Minutes of the Executive Board's Monetary Policy Meeting, No. 4

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TIME: 09.00 am

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

Leif Pagrotsky, Vice Chairman of the General Council

Sigvard Ahlzén
Claes Berg
Hans Dellmo
Hans Dillén
Bul Ekici (§1)
Johanna Eklund (§1)
Heidi Elmér
Johanna Fager (§1)
David Forsman (§1)
Eric Frieberg
Jesper Hansson
Ann-Christine Högberg
Per Jansson
Pernilla Meyersson
Marianne Nessén
Cecilia Roos Isaksson
Olof Sandstedt (§1)
Staffan Viotti

§ 1. Economic developments

It was noted that Hans Dellmo and Hans Dillén would prepare the draft monetary policy meeting minutes with regard to paragraphs 1, 2 and 3 on the agenda for the meeting.

Bul Ekici of the Monetary Policy Department began by presenting the latest developments on the financial markets. Market anxiety about public finances in the eurozone remains but has abated during the summer. Government bond rates in relation to those in Germany have, however, increased in countries such as Greece and Ireland in recent weeks. Most central banks have left their policy rates unchanged and some central banks have decided or signalled that they are prepared to take new unconventional measures or continue with those already introduced.

On the whole, ten-year government bond rates have fallen in Sweden and the rest of the world and it is mainly weak macroeconomic outcomes in the United States that lie behind this trend. This has led to a downward shift in forward rate curves around the world. In addition to this international trend of falling interest rates, it has been suggested that there are other factors that explain the fall in Swedish forward rates. The market is less convinced that the Riksbank will use the repo rate to counteract rising housing prices and increased household indebtedness. It is also believed that international developments and recent signals from central banks that they may postpone policy-rate increases will lead to a need for a more expansionary monetary policy in Sweden. However, a majority of the analysts expect the Riksbank to decide to raise the repo rate to 0.75 per cent at today's meeting and to leave the forecast for the repo-rate path unchanged. During the summer, the krona has strengthened in relation to most other currencies.

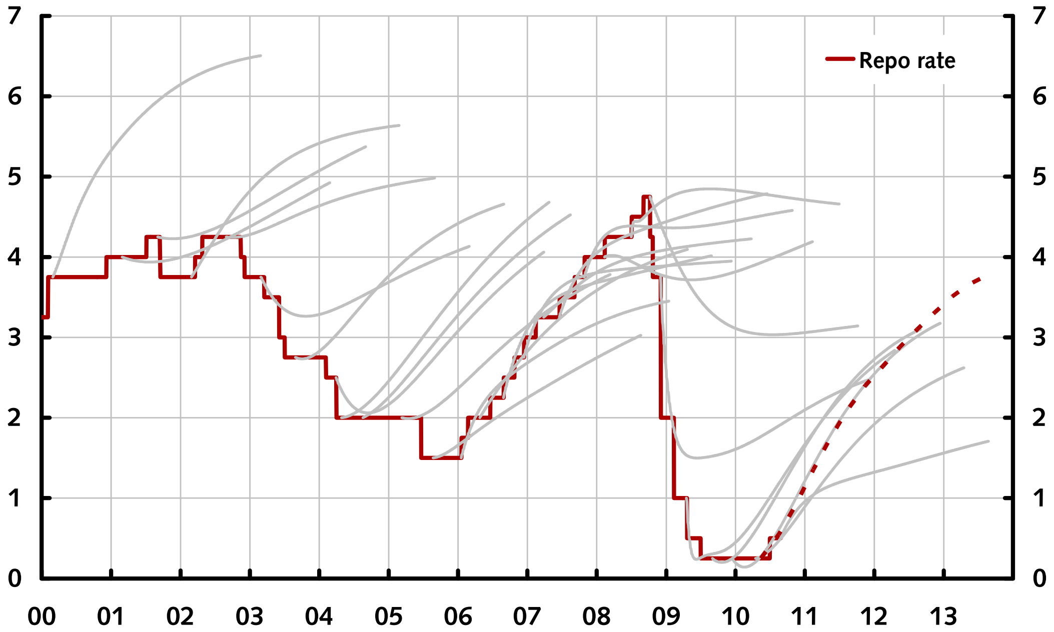
Johanna Eklund of the Financial Stability Department then gave an account of developments on the interbank market. Interbank rates have increased, above all for loans at short maturities, and it has become more expensive to exchange other currencies for krona on the currency swap market. The background to this is a decline in liquidity in the system resulting from extensive Riksbank loans reaching maturity and comparatively large investments in Riksbank certificates. At the same time, the demand for krona on the currency swap market has been relatively high. It was expected that the maturing of the loans would initially lead to a certain degree of volatility.

Per Jansson, Head of the Monetary Policy Department, first presented the statistics that had become available since 26 August when material in the form of assessments of economic development in Sweden and abroad had been presented to the Executive Board. Unemployment in July was in line with this assessment, but the number of hours worked was somewhat higher than expected. International trade and the retail trade index also developed strongly in July. The figure for GDP in the United States in the second quarter has been revised downwards, which has led to a marginal downward revision of the figure for economic activity abroad for this year.

Since the previous Monetary Policy Meeting on 30 June the GDP statistics for the second quarter in Sweden have come in strong. Strong exports lies behind this trend, but investments and consumption also contribute to the picture of a broad upturn in the Swedish economy. Employment increased in June and July in several sectors, thus strengthening the impression of a clear turnaround on the labour market. Inflation developed in line with the assessment in the latest Monetary Policy Report in the same period. However, the recovery of the global economy is moving more sluggishly in many areas, not least in the United States where the outlook for growth has been revised downwards. This downward revision reflects the weak development of the housing and labour markets, which will have a dampening effect on consumption in the period ahead. On the other hand, many indicators suggest that the manufacturing industry in the United States and other parts of the world is developing relatively strongly.

Given these developments, it was proposed to leave the forecast for the repo-rate path unchanged and to raise the repo rate, in line with this forecast, to 0.75 per cent. Although the strong development of the Swedish economy is an argument for increasing the forecast for the repo rate somewhat, the revisions regarding the Swedish economy are relatively small while uncertainty has increased abroad - factors that argue for an unchanged repo-rate path. Monetary policy expectations as expressed in the forward rates have also shifted downwards during the summer. Such shifts can be difficult to interpret. Historically, the actual repo rate has often developed differently than expected by the market participants (according to the forward rates), see Figure 1.

Figure 1. The repo rate and forward rates*



Sources: Reuters, Ecowin and the Riksbank.

*The grey curves are forward rates that are a rough measure of the market's expectations concerning the repo rate in the future. For example, the grey curve furthest to the left shows that in early 2000, following two increases of the repo rate at the start of the year, the market agents expected to see a gradual increase of the repo rate from 3.75 per cent to approximately 6.50 per cent in early 2003.

§ 2. Economic outlook abroad

First Deputy Governor of the Riksbank **Svante Öberg** began by saying that he supported the picture of developments abroad presented in the draft Monetary Policy Update.

The new information received during the summer indicates that development in the United States will be weaker than the Riksbank expected in the latest Monetary Policy Report. This makes it reasonable to revise the forecasts for the United States downwards, but like most other analysts the Riksbank, in its main scenario, should not assume that there will be a so-called *double dip*.[1] The strong growth in Asia has also slowed down somewhat. Growth in the eurozone, on the other hand, was stronger in the second quarter of this year than expected, especially in Germany. However, growth in the second half of this year and next year will probably be slower due to weaker development in other parts of the world. This means that, as previously, we should expect to see a relatively slow recovery abroad following the financial crisis.

However, there is of course a risk of even weaker development abroad. The budget deficit in many countries will be substantial for several years to come and renewed turbulence on the financial markets cannot be ruled out. Anxiety on the financial markets in Europe abated somewhat in the early summer. Greece was able to manage the consolidation of the national budget and several other countries were once again able to acquire funding on the financial markets. The stress test of European banks conducted by the Committee of European Banking Supervisors (CEBS) was well received by the markets. However, tension has increased in recent weeks as a result of the weaker signals from the United States, increased problems in Ireland and renewed difficulties for the banks to get market funding. Interest rate differentials in relation to Germany and CDS premiums are now back to the levels they were at in May. It is therefore important to continue to be aware of how the problems in Europe are developing and what the consequences of the weaker development in the United States may be for Europe and for Sweden.

So far, the normalisation of Swedish monetary policy has not led to any problems on the Swedish financial markets. The Riksbank has begun to raise the repo rate and the Riksbank's lending to the banks has fallen from SEK 335 billion at the end of June to SEK 112 billion at the end of August without giving rise to any market disruptions. There is reason to believe that things will go well when the Riksbank phases out the remaining loans during the autumn. The situation on the financial markets does not, in contrast to the United States, restrict the Riksbank in any way from continuing the normalisation of monetary policy.

Deputy Governor **Lars E.O. Svensson** declared that he also largely shared the view of developments abroad presented in the draft Monetary Policy Update. There is great uncertainty about developments in the eurozone. In the United States, the situation appears to be both more uncertain and more gloomy than previously, with a greater risk of a double dip and perhaps even deflation. As a consequence of this, and judging by statements by the Federal Reserve and the ECB, the best forecast is that both the United States and the eurozone will have very low policy rates going forward. In line with this, expectations regarding future policy rates and thus the current short-term and long-term market rates in the United States and the eurozone are very low. All else being equal, this will have an impact on Sweden and on the level of market rates and the repo-rate path here. A small, open economy like the Swedish economy cannot have too large differences between domestic and foreign interest rates without this having major effects on the exchange rate.

Deputy Governor **Karolina Ekholm** stated that she had no objections to the description of the economic outlook abroad in the draft Monetary Policy Update. Recent developments in the United States raise fears that the recovery there will take a very long time. There may of course be a serious weakening of economic activity and actual deflation in the United

[1] A "double dip" describes a situation in which the recovery following a downturn is reversed and the economy enters a new downturn.

States, but Ms Ekholm said that she shares the assessment in the draft Monetary Policy Update that the probability of such a scenario is rather small.

There are still problems with weak public finances in Europe and several European countries will need to tighten fiscal policy in a situation where resource utilisation is low. Given the weak development in the United States and the weak public finances in Europe, it is reasonable to assume that monetary policy in these areas will continue to be expansionary for some time to come. Expectations regarding policy rates in the United States and the eurozone have also shifted downwards recently. This may have an impact on the Riksbank's monetary policy as interest rate differentials between countries can be expected to influence exchange rates. All else being equal, one can expect that an increased interest rate differential in relation to other countries will lead to a strengthening of the exchange rate. However, this also depends on expectations concerning the more long-term exchange rate in the future, which is affected by inflation differences between countries. If one believes that inflation in Sweden will be higher than in the United States and the eurozone in the period ahead, a higher interest rate will not necessarily lead to a strengthening of the exchange rate. Ms Ekholm's assessment was that the latest developments in the United States and Europe indicate that interest rates abroad will rise more slowly than previously expected by the Riksbank and that this may mean that the repo rate may need to be increased more slowly than the Riksbank previously believed.

Deputy Governor **Barbro Wickman-Parak** noted that the upturn in the United States is proceeding more sluggishly than expected. This began to become apparent in the summer and is clearer now. The most worrying factor is that the figures for the labour market continue to be disappointing, but the development of the housing market has also been a negative surprise. The economy is in a sensitive state. Without the support of a sustainable increase in employment, consumption cannot take over the baton as the growth engine in the economy when the transitional contribution of the stock cycle to growth is over and the effects of the fiscal stimulation measures fade.

However, things are not entirely gloomy in the US economy. One example is the revised version of the national accounts presented since the previous meeting. Growth has been affected by the build-up of stocks to a greater extent than shown by previous statistics. At the same time, the households have been more cautious in their spending than previous statistics indicated and the savings ratio has been revised upwards significantly. This means that the households have made a lot of progress in the effort to repair their balance sheets and this increases the chances that consumption will accelerate in the longer term.

Another positive factor is the upturn in corporate investment. In this context it may be worth noting that the situation on the financial markets now, compared to a year ago, is no longer an obstacle to the expansion of at least the larger companies. Finally, it can be noted that although there has been a downturn in the purchasing mangers' indices for the manufacturing and service sectors they are still within the growth zone.

A disjointed growth process with figures that sometimes inspire hope and sometimes are a disappointment in relation to expectations is common in sensitive phases of the economic cycle. It is important not to get carried away by all the ups and downs. However, as a lot of the outcome data and indicators are pointing in the same direction it is nevertheless reasonable to adjust the growth forecasts for the United States downwards in line with the adjustment in the draft Monetary Policy Report. The growth process will be slower than predicted previously but this does not mean that the bottom has fallen out of the economy.

It is no secret that that are significant differences in the level of growth in the various countries in the eurozone. Although growth in Germany, the largest economy in the eurozone, is primarily due to strong exports, investments are also increasing and there is also actually a slight increase in private consumption, which is positive. If this continues it could also give some impetus to the economies of the southern European countries. However, the risk for the eurozone is, irrespective of developments in the United States, that measures to tighten fiscal policy will stifle these fragile green shoots. The growth forecast for the eurozone this year has been revised upwards due to stronger outcomes, while for the years ahead it largely remains unchanged. It would be wise not to stick our necks out more than this. The forecast for international growth is on the whole a reasonable assessment that can form the starting point for today's repo rate decision.

Deputy Governor **Lars Nyberg** said that he essentially agreed with the international outlook presented in the draft Monetary Policy Report. Relatively little has happened since the meeting in July so it is difficult to make too much of recent events. Growth in the United States has slowed down somewhat, perhaps not unexpectedly as restocking was such an important element during the early part of the year. The property market has been very weak, but on the other hand investments and industrial production are increasing. Even though the outlook has become slightly gloomier, it is hard to believe the prophecies of a new double dip. The functioning of the financial markets is steadily improving and one is hearing last year's mantra that a shortage of capital at the banks would constitute a serious obstacle to the upturn less and less often.

Germany, on the other hand, has been a positive surprise with somewhat higher growth than expected. It is interesting to note that world trade, which fell by almost 20 per cent in the autumn of 2008 and the winter of 2009, is now back to its previous levels. This benefits Germany, but also Sweden.

Two factors have reduced uncertainty on the financial markets. First, the European stress tests of the market were interpreted to mean that the situation was perhaps not as serious as feared. Whether this means that the situation is satisfactory is an entirely different matter. Secondly, it appears that the new Basel regulations will not restrict profitability in the bank system to the extent previously feared. Both of these factors have eased the funding situation somewhat for countries with questionable public finances, as well as for their banks. However, the fundamental questions concerning the success of the budget tightening measures in the GIIPS[2]-countries and how they will affect growth still of course remain unanswered. Although important elements of uncertainty have been resolved during the summer, there are still a sufficient number of question marks for developments on various markets to continue to demonstrate a degree of variability that is greater than normal for some time to come. This has been evident in recent weeks in connection with renewed anxiety concerning Greece and Ireland.

Governor **Stefan Ingves** pointed out that the revisions for GDP growth abroad are minor and he said that he supports the assessement of international economic activity in the draft

[2] GIIPS is a designation for the following countries: Greece, Ireland, Italy, Portugal and Spain.

Monerary Policy Update. The risk of a more prolonged recovery abroad has, however, increased slightly. In the United States, the tendencies towards a weaker development may linger while the imbalances built up prior to the crisis are corrected. Following severe crises, it usually takes quite a long time before production and unemployment return to the levels that prevailed before the crisis, as Carmen Reinhart and Vincent Reinhart have shown in a paper that was recently presented at Jackson Hole.[3]

In the eurozone there are signs that uncertainty regarding public finances is declining somewhat. Following the rescue package launched in the spring it appears that the most critical phase is now over. This should also reduce uncertainty in the banking sector. Putting things right is, however, a process that takes many years and a process that one cannot expect to proceed in exactly the same way in all the countries that have problems. Recurring anxiety about individual countries will probably be part of the background picture for the foreseeable future.

If there is a more marked weakening of the recovery in the United States, this will have repercussions in Asia and the eurozone. The forecast for the economic outlook abroad would then be weaker than in the main scenario in the draft Monetary Policy Update. However, this is not the situation at the moment and the assessments in the draft Monetary Policy Update do not comprise a double dip in the global economy. Mr Ingves believed that this was a reasonable starting point.

Governor Stefan Ingves then summed up the discussion of the economic outlook abroad by saying that all the members of the Executive Board appeared to support the assessment presented in the draft Monetary Policy Update. The process of overcoming the financial crisis has been underway for a while and positive growth can be seen around the world even though the recovery is often sluggish and disjointed.

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

First Deputy Governor **Svante Öberg** agreed with the picture of economic developments in Sweden presented in the draft Monetary Policy Update. He also supported the proposal to increase the repo rate by 0.25 percentage points and the repo-rate path presented in the draft Monetary Policy Update.

GDP growth is high, employment is rising rapidly and resource utilisation is increasing. CPIF inflation will be somewhat lower than 2 per cent for most of the forecast period but will be at 2 per cent at the end of the forecast period. CPI inflation, on the other hand, will be somewhat higher than 2 per cent during the later part of the forecast period and it will take another couple of years after the end of the forecast period to reach the inflation target of 2 per cent. As resource utilisation increases, the Riksbank should gradually raise the repo rate to avoid overheating in the economy in the longer term. In the current situation, monetary policy is thus generally well balanced.

There is of course, and as usual, great uncertainty concerning the repo-rate path, particularly in the longer term. This is illustrated in Figure 1, which Per Jansson presented

[3] See Carmen M. Reinhart and Vincent R. Reinhart (2010) "After the fall", NBER Working Paper 16334.

earlier, and in the so-called fan diagrams at the beginning of the Monetary Policy Update. Mr Öberg said that he felt no great uncertainty about the rest of the year, but also said that anything can of course happen - as it did in September 2008 when Lehman Brothers collapsed. Mr Öberg's assessment was that the Riksbank should continue to increase the repo rate by 0.25 percentage points per meeting during the autumn to a level of 1.25 per cent at the end of December. However, there is greater uncertainty with the regard to the repo-rate path in the longer term. This will in part depend on developments in the eurozone and the United States and how these affect the Swedish economy. Weaker international development could lead to weaker development in Sweden and a lower repo-rate path in the longer term.

However, there is also a risk of stronger development and a higher repo-rate path. Inflationary pressures are low in Sweden at the moment. Resource utilisation is low, pay increases are moderate and inflationary impulses from abroad are weak. It is possible, however, that inflationary pressures will increase more than expected by the Riksbank in the period ahead if the speed of the recovery on the labour market has been underestimated once again. Employment is now increasing at a rate of 100 000 people per year and unemployment has begun to fall. The last time Sweden experienced such strong development on the labour market, that is in 2006 and 2007, unemployment fell by around one percentage point per year. The Riksbank now estimates that employment will increase by approximately 50 000 per year in the next two years and that unemployment will fall by approximately 0.5 of a percentage point per year. This estimate may be too cautious.

More information that will reduce uncertainty about the future will gradually become available during the autumn and the Riksbank will then be able to revise the repo-rate path for the longer term if this is justified.

Deputy Governor **Lars E.O. Svensson** noted that monetary policy aims to stabilise inflation around the target level and resource utilisation around a normal level. It is therefore important to choose a repo-rate path so that the inflation forecast is stabilised around the target and the forecast for resource utilisation is stabilised around a normal level. Normally, the inflation forecast is not precisely on the target and the forecast for resource utilisation is not precisely at a normal level. For monetary policy to be well balanced in such a situation the inflation forecast should be above the target and the forecast for resource utilisation should be below a normal level, or vice versa. If the forecasts for inflation and resource utilisation are both too low, target attainment for both can be improved if monetary policy becomes more expansionary, in which case achieving the right balance is not a problem. Similarly, if the forecasts for inflation and resource utilisation are both too high, target attainment for both can be improved if monetary policy becomes tighter. In this case too, achieving the right balance is not a problem. One can say that a necessary condition for a well-balanced monetary policy is that the inflation gap (between inflation and the inflation target) and the resource utilisation gap (between resource utilisation and normal resource utilisation) should have different signs. If they have the same sign, monetary policy is not well balanced. This is one of the conditions for good inflation targeting that Jan Qvigstad, who is now Deputy Governor of Norges Bank, presented in a much-discussed paper entitled "When does an interest rate path 'look good'? Criteria for an appropriate future interest rate path" (Norges Bank Staff Memo No. 2005/06).

If the unemployment gap (between unemployment and equilibrium unemployment) is used as a measure of resource utilisation, then the necessary condition for a well-balanced monetary policy is of course that the inflation gap and the unemployment gap have the *same* sign. At present, the forecasts for the inflation gap and the unemployment gap have *different* signs. The inflation forecast is too low and forecast for unemployment is too high. Monetary policy is therefore not well balanced at the moment. A more expansionary monetary policy can improve target attainment for both inflation and unemployment. Using the same arguments and the same diagrams on policy alternatives that Mr Svensson has presented at earlier monetary policy meetings (diagrams presented during the decision-making process but not published in the draft Monetary Policy Report) it is possible to show, with what Mr Svensson regards as irrefutable logic, that a lower repo-rate path provides better target attainment and that it would be better to leave the repo rate unchanged now or even lower it to 0.25 per cent.

Svensson claimed that an improved economic situation is not a reason for raising the repo rate earlier if CPIF inflation and resource utilisation are still too low. He would have liked to have seen a discussion of policy alternatives and alternative repo-rate paths in the Monetary Policy Update. Mr Svensson had previously advocated an alternative repo-rate path in which the repo rate lies slightly below the path in the main scenario for several quarters before gradually returning to the main scenario's path, without questioning the form and level of the repo-rate path in the longer term. Now, however, he believed that a greater downward shift of the entire repo-rate path was justified.

At the monetary policy meetings in April and June there was a substantial difference between the repo-rate path and the development of the repo-rate path expected by the market. Market expectations of the repo rate a couple of years ahead were far below the repo-rate path. At both of these meetings, Mr Svensson said that he would like to see a thorough analysis of this ahead of the next meeting and that he was not usually prone to saying that the market is right and the Riksbank is wrong. However, he would not be surprised this time if it turned out that it really is the market that is right and the Riksbank that is wrong. Mr Svensson had now conducted his own preliminary analysis and drawn his own conclusion. His conclusion was that the market is right and the Riksbank is wrong about the level of the repo-rate path in the period ahead. The entire repo-rate path should be shifted downwards to a level that roughly corresponds to market expectations.

Mr Svensson thus advocated a repo rate of 0.50 per cent and a low repo-rate path that then gradually rises to 1.75 per cent at the end of the forecast period. This does not entail a lowering of the long-term average level of the repo rate of approximately 4 per cent, but simply that the repo-rate path will be flatter and reach the long-term level beyond the forecast horizon.

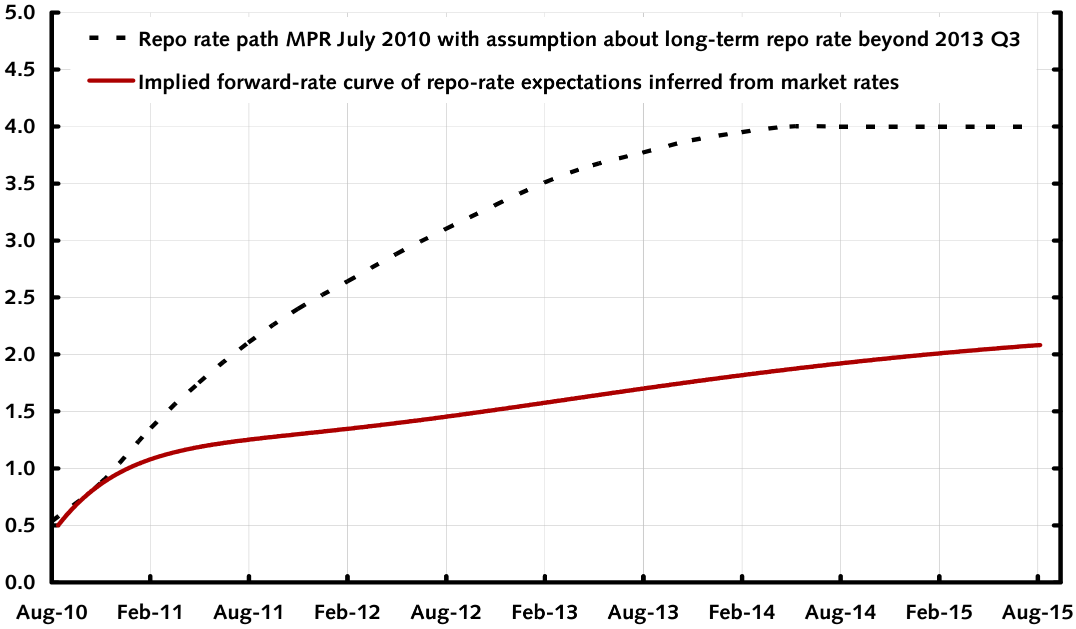
Mr Svensson believed that the repo-rate path in the main scenario is unreasonably high. It is far above market expectations and the corresponding short-term and long-term market rates. If it were to achieve full credibility, market expectations would shift upwards to the same degree. This would have fateful consequences. Mr Svensson called on his colleagues on the Executive Board to point out any faults in his reasoning.

Mr Svensson's starting point was that monetary policy and the published repo-rate path have an impact through the market expectations regarding future repo rates that they give rise to. These market expectations then determine the actual prevailing market rates for various maturities, that is the actual yield curve. Monetary policy thus acts through the yield curve it gives rise to. If the repo-rate path has full credibility then market expectations correspond to the repo-rate path and give rise to an actual yield curve that is compatible with the repo-rate path. If the repo-rate path lacks credibility, market expectations deviate from the repo-rate path. The actual yield curve will then deviate from the yield curve that is compatible with the repo-rate path. In the former case actual monetary policy (the actual yield curve) coincides with the intended monetary policy (the yield curve that is compatible with the repo-rate path). In the latter case, actual monetary policy differs from the intended policy. Mr Svensson noted that in this context the forecasting abilities of the repo-rate path and of market expectations do not matter; all that matters is the actual yield curve that arises.

Mr Svensson's reasoning can be clarified with the help of the figures below. Figure 2 shows the repo-rate path (July and September 2010) extrapolated five years ahead and the forward-rate curve calculated on the basis of market rates on 27 August and adjusted for estimated forward premiums. Figure 3 shows yield curves, that is the yield curve that corresponds to the forward-rate curve and the yield curve that follows from the repo-rate path.[4] The vertical axis shows the interest rate in per cent (calculated on the basis of market listings on 27 August) as a function of the due date shown on the horizontal axis. The difference between the two yield curves shows what would happen to interest rates for various maturities if the repo-rate path were to become credible overnight; that is if the market expectations in Figure 2 were to shift from the red to the black broken line. This is assuming that risk premia remain unchanged, premia that in any event, according to normal assumptions and rules of thumb, are rather small – around 0.06 per cent per year and thus around 0.30 per cent for a five-year interest rate.

[4] The curves in Figure 3 show yield curves in the form of the interest rate for a zero-coupon bond issued on 27 August 2010 which matures in accordance with the horizontal axis until August 2015. The zero-coupon rates in Figure 3 relate to the forward rates in Figure 2 as unit costs to marginal costs. The zero-coupon rate with maturity in August 2013 is thus equal to the average forward rate up to August 2013. See Svensson, Lars E.O., "Estimating forward rates", *Sveriges Riksbank Economic Review 1993:3*, for details.

Figure 2. Forward rates (27 August) and the repo-rate path*

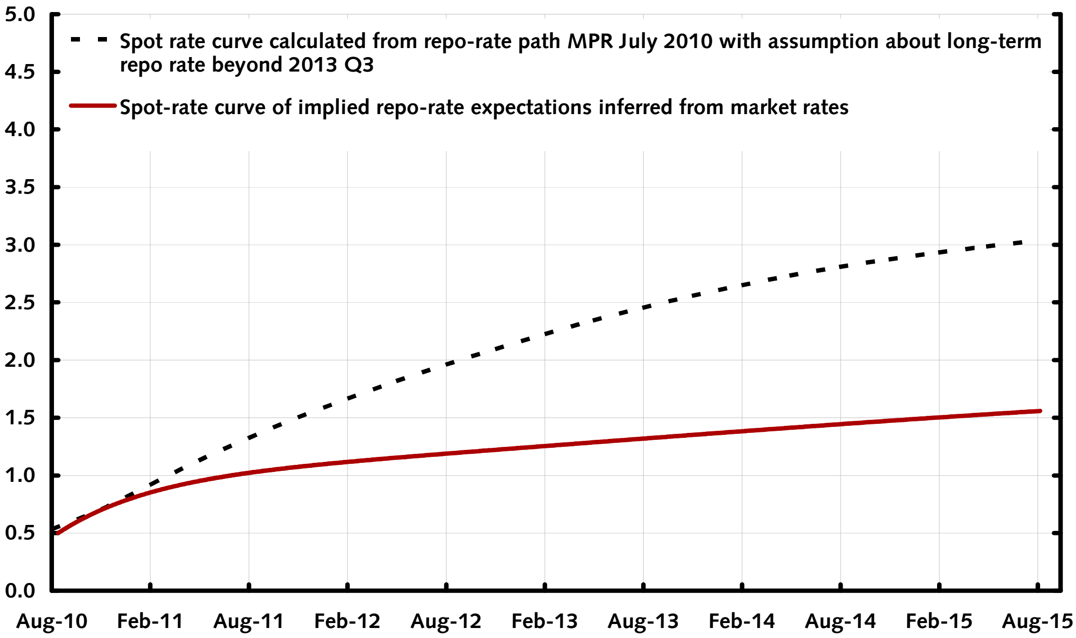


Note. Repo-rate expectations have been inferred from market rates by deducting an assumption about risk premia.

Sources: Reuters, Ecowin and the Riksbank.

* The calculation of risk premia is always uncertain. This applies in particular to the longer horizons of three to five years as there is a lack of good instruments that can act as measures of monetary policy expectations. In the calculations, Mr Svensson assumes an extrapolation of the repo-rate path after the forecast horizon with a continued increase to 4 per cent where the repo rate then remains unchanged.

Figure 3. Yield curve (market pricing 27 August) and repo-rate path based yield curve*



Note. Repo-rate expectations have been inferred from market rates by deducting an assumption about risk premia.

Sources: Reuters, Ecowin and the Riksbank.

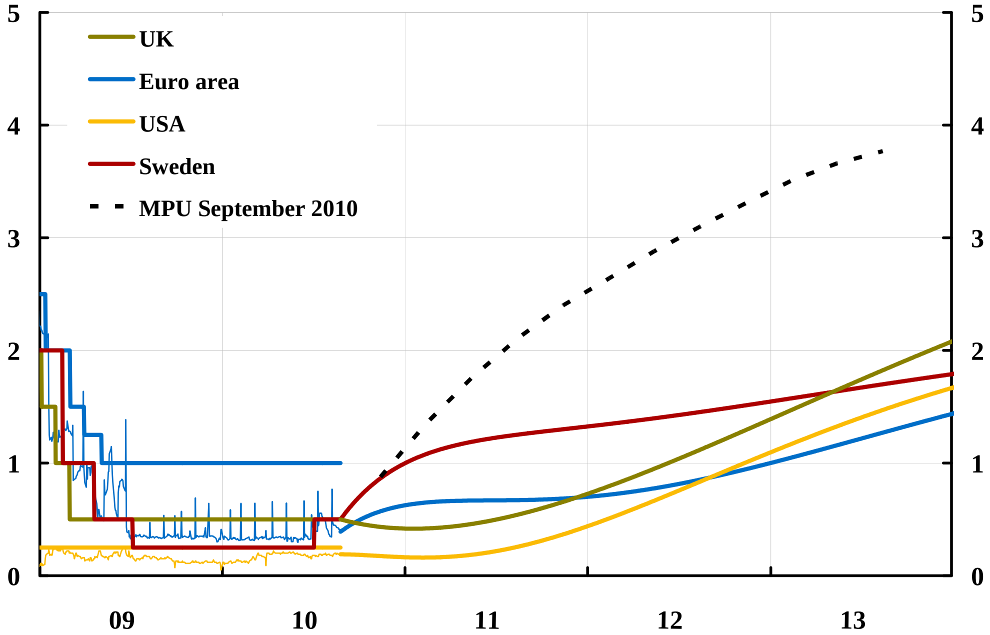
* The yield curve calculated on the basis of forward rates can not be directly compared with a yield curve calculated using government bond rates due to an adjustment for risk premia.

According to Figure 3, a three-year interest rate (maturing in August 2013) would increase by approximately 1.2 percentage points, while a five-year interest rate (maturing in August 2015) would increase by almost 1.5 percentage points. Normally, the Riksbank wishes the repo rate to be credible and to be incorporated in market expectations. If this were to happen now it would entail a drastic increase in interest rates at these maturities and a very dramatic tightening of monetary policy compared to the present situation.

Mr Svensson believed that the present good level of growth and recovery is due to the actual monetary policy, that is to market expectations and the current market rates for various maturities, rather than to the intended monetary policy, that is the repo-rate path. A drastic tightening of monetary policy would in all likelihood choke off this growth and recovery. Is this appropriate? Is it not the case that the actual monetary policy in line with market expectations seems more appropriate in this situation? Mr Svensson believed that the market was right in the sense that the current yield curve is appropriate for the Swedish economy now. The Riksbank is wrong in the sense that the yield curve that is compatible with the repo-rate path would lead to a drastic tightening of monetary policy and choke off the recovery of the Swedish economy.

Mr Svensson also said that such a great increase in the interest differential in relation to other countries would be followed by a substantial weakening of the krona, which would further reduce inflation and hit the export industry and its recovery particularly hard. This is illustrated in Figure 4, which apart from the repo-rate path and repo-rate expectations for Sweden also shows policy-rate expectations for Europe and the United States. As mentioned at the beginning of the meeting these are very low. Given statements made by the Federal Reserve and the ECB, these low policy-rate expectations must be regarded as very realistic. The differential between Swedish and foreign interest rates is currently moderate. If the repo-rate was to become credible and policy-rate expectations for Sweden were to shift up to the repo-rate path, the expected differential in relation to other countries would be considerable. This would trigger substantial capital flows and lead to a dramatic appreciation of the krona. Both higher market rates and a stronger krona would entail a drastic tightening of actual monetary policy.

Figure 4. Repo-rate path and expected policy rates for Sweden, the euro area and the United States (27 August)



Sources: Reuters, Ecowin and the Riksbank.

Mr Svensson said that this is no small matter when one considers the effects on the Swedish economy. At previous meetings he had spoken about a shift in the repo-rate path of 25 points for four quarters that would correspond to approximately 16 000 jobs lost or saved depending on whether the shift was upwards or downwards. Now it is a case of more than 100 points for more than 12 quarters. He said that one must hope that the relationship is not linear.

The repo rate path reflects the *intended* monetary policy. Market expectations (the forward rate curve adjusted for risk premiums, etc.) reflect the *actual* monetary policy conducted. It is primarily the actual monetary policy that affects the economy. Current developments in inflation and GDP and the corresponding recovery are thus dependent on the actual monetary policy, not the intended monetary policy. The actual monetary policy (market expectations) has been much more expansionary than the Riksbank's intended monetary policy (the repo rate path). This has probably contributed to the surprisingly positive development in the economy.

Mr Svensson considered that a severe tightening of actual monetary policy would lower both inflation and GDP growth, slow down the recovery, and keep unemployment high. This is in a situation where inflation and resource utilisation are already too low to begin with. Normally, the Riksbank's wish and endeavour is that the repo rate path shall gain credibility and be incorporated into market expectations and market pricing. In this way, monetary policy will have the largest possible impact. However, this time it is the opposite. Mr Svensson claimed that if the repo rate path in the main scenario is supported by the majority, one must hope that it is still not credible and thus will not have very large consequences before it can hopefully be corrected at the next monetary policy meeting. There is an old saying that one should be careful what one wishes for. This is because getting what you wished for may sometimes have unforeseen consequences. This could be one of those times. Mr Svensson claimed that in this case, one should not wish for better credibility for the repo rate path.

In conclusion, Mr Svensson noted that a lower repo rate path gives a smaller difference between CPI inflation and CPIF inflation and thus improves the target fulfilment for CPI inflation, which otherwise tends to overshoot the target.

Deputy Governor **Karolina Ekholm** noted that developments in Sweden had again been stronger than expected. The labour market situation has improved more than was forecast in the latest Monetary Policy Report and forward-looking indicators point to a relatively fast recovery for some time to come.

Ms Ekholm reminded the meeting that when the Riksbank made its decision in July, her opinion was that the rapid recovery in the economy was in itself motivation for raising the repo rate, but that she nevertheless entered a reservation against such an increase. Ms Ekholm said that she believed at that time that reasons of prudence justified keeping the repo rate unchanged, not least in the light of the uncertainty prevailing then with regard to the consequences of the fiscal problems in the eurozone. With hindsight it can be seen that some of these fears were exaggerated. Of course the fiscal problems in the eurozone remain, but at least the stress tests published in the summer did not lead to any greater problems for the European bank system; on the contrary, they seem to have led to greater confidence in the system as a whole. Ms Ekholm observed that she was also uneasy about a high level of maturation of fixed interest rate loans in Sweden and the eurozone leading to increased spreads. These maturities passed off more or less without disruption, even though there have recently been some signs of increased spreads in the interbank market.

Now that the recovery is once again looking stronger than the Riksbank has forecast, Ms Ekholm raised the question of whether increasing the repo rate again is justified, despite the fact that she did not think it should have been raised at the previous meeting. Ms Ekholm considered that raising the repo rate is justified. Given the strong development of the Swedish economy, Ms Ekholm's assessment was that there is justification for further easing up on the accelerator. However, there was no justification for retaining the earlier repo rate path. The fact that the recovery in the United States now appears to be taking longer and that growth in Asia is flagging will hold back growth and inflation in Sweden in the coming period. This entails low inflation and low resource utilisation during the forecast period, which is also included in the forecast. But at the same time it motivates increasing the repo rate at a slower pace than is proposed in the draft Monetary Policy Update. Given the repo rate path that is proposed, resource utilisation will be lower than normal, in principle for the whole of the forecast period. Moreover, CPIF inflation will be below 2 per cent for most of the period, even if CPI inflation is above the inflation target as a result of the effect of higher mortgage rates. All in all, there is thus scope for a more expansionary monetary policy when one looks ahead.

Ms Ekholm further considered that there is reason to be somewhat cautious with regard to keeping interest rates at a higher level than in the rest of the world. The fact that the Riksbank is raising its policy rate sooner than the ECB and the Federal Reserve is justified, as there is less need for continued expansionary monetary policy in Sweden. This is not because resource utilisation is necessarily higher here than in the United States and the eurozone at present, but because the Swedish economy is basically in better shape and has better opportunities to quickly return to normal resource utilisation. However, if interest rates in Sweden are expected to be much higher than those in the United States and the rest of Europe, without this being justified by expectations of much higher inflation, there is a risk that the krona will strengthen more than the Riksbank is expecting. This could hold back inflation as a result of lower import prices, and lead to lower resource utilisation through a negative effect on net exports.

Ms Ekholm clarified that she is voting in favour of raising the repo rate from 0.5 to 0.75 per cent, but that she wishes to enter a reservation against the proposed repo rate path, preferring a flatter path, that is, one where the repo rate is raised at a slower pace in the coming period. Her main grounds for the reservation were that weaker development abroad, first and foremost in the United States, can be expected to hold back growth and inflation in Sweden, too, further ahead, and that a slower increase of the repo rate should therefore bring inflation closer to the inflation target and resource utilisation closer to a normal level.

In conclusion, Ms Ekholm wished to comment on Mr Svensson's reasoning that if the repo rate path were to become credible this would entail a dramatic increase in market rates and a very dramatic tightening of monetary policy compared with the present situation. It appears as though the Swedish forward rates follow when forward rates abroad change in a way that perhaps means one does not need to worry this will happen. But it would be useful to investigate more closely how forward rates are affected by the repo rate path and by forward rates abroad.

Deputy Governor **Barbro Wickman-Parak** noted that economic data received for Sweden has been stronger than expected. Exports have recovered quickly and gloomy prophecies that the composition of Swedish exports would be a hindrance have been put to shame. Rising capacity utilisation is beginning to have an effect on corporate investment and funding opportunities are no obstacle. At the same time, private consumption has developed well and households are very optimistic. It looks as though all of the cylinders in the growth engine have already fired or are about to fire and this has had an effect on the labour market, which has once again been stronger than expected.

At the same time, there are no immediate threats to inflation during the forecast period. At the previous monetary policy meeting Ms Wickman-Parak said that monetary policy must plan in advance and take into account what effects the Riksbank's decisions may have even beyond the forecast horizon. She had also pointed out that although resource utilisation was low and unemployment was high, there was nevertheless a risk that a labour shortage could arise further ahead. Now the forecast for employment is being revised up further. The shortage figures are also rising. The levels are not at all alarming, but an upward trend is clear. Although structural reforms have been made, it is difficult to say how great an effect they will have, and at what horizon.

Household borrowing does not comprise any immediate problem, either. But this variable is nevertheless a risk factor in the slightly longer perspective. Ms Wickman-Parak repeated a point of view she expressed at the previous meeting. A slightly higher interest rate now could make households begin to adjust so that an even higher debt ratio does not force them to make large cutbacks in consumption when the increases in the repo rate nevertheless begin further ahead, and this may have to be done in quick stages.

The Executive Board's decisions try to manage the risks in the best possible way. There is, of course, a risk that developments abroad will be worse than expected, which would have repercussions for the Swedish economy. However, Ms Wickman-Parak supported the main scenario as a basis for the monetary policy decision. There are risks on the domestic side that are not conspicuous or visible yet but may build up. Although the Swedish economy is growing from a low level, there may be sluggishness in the labour market that means that a growth of 3-4 per cent causes bottlenecks to arise. Severe difficulties in obtaining skilled labour were a major theme prior to the crisis.

There is now slightly greater uncertainty over the strength of the recovery abroad. However, in the Swedish economy the strength of the recovery is instead becoming increasingly clear. And our monetary policy focuses on conditions in Sweden. In conclusion, Ms Wickman-Parak expressed support both for a decision to raise the repo rate to 0.75 per cent and for the repo rate path. With this repo rate path the repo rate will remain low for some time to come. In real terms, it will be negative for a further period, and then slowly rise and be just over one per cent at the end of the forecast horizon.

When it comes to the repo rate path, it is of course the case that a setback abroad could have a negative effect on growth in Sweden. In this situation there may of course be reason to adjust the repo rate path. This is natural; if the forecasts for growth and inflation change, then the repo rate path will be affected. But the events since the summer do not give any reason to make a change at present.

Deputy Governor **Lars Nyberg** noted that, at present, only a handful of European banks have full access to international financial markets and that the major Swedish banks are among these, albeit to somewhat varying degrees. In an international comparison, Sweden's banks seem transparent and well-managed and without any suspect assets that are difficult to evaluate. The problems remaining in the Baltic countries have been sufficiently mapped, although perhaps not solved. All of the major banks are reporting significantly lower loan losses than expected, not least in Sweden. The banks' situation does not form a problem as regards funding the expansion of the manufacturing sector during the current economic upswing.

The economic recovery has continued approximately as expected during July and August, that is to say since the last monetary policy meeting. The picture of a stable economic upturn has become clearer and the reasons for continuing gradual interest rate increases have become stronger. Mr Nyberg said, therefore, that the repo-rate path should be held unchanged and, consequently, the repo rate should be increased by a quarter of a percentage point at today's meeting.

This development is described in depth in the draft Monetary Policy Update. On the whole, the economy has grown slightly faster than expected. One year ago, a GDP increase of 4 per cent in 2010 could hardly have been imagined. Exports, investment and the retail trade have all developed somewhat more strongly than predicted. The labour market has made a significant improvement and there is reason to revise the forecast for unemployment downward once again. Household borrowing has increased, as has household debt as a percentage of disposable income. However, the rate of increase in property prices seems to be diminishing. Attention should be paid to these factors in the monetary policy discussion.

The primary source of uncertainty is the situation abroad. In the United States, the Federal Reserve has indicated that it intends to continue to keep the interest rate at a low level for the foreseeable future, while, in Europe, the ECB has found it appropriate to continue its monetary policy stimulation measures. However, the situation in Sweden appears to resemble that of Canada or Australia, where policy rates are being increased as a consequence of the domestic economy's increasing strength.

It is interesting to observe that expectations of future repo rates shifted downwards not only in the United States and Europe, but also in Sweden. In Sweden, market participants' repo rate expectations 1–2 years ahead are currently not insignificantly below the repo-rate path. The market thus believes that the repo rate will be increased at a slower pace than is indicated by the repo-rate path. This may possibly be because the market believes in a less rapid upturn in economic activity, or possibly because it is believed that interest rate increases will have more bite in a situation in which households have borrowed heavily at variable interest rates. There may be several possible explanations. However, in conjunction with the inflation expectations also implied by the market, this suggests negative real interest rates during the coming years, which may be considered remarkable. There will be reason to return to this issue in the next Monetary Policy Report. Possibly the market is right? It is of little consequence for today’s decision to increase the interest rate, however. Expectations for this year coincide well with the Riksbank’s interest rate path.

Neither is it completely obvious that market expectations, as expressed in implied forward rates, provide a completely fair picture of what Mr Svensson refers to as "actual monetary policy", that is to say that which affects the behaviour of individuals and companies. There is probably no serious risk that the market will suddenly discover that the Riksbank’s repo rate curve is the “actual” one and will thus rapidly adjust its expectations accordingly, with the effects on interest rates and exchange rates sketched by Mr Svensson. The market will probably see the repo-rate path exactly as the Riksbank wishes it to be seen, namely as a forecast, rather than a promise. And the Riksbank’s forecasts can differ from those of the market, without this necessarily being particularly sensational.

Finally, a question arises regarding the unconventional monetary policy measures implemented by the Riksbank during the crisis, that is to say the special loans to the banks. The Riksbank has continued to wind up its crisis measures by not replacing loans to market actors as these successively mature. As far as loans have been offered, this has been at interest rates that the market has found unfavourable – that is to say that cheaper funding has been available elsewhere. The final fixed interest-rate loan with a one-year maturity, provided by the Riksbank to the banks, will mature on 6 October. Once this has matured, the banks will have resumed responsibility for the overnight market in all essentials. At this point, it is possible that frictions may initially arise so that some banks deposit with the Riksbank at an interest rate equivalent to the repo rate minus 75 percentage points, while others borrow from us at an interest rate equivalent to the repo rate plus 75 percentage points. Such a development would be no cause for concern. Any inability of the overnight market to manage such imbalances under normal circumstances would be a problem for the banks, not the Riksbank. Certain banks would miss a possible source of revenue, while others would have to pay an unnecessary expenditure. Such situations usually correct themselves rapidly. On the other hand, a failure of the market to function in times of crisis may also be a problem for the Riksbank, as the confidence of foreign investors in the Riksbank may also be affected. However, the situation has now returned to normal and there is no reason for the Riksbank to be concerned about the manner in which the banks manage their internal affairs.

Governor **Stefan Ingves** observed that the recovery of the Swedish economy was benefiting from the rapid growth of world trade and the strong state of central government finances. Increased exports, consumption and investment are deemed to be contributing to the higher rate of GDP growth in Sweden than in the euro area over the entire forecast period. Sweden was affected by the global downturn at a late stage and in a situation in which the economy was strong in a variety of respects. Under these circumstances, it is reasonable for the recovery in Sweden to proceed more rapidly and to be stronger than elsewhere. It is thus reasonable for Sweden to have a higher policy rate than countries suffering problems.

In light of this, together with the data obtained since the Riksbank's decision at the previous monetary policy meeting, it seems reasonable to support the proposed increase of the repo rate and the proposed interest rate path. As regards the interest rate path, the Riksbank needs to return with a deeper analysis of long-term economic developments both abroad and in Sweden, but this would be a study for the future, having no effect on our current stance. In addition, the introduction of our own repo-rate path was a long process and this should not be changed arbitrarily.

The labour market has made a stronger recovery than the Riksbank was expecting and employment has been adjusted upward for the entire forecast period. This has contributed towards resource utilisation initially being deemed to be higher than was previously believed and to be moving towards a normalisation. Wage increases are still expected to be fairly moderate, between 2.5 and 3 per cent per year. Productivity is expected to increase by between 2 and 2.5 per cent per year. All in all, this contributes towards the fairly slow increase of unit labour costs over the forecast period, compared with the historical average. Should these conditions change as a consequence of the strong growth, inflation will risk becoming higher.

The inflation forecast for the coming year has been revised downward somewhat since the Monetary Policy Report in July, due to lower energy prices and the stronger Swedish krona. Towards the end of the forecast period, the Riksbank expects inflation to be higher than previously, due to the upward revision of resource utilisation. By 2012, CPIF inflation is expected to have reached an average of 1.7 per cent, which may seem low, but, when measured with CPI, which is the Riksbank's target variable, inflation is estimated to reach 2.5 per cent in the same year.

This forecast is based on the same interest rate path as was used in July. With this interest rate path, the inflation target will be met at the same time as resource utilisation is normalised. It thus seems reasonable to make monetary policy somewhat less expansionary and to increase the repo rate to 0.75 per cent today. Together with the recent maturity of a fixed interest-rate loan, this contributes towards the continued normalisation of monetary policy. It also underpins the Riksbank's efforts to avoid the build-up of any new financial imbalances in Sweden, which will be a risk if the interest rate is held at an excessively low level for too long. A gradual increase now is preferable to being forced to implement rapid interest rate increases at a later date. Mr Ingves pointed out that this is a matter of making choices between the short and long terms, which he does not consider can be disregarded. Neither is it possible to leave everything to macro supervision rules, the practical application of which has not been developed as yet. Mr Ingves concluded by commenting on the discussion of the effects on exchange rates that can result from different monetary policy decisions. Exchange rate assessments are highly uncertain and are steered by many factors. Consequently, it is difficult to base monetary policy on a fixed view of the development of the Swedish krona.

First Deputy Governor **Svante Öberg** considered the issues addressed by Mr Svensson to be important. During the autumn, the Riksbank must review the relationship between the repo rate in Sweden and policy rates in the United States and euro area. Not only this, it must also conduct a more detailed analysis of the connection between the Swedish repo rate and Swedish lending rates and the manner in which this affects the transmission mechanism. It is, of course, the short-term rate and thereby today's repo rate decision that are most significant for household and corporate loan costs, as the main portion of their borrowing takes place at variable interest rates, while the market's expectations regarding the repo rate and the interest rate path over the longer term are less significant for borrowing costs.

On the other hand, household expectations of longer term mortgage rates are important to households' decisions regarding loans for home purchases. Recently, these expectations have developed in another direction. Household expectations of mortgage rates have risen since the Riksbank started increasing the repo rate, which is good, while market expectations of the repo rate have fallen. Another important question concerns the impact of rising interest rate margins and new regulations on the neutral long-term repo rate. There will consequently be a great deal to consider over the autumn.

Deputy Governor **Karolina Ekholm** agreed that, in principle, a thorough analysis would be required to draw well-founded conclusions regarding just how a flatter repo-rate path would have to be formulated to result in a well-balanced monetary policy. Nevertheless, her assessment is that it would be justifiable to decrease the path so that, at the end of the forecast horizon, the repo rate would be one percentage point or so lower than the path proposed in the draft MPU. On the other hand, Ms Ekholm was sceptical towards shifting the path downward so much as to bring it in line with the expected path implied by forward rates. Following such a path would mean that the repo rate would be more than two percentage points lower than the proposed repo-rate path by the end of the forecast horizon. However, Ms Ekholm wished to emphasise that this assessment was not based on any detailed analysis.

Deputy Governor **Lars E.O. Svensson** then commented on Mr Ingves' earlier contribution to the discussion. According to Mr Ingves, Sweden was impacted by the crisis at a later stage. Mr Svensson did not agree. Figure 13 of the draft Monetary Policy Update shows that GDP started to decline earlier in Sweden than in the euro area and United States, this occurring in the first quarter of 2008. GDP declined more rapidly and to a greater extent in Sweden than it did in the euro area and the United States, and it remains lower than GDP in these countries. An interesting question is that of how much potential GDP has fallen in Sweden, compared with the euro area and United States. Mr Svensson was inclined to believe that potential GDP could very well have fallen less in Sweden, as Sweden has only been exposed to a demand shock via a fall in exports, while the euro area and United States are facing major problems in their financial sectors, with unsustainable financial policies and the need for significant reforms. In this case, the negative production gap is greater in Sweden than in the euro area and United States.

Mr Svensson also wished to make a clarification regarding Mr Ingves' comment on the adjustment of the interest rate path to market expectations. Mr Svensson was absolutely not claiming that the repo-rate path should always be adjusted to market expectations. Research has been conducted in this area. One important conclusion is that if monetary policy is adjusted to market expectations and market expectations are affected by monetary policy, the anchoring point may be lost and multiple equilibria may arise. Mr Svensson maintained that *on this particular occasion*, although not in general, the market was right and the Riksbank wrong. As usual, this is a matter of setting a repo-rate path that best stabilises inflation and resource utilisation. On this particular occasion, market expectations have been better at this than has the main scenario's interest rate path.

Mr Svensson also commented on Mr Ingves' concern that household financial imbalances could build up in a situation with excessively low interest rates. Mr Svensson was not concerned about this, his reason being that household balance sheets are so strong. The average loan-to-value ratio among households is only approximately 30 percent of their total assets, including housing. Households thus have great wealth, which is increasing due to the high saving ratio. Instead of being concerned over the ratio of debts to disposable income, it would probably be better to compare the ratio of wealth to disposable income. Furthermore, household balance sheets are an issue that the Riksbank will address and analyse in detail in its Financial Stability Report later in the autumn.

As regards the important issue of the level of the repo-rate path, Mr Svensson had a couple of questions for his colleagues in the Executive Board. He was very curious about the reasoning of those members wishing to maintain the high repo-rate path. As Mr Svensson understood matters, they were not questioning that the credibility of the repo rate path and a shift in market expectations of the repo-rate path would entail an upward shift of the yield curve and that long-term market rates would then increase as much as Mr Svensson had claimed. Incidentally, these increases are, of course, the result of pure logic and arithmetic. But does this mean that the other members of the Executive Board claim that these major interest rate increases (1.2 percentage points for a three-year rate, and 1.5 percentage points for a five-year rate) would not have any major effect on the Swedish economy and exchange rate? Or does it mean that they predict or even hope that the high repo-rate path will not be credible and thus that market expectations and market rates will not shift upward? Mr Svensson did not understand their reasoning and hoped to receive a clarification.

Mr Svensson also noted that the correspondence between market expectations and the repo-rate path is a subject he has examined in two papers in *Economic Review*. His conclusion in these studies was that correspondence has largely been strong and that the credibility of the repo-rate path thus was high until the end of February 2009, while credibility decreased and market expectations lay over the repo-rate path from the start of April 2009. Later, from the start of February 2010, the opposite situation has arisen, of course, namely that market expectations are lower than the repo-rate path. However, for a long time, the credibility of the repo-rate path was relatively strong.

Mr Svensson concluded by addressing the question of why he would like to shift the repo-rate path so much now, following a fairly preliminary analysis, instead of waiting and possibly shifting it downward at the next monetary policy meeting in just less than two months time. The reason is that the expectations of many economic agents (for example households and mortgage holders) are influenced by the Riksbank's communications and the announced repo-rate path. Many of these agents are not as sophisticated as some market participants and do not realise that the Riksbank's repo-rate path is unreasonably high and will be shifted downward. Instead, over a period of two months, they will receive misleading information about excessively high future interest rates and will risk making poorer economic decisions. As there are such strong arguments that the high repo-rate path is unreasonably high, and no counter-arguments have been put forth, it seems clear that a major downward shift in the repo-rate path will take place sooner or later. It would be better for this shift to be made sooner, rather than later, so as to avoid a situation in which the Riksbank issues misleading information for another two months.

Deputy Governor **Barbro Wickman-Parak** wished to comment on the discussion concerning an amended interest-rate path in the period ahead. Her opinion was that if the prospects for the real economy and inflation were to change, an appropriate adjustment of the interest-rate path would naturally be made. Another matter is whether the market is "right" or "wrong". She mentioned that, after careful consideration, the Riksbank had decided to publish its own interest-rate path. It is important to be clear that this system will continue to be used in the future. There are no strong reasons to believe that the market is always right. The diagram presented by Per Jansson in his discussion illustrates this point. Ms Wickman-Parak therefore welcomed Mr Svensson's clarification to the effect that market expectations should not automatically be used in future, but that Mr Svensson, on this particular occasion, had a point of view that closely coincided with the market's expectations.

Deputy Governor **Lars Nyberg** stated that market expectations of the future repo rate often turned out to be erroneous, and pointed out that this was one of the reasons that the Riksbank went over to using its own interest-rate path. Mr Nyberg interpreted Mr Svensson as meaning that the Riksbank should lower the interest-rate path to bring it into line with market expectations, as these provide a better picture of the "actual" monetary policy, that is to say the policy influencing the behaviour of households and companies. Such a decrease would not have any impact on the economy, as it would only be an adjustment to "reality". However, Mr Nyberg believed that such a strong decrease of the interest-rate path would be regarded as clearly signalling a more expansionary monetary policy and would thus also have clear effects on both interest rates and exchange rates.

Governor **Stefan Ingves** commented on Mr Svensson's previous discussion of whether the Swedish economy was affected at an early or late stage of the financial crisis. Mr Ingves stated that several different factors should be examined when making such an assessment, not just GDP. For example, the impact on the financial sector should be considered. Mr Ingves stated that his overall assessment is that Sweden has escaped lightly, compared with most other countries. In conclusion, there is currently no reason to change the interest-rate path, as, at present, no sufficient new information calls for such a decision.

Deputy Governor **Lars E.O. Svensson** opined that Lars Nyberg had posed a very important question. How would the market react if the Riksbank were now to lower the repo-rate path as far as Mr Svensson advocated? Would market expectations remain unchanged or would they shift downward? This is something that nobody knows. However, Mr Svensson conceded that he would have no objections towards a minor downward shift, as monetary policy would then become slightly more expansionary in a situation in which CPIF inflation is low and unemployment is high.

Mr Svensson also answered the question of why he wishes to shift the repo-rate path precisely to match market expectations, as opposed to a path above or below these expectations. Mr Svensson considered that the ongoing development and recovery of the Swedish economy is entirely satisfactory at present. Of course, this depends on the actual monetary policy, that is to say market expectations and the actual market rates for various maturities. Mr Svensson stated that the current forecasts for inflation and GDP are compatible with the current interest rate level, market expectations and yield curve. It would thus be appropriate to change the intended monetary policy to the actual one, consequently shifting the repo-rate path downward to match market expectations. However, it is only on this particular occasion that the market is right, not necessarily in the future.

Mr Svensson also posed the question of how best to explain the high level of the interest-rate path. Mr Svensson claimed that an error in the level had gradually entered the interest-rate path, eventually increasing in extent. One possible explanation is that the monetary policy decisions are steered by revisions to an excessive degree. This implies that the previous monetary policy decision and the previous repo-rate path have been accepted without criticism and that the repo-rate path has then been shifted upward or downward depending on whether the development of the economy and inflation have been above or below expectations. No monetary policy decision is perfect. Each decision includes greater or smaller errors. Allowing revisions to steer means allowing new errors to be added to the existing ones. Anybody who remembers their introductory course in statistics or finance will realise that this means that the monetary policy will include an element of a “random walk”, meaning that it can drift off and eventually give rise to major errors. In order to counteract this effect, an error-correction mechanism must be added. The previous repo-rate path should not be accepted uncritically as a starting point. Mr Svensson reminded the meeting that, at the previous monetary policy meeting, he had criticised what he referred to as the revisionist argument and maintained that each monetary policy decision should be independent and not be propped up by the previous one.

Mr Svensson repeated that the actual monetary policy (market expectations) has been much more expansionary than the Riksbank’s intended monetary policy (the repo-rate path) and that this has contributed to the surprisingly positive development of the economy. It has been the Swedish economy's good fortune that the repo-rate path has not been credible.

Deputy Governor **Karolina Ekholm** stated that the issue raised by Mr Nyberg was a key issue requiring investigation in the period ahead. How do the Riksbank’s repo-rate path decisions affect market rates and, consequently, the impact of monetary policy? Like Mr Nyberg, she finds that there is reason to believe that a major downward revision of the repo-rate path just now would influence market rates in a negative direction, making the “actual” monetary policy more expansionary, rather than keeping it unchanged. Ms Ekholm pointed out that this is, however, merely a hypothesis and that a deeper examination of the question of how decisions concerning changes to the repo-rate path affect market rates would be beneficial. Not least, this would be important information to have as underlying data if the problems regarding the level of the repo-rate path, mentioned by Mr Svensson above, are to be addressed. If the Executive Board intends to make adjustments to the level of the repo rate at some point, it will be important to have a clear understanding of how this may affect market rates and thus which effects the monetary policy conducted will have.

Governor **Stefan Ingves** summarised the monetary policy discussion. The Swedish economy has developed strongly so far this year. World trade has increased rapidly, which has contributed to an acceleration in exports and investment. There has also been a substantial improvement in the labour market. Households are optimistic about the future, which has led to an increase in consumption. At the same time, there are signs that the recovery in the United States will take slightly longer than expected. GDP growth in the eurozone has been unexpectedly high, although the recovery there is expected to take its time, partly as a result of the extensive fiscal policy tightening in several European countries. Continuing modest activity in the eurozone and a more protracted recovery in the United States are expected to dampen developments in Sweden somewhat in the long run.

Inflationary pressures are still low in the Swedish economy, but are expected to rise as the labour market improves and economic activity strengthens. The repo rate needs to be raised gradually towards more normal levels to attain the inflation target of 2 per cent and at the same time contribute to a stable development of the economy. There is a majority in the Executive Board for the interest-rate path presented in the draft Monetary Policy Update. Another factor is that household indebtedness has increased significantly in recent years. During the summer, two of the three fixed interest-rate loans issued to the banks during 2009 matured. The fact that these loans have matured and not been replaced by new loans at a low, fixed-interest rate is also a part of the normalisation process for monetary policy.

§ 4. Monetary policy decision

The Executive Board decided after voting

- to adopt the Monetary Policy Update according to the proposal, Annex A to the minutes.
- to publish the Monetary Policy Update on 02.09.10 at 9.30 a.m.,
- to raise the repo rate by 0.25 percentage points to 0.75 per cent and that this decision would apply from 08.09.10,
- to raise the lending rate to 1.50 per cent and the deposit rate to 0.00 per cent, with effect from 08.09.10,
- to publish the decision above at 9.30 a.m. on 02.09.10 with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on 15.09.10, at 9.30 a.m.

Deputy Governor Lars E.O. Svensson entered a reservation against the decision to raise the repo rate by 0.25 percentage points to 0.75 per cent and against the repo rate path in the Monetary Policy Update. Deputy Governor Karolina Ekholm entered a reservation against the repo rate path.

Deputy Governor Lars E.O. Svensson entered a reservation against the decision to raise the repo rate by 0.25 percentage points to 0.75 per cent and against the repo rate path in the

Monetary Policy Update. He advocated a repo rate of 0.50 per cent and a low repo rate path that then gradually rises to 1.75 per cent at the end of the forecast period. The higher repo rate path in the main scenario would, if it becomes credible and is incorporated in market expectations, imply a considerable tightening of the current actual monetary policy with a substantial increase in market interest rates of longer maturity and a substantial appreciation of the krona, which would lower the already low CPIF inflation and increase the already high unemployment during the forecast period.

Deputy Governor Karolina Ekholm entered a reservation against the repo rate path in the Monetary Policy Update. She advocated a flatter repo rate path with a repo rate at the end of the forecast horizon that is around one percentage point lower than the adopted repo rate path. Her main grounds for this were that weaker development abroad can be expected to reduce growth and inflation in Sweden too in the period ahead and that a slower increase of the repo rate should therefore bring inflation closer to the inflation target and resource utilisation closer to a normal level.

This paragraph was confirmed immediately.

Minutes by

Ann-Christine Högberg

Checked by:

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