



SPEECH

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■ The role of the central bank after the financial crisis – the challenges ahead

The last five years have been an extraordinary period for the global economy, with crisis management and major fluctuations in growth and economic development. For politicians and authorities in many countries, it has been – and still is – a complex world that is hard to navigate. Five years after the financial crisis broke out, many countries are still in the process of cleaning up after it. It can be ascertained that financial crises are expensive, time-consuming processes, and that far too little has been done previously to prevent them from occurring.

The financial crisis has made it clear that the monetary policy framework needs to be developed so that it takes greater account of the importance of financial stability. While the crisis was indeed not caused by monetary policy, a lesson nevertheless learned is that price stability does not suffice to ensure financial stability and a stable development in the real economy.

The financial crisis has also brought to light deficiencies in financial stability policy, in that microprudential policy does not guarantee financial stability. Hence, financial stability policy must also be developed. It needs a clearer mandate as well as tools for managing systemic risks. In response to this, macroprudential policy is now emerging as a new policy area.

Finally, the financial crisis has shown that monetary policy and financial stability policy must be coordinated to an even greater extent than before. There is thus a great international consensus that the roles and responsibilities of the central banks and other authorities are in need of review. Today, I intend to discuss how I view the future role of the Riksbank. I will focus on the interaction between monetary policy and financial stability policy and the new policy area macroprudential policy.

The central bank's tasks and objectives may come into conflict with each other

In most countries, the central bank has a responsibility for price stability, while at the same time supporting a sustainable economic development. In practice,

■ this involves stabilising inflation and some measure of resource utilisation. In addition, the central banks usually have a responsibility for financial stability.

This means that the central banks often face various conflicting objectives or trade-offs. For instance, it can be a case of striking a balance between achieving the inflation target and a sustainable level of resource utilisation when inflation and resource utilisation are moving in different directions. When productivity increases, inflation usually falls while resource utilisation rises. So, in the short term, it is not possible to simultaneously stabilise inflation around its target, and resource utilisation around its sustainable or long-term level.

It can also be a trade-off between a stable financial system and a sustainable level of resource utilisation. Overly stringent regulation normally leads to more expensive financial services, which affects resource utilisation. The stringent regulation of financial markets in the 1960s and 1970s gave us a relatively stable financial system, but at the expense of efficiency. On the other hand, deregulation brought about developments on financial markets which created a “seemingly efficient” system, but which gave rise to major risks to stability.

The development over recent years has shown just how closely interlinked the tasks of the central banks are. For example, the emergence of a situation of financial instability also has repercussions for both inflation and resource utilisation. This illustrates that it is not possible to conduct monetary policy and financial stability policy completely separately.

Differences in time horizons give rise to trade-offs

We can also describe the central banks’ conflicting objectives in terms of different time horizons. For monetary policy, the time horizon is usually two to three years, which is reasonable in light of how the business cycle usually varies. However, we know from experience that financial imbalances and risks in the financial system are built up over a much longer period of time, which can include several business cycles. These longer periods are usually described in terms of so-called financial cycles. There is no established method of measuring the financial cycle, but lending rates, credit terms and asset prices are common indicators.¹

So, the financial cycle has its up- and downturns just like the regular business cycle, but is often more protracted. In the upward phase, obtaining financing is easy and cheap, while it is harder and more expensive in the downward phase. Sometimes, the upturn in the financial cycle results in a financial crisis, but not always.

The difference in the time horizon between the regular business cycle and the financial cycle gives rise to conflicting objectives for the central bank. When the cycles head in different directions, there may be a trade-off between price stability and resource utilisation in the short term, and financial stability in the longer term.

If a financial crisis actually occurs it will of course have repercussions on both inflation and resource utilization. The trade-off is particularly severe if the central bank only has the policy rate at its disposal.

¹ This rationale is based on Drehmann, M., C. Borio and K. Tsatsaronis (2012) *Characterising the financial cycle: don't lose sight of the medium term!* BIS Working Papers No 380.

■ In the Swedish economy, we currently have a low inflation rate and relatively weak resource utilisation, while at the same time credit volumes have been increasing relatively sharply for a long time. There is therefore a trade-off between price stability and normal resource utilisation in the short term, and financial stability in the slightly longer term. For a central bank with only the policy rate at its disposal it is a case of balancing a poorer inflation and resource utilisation outcome in the short term against uncertain but very severe outcomes in the longer term. In such a situation, more expansive monetary policy can provide better fulfilment of inflation and resource utilisation objectives in the short term. However, more expansive monetary policy can also increase the risk of a financial crisis, and thus of very severe outcomes in the longer term.

The way central banks work is changing

The financial crisis has led to a change in how central banks should approach the trade-off between price stability and financial stability. Before the crisis, the general perception was that the policy rate should be used to achieve price stability and to support the economic development. If a crisis nevertheless occurred, cleaning up afterwards would be relatively painless. With this approach, it was fairly simple to manage the trade-off between the objectives of monetary policy in the short term, and risks to financial stability in the slightly longer term, because the trade-off was negligible.

Recently, the pendulum has swung over to the view that monetary policy should lean against the wind to a greater extent, and take greater account of financial stability.² In the autumn of 2007, I took part in a panel debate in Jackson Hole, and indicated then that it is better to attempt to prevent the risk of a financial crisis than to clean up afterwards. The main argument as I see it – now as it was then – is that cleaning up is extremely costly and takes a long time. Experiences in Sweden from the crisis of the 1990s are an example of just how painful it can be. Because, reducing major debts often takes a long time, and during that time possibilities of stimulating demand through monetary policy are limited. It doesn't matter much if the debts are in the private sector, i.e. among households and companies, or in the public sector. In both cases, a trend build-up of debt in relation to income is always unsustainable in the long term.

A question is then how central banks more tangibly can lean against the wind. The policy rate is a tool that can be used. We therefore need to develop the monetary policy framework so that it takes greater account of financial stability. At the same time, financial stability policy is changing, and a new policy area, macroprudential policy, is emerging which also aims to lean against the wind. Hence, we are facing two changes in the areas of responsibility of central banks, both of which create new possibilities to manage the trade-offs between price stability, resource utilisation and financial stability. I will start to discuss monetary policy and then move on to macroprudential policy.

² See e.g. King, M. (2012) *Twenty years of inflation targeting*, The Stamp Memorial Lecture, London School of Economics, 9 October 2012 and Eichengren, B. et al. (2011) *Rethinking Central Banking*, Committee on International Economic Policy Reform, September 2011.

■ **The monetary policy framework is in need of review**

As I have mentioned, monetary policy of the 1990s and up to the financial crisis was viewed as successful by many. It was considered that this played an important role in both the relatively low and stable inflation, and the relatively stable GDP growth during those years.

During the global financial crisis, it came to light, however, that major financial imbalances had been built up despite the seeming stability of many macroeconomic indicators. An important lesson from the financial crisis is therefore that low and stable inflation does not always guarantee financial stability or sustainable economic growth.

The huge costs of the financial crisis to the real economy have led central banks around the world to start thinking about the current monetary policy framework. The challenge ahead is to create a framework which continues to safeguard stable prices, but which at the same time is consistent with a sustainable development in the financial system. Financial circumstances therefore need to be accounted for in the monetary policy decision-making.

Taking account of financial factors in monetary policy decisions

Different approaches can be used to formally take greater account of financial stability in monetary policy decisions. For instance, how much a change in the policy rate affects the probability of a financial crisis can be calculated. The trade-off is subsequently performed between objective fulfilment in terms of inflation and resource utilisation during the forecast period, and the risk of very poor objective fulfilment further ahead due to a financial crisis. A consequence of this approach is that it has to be based on longer time horizons than currently since the build-up of financial imbalances occurs over longer periods of time. Norges Bank has chosen a different approach in which an explicit term is incorporated into the loss function of the monetary authority. The purpose of this term is to capture that, in addition to the price stability and sustainable resource utilisation targets, financial stability should also be accounted for.

Whatever approach chosen, in order to give financial stability a greater role in the monetary policy decisions, the use of financial variables as indicators in monetary policy decision-making will increase.

Measuring financial stability is often difficult

To measure the extent of financial stability requires a broad approach which can often resemble detective work. The stability report which we publish twice a year is an example of the type of comprehensive analysis that is needed. It describes a series of indicators, for example credit growth, risk premiums, and the development on various asset markets. From this year, we have also introduced an annual report of our assessment of Sweden's financial infrastructure. Taken together these indicators often give a good picture of the financial situation. Hence, the extent of financial stability cannot be summarised in a single, simple financial variable.

This type of measurement problem is in fact also apparent in the inflation rate and the resource utilisation. The formal inflation target for the Riksbank is measured using CPI, but we also use various measures of underlying inflation.

■ In order to measure resource utilisation, we look at a series of different measures such as the GDP gap, unemployment gap and the employment gap. For inflation and resource utilisation, we have long learned to use different measures even though we know they are inherently uncertain. Applying that experience will be useful when it now comes to evaluating different measures of financial stability.

Financial stability cannot be assessed by relying on various indicators alone, though. The reasons for the development must also be understood. It can be compared to the reasoning of central banks in assessing inflation. An increase in inflation does not in itself constitute a reason for increasing the policy rate. Appropriate monetary policy depends on the reason for the change. If the rise is due to price pressure from increased demand, the monetary policy will not be the same as it would have been had the rise been due to lower productivity. Similarly, rapid credit growth is not necessarily always a sign of lending being unsustainable and posing a threat to financial stability.

A hot topic on that subject is how much house prices and the debt build-up of households should weigh in monetary policy assessment. In general, central banks do not have targets either for house prices or household debt. A rapid surge in house prices or rising lending may, however, signal an imminent financial crisis which could affect future inflation and resource utilisation. Hence, under certain circumstances, also taking account of house prices and household indebtedness in monetary policy decisions is necessary. The extent to which this should be done is, of course, a matter of judgement affected by several factors. For instance, it depends on the other variables currently being taken into account, and the shocks expected ahead. The housing market is also an important part of the monetary policy transmission mechanism. The house prices thus also contribute important information about which shocks are driving the economic development.

On the whole, I do not believe that the flexible inflation target policy conducted by the Riksbank since the mid-1990s, with price stability as the overriding target, needs changing. However, monetary policy must to a greater extent lean against the wind and take greater account of financial stability.

Macroprudential policy provides financial stability policy with a new focus

The emergence of macroprudential policy as a new policy area involves a far-reaching change in the preventive work of financial stability policy.³ Macroprudential policy is about limiting systemic risks from a systemic perspective. It is about analysing the links between the various agents in the financial system and the relationship over time between the financial system and the macro economy. Macroprudential policy affects the resilience of the financial system, but one (more or less pronounced) effect of this is also that lending rates are affected, which is of consequence to the trade-off between price stability and financial stability. To highlight this in more detail, I will provide a general picture of how I view macroprudential policy. As a starting

³ It should also be mentioned that macroprudential supervision is not the only change to better prevent future crises. Many of the regulatory deficiencies prevailing before the crisis are being addressed by the new capital and liquidity regulations of the Basel III accord. Work on improving the regulations is, however, far from complete and intense efforts are under way in various international forums.

point, I will take the interest rate which households and companies pay for loans ($i_t^{lending}$). Put rather simply, this can be defined as the central bank's policy rate (i_t) plus an interest rate margin (δ_t):

$$i_t^{lending} = i_t + \delta_t.$$

The interest rate margin depends on the banks' compensation for administrative expenses and capital and funding costs, risk premiums and the banks' profit margin. Credit terms such as the loan-to-value ratio and amortisation requirements are not directly visible in the interest rate encountered by borrowers, but in order to illustrate their effect at an aggregate level, they can be restated into interest rate terms. In order to obtain a simple formula, I therefore include the credit terms in the "interest rate margin".

Interest rate margins and credit terms tend to vary over time with the financial cycle. When the future outlook is bright and financial agents, households and companies alike are optimistic, risk premiums are usually low, which leads to lower lending rates and generous credit terms. This contributes to a rise in credit growth and asset prices. When outlook deteriorates, banks' lending becomes riskier, or is at least perceived as such, which can be noticed in higher risk premiums and tougher credit terms. The banks, quite simply, become more restrictive in their lending in bad times and we will have a downturn in the financial cycle.

So, why should central banks take account of fluctuations in interest rate margins and credit terms? Well, because there is a series of so-called external effects associated with financial activity which lead to the banks (and other financial agents) intensifying these fluctuations. The majority of the external effects are due to the fact that the social costs of financial instability are greater than the costs borne by the banks.

Put simply, financial stability can be equated to stable interest rate margins and credit terms over time.⁴ In other words, interest rate margins which are not too low in good times or too high in bad times, and credit terms which are not too generous in good times or too restrictive in bad times. Lending and the building up buffers among both lenders and borrowers then stabilises over time. I would like to emphasise that this is a highly simplified description of financial stability, which to a certain extent disregards the structural aspects of systemic risk such as resilience and risks in financial infrastructure on the one hand, and such factors that trigger financial crises on the other. However, even the simplified picture gives important insights.

The new tools being developed and the old tools which can be used for a new purpose are crucial to the success of macroprudential policy. Allow me therefore to discuss macroprudential policy tools and how they are intended to function.

⁴ A fuller definition of financial stability is that the financial system shall fulfil its fundamental functions and be resilient to various shocks occurring, see the Riksbank (2013) *The Riksbank and financial stability*, Stockholm February 2013.

■ **Macprudential policy tools and how they fit in with monetary policy**

Typical macroprudential policy tools are capital and liquidity requirements chiefly focused on banks and the supply of credit. However, it's also about measures to limit demand, such as the mortgage cap, or the regulation of exposures and haircuts with the purpose of limiting the contagion risk in the financial infrastructure. The various tools can be divided into static and time-varying tools. Using my simple lending rate formula, I will illustrate how, in different ways, these tools affect lending rates and credit terms. That is, after all, partly their purpose. However, this also has consequences for monetary policy.

The static tools can be illustrated by adding a variable (\bar{z}) denoting how regulation affects interest rate margins and credit terms in the simple definition of the lending rate:

$$i_t^{lending} = i_t + \delta_t(\bar{z}).$$

The primary purpose of static regulation is to adapt resilience according to the structural factors which give rise to systemic risk, such as the size, concentration and degree of maturity transformation of the banks. The introduction of static regulation involves a one-time shift in the interest rate margin. Monetary policy may need to take account of this. Monetary policy must naturally also take account of the extent to which the measure affects the risks of financial instability ahead.

However, variations in the view of risk-taking and credit growth also involve variations in systemic risk over time. A time-varying macroprudential policy tool is therefore also needed. This is also a way of attempting to make the regulation slightly cheaper, i.e. managing the balance between stability and efficiency. An example of time-varying regulation is the countercyclical capital buffer. It aims to induce banks and other financial institutions to build up capital buffers in good times, which they can then reduce in bad times. However, such time-varying regulation also contributes to stability by increasing the costs of borrowing when credit growth and other financial variables suggest that systemic risk has increased, and reducing the interest rate margin in financial crisis situations when the buffer can be used. We can illustrate the time-varying part by adding a time index also for the regulation variable (z_t):

$$i_t^{lending} = i_t + \delta_t(z_t).$$

If time-varying regulation is introduced, the variations of the interest rate margin will be different over time, which can affect the monetary policy transmission mechanism. At the same time, a central bank must, irrespective of macroprudential policy, understand how the financial sector determines various financial prices in order to understand how monetary policy affects the economy through the lending rate.

Credit markets are often not entirely homogeneous, but consist of several different segments or sectors. The development within different sectors can

vary tremendously. Although many other factors affecting the lending rate and other credit terms are of an aggregate nature, sector-specific factors are often important too. It is therefore important to have a macroprudential policy tool focusing on individual sectors. This is not least important in attempting to reduce the costs of leaning into the wind. If for instance lending to households is weak while lending to companies is strong, and we only have a broad tool such as the policy rate or the countercyclical capital requirements, it will be hard to achieve a policy rate or interest rate margin which is optimal for both sectors. Sector-specific capital requirements would enable increasing the interest rate margin only for the corporate sector, thus avoiding a contraction for households. We can illustrate sector-specific tools by adding an index (S) for sector-specific tools:

$$i_{t,S}^{lending} = i_t + \delta_{t,S}(z_{t,S})$$

It might be assumed that macroprudential policy ought to reduce the need for monetary policy to lean into the wind. This is true to a certain extent. Macroprudential policy is important in offloading monetary policy. If the macroprudential policy tools can increase the interest rate margin, the policy rate can be put at a lower level than would otherwise have been possible without an increase in credit growth. Monetary policy can thereby stimulate a faster economic recovery through other channels, like the exchange rate channel, without risking the financial stability. However, in practice there is a limit to how much prices on different credit markets can be affected through regulation, and how much lending rates can thus diverge from the monetary policy rate. If the divergence is too wide, incentives to circumvent the regulations are also great, i.e. conducting regulation arbitrage. Throughout history, we have seen countless examples of regulation arbitrage undermining the efficiency of financial regulation. This was the case in Sweden not least in the 1970s and 1980s, when the combination of a loan cap and a negative real interest rate gave rise to great incentives for regulation arbitrage, which led to the emergence of a “grey” credit market.

Macroprudential and microprudential policy also need to be coordinated

Macroprudential policy is also linked to other policy areas, not least to microprudential policy. Unlike macroprudential policy, which focuses on stability in the financial system as a whole, microprudential policy focuses on the stability of individual financial institutions and on consumer protection. Decisions in microprudential and macroprudential policy thus differ; they derive from different motives and are based on different types of analysis.

To a certain extent, however, the tools for microprudential and macroprudential policy can complement each other. Microprudential policy establishes certain minimum requirements aimed at ensuring that individual institutions are sufficiently resilient to the risks they encounter. On top of these are then placed the macroprudential requirements, which aim to counteract risks at systemic level and which can also be time-varying. Often, the same tools are used for both purposes, and in this case it is fairly clear that the tools can complement each other. However there are also situations where microprudential and macroprudential policy can come into conflict with each other. A typical example is a financial crisis situation in which a

■ macroprudential policy authority wishes to reduce the capital buffers of banks in order to stimulate lending while, from a microprudential perspective, it would instead be desirable to see the banks strengthening their balance sheets with more equity. So, there is a need to coordinate these policy areas too. Also, the knowledge about individual institutions generated in microprudential supervision work is important to understanding risk build-up at systemic level.

Wind strength is also affected by other policy areas

Not only is there a strong link between monetary and macroprudential policy and a need to coordinate macroprudential and microprudential supervision – the need to lean against the wind is also affected by other policy areas. Fiscal policy has a significant influence on borrowing and lending incentives. However, other policy areas can also come into play, such as housing policy when it comes to household indebtedness. There is thus a limit to what can be achieved by macroprudential policy, or monetary policy for that matter, which depends on other policy areas.

The opportunities and limitations of macroprudential policy – the example of the Swedish household sector

I will now be much more specific about the opportunities and limitations of macroprudential policy by focusing on a concrete example. By now, it is well known that, for a number of years, the Riksbank has seen substantial risks associated with household indebtedness. Also, a number of external experts have indicated the housing market and private indebtedness as a risk factor.⁵ In other words, this matter is highly suited to the discussion about what macroprudential supervision can and cannot do or, if you like, how macroprudential policy can contribute to managing the trade-off between price stability and financial stability we are facing.

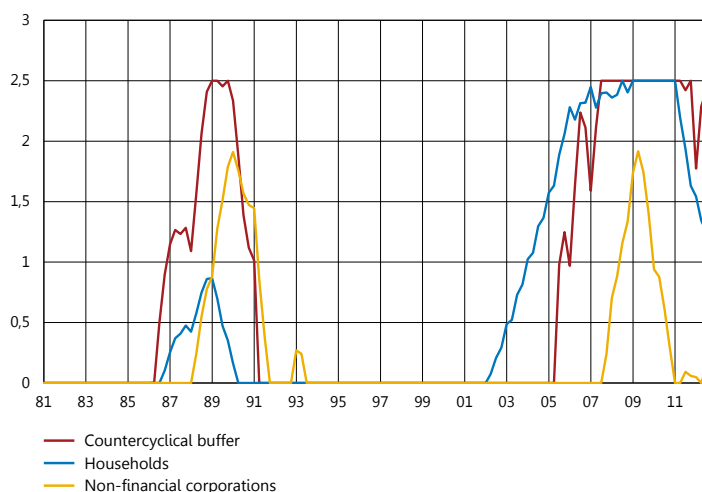
The countercyclical capital requirement would have been activated

One way of illustrating the possibilities of macroprudential policy to limit the risks ensuing from the debt build-up of the household sector is to consider how the countercyclical capital requirement would have been used if it had been in place. This requirement involves the banks building up an extra capital buffer when aggregate lending is high. In a crisis, the banks are then able to use this buffer to stimulate lending. Although this tool is not yet in place, we can assess fairly well how it would have been used historically, thanks to the fact that the Basel Committee has provided guidelines regarding when it is appropriate to activate the requirement. The most important indicator in this assessment is the credit gap, which is a measure of how much credit growth deviates from its long-term trend. The reason for the credit gap having gained a key role in the assessment is that it has proven to be the indicator that warns

⁵ See OECD (2012) *OECD Economic Surveys: Sweden*, OECD Publishing, doi: 10.1787/eco_surveys-swe-2012-en, IMF (2013) *Sweden—2013 Article IV Consultation: Concluding Statement of the Mission*, Stockholm: 31 May 2013 and European Commission (2013) *Recommendation for a COUNCIL RECOMMENDATION on Sweden's 2013 national reform programme and delivering a Council opinion on Sweden's convergence programme for 2012-2016*, Brussels: 29 May 2013.

- of an impending crisis best and sufficiently early. A pure mechanical application of the credit gap can provide a certain guide to when the capital requirement would have been activated (see figure 1).⁶

Figure 1. Time periods when countercyclical capital buffers should have been activated based on historical measures of the credit gap (per cent).



Note: The calculations are based on a mechanical application of the credit gap approach.

We can see that the requirement would have been activated on two occasions. The first time would have been a few years before the banking crisis of the 1990s, and the second time around 2005, that is just before the global financial crisis. We can also see which lending makes the credit gap grow by applying the approach separately to different sectors. The driver of activation of the capital requirements in the 2000s is mainly the household sector. So, during this period, the credit gap was not an early warning of the global financial crisis or the recession in the Baltic countries. Instead, it warned of an unsustainable development in Sweden, due primarily to credit growth in the Swedish household sector.

Targeted capital requirements and measures to strengthen the buffers of households

A number of measures have already been taken due to the increased indebtedness of households. The Riksbank has taken account of the risks associated with household indebtedness and the developments on the housing market in monetary policy. Finansinspektionen recently decided to introduce a risk weight floor of 15 per cent for Swedish mortgages, which can be seen as a sector-specific capital requirement. Measures have also been taken more directly targeting the demand side of the mortgage market. In October 2010, Finansinspektionen introduced a mortgage cap, restricting mortgaging a home to a maximum of 85 per cent of its value. The Swedish Bankers' Association has

⁶ The mechanical application is called the BIS standardised approach and is described in the Bank for International Settlements, 2010, "Guidance for national authorities operating the countercyclical buffer" December. See also Juks, Reimo & Melander O. (2012), *Countercyclical Capital Buffers as a Macprudential Instrument*, Riksbank Studies, December.

■ also established principles according to which new mortgages exceeding 75 per cent of the value of the home should be amortised.

However, household indebtedness is still high in both a historical and an international perspective, and more needs to be done. The 15 per cent risk weight floor is a welcome initial step in partly compensating for the higher loan-to-value ratios of households in relation to disposable income and lower amortisation levels, which could lead to high credit losses ahead. In my opinion, however, risk weights for mortgages need to be raised even further. Not least to better internalise the external effects associated with such lending – for example, the risks to financial stability which may ensue from the drop in consumption of highly indebted households in the event of a decline in house prices.

We also need measures which strengthen the buffers of households and contribute to curbing credit growth in the household sector more permanently. It would be preferable if the banks themselves took the responsibility for sounder lending practices. But, if this does not happen soon enough, and forcefully enough, then the authorities must intervene. There are many so-called quantitative regulations which can be used for this. The mortgage cap introduced by Finansinspektionen can be adjusted, and limitations can be introduced on the size of a loan in relation to the household's income. Another tool is introducing an amortisation requirement, which directly reduces household indebtedness. I believe that, in the current situation, separate amortisation requirements should be considered to supplement the existing measures.

Stricter credit terms can also be achieved with so-called qualitative measures which affect borrowing capacity. It would then be a matter of tightening banks' credit assessment procedures, which can be done in several ways. For instance, a review can be performed of the way the banks calculate borrowing capacity using discretionary income calculations, and the scenarios a borrower can withstand. As part of their credit assessment procedures, banks should also ensure that all mortgage customers can cope with amortising their mortgages at a certain rate. One way of influencing amortisation behaviour could also be to clearly inform customers about the long-term consequences of different rates of amortisation. The government has commissioned Finansinspektionen to investigate the conditions for placing requirements on banks to provide mortgage customers with tailored advice about suitable rates of amortisation, which is a step in the right direction.

In terms of the possibilities of macroprudential policy, we can, with different types of capital requirements, increase the banks' buffers and, with various supplementary measures, increase the buffers of borrowers (households in this case). The higher buffer requirements will affect the costs of borrowing, and could thus also contribute to curbing credit growth. Because all of these measures ultimately affect the cost of borrowing in one way or another, it might be appropriate to use a little of several tools rather than a lot of one, since different tools affect various groups in society slightly differently. Also, the use of several tools can reduce the possibilities of regulation arbitrage.

■ ***Macprudential policy does not resolve the structural problems on the housing market***

It is important to emphasise that the macroprudential tools will not be able to prevent all types of risk associated with household indebtedness and developments on the housing market. The structural problems of low housing construction and an inefficient rental market, which lead to a housing shortage in major cities and university regions, are an important reason for rising house prices and thus also credit growth. However, these structural problems are beyond the area of macroprudential policy and must be addressed by other policy areas. The housing shortage in itself is also a social problem with more dimensions than household indebtedness. For example, the housing shortage also risks affecting geographic mobility, which is fundamental to, for instance, efficient matching of vacant positions with job seekers. Efficient matching is important to achieving low unemployment.

In a broader socioeconomic sense, it is therefore desirable to achieve a more smoothly functioning housing and mortgage market. To this end, measures are needed which promote a more flexible offering of homes which better respond to price changes and reduce construction costs. Reforms are therefore needed which would lead to a further softening of rent regulation and increased competition in the construction sector. In the fiscal policy area, the possibilities of tax relief on interest can be phased out, and real estate tax reintroduced. These measures would increase neutrality between different types of investment alternatives and make building up debt less profitable in terms of tax policy. Both the IMF and the European Commission proposes similar measures in their recommendations for Sweden.⁷

Organisational structure of macroprudential policy in Sweden

Developing macroprudential tools strengthens the possibilities of preventing systemic risks. However, creating an organisational structure for macroprudential policy that ensures the right tools are used at the right time is at least equally important. Both decisive action and sound analytical capability are required here.

Decisive action is important because acting against systemic risks is generally difficult and unpopular. It must therefore be clear where the responsibility of counteracting systemic risk lies, which in turn requires a clear mandate.

Analytical capability is important because the interaction between the financial system and the real sector, and the risks generated in this interaction, are complex matters. Neither is it easy to determine which effects can be achieved with different tools. This requires expert knowledge. However, it is also important that this analytical capability is enduring. In the often fairly long periods of calm, the temptation to cut back or reallocate resources to other areas can be substantial.

⁷ See IMF (2013) *Sweden—2013 Article IV Consultation: Concluding Statement of the Mission*, Stockholm: 31 May 2013 and European Commission (2013) *Recommendation for a COUNCIL RECOMMENDATION on Sweden's 2013 national reform programme and delivering a Council opinion on Sweden's convergence programme for 2012-2016*, Brussels: 29 May 2013.

■ Many countries have recently created organisations for macroprudential policy and have more comprehensively enhanced the efficiency of financial stability efforts. New structures have emerged in, for instance, the UK, Germany and Denmark. In Sweden, the Financial Crisis Commission proposed, in its first interim report, that the Riksbank and Finansinspektionen together bear responsibility for macroprudential policy in Sweden.⁸ This is to occur through the formation of a macroprudential council, in which both authorities work together with independent experts, entailing in principle that the existing Council for Cooperation between the Riksbank and Finansinspektionen is confirmed in law. The Council is to seek to promote greater knowledge about systemic risks and the development of macroprudential tools, and discuss appropriate measures.

In our consultation response, we gave our view on the commission report and also added our own proposals.⁹ We believe that the Financial Crisis Commission's proposal for shared responsibility between two authorities risks giving rise to ambiguity about who should act. This ambiguity could result in indecisive action. In order to ensure decisive action, responsibility for macroprudential policy should be placed on *one* body. Placing responsibility on one body is well in line with international recommendations and proposals starting to take shape in other EU countries.¹⁰

The Riksbank should have an influential role in macroprudential policy

In my view, the Riksbank has solid fundamentals to shoulder responsibility for macroprudential policy in Sweden. Over the last 15 years, we have built up extensive systemic risks analysis capabilities. As I briefly mentioned before, we also have in-depth knowledge in terms of studying the relationships between the financial and real sector, for instance, as a result of the monetary policy analysis apparatus. Placing responsibility for macroprudential policy on the Riksbank would also involve synergies with monetary policy. Because coordination with microprudential policy is also important, in our consultation response we propose the establishment of well-defined ways of cooperation between the Riksbank and Finansinspektionen. The central bank having a key role in macroprudential policy is also recommended by the European Systemic Risk Board (ESRB).

The Riksbank is an authority with a high degree of autonomy, which raises the question about how autonomous macroprudential policy should be. A high degree of autonomy can be beneficial when it comes to preventing financial instability, more or less for the same reasons as in monetary policy. On the one hand, the decisions can be unpopular politically, and on the other hand expert knowledge is important.

However, there is a crucial difference between monetary policy and macroprudential policy in one respect. While monetary policy is guided by a

⁸ SOU 2013:6 *Att förebygga och hantera finansiella kriser*, Delbetänkande av Finanskriskommittén, Stockholm: 2013.

⁹ Riksbanken (2013) *Remissyttrande om betänkandet Att förebygga och hantera finansiella kriser (SOU 2013:6)*, DNR 2013-234-StA.

¹⁰ The recommendation regarding national macroprudential policy mandates issued by the European Systemic Risk Board (ESRB) in December 2011 states that the EU countries should give one authority or one council the responsibility of implementing macroprudential policies.

■ quantified inflation target, the target of macroprudential policy comprises several different dimensions. For example, macroprudential policies can be about reducing and preventing excessive credit growth, reducing liquidity risks and maturity mismatches in the banking system, and increasing the financial infrastructure's resilience to shocks. In all cases, it is hard to formulate a simple and clear target. Evaluating macroprudential policy decisions and holding the decision makers to account is therefore harder. It is therefore important to make sure the democratic control of macroprudential policy is guaranteed and regularly safeguarded. However, this can occur by developing the structures of democratic follow-up and control of the Riksbank that are already in place, chiefly through the General Council of the Riksbank. We can also benefit from what we have learned from how monetary policy is monitored, for instance through the publication of reports, minutes and regular questioning in the Parliamentary Committee on Finance.

The future role of the central bank is taking shape

Allow me to conclude by highlighting certain aspects that are important to central banks in terms of creating a framework that continues to safeguard stable prices while at the same time being consistent with sustainable development in the financial system.

First, monetary policy should continue to be conducted in the framework of flexible inflation target policy, with price stability as the overriding target. However, the financial crisis has brought to light the importance of monetary policy taking greater account of financial stability. It can be a case of extending the time horizon of the monetary policy analysis, and focusing on price stability over a longer period than just the next few years.

Second, financial stability policy requires a new focus, and macroprudential policy is emerging as a new policy area. Macroprudential tools provide better opportunities to strengthen the resilience of banks and other financial institutions to various shocks. They also provide better possibilities of influencing bank lending rates and thus macroprudential policy becomes closely interconnected with monetary policy. Overall, this enables us to work to a greater extent towards achieving a sustainable development in both lending and economic development. Having more tools also facilitates managing the conflicting objectives encountered by central banks, even though there will always be difficult trade-offs.

So, there is good reason to give central banks an influential role in macroprudential policy. It will better equip us to contribute to price stability while financial stability and a stable economic development are secured. At the same time, it should be emphasised that macroprudential policy does not resolve all the problems associated with the financial sector. Also, we do not know how efficient the new macroprudential tools will be; we will need to analyse and evaluate them afterwards.