Minutes of the Executive Board's Monetary Policy Meeting, No.2

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TIME: 09.00

PRESENT: Stefan Ingves, Chairman
Karolina Ekholm
Lars Nyberg
Barbro Wickman-Parak
Lars E. O. Svensson
Svante Öberg

Leif Pagrotsky, Vice Chairman of the General Council

Sigvard Ahlzén
Hanna Armelius
Claes Berg
Hans Dellmo
Heidi Elmér
Eric Frieberg
Ann-Christine Högberg
Per Jansson
Anna Lidberg (§1)
Sofia Lindh (§ 1)
Tomas Lundberg
Pernilla Meyersson
Christina Nyman
Cecilia Roos Isaksson
Olof Sandstedt (§1)
Lena Strömberg (§1)
Ulf Söderström
David Vestin
Staffan Viotti

It was noted that Hanna Armelius and Hans Dellmo would prepare draft minutes of § 1, 2 and 3 of the Executive Board's monetary policy meeting.

§ 1. Economic developments

Olof Sandstedt of the Financial Stability Department began by presenting recent developments regarding financial stability with a focus on the rising variable mortgage rates and the turbulence regarding public finances in Europe. Variable mortgage rates have risen more than is justified by the recent increases in the repo rate. This is because the mark-up between STIBOR, which is the reference rate paid by banks when lending to one another, and the repo rate has increased.

Concern over public finances has caused the yields on 10-year government bonds to rise substantially in certain euro area countries. There is increased concern on the markets that Greece will need to renegotiate its debts, which has made Greek government bond yields rise sharply. Portugal also experienced a sharp rise in long-term rates before it became clear that the country would receive a support package from the EU and IMF. Concern over developments in Ireland appears to have declined somewhat following the publication of the results of the stress tests carried out for the banking system. Prior to this, rates had been rising over a fairly long period in Ireland, too. Long-term interest rates in Spain, on the other hand, have not risen to the same extent as in the countries mentioned above, but it is uncertain how long this situation will continue.

Anna Lidberg of the Monetary Policy Department presented the most recent developments on the financial markets. The krona exchange rate in terms of the TCW index is still stronger than prior to the financial crisis, although it has weakened slightly since the monetary policy meeting in February. Rate-setting on the interbank market has been volatile and both listed variable mortgage rates and household expectations of future mortgage rates have risen. At the same time, long-term treasury bond yields have fallen in Sweden. In the euro area, however, treasury bond yields are higher now than they were in February as the ECB has begun to raise its policy rate. There has been a large upwards shift in monetary policy expectations there, according to implied forward rates. In the United States and the United Kingdom, on the other hand, monetary policy expectations have shifted downwards since the meeting in February.

Pricing on the market indicates that an increase in the repo rate of 0.25 percentage points is expected at today's meeting. Three further increases in the repo rate this year are priced by the market. Monetary policy expectations according to market pricing are thus largely unchanged in relation to February. Prospera's survey also points to monetary policy expectations being largely unchanged.

David Vestin, Deputy Head of the Monetary Policy Department, presented the draft Monetary Policy Update which, in the assessment of the Monetary Policy Department, should gain the support of the majority of the Executive Board members. He began by noting that the forecasts in the draft Update were discussed by the Executive Board at meetings held on 6, 7 and 11 April. Forecasts and texts were tabled at a meeting of the Executive Board on 13 April. New statistics for inflation in Sweden in March have been received since 11 April. Inflation excluding interest rate adjustments, measured in terms of the CPIF, amounted to 1.5 per cent, which was 0.4 percentage points lower than expected. CPI inflation increased by 2.9 per cent compared with last year, which was 0.4 percentage points higher than the forecast in the February Monetary Policy Report. This forecasting error is partly due to mortgage rates having risen more than would correspond to the repo rate increases, as Olof Sandstedt described earlier. Another reason for the forecasting error is that Statistics Sweden has updated the weights for variable mortgage rates. Underlying inflation measured as the CPIF excluding energy was also lower than in the February forecast, amounting to 0.9 per cent in March. One reason for this was probably the krona appreciation over the past year.

The Swedish economy remains strong, although the growth rate has slowed down compared with last year. Swedish GDP growth is expected to be 4.6 per cent in 2011 and then to fall back towards a historically-average level. The recovery is broadly based, with good growth in both domestic demand and exports. Investment has begun to accelerate. The labour market is continuing to improve and unemployment is falling. The rate of wage increase will probably rise, which is normal at this stage of an economic cycle. The forecast assumes that wages will follow normal rates of increase.

The growth rate in the world as a whole remains high, but also remains divided. The forecast for world growth remains largely unchanged since the February Monetary Policy Report. The emerging economies in Asia are showing overheating tendencies, while the recovery in Europe and the United States is still relatively slow. The natural disaster in Japan, the public finance situation in the euro area and political unease in North Africa and the Middle East are contributing to increased uncertainty. The earthquake in Japan will hit the Japanese economy hard this year, but a recovery is expected relatively quickly once the rebuilding work has started. The current assessment is that the contagion effects will be limited for the world economy. Strong international growth and unease in the oil-producing countries will push up energy and other commodity prices. This has a restraining effect on world growth and also leads to higher inflationary impulses in many parts of the world, including Sweden.

Inflationary impulses from abroad and less spare capacity will contribute to rising inflation in Sweden, although there is probably still spare capacity in the economy. Oil price futures have risen by around 10 per cent compared with February, which means the inflation forecast for the short run, in particular, is revised up slightly. Underlying inflation is still low, but is expected to increase gradually as economic activity strengthens. At the same time, CPI inflation is high as a result of rising mortgage rates. The effect of mortgage rates is expected to push up the CPI further for some time as the repo rate is increased, but this effect is expected to be temporary.

Unemployment, which was 7.6 per cent in February, is expected to fall as economic activity improves. Despite an increase in labour force participation since 2009, unemployment has declined by one percentage point. The forecasts for both employment and unemployment have been revised up slightly since the Monetary Policy Report was published in February.

We need to gradually raise the repo rate towards more normal levels to stabilise inflation close to the target of 2 per cent and to avoid resource utilisation becoming too high. The repo rate path in the draft Monetary Policy Update remains unchanged compared with the February Monetary Policy Report. One important condition for this is that the high rate of CPI inflation does not have a more tangible impact on various agents' long-term inflation expectations and on wage formation.

§ 2. Economic outlook abroad

First Deputy Governor **Svante Öberg** began by observing that he thought the economic outlook abroad described in the Monetary Policy Update provided a reasonable starting point for the discussion. The recovery abroad is continuing at a good pace, but the differences between different areas are considerable. Only minor revisions have been made to the GDP forecasts in the February Monetary Policy Report. Growth in the United States is expected to be slightly weaker this year and next year. The forecast for growth in Japan this year has also been revised down as a result of the devastating earthquake and the tsunami, but next year higher growth is expected as a result of the rebuilding. For the world as a whole, the forecast for GDP growth during the forecast period remains unchanged, compared with the February Monetary Policy Report. The forecast for inflation abroad, on the other hand, has been revised upwards for this year and also marginally upwards for next year.

Mr Öberg felt that the main risk is that inflation may be higher than forecast. The strong increase in demand in the world is pushing up energy and commodity prices. Moreover, there could be supply shocks resulting from the war in Libya and there is concern that the problems will spread to other countries in North Africa and the Middle East. Inflation expectations have also risen in many countries. China and several other countries have also begun to tighten monetary policy.

Another risk is that the public finance problems in the United States and a number of European countries may lead to renewed turbulence on the financial markets. The most serious threat would probably be if Spain were to be exposed to increased pressure from the financial markets. Spain has begun to tighten its fiscal policy and has implemented a number of reforms, but is still in a vulnerable situation with high loans, problems in the banking sector and an unemployment rate of around 20 per cent. Spain is also a large country in Europe, unlike the three small euro area countries that have earlier required external help to manage their fiscal problems. Any problems in Spain would therefore have greater consequences for developments in Europe than the problems in these smaller countries.

But the recovery is continuing in the euro area as a whole. Resource utilisation measured using indicators similar to the Riksbank's RU indicator is at a normal level already, despite unemployment still being high. Inflation has also risen to levels much higher than the ECB’s inflation target. When measured in terms of the HICP, inflation rose to 2.7 per cent in March. Underlying inflation measured as the HICP excluding energy and unprocessed foods also rose in March, to 1.5 per cent. Given this, Mr Öberg considered it natural that the ECB raised its policy rate in April to 1.25 per cent.

The fact that the ECB has raised its policy rate also eases an external condition for Swedish monetary policy. Normally, the Swedish repo rate does not deviate more than a percentage point or so from the ECB’s policy rate. This is mainly because economic developments normally do not differ substantially between Sweden and the euro area. But it is also due to the krona exchange rate sometimes being affected substantially by the interest rate differential to the euro area, which in turn can affect the Swedish inflation rate. The forecast assumes higher growth in Sweden than in the euro area and better developments in the Swedish labour market. Mr Öberg therefore considered it reasonable that the Riksbank should be ahead of the ECB in normalising monetary policy.

Deputy Governor **Karolina Ekholm** stated that she shared the view that the international recovery was looking more stable now on the one hand, but that there were on the other hand increased risks abroad. These include political unease in the Middle East and North Africa, the effects of the earthquake in Japan and the continuing debt crisis in Europe, with uncertainty over Portugal's aid programme. Moreover, there is uncertainty over the ability of the United States to come to terms with its fiscal problems.

Ms Ekholm was on the other hand sceptical towards the forecast for foreign policy rates, as she had been at previous meetings. Once again, the forecast for policy rates abroad deviates somewhat from market expectations as expressed in implied forward rates, particularly towards the end of the forecast period. The forecast in the draft Monetary Policy Update points to higher policy rates than the implied forward rates indicate. Ms Ekholm thought that despite the difference no longer being as great as it was last year, it still has significance for her view of the monetary policy decision. The fact that the forecast a couple of years ahead is higher than market expectations would entail means that long-term interest rates are expected to be higher than they are now. If they remain low, there is a risk that the difference between Swedish and foreign long-term interest rates will increase and that this will affect the krona exchange rate so that it strengthens further.

As Mr Öberg pointed out, the ECB has raised its policy rate since the previous meeting. The main background to this is the higher energy and commodity prices having pushed up inflation in the euro area, as in most other regions. It is clear that the ECB has chosen to show that it prioritises keeping inflation in check. Ms Ekholm's interpretation of the ECB's communication is, however, that they do not consider that they have begun a phase of successive interest rate increases, but that it may well be the case that they will retain the current interest rate for some time to come. However, as illustrated in Anna Lidberg's presentation of the situation on the financial markets, expectations of policy rates in the euro area have shifted upwards since the previous meeting, which in itself has contributed to the difference between the forecast in the draft Monetary Policy Update for foreign policy rates and market expectations based on implied forward rates is smaller at this meeting than it was during the autumn. There is still a difference, though, and Ms Ekholm's assessment is that implied forward rates provide a better forecast of how foreign policy rates can be expected to perform.

Deputy Governor **Lars E.O. Svensson** declared that he largely shared the view of developments abroad presented in the draft Monetary Policy Update with regard to inflation and GDP abroad. Mr Svensson pointed out that he shared Ms Ekholm's view with regard to the assumptions for foreign policy rates. He has previously explained that in his opinion it is normally (and also on this occasion) best to use implied forward rates as a forecast for policy rates abroad. The main scenario in the draft Monetary Policy Update instead assumes higher foreign policy rates than is forecast by implied forward rates. This means there is a contrast between the assumptions in the main scenario and the long-term foreign market rates that actually affect the exchange rate. If one instead uses market pricing as a base, there is no contrast between the forecast for foreign policy rates and the way the exchange rate is determined.

According to Mr Svensson, this was a major problem during summer and autumn 2010 and he has further developed his arguments in a speech held on 24 November 2010.[1] The problem still remains beyond the two-year horizon. This means that the krona may strengthen more than is assumed in the main scenario and that the CPIF forecast will thus

[1] Svensson, Lars E. O. (2010), "Some problems with Swedish monetary policy and possible solutions", speech held in Stockholm on 24 November 2010.

be lower than is assumed in the main scenario. An overly strong krona slows down exports, industrial production, employment in industry and investment. The level of all of these variables is lagging behind the present recovery. When one talks about a "broad upturn", this applies to the growth rate of the variables; when one looks at the levels the situation is very uneven.

Finally, Mr Svensson pointed out that he shared Ms Ekholm's views on how the ECB's policy rate increase should be interpreted.

Deputy Governor **Lars Nyberg** pointed out that two elements of uncertainty have been removed on the financial markets in Europe, which has contributed to stabilisation. The first uncertainty concerns Portugal, which finally thought fit to request assistance from the IMF and the EU. This had essentially already been assumed by investors. The fall in confidence in Portugal during the winter has rather been linked to the fact that it took so long for those responsible to realise that the situation was untenable. But now this element of uncertainty has been removed. It remains to be seen how the agreement will look and above all whether a government can be formed after the election that is capable of dealing with the long-term problems.

The second uncertainty that has been removed, or at least reduced, concerns Ireland. There the new government has used external consultants to make a credible examination of the banks' balance sheets, to assess the size of the holes and has then decided how the holes should be filled. This is similar in many ways to what was done in Sweden after the crisis in the 1990s. They have also established a plan for how the banking system will be reduced and restructured. All of this could have been done earlier, and many problems still remain, but the market's confidence in the government's ability to resolve the problems has undoubtedly increased. However, it is still worth pointing out that the problems are considerable. The costs are around 30-40 per cent of GDP, which can be compared with the 3-4 per cent of GDP that Sweden had to deal with during the crisis in the 1990s. And yet we still felt that we were experiencing a severe crisis.

Of course, the fact that uncertainty has declined in these two aspects does not mean that it has disappeared entirely. The questions regarding Greece's future debts still remain unresolved and the property crisis in Spain has not subsided, although the authorities have so far managed the problems in the savings bank system. On the whole, it still appears as though a number of banks in Europe are very undercapitalised. We will know more about this when the results of the new European stress tests are presented in the summer. We should probably assume that a number of banks will fail the tests - otherwise the exercise would not be credible. The criteria are also much tougher than in the similar exercise carried out a year ago. A couple of Irish banks passed those, but were forced to throw in the towel just a few months later.

Mr Nyberg pointed out that investors not only want to know which banks are poorly capitalised, they also want to know what the responsible politicians and authorities in each country intend to do about it. These are the questions that were recently answered in Ireland. And clear instructions on how to manage banks that do not pass the stress tests must be communicated to the market in good time before the results are presented. If this is not done, we will see the results in prices and volatility in the market. Credible information must also be provided by the countries where the market doubts that the state can afford to capitalise the banks that may not pass the stress tests.

Many European banks, and not least the Swedish ones, are strongly dependent on short-term funding from the US market. If the fiscal problems and bank problems in Europe are not managed in a credible way, parts of the foreign funding may suddenly disappear, as it did in autumn 2008. This would have effects on the real economy, too, as it did then.

Although Mr Nyberg saw a decline in uncertainty in a couple of aspects, he believed that unease on the financial markets would continue over the coming months. The real economic developments in the world appear so far to be chugging along nicely without giving much consideration to the earthquake in Japan, the unrest in North Africa or the uncertainty on the European financial markets. Mr Nyberg agreed with the outlook described in the draft Monetary Policy Update, but also shared the concern expressed and motivated by Mr Öberg earlier concerning the possibility that inflation abroad might accelerate.

Deputy Governor **Barbro Wickman-Parak** noted that so far neither the natural disaster in Japan, the political turmoil in North Africa and the Middle East nor the fiscal problems in Europe appear to have affected the recovery in the world economy. Nor has it been necessary to make any major revisions to the forecasts for international growth, with the exception of Japan. Given the uncertainty factors that exist, one can easily speculate on the different directions that developments may take, but her assessment was that the forecast presented in the draft Monetary Policy Update was realistic, given the information currently available. The forecast points to conditions for Swedish exports continuing to be favourable.

At the same time, the rise in energy and food prices has brought global inflation into focus. The question is whether these price rises may have contagion effects on the more underlying inflation. The risk of this is greater in emerging economies where capacity utilisation is high and where underlying inflationary pressures are already increasing. The more developed economies still have spare capacity and the risk of an inflation spiral should be less in these countries. However, growth is slowed down by the higher oil prices and this has justified some downward adjustment in the growth forecasts for the United States and the euro area, for instance.

In the United States, corporate investment has begun to pick up significantly, stimulated by both rising capacity utilisation and good profits. Private consumption is also strong and employment has increased at a relatively good rate in the recent period. These are important signs of a more self-supporting growth process. If these tendencies continue, the US economy will be better equipped to meet the future fiscal policy tightening that is necessary to cure the country’s urgent budget problems. The noose is beginning to tighten.

In Europe, the largest economy, Germany, is continuing to show signs of strength. It is important in this context that domestic demand has accelerated. This also provides a growth boost to neighbouring trading partners.

Ms Wickman-Parak shared Mr Nyberg’s analysis that the uncertainty regarding Portugal has now been dispersed since the country applied for support from the EU and the IMF and has therefore been caught up in the international financial safety net. With regard to Spain, it appears as though the market agents do not equate it with other affected countries, at least not at present. But Spain, like other countries in the euro area with problems, has a long period of adjustment ahead of it. And on the financial markets a possible reconstruction of the Greek national debt and the status for the banking systems in certain countries are recurring themes.

Governor **Stefan Ingves** supported the analysis in the draft Monetary Policy Update. World growth is good, with rapid growth in Asia, a wider spread of inflationary impulses than before and probably also a greater variation in monetary policy in the coming period, as an increasing number of countries need to raise their policy rates. Several countries have already begun tightening. In some countries one can also expect continued regulation to slow down the flow of capital, especially if they do not want to allow exchange rate movements. It is difficult to know how such measures will affect the global imbalances, but it may lead to a slower process to correct them. It is also difficult to assess what effects this will have on Sweden.

Energy and commodity prices are rising. Given the good world growth, Mr Ingves felt that it was reasonable to view this as a demand effect where prices would probably remain high for the foreseeable future. It could also affect inflation expectations and monetary policy if many people try to obtain compensation for these price movements. Sweden will not be alone in raising its policy rate.

The developments in North Africa, the problems in Japan, the fiscal problems in Europe and unemployment in the United States are all worrying factors linked to downside risks, but this did not change the picture of good growth and rising inflationary impulses abroad for Mr Ingves. He shared Mr Nyberg's analysis of the situation in Europe.

In Sweden's neighbouring area, including Germany, developments are good and inflation is rising in Europe. Developments in Germany will probably affect monetary policy in the euro area and this will lead to interest rate increases, which will also have an effect in Sweden as the interest rate differential between the euro and the krona will decline.

§ 3. Economic developments in Sweden and the monetary policy discussion

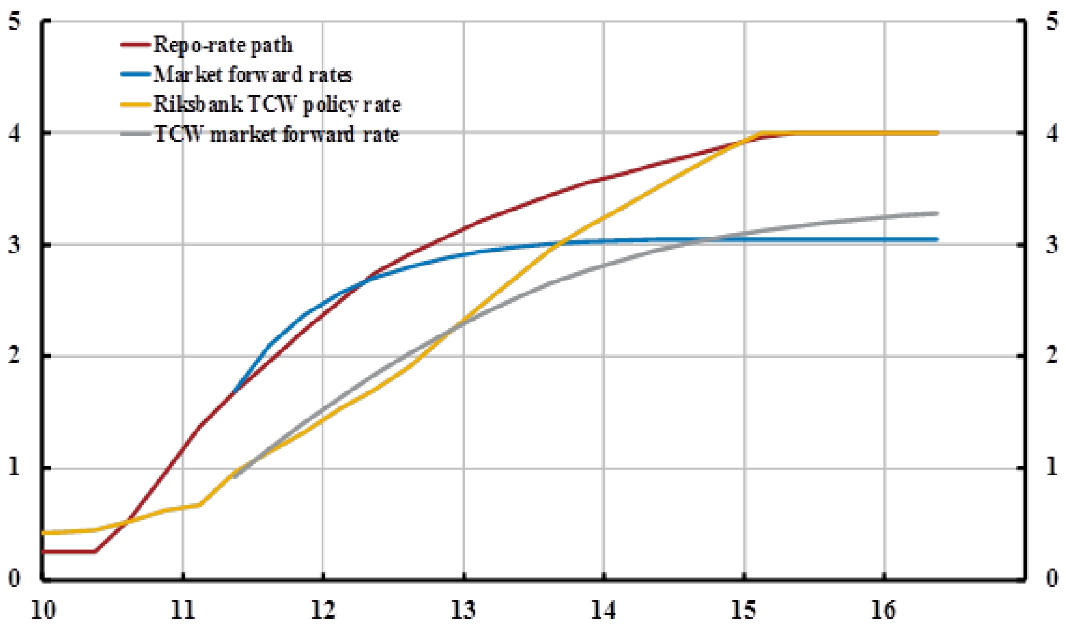
Deputy Governor **Lars E.O. Svensson** advocated an unchanged repo rate of 1.5 per cent at this meeting and a repo-rate path that initially rises more slowly and then more quickly than in the main scenario, and at the end of the forecast period reaches a level of around 3.9 per cent, around 0.25 percentage points higher than the level at which the path in the main scenario finishes. This repo-rate path is preferable as the path in the main scenario entails a monetary policy that is not well-balanced, in Mr Svensson's opinion. The main scenario namely entails a forecast for CPIF inflation that is too low, and a forecast for unemployment that is too high. An unchanged repo-rate path now, and then the repo-rate path he prefers will lead to better target fulfilment for both inflation and unemployment.

Mr Svensson's stance was based on the fact that monetary policy should aim to stabilise inflation around the inflation target and to stabilise resource utilisation at a normal level.

According to Mr Svensson, CPIF inflation is the best measure of inflation and the unemployment gap is the best operational measure of resource utilisation. The reasons for this can be read in the minutes of earlier monetary policy meetings and in Mr Svensson's speech in Luleå on 8 March this year.[2] Stabilising CPIF inflation around 2 per cent and stabilising unemployment around the sustainable rate of unemployment will make monetary policy simple, clear and robust. One should not change back and forth between different measures of inflation, nor between different measures of resource utilisation. It is important that the Riksbank cannot be accused of changing the inflation measure to attain a better target fulfilment for inflation. It is equally important that the Riksbank does not risk being accused of changing the measures of resource utilisation to attain a better target fulfilment for resource utilisation. There is less risk of this if one uses the unemployment gap in relation to a clearly-announced and justified assessment of the sustainable rate of unemployment than if one uses other, less transparent and in practice unverifiable measures. The speech Mr Svensson held in Luleå describes in more detail several advantages of the unemployment gap over other measures of resource utilisation, including the fact that it appears to be more reliable.

Mr Svensson then referred to some figures. In Figure 1 the yellow curve shows the main scenario's assumption for TCW-weighted foreign interest rates. The grey curve shows TCW-weighted implied foreign forward rates. There is a fairly large difference between the curves beyond the two-year horizon and Mr Svensson said that this will have consequences for the exchange rate. The curves beyond the three-year horizon show Mr Svensson's own assessment.

Figure 1. The repo rate path, implied forward rates in Sweden and abroad and the forecast for policy rates abroad

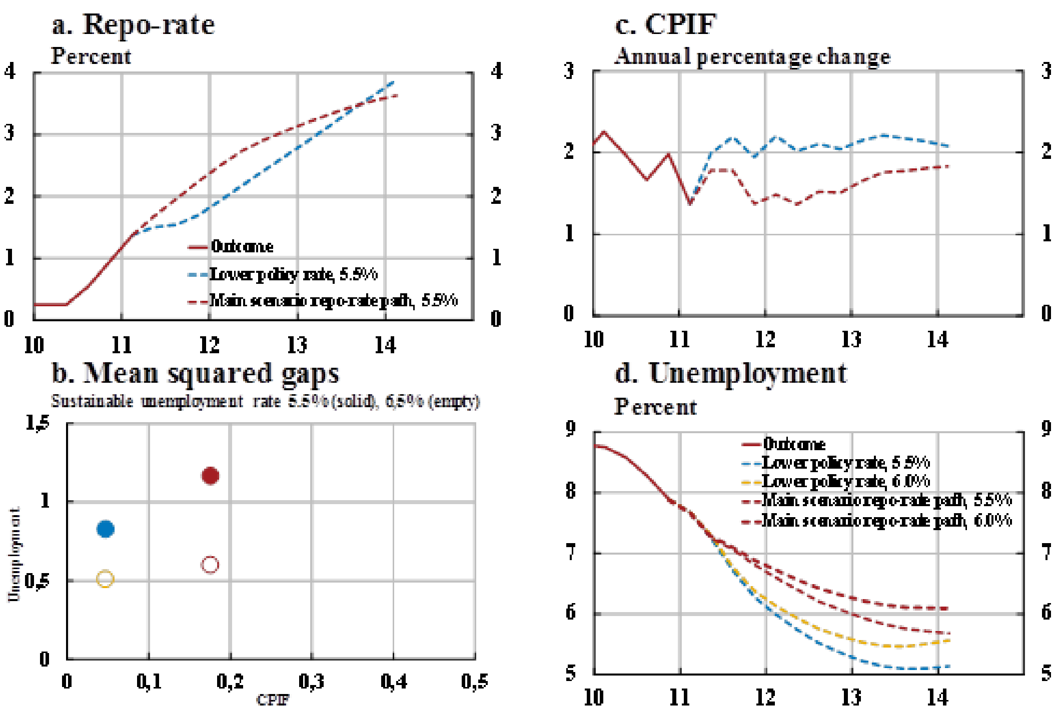


[2] Svensson, Lars E.O. (2011), "For a better monetary policy: Focus on inflation and unemployment", speech at Luleå University on 8 March 2011.

Figure 2 shows Mr Svensson's assessment of the effects of two different repo-rate paths on CPIF inflation and unemployment, assuming that foreign interest rates are instead given by implied forward rates. Two assumptions are also made about the sustainable rate of unemployment, at 5.5 per cent and 6 per cent respectively. In the international literature the sustainable rate of unemployment is sometimes called "the steady-state equilibrium rate of unemployment". At the Federal Reserve the expression "the longer-run sustainable rate of unemployment" is used.

Figure 2. Monetary policy alternatives, April 2011

Foreign interest rates according to implied forward rates



In panel a, the red repo-rate path is the path in the main scenario. Mr Svensson advocated the blue repo-rate path.

Panel c shows forecasts for CPIF inflation under the two repo-rate paths. Mr Svensson's assessment was that the main scenario's repo rate path – the red curve – gives an inflation forecast that is below 2 per cent throughout the forecast period. The assumption of foreign interest rates according to implied forward rates means that the inflation forecast is lower than the main scenario's CPIF forecast in the draft Monetary Policy Update. Mr Svensson's assessment was that his repo-rate path – the blue curve – gives a forecast slightly above, and much closer to, 2 per cent. It provides a distinctly better target attainment for CPIF inflation. In this case, the forecast for CPIF inflation depends very little on the assumption made about the sustainable rate of unemployment – it is too small to be seen in panel c.

Panel d shows the forecasts for unemployment for the different repo-rate paths, under the two assumptions about the sustainable rate of unemployment. The forecasts for unemployment depend on the assumption regarding the sustainable rate of unemployment. Mr Svensson took his assessment of the sustainable rate of unemployment of 5.5 per cent as his starting point. The thick red curve shows Mr Svensson's unemployment forecast with the main scenario's repo-rate path when foreign policy rates are based on implied forward rates. The blue curve shows the unemployment forecast with Mr Svensson's repo-rate path. The blue curve falls more sharply than the red curve and ends at a point just below 5.5 per cent. It leads to a smaller unemployment gap and better target attainment in relation to 5.5 per cent than the red curve. Mr Svensson said that the unemployment rate would be lower than 5.5 per cent for a while at the end of the forecast period would counteract the persistency problems that higher unemployment may have caused previously and help to attract people back to the workforce.

Mr Svensson's repo-rate path thus provides better target attainment for both CPIF inflation and unemployment than the main scenario's repo-rate path under the assumption that foreign policy rates are based on implied forward rates. This can also be seen in panel b, where the mean squared gaps for both inflation and unemployment are lower for this repo-rate path than for the path in the main scenario. The solid blue dot is to the left and below the solid red dot. One could argue that lowering the repo rate now would provide even better target attainment, but the same effect can be achieved to a certain extent with a repo-rate path that increases slowly initially.

If the assumption of a sustainable rate of unemployment of 6 per cent is instead taken as the starting point, the forecasts in panel d and the mean squared gaps in panel b (the unfilled dots) show that target attainment for unemployment in relation to 6 per cent is still better with the repo-rate path advocated by Mr Svensson than with the path in the main scenario.

This is an example of a sensitivity analysis of the consequences of two different assumptions about the sustainable rate of unemployment. So which assumption is reasonable? Mr Svensson's preliminary assessment is that the sustainable rate of unemployment is 5.5 per cent.

What has happened since the previous meeting is that the Ministry of Finance has published a report that contains detailed estimates of the sustainable rate of unemployment, which is referred to as the equilibrium rate of unemployment in the report, and has revised this rate downwards to 5 per cent. Mr Svensson said that this analysis is of good quality and by far the best conducted on this issue so far. In addition, the National Institute of Economic Research has revised its view of the equilibrium rate of unemployment downwards about 0.5 percentage points to close to 6 per cent. Mr Svensson's assessment of 5.5 per cent is thus an average of the assessments of the National Institute of Economic Research and the Ministry of Finance. It is important that from now on the Riksbank devotes considerable resources to estimating the sustainable rate of unemployment. Mr Svensson said that the Riksbank's previous assessment of approximately 6.5 per cent now needs to be reviewed and does not take into account new information about the labour market and how it functions.

First Deputy Governor **Svante Öberg** thought that the picture of economic developments in Sweden presented in the Monetary Policy Update was reasonable on the whole. The only significant revision since February is that CPI inflation is now much higher than was expected then. It is now expected to average 2.9 per cent per year during the forecast period. In February, we estimated that it would average 2.4 per cent per year. The estimate for CPIF inflation, on the other hand, is the same as in February at an average of 1.8 per cent.

Underlying inflation is low at present and will probably remain low this year. However, Mr Öberg's assessment was that there is a risk that inflation will be higher than forecast, particularly in 2012 and 2013. There are three reasons for this. The first is that the impact of rising world-market prices on the rate of inflation in Sweden may be greater than expected. The second is that the high rate of CPI inflation may have an impact on inflation expectations and on the approaching rounds of wage negotiations. The third is the risk of overheating on the labour market.

There is already a marked labour shortage in many sectors, despite the fact that unemployment is higher than the average for the 10 years preceding the crisis. This indicates increased matching problems on the labour market. The so-called Beveridge curve also indicates increased matching problems.[3] Wage expectations one and two years ahead have also increased significantly over the last 12 months. This may entail problems in the wage formation process.

The forecast is that wages will increase by an average of 3.5 per cent per year and that this is compatible with inflation being approximately 2 per cent in the long term. However, this is on the high side with regard to inflation, which is also on the high side. Somewhat lower wage increases would be good in that they would keep inflation down and reduce unemployment.

Mr Öberg supported the proposal to increase the repo rate to 1.75 per cent and the repo-rate path presented in the draft Monetary Policy Update. Given what we know today about the development of the economy it would have been preferable to raise the repo-rate path so that it would have been compatible with repo-rate increases at every meeting this year. Already in February, Mr Öberg's assessment was that the repo-rate path should be somewhat steeper and the assessments in the forecasts since February support this assessment. Expectations as expressed in market pricing and according to surveys and market analysts are also somewhat higher than the repo-rate path up to the turn of the year.

But the differences between the assessments are minor and there is a lot of uncertainty about the repo rate at the end of the year. There is therefore no reason to enter a reservation against the repo-rate path. The decision to raise the repo rate is more important than determining what the repo-rate path should be further ahead. Mr Öberg discussed the reasons for this in speeches earlier this year. Mr Öberg also noted that the draft Monetary Policy Update points out that one important condition for not adjusting the repo-rate path upwards is that the high rate of CPI inflation does not make a more significant impression on various agents' long-term inflation expectations and on wage formation.

Like Lars Svensson, Deputy Governor **Karolina Ekholm** advocated an unchanged repo rate at this meeting and a repo-rate path in which the repo rate is first increased more

[3] The Beveridge curve shows the relation between the number of vacancies and unemployment.

slowly and then more rapidly than in the draft Monetary Policy Update. She gave a couple of reasons for this stance regarding the monetary policy decision. As she mentioned earlier, the assessment that foreign policy rates may be expected to increase somewhat more slowly than in the Update's forecast is of importance. If interest rates abroad at slightly longer maturities remain low while Swedish interest rates rise so that the interest rate differential increases, this could lead to a further strengthening of the krona. This in turn would exert downward pressure on inflation and resource utilisation by reducing net exports. This is an argument for a somewhat more expansionary monetary policy than in the draft Monetary Policy Update.

In one sense this argument has become less weighty than it was in the autumn, however, as the difference between the Update's forecast for foreign policy rates and the forecast that seems to be incorporated in market expectations is less now than it was then. But, as a matter of principle, a different assessment of what is a reasonable forecast for foreign policy rates must be followed by a different assessment of what is an appropriate repo-rate path for Sweden, given the belief that the interest-rate differential affects the exchange rate and that the exchange rate in turn affects inflation and resource utilisation.

As Svante Öberg pointed out, underlying inflation is low at present – CPIF inflation is below 2 per cent and the latest figures also came in lower than was forecast in the Monetary Policy Report published in February. As mentioned by David Vestin when he presented the draft Monetary Policy Update, the recent strengthening of the krona may be a factor behind the low level of underlying inflation. According to the forecast in the Update, CPIF inflation will be well below 2 per cent for a large part of the forecast period. CPIF inflation will not reach 2 per cent until the first half of 2013. In light of the fact that, to all appearances, resource utilisation is lower than normal this means that it can be argued that there is scope for a more expansionary monetary policy, completely irrespective of what we believe about foreign policy rates.

A potential counterargument is the one pointed out by Svante Öberg, namely that CPI inflation is now clearly above the target of 2 per cent and that this is something that could lead to higher inflation expectations and possibly to higher wage increases than are compatible with a rate of underlying inflation close to 2 per cent. At present, however, we expect inflation expectations to actually remain anchored close to the inflation target and wage increases to be at levels compatible with the target. Inflation expectations have crept up somewhat recently, but the more long-term expectations, five years ahead, still seem to be fairly close to 2 per cent. Reports concerning the fact that CPI inflation is now above the target of 2 per cent have also been rather clear that the recent repo-rate increases are the main reason for this and that it therefore has nothing to do with underlying inflation. However, there is a risk associated with the increase in the figures on shortages and many companies are reporting a shortage of labour despite the relatively high rate of unemployment. This is a factor that may give rise to concern that wage increases could be higher than is usual at this stage of the economic cycle. It will be important for the Riksbank to monitor developments closely when the time comes for new wage bargaining rounds in the autumn and next spring.

Ms Ekholm felt that, all in all, a more expansionary monetary policy than represented by the main scenario's repo-rate path is justified. She was also in favour of a somewhat different profile for the repo-rate path than that in the draft Monetary Policy Update, namely a profile in which the repo rate would be increased more slowly to start with and more rapidly towards the end of the forecast period. It is very difficult to assess how a different profile for the repo-rate path would affect inflation – this depends on the time lag between the repo-rate changes and their impact on inflation and there is great uncertainty about this. According to Lars E.O. Svensson's calculations, CPIF inflation could come closer to 2 per cent with slower repo-rate increases initially and more rapid increases towards the end of the forecast period. However, Ms Ekholm's assessment was that these forecasts are very uncertain. She did believe, however, that there is a strong reason why a different profile for the repo-rate path is preferable, which is that it could reduce persistence problems on the labour market. The rate of the increase in resource utilisation is of significance in determining how persistent unemployment will be. Unless unemployment is pushed down quickly, the risk of some groups being excluded from the labour market will increase.

To sum up, Ms Ekholm advocated leaving the repo rate unchanged at this meeting and a repo-rate path that rises more slowly at the beginning of the forecast period and more quickly at the end of the period and that ends somewhat above the repo-rate path in the draft Monetary Policy Update at around 3.9 per cent.

Deputy Governor **Lars Nyberg** noted that, in Sweden, the positive economic developments have continued more or less as expected. Nothing has happened to give us reason to reassess the overall picture from the most recent monetary policy meeting. The fact that the difference between the CPI and underlying inflation has increased by slightly more than the Riksbank and other forecasters were expecting does not change this. It is thus reasonable to let the repo-rate path remain unchanged as proposed and to raise the repo rate by a quarter of a percentage point at today's meeting.

There are three issues with particular reason to be carefully monitored. The first is wage formation. The economic situation that will face the social partners in the autumn is completely different from that prevailing during the last round of negotiations. It also appears as though the resource situation is rapidly becoming strained in a number of sectors, while total unemployment will remain relatively high. It remains to be seen how this labour market situation may affect both the outcome of the negotiations and any additional wage drift. But the result will be of central importance for discussions of the future repo rate.

The second issue concerns inflation expectations. When CPI inflation rises as rapidly as it has recently, largely due to the Riksbank's own interest rate rises, inflation expectations can easily follow upwards in its wake. Inflationary pressures in a number of other countries have also risen. However, in Sweden, inflation expectations have not increased significantly, particularly not over the longer term. The development of inflation expectations over the coming months will also be of great importance in discussions of the future repo rate.

The third issue deserving extra attention is the exchange rate. It is not particularly surprising that the Swedish krona has appreciated over the last year, considering the strong level of economic activity in Sweden and the interest rate increases implemented by the Riksbank. This appreciation has also contributed towards preventing rising inflation abroad from having such a strong impact on Sweden. The ECB has now implemented its first increase, and interest rate expectations in the euro area have been adjusted upwards. It seems reasonable to believe that this will reduce the appreciation pressure on the krona, which has also happened recently. However, the development of the krona over the next few months will also be important for the development of demand and inflation in Sweden, and thus also for monetary policy.

Mr Nyberg considered that there was one issue that did not require so much attention as previously, namely household debts. The growth rate in household debt has clearly dampened and house prices, which co-vary strongly with debts, have levelled off. The Executive Board has never raised the interest rate with the intention of reducing debts or dampening house prices, but there has been concern that developments would continue and become unsustainable in the course of time, leading to problems for monetary policy in the long term. Mr Nyberg was prepared to place this concern to one side, at least temporarily, but said that he would willingly change his position if debt increases should again pick up speed.

Governor **Stefan Ingves** supported the analysis of developments in the Swedish economy presented in the Monetary Policy Update. The picture painted in the February Monetary Policy Report remains largely unchanged. Growth will also continue at a favourable level in the future, albeit at a somewhat slower pace. Resource utilisation is returning to normal, investments are rising and unemployment is falling. CPI inflation is far above target and CPIF inflation is gradually approaching two per cent. All in all, this means that the repo rate now needs to be raised, at the same time as interest rate increases should continue more or less as we have previously stated. If we are to meet our inflation target, the interest rate level needs to be adapted to the economic outlook. This assumes that wage developments will be approximately the same as in our forecast – that is to say that wage increases must be moderate. It also assumes that inflation expectations will remain anchored around the inflation target, in particular expectations in the slightly longer term. If these conditions are not met, there may be reason to reconsider our view.

The economic outlook itself gives us reason to raise the repo rate. An interest rate increase will also contribute towards the calmer development of the credit market. In combination with Finansinspektionen's (the Swedish Financial Supervisory Authority) loan ceiling, household indebtedness should increase at a slower pace in the period ahead. To attain this effect, monetary policy should not compensate for the increased difference between mortgage rates and the repo rate that we are now seeing.

The forecast decrease of unemployment to an average of 6.4 per cent in 2013 is reasonable. There is still too much uncertainty about the development of the labour market to determine whether unemployment will bottom out at this level or an even lower one. Naturally, this is something that we will have to return to later after more detailed studies. Other central banks have started to raise their policy rates. This reduces appreciation pressures on the exchange rate, which can also be seen in the exchange rate forecast. This means that inflationary impulses from abroad may be greater later on. However, exchange rate forecasts are genuinely difficult to make and unforeseen events may change our view.

Sweden currently has an expanding economy and we need to focus on balanced growth now that the recession is behind us. One risk with not raising the repo rate now, when the interest rate level is low in comparison to other economic upswings, is that the interest rate would have to be substantially increased later on. The current strategy of gradual increases is a safer choice, particularly when the starting position of these increases is far from the interest rate level to be expected under reasonably normal conditions.

Deputy Governor **Barbro Wickman-Parak** noted that statistics reflecting the real development have not presented any great surprises and that the February forecast is holding up well. Everything indicates that we will see strong growth, even if, as is expected, the rate of this is dampened in comparison to the strong recoil experienced last year.

The indicators we have for the labour market point to employment being slightly higher in the period ahead than we estimated in February, and the forecast for this year has been adjusted slightly upwards.

As regards resource utilisation, it is striking how rapidly resource utilisation in the manufacturing sector has recovered. Other measures for calculation also point to rising resource utilisation. The RU indicator already shows approximately normal resource utilisation, while the hours gap and the GDP gap are on the way towards closing and will be slightly above normal at the end of the forecast period. Unemployment is expected to fall towards about 6.5 per cent in 2013. As Ms Wickman-Parak has repeatedly said at monetary policy meetings, it is very important to carefully follow indicators such as remaining job vacancies, labour shortages etcetera to monitor how easily it will be possible to meet the increased demand for labour. Given the time perspective monetary policy uses, it is more relevant to identify sluggishness and the risk of bottlenecks by analysing different indicators on the labour market than it is to discuss what the level of long-term sustainable unemployment may be. Using several different measures of resource utilisation would be a wise strategy. No one measure alone can form the basis for monetary policy deliberations.

Underlying inflation, measured by the CPIF, has been adjusted downwards for this year, due to the lower than expected outcome in the first quarter. Underlying inflationary pressures will be low to start with, but will pick up as economic activity and the labour market get stronger. It is estimated that the CPIF will be around 2 per cent at the end of the forecast period.

According to Ms Wickman-Parak, the repo rate needs to be raised by 0.25 percentage points and then raised in accordance with the repo-rate path in the report. This is a balancing act: we should not unnecessarily restrict growth, but, at the same time, we should not risk entering a situation with overheating tendencies and inflation above the target. Quite simply, this balancing act requires us to reduce speed. Because this is just what this is all about: the real repo rate will continue to be low.

Ms Wickman-Parak also commented on inflation expectations. As we all know, these have increased recently, particularly one and two years ahead. These expectations are greatly influenced by the actual inflation rate. However, the high rate of CPI inflation, which is affected by interest rate increases, has not made any noticeable impression on long-term expectations. Of course, the Riksbank will have to observe the future development of expectations and how these, in turn, may affect economic agents. The approaching wage bargaining rounds have already been mentioned several times in this context. At the same time as this is, of course, an important aspect, there is no reason for alarmism yet.

Deputy Governor **Lars E.O. Svensson** referred to earlier comments. The risk of higher wage increases than assumed by the main scenario is small. The facts that almost 400 000 people are unemployed, that employment in the manufacturing sector has been severely impacted and is lagging behind, and that the manufacturing sector usually plays a wage-setting leadership role could well have a restraining effect on the wage bargaining rounds. If wages should nevertheless increase more, this will eventually become noticeable and future inflation forecasts will be able to take it into account.

Inflation expectations have recently increased slightly, which is not so strange when CPI inflation is high in the short term. The important point is that inflation expectations five years ahead seem to be stable and are close to two per cent. It is important to remember that inflation expectations are not a separate target for monetary policy, but should only be important to monetary policy in as far as they affect inflation and resource utilisation.

Regarding the presence of bottlenecks and labour shortages in certain sectors, as we discussed at the last monetary policy meeting, these should only affect monetary policy to the extent that they affect wages, inflationary pressures and the inflation forecasts. They do not normally affect the sustainable level of unemployment and do not affect the unemployment gap as a measure of resource utilisation and target variable.

The Chairman, Governor **Stefan Ingves**, summarised the monetary policy discussion. The majority of the Executive Board shares the view presented in the draft Monetary Policy Update. No crucial changes have taken place in relation to the analysis included in the February Monetary Policy Report. Given this, it is the opinion of the majority that the repo rate should be raised today and that the repo-rate path should be left unchanged in relation to the Monetary Policy Report. Many Executive Board members have observed that changes in the wage rate or inflation expectations may affect future repo-rate decisions. Underlying inflation continues to be low in Sweden, at the same time as CPI inflation is high due to rising mortgage rates. The Executive Board has also discussed developments on the labour market, which will be dealt with in more depth in coming analyses. A minority advocates leaving the repo rate unchanged and a repo-rate path that initially rises at a slower rate before increasing to a faster rate of increase than the path in the Monetary Policy Update, reaching a level of about 3.9 per cent at the end of the forecast period. The basis of this position is that CPIF inflation will then be closer to 2 per cent and that unemployment will then fall more rapidly to a sustainable rate, particularly if foreign interest rates are not assumed to be higher than foreign implied forward rates.

§4. Monetary policy decision

The Executive Board decided after voting

- to adopt the Monetary Policy Update according to the proposal, Annex A to the minutes,
- to publish the Monetary Policy Update on Wednesday, 20 April 2011 at 09.30,

- to raise the repo rate by 0.25 percentage points to 1.75 per cent and that this decision would apply from Wednesday, 27 April,
- to publish the decision above at 09.30 on Wednesday 20 April 2011 with the motivation in a press release, and
- to publish the minutes of today's meeting on Tuesday 3 May 2011, at 09.30.

Deputy Governor Karolina Ekholm and Deputy Governor Lars E.O. Svensson entered a reservation against the decision to raise the repo rate to 1.75 per cent and against the repo-rate path in the Monetary Policy Update.

They advocated a repo rate equal to 1.5 per cent and a repo-rate path that initially rises at a slower rate before increasing to a faster rate of increase than the path in the Monetary Policy Update, reaching a level of about 3.9 per cent at the end of the forecast period. Such a repo-rate path implies a level of CPIF inflation closer to 2 per cent and a faster reduction of unemployment towards a sustainable level.

This paragraph was verified immediately.

Minutes by

Ann-Christine Högberg

Verified by:

Karolina Ekholm	Stefan Ingves	Lars Nyberg
Lars E.O. Svensson	Barbro Wickman-Parak	Svante Öberg