

## **Barbro Wickman-Parak: The Riksbank and monetary policy – perspectives on interest rate forecasts**

Speech by Ms Barbro Wickman-Parak, Deputy Governor of the Sveriges Riksbank, at a Statistics Sweden seminar, Stockholm, 3 October 2007.

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Thank you for inviting me to this seminar. Economic forecasts have long been my special field and this of course plays an important role in my job at the Riksbank. But as you know, the Riksbank's communication policy means that we do not usually send any signals on how we intend to act with regard to changes in the policy rate at the next meeting. This limits the possibilities for me to actively participate in a discussion of the most recent yield of statistics, which is the theme of this meeting. So the view of the economic situation I intend to present in brief today applies to my assessment at the time of the monetary policy meeting held in September. I shall instead take the opportunity to say a few words about our experiences so far of the Riksbank's publication of its own forecast for the repo rate. What lessons can we learn?

### **The monetary policy decision on 6 September**

In September we Executive Board members decided to raise the repo rate from 3.50 to 3.75 per cent. I supported both the raise in the interest rate and the assessment that the repo rate should be raised further at around the pace we presented in June. My motives for the decision are expressed in more detail in the minutes from the meeting, so I shall not say very much on this point.

The statistics received regarding developments in Sweden during the second quarter showed a slightly tighter labour market than we expected in June and unemployment was slightly lower than we were predicting (Figure 1). The hiring plans according to the National Institute of Economic Research's business tendency survey for July also indicated that employment would continue to rise during the third quarter.

At the same time, labour shortages in the business sector had continued to increase (Figure 2). I therefore repeated by view from June, namely that companies could be forced to increase their remunerations to obtain skilled labour. This could push up wage increases. If companies instead choose to lower their requirements regarding qualifications this could have an effect on productivity growth which would then risk being weaker than the development we envisaged. In both cases cost and inflationary pressures rise.

According to the preliminary National Accounts, which were published in August, productivity showed much weaker development during the second quarter than we had predicted in June (Figure 3). But even if there was reason to believe that it would be short-lived, there is nevertheless considerable uncertainty regarding how productivity will develop in the future.

And inflation, what has happened there? It had only been slightly higher than the forecast in June (Figure 4). However, companies' costs had increased more rapidly than expected (Figure 5). We also saw that commodity prices had risen, as had food prices (Figure 6). Business tendency data from the National Institute of Economic Research also indicated that food prices would continue to rise. Inflation expectations, which normally fluctuate fairly substantially, had also shown a weak trend increase since summer 2005 and were at around 2.5 per cent for households in August, according to the National Institute of Economic Research's survey (Figure 7).

House prices had also continued to rise over the summer, while household borrowing had continued to increase at roughly the same rate as during the first quarter.

To summarise, there were in my view strong domestic reasons for raising the repo rate to 3.75 per cent in September. This could in itself also have justified a slightly higher forecast for the repo rate. But there was a counteracting effect from developments in the United States and the unrest on the financial markets. My conclusion was therefore that the repo rate forecast from June provided a fairly good picture of the most likely path for the repo rate over the coming years. If it were the case that the US economy suffered a deep recession with severe contagion effects, the Riksbank would have reason to reconsider its views.

### **Advantages of an own interest rate forecast**

This leads me on to our experiences so far of the Riksbank's publishing its own forecast for the repo rate. Since the inflation target was introduced, the Riksbank has tried in different ways to become ever more open and clear with regard to how monetary policy is conducted. More and more information on the bases for the decisions has been published, not least the forecasts for inflation and the economy as a whole. I think that the decision to publish our own forecast for the repo rate was a natural continuation of this process.

One should also bear in mind that the Riksbank must in any case make an assumption about the interest rate as a basis for its forecasts regarding growth and inflation. To begin with, an unchanged policy rate was used in the forecasts. This method had the advantage of making it easy to explain that the interest rate needed to be raised or cut, but it also involved an unrealistic forecast. The interest rate does not normally remain unchanged during a forecast period of a couple of years.

After this the Riksbank changed over to using implied forward rates as a base for its forecasts. One problem is that these interest rates do not unambiguously reflect expectations of the repo rate, as they also contain risk premiums that may vary over time. Although adjustments were made for this, there was another type of problem with using forward rates. If market agents' expectations differ from the Riksbank's view, it is problematic if forward rates are nevertheless used as a base for the forecasts. Using one's own forecast is much more transparent and direct.

In February the Riksbank introduced a new system which means that we publish a forecast for the repo rate together with a probability distribution. Previously the interest rate path has only been published in connection with the Monetary Policy Reports issued three times a year. But in September the Executive Board took the decision that the interest rate path and forecasts for certain key variables should also be published at the monetary policy meetings where no report was published.

There are several advantages to the Riksbank publishing its own interest rate forecast. We can then explain more clearly to the general public and market agents how we view future interest rate developments, which makes it easier to evaluate monetary policy. Clearer communication should also mean that monetary policy becomes more efficient. Through the influence on interest rate expectations the Riksbank can to a greater degree influence interest rate setting in the economy.

Another advantage of having our own interest rate forecast is that it becomes simpler to explain how we view the driving forces behind economic developments and also the objective and effects of monetary policy. At the same time, it should contribute to giving greater depth to the analyses and discussions of monetary policy conducted both within and outside of the Riksbank.

Up to February this year, when I myself still worked as an analyst, I like many others tried to interpret the Riksbank's communication and what it might mean for future interest rates. The combination of the Riksbank now publishing its own interest rate forecast and at the same time continuing to report how we think has the potential to change the discussion outside of the Bank. It could to a greater extent concern how new information should affect

expectations of interest rate developments rather than exactly what formulations are used in for example speeches and press releases.

### **Interest rates are by definition always uncertain**

Let me take up some issues that are important to keep in mind when formulating forecasts for the repo rate.

Firstly, the interest rate path we present is a forecast and forecasts are, as we know, very uncertain. To illustrate this, the Riksbank publishes uncertainty intervals, known as fan charts, around its interest rate forecasts and also its inflation and GDP forecasts (Figure 8). As you see, the uncertainty interval increases considerably in relation to the length of the time horizon. Put simply, the probability of unexpected shocks arising in the economy that would lead to developments deviating from the forecasts increases when the time horizon is longer.

In other words, it is not easy to make accurate forecasts of the development of the interest rate in the longer term. One means of illustrating this is to see how the implied forward rates have changed over time. Figure 9 shows implied forward rates measured on a quarterly rate. Expectations of the development of the repo rate have varied substantially over time when measured in this way. During the years the interest rate has gradually been cut, expectations according to implied forward rates have substantially overestimated the level of the repo rate. After the interest rate raises began one and a half years ago, there has rather been a tendency for the repo rate path to be slightly underestimated.

As the economy is constantly exposed to unexpected shocks, it is not at all strange that forecasters revise their assessments. This applies to the major banks, the National Institute of Economic Research, the Ministry of Finance and also to us at the Riksbank and our interest rate forecasts. The major uncertainty means that we forecasters should be very cautious when making statements about the future, but this should not restrain us from saying how we think the future will look.

Secondly, it is difficult to determine what will be a normal level for the interest rate a couple of years ahead, that is, the interest rate that prevails in a normal phase of the business cycle. As we can see in the diagram, the paths for forward rates have flattened out and the view of what is a normal rate has gradually been revised downwards over time (Figure 9). The Riksbank has stated that a normal level for the repo rate is probably somewhere in the interval 3.5 to 5 per cent. But experiences show that the repo rate can lie outside of this rather broad range for fairly long periods of time.

### **Lively discussions after publication of the interest rate path**

There have been lively discussions on both occasions when the Riksbank has published an interest rate path. It is good that our forecasts and assessments are discussed. The fact that the Riksbank gives its view of the interest rate over a longer time span encourages this – the longer the time perspective, the greater the scope for differences in assessments. But the discussion that has arisen has often not taken this direction; instead it has focussed on market agents having been taken by surprise by the Riksbank.

This is, of course, not the desired effect. The Riksbank aims to be predictable and from this aspect the experiences so far of publishing our own interest rate forecast have been not only positive. My view is that we are at the beginning of a joint learning process. It is unusual for the Riksbank to communicate its own interest rate path and it is unusual for market agents to relate to it. This is something that both parties will become better at as our experience in this field increases. We can also make some comparisons with when the Riksbank began to publish its inflation forecast. When the forecast was changed this sometimes led to a debate.

But after a time, everyone became used to the idea that the inflation path would be revised, and it will probably be the same case with the interest rate path.

### **Was the adjustment of the interest rate path in June extreme?**

Here I intend to focus primarily on the reactions in the financial markets following the monetary policy meeting in June. As you will remember, the Riksbank at that time presented a new forecast for the repo rate. The forecast was on average 50 points above the earlier forecast that we published in our February report. We were then criticised because our revision of the repo rate forecast was greater than one would normally expect during such a short period of time.

One observation is that while the revision was large, it was not in any way extreme. If one analyses how the implied forward rates are revised, one can see that the probability of these being revised to a greater degree than the Riksbank's revision of the repo rate forecast between the February and June reports is approximately 20-25 per cent. This means that on every fourth or fifth occasion the market expectations have been revised more than the Riksbank's revision in June.

### **What had the market agents expected?**

Another question is how the market agents' expectations of interest rate developments changed after we had published our forecast in June.

Figure 10 shows the expectations of monetary policy that can be understood from the implied forward rates. The day prior to the decision the implied forward rates indicated that market agents had prices a level for the repo rate of 4.0 per cent during the first quarter of 2008, that is, around the same as the main scenario later published by the Riksbank. In the longer term the Riksbank's main scenario and implied forward rates differed. With effect from the middle of 2008 onwards, implied forward rates were *above* the new interest rate path published by the Riksbank. The market information the commercial banks sent to their customers showed a similar picture. One can not, therefore, say that the Riksbank's June forecast on the whole contained abnormally large interest rate increases.

### **Why were the market reactions so strong?**

Both the market information and pricing in the market thus indicated that analysts if anything were counting on a higher repo rate in the longer term than the forecast later published by the Riksbank. Nevertheless, the yield curve for implied forward rates rose by around 15 points *over the entire period* following the interest rate announcement on 20 June (see Figure 10).

Why were the market reactions so strong? Firstly, international interest rates rose that day, which probably reinforced the rise in Sweden. Secondly, there are many signs that market agents had expected the Riksbank to publish an interest rate path that was lower than the path it actually published. So despite the market analysts' own interest rate expectations being in line with the Riksbank's published interest rate path for the coming six months and higher further ahead, they were surprised by the Riksbank's upward revision of the interest rate path.

One might ask why market agents' expectations of the Riksbank's interest rate path differed from their own forecasts for the repo rate. One interpretation is that they believed they had weighed together information on inflationary pressures in the economy in a different way than the Riksbank. This is nothing strange in itself. Assessing economic developments is not an exact science and different forecasters may very well draw different conclusions regarding the underlying inflationary pressure in the economy. But what surprises me, if this is the

correct interpretation, is that the market nevertheless reacted so strongly to the assessment we made in June.

Another interpretation might be that some analysts thought the Riksbank's assessment of inflation prospects and interest rate development did not differ significantly from their own assessments, but that the Riksbank did not want to revise the interest rate forecast made in February by that much, for reasons of prestige. I do not know whether this could have been part of the explanation, but I believe and hope that it was not. We Executive Board members have always been careful to point out that the interest rate path we publish is a forecast, and like other forecasts is reconsidered each time we make a decision. If our analysis of the prospects for production and inflation shows that our repo rate path needs to be revised in a particular way so that monetary policy is well balanced, then we will do this.

### **What lessons can we learn?**

So far we have only limited experience of the new system and it is difficult to draw any far-reaching conclusions. But perhaps we can learn some lessons for the future already at this stage. To begin with, it is important to note that, apart from the differences between different market agents' expectations, there may also be differences between market agents' own forecasts for the repo rate and their forecasts for the interest rate path the Riksbank will publish. It will be important for us to analyse what these differences are due to and how they should be interpreted in order to be able to predict the reactions at the times of the interest rate decisions. It is also important that we should constantly strive to become clearer in our communication to avoid it being interpreted in a way we did not intend. The decision to begin publishing interest rate forecasts in connection with each monetary policy meeting should be regarded in this context.

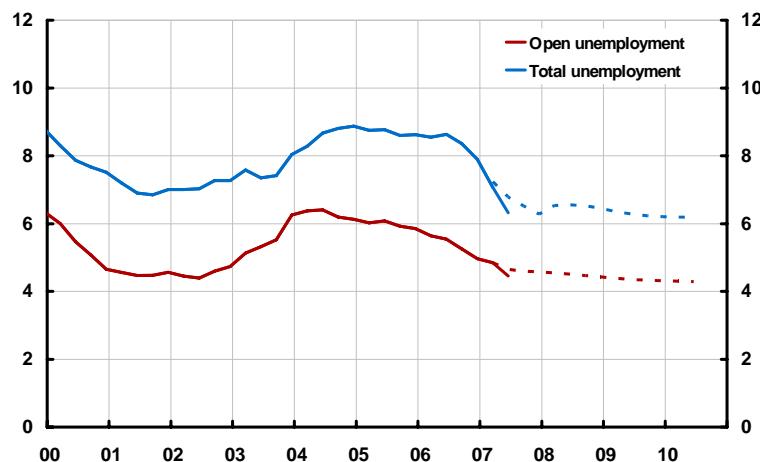
There are some indications that certain market analysts interpreted a couple of speeches by Executive Board members during the spring in a way that was not intended. They appear to have drawn the conclusion that the interest rate path would be revised upwards less than had been assumed previously. The reasons for this could be a combination of unclear communication on our part and a willingness among some market agents to read too much into what was actually said. The more our new policy of not signalling between monetary policy meetings becomes established, the better the communication will work. We Executive Board members will of course assess new information continuously and have instantaneous opinions on where we are heading. All those who make forecasts know that one's opinion of how the future will look like varies over time. But one day one must put one's foot down. It is mainly the result of this sometimes convoluted process that is the interesting factor, although the journey also has some information value. For us Executive Board members each monetary policy meeting is the final point of one such process and it is not until then that we make our collective assessment.

Thank you!



**Figure 1. Labour market had tightened**

Per cent of labour force



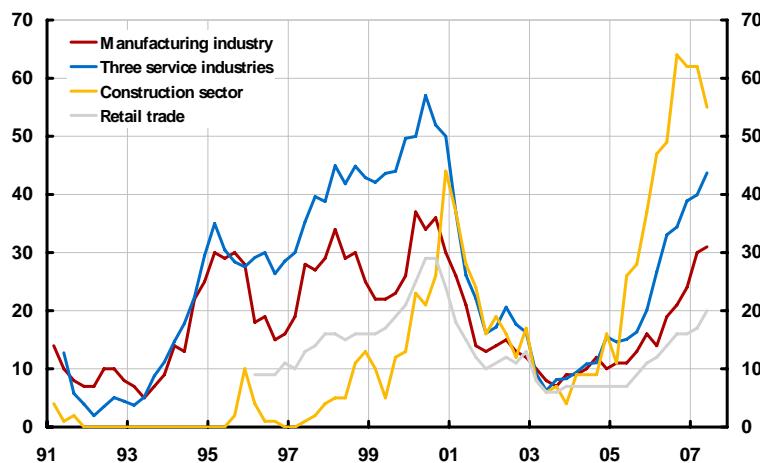
Note. The broken line refers to the Riksbank's forecast in MPR 2007:2.

Sources: Statistics Sweden and the Riksbank



**Figure 2. Labour shortages had increased**

Net figures

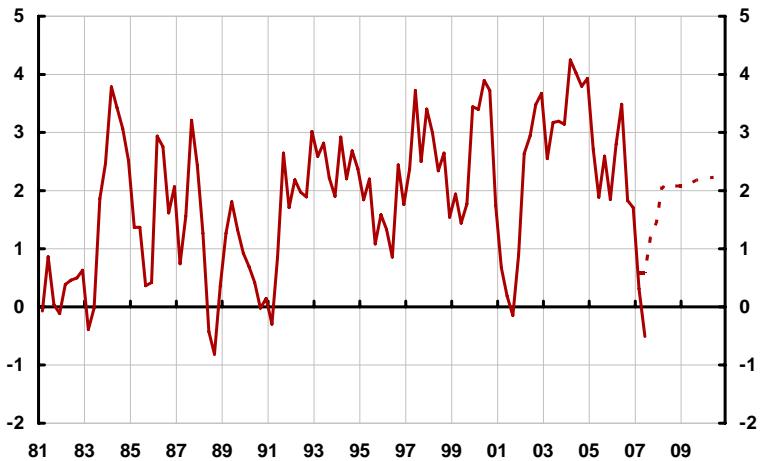


Source: The National Institute of Economic Research



### Figure 3. The weak productivity growth was assessed as temporary

Annual percentage change



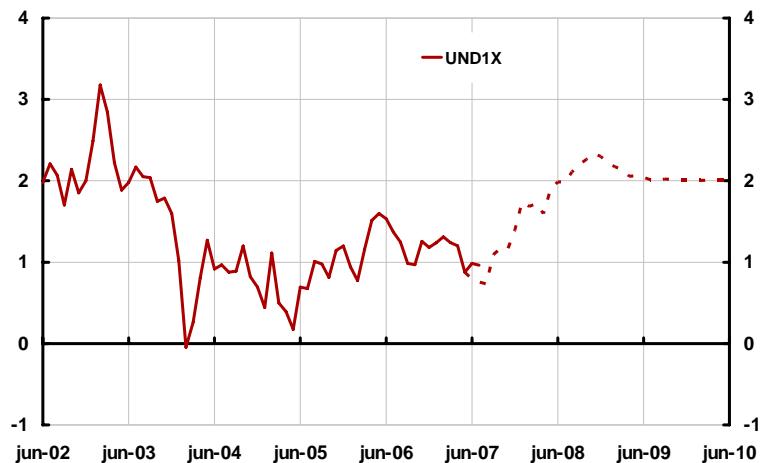
Note. The broken line refers to the Riksbank's forecast in MPR 2007:2.

Source: Statistics Sweden and the Riksbank



### Figure 4. Inflation was in line with the forecast but...

Annual percentage change



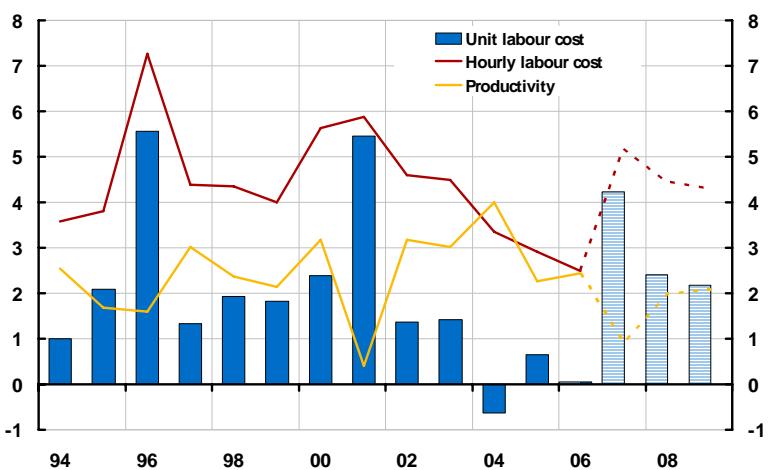
Note. The broken line refers to the Riksbank's forecast in MPR 2007:2.

Sources: Statistics Sweden and the Riksbank



## Figure 5. ...companies' costs rose

Annual percentage change, seasonally adjusted data



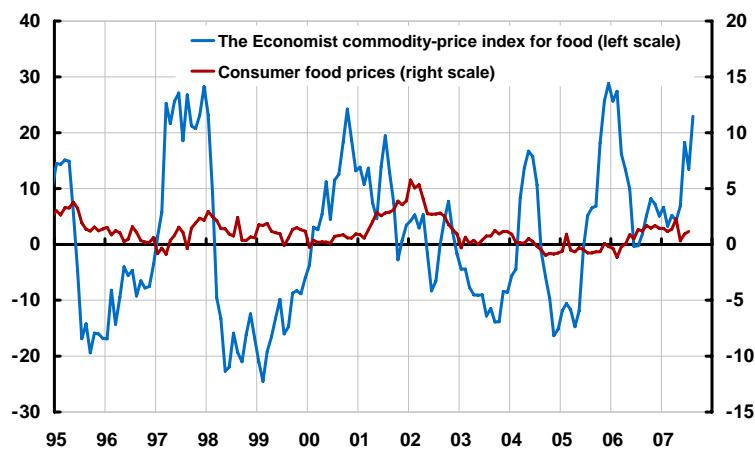
Note. The broken line refers to the Riksbank's forecast in MPR 2007:2

Sources: Statistics Sweden and the Riksbank



## Figure 6. Rising food prices

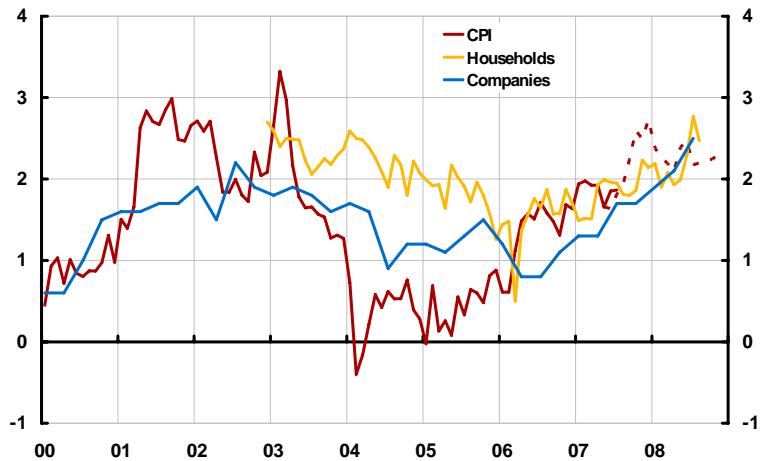
Annual percentage change



Sources: The Economist, Statistics Sweden and the Riksbank



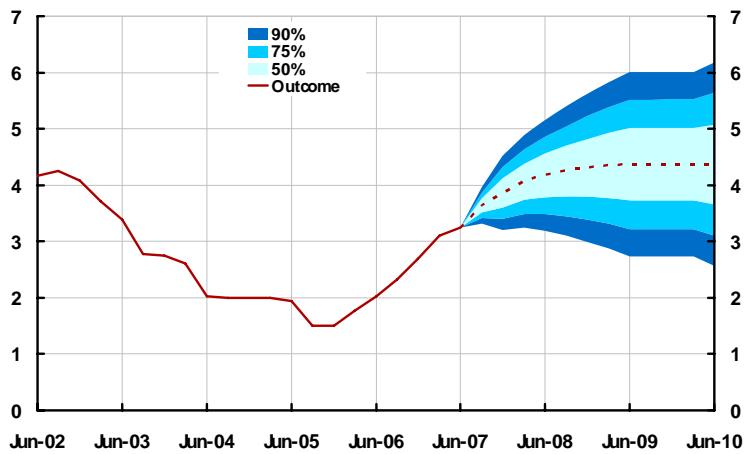
**Figure 7. Rising inflation expectations**  
Annual percentage change



Note. The broken line refers to the Riksbank's forecast in MPR 2007:2. Sources: The NIER, Statistics Sweden and the Riksbank



**Figure 8. Repo rate with uncertainty bands**  
Per cent, quarterly averages

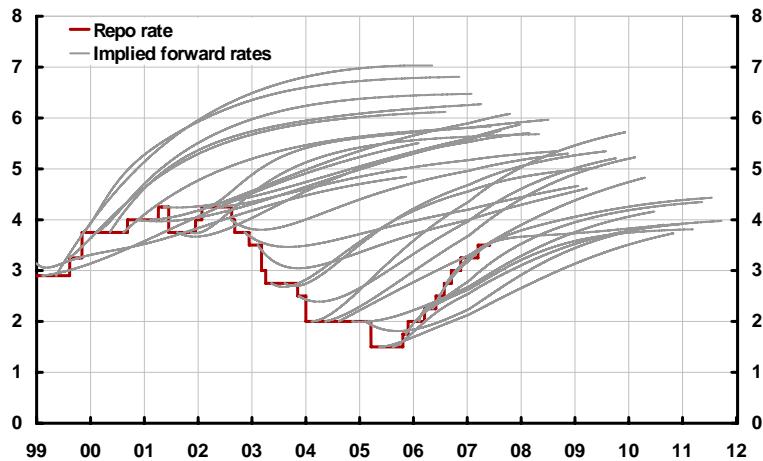


Source: The Riksbank



**Figure 9. Expectations of the repo rate according to implied forward rates**

Per cent

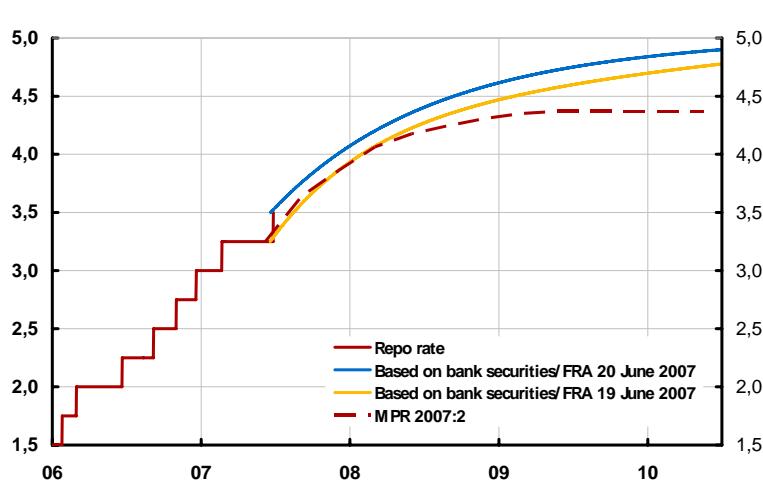


Source: The Riksbank



**Figure 10. Interest rate expectations 19 and 20 June**

Per cent



Source: The Riksbank