SPEECH

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How can financial crises be avoided in Sweden?*

Four years after the financial crisis broke out, we are still living with its consequences: a sovereign debt crisis in the euro area, sluggish recovery in the United States and United Kingdom, with unemployment entrenched at high levels and a world beyond Europe and the United States that is finding it hard to adjust to the fact that their most important export markets are faltering. The realisation that the costs of financial crises are dreadfully high has led to a general understanding that economic policy must focus much more on preventing such crises.

Here in Sweden, we have coped relatively well through the recent turbulent years. But, even here, unemployment remains on a high level – and part of the high Swedish growth rate has merely been a recovery from the great fall in GDP in 2008 and 2009. It is well-known that I have advocated a lower repo rate to push down unemployment faster and to push up an inflation rate that is currently below our target of two per cent. As there is a broad opinion that low interest rates form a risk to financial stability, it may seem as though I am taking the risk of a financial crisis breaking out in Sweden too lightly. But I am not. I share the opinion that economic policy needs to focus on counteracting financial crises. But I do not think that this is primarily a task for monetary policy. On the contrary, it is a task for macroprudential policy, and it is this topical policy area that I will be talking about today. I have previously spoken on how macroprudential supervision could be organised in Sweden, and on how responsibility for the tools in question could be allocated. [1] The question of the allocation of responsibility and mandates is also being investigated just now by the Financial Crisis Commission. In my opinion, it is important that there are clear targets and mandates for macroprudential policy in the same way as there are for monetary policy. If this is the case, each policy area can take the other for granted.

*The views expressed in this speech are my own and are not necessarily shared by the other members of the Executive Board of the Riksbank. I would like to thank Jill Billborn, Johanna Fager Wettergren and Per Åsberg-Sommar for their great assistance in the writing of this speech.

[1] The speech "Macroprudential policy and clear communication contribute to financial stability" was held at the Swedish Bankers' Association on 30 March 2012. See www.riksbank.se.

Macroprudential policy is aimed at counteracting risks in the financial system as a whole, and is a policy area for which many countries are now trying to set the framework. [2] Exactly how these frameworks will look is still somewhat unclear, but a few general principles have crystallised as regards both appropriate institutional structures and which instruments it may be appropriate to use. [3]

Finansinspektionen already has instruments at its disposal that are focused on the health and behaviour of individual participants and companies. But one important lesson of the crisis is that this is not enough. Our toolkit needs to be complemented with tools that can focus on the system as a whole. Today, I will discuss what such a Swedish toolbox for macroprudential supervision could include.

Different types of risk...

Before I go into the different types of tools that could be used to manage systemic risks, I will explain what is meant by systemic risk.

The Riksbank usually defines systemic risk as the risk that a shock will occur in the financial system, leading to substantial costs for society.[4] Such risks can arise for various reasons. The crisis and the period before the crisis clearly illustrate the tendencies towards exaggerated cyclical behaviour that often characterise the financial markets. In periods of strong growth, there is usually an increase in demand for loans for corporate investments and property purchases. It also seems to be common for awareness of risks to decrease during such an upturn. Lenders often relax requirements for creditworthiness at the same time as they often take on too much debt themselves. When problems subsequently arise as a result of some borrowers finding it difficult to repay their loans, there can be an overreaction in the other direction, with severe credit tightening as a consequence.

But systemic risk is not just a matter of a tendency towards exaggerated cyclical behaviour in credit granting. It is also a matter of how the concentration of risk and the links between different parts of the financial system at any given time affect the risk of a crisis hitting the system as whole. For example, several banks can take the same kind of risk or be dependent on the same funding sources. The high degree of interconnectedness in the financial system – between different institutions and between different markets – increases the risk of contagion when financial problems arise.[5]

Circumstances that need not constitute a risk on the micro level can thus become risks on the macro level. Not knowing which risks will trigger systemic crises is in the nature of things. Of course, this is because the financial system is

[2] For more detailed analyses of macroprudential policy and its ability to counteract systemic risk, see, for example, Borio (2010), Galati and Moessner (2011) and Viñals (2010 and 2011).
[3] See, for example Lim, C., et al., (2011),"Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences", IMF Working Paper, 11/238
[4] The Riksbank has defined financial stability as meaning that the financial system can maintain its basic functions while also having resilience to disruptions that threaten these functions. The Riksbank and financial stability (2010). See also Nordh-Berntsson and Molin (2012), "A Swedish framework for macroprudential policy", Sveriges Riksbank Economic Review 2012:1.
[5] Rajan (2005) argues that the element of distorted incentives for managers of financial assets to take serious risks has increased as a result of structural changes to the financial sector, in which the banks' significance has decreased and the role of other players, such as securities funds, insurance companies, pension funds etc., has increased.

- constantly changing – new instruments and markets arise and technology develops. And, as the financial system changes, the risk outlook changes too. What at first seems to be uncomplicated and 'risk-free' need not be so in reality. This suggests that a broad set of macroprudential supervision instruments is needed to tackle systemic risks.

... suggest a broad toolkit for macroprudential supervision

So what should we bear in mind when selecting and designing tools for macroprudential supervision? Firstly, we need to be able to counteract different types of systemic risk and, for this, we clearly need different types of tool. The principle used in dealing with problems involving a tendency towards exaggerated cyclical behaviour is to variously make it more expensive and less attractive to allow risks to build up when times are good, at the same time as buffers are created that can be used when times are bad. Problems caused by the financial system's structure should instead be approached by managing individual institutions' contributions to total systemic risk, for example by way of specific requirements for capital buffers, strengthened requirements for transparency, or limitations on certain types of activity.

Secondly, there is probably a need both for tools with a wide area of effect and for those aimed at a particular sub-market or activity. Countercyclical capital buffers are an example of a tool with a relatively wide area of effect. These are based on the total expansion in credit and cover all banks. I will return to this instrument shortly. However, such broadly-acting tools have the disadvantage that they risk having unforeseen effects in sectors that have not had problems. If the problems are clearly concentrated on a specific sector, tools with a narrower area of effect are thus to be preferred. If, for example, the problem is a rapid build-up of housing loans in combination with rapidly rising housing prices, it may be better to focus specifically on the housing market. A more narrowly-acting tool in this case could be an increase of risk weights specifically on housing loans. However, it is not certain that there will always be narrowly-acting tools that are sufficiently effective.

Thirdly, there may be a need for tools that can be focused on different types of participant. This is primarily a matter of using tools aimed at financial companies, as it is within these companies that problems that may ultimately lead to a financial crisis can arise. But there may also be reason to use tools aimed at households and non-financial companies. Such tools can form important complements, for example by dampening demand for credit.

Naturally, there are already policy areas that directly or indirectly influence financial stability. As regards the housing market, which is a sector that is creating a great deal of unease in Sweden due to high indebtedness and high prices, this is influenced by factors such as regulations for tax deductions for interest payments, changes to property tax, rent control and other regulations that affect incentives for housing construction. But decisions on measures in these areas are primarily taken on the basis of other goals than safeguarding the stability of the financial system. In micro supervision, which is the kind of supervision carried out by Finansinspektionen in Sweden, a series of different tools is also used to influence financial stability. However, at present, Finansinspektionen's remit is focused on dampening risks among individual institutions, not in the system as a whole.

- What we need, quite simply, are specific tools for macroprudential supervision that can be used with the direct aim of promoting stability in the system. This will make it possible to counteract the systemic risks created by policies in other areas so that the system as a whole remains stable. The housing market is a good example of this. Politically, it may be difficult, if not impossible, to carry out changes to the taxation system making mortgage borrowing significantly more expensive, even if this would be the most effective way of reducing the risks associated with high indebtedness among households. This means we need tools that can counteract this kind of indebtedness and which can be used with the aim of promoting the stability of the financial system.

There is a great need for such tools in Sweden

The Swedish banking system is large and closely interwoven, which means that problems in one bank can easily spread to the other banks. The costs to society can thus be extensive in the event of a crisis. Increasing the safety margins in the financial system is therefore highly important. It can be enough for one bank to be impacted by problems for confidence in all banks to be dealt a blow. The important role of confidence in the financial markets became clear in the autumn of 2008, when the lack of confidence led to many banks rapidly encountering liquidity problems and being forced to rely on the Riksbank's measures for their funding. In this regard, the Swedish banks are also particularly sensitive to shocks on the financial markets as they largely obtain funding in foreign currency. Funding in foreign currency is often for shorter durations than funding in Swedish currency and has been seen to disappear abruptly in times of stress.

Important steps have already been taken...

A series of important steps have already been taken to make the financial system more robust. A large part of this work is taking place within the framework of the Basel III regulations. Higher demands for more and higher quality capital will contribute towards strengthening confidence in the individual banks and thereby also in the system as a whole. In addition, more capital will lead confidence in the banks on the financial markets to increase, which will make it easier for the banks to obtain access to market funding.

The new regulations also bring with them a few 'pure' macroprudential policy instruments in the form of countercyclical buffers and special capital supplements for global systemically-important financial institutions (SIFIs). I will return to this shortly, but allow me first to say a few words on the new capital adequacy rules.

At the moment, the Council of the European Union and the European Parliament are negotiating procedures for the incorporation of the new capital adequacy rules into EU law. These discussions have broadly focused on whether individual member states should be able to place higher capital requirements than the minimum. I consider that we should be allowed to do this. In Sweden, we need to set capital requirements on the basis of the prevailing circumstances on the Swedish banking market. In my opinion, this must be the guiding principle as long as it is Swedish taxpayers' money that would ultimately be at stake in the event that Sweden were to be impacted by a financial crisis. The Ministry of Finance, Finansinspektionen and the Riksbank

- have signalled that the capital adequacy of the major Swedish banks needs to be increased considerably. According to the plan, capital adequacy is to increase to at least 10 per cent by 2013 and at least 12 per cent by 1 January 2015.[6] The Swedish banks have every chance of meeting these requirements due to their high earning capacities and their low loan losses. The four major banks are systemically important on a national level and, additionally, Nordea is systemically important on a global level.[7] The supplement for systemic importance is included in the capital levels that I have just cited. This is thus a measure linked to risks of a structural character.

For the same reasons, there may be a need for Sweden to introduce tougher requirements for the Swedish banks' liquidity reserves than are advocated by the Basel III regulations. The banks need to become better at themselves managing the liquidity problems to which their activities give rise, particularly as regards liquidity in foreign currency. If the banks match the maturities of assets and liabilities better and maintain sufficient liquidity reserves in foreign currency, they will be less sensitive to shocks on the financial markets.

The Basel III Accord intends that two quantitative liquidity requirements be introduced, one short-term and one long-term. The short-term measure liquidity coverage ratio (LCR) is intended to ensure that the banks have enough liquidity to cope for 30 days under stressed market conditions. The long-term measure net stable funding ratio (NSFR) is aimed at reducing the maturity difference between assets and liabilities.

The Basel Committee's plan is for the LCR to be introduced in 2015 but, as the Swedish banks largely use short-term market funding in foreign currency, the Riksbank and Finansinspektionen consider that Sweden should go in advance and introduce the LCR in January 2013.[8] In addition to this, the Swedish banks will also need to have the LCR at 100 per cent in the foreign currencies euro and US dollar. So, even here, we consider that higher requirements should be placed on the Swedish banks than the Basel III regulations do.

Countercyclical capital requirements, a macroprudential policy instrument in focus

One of the macroprudential policy instruments being discussed most in Europe at present is countercyclical capital requirements. These are included as a part of the new Basel regulations. Consequently, this is an instrument that we know we will be able to use in Sweden in a number of years. The principle is simple: when the financial risks increase, the banks will successively be forced to increase their countercyclical buffers; when the risks recede, they will be permitted to decrease them. However, in practice, the instrument is not entirely so simple to design. The level of the countercyclical capital buffers will be determined by the relevant authorities on the basis of quantitative and qualitative assessments. Among other data, the quantitative assessment will take into account the so-called credit gap, which is how far credit growth deviates from an estimated trend. But this is a fairly rough measure of the degree of risk in the system, and other measures and assessments may also be fairly important.

[6] This refers to Core Tier 1 capital in relation to risk-weighted assets.
[7] FSB (2011), "Policy Measures to Address Systemically Important Financial Institutions", 4 November 2011.
[8] See, for example, Financial Stability Report 2012:1, Sveriges Riksbank.

The aim of the countercyclical capital buffers is primarily to strengthen the banks and the resilience of the financial system. One effect of introducing the buffers will be to moderate the fluctuations of the credit cycle. In an upturn, substantial credit expansion will activate the buffers, which means that the banks will gradually have to hold more capital. This will restrict lending and thus reduce the risk of exaggerated credit growth and rising asset prices. In a situation in which lending is being tightened, the banks' capital will be freed up as the buffer requirement is reduced. The banks will therefore not need to reduce their lending to the same extent, which would otherwise reinforce the downturn. Here, it may be worth emphasising that the credit cycle does not typically coincide with the business cycle (the fluctuations of which we, at the Riksbank, attempt to dampen with the use of monetary policy), but has a longer course. But once again, the primary purpose of the countercyclical capital buffers is to increase the resilience of the financial system by ensuring that the banks have enough capital in periods when risks are accumulating.

Negotiations are underway on the EU level regarding the implementation of Basel III, and thus also the countercyclical buffer. Who will be responsible for the instrument – an existing authority, several authorities together or a newly-formed authority – is an open question in Sweden and many other countries. The Swedish government has appointed a commission to investigate the implementation of countercyclical capital buffers in Sweden. [9]

...but the Basel regulations do not capture all risks in Sweden

The Basel III Accord will also place requirements on the banks' leverage ratio, which is the minimum amount of capital that the banks must retain regardless of the risk class of the assets.[10] The fact that a requirement for the leverage ratio sets a ceiling for indebtedness in the banking system is very attractive. It guarantees a kind of minimum level for resilience. At the same time, the banks will no longer have to rely upon the risk weights correctly reflecting the actual risk in lending.

My assessment is that leverage ratios and countercyclical buffers are good instruments for the management of systemic risks which will help us strengthen the financial system when the need arises. But they have their limitations. Both of these instruments are indiscriminate and it will be difficult to determine when it will be appropriate to increase or decrease the countercyclical capital buffers. If we are to be able to combat risks efficiently, we will also need instruments that can be directed towards the areas in which the problems exist.

Variable risk weighting – a usable instrument

One instrument that a growing group of countries is choosing to introduce is variable risk weighting for lending.[11] These can be seen as a complement to countercyclical capital buffers and are aimed at counteracting the build-up of

[9] This work is being conducted within the framework of the government's inquiry Fi 2012:05 "Inquiry on capital adequacy regulations", to be concluded in the spring of 2013.
[10] This capital conservation buffer is to be held in the form of core Tier 1 capital and is to consist of 2.5 per cent of the risk-weighted assets.
[11] In the United Kingdom, the Financial Policy Committee has been given a mandate to introduce risk weighting, so-called sectoral capital requirements, see Financial Policy Committee statement, March 2012. See also Bank of England Instruments of macroprudential policy, a discussion paper, December 2011.

risks in lending to specific sectors. Varying risk weighting is thus a more focused instrument than countercyclical capital buffers.

The banks' capital ratios are determined by their capital and assets and by the risk weights used for calculating the risk-weighted assets. If the risk weightings on lending to sectors considered as higher risk are increased, the banks must allocate more capital per loan. This could dampen lending to higher risk sectors. Our domestic banking crisis at the start of the 1990s provides one example of how systemic risks can build up and become concentrated upon a single sector – in this case, commercial properties. An increase of the risk weighting on loans to commercial properties might have been able to alleviate the crisis that we went through then.

In Sweden, recent discussions have, above all, dealt with risk weightings on mortgage loans, which are among the lowest in Europe due to the historically-low loan losses. But there is reason to question these low risk weightings, as they do not account for recent years' increases in household indebtedness. Consequently, Finansinspektionen has also started work on reviewing the risk weights with the aim of increasing them.

I consider that variable risk weighting is a macroprudential policy instrument that it would be advantageous to include in a toolbox for Sweden. It could both strengthen the banks' resilience against systemic risks in a broad sense, and reduce the risks associated with lending to a specific sector. Such a tool would reduce the pressure on monetary policy as an instrument for managing risks on the Swedish housing market, something that I personally would very much welcome. This would allow influence to be exerted on the expansion of credit in the household sector and on housing prices, without simultaneously impeding credit granting in other sectors and possibly influencing the krona exchange rate in a direction that would impede exports.

A ceiling on household borrowing

Another way of counteracting systemic risks is to use loan ceilings as a macroprudential policy instrument. These can certainly be focused on all categories of borrower in society, but, in the countries in which they have so far been applied, they have been directed at households and their indebtedness.[12] These instruments have usually been formulated as a limit on the amount of the loan in relation to the household's income or the value of the household's assets that form the collateral for the loan. There is no internationally harmonised definition of these instruments, allowing them to be defined differently as regards loan amount, income and value of underlying collateral.

In Sweden, Finansinspektionen issued a recommendation almost two years ago regarding a limit on how much borrowers may borrow, the so-called mortgage ceiling. According to this, household loans should not exceed 85 per cent of the property's market value when the loan is granted. Lending above this threshold is still possible, but should be granted without residential collateral and therefore at higher interest rates. Even if Finansinspektionen's justification for the mortgage ceiling was to protect consumers, the measure can also be used for macroprudential supervision. From a stability perspective, the credit risks in the banks' credit portfolios could be reduced if the rule contributes

[12] See, for example Lim, C., et al., (2011), "Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences", IMF Working Paper, 11/238

towards reducing the economic vulnerability of households. The loan ceiling may also contribute towards more stable price formation on the housing market, as the rules influence how much money households are willing to put into purchasing housing. If this counteracts excessive price variations on the housing market and the unsustainable accumulation of debt among households, it will also likewise contribute towards reducing the risk of loan losses in the banking system.

A loan ceiling based on income would have largely the same characteristics as one based on the value of housing, but may have certain advantages. If debts are not linked to price movements on the housing markets, this avoids the problem of price increases and indebtedness reciprocally being pushed upwards in a rising spiral.

Effectively combating future financial crises will require flexibility

An efficient financial system is a prerequisite for a modern economy. A shock leading to the breakdown of any of the financial system's functions can have major economic costs in the form of sharp falls in GDP and high unemployment. Central government finances can be weakened so much that the country enters a debt crisis. From this point of view, it may be considered justifiable to make every effort to increase the resilience of the financial system. At the same time, it is important to always compare the cost of various types of measure with their benefit, so that we can design the most efficient system possible.

I have presented a long list of possible instruments that could be used to conduct macroprudential supervision. By necessity, this list will include most tools, as different tools are needed to counteract different systemic risks. But we are discussing something that is relatively new. At present, we only have limited experience of conducting macroprudential supervision in practice. This means that the process of introducing macroprudential supervision will entail a certain degree of trial and error. Quite simply, we will have to test our way forward, while constantly doing our best to assess the efficiency of the instruments being employed.[13] The financial system is complex and dynamic, and the risk outlook is changing all the time. This means that it can never be determined with certainty where a financial crisis may arise. Bearing this in mind, it is important that we, in Sweden, construct a framework for macroprudential supervision that is flexible and that we do not limit our possibilities in terms of the instruments that can be used. It is also important to establish a process to evaluate and later develop and modify the toolbox.

I consider that a clear but, at the same time, flexible framework for macroprudential supervision will create the best conditions to counteract future financial crises. But this is not to say that this would be enough to ensure that no financial crisis ever occurs again. The crises of tomorrow will probably have completely different causes to the crises of yesterday, making

[13] In the absence of empirical experience of conducting macroprudential supervision, theoretical analyses can provide guidance to the consequences that can be expected. However, academic research into this area is still in its infancy and it is therefore difficult to draw any unequivocal conclusions from it at present. Goodhart et al. (2012) is one example of a study investigating the interplay of a number of macroprudential policy instruments, which is to say whether these complement or substitute each other.

them difficult to protect ourselves against. However, the scale of the costs of a financial crisis justify making every effort to protect ourselves.

As regards the question of where responsibility for macroprudential policy ought to lie, it is clear that this area is closely linked to both the Riksbank's and Finansinspektionen's activities. The Riksbank has been analysing the stability of the financial system for fifteen years and also currently provides recommendations for safeguarding it in its Financial Stability Reports. Finansinspektionen also works for the stability of the financial system but with a focus on individual institutions. The competence and experience of both authorities will have to be utilised if macroprudential policy is to be effective in Sweden.

While awaiting a more long-term solution for Swedish macroprudential supervision, the Riksbank and Finansinspektionen have set up a temporary council for cooperation. In addition to consulting and exchanging information on assessments of risks and possible countermeasures, one task of the council is to discuss the development of instruments and methods within macroprudential supervision. The joint communication of our assessments in connection with this council for cooperation is a benefit in itself. However, over the long term, something more than a qualified discussion forum will be needed. To become really effective, macroprudential policy needs to acquire the distinct status of an independent policy area with its own tools for promoting stability in the financial system as a whole and a clear allocation of responsibility. Assessing and demanding responsibility demands a clear allocation of responsibility.

Another benefit of establishing a clear and effective framework for macroprudential policy is that this will allow monetary policy to be relieved of taking account of financial stability. In my opinion, this consideration is creating a risk that monetary policy will become unclear and unpredictable. A functioning macroprudential policy will thus let us both reduce the risk of financial crises and give us a monetary policy that can more efficiently stabilise inflation around the inflation target and resource utilisation around a sustainable level. Thank you!

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