments in one or more of the major banks, as this could have devastating consequences for the financial system. During the bank crisis no banks were declared bankrupt.

The lack of specially-adapted regulations for winding up problem institutions with the capacity to take into account society's need for financial stability was emphasised by the Banking Law Committee (Banklagskommittén. This was a commission of enquiry appointed in 1995 in the wake of the bank crisis to look into the needs for modernised legislation for banks. The Committee also presented a proposal for a new framework to manage banks in distress, called public administration. This proposal has now been under consideration by the Government Offices since 2000.

## CUSTODIA WAS A REMINDER OF THE SHORTCOMINGS

Since then, we have received new indications of the shortcomings in the regulations. The course of events at the credit institution Custodia in 2006 indicated worrying difficulties in managing even a relatively small and insignificant problem institution. We are therefore in no way better equipped than the United Kingdom to manage problem institutions and this applies with regard to both small and large institutions.

Fortunately, Custodia was a small company and the problems occurred in a situation where there was relative calm on the financial markets. The stability of the financial system was thus definitely never threatened. But it is regrettable that we still have not managed to create an adequate regulatory framework in this field, more than fifteen years after our own bank crisis.

In countries where they have slightly more experience of bank failures, such as the United States and Canada, they have learned that special institutions and arrangements are needed to manage institutions with financial problems.

One of the most important lessons is that the authorities must be able to intervene as quickly as possible when a bank faces problems. There are several reasons for this. The first is to put pressure on the management and owners of the bank to rectify the situation and hopefully to prevent the situation deteriorating further. The so-called Savings and Loans crisis in the United States in the 1980s became more costly when the authorities failed to take action in time. This meant that in the United States at the beginning of the 1990s they introduced a system with socalled prompt corrective action. This means that the authorities quite simply are obliged by law to intervene at certain specified thresholds. In our opinion, it is desirable that Finansinspektionen (the Swedish Financial Supervisory Authority) should also have a large toolbox of measures that can be taken at an early stage. It should be possible to intensify these measures gradually as problems worsen. Of course, it is not desirable that the only possibility is to withdraw the license of an institution whose capital adequacy falls below the eight per cent level. In Sweden, there is every reason to look more closely into the obligations and powers of authority of Finansinspektionen.

Another motive for the authorities to act quickly is to be able to quickly pay the deposit guarantee. To be able to make the necessary preparations for this, the authorities therefore need to have access to and control over relevant data files at an early stage when an institution gets into difficulties. This has been a problem in earlier cases of compensation from the Swedish deposit guarantee.

If the financial system is threatened, the authorities must also be able to temporarily take control over the bank to maintain vital functions. The banks' central role in the payment system means that payment defaults by one bank can have substantial domino effects. The consequences for the rest of the financial system may then be difficult to overview.

With regard to institutions lacking a long-term survival capacity, it is of course important that they are wound up as quickly and smoothly as possible. There must be several different alternative methods for winding up banks to make it possible to choose the model that is best suited and entails the least cost to society. Of course, it would be best if one could get another bank to take over this institution's activities. But the possibility to carve up the business and sell it in parts could in some cases prove more cost-effective. In certain cases, a reconstruction of the bank may be the most appropriate solution.

If it were to take too long to find a buyer, it might be necessary for the state to take over the bank temporarily. This was what was ultimately necessary in the case of Northern Rock. There is a risk in similar situations that the state could be exposed to blackmail. To minimise the costs to

taxpayers, it is therefore desirable that the state has sufficient strength to negotiate with existing and presumptive shareholders. For instance, there must be legal possibilities for the state to redeem the shares at a price corresponding to the value of the bank in the absence of state measures. It is also particularly important to avoid situations where a bank ends up in a no man's land regarding ownership.

An essential condition for a well-functioning system is that one can attain a balance between all of the interested parties who come forward when a bank is in distress. The various interests include society's interest in financial stability and the depositors' interest in good consumer protection. But there are also the creditors' interest in good protection and fair treatment as well as the taxpayers' and the fee-paying institutions' interest in the cost of the deposit guarantee system being as low as possible. In addition to this, we have the owners' interest in their legal rights and not least society's interest in the administration of justice functioning in the field of economic crime.

All of these interests, and probably more, are entirely legitimate and must of course be taken care of in the legislation. But they must be classified according to their relative significance to society. Otherwise it will not be possible to distribute the roles between the different authorities in the best way when managing problem institutions. There is also a risk of wasting valuable time on managing conflicts between different interested parties instead of managing the institution's problems. In other words, it is necessary to have a bird's eye view when drawing up regulations.

## THE REGULATIONS MUST BE FORMULATED TO GIVE THE STATE THE RIGHT TOOLS

The Swedish Ministry of Finance is currently working hard on a proposal for the public administration of banks in distress. The design of the deposit guarantee and Finansinspektionen's powers of authority are also being reviewed. We eagerly await these proposals. Even if the work is carried out on parallel tracks, it is important that the final result is coherent. Otherwise it could be difficult to manage a future crisis in the financial system.

It is also important that the proposals are not toothless. Running a bank is not a right, rather it entails considerable responsibility towards both society as a whole and the customers who have entrusted their savings to the bank. Bank owners are already protected by the financial safety net and insulated against risks in a completely different way to those who own ordinary companies. It would therefore be unfortunate if the result was merely a proposal that entailed the state taking over the management of a problem institution, fixing it up and then handing it back to the owners in a new, improved version.

Hopefully, the government will dare to take the overall approach required when working on these issues and, in particular, they will take note of the events in the United Kingdom and the initiatives that have come about as a result of the problems with Northern Rock. It is important that the state has the necessary tools. If the current EU legislation puts a spoke in the wheel in various ways, then the joint regulations also need to be reviewed.

# The internationalisation of the financial sector requires greater cross-border cooperation

The authorities' crisis preparedness and legal and institutional arrangements for crisis management will thus be less of a purely national affair. The financial sector will be increasingly internationalised, if not globalised. The banks' activities are becoming more cross-border in nature.

The four largest Swedish banks currently have more than half of their total assets abroad, mainly in the other Nordic countries, but also in Germany, Poland and the Baltic states, and, recently, in Russia and the Ukraine. An almost equally large share of their total operating profits originates abroad. For the Nordea Group this share is no less than three quarters.

In recent years, there have also been some much-publicised crossborder acquisitions among several large European banks. There are currently around 50 banks in Europe with substantial operations in several EU countries. There are a number of interacting reasons behind this. The capital adequacy rules have been harmonised, the opportunities to expand in small and mature domestic markets are slight and the economies of scale have increased as a result of, for instance, IT costs accounting for a larger share of the banks' total costs.

When the banks operate across national borders competition increases. This benefits both companies and households, as financing costs fall and the supply of financial services increases. These are efficiency gains which are ultimately beneficial for economic growth.

But at the same time the risk of a bank crisis spreading across national borders increases. This also increases the risk of serious problems arising in several countries at the same time. This makes high demands of crisis management. The exchange of information and the decision making must be coordinated between different authorities. This can be difficult enough to achieve in just one country. The differences between the different authorities' aims, perspectives and working methods can be substantial. In a cross-border crisis it would also be necessary to coordinate the authorities in several different countries. It is not difficult to imagine that this could be very complicated. Apart from involving more authorities, a number of legal and practical complications arise. This can sorely test the coordination of the exchange of information and the decision making.

The Swedish bank's substantial activities abroad have therefore meant that the Riksbank has entered into a number of agreements on cooperation in the event of financial crises with the central banks in the other Nordic countries and in the Baltic states. There is now also an overall agreement on crisis management at the EU level - a Memorandum of Understanding (MoU). This covers central banks, supervisory authorities and finance ministries in all of the member states. Agreements of this nature are valuable because they create orderly forms for cooperation. They create necessary contact networks and, not least, a common parlance, which can be of great importance when managing a crisis. But these MoUs also have shortcomings. They are often worded in a vague and general manner and are not usually legally binding; more a declaration of intent.

But the most serious deficiency is that they do not take into account the conflicts between national interests that may arise in a crisis situation. These should be added to all of the other conflicts which may arise between different interested parties and authorities with different objectives. Conflicts between national interests can be particularly prominent if the socioeconomic costs of a crisis in a cross-border institution are unevenly or unreasonably distributed between different countries. This could in some situations affect the willingness to contribute constructively to an overall solution of the crisis. There is an evident risk that the crisis management can be delayed by political negotiating games. When the stakes are high, there is a risk that many countries will choose to play their cards close to their chest as long as possible. In the worst case scenario, this could lead to crisis measures not being taken in time, which could have devastating results for all those involved.

In September 2007, a Nordic-Baltic crisis exercise was organised around a financial crisis scenario. The central banks, financial supervisory authorities and finance ministries of all of the five Nordic countries and the central banks of the Baltic states took part in this excercise. The exercise brought to light many shortcomings in coordination – both between authorities within individual countries and across national borders. In particular, it showed that measures taken unilaterally by the authorities in one country can easily have devastating consequences for financial stability in other countries. It also further emphasises the importance of continuing to develop the cooperation and ensuring that national regulations do not form an obstacle to cross-border crisis management.

In a crisis it is essential that the authorities in different countries understand one another's assessments of the situation and preferable that they can reach a common view. This demands common criteria and joint terminology.

It must also be possible to coordinate various measures across borders, such as emergency liquidity assistance and payments of deposit guarantee funds. And it must be possible to distribute the socioeconomic burdens in the wake of a cross-border crisis in a reasonable and preferably fairly predictable manner. Otherwise, there is a risk that conflicts between national interests will make the management of a crisis more difficult and belated.

Another aspect which has come to the fore in the recent financial turmoil is the banks' increased dependence on liquidity in the securities markets for their risk management and funding. Central banks around the world need to examine whether they have the necessary tools to manage coming liquidity crises. The question of when and how liquidity support can be given and how such a decision should be communicated without having a stigmatising effect that counteracts its purpose may require new ways of thinking.

# Better regulations and increased cross-border cooperation are necessary

In conclusion, we can observe that the current financial turmoil bears a number of clear parallels to many other financial crises – not least the Swedish bank crisis of the 1990s. The bank crisis was in many ways the wake-up call that made the Riksbank and other authorities realise the serious consequences that a lack of stability in the financial system can have. It led to the Riksbank developing an analysis capacity in the field of financial stability. Ten years ago, the Riksbank published the first of its now regular Financial Stability Reports.

The insights from the bank crisis have also led to the Riksbank strengthening its crisis organisation and developing forms for cooperation between authorities with regard to managing financial crises. But one important element is missing, namely an effective and coherent regulatory framework for managing financial institutions in distress. In our opinion, one should have at least some fundamental requirements for such a system.

Firstly, it should ensure the quickest, most resolute action possible from Finansinspektionen when a financial institution suffers problems.

Secondly, it should be designed so that it is possible to quickly and easily pay the deposit guarantee.

Thirdly, it should give the state sufficient negotiating power towards existing and presumptive shareholders to prevent taxpayers having to bear the cost when a financial institution has been mismanaged.

Without well-functioning arrangements and appropriate legislation already in place it may be very difficult to manage future problems in the Swedish financial system. And it is not sufficient to merely patch up the gaps in the domestic regulatory framework. The real challenges lie in managing cross-border crises. This is becoming increasingly important, particularly in the light of the banks' increasing international operations. It entails challenges that we must tackle jointly on an international level. The regulations must be developed at the European level, at least.

All of these are difficult issues. One does not need to look far beyond narrow authority objectives and short-sighted national interests to realise that new regulatory frameworks and arrangements for cooperation are required if we are to be able to manage future financial crises. But this appears to be an insight that not everyone reaches at the same time. The picture appears to be most clear to the countries that have come furthest in the question of the integration of the financial sector across national borders and which themselves have experience of financial crises. It appears to take other countries longer to realise what new demands arise from the changes in the financial landscape. To achieve this it is necessary to surmount ingrained opinions and other internal resistance. We hope that it will not require a financial crisis of catastrophic proportions before the political maturity and willingness to go further can be achieved on all fronts, both nationally and within the EU.

As John F Kennedy said, "the time to repair the roof is when the sun is shining." When it starts to drizzle it is high time to speed up.

## References

- Reinhart, C. & K. Rogoff (2008): "Is the 2007 U.S. sub-prime financial crisis so different? An international historical comparison". NBER Working Paper Series, Working Paper 13761, January 2008.
- Hoggarth, G. & V. Saporta (2001):"Costs of banking system instability: some empirical evidence". Financial Stability Review, Bank of England, June 2001.