

## **Irma Rosenberg: Monetary policy, house prices and household indebtedness**

Speech by Ms Irma Rosenberg, Deputy Governor of the Sveriges Riksbank, at Sparbanken Finn's customer meeting, Lund, 20 September 2004.

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### **Introduction**

Let me begin by thanking you for the invitation to come here and speak at Sparbanken Finn's customer meeting. Tonight I intend to talk about something that has been much debated in the media recently; namely the increase in house prices and household indebtedness and its significance for monetary policy. House price trends, combined with increased indebtedness, could for instance cause significant problems in the future if households have not taken into account in their calculations the fact that interest rates will rise from their present low levels. Is this something we should take into account when making monetary policy decisions?

To answer this question, I shall begin with a few words on how we conduct our monetary policy and the aims of our policy. I shall then go on to describe developments in household borrowing and house prices and the most important driving forces behind them. I shall also mention how household wealth is included in our forecasts and whether there is reason to pay particular attention to developments in debts and house prices in the monetary policy stance. In conclusion, I shall also briefly comment on the present economic situation and the inflation outlook.

### **The aims of monetary policy**

The Riksbank has been assigned two tasks by the Riksdag (the Swedish parliament). The first entails maintaining price stability and the second involves promoting a safe and efficient payment system, i.e. contributing to financial stability. In addition, if it is possible to do so without creating a conflict with the other aims, we shall also take into account other aims of economic policy, such as economic growth and employment.

Maintaining price stability means in more concrete terms that the Riksbank has set an inflation target for its monetary policy. The rate of price increase in terms of the consumer price index, CPI, shall be limited to 2 per cent a year with a tolerated deviation interval of +/- 1 percentage point. The fact that deviations from the target are tolerated, within a set interval, is because monetary policy is not sufficiently precise to be able to bring inflation to exactly 2 per cent all of the time. However, the deviations must not be too large, nor of long duration.

The Riksbank mainly endeavours to influence inflation by raising and lowering its key rate - the repo rate. The aim is to subdue or stimulate demand in order to affect the balance between supply and demand in the economy, and thereby resource utilisation and inflationary pressure. An adjustment in interest rates affects the cost of borrowing and thereby also demand for housing and households' demand for primarily durable goods. The speed and strength of the impact of these interest rate adjustments to some extent depend on household indebtedness and asset holdings, for instance, housing.

As monetary policy has an impact after a certain time lag, it is difficult to steer inflation in the short term. Monetary policy decisions are therefore based on an inflation forecast, usually looking one to two years ahead. This is the approximate time required for the effects of an adjustment in interest rates to pass through various channels of the economy and attain full impact on the rate of price increase. At the same time, we try to conduct our monetary policy in a way that will avoid excessive fluctuations in production and employment. This may give us reason to extend the forecast perspective a little beyond the two-year horizon. One could say that the Riksbank conducts a flexible inflation-targeting policy, a concept to which I will return later.

### **Developments in household indebtedness and house prices**

Before I go into more detail on the significance of debts and wealth in monetary policy, I would first like to comment on developments in indebtedness and house prices in Sweden and compare them with developments in some other countries.

In recent years, household borrowing and property prices have increased rapidly in Sweden, as they have in many other countries. Debts have increased more than disposable incomes, and in Sweden the debt ratio, i.e. debts in relation to disposable incomes, is approaching the level seen during the crisis period in the early 1990s. House prices, when regarded across the country as a whole, have risen since the end of 1996. The rate of increase has varied this year between 7 and 10 percentage points a year according to Statistics Sweden's real estate price index. As I see it, there are several factors of a partly structural nature behind this development. One is the decline in interest rates, which is largely a result of the economic policy conducted. The fact that credit markets have been deregulated in recent decades and become more efficient has also created more beneficial conditions for household borrowing. These driving forces have been similar in many countries, although they have occurred at slightly different points in time.

The fact that households have increased their indebtedness can to some extent also be due to the changeover in economic policy that took place in Sweden at the beginning of the 1990s, with a focus on price stability. Public finances were consolidated and an inflation target was introduced. Confidence in the low-inflation policy was established gradually and has brought greater stability to the economy, with lower inflation and interest rates. A more stable economy makes it easier to predict future developments in interest rates and inflation. This can in turn mean that the risks connected with slightly higher indebtedness are perceived as smaller.

In recent years, household loans have largely been used to buy housing. The fact that the increase in lending to households has gone hand in hand with rising property prices is therefore no surprise. The rapid increase in house prices during the second half of the 1990s is partly due to the decline in interest rates. However, there are also other explanatory factors. Naturally, income growth has also played an important role. Other driving forces behind house price trends include demography and relocation flows that have contributed to a large demand for housing in certain areas of the country, particularly the metropolitan regions. There are also other factors that have had an impact, such as reduced housing subsidies and rising construction costs. There has also been relatively little new building since the crisis years, despite substantial demand for housing. Nevertheless, it now appears that the trend regarding construction has turned.

The increase in house prices has in turn contributed to a rise in the value of household wealth, as well as in the collateral for most of their loans. Household debts as a percentage of total assets, which among other things include housing, equity and saving in insurance policies, have therefore shown relatively little increase, despite the fact that the loans have risen in relation to disposable incomes. The fall in interest rates has also meant that the percentage of households' disposable income used to pay interest expenditure after tax is currently low, despite the increase in indebtedness.

Is there reason to be concerned that households have acquired such large debts and house prices have risen so much that it could cause problems in future? To determine this, it is necessary to have some perception of the long-term sustainable levels. One point worth noting to begin with, is that the Swedish nation as a whole has not increased its indebtedness in recent years. On the contrary, the large surplus on the current account indicates that external debt has declined. This should have contributed to making the economy as a whole less vulnerable to a rise in interest rates. In this respect we differ from a number of other countries, where household indebtedness has increased rapidly, while they have had a deficit in their current accounts for several years. This applies, for instance, in the United States, the United Kingdom and Australia.

Developments in household indebtedness in Sweden are not remarkable when seen in relation to other OECD countries. It is clearly difficult to compare the level of debt ratios between different countries. Differences in taxation systems, credit terms and the percentage of the population that are home-owners are just some of the factors that complicate this analysis. On the other hand, a comparison of how much the debt ratio has increased in different countries in recent years can provide some perspective for developments in Sweden. It appears that developments in, for instance, the United Kingdom and Australia have been much more dramatic than in Sweden. Property prices have also risen more rapidly in these countries. However, in the United States, which deregulated its credit market at an earlier stage than the other countries, indebtedness has increased at a slightly slower rate, although it did not show any decline in the mid-1990s, as there was in Sweden.

The structure of the credit market and the wording of the loan contract also affect property prices, and lead to differences in trends between countries. One example is that in some countries, such as the United States and Denmark, there is an opportunity to renegotiate fixed-rate loans - at a very low cost - when interest rates fall.

One phenomenon that is probably significant for indebtedness and property prices in some other countries, but which does not appear to be particularly common in Sweden, is that private households invest in property to rent out. This occurs, for instance, in the United Kingdom and, probably to an even greater extent, in Australia, where loans for making investments comprise approximately one-third of the banks' lending to households.<sup>1</sup> The fact that households borrow money to buy property in addition to their own housing to rent out probably increases the risk of speculative elements in the price-setting. At the same time, it makes households more vulnerable to changes in interest rates and income. They also become more sensitive to changes in the balance of the rented property market. This means that the risk of substantial fluctuations in house prices is probably greater in countries where it is common to buy housing to rent out.

There has thus been an increase in indebtedness internationally, parallel to a rise in property prices. As has been the case in Sweden, questions have arisen regarding the sustainability of this trend and what happens when interest rates rise. Developments in house prices and household indebtedness are regularly analysed in the Riksbank's Financial Stability Reports. Of course, any assessments of the valuation of the house market are connected with a large measure of uncertainty. However, the calculations we have made so far do not indicate that the pricing of houses in Sweden as a whole is significantly out of balance. Price trends can be explained fairly well by the increase in household incomes, the decline in interest rates and a low construction rate, despite strong demand. However, one should be aware that the rate of price increase varies substantially between different regions. House prices have increased at a much faster rate in metropolitan areas than in the rest of the country. The possibility that price increases may have been exaggerated in certain individual regions or markets cannot be ruled out, although developments in Sweden as a whole appear to be balanced.

### **Indebtedness, house prices and inflation forecasts**

What significance do house prices and household indebtedness have for the Riksbank's inflation forecasts? The inflation forecasts are based on an analysis of the various driving forces behind domestic inflation and the international rate of price increase, imported inflation. Domestic inflation is largely governed by cost trends and by how total demand develops in relation to production capacity, that is to say, resource utilisation. Household consumption comprises a significant part of total demand and this is where indebtedness and house price trends mainly come into the forecast work. Household wealth plays an important role in the Riksbank's assessment of how private consumption will develop.

Wealth affects households' consumption in several ways. To simplify, one can say there are two reasons why an increase in wealth, for instance in the form of an increase in the value of one's own home, can be expected to lead to increased consumption. Firstly, the larger the wealth an individual has, the more he or she can consume during his or her lifetime. This is a traditional wealth effect. Secondly, the size of the wealth can affect the possibilities to obtain loans. This is usually called the balance sheet effect. The larger the collateral a household can offer for its loans, the greater the possibilities to borrow and thereby to consume. When the value of the property owned by the household increases, this also provides a possibility to take out further loans on the property, for instance, to extend or renovate and further increase the value of the property, or to consume other goods. Another effect is that a higher valuation provides the possibility to renew last mortgage loans as first mortgage loans and thereby reduce the interest costs for the loans. There is also empirical support for a positive correlation between wealth and consumption.

Wealth also has significance for how strongly households are affected by interest changes. An adjustment in interest rates affects the price of households' assets, such as housing and thereby wealth, and through this channel has an indirect effect on households' consumption in the way I just have described. However, an adjustment in interest rates also has a direct effect on households' purchasing power and willingness to incur debt via interest costs for borrowing.

The speed and strength of the impact of an interest rate adjustment on households' interest expenditure depends to a large extent, as I mentioned earlier, on the size of the debts, the percentage of the loans that are variable-rate loans and the average fixed-rate term for the loans at a fixed interest rate. The percentage of variable-rate loans increased during the 1990s and is currently around 35 per cent of the total debts. The larger the percentage of variable-rate loans a household has, the faster an

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<sup>1</sup> See pp 15-17, Financial Stability Report 2004:1

interest rate adjustment will affect interest expenditure. The fact that indebtedness and house prices have increased should thereby have contributed to a more rapid and possibly also a stronger impact by monetary policy on household consumption demand than previously.

### **Do the inflation forecasts contain all of the relevant information on house prices and indebtedness?**

As I mentioned earlier, the Riksbank's monetary policy is normally based on forecasts of inflation one to two years ahead. Two important issues in this context are whether this is a sufficiently long time perspective and whether there are problems with the forecasting methods that lead to the effects of households' increased indebtedness being underestimated.

The reason why the Riksbank has chosen to focus on the inflation forecasts one to two years ahead is that this is the perspective in which monetary policy is assumed to attain a full impact. However, it is not possible to disregard expectations of how inflation and the real economy will develop beyond the two-year horizon. Sometimes shocks may occur that affect the economy for a much longer period than two years. This indicates that monetary policy should, in principle, also take into account whether events now, such as developments in household indebtedness and house prices, can be expected to have serious repercussions on the real economy and inflation in a longer perspective. However, at present there is no reason to believe that the developments in the housing market or household indebtedness entail a risk of creating shocks that would require special consideration in monetary policy.

So what are the potential problems with regard to assessing how indebtedness and property prices affect inflation? Our forecasts are based on both calculations using economic models and more qualitative assessments of the factors expected to affect inflation. The theoretical models are usually based on households behaving in a rational manner. This involves households making plans for the future and building up expectations of future economic developments, and also there being no systematic errors in these expectations. It is not unlikely that households' rationalism is in some cases overestimated in the formal models. If this is the case, the conclusions regarding the effects of, for instance, repo rate rises that are calculated using these models may be incorrect. One such example would be if households did not include in their calculations the fact that interest rates rise when economic activity strengthens and that indebtedness and house prices therefore were being pushed beyond sustainable levels.

Something that can give rise to special problems in the forecast context is that changes in indebtedness and property prices have a tendency to reinforce one another over the economic cycle. Low interest rates make it cheaper to finance house purchases, which means that house prices rise. As the value of the collateral for households' loans mainly consists of houses or tenant-owned apartments, the price increase in itself contributes to making it possible to borrow more money. Sooner or later, interest rates will rise and the question is what happens then. If indebtedness and house price trends during the upturn phase have been based on over-optimism and unrealistic expectations among lenders and borrowers, house prices may fall sharply and households may experience difficulty in meeting their interest payments. Demand in the economy can then fall substantially. It is difficult to completely capture a sequence of events where changes in different variables tend to reinforce one another in economic calculations. If the households have also been overly optimistic - irrational - in their expectations, it becomes particularly difficult to capture these effects. It is therefore important for forecasters to make more "qualitative" assessments in addition. Another reason for not trusting solely to formal models based on historical data is that the effects of structural changes that have taken place fairly recently can easily be underestimated.

Let me give an example that to some extent captures these problems. During the years from the mid-1980s to the beginning of the 1990s, substantial changes were made in the economic structure and there was a clear correlation between the change in house prices and the change in household borrowing. The decline in house prices during the financial crisis at the beginning of the 1990s was largely due to an unfavourable combination of changes of both a structural and a cyclical nature. In connection with the deregulation of the credit markets during the second half of the 1980s, household borrowing increased substantially and the loans were largely used to buy houses. The fairly high and fluctuating inflation rate contributed to real interest costs after tax often being low, sometimes even negative, which in practice meant that one could at times make a profit from borrowing. At the beginning of the 1990s, the tax system was reformed, and this entailed a substantial reduction in the opportunities for deducting interest expenditure. Interest rates rose substantially at the same time, and

the Swedish economy was affected by an international economic slowdown. This had very negative effects on both household borrowing and house prices. Could a similar situation arise today? Although we have seen a rapid increase in both indebtedness and house prices in recent years, the present situation is quite different, with a low-inflation policy and thereby more stable economic environment. Nor have there been any extensive structural changes of a nature that would completely alter the conditions for households' decisions on indebtedness and property purchases.

### **Monetary policy takes account of other factors than inflation**

In principle, household indebtedness and developments in house prices could create problems for the payment system. This is something regularly analysed in the Riksbank's Financial Stability Reports. The conclusion that can be drawn from the most recent report in June is that the risk of the household sector alone being able to create such large losses for the banks as to threaten the payment system is very slight. As I mentioned earlier, the assessment is that house prices over the country as a whole are reasonable. A special study of households in debt was included in the June report, and this showed that, on average, these households were assessed to have good margins for managing rising interest expenditure or increased unemployment. It is also worth mentioning that during the property crisis at the beginning of the 1990s, it was not the households that caused problems for the banks.

As I mentioned earlier, the Riksbank, like many other central banks, conducts a flexible inflation-targeting policy. In addition to taking account of price stability, monetary policy may in certain cases wish to take into account developments in the real economy as a whole. This can mean, for instance, conducting a less aggressive interest rate policy and thereby allowing inflation to return to the target gradually after a disturbance to avoid excessive fluctuations in production and employment. In connection with the build-up of household debt and price trends in housing, there could be a situation where households may have based their decisions on incorrect expectations and the trend may have proved unsustainable, or that we see a tangible risk of this situation arising. This could lead to an adjustment process, where house prices fell heavily and there was a decline in the real economy as a whole. We explained in a clarification of monetary policy published in 1999 that, if we choose to take these considerations into account, we will clearly motivate our decision. If flexible inflation targeting functions well, it leads to smaller fluctuations in production, without this causing average inflation to rise. The scope for conducting such a policy is determined by households' and companies' confidence in monetary policy. If they have considerable confidence, there is little risk that inflation expectations will be affected if inflation should deviate temporarily from the target level.

At present, I cannot see that real economy considerations could lead to the Riksbank wishing to deviate from the normal rule of thumb for monetary policy, given the current level of household indebtedness. My own assessment is that there does not appear to be any conflict between price stability and stability in the financial and real economy.

### **The current situation**

Before I summarise what I have said tonight, I would like to briefly comment on my current perceptions of future inflation.

Our assessment in the spring was that economic activity both in Sweden and abroad would continue to strengthen this year and over the coming two years. Inflation in Sweden was expected to be relatively stable over the coming year and then to increase gradually as resource utilisation rose in Sweden and abroad. The conclusion was that inflation would be in line with the target level two years ahead, and we therefore chose to leave the repo rate unchanged.

At our meeting in August, there appeared to be reason to expect slightly more rapid growth in Sweden and abroad, which then gave reason to assume a higher figure for resource utilisation and inflation. However, we still anticipated that inflation would be in line with the target two years ahead.

The conclusion drawn by the Riksbank in August with regard to future inflation still largely stands, in my opinion. However, there may be reason for some upward revision to the inflation forecast made in May, and perhaps even to the one made in August. One factor which could indicate a higher inflation rate, at least in the short term, is the high oil prices. Resource utilisation may also be slightly higher than anticipated in the coming years. One reason is the strong figures for Swedish growth that we have seen over the summer. Another is that fiscal policy will probably become more expansionary

now. Inflation can nevertheless be expected to be in line with the Riksbank's target two years from now.

This is also the picture painted in a speech by Riksbank Governor Lars Heikensten in London today.

## **Conclusion**

Let me summarise what I have said this evening.

Despite stock market fluctuations and a periodically weak economic climate, both household indebtedness and house prices have increased substantially, on a national level, in recent years. There have been similar developments in many countries, and households' debts and interest payments as a percentage of disposable income are not remarkably high in Sweden. Although the debt ratio is approaching the high level prior to the financial crisis at the beginning of the 1990s, the low interest rates have meant at the same time that households' interest expenditure as a percentage of income has largely been halved since then. Our calculations also indicate that households with debts on average have a relatively good safety margin for interest rate rises and reductions in income. We therefore do not at present envisage any major problems for the household sector as a whole, even if interest rates rise significantly. However, this does not mean that problems will not arise for individual households in the case of higher interest rates. It is important that borrowers include rising interest rate expenditure in their calculations and carefully consider what level of indebtedness they can manage when interest rates sooner or later begin to rise. For this reason, we have emphasised in connection with our monetary policy decisions over the past six months that interest rates are at present low in a historical perspective and will need to be raised in the long run.

With regard to house prices, the calculations we have made so far do not indicate that prices for housing in the country as a whole are substantially unbalanced. The developments can be explained fairly well by factors such as disposable income, living costs, construction costs and the fact that there is relatively little new building, despite strong demand. Supply is expected to increase at a slightly slower rate than demand over the coming years. My assessment is that at present no imbalances have been built up that could risk leading to a sharp fall in prices further ahead. However, the rapid increase in house prices and indebtedness occurring now is something we shall monitor closely.

I would at the same time like to emphasise that monetary policy often involves difficult considerations. If I and my colleagues were to come to the conclusion that serious imbalances were building up in the economy in a way that threatened the stability of the payment system, or in a way that we felt would have serious consequences for the real economy in the future, we may want to take this into account when conducting monetary policy. However, so far, considerations concerning the effects of house prices and household indebtedness on other elements than inflation have only played a marginal role in monetary policy.