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Minutes of the Executive Board's monetary policy meeting, no. 4

DATE: 6 September 2011

TIME: 09.00

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

Johan Gernandt, Chairman of the General Council

Sigvard Ahlzén (§ 1)
Claes Berg
Hans Dillén
Johanna Eklund (§ 1)
Heidi Elmér
Johannes Forss Sandahl (§ 1)
Ann-Christine Högberg
Per Jansson
Tomas Lundberg (§ 2-4)
Pernilla Meyersson
Marianne Nessén
Christina Nyman
Cecilia Roos-Isaksson
Anna Lidberg (§ 1)
Bengt Pettersson
Olof Sandstedt (§ 1)
Ulf Söderström
Lena Strömberg (§ 1)
Åsa Sydén
David Vestin
Staffan Viotti

§ 1. Economic developments

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

Anna Lidberg of the Monetary Policy Department began by presenting the latest developments on the financial markets. Market concern over sovereign debt in the euro area and the United States, and concerns regarding global growth have intensified over the summer. The uncertainty has led to an increase in risk aversion, and stock markets have fallen both in Sweden and abroad. Investors have chosen to invest in safe interest-bearing assets, which has pushed down long-term rates from already low levels. Monetary policy expectations, expressed as implied forward rates have shifted downwards considerably compared with July, when the Monetary Policy Report was published. There is a relatively large discrepancy between the different market analysts' views regarding monetary policy next year. Some analysts believe the repo rate will be cut, while others believe that the increases will continue. However, a majority of the analysts believe that the repo rate will be held unchanged at the September monetary policy meeting and that the repo rate path will be adjusted downwards.

Johannes Forss Sandahl and Olof Sandstedt of the Financial Stability Department then reported on the outlook for Europe with regard to consolidation of public finances and the situation in the Swedish banking sector. The yield on two-year Greek government bonds has risen rapidly to new record-high levels, while the ECB's purchases of Spanish and Italian government bonds have pushed down yields on these bonds. There is general uncertainty regarding whether or not various countries' measures are adequate and there are questions regarding political resolve. Several important events will be taking place in the near future that can have a decisive effect on continued developments in Europe.

Per Jansson, Head of the Monetary Policy Department, then presented the new macro economic information received since the July Monetary Policy Report and the main features of the Monetary Policy Update. Earlier discussions of the material presented at the monetary policy meeting took place at the meetings on 30 August and 2 September.

The outcome data published during the summer for Sweden has been roughly in line with the forecast in July, while a number of confidence indicators have shown a substantial decline. Labour market statistics for June and July indicate a slightly lower increase in employment and labour force than was expected in the material compiled prior to the July monetary policy meeting. GDP for the second quarter rose more than expected, while inflation in June and July was slightly lower than expected. Various confidence indicators, such as the purchasing managers' index and the National Institute of Economic Research's Economic Tendency Barometer have fallen rapidly, however.

Given the surprisingly weak international developments over the summer, both in terms of outcome data and confidence indicators, the forecast for the global economy has been revised down in the draft Monetary Policy Update. For instance, stock markets in Sweden and abroad have fallen heavily since the monetary policy meeting in July. A growth rate of 2 per cent is now predicted for the United States next year, which is a downward revision of 0.7 percentage points. A growth rate of just over 1 per cent is predicted for the euro area, which is a downward revision of 0.5 percentage points. This means that the most important markets for Swedish exports are expected to slow down quite significantly. The global economy is expected to grow in total by almost 4 per cent, however, as the emerging markets are expected to continue growing at a much faster rate than the advanced economies.

A number of countries in the euro area and the United States are expected to continue to have problems with sovereign debt in the period ahead. The forecast assumes that the political systems will eventually manage to deliver the measures needed to consolidate public finances in several countries and that this will strengthen confidence. The governments in the countries concerned must go from words to action. The downward revision to the forecast for the global economy also included a downward revision to the forecast for policy rates abroad.

The forecast for Swedish GDP growth has been revised down for the rest of this year and next year. Growth is forecast at 1.7 per cent in 2012, which means the Riksbank's forecast is around average of all forecasts made by analysts in Sweden. The downward revision in the growth forecast is slightly less dramatic than others' revisions, which is mainly because the forecast in the July Monetary Policy Report was lower than, for instance, those made by the National Institute of Economic Research and the Swedish Ministry of Finance. GDP growth is expected to rise to 2.4 per cent in 2013. Unemployment is calculated to be around one half of a percentage point higher in 2013 than was forecast in July. It is forecast at 6.9 per cent in 2013. Resource utilisation and cost pressure are therefore expected to be lower. The forecast for energy prices has also been revised down. This has led to a clear downward revision in the inflation forecast. CPI inflation is forecast at 2.1 per cent in 2012 and 2.6 per cent in 2013. CPIF inflation, which excludes the effects of mortgage rates, is expected to be around half a percentage point lower in the coming years. Wage increases are expected in the forecast to be compatible with the inflation target.

Given the above, it was proposed that the repo rate increases would be postponed somewhat. The proposal means that the repo rate is held unchanged at 2 per cent, and that the repo rate path is revised down so that the forecast for the repo rate is 3.6 per cent for the third quarter of 2014.

§ 2. Economic outlook abroad

First Deputy Governor **Svante Öberg** took up two issues in his contribution to the discussion; the revisions to the forecasts and the uncertainty of the forecasts. He began with the revisions.

Mr Öberg said that the statistics received during the summer point to slightly weaker developments abroad, particularly in the United States, during the first half of this year than was assumed in the Monetary Policy Report published in July. The dramatic events in the financial markets have moreover increased uncertainty over the future, and forward-looking indicators point to growth weakening further in the coming period. Despite the assessment in the July Monetary Policy Report that GDP growth would be moderate in the United States and the euro area, it is therefore reasonable to revise down the forecasts for GDP growth abroad roughly as described in the draft Monetary Policy Update. This means that the Swedish export market will also grow more slowly. The weaker international developments have also meant that energy and commodity prices have continued to fall, and the risk of inflationary effects from them has declined. It is therefore reasonable to also revise down the forecasts for inflation abroad. With regard to the uncertainty of the forecasts, Mr Öberg pointed out that the main risk on this occasion was that international developments would probably be poorer than estimated. The revisions made to the forecasts for the international outlook are modest. TCW-weighted GDP growth has been revised down by 2-3 tenths of a percentage point per year, and

TCW-weighted inflation by 1-2 tenths of a percentage point per year. It is possible that it will be necessary to revise down the forecasts even further later on.

Experiences of earlier financial crises indicate that GDP growth will be weaker than normal in the United States and southern Europe for a long period of time, perhaps up to ten years. This is what Kenneth Rogoff calls the Second Great Contraction. But at the same time, developments in other parts of the world remain strong. The emerging economies in Asia – China and India and so on – are continuing to grow rapidly and there is potential to counteract the weaker demand from the United States and Europe with more expansionary fiscal and monetary policy.

Mr Öberg also said that at the previous monetary policy meeting he claimed that the main scenario is that the sovereign debt problems in Europe can be managed without any major problems arising in the financial markets. This was not the case. On the contrary, the management of sovereign debt problems in both the United States and Europe has had a large element of drama and this has resulted in financial market turbulence. This time the forecasts are based on the assumption that the necessary political decisions are made that will ensure an increase in confidence among households and companies once again. If developments are much worse than assumed on this occasion, we will need to be prepared at coming meetings to take measures to preserve financial stability as well as to reconsider the monetary policy stance.

Deputy Governor **Karolina Ekholm** mainly expressed support for the forecasts for the global economy in the draft Monetary Policy Update, although she did have some objections.

When the monetary policy decision was made in July, there were already signs of a slowdown in economic activity, primarily with regard to the US economy. However, it was difficult to assess to what extent this involved factors that were only temporary. The statistics received since then point mainly towards a more lasting slowdown and this justifies the downward revision to international growth prospects made in the draft Monetary Policy Update.

It has also become increasingly clear that the public debt problems suffered by the United States and large parts of the euro area do not have a simple solution. There were earlier hopes that these economies would succeed in growing out of the high national debt ratios, but with slower growth it is difficult to find a painless way of creating sustainability in public finances. The forecast presented in the draft Monetary Policy Update is based on the assumption that decisions will be reached fairly soon that will mean the United States and the euro area have good control over their public finances. Ms Ekholm explained that she could support this assumption, but that at present she thinks it perhaps a little too optimistic. She felt that sooner or later decisions must be made that will create sustainable public finances in one way or another, but that this may take quite a long time – for instance, it appears unlikely that any sharper proposals will be put forward in the United States before the next presidential election in November next year – and that the market may regard future developments as rather unsettled.

Ms Ekholm also pointed out that she has had a different opinion on what can be considered a reasonable forecast for policy rates abroad at recent monetary policy meetings. They have been much higher than market expectations based on implied forward rates at slightly longer horizons. She had perceived this to mean there was an implicit assumption that implied forward rates would shift upwards gradually and approach the forecast level for policy rates. But now implied forward rates have shifted downwards instead – they have fallen quite heavily over the summer. There is a logic to this, as developments with regard to the public debt problems in the United States and the euro area – where it appears likely that countries will be forced to implement severe fiscal policy tightening in a weak economic situation – imply that pressure for an expansionary monetary policy to counteract the tightening will be even greater than it was before. The forecast for policy rates abroad has been revised down substantially in the draft Monetary Policy Update, which Ms Ekholm considers justified. At the same time, she noted that there is still a fairly large discrepancy between the forecast policy rates and market expectations based on implied forward rates. To some extent the implied forward rates at longer horizons may be pushed down by investors reducing their holdings of higher risk instruments in favour of government bonds, but in principle Ms Ekholm assessed that a larger downward revision of policy rates abroad would have been justified. However, on this occasion Ms Ekholm's opinion was that the discrepancy between the forecast policy rates and the implied forward rates was not as important to the exchange rate forecast as she had previously believed. She would return to this later in the discussion on the monetary policy decision.

All in all, Ms Ekholm supported the forecast for international developments, although she considered in principle that a larger downward revision of policy rates abroad in the slightly longer run would have been justified.

Deputy Governor **Lars Nyberg** said that he essentially agreed with the international outlook presented in the draft Monetary Policy Update and supported the revisions made to the forecasts.

Mr Nyberg wished to add to this picture some overall reflections. Since the previous monetary policy meeting in July the sentiment in the financial markets and the media has drastically changed. Stock markets around the world have fallen, willingness to take risk has declined substantially and the flight to safe investments has increased. This has led to a rise in the price of government bonds (and other bonds) that are considered safe, and to a fall in the corresponding yields. The developments in high-risk interest-bearing securities have been the reverse. Over the past week the entire process towards increased security has escalated. The German ten-year rate has fallen to around two per cent, the Greek has risen to twenty per cent.

Mr Nyberg considered that the reversal is partly due to developments in the real economy, as reflected in the statistics, becoming somewhat worse than expected, both in the United States and Europe. This is serious in itself, as the hope on both sides of the Atlantic has been that countries would be able to grow out of the crisis. But developments in the real economy have not been so weak that they justify a total changeover from optimism to pessimism in the markets. Mr Nyberg believed that the background to the changeover lies to a great extent in a gradually undermined confidence among investors in the political system's ability to manage the debt crisis, in the United States and Europe. The fiscal and monetary policy tools have largely been exhausted, according to the market, and cannot be used credibly in an economic slowdown. The dissension among the countries in the euro area over how to manage the crisis in Greece became increasingly evident during the spring. Perhaps it is not so surprising that those who invest money in bonds are beginning to wonder how the situation will be managed if larger countries' ability to pay comes into question. The concern over Spain and Italy that arose during the summer, and the rising government rates it has led to, are clear signs of this. It is worrying that Italy has a large percentage of its borrowing requirement left to fill this year, and it is worrying that interest in the issues appears to be declining.

Mr Nyberg felt that it is difficult at present to see any quick and credible solution to the crisis in the euro area. Confidence in the European banking system has fallen parallel to confidence in the political system. Greece does not appear able to manage the commitments required for the next payment from the IMF and Europe. Finland has negotiated collateral for its share of the previous payment and this has irritated other contributors and further increased unrest on the market. The yield on two-year Greek government securities is now over 50 per cent, which of course reflects an increasingly strong expectation of a Greek payment default. The politicians are no longer denying that the Greek national debt needs restructuring, which is positive. But powerful measures are needed to restore market confidence. There are many proposals for such measures, including the issue of Eurobonds. However, what all of these proposals have in common is that they assume an increase in economic commitments, primarily from Germany. And there does not appear to be any political sympathy for this among German voters. The European way of muddling through the problems has increasingly lost credibility.

It is not impossible that the European crisis will enter a new phase in the near future. Last week's issue of "The Economist" reported on US investors who said that "it is easier to refrain from all European investment right now than to explain why the ones I chose are not high risk". If this view spreads, the crisis will become acute. How to resolve it is a different story. But Mr Nyberg did not believe one could look forward to a calm and stable autumn on the financial markets in Europe.

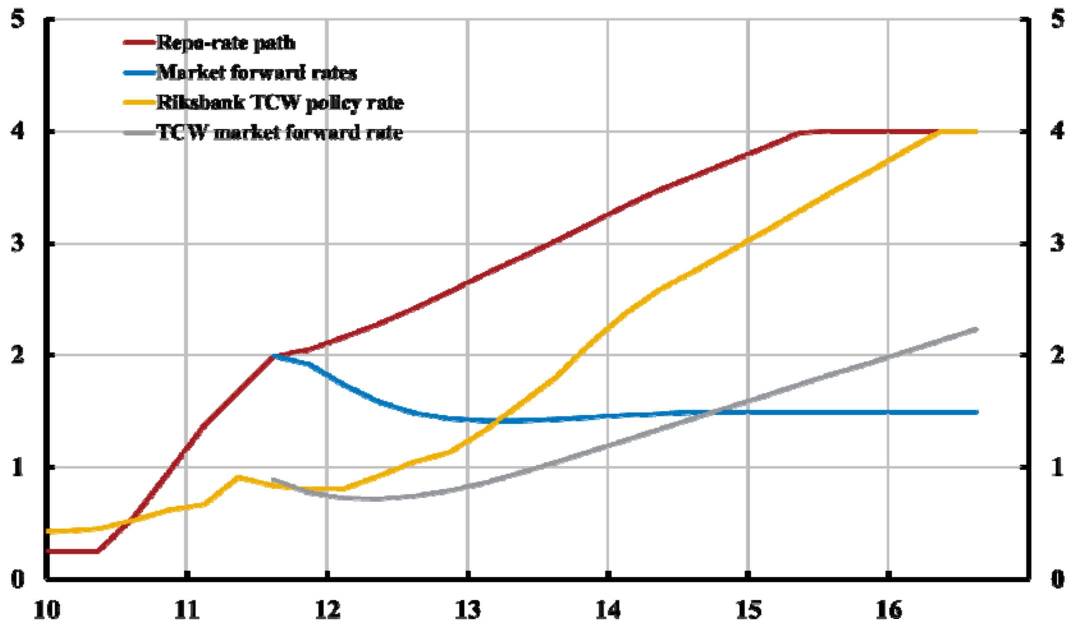
Mr Nyberg concluded his contribution to the discussion by clarifying that in the United States during the summer there was no doubt regarding ability to pay, the doubt concerned willingness to pay. The vacillations in Congress prior to the increase of the loan ceiling have given the impression that politicians lack understanding of the debt problems and prioritise domestic party politics over responsibility for a long-term credible budget policy. Just as in Greece, in other words. This has given rise to a sensational downgrading from one of the credit rating agencies and increasing concern on the markets. However, it has not given rise to an increase in US government rates. US government securities are still regarded as the safest – and are perhaps above all the most liquid in the world at present. Increased concern in the market thus leads to greater demand for US government securities, even when one of the causes for concern is increased doubt over the United States' crisis management.

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 the views presented of developments in inflation and GDP abroad he was a little more pessimistic, but said the differences were not so great. However, as at previous monetary policy meetings, he pointed out that there were problems associated with the assumption regarding interest rates abroad and the forecast for policy rates abroad. As he had demonstrated with the aid of a slide at the monetary policy meeting in July, the forecast for policy rates abroad has systematically been too high for several years, with the outcome systematically lower than the forecast. A too high forecast for policy rates abroad leads to a bias towards a too high repo-rate path, all else being equal. A higher interest rate path abroad will, all else being equal, lead to a smaller difference between Swedish interest rates and those abroad, and to a weaker krona. The Swedish repo-rate path must then be higher to counteract this.

Mr Svensson showed in Figure 1 in an appendix he distributed at the meeting how the yellow line shows the current forecast for TCW-weighted policy rates abroad. The grey line shows TCW-weighted implied forward rates, adjusted by normal forward premiums, that is, 1 basis point per month. Mr Svensson has extended the period for the forecast and the implied forward rates to be five years. Implied forward rates have shifted down considerably since July, in accordance with expectations of lower policy rates in the countries concerned. The forecast has also shifted downwards, although not as much. The forecast is now very high above the implied forward rates and gives rise to a substantial upward shift in the Riksbank's repo-rate path. There is no discussion of these important circumstances in the draft Monetary Policy Update and there is no explanation of this high forecast, despite the fact that it has major consequences for the repo-rate path. If the forecast deviates from implied forward rates, then it is important to discuss and justify these deviations. Such a justification could appropriately be based on an analysis of monetary policy considerations in the euro area, the United Kingdom and the United States. The deviations must not seem arbitrary. There should be no grounds for suspecting that the Riksbank produces high forecasts to justify a high repo-rate path.

Figure 1. Repo-rate path, forward rates and policy rate forecasts,

Per cent

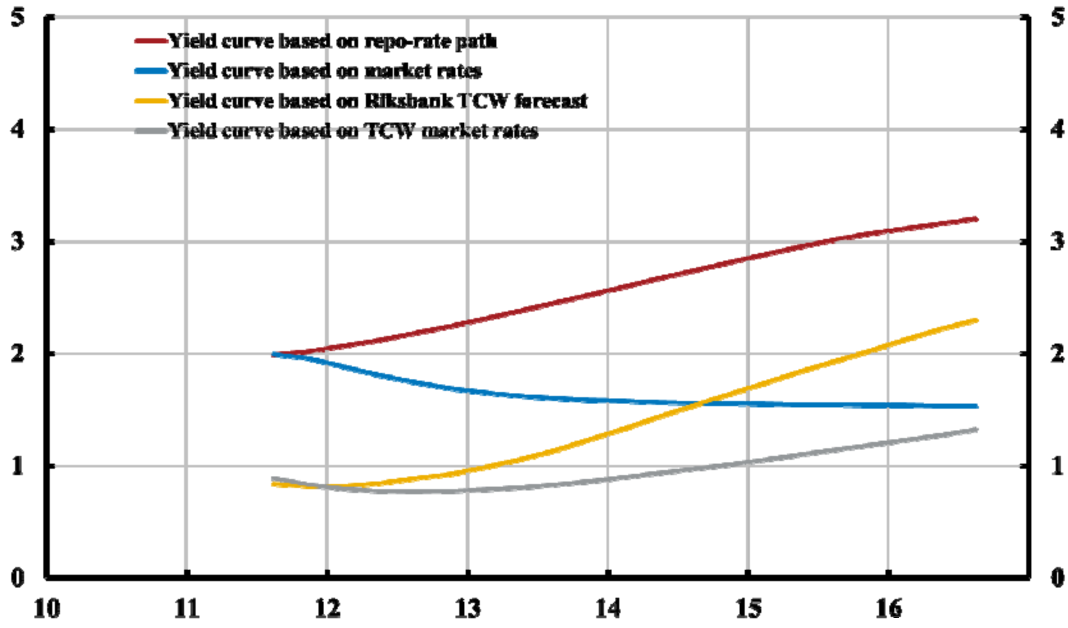


Sources: National sources, Reuters EcoWin, the Riksbank and own calculations
Note: The implied forward rates are adjusted for credit risk and maturity premiums using a rule of thumb.

The forecast for interest rates abroad can also be perceived as an assumption on and forecast for yield curves abroad, that is, interest rates for different maturities abroad. In Figure 2 the grey curve shows the actual TCW-weighted yield curve, while the yellow curve shows the yield curve that is compatible with the Riksbank's forecast for policy rates abroad. A TCW-weighted five-year market rate is roughly 130 basis points. The Riksbank's high forecast for policy rates abroad corresponds to a five-year rate that is 100 basis points higher. Put simply, it is as though the analysis is based on five-year interest rates abroad being 100 basis points higher than they actually are.

Figure 2. Yield curves,

Per cent



Sources: National sources, Reuters EcoWin, the Riksbank and own calculations

To sum up, Mr Svensson thus claimed that the forecast for policy rates abroad is much too high and that this contributes to the repo-rate path being too high. It would be better to allow the forecast to be based on forward rates abroad and then adjust it on the basis of an assessment of monetary policy in the euro area, the United Kingdom and the United States. He pointed out that he had said on several previous occasions that it is important to monitor this issue and any deviations from implied forward rates should be well-motivated and carefully discussed.

Deputy Governor **Barbro Wickman-Parak** noted that since the July meeting the concern over sovereign debt problems in Europe had intensified and now covered Spain and above all Italy. The uncertainty regarding European banks remains and is closely linked to the sovereign debt crisis. On top of this comes the lack of confidence in the political capacity to resolve the budget problems in the United States. Moreover, poorer statistics on economic activity have worsened the situation. The deeper confidence crisis and fears of a more severe economic downturn have led to stock market falls and gloomy headlines in economic news coverage. The situation is many-faceted and complex and has its own dynamics. Strong reactions on the financial markets contribute to declining confidence among companies and households, which in turn accentuates economic concern, which in its turn has repercussions on the financial markets, and so on. Expectations have considerable significance and the most gloomy signals are coming from forward-looking indicators.

The problems faced by politicians in different countries are severe and future developments will be closely linked to an ability to present credible measures programmes and this entails a large measure of uncertainty. An assumption that political solutions will be reached and confidence crises resolved forms the starting point for the forecasts in the Monetary Policy Update. The outcome may differ, but this is something we can only speculate on.

Ms Wickman-Parak emphasised that even before the intensified unease on the financial markets it was possible to detect signs of weakening economic activity abroad. This applied in particular to the United States. The assessment in July was that temporary effects could explain part of the weaker developments and that the Riksbank, like many other analysts, had as its main track that better GDP growth could be expected in the second half of the year. The statistics on the macro economy received since then do not reinforce this hope. It is clear that it will take longer time than most analysts believe before the adjustment in the US housing market is complete. The situation on the labour market remains gloomy and consumer confidence has continued to fall. Households' expectations regarding employment have deteriorated substantially and contribute to caution in spending. A low interest rate contributes to stimulating consumption, but it appears difficult to achieve any major positive effects when households are in a phase where they are trying to consolidate their balance sheets.

Ms Wickman-Parak also felt that it should be noted at the same time that the situation in the United States was not all gloom. Companies have earned a lot of money and some positive signals have come in from July with regard to orders, industrial production and the retail trade. Individual monthly figures should not be over-interpreted, but should as usual be followed up carefully. The growth forecast for the United States has been revised down for the entire forecast period and Ms Wickman-Parak considered this to be reasonable.

In conclusion, she said that the statistics for the euro area received since the summer justified a further downward revision to the growth forecast made in July. The confidence indicators for households and companies were not a good omen. This also applies to Germany, which has previously had a more positive development and acted as growth engine for the euro area. All in all, Ms Wickman-Parak considered that the downward revisions to the international outlook are reasonable and she had no objections to the forecasts presented in the Monetary Policy Update. Weak but nevertheless positive growth is expected in the United States and Europe, while the emerging economies are making better headway. Market growth for Swedish exports has been adjusted down by 1-1.5 percentage points a year during the forecast period and this has repercussions for Swedish exports.

Governor **Stefan Ingves** said that he shared the view of international developments presented in the draft Monetary Policy Update. Global growth prospects have worsened over the summer. Unease over public finances in the United States and the euro area has increased. Much of this concerns increased uncertainty regarding the capacity to make political decisions to stabilise debts. There are also macro economic indicators that point to poorer developments. GDP growth has begun to slow down in the world as a whole and confidence indicators point downwards. The forecast for the US economy has been revised down. Households are expected to become more cautious and the recovery in the housing market is expected to take longer. The question is whether one should not regard unemployment in this situation as structural rather than cyclical. The forecast for the euro area has been revised down, primarily as a result of lower domestic demand from households and companies. Fiscal policy in both the United States and the euro area is now expected to be tighter than was forecast in July. There is considerable political uncertainty in both the United States and Europe with regard to how the current situation will be dealt with. And of course this makes the traditional economic monitoring more difficult, as it does not readily include political events.

Indicators in the BRIC countries (Brazil, Russia, India and China) point to some slowdown, although growth is good and inflation is much higher than in the developed economies – on average 7.4 per cent in July. This means that they need a tighter monetary policy than that conducted in the developed economies. The adjustment of the global imbalances has begun, but this has been primarily through inflation contributing to a real appreciation of the exchange rates in the BRIC countries. This contributes to a more even distribution of global growth in the long run, but there is still a lot of tension, particularly as long as one tries to avoid a more immediate adaptation of the exchange rate. In our more immediate surroundings, growth in Norway is still good, but growth in Denmark is slow, as the country is still suffering from remaining bank problems and the aftermath of an overheated housing market.

Mr Ingves also said that concern over national debt and subdued growth prospects have increased risk aversion on the financial markets. Market interest rates and share prices have fallen. Monetary policy expectations as measured in terms of forward rate curves have shifted downwards in the United States and the euro area, which provides some stimulus. Our forecast is also based on an assumption that market confidence will return as credible programmes for debt consolidation are decided in the United States and the euro area. However, producing such programmes may prove tricky and it is not clear how long it will take.

Mr Ingves then took up some problems regarding developments abroad. The first is that it has taken far too long to consolidate balance sheets for several states and private agents. Excessive indebtedness is negative for economic growth.[1] There is thus an upper limit for the debt ratio. For public debt this is between 80 and 100 per cent of GDP.[2] This means that countries with an excessively high public debt need to not only stabilise the debt ratio, but also reduce it to levels where it will not hamper growth. If this does not happen, concern increases with regard to the possibility to fund the debts. Moreover, the

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[1] See Cecchetti, S. M. S.Mohanty and F Zampolli (2011) "The real effects of debt", prepared for the Jackson Hole Symposium, August 2011.

[2] For companies' debt ratio the upper limit is around 90 per cent as a percentage of GDP and for households the limit is around 85 per cent. However, these figures have less statistical significance than the threshold for the public sector debt ratio.

contagion effects of the countries' funding problems will affect banks exposed to the crisis countries, which may in turn have consequences for public finances in these banks' home countries. This creates potential contagion effects, a negative externality, which also affects countries, such as Sweden, that are not directly affected. It creates uncertainty here, too.

Another problem is the risks related to excessively low policy rates over an excessively long period of time. The risk is that excessively low interest rates will contribute to delaying the consolidation of balance sheets, both for governments and private sector agents. This is because excessively low interest rates over a long period of time risk contributing to the misallocation of production resources. But they can also risk triggering a more dramatic sequence of events in the real economy and disruptions to the financial system. Such sequences are rarely gradual and therefore difficult to forecast. On the one hand, a low interest rate keeps demand up, but on the other hand it reduces the need to consolidate various balance sheets. It is not easy to find a good balance in this process.

Mr Ingves highlighted a third problem for monetary policy that concerns the link between policy rates abroad, the Swedish repo rate and the Swedish exchange rate. The krona has weakened slightly over the summer in a way that is not easy to relate to the development of interest rate differentials to other countries. This is a common phenomenon among the currencies of small, open economies in times of unrest. It indicates that there is no exact correlation between interest rates and exchange rates at least in the short term. The volatile forward rates are therefore a challenge when it comes to making forecasts for the krona. They also contribute to problems when forecasts are being produced for monetary policy abroad. The implied forward rates are one piece of the puzzle that needs to be supplemented with other information. The model world requires an immediate link between the exchange rate, domestic interest rate and interest rates abroad. This is a link that for various reasons does not always hold. Of course, it makes the analysis more difficult, but it is a phenomenon that it is unfortunately impossible to escape.

Mr Öberg then called for a clarification by Per Jansson, the Head of the Monetary Policy Department, as to which interest rate assumptions the forecasts are based on, given Mr Svensson's comments that the Department is counting on the five-year government bond rates abroad being one percentage point higher than they actually are.

Mr Jansson pointed out that the Department's forecasts naturally take into account actual outcomes for various variables, including interest rates. The fact that simplifications are made in models, such as with regard to the relationship between expected policy rates and interest rates with longer maturities, does not mean that the Department's forecasts are based on interest rates that differ from those observed in real life. The fact that model analyses need to be supplemented with judgements applies to many aspects, where the relationship between interest rates with different maturities is only one example.

Mr Svensson commented that the Monetary Policy Department's Ramses model assumes rational expectations. When one then feeds in the high forecast for interest rates abroad, this means one is assuming that all agents believe in it and that long-term rates abroad, in accordance with the expectations hypothesis, are much higher than actual interest rates abroad. Mr Svensson emphasised that he has stated for quite a long time now that it would be a good idea to develop the analysis apparatus to cover situations where the market does not believe in the Riksbank's forecasts, such as when market expectations for domestic and foreign interest rates are lower than the Riksbank's repo-rate path and its forecast for interest rates aborad. It would be useful to have this development.

Mr Svensson also pointed out that the Riksbank's high forecasts for policy rates abroad have sometimes been justified by saying that the current low interest rates abroad are not consistent with the Riksbank’s models or various Taylor rules. However, the current situation in Sweden and abroad is very special. Models work well in normal circumstances, but perhaps not so well under the present very special circumstances. If models and reality differ, it is reality that should count.

Mr Jansson agreed with Mr Svensson that there is a need for further work on these issues.

Governor **Stefan Ingves** commented that it is reasonable for the Riksbank to return in some form with regard to how this work will proceed. It may be valuable to explain to outsiders how the process works and the arguments on what can be considered a desirable research endeavour.

Mr Ingves then summed up the discussion of the economic outlook abroad by saying that all the members of the Executive Board appeared to agree with the assessment presented in the draft Monetary Policy Update, although some members assess that policy rates abroad will rise at a slower rate than is forecast in the Update.

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

Deputy Governor **Barbro Wickman-Parak** began the discussion by pointing out that the Riksbank's growth forecasts for Sweden over a long period of time had predicted a slowdown in growth towards more normal levels, and this now appeared to be happening. Although GDP for the second quarter was slightly stronger than the Riksbank predicted, this was due to a higher contribution from stocks and to lower imports. Both exports and final domestic demand were lower than expected.

Monthly statistics in the form of business tendency surveys and purchasing managers’ indexes all point towards growth slowing down. There is very little new outcome data available for the third quarter. Statistics have been received for foreign trade in July and for retail trade sales and these also point towards a slowdown, but not of the same size as implied by other confidence indicators.

Household confidence fell relatively substantially in July and August. This applies in particular to the view of the Swedish economy, but also to some extent with regard to their own personal finances. However, so far they assess their own risk of becoming unemployed as low. The forecast in the Monetary Policy Update shows that the labour market is improving, although the strengthening will slow down over the coming year. After this, stronger development is expected. If this is the case, consumer confidence need not be damaged in a deeper and more prolonged manner. Household wealth has also been negatively affected in the wake of falling stock markets and property assets that are no longer increasing in value. The risks in the growth forecast also come primarily from abroad, but Ms Wickman-Parak assesses that there is also reason to keep an eye on the household sector here in Sweden.

The weaker international growth forecast, domestic demand that is slowing down faster than was previously forecast and the unanimous signals from confidence indicators justify a downward revision in the forecast for Swedish growth. This is now expected to stop at 1.7 per cent next year. This means a downward revision of 0.5 of a percentage point, compared with July. Growth is expected to pick up speed somewhat during 2012. This is not a dramatic revision of growth prospects; a slowdown in the growth rate has been on the cards for some time.

The slowdown in growth is thus expected to be more pronounced now than the Riksbank had predicted earlier, and the forecast for inflation has been revised down slightly. Add to this the political uncertainty abroad, and the convulsions on the financial markets and it seems very appropriate to take up a waiting stance. Ms Wickman-Parak announced that she supports the forecast in the Update and the proposal to hold the repo rate unchanged, and that future repo-rate increases are postponed.

Of course, it is not difficult to construct, as many people do, a darker perspective on economic activity, given all the problems and risks emanating from abroad. But at the same time, it is important not to be caught up in a sentiment that might quickly change. One must, as usual, try to interpret the information flowing in as best one can. This is a wise approach to take to forecasts. If one instantly sticks one's neck out, there is a risk of large fluctuations in the forecasts and a monetary policy that lacks stability. It is important to closely follow developments and be prepared to adapt the forecasts when new information gives us a reason to do so. If more dramatic events occur, the situation will be more difficult and monetary policy will need to take a stance on them.

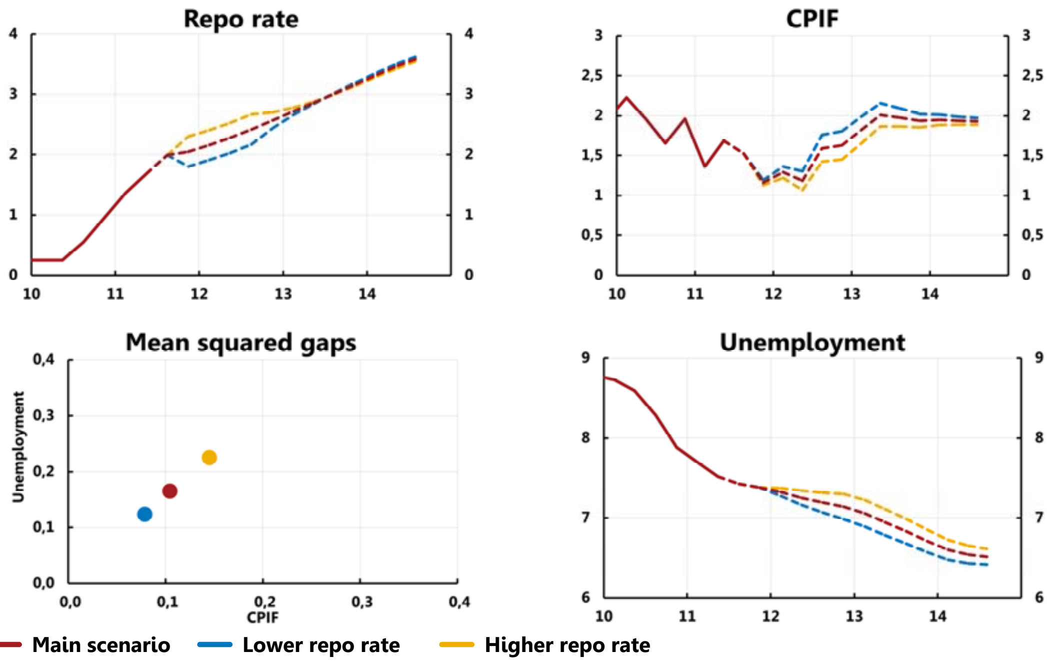
Deputy Governor **Lars E.O. Svensson** announced that he supports the proposal to hold the repo rate unchanged at this meeting, but that he prefers a repo-rate path that remains at 2 per cent until the middle of 2013 and then rises to 3 per cent at the end of the forecast period.

Mr Svensson considered the repo-rate path in the main scenario to be too high for several reasons. First, as he had already mentioned, an unjustified high forecast for policy rate abroad gives a bias towards a too high repo-rate path. Second, there is a bias towards overestimating resource utilisation. Third, even if one accepts the high forecast for policy rates abroad and the high estimate of resource utilisation and the sustainable unemployment rate of 6.5 per cent (which he intended to return to in his contribution to the discussion), one can still show that a lower repo-rate path stabilises CPIF inflation better around 2 per cent and unemployment better around a rate of 6.5 per cent.

The third reason is exemplified in Figure 3. This shows the forecasts for CPIF inflation and unemployment for different repo-rate paths under the assumption in the main scenario of a high forecast for policy rates abroad and a high sustainable rate of unemployment. In the upper left panel the red path represents the repo-rate path in the main scenario, and the blue path is a lower repo-rate path. The right-hand panels show that the lower repo-rate path gives a forecast for CPIF inflation that is better stabilised around 2 per cent and a forecast for unemployment that is better stabilised around 6.5 per cent. A lower repo-rate path thus gives better target fulfilment for both inflation and unemployment. The lower left panel shows that the mean squared gap is lower for both inflation and unemployment with the lower repo-rate path.

Actually, this is fairly self-evident. The shock that has affected the Swedish economy since July this year is a negative shock to aggregate demand resulting from a weaker forecast for economic activity abroad, due to lower confidence in economic policy abroad, stock market falls and a general increase in uncertainty. Stock market falls are not merely a sign of a flight to safety, they also indicate a dampening in expectations of future profits and developments in Sweden. A negative shock to aggregate demand lowers the forecast for both inflation and resource utilisation. This can be met with more expansionary monetary policy. It is only a question of how far one should go. Lowering the repo-rate path in the main scenario is thus not sufficient, even under the assumption in the main scenario of high policy rates abroad and resource utilisation.

Figure 3. Monetary policy alternatives
Policy rates abroad according to the Riksbank's forecast; sustainable unemployment of 6.5 per cent



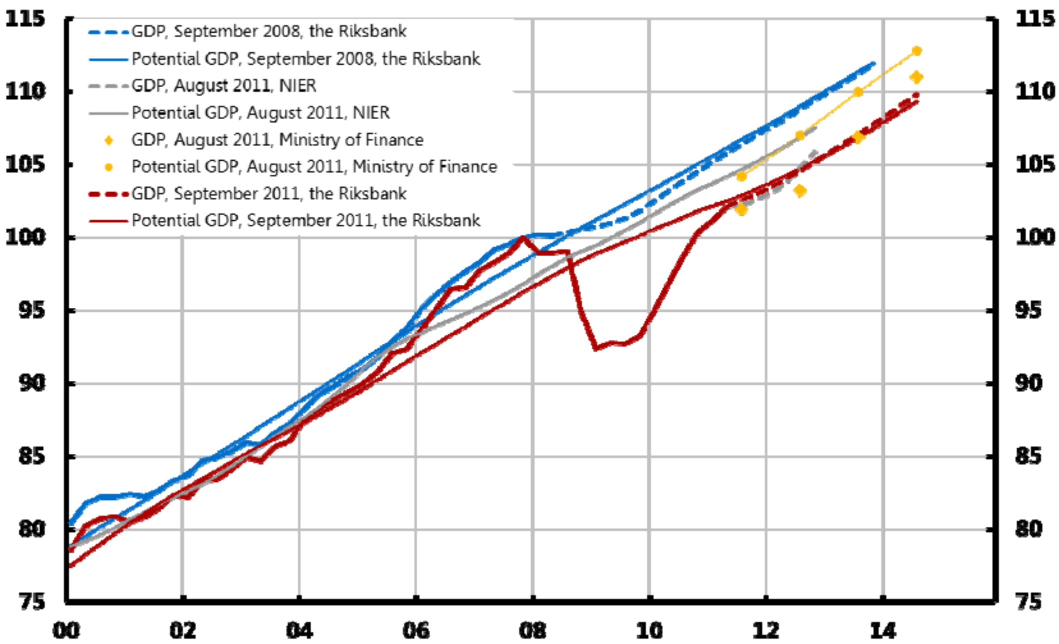
Sources: Statistics Sweden and the Riksbank

Mr Svensson said that, moreover, the National Institute of Economic Research has an excellent analysis in its most recent Swedish Economy, which was published a few days before the meeting. They recommend an unchanged repo rate and then a much lower repo-rate path than the one published by the Riksbank in July; a repo-rate path that is much lower than the one in the main scenario of the draft Monetary Policy Update. They also warn that a higher repo-rate path could have negative effects on the recovery from the crisis. Mr Svensson then moved on to the other reason for the repo-rate path being too high and the claim that resource utilisation is over-estimated. Mr Svensson apologised for having to go into such detail and show several different figures, but the assessment of resource utilisation is undoubtedly very important, and the analysis has been neglected, in his opinion.

The over-estimation of resource utilisation is evident in, for instance, a too low assumption of, and too low forecast for, potential GDP. This means that the forecast for the output gap becomes too high. Although the GDP gap is only one of the indicators the Riksbank uses, it is representative of the others, except the unemployment gap, to which Mr Svensson intended to return later. With regard to the current level of potential GDP, the National Institute of Economic Research and the Ministry of Finance make a different assessment, as shown in Figure 4, with a higher forecast for potential GDP (thin whole grey line and yellow dots). Behind the Riksbank forecast for potential GDP are assumptions and estimates of potential GDP have shifted downwards considerably following the crisis. This is despite the fact that the crisis largely entails, from a Swedish macroeconomic and monetary point of view, a purely negative shock to aggregate demand, a fall in demand for exports, which would not have any major effect on potential GDP according to normal monetary policy analysis. Although the assumption and estimates of potential GDP are very important, there is no account of an analysis of why potential GDP should shift downwards so far as a result of a pure demand shock.

Figure 4. GDP and potential GDP

Index, 2007 Q 4 = 100

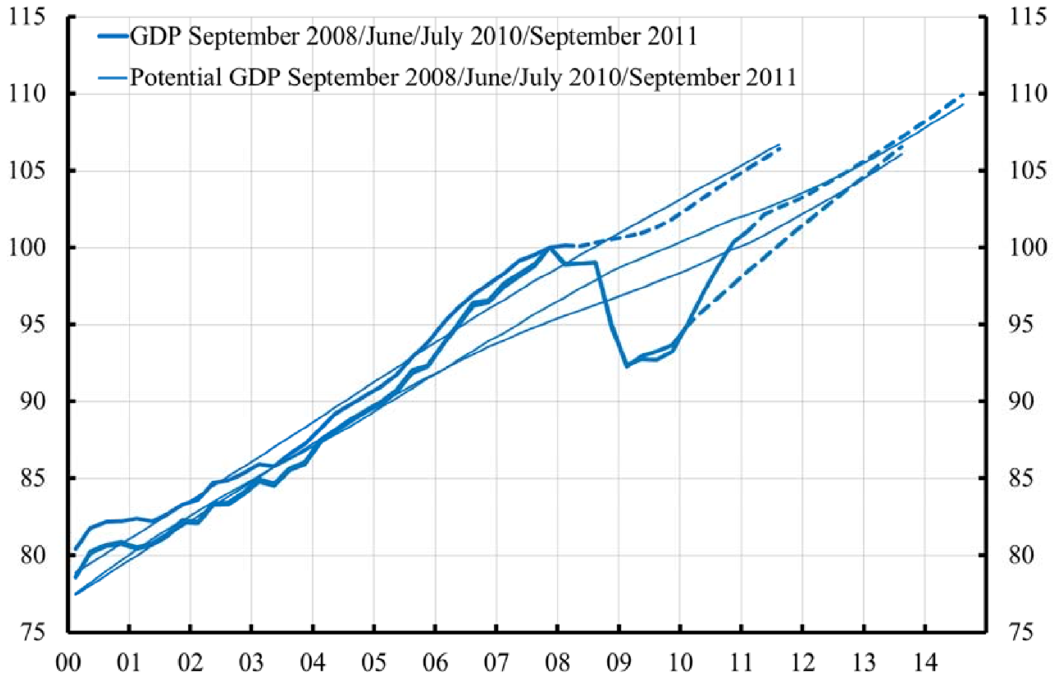


Sources: The Ministry of Finance, the NIER and the Riksbank

With regard to the shift in potential GDP, we can see in Figure 5 how the Riksbank's forecast for potential GDP has shifted down from September 2008 to June/July 2010 and then up again slightly to September 2011. The forecasts in September 2008 and June/July 2010 were made using an HP filter, the forecast in September 2011 was made using the production function method described in the Monetary Policy Report published in October 2010. In practice, there is no major difference between the new production function method and the old HP filter. As clearly shown in this figure, these forecasts have a well-known endpoint problem, that is, potential GDP approaches GDP at the end of the forecast period. The gap thus tends to close at the end of the forecast period. This makes potential GDP calculated in this way a misleading and unreliable indicator. Another unusual circumstance is the large retrospective revisions of potential GDP we can see.

Figure 5. GDP and potential GDP: The Riksbank

Index, 2007 Q4 = 100



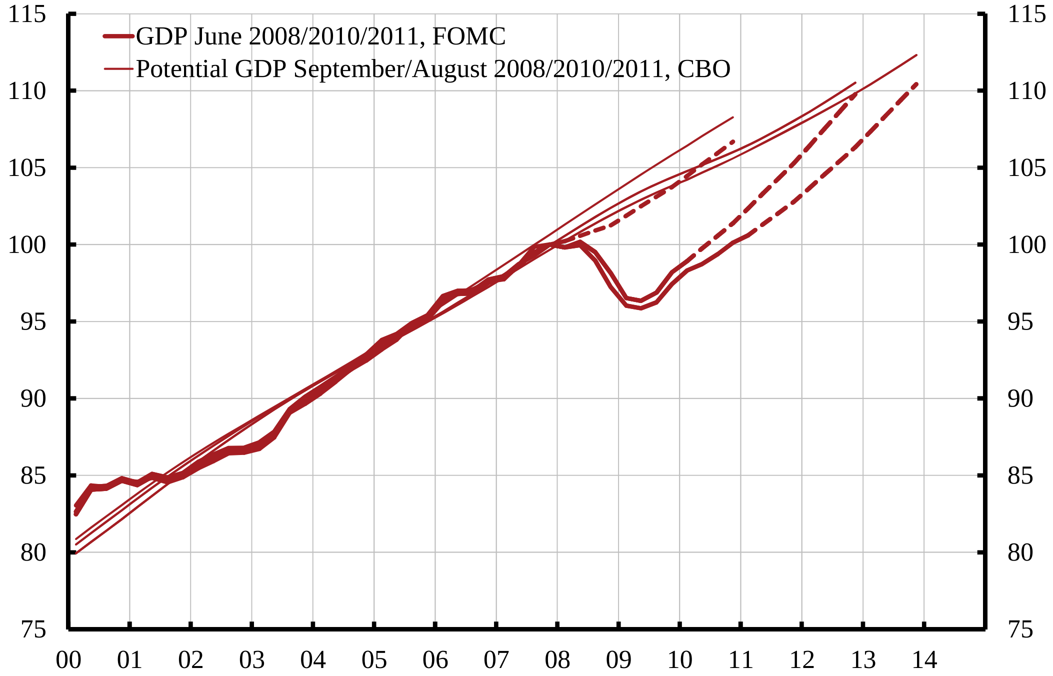
Source: The Riksbank

The economic upswing at the end of 2007, which the Riksbank considered to be fairly moderate in autumn 2008, has in June/July 2010 become a roaring boom, roughly as high as the later large recession was deep. This is not convincing, and not reliable.

In comparison, Figure 6 shows revisions to the forecast for potential GDP in the United States made by the Congressional Budget Office, CBO, at the same time. As we can see, the CBO does not revise potential GDP retrospectively to any great extent, mainly forwards, and fairly little for a short horizon. Why do the Riksbank's forecasts for potential GDP look so different from the forecasts by the highly-reputed and much respected CBO? And why should a shock to aggregate demand have such major effects on potential GDP? These are questions that should not be ignored.

Figure 6. Forecast for potential GDP (CBO) and forecast for GDP (FOMC)

Index, 2007 Q4 = 100



Source: Congressional Budget Office, CBO and Federal Open Market Committee, FOMC

Mr Svensson pointed out that it is in the light of the above circumstances that he wanted to highlight the unemployment gap between unemployment and an estimate of sustainable unemployment as a much more reliable and transparent indicator of resource utilisation as a target variable.

Why is the unemployment gap a better indicator than the GDP gap. Well, because unemployment is more closely related to welfare. One of the worst things that can happen to a household is that one of its members loses their job. There are also fewer revisions to unemployment figures and fewer measurement errors. It is not easy to estimate sustainable employment, but it is much easier than estimating potential GDP. Long-term unemployment lies in a limited interval and is 5, 5.5, 6 or maybe 6.5 per cent. It can be estimated and discussed in an open debate within and outside of the Riksbank, including a debate with Sweden's macro economists and labour market experts. The Ministry of Finance has made its excellent analysis and assessment of the sustainable unemployment rate in close cooperation with some of Sweden's leading economists in the fields of macro economics and labour market economics.

It is important, Mr Svenssson continued, that it is the gap relative to sustainable unemployment that is relevant as a target variable for monetary policy. Why, you may wonder? Why is it not the short-term NAIRU or some other short-term equilibrium employment rate that can be determined on the basis of the prevailing shortages and job vacancies and other short-term indicators? Well, the short-term NAIRU is by definition the rate of unemployment that could currently entail unchanged inflation. This means that the gap between unemployment and the short-term NAIRU is proportional to the change in inflation. Having this gap as a target variable that one wishes to stabilise around zero is the same as trying to keep inflation unchanged. It means that one implicitly introduces an objective to keep inflation stable, all else being equal. Why would one want to do this? It is not reasonable. This and related issues are discussed in more detail in a paper Mr Svensson said he will present at a conference at the Brookings Institution in Washington, DC, the week after the monetary policy meeting.

Mr Svensson then put the question of why he wanted a repo-rate path that is at 2 per cent up to the middle of 2013, and then rises to 3 per cent at the end of the forecast period. This is shown in Figure 7. It presents this repo-rate path and the repo-rate path of the main scenario, and also the corresponding forecasts for the CPIF and unemployment, under the assumption of interest rates abroad in accordance with forward rates and Mr Svensson's own assessment of the sustainable unemployment rate of 5.5 per cent. He had given his motivation for this rate earlier. It is now between the National Institute of Economic Research's estimate of just over 6 per cent and the Ministry of Finance's estimate of 5 per cent.

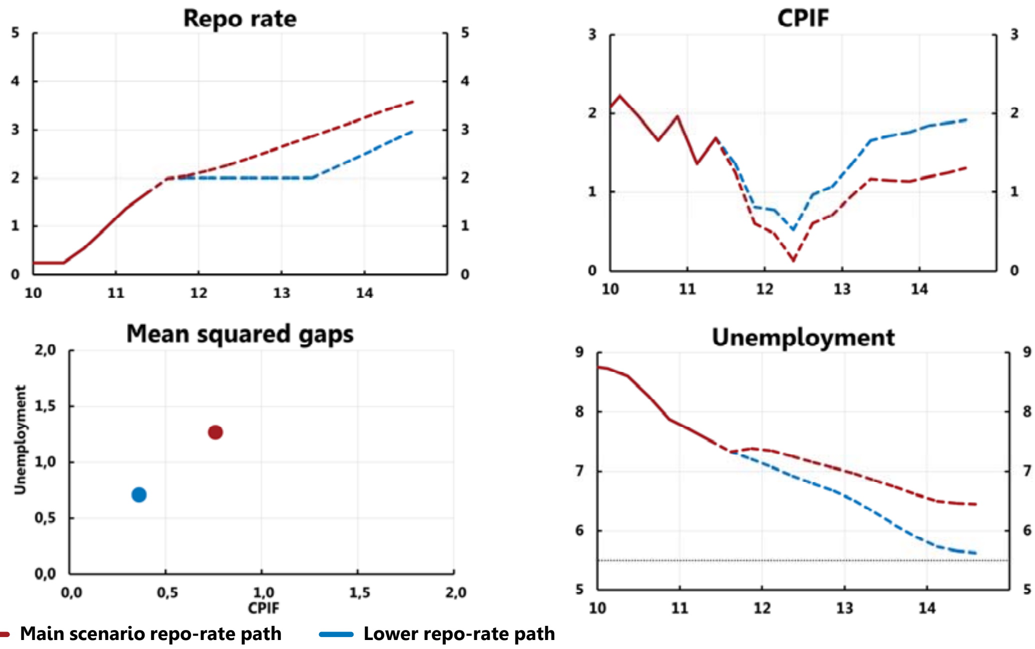
Mr Svensson went on to say that he considers the Ministry of Finance's analysis of the sustainable rate of unemployment to be the best so far, but while awaiting continued research on these questions Mr Svensson chose in his assessment to remain roughly midway between the two institutions.

As shown in Figure 7, the repo-rate path in the main scenario gives a CPIF forecast a good way under 2 per cent, given the assumption of lower policy rates abroad. A lower interest-rate path abroad results in a greater interest-rate differential and a stronger krona that brings down inflation with the repo-rate path in the main scenario. The lower repo-rate path gives higher CPIF inflation closer to the target and a much lower forecast for unemployment closer to 5.5 per cent. Target fulfilment for both inflation and unemployment will be much better with the lower repo-rate path.

More precisely, target fulfilment could be even better if one went even further, cut the repo rate now and let the repo-rate path lie below 2 per cent until the middle of 2013. However, it requires considerable resources and there are a number of technical difficulties that have not yet been resolved with regard to making forecast calculations for repo-rate paths that are far from the main scenario and to determine which path is best. The proposed repo-rate path does entail a much improved target fulfilment relative to the main scenario, so it will suffice on this occasion. After further investigation prior to the meeting in October, the best action may well be to lower the repo-rate path, according to Mr Svensson. But that assessment will be made then.

Figure 7. Monetary policy alternatives

Policy rates abroad according to implied forward rates; sustainable unemployment of 5.5%



Sources: Statistics Sweden, the Riksbank and own calculations

Deputy Governor **Lars Nyberg** continued the discussion by noting that at the monetary policy meeting in July the sentiment in the Swedish economy was very different from today. The Swedish economy was then steadily rising in the economic cycle, although it was easy to see some risks. Now stock markets and interest rates have fallen, all analysts have revised down their forecasts and households and companies have become much more pessimistic regarding the future. This could be termed a black August.

Now, things are probably not as bad as the newspapers sometimes imply. The journey from economic upturn to downturn takes more than one month. This insight is also reflected in the forecasts published during the past month. The Swedish economy is still growing, although growth does not look to be as strong as was thought at the beginning of the summer. The increased concern is not just a question of falling economic activity abroad, it equally encompasses US and European politicians' ability to take action in the shadow of the debt crisis. But Sweden has been affected, not least by the stock market fall, which in turn has contributed to a decline in households' and companies' expectations. Receding growth in the United States and Europe also leads to a decline in the markets for Swedish exports.

Mr Nyberg announced that he supports the analysis and forecast revisions presented in the Monetary Policy Update. Given this, Mr Nyberg considered it wise to adjust the repo-rate path in the way suggested and thus call a temporary halt to the planned repo-rate increases. The low underlying inflation does not entail any immediate demands to raise interest rates to attain the inflation target. The length of the halt will have to be discussed by the Executive Board at later meetings. It will depend to a large degree on what happens in Europe. This means that the repo-rate path feels more uncertain than usual, the further ahead one looks. But the starting point for the Riksbank's forecast is that the problems in the euro area are resolved and that international confidence in Europe gradually returns. Under these conditions the Swedish economy can reasonably be expected to continue to grow, and the Riksbank will have reason to raise the repo rate further. A repo rate of two per cent is, after all, still a low rate.

Perhaps it is time to point out that Sweden has a good initial position as uncertainty increases. Sweden has sound public finances, unlike many other countries in Europe. Sweden also has a stable and well-capitalised banking system, and here too it differs from most other countries in Europe. The situation is also very different from the autumn of 2008. Then banking systems all over the world were hit by an unexpected liquidity crisis with its roots in the United States. Today one can see the development of an expected debt crisis in parts of Europe. There is nothing to indicate that the crisis needs to have a similar effect on the banking systems, particularly in countries with good public finances.

Some words about the exchange rate. Given Sweden's strong position in relation to Europe (and perhaps also its comparatively high interest rates) one couls assume that the krona will increase in value in a similar way to the Swiss franc. The krona could be a safe haven in times of unrest. But the krona is a small currency that has never had the status of world currency held by the Swiss franc. Nor is this status something that can be attained overnight, and at present one should be thankful for this. However, it is important to continue monitoring what happens to the krona.

Mr Nyberg then said that as usual he wished to conclude with a few reflections on the housing market. The market for single-family dwellings and tenant-owned apartments appears to have stabilised and prices are not rising as much as they have done for some years now. The mortgage ceiling, higher interest rates and the increase in pessimism during the autumn have probably contributed to this. Concerns regarding overheating on the housing market have declined, at least for the present. Households' mortgage rates appear to have risen more with regard to shorter fixed-term rates than for longer terms, which has sometimes been interpreted as the banks having increased their profit margins. Mr Nyberg believed that one should be cautious about reaching such a conclusion. All mortgages have a long time to maturity, even if the period for which the interest rate is fixed is short. The new liquidity regulations for banks (and also the banks' own experiences of the crisis) require that they fund long-term lending with long-term borrowing to a much greater extent than before. And long-term borrowing usually costs more than short-term borrowing. Part or all of the cost for the "term premium" must be transferred to the banks' borrowers. There are thus arguments in favour of short-term mortgage rates remaining higher than borrowers have been used to.

Deputy Governor **Karolina Ekholm** considered that the critical issue with regard to assessing developments in Sweden is, as Barbro Wickman-Parak and Lars Nyberg have already mentioned, how far the Swedish economy will be affected by the weaker developments abroad, the decline in wealth as a result of falling share prices and what would appear from confidence indicators to be a large fall in confidence among Swedish households and companies.

In principle, Ms Ekholm thought that the forecasts in the draft Monetary Policy Update with regard to growth and inflation appear reasonable, although at present she sees more downside risks than upside risks, given the recent international developments. With regard to the proposed repo-rate path, Ms Ekholm considered that a flatter path is preferable. Ms Ekholm considered there to be scope for an even larger downward revision of the path to counteract the fall in GDP growth and inflation in the forecast. But she supported the proposal for an unchanged repo rate at today's meeting.

Although there was also justification for cutting the repo rate today, Ms Ekholm nevertheless felt it is better to wait and see how the economy develops. To some extent, there is a delicate balance at present, and like Barbro Wickman-Parak she saw a possibility that the Swedish economy will not be affected quite as much by the unease prevailing with regard to developments in the United States and the rest of Europe as is implied by falling confidence indicators. Ms Ekholm's assessment was that it is better to wait before cutting the repo rate in the light of the considerable uncertainty prevailing at present regarding the Swedish economy.

At the same time, Ms Ekholm felt that the probability that the Riksbank will really need to cut the repo rate further ahead is in principle as great as the proability that the Riksbank will need to increase it. She therefore considered that a repo-rate path with an unchanged repo rate in the coming period is more reasonable than one that gradually rises. Moreover, Ms Ekholm considered that a path ending on a slightly lower level than the one presented in the draft Monetary Policy Update would constitute better-balanced monetary policy. Like Mr Svensson, she advocated a path with an unchanged repo rate up to around the middle of 2013, and then gradual increases up to approximately 3 per cent at the end of the forecast period. As at the moste recent meetings, Ms Ekholm considered that the low underlying inflationary pressure - now and for most of the forecast period - creates the scope for making monetary policy more expansionary to keep up resource utilisation and hold back unemployment more.

A central argument for her reservations against the path at earlier meetings had been that the proposed path implied high interest rate differentials towards other countries, given the forecast for policy rates abroad, which she herself has considered reasonable and this in turn has implied a stronger exchange rate than in the forecast. However, she agreed with Stefan Ingves and Lars Nyberg that the krona appears to belong to the group of currencies whose value is pushed own in periods of market turbulence. During these periods there appears to be a tendency for investors to sell their krona assets in favour of assets perceived as more liquid and encumbered with less risk. Periods of market turbulence are typically periods with low interest rates, like now. So Ms Ekholm could imagine that increased interest differentials to other countries at present would be linked to weaker appreciation pressure on the krona than would be the case in a more normal situation.

To sum up, Ms Ekholm said that she supported the proposal to hold the repo rate unchanged at 2 per cent, but that she did not support the proposed repo-rate path. Like Lars Svensson, she instead prefers a path where the repo rate remains at 2 per cent until the middle of 2013 and then rises to 3 per cent at the end of the forecast period.

First Deputy Governor **Svante Öberg** took up three questions, the revisions to the forecasts, the uncertainty and monetary policy. However, he intended to later comment on Lars Svensson's contribution to the debate. Mr Öberg began with the revisions. The statistics received during the summer are largely in line with the earlier forecasts. But more forward-looking indicators point to a rapid slowdown during the second half of the year, particularly in the manufacturing industry but less explicitly in the services sector. This, together with the weaker international developments and turbulence on the financial markets means that the forecasts for GDP growth, employment and inflation should be revised down roughly as described in the draft Monetary Policy Update. One may perhaps think the downward revisions are small. But the Riksbank predicted a significant slowdown in growth back in July and is now expecting lower interest rates that will support the recovery.

At the same time, there is a good deal of uncertainty surrounding the forecasts. The main risk on this occasion is probably that developments will be worse than in the main scenario. Mr Öberg then went on to say that, as he had pointed out earlier, the revisions to the international forecasts are relatively minor. And even if the assessment is for fairly weak GDP growth in the coming years, the Riksbank may well have an overly positive picture of developments and perhaps in particular of the improvement in the labour market. Mr Öberg's experience was that one should not change forecasts very much as a result of developments in individual months. If the changes proved to be more durable, the Riksbank would have good opportunity to revise its forecasts further at later meetings.

Mr Öberg went on to describe his views on monetary policy. At the previous monetary policy meeting in early July, Mr Öberg believed that the repo rate could need to be raised at all three meetings in the autumn, especially if it turned out that the sovereign debt problems in the euro area could be handled without tangibly negative effects on the financial markets. But developments since then had caused Mr Öberg to change his mind. The sovereign debt problems have led to turbulence on the financial markets, falling share prices and increased uncertainty over the future. The risks of higher inflation that Mr Öberg saw at the previous monetary policy meeting had not materialised. Inflation in July was marginally lower than the Riksbank had expected and the forecasts for inflation have been revised down. Energy and commodity prices in the world market have fallen. This holds back inflation. The lower CPI inflation now being forecast also reduces the risk of inflation and wage expectations being too high. The labour market is entering a calmer phase. This reduces the risk of pressure in the labour market leading to excessively high wage increases. The forecast for the rate of increase in hourly wages has also been revised down somewhat. But a decisive factor here is the central wage bargaining rounds that will take place in the autumn and spring.

Given this - the downward revision to forecasts and the risk of weaker developments - Mr Öberg's assessment was that the Riksbank should put its repo rate increases on hold during the autumn. Mr Öberg said that he therefore supported the proposal to hold the repo rate unchanged at 2 per cent and the downward revision of the repo-rate path. The repo-rate path means that there is an approximately 50 per cent probability that the Riksbank will increase the repo rate in October or December. He considers this to be a reasonable assessment in the present situation. At the same time, both the Riksbank and the general public must be aware that the repo rate is still low and that it will in the long run need to be increased to a more normal level.

Mr Öberg then commented on Lars Svensson's contribution to the debate. Inflationary pressures are currently quite low. CPIF inflation was 1.6 per cent in July. But CPIF inflation is not a target variable. There is thus no end in itself to holding CPIF inflation close to 2 per cent during the forecast period. CPIF inflation can instead be regarded as one of several indicators of the direction CPI inflation is taking in the long run. With the current forecasts, CPIF inflation is expected to rise to around 2 per cent towards the latter part of the forecast period. This indicates that CPI inflation in the long run stabilises around 2 per cent, which is the target for monetary policy. This indicates that the proposed monetary policy stance is well-balanced.

Moreover, Mr Öberg's assessment was that resource utilisation was currently largely at a normal level. The GDP gap, the hours worked gap and the RU indicator are all close to zero and capacity utilisation in the manufacturing industry is at a normal level. Resource utilisation is also calculated to be largely normal or slightly above normal during the forecast period. Although unemployment is still relatively high, the labour shortage is also high. This indicates that resource utilisation with regard to labour is also at a fairly normal level. This also indicates that monetary policy is well balanced.

It is quite correct as Mr Svensson says that it is difficult to estimate potential GDP and the GDP gap. But it is also difficult to estimate the sustainable unemployment level. The fact that resource utilisation is largely normal now, in the way shown by the GDP gap, is supported by other measures based on data from the economic tendency survey, such as capacity utilisation in the manufacturing industry. These are measures that do not require any complicated calculations, but can be directly read in the statistics.

Mr Öberg also believed that the administration in the United States has over-estimated the potential level of GDP, which has led to a belief that the sovereign debt problems will largely resolve themselves through a high GDP growth rate. Mr Öberg believed it more likely that the financial crisis will be followed by a prolonged period of relatively low growth and that it will be necessary to revise down the estimates of potential GDP.

The uncertainty in the forecasts and model calculations indicates that one should not base one's assessments solely on the expected values of the forecasts. The confidence interval around these expected values is very broad. If one was to draw a 90 per cent confidence interval around the dots in Mr Svensson's figures 3-7, it would be so large that it would appear strange to claim with any confidence that one dot is better than another. Goodhart and Rochet also write in their assessment of Swedish monetary policy that this type of figure exaggerates the certainty of comparisons of different alternatives.

Mr Öberg also considers it important that the interest rate is currently low and that it should in the long run be increased to a more normal level. Low interest rates over long periods of time lead to problems that are difficult to capture in the forecasts. Mr Ingves said something along these lines earlier. Mr Öberg also considered that a more even profile in the repo-rate path would be better than one that varies substantially over time. Both of these factors should be considered when choosing a repo-rate path. Mr Öberg said that he has earlier discussed this further in a speech he held[3].

[3] Svante Öberg: "My view of monetary policy 2006-2011", March 2011.

Governor **Stefan Ingves** emphasised that there is considerable uncertainty, that the forecast situation is difficult, and that he shares the assessment of the Swedish economy described in the draft Monetary Policy Update. He stands behind the repo-rate forecast presented and the proposal of holding the repo rate unchanged. The fact that the Swedish economy is quite far from the normal model values does not change this conclusion. In Sweden, the recovery directly following the financial crisis was stronger than in many other developed economies. Now, the Swedish economy is being impacted by the new slowdown abroad and the financial unease, primarily via effects on foreign trade and the growth in wealth. Growth is expected to slow down and to be lower over the next year than the previous forecast suggested. Part of this effect was captured by the July forecast and, consequently, the forecast does not need to be adjusted downwards so much. GDP growth is expected to improve again in 2013. Sweden is expected to achieve growth quite close to average during the forecast period. Different indicators, both in Sweden and abroad, point to the same conclusion, and Mr Ingves agreed with the assessments of Barbro Wickman-Parak, Lars Nyberg and Svante Öberg.

All in all, resource utilisation is now deemed to be fairly close to normal. It will then rise slightly more slowly than previously forecast and is expected to be normal by the end of the period. This is not a simple assessment, as there are many different measures and, not least, it is difficult to predict both future potential GDP and the future functioning of the labour market. For his own part, Mr Ingves believed it would be difficult for monetary policy to fine-tune these variables. The difference between inflation measures remains fairly large. CPI inflation is 3.3 per cent, which is to say higher than CPIF inflation, which is 1.6 per cent. This is because CPI inflation considers the effects of interest rate rises on mortgage rates. The inflation forecast has been adjusted down due to less favourable developments abroad, lower electricity and oil prices and lower resource utilisation. CPIF inflation is expected to be below target this year before amounting to 2 per cent in 2013, while the currently-high level of CPI inflation is expected to decrease to 2.5 per cent. These are not particularly great changes.

The downward adjustment of the repo-rate path is appropriate to counteract the weakening of the economy and the more dampened development of CPIF inflation. This means that the Riksbank is now taking a break in adjusting the repo rate and will postpone any future increases until a slightly later date. This also means that the real interest rate will remain fairly low from a historical perspective. In this sense, monetary policy is continuing to be expansionary. But, today, it is particularly important to point out the uncertainty surrounding the position of the repo-rate path and the shape of the forecast fan, particularly further into the future. At the end of the forecast period, 90 per cent of the implied probability distribution of the repo rate will be between 0 and 7 per cent. Finding a balance between short and long term is difficult. For example, it may be that different alternative scenarios with poorer or better development are just as likely as the main scenario. This means that forecasts may need to be complemented with value judgements on sustainable levels of central variables, such as households' debt ratios. Consequently, Mr Ingves' conclusion was that the current repo-rate path is even more of a forecast than a promise than usual. The forecast is based on the assumption that the debt problems will gradually be resolved at the same time as we experience normal wage formation at home. If this is not the case, we will have to reassess monetary policy later on.

Deputy Governor **Lars E.O. Svensson** wished to make a couple of comments. Mr Svensson first addressed a more general issue. As everybody knows, foreign and Swedish yield curves have shifted downwards considerably since July. As most people know, the repo rate and the shortest interest rates over the coming two months matter very little, or not at all, to the economy. What does matter to decisions on investment and saving and to asset prices and exchange rates is interest rates with longer maturities, a couple of years or more. That is, what matters is the entire market yield curve. Monetary policy acts by influencing the market's yield curve.

In Figure 2, the blue curve shows the present actual market yield curve. It has shifted markedly downwards since July. Mr Svensson has previously described this curve as the actual monetary policy, as it represents monetary policy's actual impact. It could also be said that the curve reflects the actual financial conditions. Monetary policy acts by influencing financial conditions. To be quite accurate, these financial conditions also include the maturity structure of mortgage loans, corporate loans, housing bonds and corporate bonds, but Mr Svensson chose not to address those in detail.

The red curve in Figure 2 shows the yield curve that is currently compatible with the repo-rate path in the main scenario, that is, the yield curve that would arise if the repo-rate path was fully credible and forward premiums were normal. This yield curve is what Mr Svensson has previously called the intended monetary policy. It could also be called the intended financial conditions, or just the financial conditions that are compatible with the repo-rate path.

In Figure 2 it can be seen that a five-year market interest rate is just over 150 basis points (adjusted downwards by 30 points, a normal forward premium). But the five-year interest rate compatible with the repo rate path is about 320 points, which is to say about 170 points higher. What can be seen from this is that the financial conditions that are compatible with the repo-rate path are dramatically tighter than the financial conditions that the market is now implementing. Earlier, during the worst part of the crisis, the Swedish economy benefitted from the steep depreciation of the krona. At present and, in fact, since the start of 2010, the Swedish economy is benefitting from the implementation by the market of financial conditions (and thus the actual impact of monetary policy) that are much more expansionary than the financial conditions compatible with the repo-rate path. Mr Svensson considered this to be good and hoped that the market would continue to do this. It would be devastating for the Swedish economy if the repo-rate path became credible and the five-year rate rose by 170 basis points.

Mr Svensson then continued to say what he had said at the previous monetary policy meeting and had developed in more detail in the paper for the Brookings Conference he mentioned, namely that he believes that the fact that the development of the Swedish economy was better than expected over the last year may well have been significantly due to the implementation by the market of financial conditions that were much more expansionary that those that would have been compatible with the repo-rate path. As we know, the five-year rate from February 2010 to July 2011 has been about 85 basis points lower than the rate compatible with the repo-rate path, and it seems reasonable to suggest that this has implied a considerable stimulus for the Swedish economy.

To gain an understanding of the effect this shift in five-year rates has had on the economy, Mr Svensson said that we could try translating them to shifts in the policy rate that would have had approximately the same effect on the economy. For the United States, the Federal Reserve usually uses a factor of four when translating 10-year rates to the Federal Funds Rate with approximately the same effect on the economy. This is to say that 50 basis points for a 10-year rate (according to many, the approximate effect of QE, quantitative easing) corresponds to about 200 points for the Federal Funds Rate. For Sweden, a regression of five-year rates on short interest rates indicates that a factor of between two and three is suitable for the translation of shifts in five-year rates to shifts in repo rates with approximately the same effect on the economy. This means that a decrease of the five-year rate by 85 basis points (the average between the start of 2010 and the summer of 2011) would have about the same effect on the Swedish economy as a decrease of the repo rate by between 175 and 250 points. According to these calculations, the 170-point lower five-year rate we see at this monetary policy meeting would have about the same effect on the economy as a decrease of the repo rate by 350 to 500 points. These are undeniably prodigious figures. If this standard approach is the right way of calculating, these are no trivial effects. This deserves to be thoroughly examined.

Mr Svensson wished to comment on some questions that Mr Öberg addressed in his previous contribution. As regards the question of the CPI and the CPIF as target variable, Mr Svensson's firm conviction is that it is inappropriate to jump back and forth between different variables, sometimes referring to one and sometimes to the other. This allows quite different monetary policies to be justified. To create order in monetary policy, we should keep to one index. In this case, it would be better to consistently use the CPIF and disregard, in monetary policy, the direct effects on the CPI caused by interest rate changes. This would only entail the stabilisation of the CPI in the somewhat longer term.

Mr Svensson also commented on resource utilisation and the indicators that suggest that this is now close to normal. These indicators give approximately the same impression as the output gap. Considering how potential GDP is estimated, the output gap is not a reliable indicator and is currently biased towards excessive resource utilisation. The other indicators that Mr Öberg mentioned largely measure the short-term 'slack' in the economy, more or less like the short-term NAIRU Mr Svensson mentioned. That is to say that they are primarily indicators of inflationary pressures. But what is relevant for resource utilisation as a target variable is resource utilisation in relation to a long-term sustainable rate. According to the publication Monetary Policy in Sweden and the summary at the start of every Monetary Policy Report, the aim is "to stabilise production and employment around long-term sustainable paths". This means stabilising unemployment around a long-term sustainable rate, not around a short-term NAIRU. The relevant target variable is the unemployment gap to the long-term sustainable rate. As an aside, when it comes to the calculation of potential GDP with the production method, as far as Mr Svensson is aware, the actual capital stock is currently used. But it should be the long-term sustainable capital stock.

Mr Svensson also addressed Mr Öberg's earlier contribution on uncertainty and monetary policy and referred to Goodhart and Rochet's evaluation. In this, they give the impression that a great deal of uncertainty means that monetary policy is not hugely important, that it is unimportant which repo rate path is chosen, and that the effects of monetary policy are "dwarfed" by the great uncertainty that exists. This is a huge mistake and a major misconception. Great uncertainty is no reason to sit back, to fail to conduct the best possible monetary policy, to fail to do your best.

How monetary policy ought to be conducted in times of uncertainty has been carefully investigated and is well-known in the international literature, Mr Svensson pointed out. For example, when it comes to target fulfilment for inflation, the realised target fulfilment can be measured by the squared deviations of inflation from target. This term can be divided into two. The first term is the squared deviation of the mean forecast from the target. The second is the squared forecast errors, the squared deviations of the inflation outcome from the mean forecast. This latter is the term representing the uncertainty. Its variance is the variance of the forecast errors. This variance can sometimes be extensive, sometimes less extensive, depending on the level of uncertainty in the economy. In principle, it is independent of monetary policy. Normally, monetary policy cannot do anything about this uncertainty. What monetary policy can do something about is the first term, the square of the mean forecast's deviation from target. This is the term represented by the mean square gap. It becomes smallest when monetary policy is adjusted so that the expected-value forecast is on target.

Target fulfilment thus consists of two additive and normally independent terms. The first, the mean square gap, can be influenced by monetary policy. The second, the square of the forecasting errors, cannot normally be influenced by monetary policy. The fact that the second term is sometimes large and sometimes not so large is no reason not to minimise the first term and thereby together achieve the best target fulfilment. Regardless of whether uncertainty is large, we should always do our best in monetary policy. This means minimising the mean squared gap. It is by conducting monetary policy in the best possible way, regardless of whether uncertainty is large or small, that inflation targeting has been such a success over the last two decades.

Deputy Governor **Karolina Ekholm** took up the discussion of CPI inflation against CPIF inflation. Her assessment that a lower repo-rate path is preferable to that proposed in the draft Monetary Policy Update is based on her focus on the forecast for CPF inflation rather than CPI inflation. She explained that she considered that it is more relevant to focus on CPIF inflation over the short term, but considered that there may be situations in which a high level of CPI inflation may form a problem. But, in that case, this would be because a high level of CPI inflation risks leading to high inflation expectations that would then impact actual inflation, above all via high wage increases. However, Ms Ekholm's opinion was that, at present, there was no great risk of such a scenario. Given the prevailing situation in the economy, she did not believe that the relatively high level of CPI inflation would lead to high inflation expectations. She also believed that the slowdown of economic activity would have a dampening effect on the wage increases to be agreed upon in the approaching wage bargaining rounds.

Governor **Stefan Ingves** pointed out that a majority of the Executive Board members considered that the actual monetary policy is the policy that was decided on and implemented.

He then summarised, as chairman of the meeting, the monetary policy discussion by stating that most members of the Executive Board stand behind the forecasts in the Monetary Policy Update, but that there are certain slight differences of opinion. There is also agreement that the repo rate should be held unchanged and a majority stands behind the proposed forecast for the repo rate.

§ 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 at 09.30 on Wednesday, 7 September 2011

to hold the repo rate unchanged at 2.0 per cent and

- that this decision would apply from Tuesday, 13 September 2011,
- to publish the decisions above at 09.30 on Wednesday, 7 September 2011 with the motivation in a press release, and
- that the minutes of today's meeting would be published at 09.30 on Tuesday, 20 September 2011

However, Deputy Governor Karolina Ekholm and Deputy Governor Lars E.O. Svensson entered a reservation against the repo rate path in the Monetary Policy Update.

They preferred a repo-rate path that remains at 2 per cent until mid-2013 and then rises to 3 per cent by the end of the forecast period. This was justified by their assessment that the Update's forecasts of foreign policy rates and Swedish resource utilisation were both too high. According to Ms Ekholm and Mr Svensson, the repo-rate path they prefer 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