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Minutes of the Executive Board's Monetary Policy Meeting, No. 3

DATE: 4 July 2011
TIME: 09.00

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

Sigvard Ahlzén
Hanna Armelius
Claes Berg
Johanna Eklund (§1)
Eric Frieberg
Gudrun Gunnarsdottir (§1)
Ann-Christine Högberg
Cecilia Roos-Isaksson
Per Jansson
Johanna Jeansson
Anna Lidberg (§1)
Tomas Lundberg
Pernilla Meyersson
Marianne Nessén
Christina Nyman
Ulf Söderström
David Vestin

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

§1. Economic developments

Gudrun Gunnarsdottir of the Financial Stability Department began by presenting recent developments regarding financial stability. The situation on the financial markets has largely been characterised by unease concerning public finances in Greece. This has led to increased volatility and to a reduction in risk appetite on the financial markets. The short-term demand for US dollars has increased, as have credit spreads.

The funding situation of the Swedish banks has partly been affected by the events in Greece. Liquidity has decreased on the short-term krona, dollar and euro markets. Our

assessment is that the greatest risk with regard to the Swedish banks is the shortage of funding in dollars. Dollars are available at present, but maturities have been shortened and prices have risen. However, the Swedish banks were not affected by the collapse of the Danish bank Fjordbank

Anna Lidberg of the Monetary Policy Department presented the most recent developments on the financial markets. Share prices and government bond rates have fallen, and the krona has weakened, since the monetary policy meeting in April. Monetary policy expectations measured in terms of adjusted implied forward rates have also shifted downwards in Sweden by almost 50 points over horizons of one and two years. According to market pricing, two further repo-rate increases are expected this year. The Prospera survey indicates monetary policy expectations that are higher and more in line with the repo-rate path. There are relatively small deviations between the repo-rate forecasts of the major banks and the National Institute of Economic Research, and they are spread around the repo-rate path.

Developments abroad have been similar to those in Sweden. Monetary policy expectations as indicated by implied forward rates have fallen in the United States and the United Kingdom. In the euro area the ECB is expected to raise its policy rate to 1.5 per cent this week, but expectations regarding developments in the period after this have shifted downwards.

Christina Nyman of the Monetary Policy Department presented the draft Monetary Policy Report. She began by noting that the forecasts in the draft report were discussed by the Executive Board at meetings held on 14, 15 and 21 June. The text was tabled at a meeting with the Executive Board on 28 June. The most important new information received regarding Sweden since the monetary policy meeting in April has been in the form of the figures for GDP in the first quarter, inflation in April and May and unemployment in the period March to May. The outcomes for all these variables have been well in line with the April forecasts and have therefore given rise to only minor revisions. The oil price has fluctuated considerably during the period and is now somewhat lower than in April.

New statistics on unemployment in May, which was somewhat higher than forecast, and on foreign trade in goods, which was somewhat stronger than expected, have become available since the final forecast meeting with the Executive Board on 21 June. New figures on retail-sector sales were, however, slightly weaker than expected. According to the Business Tendency Survey activity has slowed down somewhat, but it still indicates strong growth, while the purchasing managers' index fell below its historical mean in June. Recent statistics from the United States also indicate that consumption has been weak. All in all, this means that the forecast for GDP now looks a little weaker in the short term, while the picture for the long term remains the same. Sweden's economy is now entering a more normal growth phase, just as expected in April. On the other hand, uncertainty about the global economy has increased.

The picture regarding developments abroad is divided. The emerging economies in Asia are in need of policy tightening, while the recovery in Europe and the United States remains relatively slow. Following a period of high growth, the situation is now returning to normal in the Swedish economy. However, the labour market has not yet fully recovered. Resource utilisation will be normal, or slightly above normal, during the

forecast period. CPI inflation is clearly above the target of 2 per cent, but CPIF inflation is more in line with the target. In periods of significant changes in the repo rate, the CPIF provides a better picture of inflationary pressures. However, the two measures will converge over the longer term.

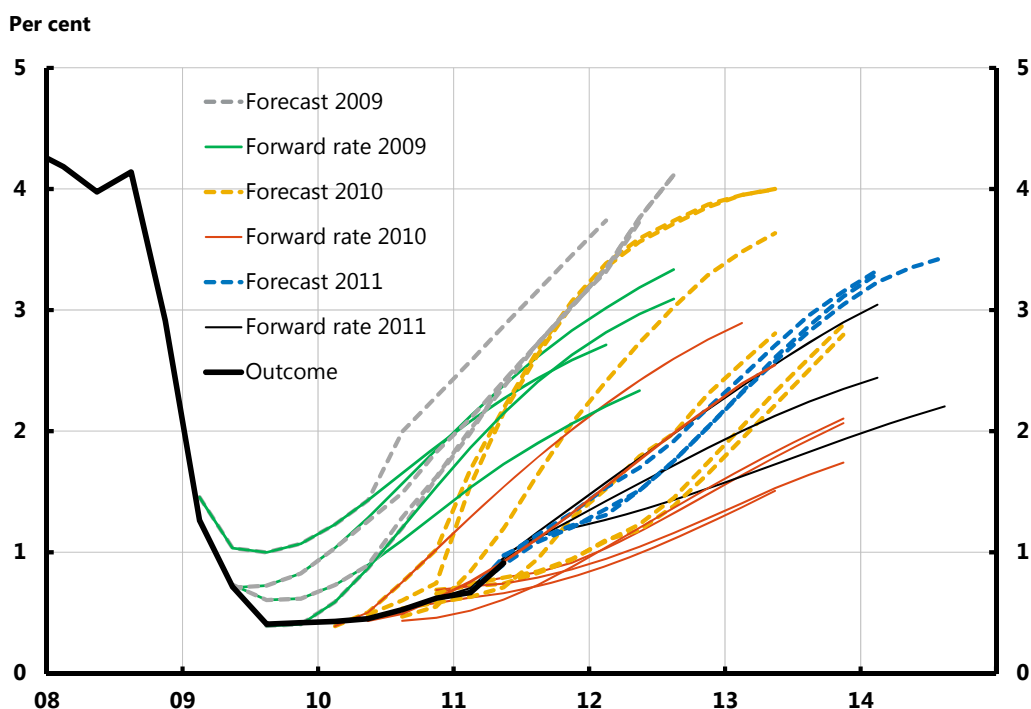
According to the draft Monetary Policy Report, there is a need to gradually increase the repo rate to more normal levels to stabilise inflation around the target of 2 per cent and resource utilisation around a normal level. The repo-rate path in the draft Monetary Policy Report remains unchanged compared with the April Monetary Policy Update. The repo-rate will be gradually raised to 3.8 per cent by the third quarter of 2014.

§2. Economic outlook abroad

Deputy Governor **Lars E.O. Svensson** began by saying that that he largely shared the view of developments abroad presented in the draft Monetary Policy Report with regard to inflation and GDP. However, as previously, he believed that there were problems associated with the assumption regarding foreign interest rates and the forecast for foreign policy rates. The forecast for foreign policy rates has been systematically too high for some time now. A too high forecast for foreign policy rates leads to a bias towards a too high repo-rate path, all else being equal. A higher policy-rate path for foreign rates, all else being equal, leads to a weaker forecast for the krona via the interest-rate differential between Sweden and abroad. The Swedish repo-rate path must be higher to counteract this.

Mr Svensson showed examples of this in Figure 1. The unbroken black line shows the outcome for a TCW-weighted foreign policy rate. The thick broken lines show the Riksbank's forecasts for foreign policy rates at the monetary policy meetings held since the start of 2009, with different colours for different years. The thin unbroken lines show adjusted implied forward rates for TCW-weighted policy rates. The Riksbank's forecasts are well above the implied forward rates. This becomes even more apparent when we look at forecasts, forward rates and outcomes for the individual policy rates included in TCW, for example the United States' Federal Funds Rate. The implied forward rates are in several cases above the outcomes for the policy rates, but they are significantly better forecasts than the Riksbank's forecasts. It would thus have been better to use the implied forward rates than to produce our own forecasts. As the forecast for foreign policy rates has such a great impact on the Riksbank's repo-rate path, Mr Svensson said that it would be better to use the implied forward rates, which are determined outside the Riksbank, unless there are clear reasons for deviating from them.

Figure 1. The Riksbank's forecasts, implied forward rates and TCW-weighted policy rate



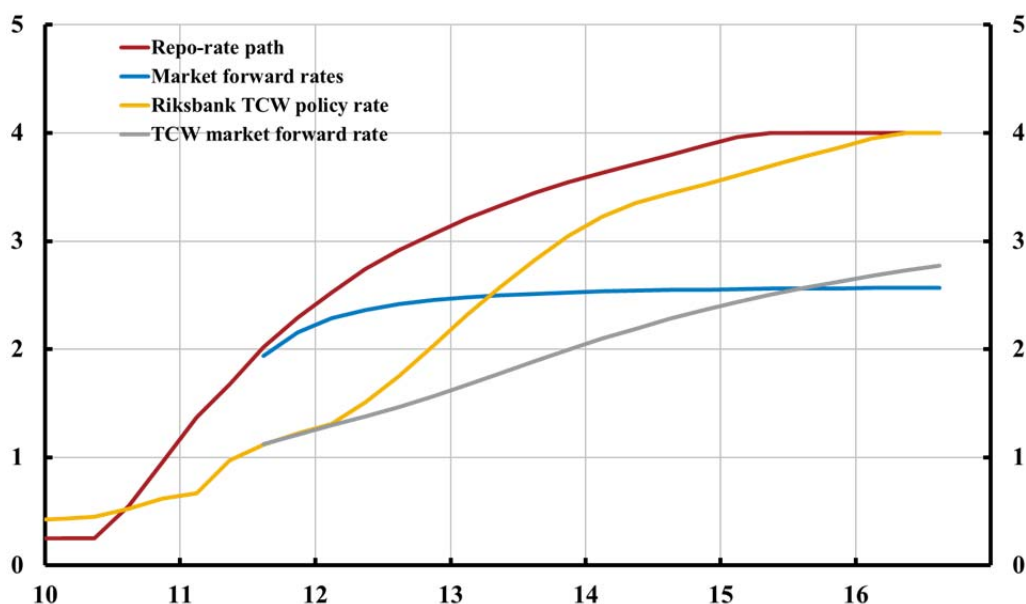
Sources: Reuters EcoWin and the Riksbank

Note: The implied forward rates are adjusted for credit risk and maturity premiums using a rule of thumb.

The Riksbank's high forecasts for foreign policy rates have sometimes been justified by saying that the current low level of foreign rates is not consistent with the Riksbank's models and historical patterns. However, the current situation in Sweden and abroad is very special. Models and historical patterns work well in normal circumstances, but perhaps not so well under the present very special circumstances. If models and reality differ, Mr Svensson said that it is reality that should apply.

Figure 2. Repo-rate path, forward rates and the Riksbank's 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.

Mr Svensson continued by referring to Figure 2, where the yellow line shows the current forecast for TCW-weighted foreign policy rates. The grey line shows TCW-weighted implied forward rates. Mr Svensson has extended the period for the forecast and the implied forward rates to a five-year horizon. The forecast is 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 Report 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 may, for example, be based on an analysis of monetary policy considerations in the euro area, the United Kingdom and the United States. Mr Svensson said that it was important that the deviations did not appear arbitrary. There should be no grounds for suspecting that the Riksbank produces high forecasts for foreign interest rates in order to justify a high repo-rate path.

To sum up, Mr Svensson thus claimed that the forecast for foreign policy rates is much too high and that this contributes to the repo-rate path being too high. He believed that there were several reasons why it would be better to base this forecast on foreign implied forward rates. He said that it was important to monitor this issue in the future and that any deviations from implied forward rates should be well justified and discussed in detail.

Deputy Governor **Karolina Ekholm** began by stating that she largely shared the assessment presented in the draft Monetary Policy Report. She said that there are a couple of particularly difficult issues that have to be decided on when forecasting

inflation and GDP abroad. One is what to expect with regard to developments in the euro area given the problems with weak public finances in several of the countries. In the near-term, it is the situation in Greece that is creating a great deal of uncertainty and risks with regard to financial stability in Europe. In the slightly longer term, however, there are also obvious problems in implementing sufficiently strong budget-consolidation measures to make public finances sustainable in several other countries, a situation she felt was described well in an article in the draft Monetary Policy Report. The forecast for the main scenario in the draft report is based on the assumption that the countries in the euro area will nevertheless manage to handle the debt problems in a way that will not seriously disrupt financial stability. Ms Ekholm said that this was a reasonable assumption, even though the management of these problems to date does not appear to have been particularly effective. It is also reasonable to assume that there is some likelihood that the situation will not be dealt with successfully and that something like a real crisis will develop, which is a scenario that is analysed in Chapter 2.

Ms Ekholm said that another difficult issue is how to view the slowdown in the recovery of the US economy that has recently become apparent. A crucial question is whether the slowdown is entirely driven by temporary factors – such as higher petrol prices which are dampening other private consumption or reduced access to input goods from Japan as a result of the earthquake there – or whether this is a more lasting slowdown. The forecast assumes that it is mainly a case of temporary factors and Ms Ekholm said once again that she believed this is a reasonable assumption. However, if the outcomes fail to indicate an upturn in growth during the second half of 2011 this assumption may have to be revised and the Riksbank will perhaps have to take into account that structural weaknesses in the US are playing a greater role than was previously assumed.

However, she was once again sceptical about the forecast for policy rates abroad for the same reasons as previously put forward by Mr Svensson. During the first quarter the forecast follows market expectations as indicated by implied forward rates, but then it begins to deviate upwards and this deviation gradually increases towards the forecast horizon. Ms Ekholm said that it was still unclear why one should expect significantly higher interest rates than those indicated by implied forward rates, although she had nothing in principle against the forecast deviating from market expectations. As previously, she believed that the economic situation in the currency areas that carry a lot of weight in the TCW; that is the euro area, the United States and the United Kingdom, is such that it is difficult to believe that interest rates will rise quickly in the period ahead.

It is true that the ECB has raised its policy rate due to increasing inflation, and that it has signalled a further increase at the next meeting. However, given the current problems in large parts of the euro area it is hard to believe that interest rates will rise quickly. In the case of the United States and the United Kingdom, the development of the real economy is so weak and the need for budget consolidation so great that even with increasing inflation it is difficult to see why the central banks would want to increase their policy rates more quickly.

Ms Ekholm pointed out that the forecast for policy rates abroad has been revised downwards in the draft Monetary Policy Report compared to the forecast in the Monetary Policy Update in April, but that it is still well above the policy rates that appear to be expected by the market. Mr Svensson had already explained why this matters. Swedish

and foreign interest rates are interlinked via the exchange rate, which means that the forecast for foreign policy rates has consequences for the forecast for the Swedish repo rate.

Deputy Governor **Lars Nyberg** pointed out that the financial markets, despite all the events of last week, are still dominated by rumours and speculation about what will happen next in Greece. In economic terms Greece is rather a small country, accounting for only a few per cent of GDP in the EU, and in financial terms it is even smaller. Economically it would have paid off to find a solution to the Greek crisis a long time ago, given the costs in the form of less efficient markets and falling stock markets that the uncertainty has led to. However, Greece is now part of the euro area and this means that the crisis must be resolved politically and at the European level. Mr Nyberg noted that the European mechanisms for resolving crises do not appear to work particularly well.

Financial market investors are wondering, and justifiably so, how a crisis in a larger country could possibly be managed if it is not even possible to reach agreement on how to deal with Greece. Or, to put it another way: A failure to manage what in economic terms is the relatively minor Greek crisis will probably lead to market confidence being largely undermined. How would the political process in the euro area, and to a certain extent in the EU, then be able cope with the really serious problems that could arise in Portugal, Spain or Belgium? Mr Nyberg said that a failure to deal with the situation in Greece would probably lead to serious and lasting uncertainty on the financial markets in Europe. Investors will expect the problems evident in a number of countries to worsen and they will lack confidence in the ability of the political process to deal with them. Investors will then place their money elsewhere, which normally makes it more difficult for companies and banks to find funding and leads to increasing interest rates and falling share prices. Mr Nyberg thus believed that a failure in Greece could have major consequences – consequences that would be more far-reaching than the impression one gets when reading a number of the analyses now circulating on the market. A relatively minor economic crisis may quickly become a major political crisis.

It is also the case that the management of the crisis may fail not only because of an inability to reach agreement in the euro area but also because the Greeks themselves fail in their political process. A number of obstacles have been overcome, but many still remain. Although it is in everyone's interest to succeed, this will not necessarily be the case. Mr Nyberg said, however, that as always it was difficult to take factors such as this into account in monetary policy in a meaningful way and that he intended to return to this during the discussion of the repo rate. Either there will be an unfortunate outcome in some way and we will then have to see what this entails and deal with it, or it will be possible to avoid an acute crisis and the world will roll along, more or less as in the Riksbank's main scenario. He shared the view of the global economy presented in the draft Monetary Policy Update. The concern about the weaknesses in the US economy and parts of the European economy was worth emphasizing, as several of his colleagues on the Executive Board had already done

In the midst of this prevailing uncertainty, the EBA, the European supervisory authority, together with the national supervisory authorities, is also conducting this year's stress tests of ninety or so European banks. It will probably turn out that a number of them have too little capital, both in the view of the test and of the market, especially in relation to

their holdings of government bonds from countries in southern Europe. Mr Nyberg said that it was of course highly unfortunate that sovereign debt problems and bank problems are so closely interlinked, but that this relates to the fact that many European countries have not yet, either by private or public means, been able to capitalise their bank systems following the crisis. It is not so easy to acquire new risk capital on the market in the current situation even for banks with strong balance sheets, and it is probably particularly difficult for those whose long-term solvency is being questioned. The risk is that a number of member states will once again have to intervene to capitalise parts of their banking systems using tax revenues. Some of the countries have credible backstops available, others unfortunately do not. This of course constitutes a further uncertainty factor to add to all the others.

Deputy Governor **Barbro Wickman-Parak** pointed out that when the Executive Board discussed international developments in April, her view was that, given the uncertainty factors that existed at the time, it was easy to speculate that developments would take a different course than in the main scenario that then applied. What she mainly referred to in April was the precarious situation in various countries in southern Europe and the risk that this would disrupt the financial markets with repercussions for economic activity. Ms Wickman-Parak said that this risk still exists, but as several members of the Executive Board had already discussed this she did not want to elaborate further but wished instead to comment on the high-degree of uncertainty that has developed concerning global economic activity in general.

She pointed out that when discussing the United States at previous meetings her focus had been on the fact that various signs could be interpreted to indicate that growth there is beginning to become self-sustaining. This is an important precondition for reasonable growth once the stimulating effects of fiscal policy measures waned and the time comes to tighten policy again. She said that with the support of statistics and indicators she has been confident that such a process could be underway. However, the latest statistics on strategic factors such as the labour market, private consumption and the housing market have not been encouraging.

The forecast for growth in the United States this year has been adjusted downwards by 0.5 percentage points, partly because of weaker growth during the first quarter. The Riksbank's main assumption is, like that of many other forecasters, that the current slowdown is temporary and that growth can be expected to accelerate in the second half of the year. The earthquake in Japan appears to have had greater negative effects than expected, above all on the US motor vehicle industry. This has led to production losses and has also affected the labour market. Increases in petrol prices may be one of the factors that explain the weak growth in consumption. Ms Wickman-Parak noted that Ms Ekholm had already commented on these factors. Confidence indicators now suggest that the Japanese recovery has begun and oil prices have fallen somewhat recently. This increases the potential for stronger growth. However, there may also be structural problems in the US economy that could hamper growth in the period ahead.

Ms Wickman-Parak noted that the international forecast for the world as a whole was practically unchanged compared to the forecast in April. However, as pointed out in the draft Monetary Policy Report there are major risks. One of the figures in the report, for example, shows purchasing manager indexes for different parts of the world, including

the BRIC countries. The indexes have fallen in all of the areas concerned. She wondered whether this may herald a more marked slowdown in global growth. The existence of temporary factors makes it difficult to determine whether this is the case. Ms Wickman-Parak said that it was an open question how the countries experiencing rapid growth would manage the balancing act of tightening policy to prevent overheating and inflation without inducing a slump in growth.

She reminded the meeting that there was a temporary slump in the spring and summer of last year which was also reflected in fears that there would be a downturn in economic activity, fears that later proved to be unfounded. She supported the international forecast in the draft report but said that her misgivings regarding the strength of economic activity had increased somewhat. She hoped that the statistics that would become available during the summer and autumn would provide more guidance.

Ms Wickman-Parak also wanted to say a few words about forward rates. These can fluctuate significantly over a short period of time. In February, for example, forward rates increased rather substantially compared to the situation at the time of the preceding report. In April the opposite was true, and these rates have shifted downwards this time too. Should this be interpreted to mean that weaker economic activity has significantly dampened monetary policy expectations? The Executive Board has on several occasions discussed how best to translate forward rates into monetary policy expectations. The fact that these rates have fallen recently may relate to the risks in Europe. When investors, for example US money market funds, flee Europe they look for somewhere to “park” their money, and US government securities are usually regarded as a safe haven in such cases. This pushes down the forward rate curve in the United States. As Mr Svensson had already mentioned, the forecast for foreign policy rates has rather a significant impact on the forecast for the repo-rate path. This means that if the Riksbank were to use forward rates as a forecast of foreign policy rates then the forecast for the Swedish repo rate would also fluctuate a lot.

Governor **Stefan Ingves** said that he shared the view of international developments presented in the draft Monetary Policy Report. The recovery of the international economy has continued, but at a slightly calmer pace. There are still considerable differences between different parts of the world, with good growth and a high level of resource utilisation in the emerging economies in Asia and Latin America, which is pushing up commodity prices around the world, but a more sluggish recovery in the developed economies.

Commodity prices, which have lifted inflation in both the emerging and developed economies, have increased for several reasons. The strength of the international recovery is an important factor, but various supply disruptions, relating to factors such as the weather and political unrest, have also played a role. High energy, food and metal prices during a sustained period of time can lead to increasing inflation. This, in combination with a monetary policy that is not sufficiently tight in some countries, may lead to rising wage demands. Higher wage costs in the emerging economies may also affect underlying inflation in the developed countries through globalised production chains. Mr Ingves noted that it is difficult to know exactly to what extent this may happen but said that the situation is different now compared with the last 15 years. Sweden benefited earlier from dampened or even falling import prices, but now there is a risk of increasing inflation

impulses from abroad. Mr Ingves said that this was a factor that should be monitored. He also said that this entails a risk of a development that will be more difficult to manage from a monetary policy of view.

Mr Ingves said that he shares the analysis of the situation in the United States and Europe presented by the other members of the Executive Board. He wished to add, however, that much of the discussion in the United States has been based on a cyclical perspective. The current questions about the situation in the United State are based on a perspective that stretches far into the future, which means that the focus shifts to structural problems in the economy. Mr Ingves said that Mr Nyberg had presented a sound analysis of the situation in Greece but pointed out that in northern Europe there are countries that are growing at a relatively good rate and these countries are more important to Sweden. They are also large economies and ongoing good development there may therefore lead to continued interest rate increases in the euro area.

On the one hand there are thus countries that must tighten monetary policy while on the other there is a risk of a public debt crisis in Europe. It is therefore a case of finding a balance. For the world as a whole, Mr Ingves said that monetary policy should gradually become less expansionary, but with major differences between the countries. In such a context, monetary policy in Sweden should probably lie between those that need to maintain a much higher interest rate and those who need to maintain a lower rate.

With regard to whether the Riksbank should produce its own forecasts for international policy rates or use forward market pricing, Mr Ingves noted that this issue had been discussed before and as far as he could see the majority had not changed its view and there was thus no need to discuss the issue further today. The Riksbank should produce its own staff forecasts for interest rates. Any further analysis should be part of the general development and evaluation work. Mr Ingves also shared Ms Wickman-Parak's view that given the relatively large fluctuations in forward pricing it would not be a good idea to only use adjusted implied forward rates as a forecast of monetary policy abroad. He said that the discussion of the impact of foreign interest rates on the exchange rate reminded him of the debate on the Monetary Conditions Index that was used in the 1990s. This debate was also unsuccessful in establishing a clear short-term link between interest rates and exchange rates.

First Deputy Governor **Svante Öberg** said that he shared the view of international economic developments presented in the draft Monetary Policy Report. He said that the forecast for the world economy was reasonable. The recovery is continuing at a good pace around the world, although growth is weaker in Europe and the United States. The forecasts have been revised only marginally since April.

However, despite the slow recovery in the euro area inflation is significantly higher than the ECB's target. Underlying inflation has also increased during the spring and the ECB is expected to raise its policy rate in July. This makes it easier for the Riksbank to raise the repo rate as the interest rate differential in relation to the euro area will be smaller and the potential strengthening of the krona will thus be weaker.

It has been possible to deal with the problems in Greece so far but the crisis is far from over. Should Greece suspend its payments, this could lead to renewed unrest on the financial markets. If the problems were also to spread to Ireland and Portugal, and

perhaps even to Spain and Italy, the situation could become very difficult. Another risk is if the results of the European stress tests that will be presented in July show that a number of European banks are not sufficiently capitalised. At this point Mr Öberg referred to previous comments by Mr Nyberg.

Mr Öberg also agreed with Ms Wickman-Parak that the situation in the United States is worrying. Both monetary policy and fiscal policy must be tightened there in the longer term. A very strong, self-sustaining recovery of the economy will therefore be required to achieve reasonable GDP growth. If monetary policy and fiscal policy are not tightened, then other problems will arise in terms of financial imbalances and an unsustainable development of public finances.

The main scenario is nevertheless that the sovereign debt problems in Europe can be managed without major problems arising on the financial markets. However, if problems do arise the Executive Board must of course be ready to take measures to preserve financial stability and to reconsider the direction of monetary policy.

Otherwise, the risk that inflation abroad will be higher than expected by the Riksbank has probably declined, at least in the short term, and particularly considering that the forecast for inflation abroad has been revised upwards slightly. Price increases for energy and commodities have been more subdued recently. In the slightly longer term, however, the strong growth in demand around the world may push up energy and commodity prices more than is assumed in the forecast in the main scenario. The BIS has also recently warned that the too expansionary monetary policy in the world as a whole is becoming a threat to price stability. Mr Öberg agreed with Mr Ingves that low interest rates for long periods of time can lead to problems.

The strong growth in some parts of the world is generating a tendency towards stagflation in the United States and Europe where rising energy and commodity prices are leading to too high inflation and too low growth at the same time.

Deputy Governor **Karolina Ekholm** wished to take up the discussion of to what extent adjusted implied forward rates are a suitable basis for the forecast of foreign policy rates. She pointed out that, as she had mentioned earlier, she had nothing in principle against the forecast deviating from market expectations as indicated by implied forward rates. However, she would nevertheless wish to use these expectations as a starting point and then explicitly discuss whether a deviation in any direction was justified. As had been pointed out, forward rates can fluctuate rather a lot and sometimes the basis for this is unclear. This could be a reason for wanting to deviate from the implied forward rates when forecasting foreign policy rates. Ms Ekholm would like to see deliberations like this being made explicit and clarified in the presentation of the forecast.

Deputy Governor **Lars E.O. Svensson** referred to Ms Wickman-Parak's comment that foreign forward rates often vary considerably. He agreed that these rates can fluctuate a great deal. He also agreed that they can reflect shifts in expected future rates as well as shifts in forward premiums. However, the implied forward rates reflect the actual market rates, that is the actual yield curves for foreign interest rates at different maturities. It is these actual interest rates that affect the exchange rate, irrespective of whether they shift due to changes in expectations about future rates or changes in forward premiums. Mr Svensson repeated that what he particularly wanted to emphasise was that the Riksbank's

forecasts are systematically too high and therefore entail a bias towards a higher repo-rate path without any special reasons being given for this.

Mr Svensson said that how to handle shifts in foreign forward rates and the extent to which such shifts justify shifts in the repo-rate path are factors that the Riksbank should examine more closely in the future. It is, for example, appropriate to take an average of forward rates over a number of weeks as a starting point to handle the more short-term shifts.

Mr Svensson also wished to comment on Mr Ingves remarks on the possibility of higher inflation around the world and whether this would pose problems to monetary policy in Sweden. Mr Svensson said that it was important to remember that general world inflation is in itself not a problem as a floating exchange rate makes it possible to separate general world inflation from inflation in Sweden. What may become a problem is large relative price changes, as in 2008 when central banks had to deal with rising relative prices for oil and commodities. In such a case, the appropriate monetary policy depends, for example, on whether the relative price changes are a temporary phenomenon or a trend that will last for several years, something that may be difficult to determine.

Governor **Stefan Ingves** summed up the discussion on the international outlook by noting that there was support among the members of the Executive Board for the general description of the international economic outlook presented in the draft Monetary Policy Report. In addition to this, various Board members had highlighted different aspects of economic development in different countries, including the forecast for foreign policy rates, and how these may affect Swedish monetary policy.

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

First Deputy Governor **Svante Öberg** said that he shared the view of economic developments in Sweden presented in the draft Monetary Policy Report. The forecasts for GDP growth, employment and unemployment remain largely unchanged compared to the forecasts in April.

However, Mr Öberg said that there had probably been a downward shift in the risk outlook with regard to the development of the real economy. The recent rather weak figures for, for example, retail sales and the purchasing managers' index may be indications that the figure for GDP in the second quarter will be weaker than expected by the Riksbank. The latest labour force survey for May indicated that the improvement on the labour market may be slowing down.

The forecasts for inflation have not been noticeably changed since April either. The Riksbank still expects CPI inflation to be high, at an average of almost 3 per cent per year during the forecast period, and CPIF inflation to average just below 2 per cent year.

However, Mr Öberg said that the risk outlook is still on the upside with regard to inflation, especially for 2012 and 2013. Inflationary pressures have to date been held down by the delayed effects of the strengthening of the krona and when these effects wane inflation will increase. Rising prices on the world market for commodities and energy may also in the long term increase inflation in Sweden more than predicted by the Riksbank. Rising

pressure on the labour market may also lead to higher wage increases and thus to higher inflation than predicted by the Riksbank. The high rate of CPI inflation may increase expectations regarding inflation and wages. Wage expectations have increased significantly over the past year.

Mr Öberg's assessment was that the Riksbank should continue to raise the repo rate towards a more normal level. He therefore supported the proposal to raise the repo rate to 2 per cent.

The pace at which the repo-rate increases should be made was, as usual, difficult to assess. The repo rate is still very low in both nominal and real terms. This means that monetary policy, with a repo rate of 2 per cent, continues to support the recovery of the economy. At the same time, the repo rate must be raised in order to avoid inflation and resource utilisation becoming too high in the long term. According to Mr Öberg, a repo rate in line with a traditional Taylor rule would today be around 3-3.5 per cent.

Mr Öberg still believed that the repo rate will be raised at all three meetings in the autumn, especially if it turns out that the sovereign debt problems in the euro area can be handled without tangible negative effects on the financial markets.

One advantage of raising the repo rate a little more quickly than indicated in the proposed repo-rate path is that the Riksbank would be able to shorten the period with high CPI inflation. This would reduce the risk of the high rate of CPI inflation driving up inflation expectations in the longer term.

However, there is a great deal of uncertainty about interest rates in the future, so Mr Öberg did not wish to enter a reservation against the repo-rate path presented in the draft Monetary Policy Report. The important thing to him was that the Riksbank should continue to raise the repo rate towards a more normal level.

Deputy Governor **Lars E.O. Svensson** preferred an unchanged repo rate at this meeting and a repo rate path that first rises slowly to 2 per cent in the third quarter of 2012 and then rises faster to about 3.8 per cent by the end of the forecast period.

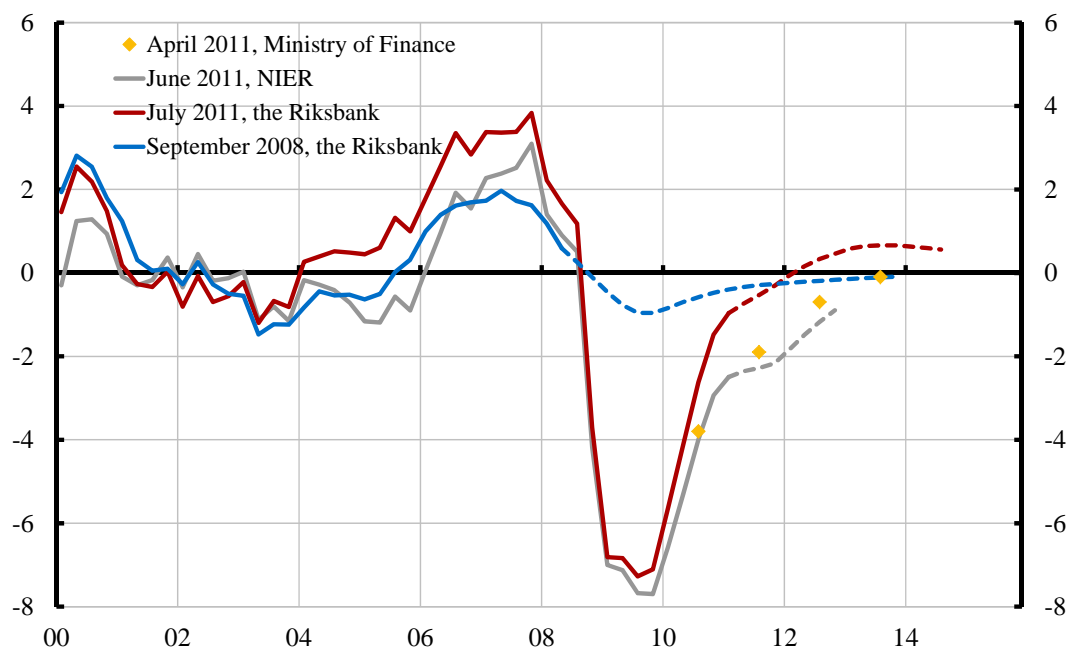
Mr Svensson considered the repo rate path in the main scenario to be too high for several reasons. He had already mentioned that one reason for a bias towards a too high repo rate path was a too high forecast for foreign policy rates. Another reason is a bias towards over-estimating resource utilisation in Sweden. A too low assumption of potential GDP means that the forecast for the output gap is too high; not negative enough at the beginning of the forecast period and too high and slightly positive at the end. One reason for this is that assumptions and estimates of potential GDP have shifted downwards considerably following the crisis. This is despite the fact that the crisis entails, from a 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 of 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.

As shown in Figure 3, the Ministry of Finance and the National Institute of Economic Research make different assessments, with a much more negative output gap. The draft Monetary Policy Report does not contain any discussion of why the Riksbank reaches an

assessment so different from those made by the Ministry of Finance and the NIER. The NIER's assessment is described in detail in their most recent Swedish Economy report and leads to the important conclusion that Sweden is in a recession in the form of a large negative output gap and a large positive unemployment gap, despite growth having been good. Mr Svensson found the NIER's analysis and assessment of the economic situation to be very convincing.

Figure 3. Production gap according to the Ministry of Finance, the NIER and the Riksbank

Deviation in percentage points



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

Mr Svensson felt that there often seems to be a lack of clarity in the monetary policy discussion with regard to what is meant by "conjuncture" and the "state of the business cycle", whether for instance this refers to the level of or the change in resource utilisation. It is generally the level that is relevant for monetary policy. The NIER is a good example, as they clearly speak of a recession despite growth.

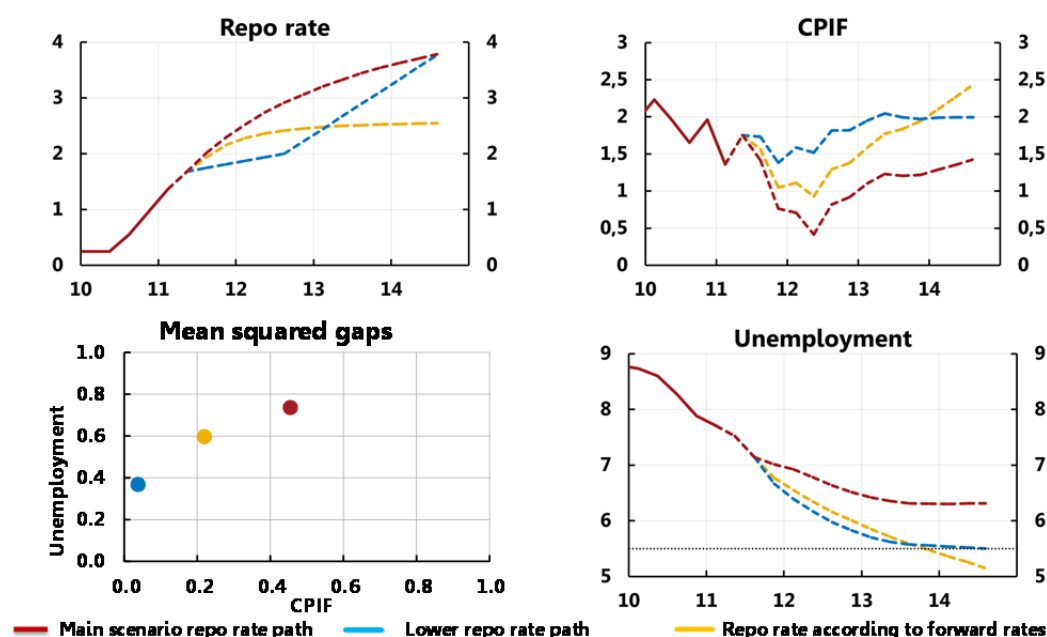
As the Riksbank's assessments of resource utilisation using an output gap and hours worked gap are not transparent and are in practice unverifiable, Mr Svensson considered it better to use the unemployment gap between the unemployment rate and the sustainable unemployment rate, the long-term equilibrium unemployment rate. The only difficult question then is what the sustainable employment rate is. As we know, the Ministry of Finance has in cooperation with some of Sweden's most prominent labour economists made a thorough analysis in a report, which reached the conclusion that the sustainable unemployment rate is 5 per cent. Mr Svensson considered this analysis to be the best so far. The NIER concluded in its Swedish Economy report in June that a sustainable unemployment rate was just over 6 per cent. Moreover, the NIER showed in its most recent report on wage formation that the sustainable unemployment rate could

be 6 or 5 per cent depending on how well wage formation works. For the time being, Mr Svensson adhered to his own preliminary assessment of 5.5 per cent, which is thus midway between the Ministry of Finance report and the NIER's Swedish Economy report. The Riksbank's earlier assessment of 6.5 per cent appears much too high, said Mr Svensson, particularly as it does not appear to include any analysis of the effect of the substantial structural labour market reforms in recent years. Mr Svensson considered the article in the draft Monetary Policy Report on what sector development of the labour market might be required to attain a 5 per cent unemployment rate to be interesting, but it offers neither a discussion of the sustainable unemployment rate nor is it a forecast of the unemployment rate.

Figure 4 shows monetary policy alternatives and Mr Svensson's assessment of the effects of different repo rate paths on the CPIF and unemployment, under the assumption that policy rates abroad are given by implied forward rates and that the sustainable unemployment rate is 5.5 per cent.

Figure 4. Monetary policy alternatives

Foreign policy rates according to implied forward rates; sustainable unemployment of 5.5%



Sources: Statistics Sweden, the Riksbank and own calculations

Note: The implied forward rates are adjusted for credit risk and maturity premiums using a rule of thumb.

The red repo rate path in the upper left-hand panel is the path of the draft Report's main scenario. The blue repo rate path is the lower one preferred by Mr Svensson. The yellow one shows adjusted implied forward rates.

The upper right-hand panel shows forecasts for the CPIF for the different interest rate paths. Mr Svensson noted that the main scenario's repo rate path gives an inflation forecast – the red curve – that is well below 2 per cent throughout the forecast period. The assumption of foreign policy rates according to adjusted implied forward rates and

thereby a stronger krona means that the CPIF forecast is lower than the forecast in the main scenario in the draft Monetary Policy Report. The lower repo rate path gives a CPIF forecast – the blue curve – that is much closer to 2 per cent. It provides a distinctly better target attainment for CPIF inflation.

The lower right-hand panel shows forecasts for unemployment for the different repo rate paths. The red curve shows unemployment under the repo rate path in the main scenario; the blue one shows the unemployment forecast for the lower repo rate path. The blue curve is much lower than the red one and approaches the sustainable level of unemployment. The fact that unemployment falls more quickly is a major advantage from a social-welfare point of view, and counteracts the persistency problems that higher unemployment may give rise to, and contributes to attracting people back into the labour force.

The lower 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 adjusted implied forward rates. This is also shown in the lower left-hand panel, where the mean squared gaps for inflation and unemployment are both smaller for the lower repo rate path than for the path in the main scenario.

Mr Svensson felt that one could argue that lowering the repo rate now would provide an even better target attainment, but that the same effect can be achieved with a repo-rate path that increases slowly initially. Compared with the repo rate path he preferred in April, this one is higher to begin with but much lower later on. It could possibly be adjusted further to obtain even better target fulfilment and to better meet the conditions of Norway's Deputy Governor Jan Qvigstad, but this has not been done here.¹

Mr Svensson also brought up the discussion of alternative repo rate paths, one higher and one lower than that in the main scenario, at the end of Chapter 2 of the draft Monetary Policy Report. In his opinion, a discussion of monetary policy alternatives is a very important part of a Monetary Policy Report. It is not possible to justify choosing a particular repo rate path without comparing it with the alternatives. Unfortunately, the discussion of the alternative repo rate paths is given very little room and emphasis; less than two pages of text in a report that is more than 70 pages long. Moreover, this comes after a longer and more detailed discussion of an alternative development in the wage bargaining rounds and the crisis in the euro area. Mr Svensson maintained that the discussion of monetary policy alternatives should be given a more prominent role in future Monetary Policy Reports and Updates.

The discussion of alternative repo rate paths came under, in his opinion, unrealistic assumptions of higher foreign policy rates and higher resource utilisation, including the assumption of a higher sustainable unemployment rate of 6.5 per cent. However, even using these assumptions it is possible to show that a lower repo rate path is better and all in all stabilises the CPIF and unemployment better, if their stability is measured in terms

¹ Jan Qvigstad's necessary condition for a well-balanced monetary policy implies that the forecasts for inflation and resource utilisation must not both be too low. See J. Qvigstad, "When does an interest rate path 'look good'? Criteria for an appropriate future interest rate path – A practitioner's approach", Staff Memo 2005/6, Norges Bank.

of mean squared gaps and given equal weight. There are thus several good reasons for considering the repo-rate path in the main scenario to be too high.

Deputy Governor **Barbro Wickman-Parak** began by saying that the economic forecast for Sweden has remained largely the same since December last year. There have not been any surprises in one direction or another. This is in strong contrast to the period before, when the Riksbank was surprised positively and constantly had to adjust its forecasts upwards.

The forecast contained in the draft Monetary Policy Report now has not changed in any decisive way. The slowdown in growth to more normal levels that we have been forecasting has now materialised and been slightly more marked than we had expected. The GDP figures for the first quarter were slightly weaker than expected, and the outcomes and indicators since then have justified some downward revision to the forecast for the second quarter.

With regard to the forecasts for economic activity, Ms Wickman-Parak wished to limit her comments to two factors. The first is the slowdown visible in various indicators for the manufacturing industry, although these have not yet reached levels that signal anything other than good growth ahead. So far, exports are increasing at a good pace and given the Riksbank's international forecast they should continue at the pace predicted. If international developments should be different, the export forecast could of course be reconsidered further ahead.

The second factor is domestic demand. The way this is described in the Monetary Policy Report, the conditions are right for investment to continue to improve at a good rate. But this presupposes that both the demand for exports and consumption will develop roughly in line with the Riksbank's forecasts. Ms Wickman-Parak shared the assessment in the draft Monetary Policy Report that the lower growth in household consumption at the beginning of the year should be temporary. A continued strengthening of the labour market and a high level of confidence among households pointed to this. And it should also be stressed that some areas of consumption, such as car purchases, had been maintained well. However, Ms Wickman-Parak's assessment was that it was not possible to be entirely certain that the weakness on the consumption side was temporary. Households are heavily indebted and the higher mortgage rates, which have risen more than the repo rate, may have a larger effect than forecast. Developments in consumption are important and the Riksbank must be observant of what effect its repo rate adjustments have on consumption.

Ms Wickman-Parak noted that she had talked about uncertain factors that could affect the Riksbank's forecasts further ahead. Her assessment of the current situation, however, was that it was too early to make any major changes to the basic picture of developments in the Swedish economy painted in the Riksbank's forecasts.

Ms Wickman-Parak went on to say that she supported the proposal to raise the repo rate to 2 per cent. She also supported the forecasts in the draft Monetary Policy Report, including the repo rate path. CPIF inflation is now below 2 per cent but will rise towards this level at the end of the forecast period. CPI inflation is for given reasons higher. The former, that is the CPIF, gives a better picture of inflationary pressures in situations with large interest rate adjustments, as is pointed out in the Report. The Riksbank's different

measures of resource utilisation indicate it is rising and will be at a normal level or slightly above at the end of the forecast period. The monetary policy represented by the repo rate path was well-balanced, in Ms Wickman-Parak's opinion.

Ms Wickman-Parak noted that there was speculation in the monetary policy debate as to whether a lower repo-rate path would be likely at this meeting. In parenthesis it can be noted that not so long ago the speculations were the reverse. She saw no reason to lower the repo rate path now. This could increase resource utilisation further and lower unemployment slightly in relation to the main scenario. But the problems that exist in the labour market, and which she has discussed on several occasions, could lead to increased inflationary pressures that cause problems in the slightly longer run. A lower repo-rate path could be an option if developments abroad become weaker than expected or if domestic developments produce negative surprises.

Ms Wickman-Parak could not see any reason to raise the repo-rate path at present either. Her assessment was that the wage bargaining rounds would lead to wage increases that are compatible with the inflation target, which agrees with the assessments made in the main scenario of the draft Monetary Policy Report. There could be a risk that the wage increases will be higher than anticipated. The extent to which this has consequences for monetary policy will depend on developments in productivity. Ms Wickman-Parak felt that this was described very well in the chapter on alternative scenarios. A recovery abroad that presented a surprise on the upside could for instance be that the concern over Greece disappeared or that domestic demand was better than expected, and these could naturally cause a re-assessment of the repo-rate path.

Deputy Governor **Lars Nyberg** began by saying that the Riksbank had underestimated the strength of developments in the Swedish economy on a number of occasions over the past two years. Now the expected slowdown was coming from an unusually high level of growth, and on this occasion the forecast was largely right on target. The outcomes for demand, production, employment and inflation have largely been as expected. In other words, there has not been any fundamental event in the Swedish economy that provides a reason to re-consider the analysis on which the decision at the previous meeting was based. Individual figures such as the recent ones for retail trade do not change this assessment, in his opinion. Given this, it would appear natural to leave the repo-rate path unchanged, which entails an increase of the repo rate by a quarter of a percentage point at today's meeting. Mr Nyberg supported the proposal and the analysis of the economy presented in the draft Monetary Policy Report. With an interest rate of 2 per cent Sweden is some way above the European and US interest rate levels, but economic developments are also much stronger here at present. The way that developments and expectations of the future look now, the Riksbank should continue to raise the repo rate as planned. There is still a long way to go to a normal level.

There has been concern that the rising interest rate differential between Sweden and our trading partners would entail such a significant upward pressure on the krona exchange rate that Swedish competitiveness would be seriously undermined. But this concern has so far been proved to be exaggerated – the krona has not shown any impressive appreciation recently. The krona exchange rate can have a significant effect on demand in the economy, however, and deserves to be closely monitored.

CPI inflation is currently overshooting the inflation target and will do so for most of the forecast period. As pointed out in the Report, this is because mortgage rates comprise such a large part of the CPI and they have risen largely due to the Riksbank's increases in the repo rate. When the Riksbank cut the repo rate in 2009, the CPI undershot the inflation target to the same degree. CPIX inflation, which excludes mortgage rates, tends to give a better reflection in periods like this of the price of the basket of goods consumers buy in the shops. Mr Nyberg felt that the Riksbank could perhaps be even clearer on this point in its communication.

The Monetary Policy Report contains two risk scenarios that Mr Nyberg thought cover well the risks he envisages today. The most important scenario is linked to wages. It illustrates how well wage increases over and above what the economy can afford may increase inflation and thus lead to faster increases in the repo rate – unless productivity developments are also much better than expected. This is a risk that becomes greater as more companies in more sectors state that they are experiencing a shortage of labour.

The other scenario, which would lead to lower interest rates, is linked to a crisis in Europe with much poorer growth than anticipated. Mr Nyberg did not think there was very much to say about this from a monetary policy point of view. If this should happen, it will have to be dealt with at the time.

Mr Nyberg wanted to conclude by taking up the long-discussed question of forward rates. The Executive Board has discussed forward rate curves, and how well these curves measure market expectations, both in Sweden and abroad, at a number of monetary policy meetings. This applies in particular to the slightly longer-term rates. Forward rate curves reflect the rates at which deals are made and in this sense the interest rates at which investors are willing to risk their money. But it is not certain that they therefore measure market expectations of future interest rates in a way that is relevant to the monetary policy decisions made by the Executive Board. Mr Nyberg felt that forward rate curves could be artificially pushed down, that is to a level below the one reflecting expectations of future interest rates, as a result of two factors, one of them international and the other specifically Swedish.

Mr Nyberg began with the international factor. It would appear, quite simply, as though investors in the market have begun to buy long-term bonds as a hedge against falling interest rates. If the European crisis were to have a violent sequence of events, they are counting on the central banks ensuring that interest rates are held low for the foreseeable future and it would then be beneficial to hold long-term securities. Although it is difficult to measure the scope, there appears to be agreement on the market that hedging against uncertain times and falling interest rates has pushed down forward rate curves on many markets around the world. Another and more technical way of saying this is that forward premiums have become negative. Normally, forward premiums are positive, as investors want to be paid extra to tie up their money over longer periods. But now the opposite appears to apply.

With regard to the specifically Swedish factor, there is an increasingly obvious shortage of government bonds available to the daily trade and as collateral for repos. The reasons for this are essentially positive. Firstly, the Swedish government is borrowing less than it previously needed to, which reduces the supply of government securities. And secondly,

Sweden has to an increasing degree come to be seen as a well-managed country, which means that the demand for Swedish government securities has increased, particularly from Asian investors. To the extent that this is reflected in falling interest rates, they probably also reflect market expectations. But government securities bought by long-term investors disappear from the market and do not become available in the daily trading. And here there will be problems, Mr Nyberg felt, as a certain stock of government securities is needed to keep the market functioning. They are quite simply needed as collateral when the banks borrow money short-term from the Riksbank or from others who have a liquidity surplus. When the available volume of government bonds declines, a shortage of usable securities will gradually arise and will have a negative effect on daily liquidity management among the banks and throughout the domestic financial system. When the shortage becomes acute, which it has been from time to time recently, this pushes down interest rates in a way that is not related to future interest rate expectations. On the Swedish market this is expected to be a growing problem, partly because the supply of government bonds is declining, and partly because many investors buy them and allow them to remain in their portfolios until they mature.

Mr Nyberg referred to Ms Ekholm who had proposed that one could use forward rate curves as a starting point in the discussion on market interest rate expectations and then describe the factors that provide a reason to deviate from them. Mr Nyberg believed that the above reasoning, although it was difficult to quantify for natural reasons, would be a good start. He concluded by saying that he nevertheless felt that the method the Riksbank uses to forecast foreign policy rates entails a good compromise.

Deputy Governor **Karolina Ekholm** largely shared the assessment of developments in inflation, GDP and employment described in the draft Monetary Policy Report, but she wished to enter a reservation, as at earlier meetings, against the proposed repo rate path and the decision to raise the policy rate by 25 basis points. Like Mr Svensson she preferred an unchanged repo rate of 1.75 per cent. Ms Ekholm noted that, compared with her stance at the April meeting, one could say that she accepts an increase in the repo rate, as she then preferred a repo rate of 1.5 per cent. Moreover, both she and Mr Svensson preferred a repo rate path then that involved a very slow increase during the first quarters and did not reach 1.75 until towards the end of the year. In principle, they thus both accept a larger increase today than was indicated by the repo-rate path they voted on in April.

Ms Ekholm did not consider there was anything in recent developments to indicate an upward revision to her own repo-rate path. But her attitude with regard to the general direction for monetary policy is that there is justification for gradually increasing the repo rate, although she would clearly prefer this to be done at a slower pace than is indicated in the main scenario of the draft Monetary Policy Report and has been assumed in a number of earlier forecasts.

The reasons for her entering a reservation against the repo rate path in the draft Monetary Policy Report were in principle the same as at the monetary policy meeting in April and the same as those put forward by Mr Svensson. There are two main reasons.

Ms Ekholm's assessment of the development of foreign policy rates – with increases at a slower pace during the second and third years in the forecast – means that the repo-rate

path of the main scenario implies larger interest rate spreads abroad than are in the forecast in the main scenario, assuming that the repo-rate path is fully incorporated into market rates. As the interest rate differentials – all else being equal – can be expected to affect the exchange rate, this entails a different exchange rate forecast, namely one with a stronger krona in the near future. A stronger krona would – once again, all else being equal – tend to push down inflation and GDP growth through reduced net exports.

As Mr Nyberg pointed out, the krona has not shown any impressive strength recently. But this only reflects the fact that the krona is affected by a number of other factors than merely interest rate differentials. Ms Ekholm felt that experience showed that the krona tends to weaken when there is increased uncertainty on the market and that this is a factor that could dominate exchange rate developments. But it does not mean that interest rate differentials are unimportant and she did not feel that it was something that actually detracted from the relevance of this argument against the repo-rate path in the main scenario.

The second reason for Ms Ekholm's reservation was that she does not actually think that the repo-rate path in the main scenario represents a well-balanced monetary policy even on the condition that the foreign policy rates develop in line with the forecast in the main scenario. As Mr Svensson pointed out, there is a discussion of whether the repo-rate path in the main scenario comprises a well-balanced monetary policy at the end of Chapter 2, by means of analysing what deviations from the main scenario the alternative repo-rate paths entail in the model simulations. Her interpretation of this analysis is that a lower repo-rate path gives a better outcome with regard to inflation, that is, it leads to a forecast for CPIF inflation that is closer to 2 per cent. Although the lower path leads to CPI inflation being even further from the target of 2 per cent, as Ms Wickman-Parak and Mr Nyberg have pointed out, it is more relevant to focus on CPIF inflation during periods when the repo rate is adjusted a lot. Ms Ekholm agreed with Ms Wickman-Parak that it is a good idea to make this clear in the draft Monetary Policy Report.

Ms Ekholm went on to say that the consequences of different repo-rate paths on resource utilisation made things more ambiguous. According to the measures of resource utilisation analysed in Chapter 2, a lower repo-rate path appears to push up resource utilisation far above what is sustainable in the long term, and from this perspective gives a poorer outcome than a higher repo-rate path. For this part of the analysis it is of course important what assumptions one makes about potential GDP, the potential number of hours worked and a sustainable long-term level for unemployment. The assessment in the draft Monetary Policy Report is that Sweden currently has a level of resource utilisation that is slightly lower than normal, but very close to a point that could be described as normal.

Ms Ekholm did not agree with this assessment. She felt that there was still fairly large scope to push down unemployment and encourage investment that would increase capacity. Unemployment is still relatively high, although employment has recently shown a strong increase. The level of GDP is higher now than before the financial crisis, but not very much higher. She therefore nevertheless believed that a more expansionary monetary policy, like that given by the scenario with a lower repo-rate path in Chapter 2, would also lead to better stabilisation of the real economy.

All in all, this means that Ms Ekholm considered that a lower repo-rate path entails a more well-balanced monetary policy, even if one accepts the forecast for foreign policy rates assumed in the main scenario.

Ms Ekholm therefore preferred a repo-rate path that was lower than the one in the main scenario and she supported the repo-rate path already proposed by Mr Svensson. This is a path with a different profile than the repo-rate path in the main scenario. It involves an increase to around 2 per cent in the first year and then faster increases so that the path ends approximately where the path in the main scenario ends, that is, at around 3.8 per cent. The reason why she preferred a repo-rate path with slower increases at the beginning and faster increases towards the end of the forecast period was in principle the same as at the previous monetary policy meeting. It is primarily in the slightly shorter term that lower interest rates than in the main scenario are justified. CPIF inflation looks to be rather too low in 2011 and 2012. In principle, it is positive if an expansionary monetary policy can help to bring down unemployment quickly to reduce the persistency problems in the labour market mentioned by Mr Svensson. Ms Ekholm felt that monetary policy could do so in this situation as inflation is actually relatively low in the near future.

Ms Ekholm concluded by saying that the path may appear more expansionary than the one preferred by both her and Mr Svensson at the meeting in April, as it was lower than the previous path towards the end of the forecast period. But by accepting the increase in the repo rate to 1.75 per cent in retrospect, the repo rate is at a higher level to begin with than was implied by that path.

Governor **Stefan Ingves** said that he largely agreed with the assessment of the Swedish economy in the draft Monetary Policy Report and he supported the proposal to raise the repo rate by 0.25 percentage points and also the proposed repo-rate path. Growth in the Swedish economy is high and higher than in many other countries. Good public finances, rising disposable incomes and a favourable composition of exports have all contributed to this. GDP is now higher than it was prior to the crisis. Mr Ingves also noted that developments had been better than the Riksbank was assuming a year ago. In July 2010 the assessment was that the output gap would not close until the second half of 2012. Now the forecast was that it would close during the current year. The assessment of the gap measured by the number of hours worked has also been revised up in relation to one year ago.

Despite a stronger real economy, inflation has been held in check. Although CPI inflation has risen to more than 3 per cent, this is primarily due to rising mortgage rates. CPIF inflation, which is not affected by rising mortgage rates, is slightly below 2 per cent. But this is a transitory effect. As resource utilisation increases, the CPIF is expected to rise gradually to around 2 per cent. Mr Ingves considered it important that CPI inflation does not accelerate. In the longer run, both CPI and CPIF inflation shall be in line with the target. The strong real economy, together with developments in inflation, show that it was correct to begin raising the repo rate last year. If the decision to begin raising the repo rate had not been taken, there would have been a risk that inflation and inflation expectations would have accelerated. There would also have been a risk that we would enter the next economic slowdown with a too low interest rate and then needed to cut the rate towards zero once again. Mr Ingves said that he personally believed that long periods with a negative or very low real interest rate were not good from the point of

view of economic developments in general. Moreover, it has been important to take into account the risks of overly large household indebtedness entailed by a too low interest rate. Mortgage rates have now risen more than the repo rate and the forward rate, which has facilitated the adjustment to the very strong recovery in the Swedish economy. It also shows that it is important not to merely focus on a varying forward rate curve, but to also take into account what is happening on the mortgage market or in other parts of the credit market. It is good that the rate of household borrowing is now slowing down. All in all, there is currently no reason to change our view of Swedish monetary policy.

Mr Ingves said that interest rates should continue to be adapted to the economic situation to ensure that inflation stabilises around the target. He felt that particular attention should be paid to whether inflation expectations were increasing, especially in the longer run, but also to different measures of capacity utilisation in tendency surveys and also the output gap. On the one hand, the main scenario assumes that the high CPI inflation this year will not push up inflation expectations and affect wage formation, but on the other hand, the rising inflation expectations are reminiscent of the period 2005-2008 with its increasing inflationary pressures. If there are higher wage increases that are not counterbalanced by higher productivity growth, the interest rate may need to be raised more quickly than in the main scenario. The same applies if high energy, food and other commodity prices abroad were to lead to substantial secondary effects on inflation in Sweden. However, if the fiscal crisis in Europe worsens, the repo rate path may need to be lower than in the main scenario.

The current risk outlook gives a choice between different types of risk. Mr Ingves said that he gives priority to developments in inflation and that the Riksbank's forecast for the economy indicates that it is important not to wait too long. It is therefore right to raise the repo rate now. At the same time, it is always difficult to forecast the future. This is captured well by the fact that 90 per cent of the probability distribution for the repo rate one year ahead is in the interval 0.5-5 per cent. This is easily forgotten when monetary policy is discussed in terms of a repo rate path.

Deputy Governor **Lars E.O. Svensson** also wanted to take up some more general issues. One year ago the majority of Executive Board members began to raise the repo rate and tighten monetary policy, despite the CPIF forecast undershooting the target and despite the forecasts for all measures of resource utilisation falling below normal levels. The majority thus began to raise the repo rate despite monetary policy not being well-balanced to begin with, and despite Jan Qvigstad's conditions for a well-balanced monetary policy not being met. Qvigstad's conditions are that the forecasts for inflation and resource utilisation may not both be too low if monetary policy is to be well-balanced.

Under these conditions one might expect that the real economy would show a rather poor development. Instead, GDP growth in 2010 has been higher than expected. Does this mean that it was right to begin raising the repo rate? Mr Svensson asked.

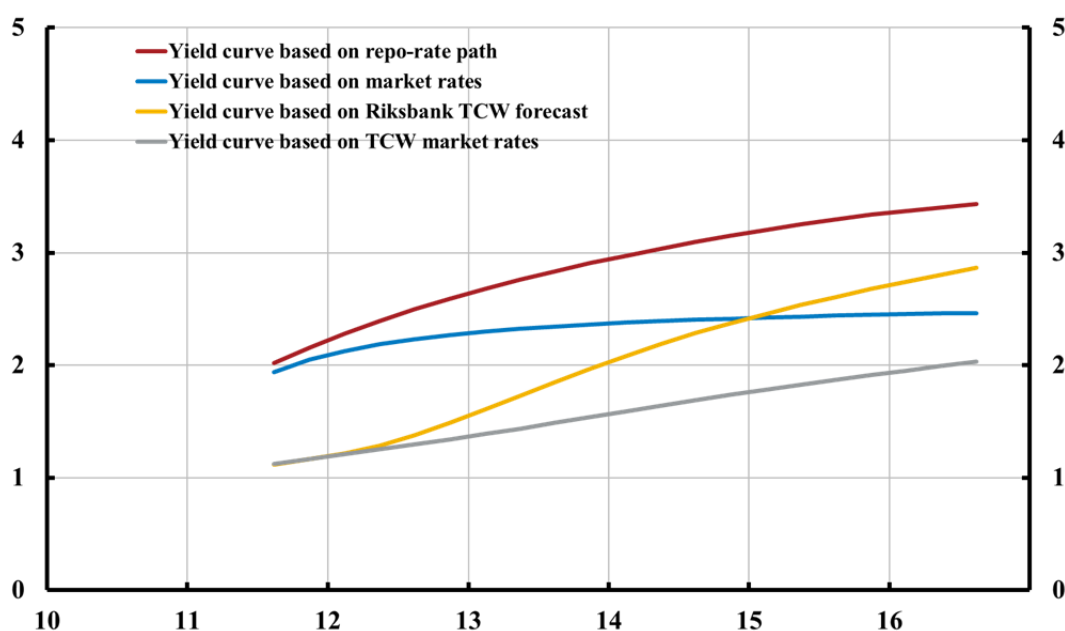
In his opinion, the answer to this question is no. The intended monetary policy would have been very bad for the Swedish economy. What has saved the Swedish economy may have been that the *actual* monetary policy was much more expansionary than the *intended*. As most people know, the repo rate during the coming two months matters

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 and more. That is, what matters is the entire market yield curve.

In Figure 5 the red curve 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 calls the intended monetary policy. The blue curve shows the current actual yield curve. This is what he calls actual monetary policy. It is the blue curve that affects the Swedish economy, not the red curve. He noted that a five-year rate according to the blue curve is around 100 basis points lower than a five-year rate compatible with the repo rate path. A five-year rate that is 100 basis points lower entails an actual monetary policy that is much more expansionary than the intended policy. If the five-year rate now rose by 100 points it would be very bad for the Swedish economy and would affect the recovery. The krona would appreciate substantially and this would affect exports negatively.

Figure 5. Yield curves

Per cent



Sources: Reuters EcoWin and own calculations

According to Mr Svensson this has more or less been the situation since February 2010. With effect from 2010 and until now the five-year rate has been on average almost 85 basis points lower than the level compatible with the repo rate path. The actual monetary policy conducted has thus been much more expansionary than the intended. Mr Svensson believed that this could be a large part of the explanation as to why growth was unexpectedly high in 2010. If the five-year rate had been on average 85 points higher, the krona would have appreciated substantially and the recovery would probably have come to a halt. Mr Svensson also said that the repo rate path in the main scenario does not pass

what one can call the credibility test. It would not have been good for the Swedish economy if the repo rate path had become credible and the five-year rate attained a level compatible with the repo rate path.

The effect of lower long-term rates has been discussed at length in the United States, in connection with the discussion of the effects of QE, "Quantitative Easing". A common view is that QE may have reduced long-term rates by around 50 basis points, primarily by lowering forward premiums. These 50 basis points are less than the 85 basis points for the Swedish five-year rate that Mr Svensson just mentioned. According to several analyses this may have had significantly positive effects on the US economy and prevented unemployment from being even higher and inflation from being even lower. It is likely that the Swedish economy is just as sensitive to long-term rates as the US economy, as exports and the exchange rate play a more important role in Sweden.

These questions are both important and complicated and deserve to be investigated more thoroughly in the future. They are also linked to what Lars Nyberg has talked about. Low long-term interest rates affect the Swedish economy regardless of whether they are low because of low forward premiums or because of low expectations of future interest rates. If a shortage of Swedish government securities pushes down long-term rates on government securities, in order to assess the effect on the real economy it will be interesting to examine if this also pushes down other long-term interest rates, such as those on corporate bonds and mortgage bonds.

Moreover, when saying that growth in 2010 has been unexpectedly positive, one should not forget that the Swedish economy has nevertheless just about recovered the fall from the pre-crisis level. There is still a loss of three years of normal GDP growth, that is, roughly 6 per cent of GDP.

When Mr Svensson now looks back at the monetary policy conducted over the past three years, an overall analysis of monetary policy during the crisis gives the result that monetary policy has been too tight, as far as he could see. It can be claimed that the monetary policy problems caused by the crisis have not been properly understood. Mr Svensson felt that the overall diagnosis was not entirely correct, something that is now increasingly clear. Sweden was hit by a very large negative demand shock; a very large fall in exports. Such a negative shock to aggregate demand results in both low inflation and low resource utilisation. The best way to meet such a shock is by cutting the repo rate and lowering the repo rate path, because a lower repo rate will help maintain domestic demand for consumption and investment and a weaker krona will help maintain, as far as possible, demand abroad for Swedish exports. Counteracting demand shocks with expansionary monetary policy is a simple and robust principle, and makes entirely good sense. To begin raising the rate before the demand shock and its repercussions on investment, exports and unemployment have been neutralised is a policy that does not appear to be good sense. It is perhaps as simple as that.

It definitely does not appear to be the case that low interest rates have led to a threat to financial stability in Sweden; a threat that would have to be met by a higher repo rate to remove it. As far as Mr Svensson could see, this is an entirely incorrect diagnosis and incorrect policy in this situation.

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.

Mr Ingves, in his capacity as chairman of the meeting, went on to summarise the monetary policy discussion. Growth in the Swedish economy is still good, but will normalise during the forecast period. Resource utilisation will remain at a normal level, or even slightly higher, and wages are expected to develop normally, which will contribute to the CPIF approaching the inflation target of 2 per cent while the CPI overshoots the target during the forecast period. This analysis and these forecasts are made in the light of the great uncertainty over developments abroad and of the different monetary policies being conducted in different parts of the world. There is tightening in some areas, but some economies are still conducting a much more expansionary monetary policy.

At the same time, the fiscal situation in Europe is uncertain, and we do not know how the problems will be dealt with. Mr Ingves's interpretation of the contributions to the debate is that if the situation in certain European countries deteriorates, the Executive Board is prepared to handle the situation as it arises, which may also affect monetary policy.

A majority of the Executive Board members supported the analysis in the draft Monetary Policy Report and advocated raising the repo rate. A minority preferred to leave the policy rate unchanged and to have a repo-rate path that first rises more slowly and then more quickly than the path in the draft Monetary Policy Report. The reason given for this was their assessment that the forecasts for foreign policy rates and Swedish resource utilisation in the Monetary Policy Report were both too high and that a lower repo rate now would thus provide better target fulfilment.

§4. Monetary policy decision

The Executive Board decided after voting

- to adopt the Monetary Policy Report according to the proposal, Annex A to the minutes,
- to publish the Monetary Policy Report on Tuesday 5 July 2011 at 9.30 a.m.,
- to raise the repo rate by 0.25 percentage points to 2.00 per cent and that this decision would apply from Tuesday, 5 July 2011,
- to publish the decision above at 9.30 a.m. on Tuesday 5 July 2011 with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on Monday 18 July 2011, at 9.30 a.m.

Deputy Governor Karolina Ekholm and Deputy Governor Lars E.O. Svensson entered a reservation against the decision to raise the repo rate by 0.25 percentage points to 2.0 per cent and against the repo rate path in the Monetary Policy Report.

They preferred a repo rate equal to 1.75 per cent and a repo rate path that first rises slowly to 2 per cent in the third quarter of 2012 and then rises faster to about 3.8 per cent by the end of the forecast period. This was justified by their assessment that the Report's



forecasts of foreign policy rates and Swedish resource utilisation were both too high. Their repo rate path implies CPIF inflation closer to 2 per cent and a faster reduction of unemployment towards a longer-run sustainable rate.

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