



SPEECH

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■ Monetary policy, debt and unemployment*

It can scarcely have escaped the attention of those who follow monetary policy in Sweden that the members of the Executive Board have held differing opinions for some time now. Most people have probably also noted that a minority of the Executive Board members – consisting of my colleague Karolina Ekholm and myself, in case anyone was not aware of this – has advocated a more expansionary monetary policy than the one that has been conducted and that the Riksbank intends to conduct in accordance with the repo-rate path advocated by the majority during the coming period.

However, I am not as convinced that everyone has a clear idea of exactly what the differences of opinion entail. Many people have recently criticised the Riksbank's communication for being unclear, with some claiming that it has sometimes been difficult to understand exactly why some decisions have been taken and why they have been judged to be better than the alternatives.¹

What I intend to do here today is to provide my view of where the main divisions are and to describe how I came to the conclusions that I hold. I believe and hope that this review of the arguments can straighten out some potential questions and that it will form a good basis for continued discussions.

Differences in views regarding monetary policy and what it can achieve

Let me start by pointing out that lack of agreement among a monetary policy committee is not a problem in itself. The actual purpose of having a group of individuals decide on monetary policy is to create the right conditions for bet-

* I would like to thank Karolina Ekholm, Kerstin Hallsten, Per Jansson, Christina Nyman, Ulf Söderström and Anders Vredin for valuable discussions and comments. Mikael Apel, Gabriela Guibourg and Staffan Viotti have contributed to this speech. The views expressed are my own, and are not necessarily shared by the other members of the Executive Board or by other employees of the Riksbank.

¹ See, for example, Calmfors (2012).

ter decisions; it is namely so that groups tend to make better decisions than individual decision-makers. This is partly because the members' experiences and skills are pooled and partly because the group acts as an insurance against the particular preferences of one individual being able to govern monetary policy; it means there are "checks and balances". The fact that different members make slightly different assessments and reach different conclusions is thus not so remarkable.

However, in the case of the Riksbank, the differences between the minority and the majority have been so great and so persistent that it has become evident that they are not merely temporary differences in, for instance, the assessment of economic developments. It rather seems to be a case of more profound differences in the ways of regarding monetary policy and what it can achieve. This need not necessarily be a problem, either. But it does require, at least, that a thorough analysis is made of the differences and that one attempts to evaluate, as far as possible, both points of view.

The arguments in favour of a higher policy rate

So how has the policy conducted by the Riksbank in recent years been justified? Why hasn't the Executive Board wanted to conduct the more expansionary policy advocated by the minority? Such a policy would have had better target attainment in terms of inflation and unemployment, with higher inflation closer to the target and lower unemployment closer to a long-run sustainable rate. My view is that the arguments have not been particularly clear, at least earlier on, and that the stated motives have varied.² Recently, however, the arguments appear to have converged somewhat. The main arguments against a more expansionary policy that have been put forward lately are that this type of policy would be too risky, given the size of household debt.³ Let me therefore use this argument as a starting point for my reasoning.

The discussion among the Executive Board members to a large extent reflects a broader international debate on the relationship between monetary policy and financial stability, on whether household debt is too high and, if so, whether monetary policy should be used to try to limit indebtedness – although the Swedish debate does contain a number of specific characteristics. In brief, one can say that those who believe the repo rate should be held extra high appear to think as follows.⁴ If the interest rate is too low, households take on too much debt. A large share of the loans households take on are used to buy housing, which also pushes up housing prices. If indebtedness and house purchases are based on overly optimistic calculations, there is a risk of a heavy fall in housing prices when the mood changes, for some reason. If prices were to fall, many households would find themselves in a situation where their assets have substantially declined in value, while their debt remains unchanged. They may then want to pay off some of their debt to come down to a more suitable level. This

² In Svensson (2011b) I take up some arguments for and against the repo-rate increases that began in summer 2010.

³ See, for instance, Ingves (2012) and Jansson (2012).

⁴ A policy where the policy rate is used to counteract the build-up of credit and debt that is considered a risk is usually referred to as the central bank "leaning against the wind". For a description of the arguments for and against such a policy, see for instance Mishkin (2011).

■ means they will prioritise saving over consumption. Demand in the economy will then decline and unemployment will increase. During this process, the banks may suffer loan losses that in a worst case scenario could become so great that the banks fail or need assistance. This would threaten financial stability.

By holding the repo rate higher, they say that the central bank can reduce the risk of this happening. While a higher interest rate means that demand is lower and unemployment higher than would otherwise have been the case, and that inflation may undershoot the target, this “insurance premium” may be worth paying if it means that one can avoid a much worse outcome in the future. This would appear to be the reasoning pursued.

This chain of reasoning may appear fairly intuitive. But it contains at least a couple of critical statements that require closer examination. The first statement is that the level of household debt in Sweden today entails sufficiently large risks that it needs to be addressed. The second is that a higher repo rate could tangibly reduce these risks and that the lower risk is worth the lower inflation and higher unemployment caused by the higher repo rate. That is, the insurance premium in terms of lower inflation and higher unemployment is worth paying. There is also a third statement implied, that is, that there is no better instrument available, with greater or the same effect on the risks and less effect on inflation and unemployment. Let me examine these statements more closely, starting with the second and third ones.

The repo rate is not a suitable instrument

Regardless of whether or not household debt is currently considered to entail major risks, it is important to discuss what instruments are appropriate to use to limit these risks, if necessary. An important question right now, as opinions are divided with regard to the risks entailed in household indebtedness, is whether the repo rate and monetary policy are appropriate instruments for limiting potential risks or whether there are other instruments available that would work better.

Housing prices and indebtedness are closely related – household debt mainly consists of mortgages, and mortgages have a stable relationship to housing prices. An important question is therefore how monetary policy affects housing prices. There is considerable research in this field that has used different approaches and data from different countries and periods. While there is some variation in the results, the typical result – which was also obtained in the Riksbank’s own inquiry into the risks in the housing market⁵ – is that monetary policy has little effect on housing prices. A policy rate that is one percentage point higher, gives housing prices that are only around 3 per cent lower in 2-3 years. This means that one has to adjust the interest rate drastically to be able to affect housing prices and thus indirectly household indebtedness. This in turn has very negative effects in the form of higher unemployment and lower inflation. Reducing housing prices in Sweden (or preventing them from increasing further) by 10 per cent would appear to need such a large increase in the repo rate that GDP would fall by around 6 percentage points and unemploy-

⁵ Sveriges Riksbank (2011).

ment would increase by roughly 3 percentage points (150,000 people).⁶ Using monetary policy and increasing the policy rate to push down housing prices thus has very high real economic costs – the insurance premium one has to pay in the form of increased unemployment is thus unreasonably high.

As a comparison with the insurance premium of 6 per cent of GDP in the above example, it can be said that during the 1990s crisis GDP fell from the peak prior to the crisis in the third quarter of 1990 to the trough in the first quarter of 1993 by around 5 per cent. During the crisis 2008-2009, GDP fell from a peak prior to the crisis in the fourth quarter of 2007 to a trough in the first quarter of 2009 by around 7.5 per cent. These falls are thus in the same magnitude as the insurance premium. If the premium and the damage are about the same size, is it a sensible insurance policy?

It is actually possible that in certain special situations effects may arise from relatively small increases in the interest rate, when combined with words of warning from the central bank and financial supervisory authorities. As Charles Bean, deputy governor of the Bank of England, said in his paper presented at the Jackson Hole conference in 2010: “[T]here may be times when a mixture of words and modest interest rate action can be effective in cooling excessive market exuberance[.]”⁷ However, as far as I know, no such effect from limited interest rate increases has been actually proved. Moreover, there is hardly anyone who would claim that the Swedish housing and mortgage market is characterised by “excessive market exuberance”. As far as I know, no one has referred to any indicators of exaggerated and unrealistic optimism regarding current developments in housing prices. In his paper, Bean reaches the same conclusion that is supported today by extensive research and practical experience: “[G]enerally speaking, monetary policy seems too weak an instrument reliably to moderate a credit/asset-price boom without inflicting unacceptable collateral damage on activity. Instead, with an additional objective of managing credit growth and asset prices in order to avoid financial instability, one really wants another instrument that acts more directly on the source of the problem.”⁸

Given that the policy rate has such small effects on housing prices and such large effects on inflation and unemployment, it quite simply does not appear possible to use monetary policy and the policy rate to limit household debt at present, without clear prejudice to the mandate to maintain price stability and attain the highest sustainable rate of employment.⁹

⁶ Results using Swedish data in Claussen, Jonsson and Lagerwall (2011) entail a reduction (or avoiding an increase) in housing prices of 10 per cent during a seven-year period normally requiring a policy rate increase that leads to GDP being 6 per cent lower than it would otherwise have been. Under the assumption of an Okun coefficient of 2, this means an increase in unemployment of 3 percentage points. Assenmacher-Wesche and Gerlach (2010) find, using data from 18 countries, that a reduction in property prices of 10 per cent normally requires a policy rate increase that leads to GDP being 4 per cent lower than it would otherwise have been and thus with the same Okun coefficient, to unemployment being 2 percentage points higher.

⁷ Bean, Paustian, Penalver and Taylor (2011).

⁸ Bernanke (2010, 2011) reaches the same conclusion. Bernanke (2010, Slide 9) also shows that for 20 countries the relationship between how expansionary monetary policy is (measured as deviations from a Taylor rule) and how house prices have developed is very weak, not statistically significant, and only explains 5 per cent of the variability in the increase in housing prices between the countries.

⁹ According to the Sveriges Riksbank Act, “[t]he objective for monetary policy is to *maintain price stability*”, According to Government Bill 1997/98:40, “[a]s an authority under the Riksdag, the Riksbank,

■ ***Monetary policy can hardly affect real housing prices and loan-to-value ratios in the long run***

Another important issue is whether monetary policy can affect real housing prices and loan-to-value ratios in the long run and thus affect household debt. A fundamental and generally-accepted insight in modern macroeconomics is that monetary policy cannot affect real variables such as production, employment, unemployment, in the long run.¹⁰ Monetary policy can only affect nominal variables in the long run, for instance, prices, inflation and the exchange rate. According to the same generally-accepted insight, monetary policy cannot affect real interest rates and real asset prices in the long run. Nor can monetary policy affect the size of the housing stock and its real value in the long run, nor the way it is funded by means of borrowing and own capital. This is instead determined by real and structural conditions in the economy, including the functioning of the housing and mortgage markets and the housing and tax policies conducted. Monetary policy can only affect real variables during a limited period of time and means that only for a limited period they can deviate from their long-run sustainable paths of development. As I mentioned earlier, monetary policy has very little effect on housing prices and debt even in the short run.

People sometimes talk about the “long-run effects of today’s monetary policy” on household debt, but according to this reasoning, monetary policy has no long-run effect on household debt.¹¹ Monetary policy is stabilisation policy, not structural policy. Influencing household debt in the long run thus requires structural policy, such as fiscal, tax and housing policy, as well as financial stability policy, so-called macroprudential policy.

A task for macroprudential policy

The large negative effects on the economy as a whole mean that it is hardly possible at present to use the policy rate and monetary policy to influence housing prices and household indebtedness without prejudice to the mandate of price stability and highest sustainable employment. It is better to use other, more direct means, which do not entail such large real economic costs. Examples of such measures include the loan-to-value cap, regulations on deductions for mortgage rates, taxes, capital adequacy requirements, risk weights and so on.

without prejudice to the price stability market, should furthermore support the goals of general economic policy with a view to maintaining a sustainable rate of growth and *high employment*”. (My italics.) I interpret “high employment” as “highest sustainable employment”.

¹⁰ One exception is when average inflation deviates from average inflation expectations for a long period of time. Then average inflation below inflation expectations will increase average unemployment, see Svensson (2012a).

¹¹ According to Englund’s (2011) article on the development of housing prices and explanations for this in the Riksbank’s inquiry into the risks in the housing markets, monetary policy plays no role here and real housing prices are explained by real quantities. In the general equilibrium model for housing prices calculated using Swedish data by Walentin and Sellin (2010) and which is also used by Claussen, Jons-son and Lagerwall (2011), monetary policy has no long-run effect on housing prices or household debt.

■ Keeping an eye on risks related to household debt is a task for the policy area known as macroprudential policy. As yet, there is no fully-developed framework for macroprudential policy in Sweden. The financial crisis committee, which was appointed by the Government, is currently looking into the design of such a framework – for instance, which tools should be used and by whom. However, some measures belonging to the macroprudential toolbox have nevertheless been implemented and apparently to good effect – here I am thinking of Finansinspektionen's loan-to-value cap. According to the report on the housing market that Finansinspektionen published in March 2012, the loan-to-value cap has had the intended effect and the loan-to-value ratio for new mortgages is now falling for the first time for many years.

A short-cut in the reasoning

Monetary policy thus has relatively little effect on housing prices and household debt, but relatively large effect on inflation and unemployment. Moreover, there are other, better instruments than the repo rate available. One can therefore claim that the first statement above, that household debt in Sweden today entails sufficiently large risks to need to be addressed, does not have any significance for monetary policy. It is not monetary policy that should be used if household debt needs to be addressed. But let me nevertheless also discuss the first statement.

How should we regard household debt in Sweden at present? This is where I perceive that those who advocate a higher repo rate because of household debt tend to take a short cut in their reasoning. They usually refer to the financial crisis and developments in other countries as a warning example of how badly things can go if one allows debt to build up and housing prices to rise. They then express concern for Swedish household sector debt and say - without mentioning the research that has shown that monetary policy has very little effect on housing prices and debt – that a higher repo rate is necessary to prevent developments similar to those in the countries that were hit hardest in the financial crisis. Sometimes one adds an argument that basically states that even if we cannot see any immediate threats in Sweden at present, this does not mean that they do not exist. In many of the countries where things have gone very badly, people did not see the risks, they say, so not seeing a risk doesn't mean there isn't one – a variation of the argument that "this time is (not) different".¹²

Let me emphasise that I certainly do not mean that risks linked to high indebtedness should be ignored. In the light of events in recent years I find it difficult to imagine that anyone would fail to agree that governments, legislators and financial supervisory authorities should do everything in their power to prevent and limit the consequences of future crises. But I nevertheless feel that the argument that household debt entails major risks and needs to be addressed must be substantiated in a sufficiently convincing manner.

¹² This alludes to a book on financial crises from an historical perspective by Reinhart and Rogoff (2009), *This Time is Different*, Princeton University Press. The title of the book is ironic and refers to the fact that immediately prior to each financial crisis there has been a tendency to regard the current situation as special and quite different from previous crises. However, many who refer to the book appear to have missed the fact that monetary policy has a very obscure role as reason for financial crises there.

■ After all, there is *always* a small risk that things can go badly wrong. If one is content to refer to this, one could justify more or less any type of policy. What one must try to make sufficiently credible is the risk that things will go badly wrong is *sufficiently large* that it needs to be addressed. One must also be able to show that the proposed changes have sufficient effect on the risks in relation to the costs of the measures taken.

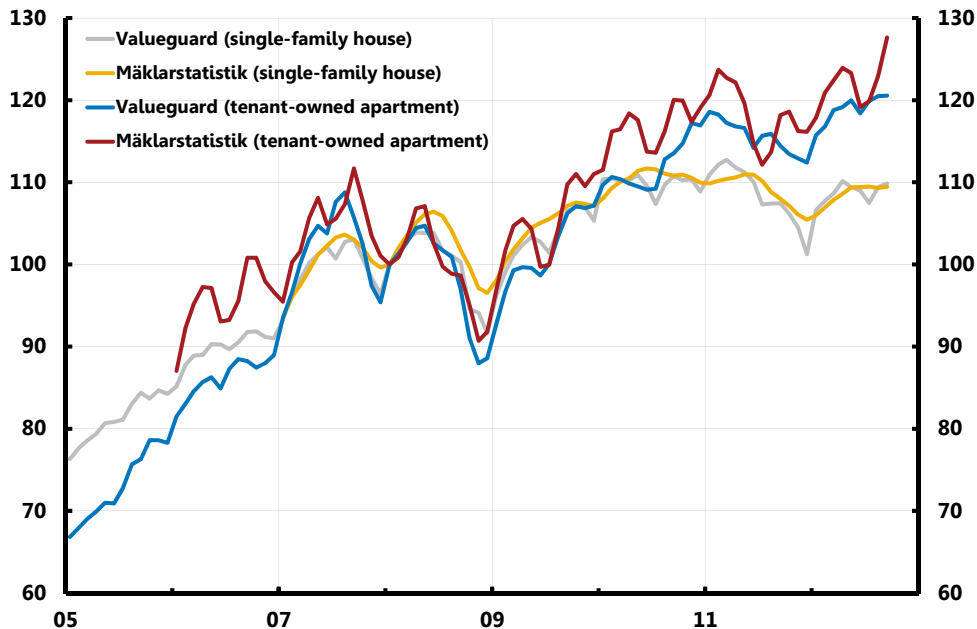
It is not enough, in my opinion, to express concern for high indebtedness and refer to the financial crisis. One must, as far as possible, make an assessment of households' entire financial situation, including their balance sheets with both assets and liabilities, as well as their debt-servicing ability, on the basis of the facts and analyses at hand. It is important to try to answer questions such as "What signs point to households having excessive debt?", "To what extent can housing prices be explained by economic and structural factors?" and "How vulnerable are Swedish banks and households?" All in all, it is important to assess whether household debt is sustainable and whether households have sufficient resilience to shocks in the form of higher interest rates, a fall in housing prices and increased unemployment, and what consequences such shocks could have for the banks and for the macro economy.

How great are the risks from household debt?

So what do the available facts and surveys tell us? With regard to the sustainability of housing prices, the Riksbank's own inquiry into the risks in the housing market, which I mentioned earlier, indicates for example that housing prices can essentially be explained by what are usually termed fundamentals, namely growth in disposable incomes, a long-run trend towards falling real mortgage rates, the abolition of wealth and property taxes, a ceiling for municipal property taxes and little new construction. There are no signs that Swedish houses are overvalued – that there is a housing bubble. As housing prices are due to fundamentals, these must change for housing prices to change, and changes in fundamentals normally occur fairly slowly. This reduces the risk of large falls in housing prices.¹³ If fundamentals are at sustainable levels, housing prices will also be sustainable. The increase in housing prices now appears to have slowed down and they are roughly at the same levels as at the end of 2010 (Figure 1).

¹³ One example of a fundamental relationship that changed suddenly was the drastic reduction in the right to make deductions for mortgage interest that were included in the tax reform at the beginning of the 1990s. The mortgage rate after tax increased drastically for many borrowers. Even the real interest rate increased drastically, despite the severe recession. This is something that one can hardly expect to happen within the current inflation targeting regime.

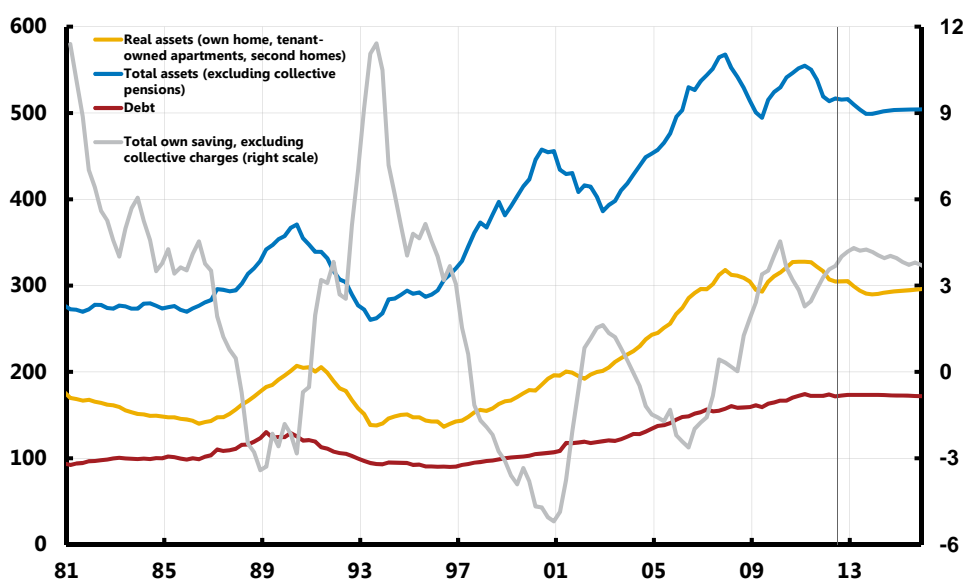
Figure 1. Prices of single-family dwellings and tenant-owned apartments Index January 2008 = 100



Sources: Mäklarstatistik and Valueguard

Is household indebtedness sustainable? Opinions on this are divided, but allow me to begin by pointing out here that households have very strong balance sheets. Household debt in relation to disposable income, the debt ratio, has increased over several years and the debt ratio is now around 170 per cent of disposable income (see Figure 2). However, the debt ratio has stopped growing as of 2011 and the Riksbank's forecast for the coming three years is for an unchanged debt ratio. Households have total assets, excluding collective pension insurances, that have grown in line with their debt and they are approximately 510 per cent of disposable incomes, that is, three times as large as their debt. Households' gross solvency, net assets (own capital) in relation to total assets, is thus approximately 70 per cent. The relationship between household debt and financial and real assets (the latter consisting of own homes, second homes and tenant-owned apartments) has been relatively stable and without a trend for several decades. Households' increased debt in relation to disposable incomes has thus been accompanied by a corresponding increase in net wealth in relation to disposable income. Households also have collective pension claims of more than 120 per cent of their disposable income.

Figure 2. Households' assets and debt in relation to disposable income
Per cent



Sources: Statistics Sweden and the Riksbank

Households' "leverage ratio", net wealth over total assets, compared with the relationship between capital and total assets among the banks and some large Swedish listed companies in 2011 (Figure 3). Households thus have a leverage ratio comparable with the best-capitalised listed companies and much greater than the banks' very small ratios between capital and total assets.¹⁴ Swedish households are also well capitalised from an international perspective.¹⁵

Households' interest payments on their debt is not high from an historical perspective. At present, it is just over 4 per cent of disposable income. With a high mortgage rate of 7 per cent before tax, the mortgage rate after tax will be around 5 per cent. With an interest rate after tax of 5 per cent, the interest payment will be 5 per cent of 170 per cent, which is 8.5 per cent of disposable income. This is not particularly high, especially in comparison with the cost of renting a home, which can be on average 20 per cent of disposable income. When assessing whether households' debt ratio of 170 per cent in relation to disposable income is sustainable in the long run, however, the most relevant indicator is the households' net debt service, that is, the debt service households must pay to keep the debt ratio constant. Then it is necessary to take in-

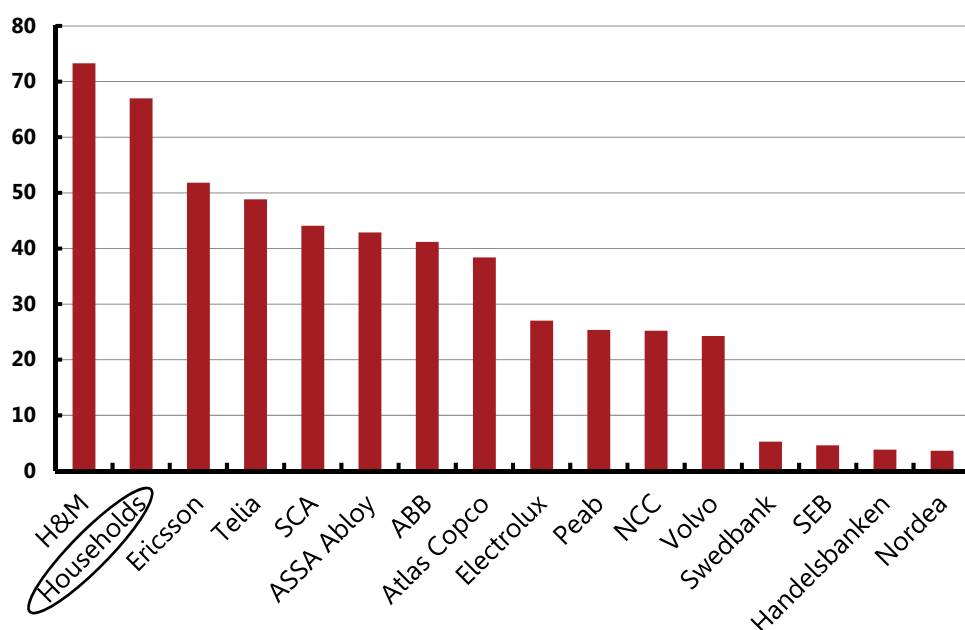
¹⁴ Households, unlike the large listed companies, have a separate disposable income that mainly consists of wages and that can be seen as return on the household's human capital. Households' human capital is not included in the normal balance sheet for households. To assess the value of human capital one can conservatively take the present value of 20 years of disposable income (many young households will work for a much longer period). With a 5 per cent interest rate after tax and a disposable income that grows by 4 per cent the current value of this will be roughly 1 800 per cent of disposable income. The average remaining surplus of disposable income in a "left-to-live-on" analysis – which is described in footnote 17 – is around 58 per cent. The current value of this surplus is then around 1 000 per cent of disposable income. When these figures are compared with a debt of 170 per cent and added to real and financial assets of 510 per cent, households' leverage ratio and debt-servicing ability undoubtedly appear to be pretty good.

¹⁵ Isaksen, Lassenius Kramp, Funch Sørensen and Vester Sørensen (2011).

to account the fact that disposable income increases over time. With a disposable income that can be expected to grow by 4 per cent in the long run, therefore, 4 per cent should be deducted from the mortgage rate before tax of 5 per cent. There then remains only 1 per cent of the debt of 170 per cent, that is, the net debt service required in the long run to keep the debt ratio constant is only 1.7 per cent of disposable income.¹⁶ With this reasoning, a debt ratio of 170 per cent is sustainable with a considerable margin.

Figure 3. Capital over assets for households, some large listed companies and Swedish banks

Per cent



Sources: Dagens Industri (capital/assets 2011 for listed companies and Swedish banks) and the Riksbank (household net wealth/assets).

The household debt situation is also analysed in Finansinspektionen's (the Swedish financial supervisory authority) report, *The Swedish Mortgage Market*. Finansinspektionen observes in this report that the loan-to-value cap has had an effect. Households' loan-to-value ratios for new loans fell in 2011, and the percentage of houses with a loan-to-value ratio of more than 85 per cent has halved since 2009, to just under nine per cent. The banks make stringent credit assessments of borrowers using a "left-to-live-on" calculation with a high mortgage rate.¹⁷ Stress tests also show that most households that have taken out a new mortgage and which should be the most vulnerable, have a good

¹⁶ A high mortgage rate after tax could be 5 per cent. A long-run level for the repo rate of 4 per cent plus an historically-high spread of 3 percentage points gives a mortgage rate before tax of 7 per cent and after tax of approximately 5 per cent $((1-0.3) \times 7 = 4.9)$. From this we should deduct a figure for sustainable growth in disposable income, say 4 per cent – 2 per cent real growth and 2 per cent inflation. This leaves us with 1 per cent. See Svensson (2012b).

¹⁷ A "left-to-live-on" calculation estimates the difference between disposable income and housing and maintenance costs, possible alimony payments and a standard for households' cost of living. The banks take into account the borrower's whole loan situation and assume on average a mortgage rate of around 8 per cent when calculating interest costs and assume some amortisation will be made. Finansinspektionen (2012).

■ debt-servicing ability and are resilient to increases in interest rates, falls in housing prices and increases in unemployment.¹⁸ In contrast to what was the case during the 1990s crisis, however, large interest rate increases probably will not coincide with high unemployment. Finansinspektionen's conclusion is that "Only a limited portion of the households are affected even when simultaneously applying assumptions of sharp drops in house prices and sharp rises in unemployment, which indicates that Swedish mortgages are currently not a threat to financial stability." Moreover, this resilience has also been tested in real time. The financial crisis 2008-2009 hit households in Sweden through a large fall in GDP, a rapid increase in unemployment and housing prices that fell by 10-20 per cent depending on which statistics you use (Figure 1). The euro crisis has recently entailed a new stress test. Swedish households and mortgage borrowers have also passed this test with flying colours.

The Riksbank's inquiry into the risks in the housing market also observed that resilience in the Swedish mortgage market was good. It estimated the effects on the economy of a fall in housing prices of 20 per cent and concluded that the effects would be relatively small, particularly if they are counteracted by a more expansionary monetary policy.¹⁹

One important indicator of sustainability and resilience is the household saving ratio. Swedish households' saving ratio is now historically high, while it was very low prior to the 1990s crisis, minus 3 per cent at its lowest (Figure 2). A high saving ratio means that households are increasing their real and financial assets and that their consumption is not funded by loans. A low saving ratio and a loan-funded consumption boom, which was the case in Sweden prior to the 1990s crisis and in the United States prior to the most recent crisis, is on the other hand problematic and not sustainable. Studies indicate that the probability of suffering a large fall in housing prices almost doubles if the saving ratio is unusually low.²⁰

An important difference between Sweden and countries that have experienced severe falls in housing prices, such as Ireland, Spain and the United States, is that the latter have also had a construction boom (see Figure 4). This gradually led to an over-production of housing, which in turn contributed to housing prices falling even more once the market began to weaken. A construction boom appears to be an important – perhaps necessary – ingredient in the recipe for crisis in the property sector.

Another important difference between the current situation in Sweden and the situation in Sweden prior to the 1990s crisis and in the Baltic countries, Ireland, Portugal and Spain prior to the most recent crisis, is that the economies in the latter cases were clearly overheated with unsustainable growth and price and wage inflation. One can scarcely claim that the Swedish economy is overheated

¹⁸ A stress test of housing prices in the report shows that a large price fall of 40 per cent and an increase in unemployment of 20 percentage points without unemployment benefit means that only 10 per cent of the new mortgage borrowers have a loan-to-value ratio of over 100 per cent and a deficit in a "left-to-live-on" calculation. (Finansinspektionen 2012, Figure 17).

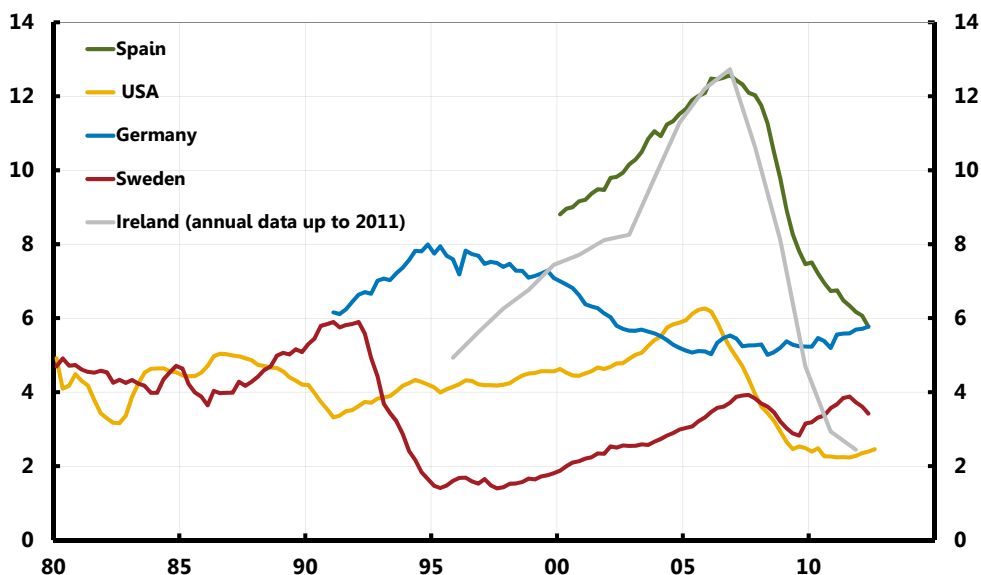
¹⁹ Claussen, Jonsson and Lagerwall (2011). In the minutes of the monetary policy meeting held in June 2010 (Sveriges Riksbank 2010), I show that a more expansionary monetary policy than is assumed in Claussen, Jonsson and Lagerwall (2011) can almost neutralise the effects on inflation and GDP of a fall in house prices, even taking into account the zero lower bound for the repo rate.

²⁰ Armelius and Dillén (2011).

■ today or even that the construction and housing sectors are overheated. As I said, housing prices appear to have levelled off (Figure 1).

Figure 4. Housing investment

Per cent of GDP



Sources: Bureau of Economic Analysis, Central Statistics Office Ireland, Federal Statistical Office, Germany, National Statistics Institute, Spain and Statistics Sweden

So how is the lenders', that is the banks', resilience? A lack of financial strength in the banks created major problems in Sweden during the 1990s crisis and is also causing problems for several countries in Europe now. But according to the Riksbank's own Financial Stability Reports, the banking system in Sweden is currently well-capitalised and functioning smoothly.²¹ Even if we were thus to see a fall in housing prices, which, contrary to expectations, led to problems in the housing sector as a whole, there is only a small risk that this in turn would lead to problems for the banks. Here it is worth noting that during the crisis in the 1990s, when housing prices fell dramatically, it was not the loans to households that caused major loan losses, but the loans on commercial property.

The conclusion that I reach overall with regard to the question of risks linked to households' current debt is that it does not appear possible to prove that they are a threat to financial stability or to the macro economy. But this is not the main reason why I say that monetary policy should not be used to limit household debt – the main reason is that monetary policy and the policy rate are unsuitable for this purpose.

Why more expansionary monetary policy?

A well-balanced monetary policy is normally a question of finding an appropriate balance between stabilising inflation around 2 per cent and stabilising the

²¹ See, for instance, Financial Stability Report 2012:1.

■ real economy around a sustainable path. The real-economy indicator that in my opinion is the most appropriate to focus on is unemployment.²² Monetary policy should thus try to stabilise unemployment around the rate that is assessed as sustainable in the long run. How well are the targets met?

Inflation is currently very low. In October, CPI inflation was 0.4 per cent. According to the Riksbank's forecasts it will be below one per cent as an annual average in both 2012 and 2013. However, CPI inflation is affected by the Riksbank's repo rate changes and the cuts in recent years have contributed to the low CPI inflation. But CPIF inflation, which gives a better picture of inflationary pressures in periods of large interest rate adjustments, will be around one per cent as an annual average in 2012 and 2013. Thus, inflation is far below the target, whichever measure one uses. According to the National Institute of Economic Research's assessment of the Swedish economy in August 2012, both CPI and CPIF inflation will be well below the target in both 2013 and 2014, despite the forecasts assuming a much lower repo-rate path than the Riksbank's.²³ Sweden has the lowest inflation in the European Union.

What about developments in the real economy? The outlook is poorer than before for both the world economy and the Swedish economy. Swedish exports have slowed down substantially and growth is now expected to be weaker. Unemployment is very high, 7.8 per cent in September, when seasonally-adjusted, and moreover it is rising (Figure 5). This means that unemployment in Sweden is as high as that in the United States and almost as high as in the United Kingdom (7.9 per cent). At the same time, unemployment is much lower in other countries that should reasonably be comparable with Sweden, such as Germany (5.4 per cent), the Netherlands (5.4 per cent), Austria (4.4 per cent) and Norway (3 per cent).²⁴

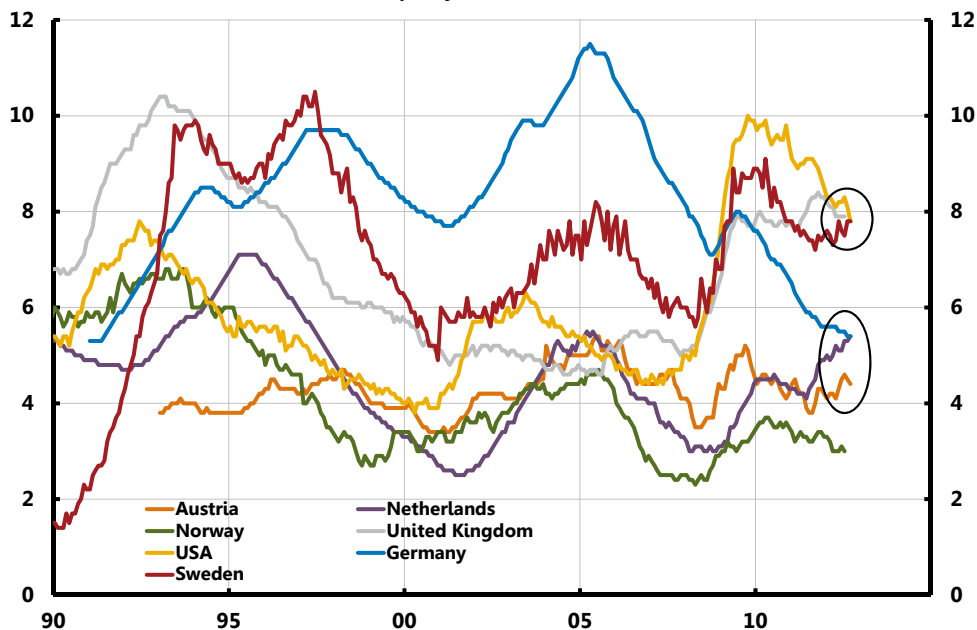
²² I describe this in more detail in, for instance, Svensson (2011a).

²³ National Institute of Economic Research (2012, Figures 12 and 43).

²⁴ Data gathered from Eurostat and the Bureau of Labor Statistics. As a result of the differences in publication dates between the countries, the most recent figures refer to July with regard to the United Kingdom and Norway, and to September for the Netherlands, Germany, Austria, Sweden and the United States.

Figure 5. Unemployment

Per cent of the labour force, seasonally-adjusted data



Sources: The Bureau of Labor Statistics and Eurostat

I am sure most people would agree with me that actual unemployment is much higher now than any reasonable estimate of long-run sustainable rate of unemployment, even if I know of course that estimates of long-run sustainable rate of unemployment are uncertain.²⁵

Why has monetary policy been so stringent that it now results in such low inflation and such high unemployment, a target fulfilment that must be regarded as very poor? Why did the Riksbank begin to raise the repo rate in summer 2010, despite the fact that the forecast for CPI inflation was below the target and the forecast for unemployment was above any reasonable estimate of the long-run sustainable rate of unemployment?²⁶ The reason could be that monetary policy has been aimed at limiting household debt, although this purpose was not as clearly stated as has been the case more recently. A more expansionary monetary policy, in line with what Karolina Ekholm and I have advocated, would have led to a better outcome in terms of inflation and unemployment.

²⁵ By the long-run sustainable rate of unemployment, also known as the long-run equilibrium rate of unemployment, I refer to the rate of unemployment in steady state, where the economy is in a state of what is known as balanced growth, the effect of all shocks has waned and expectations are fulfilled. This should not be confused with other more short-run equilibrium concepts. According to Rogerson (1997), this is the only equilibrium concept for unemployment that is well-defined. The Ministry of Finance's (2011) assessment from April 2011 entails a long-run sustainable rate of unemployment of 5 per cent. The National Institute of Economic Research's (2011) assessment from December 2011 entails a long-run sustainable rate of unemployment of 5.8 per cent. The Riksbank's (2012b) assessment from July 2012 lies in an interval with a midpoint of 6.25 per cent. My own assessment is that the Riksbank's midpoint is an overestimate of around 0.75 percentage points and that long-run sustainable rate of unemployment is thus around 5.5 per cent (Sveriges Riksbank 2012a, appendix).

²⁶ In Svensson (2011b) I note that the forecasts for inflation and unemployment looked similar for Sweden and the United States in summer 2010 and that in this situation the Federal Reserve held its policy rate close to zero and began to prepare QE2, the second round of its quantitative easing, while the Riksbank began to raise its policy rate.

How high is the cost of the current policy? How much lower would unemployment have been with a more expansionary monetary policy? Let us assume that inflation would have been 1 percentage point higher and thus been closer to the target now. According to an empirical estimation using Swedish data, a 1 percentage point higher inflation rate leads to around 1.3 percentage points lower unemployment, corresponding to around 65,000 fewer unemployed.²⁷ This could perhaps give rise to 4 per cent higher housing prices, according to the results from Claussen, Jonsson and Lagerwall (2011).²⁸ Would this have increased the risks in household debt so much that it would nevertheless be better to have 65,000 more unemployed?²⁹ Not as far as I can see.

Positive with an open debate

As I have discussed, much of the debate conducted has been based on the differences in opinion regarding whether household debt entails risks to financial stability and the macro economy, whether monetary policy is a suitable means for influencing household debt and whether it is worth holding back inflation and keeping unemployment up to reduce the risks of indebtedness. As according to extensive research in the field, monetary policy has little effect on household debt but large, negative consequences in the form of low inflation and high unemployment and there are more effective means that are already used, I draw the conclusion that monetary policy should not be used to try to influence debt. Moreover, in my opinion it is not clear that the current level of household debt entails any risks to financial stability or the macro economy. But once again – potential risks should and can be managed using other means than monetary policy. Monetary policy should instead be aimed at maintaining price stability and attaining the lowest sustainable rate of unemployment.

Let me conclude on a positive note. Previously, as I see it, it was not so easy to determine where the main dividing line went in views on monetary policy, and the discussion therefore tended to have less focus than it ought to. Recently, the dividing line has become clearer, which is good.

A situation that I nevertheless believe there is fairly considerable agreement on is that there are other tools than the repo rate better suited to managing household debt and promoting financial stability. Monetary policy should be “the last line of defence”, not the first line. As I noted earlier, a potential framework for macroprudential policy is being investigated. Once a framework is in place, monetary policy will be “unburdened” in that one of the tasks that some people feel it should carry out will be removed – namely to prevent a substantial build-up of debt in the household sector. This means that the dif-

²⁷ Svensson (2012a). The estimate is of course uncertain. As shown in Svensson (2012a), a 95-per cent confidence interval for the estimate 1.3(=1/0.75) percentage points gives an interval between 1/1.1= 0.9 percentage points and 1/0.4=2.5 percentage points, corresponding to a confidence interval for the estimate 65,000 unemployed between 45,000 and 125,000. An estimate using the Riksbank’s model Ramres, in accordance with the effects of various repo-rate paths as described in Svensson (2010), leads to roughly the same estimate of 1.2 percentage points.

²⁸ If 3 percentage points lower unemployment corresponds to around 10 per cent higher housing prices, then 1.3 per cent higher unemployment will give roughly $1.3 \cdot 10/3 = 4.3$ per cent higher housing prices.

²⁹ With even higher inflation and an inflation rate above the target, which according to Qvigstad’s (2005) criteria is justified when unemployment is higher than the long-run sustainable level, unemployment could have been even lower, and housing prices marginally higher.

ferences of opinion on monetary policy should decline considerably. And hopefully this will happen fairly soon.

In Sweden we have deliberately chosen to have a high degree of openness regarding monetary policy. This means that the discussions conducted by the Executive Board take place on an open stage, almost, through the publication of the minutes from the monetary policy meetings and through the speeches held. In many other central banks these differences of opinion never see the light of day.

This openness naturally has consequences, and not all of them positive. For example, there may sometimes be a little too much focus on the potential antagonism and differences of opinion within the Board – and in the worst case on a person rather than a policy. But one positive effect that people perhaps do not think about is that topical and important issues, often those in the forefront of academic research, are quickly implemented in the Riksbank’s practical work. The fact that the Executive Board publicly debates what role the policy rate should play to influence household debt means that the Riksbank’s analysis apparatus is activated on this issue to a greater extent than would have been the case without this open discussion.

Although I would not say that there are any more concrete results yet, there is definitely a lot of deliberation being put into this issue. I do not believe that this would have been the case – at least not to the same extent – if all of the Board members were agreed that the repo rate should be held slightly higher to subdue household debt. In other words, the open debate hopefully helps us to move forward in this field.

References

Armelius, Hanna and Hans Dillén, “The relation between household saving and falls in house prices”, *Economic Commentary* no. 4, 2011, Sveriges Riksbank.

Assenmacher-Wesche, Katrin, and Stefan Gerlach (2010), “Monetary policy and financial imbalances: Facts and fiction”, *Economic Policy* 25, pp. 437-482.

Bean, C., M. Paustian, A. Penalver and T. Taylor (2011), “Monetary Policy After the Fall”, in *Macroeconomic Challenges: The Decade Ahead*, pp. 267-328, Federal Reserve Bank of Kansas City.

Bernanke, Ben (2010), *AER Papers and Proceedings* [speech at AEA meeting, January 2010]

Bernanke, Ben (2011), “The Effects of the Great Recession on Central Bank Doctrine and Practice”, speech at the Federal Reserve Bank of Boston 56th Economic Conference, 18 October 2011.

Calmfors, Lars (2012), “Riksbanken måste bli tydligare (The Riksbank must be clearer)”, column in the Swedish newspaper *Dagens Nyheter* on 13 September.

Claussen, Carl Andreas, Magnus Jonsson and Björn Lagerwall (2011), “A macroeconomic analysis of housing prices in Sweden”, in Sveriges Riksbank (2011), pp. 67-95.

Englund, Peter (2011), “Swedish house prices in an international perspective”, in Sveriges Riksbank (2011), pp. 23-65.

- Finansinspektionen (2012), "The Swedish Mortgage Market", 13 March 2012.
- Ingves, Stefan (2012), "Stora risker med alltför låg ränta" (major risks with an overly low interest rate), Svenska Dagbladet newspaper, 18 October.
- Isaksen, Jacob, Paul Lassenius Kramp, Louise Funch Sørensen and Søren Vester Sørensen (2011), "Household Balance Sheets and Debt – an International Country Study", Danmarks Nationalbank Monetary Review, 4th Quarter 2011, Part 2, pp. 39-81.
- Jansson, Per (2012), "My view on inflation targeting", speech at Karlstad University, 11 October.
- National Institute of Economic Research (2012), The Swedish Economy, August 2012.
- Mishkin, Frederic S. (2011), "Monetary Policy Strategy: Lessons from the Crisis", NBER Working Paper No. 16755.
- Qvigstad, Jan F. (2005), "When Does an Interest Rate Path 'Look Good'? Criteria for an Appropriate Future Interest Rate Path – A Practitioner's Approach", Staff Memo No. 2005/6, Norges Bank.
- Reinhart, Carmen M. and Kenneth S. Rogoff (2009), *This Time is Different*, Princeton University Press.
- Rogerson, Richard (1997), "Theory Ahead of Language in the Economics of Unemployment", *Journal of Economic Perspectives* 11 (Winter), pp. 73-92.
- Svensson, Lars E.O. (2010), "Why a lower repo-rate path?" speech held at Umeå University, 24 February 2010.
- Svensson, Lars E.O. (2011a), "For a better monetary policy: Focus on inflation and unemployment", speech at Luleå University on 8 March 2011.
- Svensson, Lars E.O. (2011b), "Practical Monetary Policy, Examples from Sweden and the United States", *Brookings Papers on Economic Activity*, Fall 2011, pp. 289-332.
- Svensson, Lars E.O. (2012a), "The Possible Unemployment Cost of Average Inflation below a Credible Target", working paper, www.larseosvensson.net.
- Svensson, Lars E.O. (2012b), "Utmaningar för Riksbanken - penningpolitik och finansiell stabilitet," (Challenges for the Riksbank – monetary policy and financial stability) *Ekonomisk Debatt* no. 5 2012, year 40, 17-29.
- Sveriges Riksbank (2010), "Minutes of the monetary policy meeting", no. 3, 30 June 2010.
- Sveriges Riksbank (2011), *The Riksbank's inquiry into risks in the Swedish housing market*, www.riksbank.se.
- Sveriges Riksbank (2012a), "Minutes of the monetary policy meeting", no. 3, 3 July 2012.
- Sveriges Riksbank (2012b), Monetary Policy Report, July 2012.
- Walentin, Karl, and Peter Sellin (2010), "Housing Collateral and the Monetary Transmission Mechanism", Sveriges Riksbank Working Paper No. 239.

