



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

DATE: 30 June 2010  
TIME: 9.00 a.m.

SVERIGES RIKSBANK  
SE-103 37 Stockholm  
(Brunkebergstorg 11)

Tel +46 8 787 00 00  
Fax +46 8 21 05 31  
registratorn@riksbank.se  
www.riksbank.se

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

Johan Gernandt, Chairman of the  
General Council (§ 1-3)  
Leif Pagrotsky, Vice Chairman of the  
General Council

Claes Berg  
Heidi Elmér  
Johanna Fager Wettergren (§1-3)  
David Forsman (§1-3)  
Eric Frieberg  
Mia Holmfeldt (§1-3)  
Ann-Christine Högberg  
Per Jansson  
Johanna Jeansson  
Martin W Johansson (§1-3)  
Pia Kronestedt Metz (§1-3)  
Pernilla Meyersson  
Marianne Nessén  
Christina Nyman  
Stefan Palmqvist  
Tommy Persson (§1-3)  
Bengt Pettersson  
Britta von Schoultz  
Lena Strömberg (§1-3)  
David Vestin  
Staffan Viotti

## § 1. Economic developments

It was noted that Johanna Jeansson and Bengt Pettersson would prepare the necessary draft for monetary policy meeting minutes with regard to paragraphs 1, 2 and 3 on the agenda for the meeting.

Lena Strömberg of the Financial Stability Department began by presenting recent developments regarding bank funding in Europe. The market has continued to improve. The banks have access to both short-term and long-term loans, and some banks from the countries in the euro area that were hit particularly hard by the concerns regarding weak public finances have been able to issue bonds. However, there is still uncertainty and the market is sensitive to negative events. The uncertainty factors include concern over what will happen after the ECB's twelve-month loan of EUR 442 billion matures, peripheral countries' dependence on the ECB, and problems with the high level of public debt in a number of countries. The interest rate differential for ten-year government bonds in relation to Germany has risen in recent months, particularly in Greece, Ireland and Portugal.

Pia Kronstedt Metz of the Monetary Policy Department reported on developments in the financial markets since the monetary policy meeting in April. Monetary policy expectations, in terms of forward pricing, have shifted upwards in the short term, but downwards in the long term, compared to April. Very recently they have continued to rise with regard to both the short-term and long-term, as the real economy in Sweden has been stronger than the market expected. Market newsletters provide a fairly unanimous picture that the repo rate is expected to be increased by 0.25 percentage points at the monetary policy meeting. Most of the forecasts and survey outcomes are in line with the repo-rate path in the draft Monetary Policy Report up to December 2010. For 2011 the survey responses are below the proposed repo-rate path. Since mid-June government bond rates have continued to fall in the United States and United Kingdom, while they have risen substantially in Greece and to some extent in Sweden. The upturn in Sweden has been due to the recovery in the Swedish economy. The uncertainty that has arisen regarding the recovery in the United States and the continued growth in China has had a dampening effect on stock markets around the world.

Per Jansson of the Monetary Policy Department presented a summary of the background material for the Executive Board's discussion. He noted that the Swedish economy is continuing to improve. This is confirmed by the most recent statistical results; an improved labour market, stronger foreign trade, higher retail trade sales and better results in the National Institute of Economic Research's Economic Tendency Survey. To summarise, the Swedish economy is developing strongly.

The recovery in the world economy is expected to continue, despite the new uncertainty in Europe resulting from problems in public finances. The staff's opinion is that the measures taken and planned in various countries and the initiatives taken within the EU and IMF cooperation will contribute to a smooth implementation of the budget consolidation work in a number of countries. All in all, developments in the global economy have been in line with what was expected in April. Demand is good in a number of emerging markets and growth is good in the United States.

The global recovery is having positive effects on the Swedish economy, where confidence is high. Growth in Sweden, both in terms of GDP and employment has been more rapid than expected and the forecasts have been revised upwards. GDP is now expected to grow by almost 4 per cent this year, which means revising up the forecast by just over 1.5 percentage points compared with the Monetary Policy Update published in April. Inflation is expected to be around the target level during the forecast horizon. The repo rate is very low to start with and as growth prospects improve, there are arguments in favour of raising the

repo rate. What is needed now is a gradual normalisation of monetary policy from a situation that was marked by recession and financial crisis. A further step in this is to extend the interest rate corridor so that it returns to the repo rate +/- 75 basis points, which means that the lending rate in today's proposal would be raised more than the repo rate. The Swedish economy is expected to grow more quickly than those of the euro area and the United States. The recovery in the global economy is expected to contribute to a strong increase in Swedish exports. Moreover, public finances in Sweden are in a much better condition than those in most other countries and households have substantial savings they can use if they wish to increase their consumption.

## § 2. Economic outlook abroad

Deputy Governor **Lars E.O. Svensson** began the discussion by pointing out that he largely shares the view of developments abroad contained in the draft Monetary Policy Report. However, he wished to emphasise that even though the recovery of the global economy is continuing and the situation on the financial markets has normalised to a large degree, there is still a need for an expansionary monetary policy in Europe and the United States. The recovery is from a very low level and could very well be fairly slow. The sovereign debt crisis and fiscal policy tightening in the euro area contribute to holding back growth and resource utilisation there. Resource utilisation in Europe and the United States is still very low and inflation is low. The risks associated with breaking off the expansionary monetary policy too early are still much greater than the risks of continuing to pursue it for too long.

Mr Svensson went on to say that it is good that there are clear indications that the ECB and the Federal Reserve intend to continue with their expansionary monetary policy. The ECB is continuing to offer its three-month loans, where the latest will mature in December. This is interpreted by many to be an indication that the policy rate will remain unchanged at least until the end of December this year. At its most recent meeting on 23 June the Federal Reserve's Open Market Committee repeated that the economic conditions are "likely to warrant exceptionally low levels of the federal funds rate for an extended period". Market expectations of future policy rates in the euro area and the United States are low, too.

Deputy Governor **Karolina Ekholm** began by stating that she shares the view of economic prospects abroad contained in the draft Monetary Policy Report. However, the problems with large budget deficits and growing debt levels in Europe make the forecasts for economic activity abroad very uncertain. It is difficult to assess how the planned tightening will affect growth and inflation abroad. Normally, one might expect that tightening would subdue growth, but in the light of the uncertainty caused by soaring public debt levels – where doubts arise as to whether the debt can be returned to a more sustainable path – it is far from certain that growth will be lower than it would have been without the tightening. However, what is clear is that the situation that has arisen regarding public finances in Europe means that growth prospects are poorer than was forecast in the April Monetary Policy Update.

Ms Ekholm said that the continued recovery in the world economy is at present largely dependent on continued high growth in Asia. This means that the recovery nevertheless appears fairly fragile. As we can see from the current news updates, the slightest setback with regard to developments in China could create turbulence and doubts regarding the

strength of the recovery. It is also clear that many of the emerging markets in Asia and Latin America have to manage large capital inflows that tend to push up asset prices and exchange rates. The way the emerging markets succeed in managing these inflows will play an important role in determining how robust the recovery in the world economy will be.

Deputy Governor **Barbro Wickman-Parak** began by commenting that no major changes have been made in the forecast for the international economy this year, if one disregards the upward revision to the forecast for growth in Japan. Her assessment regarding developments in the United States was that although the statistics that had been published gave a fragmented impression and had given rise to new discussions concerning the strength of the economy, the recovery that had begun will continue. Ms Wickman-Parak said that it was particularly important to keep a close watch on employment here. A continuing positive outcome for employment is one of the cornerstones for self-generating growth when fiscal policy becomes tighter from next year onwards.

Ms Wickman-Parak said that in the main scenario of the draft Monetary Policy Report it is assumed that the budget consolidation in the euro area countries with the largest problems will be implemented smoothly. But fiscal policy tightening is also being launched or notified in other countries, too. This will have a negative effect on growth. At the same time, the euro has weakened and this has the opposite effect. In Germany for example, which is Sweden's largest single trading partner, there are as yet no clear signs that the increased uncertainty in the financial markets has made an impression in the macro statistics. Exports and industrial output are continuing to grow and the number of orders indicates that this development can continue. The European Commission's recently-published June survey for the euro area does not point to any decline. But the euro area is the most uncertain card in the forecast. An earlier cautious growth forecast for the euro area has been revised down, mainly for next year and 2012 and this is reasonable.

Ms Wickman-Parak mentioned that the wave of financial unease that swept in after the crisis in Greece has been dampened somewhat, although the uncertainty remains. There should be a possibility to avoid new, serious disruptions in the financial markets. All cards should now be on the table with regard to budget deficits, which should contribute to dispersing uncertainty and unease. The safety net built up by the IMF and the euro countries should also have a stabilising effect. There is also concern over the solidity of the European banks. The decision to implement and publish stress tests for European banks ought to contribute to greater clarity and thereby disperse the uncertainty that is a driving force behind the financial unease. With regard to the Baltic region, one can note that the situation there has not worsened, despite the financial unease. The fact that Estonia can now adopt the euro with effect from the start of next year may also have a positive effect on confidence in the other Baltic countries.

But even if one manages to avoid serious disruptions in the financial markets, the sensitivity to incoming data and other events will probably remain. The high volatility in the financial markets will probably remain for some time, according to Ms Wickman-Parak.

Given the assumptions made in the report, that the sovereign debt problems will be resolved and that there will be no serious disruptions in the financial markets, Ms Wickman-Parak's assessment was that the forecast for the international economy in the report was reasonable, and she therefore supported it.

Deputy Governor **Lars Nyberg** began by supporting the forecast in the draft Monetary Policy Report, but wished to make some additions with regard to financial developments. He noted that a lot had happened in the financial markets around the world since the previous monetary policy meeting. Many countries have moved on from discussing how long they need to continue the fiscal policy stimulation after the crisis to avoid damaging the economic upturn, to discussion how quickly they can phase out the fiscal policy stimulation to restore budget balances and gradually reduce the public debt burden. A previously slow fiscal policy exit strategy has become high speed. Naturally, this could have consequences for the monetary policy conducted in the countries concerned.

Mr Nyberg stated that the main factors behind this turnabout were concern among investors around the world with regard to the credit ratings of various countries, in particular those in southern Europe, and concern over the banks in these countries or over other banks that had bought their government bonds. This concern has led to an uncertainty over the direction developments may take, and to severe market fluctuations, which has of course reduced investors' willingness to take risks. This applies to both equity and debt instruments. Stock markets have fallen, the return requirement on bonds with a credit risk has risen and the corresponding interest requirements on government bonds without credit risk have fallen. Access to long-term funding for countries and for banks the investors regard as uncertain has declined substantially.

Mr Nyberg said that there are three important reasons for the market uncertainty.

Firstly, it is as yet unclear how the budget problems, and the underlying structural problems, can be managed in southern Europe. The market has not regarded the planned measures in their current state as entirely credible, although in some countries they have come further than expected. The question of how Greece will be able to manage without restructuring its debt has not been dealt with. It is still unclear how the European Financial Stability Facility (EFSF), which will be responsible for providing budget support to countries in Europe who need it, will work. Moreover, there are many questions surrounding the ECB's purchase of government securities.

Secondly, there is a strong suspicion among many market participants that the balance sheets in a number of European banks do not look so good. The investors, quite naturally, want to know which banks are bleeding, and who will give them first aid. A decision has now been taken in Europe that the stress tests currently being made should be published individually for each bank. This is not just a good thing, it is essential. But then one must also be able to say how the banks that are shown to have problems will be given more capital. This should reasonably be done country by country. But what will happen in countries where the state evidently does not have any capital to inject? Will the European community resolve the problem, and if so, how?

Mr Nyberg considered that in this situation it was not possible to use monetary policy and fiscal policy to restore confidence as was done in autumn 2008. Those possibilities were already exhausted and moreover such measures would hardly help now. What remains is simply complete transparency. But transparency should go quite a long way. The markets do not need to know that all of the problems are resolved to be able to function, but they do need to know that the problems are known and that there are credible plans as to how they will be resolved. It is the uncertainty that is the problem.

The third reason for the uncertainty among investors is due to the new capital and liquidity requirements in the world's banks that are being drawn up by the Basel Committee and discussed by G20. The design of the supervision and the regulations for crisis management are also important in this context. Moreover, a number of countries in Europe wish to introduce bank taxes in the same way as in Sweden at an early stage of the crisis. It is reasonably difficult for investors in the market to evaluate banks and to supply them with capital before the regulations and forms for taxation have been finalised. At the same time, ordinary manufacturing companies are acquiring liquidity and waiting to invest it as they are unsure how much and at what interest rates they will be able to borrow from the banks or on the market. The uncertainty reduces their risk propensity and curbs credit flows. It is therefore of central importance in this context, too, that the uncertainty can be reduced. The details of the regulatory framework are not the decisive factor.

In the main scenario of the draft report, which is a good scenario and which Mr Nyberg said was certainly his main scenario, a large part of this collected uncertainty is dispersed during the remainder of the year. It will become clear how the sovereign debt problems in Europe should be managed, banks that need capital will receive capital injections or will merge with others and the new regulatory framework will be finalised. But until this happens, the markets will probably be abnormally sensitive to bad news and price fluctuations will be larger and quicker than usual. And if the sensitive political processes managing all this encounter serious problems, it will lead to growing uncertainty rather than declining uncertainty, and thus to serious problems for the supply of capital in the market.

Mr Nyberg in conclusion returned to the turnaround from a slow to a rapid fiscal policy exit strategy. This has been a necessity in many countries. There was quite simply no other way. In a short-term perspective this will lead to a decline in demand and growth in the countries affected and thus in Europe. But on the other hand, it may perhaps become clear how one can resolve the sovereign debt problems that have gradually built up in many countries over a number of years prior to the crisis. And perhaps also how one should manage a number of essential structural issues with regard to, for instance, the labour market and the pensions system. The long-term positive effects for growth may then outweigh the short-term negative effects.

Governor **Stefan Ingves** began by saying that the recovery in the international economy has continued, despite the crisis linked to the problems in public finances in Europe. World trade has recovered much more quickly than the Riksbank had anticipated one year ago. Demand is particularly strong in the emerging markets. In other words, it is clear that global growth has accelerated and that the recovery in world trade is strong. The OECD's leading indicator for the OECD area has continued to improve and Swedish exports and imports are growing rapidly. Mr Ingves supported the picture of international developments in the draft Monetary Policy Report.

According to the draft report, the Riksbank is expecting weak growth both this year and next year as a result of the subdued outlook for domestic demand. Given the concerns over sovereign debt and the accompanying discussions regarding the condition of the banking sector in parts of Europe, it is reasonable that the growth forecast has been revised down in the draft report. One positive factor for stability in Sweden's neighbouring region is that Estonia will adopt the euro next year. This will also benefit Latvia and Lithuania.

Mr Ingves noted that the recent financial crisis, which led to a macroeconomic crisis, is comprised of several phases. In the phase of the financial crisis in which Europe now finds itself the focus is thus on public finances. There are two factors that play a particularly important role. One is the size of the international banks' claims on the public sector. The other is the size of the countries' current account deficits. The measures that have been taken, such as aid packages, the European funding mechanism and the European Central Bank's purchases of government securities can be regarded as first aid. These measures deal with acute cash flow concerns if the countries are unable to borrow, but they do not resolve any long-term problems. They will require a lot of work. Here we are probably only at the start of a process that will take many years, and where the Swedish budget consolidation in the 1990s can be used as an example for guidance.

Given the decline in confidence, the ongoing pan-European stress tests for the banking sector can only be regarded as a very valuable, important and welcome measure. When the results are clear, they will reduce uncertainty, which will make it easier for the markets to function, at the same time as forcing the banks that have problems to deal with them instead of relying on long-term liquidity support.

In conclusion, Mr Ingves returned to the problems with sovereign debt. In the short term fiscal policy tightening may subdue growth. But the debt levels are so high that credible consolidation processes should reduce the risk of "crowding out" effects. This means they should contribute positively to growth further ahead, as a result of lower long-term interest rates and greater optimism regarding the future. If the demand effects are not so great, the repercussions for the Swedish economy need not be so great.

First Deputy Governor **Svante Öberg** said that he also supported the view of developments abroad presented in the draft Monetary Policy Report. GDP growth for the world as a whole is expected to be strong, but GDP growth in our region is expected to be moderate. Moreover, the upturn is starting from a low level. The assessment is that international inflation will be relatively low.

Mr Öberg only wanted to take up one question, the sovereign debt crisis and the fact that, as several others had pointed out, there is a risk of weaker developments abroad. There is a risk scenario describing this possibility in the report.

There are three main reasons for the crisis, according to Mr Öberg. Firstly, public finances in many countries were too weak even prior to the crisis, secondly the economic recession has had a negative effect on public finances, and thirdly most countries have conducted an expansionary fiscal policy to dampen the effects of the recession. The problems are made worse by two factors; for one thing a deep recession normally reduces potential GDP and thus potential tax income, and for another the large deficits and the rapidly-rising sovereign debt push up interest rates.

Developments may be dramatic in some countries. This has already happened in Greece. But Greece is not alone here. Many other countries are also experiencing serious problems. In Europe this applies mainly to Spain, Portugal and Ireland. There is also a very large deficit in the United States, much larger than in the euro area. Many countries are now tightening their budgets substantially to improve public finances. But it will take several years to return to a long-term sustainable situation and during this time there is a risk of new crises.

The problems also risk spreading to the banks. This has already happened, to some extent. Various measures of problems in the bank sector, such as interbank rates and CDS premiums for large European banks, have risen in recent months. The increased spreads for the banks, particularly in Greece and Portugal, but also in Spain and Italy, make it more difficult for them to find funding in the markets, which may hold back lending and thus have a dampening effect on developments in the real economy. Hopefully, the stress tests of European banks, to which most Board members have already referred, and the results of which will be reported in July, will provide a good picture of stability in the bank sector. But it is then important that the results of the stress tests are credible, and that, as Mr Nyberg said in his contribution, it is made clear how the banks that may need new capital will be dealt with.

In conclusion, Mr Öberg pointed out that the April Monetary Policy Update contained the assessment that the sovereign debt problems would have a dampening effect on GDP growth, particularly in the euro area, and now the forecasts also include the dampening effect of further fiscal policy tightening. But recent developments have strengthened the fears of more dramatic developments. The experiences of earlier financial crises, such as those described in studies by Carmen Reinhart and Kenneth Rogoff, show that rapidly-rising interest rates and soaring sovereign debt could lead to suspension of payments. If this were to occur, it could jeopardise financial stability and developments abroad could then be much weaker than in the assessment contained in the draft Monetary Policy Report.

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

First Deputy Governor **Svante Öberg** began by saying that he shared the view of economic developments in Sweden presented in the draft Monetary Policy Report. He pointed out that he also supports the proposal to raise the repo rate by 0.25 percentage points and the repo-rate path described in the Report. But if developments abroad were to be much weaker than forecast in the Report, the Executive Board must be prepared to reconsider the direction for monetary policy. Mr Öberg then wished to take up two questions; the spring wage bargaining rounds and the reasons for supporting the proposals regarding the repo rate and the repo-rate path.

The wage bargaining rounds have as expected resulted in modest wage increases. But there have been more redundancy notices and conflicts than in the previous wage bargaining rounds, the length of the period covered by the central wage agreements has varied from one area to another and the notice of termination of the Industrial Agreement has been given for part of the manufacturing industry. Wage formation has functioned well since the mid-1990s and the Industrial Agreement has been a stabilising factor in this context. There is reason, prior to the next wage bargaining rounds, for the Riksbank to consider carefully what the new conditions may signify for wage formation. In the short term, this offers no problem for monetary policy, but there is a possibility of problems further ahead.

Mr Öberg then went on to talk about his reasons for supporting the proposals regarding the repo rate and the repo-rate path. The revisions made since April indicate that the repo rate should be raised in July. In April we were expecting to raise the repo rate either in July or September. Since then the forecast for GDP growth this year has been revised upwards



substantially. The first quarter turned out better than forecast, and there are indications pointing towards the second quarter also being strong. Resource utilisation is slightly higher and unemployment is slightly lower than we were expecting in April. The forecasts for inflation and wages are largely the same. All in all, this points to raising the repo rate in July rather than waiting until September.

But despite GDP growth for 2010 being revised upwards quite substantially, resource utilisation is expected to be low during the greater part of the forecast period, which will hold down domestic inflationary pressures. Inflationary impulses from abroad will also be dampened. The low resource utilisation and the moderate inflationary pressures indicate that the repo-rate path should be lower than normal, even in the coming period. This will stimulate the real economy and inflation will be kept close to the target. But as economic activity recovers, resource utilisation rises and inflationary pressures increase, the Riksbank should ease up on the accelerator and the repo rate should be gradually raised towards a more normal level.

A further reason for beginning to raise the repo rate, according to Mr Öberg, was that it will mark that interest rates will in the long run be much higher than they are now. If companies and households base their decisions on unrealistically low long-term interest rate expectations, this may lead to unsustainably high loan levels and distorted investment decisions, which in turn can have negative effects on production and employment. The low interest rate over the past year appears to have pushed down expectations of interest rates, even in the longer run. According to Prospera's survey of repo rate and inflation expectations in June, the expected repo rate 5 years ahead is 2.7 per cent and the expected real repo rate is 0.5 per cent. Market rates and the National Institute of Economic Research's surveys also point to expectations of unrealistically low interest rates in the longer run.

Mr Öberg pointed out that it is important for monetary policy that expectations of the interest rate are in line with the repo-rate path. It is market expectations of interest rate developments, and not the Riksbank's repo-rate path, that in practice steer rate-setting for interest rates paid by households and companies, and these are thus important for developments in the economy. Market expectations are now lower than the repo-rate path and the difference is moreover unusually large. This implies that monetary policy is in practice much more expansionary than is intended in the draft Monetary Policy Report. When the repo-rate path expected by the market is used in the Riksbank's models, the results show that it leads to a very strong growth in GDP and to an underlying inflation rate that far overshoots the target. This is not good, of course.

According to Mr Öberg, it is also reasonable that increases in interest rates should begin earlier in Sweden than in the United States and the euro area. The Report predicts a higher GDP growth and a slightly higher inflation rate in Sweden, particularly in comparison with the euro area. Fiscal policy in the United States and in the euro area will probably be much tighter than in Sweden, which is also a reason for keeping interest rates low for a longer period in these regions.

Deputy Governor **Lars E.O. Svensson** began by saying that he largely shared the view of the underlying – independent of monetary policy – developments in the Swedish economy contained in the draft Monetary Policy Report.

However, Mr Svensson preferred a different repo-rate path than the one in the main scenario; namely a repo-rate path where the repo rate is held unchanged at 25 basis points until the end of the fourth quarter of 2010, and then gradually returns to the repo-rate path described in the main scenario. Such a repo-rate path leads to a clearly better outcome for inflation and resource utilisation, in that it leads to a CPIF inflation rate closer to the target and to an unemployment rate that is lower and closer to a reasonable equilibrium unemployment rate.

Mr Svensson reminded the meeting that he had repeated at earlier meetings that the Riksbank conducts flexible inflation targeting, and that monetary policy thus aims to stabilise both inflation around the inflation target and resource utilisation around a normal level. Stabilising inflation around the inflation target stems from the objective of price stability in the Sveriges Riksbank Act. Stabilising resource utilisation around a normal level stems from the emphasis in the preparatory materials for the Act, that the Riksbank, without prejudice to the price stability target, should support the goals of general economic policy with a view to maintaining sustainable growth and a high rate of employment.

Mr Svensson pointed out that some readers of the minutes might have gained the impression that he is the only member of the Executive Board who interprets the Sveriges Riksbank Act and its preparatory materials in this way. But nothing could be further from the truth. The Executive Board has, after extensive discussions, agreed on a new version of the document "Monetary Policy in Sweden", which was published after the monetary policy meeting in April. The draft Monetary Policy Report will begin, starting from this occasion, with a summary of this document. The second point of the summary states that the Riksbank, in addition to stabilising inflation around the inflation target, also strives to stabilise production and employment around development paths that are sustainable in the long term, and thereby conducts a policy of flexible inflation targeting. Mr Svensson considered that it could not be expressed more clearly than this. It is thus clear that monetary policy entails choosing a repo-rate path that ensures that inflation is best stabilised around the inflation target and resource utilisation is best stabilised around a normal level. Now all that remains is to apply this to the choice between different repo-rate paths.

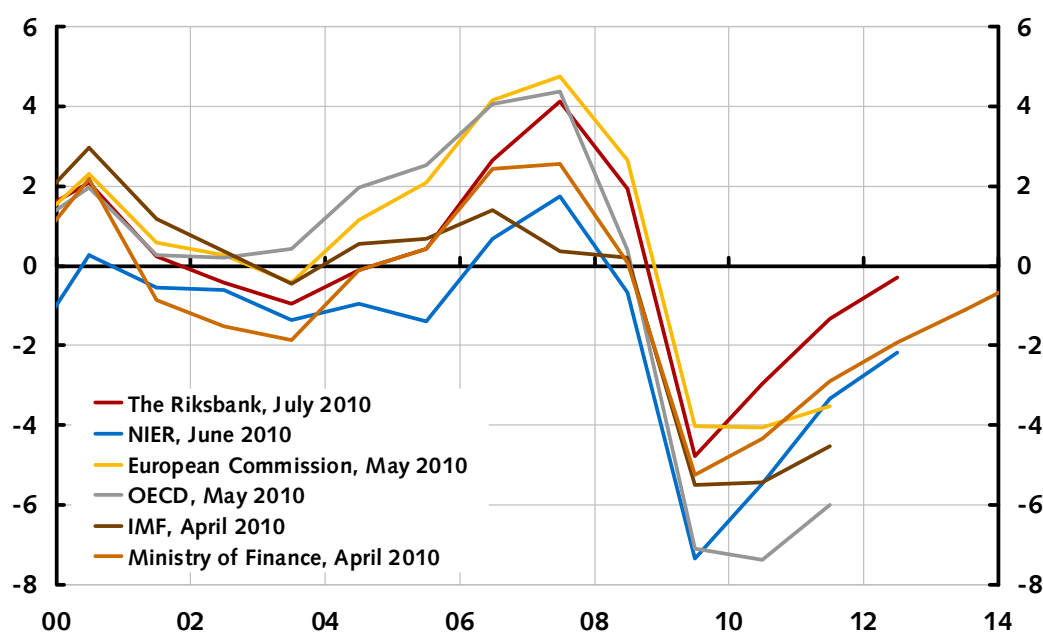
Mr Svensson mentioned that he has noted that the Riksdag Committee on Finance commented in its recently-published evaluation of monetary policy 2007-2009 that "the Committee wishes, however, to repeat its earlier stance that flexible inflation target requires, for instance, that the Riksbank very clearly reports why the various monetary policy decisions have been taken or not taken". Mr Svensson felt that this should involve a clear account of the advantages and disadvantages of various repo-rate paths and a summarising assessment of them. It involves explaining why a particular repo-rate path is the most suitable among the alternatives available.

According to Mr Svensson this can be done as follows: Start with the alternative repo-rate paths shown in Chapter 2 of the draft Monetary Policy Report. Figure 2:16 shows a higher and a lower alternative repo-rate path. Figure 2:21 shows the corresponding alternative CPIF forecasts. Figures 2:18 and 2:19 show the corresponding alternative hours gap and output gap forecasts.

However, the hours gap and output gap shown are very inadequate measures of resource utilisation. They are what are known as HP gaps. The output gap indicates that the current

deep recession is no deeper than the earlier boom at the beginning of 2008 was high. The hours gap indicates that the current deep recession is only just over one third as deep as the earlier boom was high. This is of course unreasonable, said Mr Svensson. This is also shown in a figure depicting other forecasters' forecasts of the output gap that he wished to show, see Figure 1. This shows that other analysts are less optimistic than the Riksbank. The National Institute of Economic Research's output gap, which is shown there, and its hours gap, which is shown in the most recent edition of *The Swedish Economy*, are much more reasonable than the Riksbank's output and hours gaps, according to Mr Svensson. This shows that Sweden had a small boom earlier and is now experiencing a very deep recession.

**Figure 1. GDP gap, various assessments**



Mr Svensson considered it a good thing that the Riksbank is developing new, better measures of resource utilisation. However, it is a mistake to insist when constructing these and similar measures of resource utilisation that the mean shall be zero over the economic cycle, particularly when the current extremely large recession has taken place. Then it is reasonable that the mean should instead be negative over the most recent economic cycle.

If the gaps in Figures 2:18 and 2:19 are problematical measures, then unemployment is a rather uncontroversial measure of resource utilisation, according to Mr Svensson. A reasonable equilibrium unemployment can be assessed to be in the interval of 6 to 7 per cent. There is no doubt that an unemployment rate of 8 to 9 per cent entails an abnormally low level of resource utilisation.

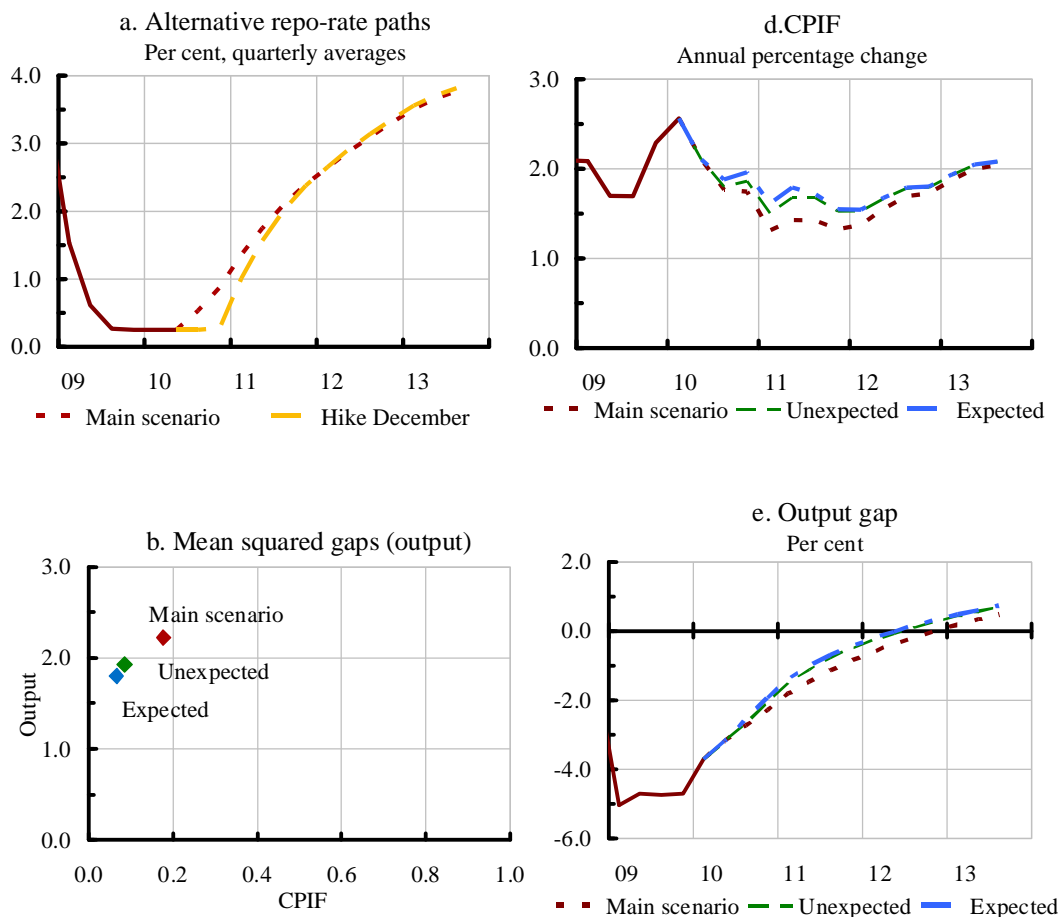
Mr Svensson wished to show a further figure, Figure 2. This shows the consequences of the lower repo-rate path, the same repo-rate path as the lower one in the Report's Figure 2:16, where the repo rate is held at a low level until the end of December and then gradually returns to the path described in the main scenario. The forecast for unemployment is shown in panel f, as a better measure of resource utilisation. Figure 2 is otherwise similar to the other figures Mr Svensson has shown and explained at previous monetary policy meetings,

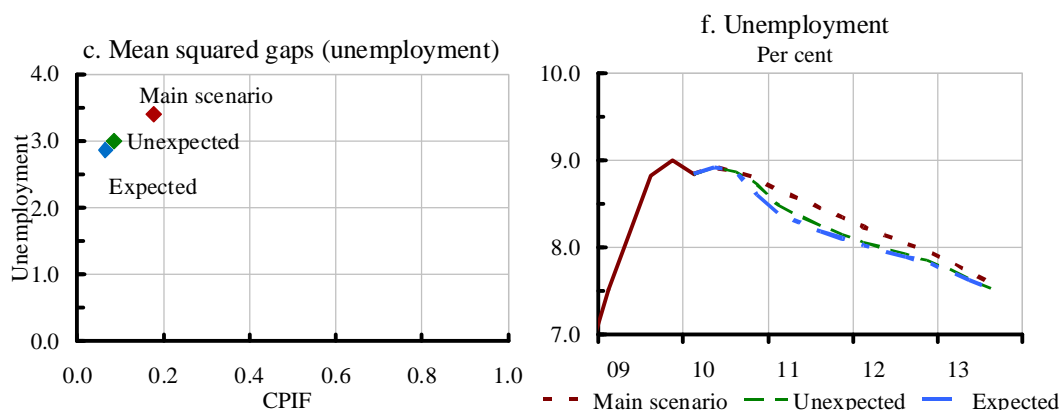
and he therefore did not go into all the details. The forecasts that are marked “Unexpected” and “Expected” correspond to the cases when the lower repo-rate path is not credible, but comes as a surprise, or is notified now, becomes credible and is included in market expectations. In the latter case the effect of the lower repo-rate path is somewhat greater.

It is clear that the lower repo-rate path will lead to better attainment of the inflation target for CPIF inflation and that resource utilisation will be closer to a normal level.

Unemployment will be lower and closer to a reasonable equilibrium unemployment. This can be seen directly in the figure of the forecasts for CPIF and unemployment, but also with the aid of the mean squared gaps in panels b and c, said Mr Svensson. He therefore preferred the lower repo-rate path to the path in the main scenario.

**Figure 2. Lower repo-rate path**





Sources: Statistics Sweden and the Riksbank

Mr Svensson noted as a parenthesis that with regard to the comparison of alternative repo-rate paths in the text of the draft Monetary Policy Report, there is a strange comment on page 28 about overheating tendencies and bottleneck problems and so on with regard to the lower repo-rate path. These tendencies and problems should already have been included in the forecasts, since these are risk-adjusted mean forecasts, expected-value forecasts. Furthermore, Mr Svensson maintained, it is difficult to conceive of any serious overheating tendencies with an unemployment rate around 8 per cent. If such tendencies were to arise later, it would be possible to adjust monetary policy then.

Mr Svensson said that one might also consider waiting until February 2011 to raise the repo rate. One could also allow the repo rate to rise at a slower pace than indicated by the repo-rate path in the main scenario of the Report. Mr Svensson wanted the consequences of possibilities like these to be examined properly prior to the next monetary policy meeting.

He was not convinced that such a rapid increase in the repo rate as described in the main scenario is justified, regardless of when the increases begin. The repo-rate path rises much more steeply than market expectations, and one to two years ahead it is far above market expectations. If the Riksbank raises the repo rate in accordance with the repo-rate path and market expectations shift upwards towards the repo-rate path, this will entail a much tighter actual monetary policy than at present. This could lead to even lower inflation and higher unemployment. Mr Svensson believed that a slower rise in the repo rate could very well be compatible with the current forecasts for inflation and resource utilisation. Mr Svensson stated that he was not a person who usually says that the market is right and the Riksbank is wrong about things, but in this case he felt that market expectations could be right. In any event, Mr Svensson considered that the pace of the upturn and the relationship to market expectations and the forecasts for inflation and resource utilisation required thorough analysis prior to the next monetary policy meeting.

All in all, Mr Svensson therefore preferred a repo-rate path where the repo rate is held at 0.25 per cent until the end of the fourth quarter of 2010 and after that a gradual return to the repo-rate path described in the main scenario.

He noted in conclusion that the National Institute of Economic Research recommends in the latest edition of *The Swedish Economy* that the repo rate increase should be postponed, as

this would lead, according to the NIER, to better balanced monetary policy with somewhat higher inflation and somewhat higher resource utilisation.

Mr Svensson said further that if his colleagues on the Executive Board had any good arguments as to why the repo-rate path in the main scenario is better than a lower repo-rate path he was of course prepared to be convinced and to change his mind. He wished to return later with views on an article in the Report about the effects of a fall in house prices.

Deputy Governor **Barbro Wickman-Parak** began by comparing the current situation with one year ago, when the market for Swedish exports was expected to be largely unchanged in 2010. At present the Riksbank's international forecast all in all points to growth in the Swedish export market of around 5 per cent this year. The external conditions for Swedish growth have thus improved very significantly compared with when the repo rate was cut to its current level.

The National Accounts that are now available show a new picture of the sequence for growth last year; GDP has been growing since the second quarter. In addition, GDP in the first quarter was much stronger than expected. This means that it is now easier to explain recent developments in the labour market. At the same time, new outcome data such as exports and industrial production are now better harmonised with the indicators. Ms Wickman-Parak summarised by saying that the draft Monetary Policy Report analyses in an excellent manner the current situation in the economy and that she supported the forecasts presented there.

With regard to today's decision, Ms Wickman-Parak pointed out that she had expressed at the April monetary policy meeting a strong leaning towards raising the repo rate in July. The much stronger growth in the Swedish economy has strengthened this opinion and she supported the proposal to raise the repo rate to 0.5 per cent at this meeting. The forecasts for trade-weighted growth abroad and growth in Sweden have been revised down for next year and 2012, and this has also justified a downward adjustment in the repo-rate forecast towards the end of the forecast horizon. This was in line with the view Ms Wickman-Parak held earlier and she supported the repo-rate path in the Report.

Ms Wickman-Parak went on to say that there are different ways of approaching a decision on the repo rate. The Riksbank's forecasts are based on good and sophisticated models, but they are nevertheless simplifications of reality. The model results are supplemented with assessments. But there is never any clear answer as to which repo-rate path is the best, in the sense that it gives rise to the best possible development of the economy during the forecast horizon while also creating the conditions for balanced developments thereafter. The Report contains alternatives with both lower and higher repo-rate paths, and with the aid of models one can calculate in a consistent manner what these alternatives might mean for growth, resource utilisation and inflation during the forecast period. The lower repo rate means that CPIF inflation is closer to the target during the forecast period and that the hours gap is closed sooner than in the main scenario. In the alternative with a higher repo rate the result is the opposite, unsurprisingly. Should this not be simple – should not the lower repo rate be preferable, Ms Wickman-Parak asked herself.

Ms Wickman-Parak said that it was not actually this simple. The gap analyses have been discussed on several occasions, as has the uncertainty they are burdened with. This means that the calculations cannot be regarded as absolute truths. In addition, as Ms Wickman-

Parak said she had pointed out at earlier meetings, monetary policy must manage risks. To be able to do this, she said it was important not to regard a forecast period as independent and separate, but to also look at what had happened before and how a decision now could affect developments after that period.

Ms Wickman-Parak went on to say that her decision to support the repo-rate path in the main scenario was influenced by the fact that she could not relax entirely with regard to inflation further ahead. Although resource utilisation is low and unemployment is high now, what will happen when the demand for labour accelerates; is it certain that companies will be able to find suitable labour? In the previous economic downturn a shortage of labour arose quite soon, despite relatively high unemployment. Could this happen again? And how might it affect companies' cost pressures and inflation further ahead? Ms Wickman-Parak had considered these risks but nevertheless decided that the proposed repo-rate path was preferable, and not the higher one. This is because in the other scale there are risks stemming from abroad. A lower repo-rate path, on the other hand, would accentuate the risks mentioned regarding inflation.

Ms Wickman-Parak also wanted to highlight an example of how she reasoned with regard to events prior to the current forecast period. Companies have just had three years of rapidly-rising unit labour costs. Might they not, in a situation with stronger demand, take the opportunity to pass on slightly more of these costs to consumers? This is also a risk assessment that had made her choose the repo-rate path in the main scenario over the lower path in the alternative scenario.

With regard to household borrowing, Ms Wickman-Parak did not see this as an immediate problem. But this variable is nevertheless a risk factor in the slightly longer perspective. A slightly higher repo rate now can make households begin to adapt so that an even higher debt ratio does not force them to make large cuts in their consumption when interest rates are raised further ahead and perhaps in rapid stages.

Given her overall assessment of the risks, Ms Wickman-Parak considered that the repo-rate path in the main scenario represents a well-balanced monetary policy. If there were to be considerable falls in international growth with repercussions on the Swedish economy, then monetary policy would of course have to be adapted to this. Ms Wickman-Parak concluded by saying that the proposed repo-rate path shows a low and negative real interest rate for some time to come and it will thus be some time before monetary policy is contractionary.

Deputy Governor **Karolina Ekholm** shared the view that the Swedish economy appears to be recovering strongly and that it therefore appears reasonable to make a substantial upward revision to the forecast for growth in Sweden. But she did not support the proposal to raise the repo rate to 0.5 per cent.

As with the recent monetary policy meetings, she felt that today's decision concerned a balance between on the one hand the need for continued very expansionary monetary policy to attain the inflation target and stabilise the real economy on condition that things developed as expected, and on the other hand the need to avoid an exceptionally-low policy rate in itself creating imbalances that could lead to a different development. This could be, for instance, the risk that a low interest rate over a long period of time pushes down expected future interest rates and leads to excessive indebtedness among households and abnormally high housing prices. One problem when discussing this balance earlier has

been that there has not been anything to relate to with regard to the expected consequences of such imbalances for what is important to the Riksbank, that is, inflation and resource utilisation. The draft Monetary Policy Report contains for the first time an attempt to estimate how a fall in house prices could affect developments in the macro economy under slightly different assumptions as to how monetary policy reacts. It is difficult to assess whether the scenario with a fall in house prices of 20 per cent is realistic, but this example nevertheless points to the consequences being fairly dramatic and difficult to counteract with further monetary policy easing.

This example does not answer the question of how the monetary policy conducted by the Riksbank affects the likelihood of imbalances building up in a way that could lead to falling house prices in the future. With regard to this question, Ms Ekholm felt that the six members of the Executive Board appear to have slightly different perceptions. Personally, she believed that a repo rate close to zero over a long period of time would increase the likelihood of such a scenario, but at the same time she did not believe that the risk of this was imminent at present.

Ms Ekholm asked the question as to how at this meeting one should regard the balance between on the one hand the need to hold the lowest possible interest rate to bring up inflation, when CPIF inflation would according to the forecast undershoot the 2 per cent target for most of the forecast period, as well as supporting the recovery, and on the other hand the need to raise the repo rate to reduce the risk of imbalances building up that might lead to even more negative future developments. Her response on this occasion was that the former need weighed heaviest. Ms Ekholm thus considered it is more important to continue to hold as low a repo rate as possible to bring up inflation and resource utilisation rather than to raise the repo rate to suppress a potential build-up of imbalances. She wished to put forward a couple of reasons for this:

Firstly, the recovery in the Swedish economy certainly seems to be much stronger than was forecast earlier, which would in itself justify an increase. But at the same time, there is greater uncertainty now over developments in the rest of Europe and in the financial markets. Before more concrete information has been received regarding how the sovereign debt problems will be resolved and on the situation in the European banks – for example through the publication of the results of stress tests on these banks – the risk of disruptions in the financial markets is heightened. For reasons of caution, therefore, Ms Ekholm felt that the Riksbank can wait a while before raising the repo rate.

Secondly, some of the unconventional measures taken during the financial crisis will be phased out now during the summer. The Riksbank's own fixed-interest rate loans will mature; SEK 100 billion reaches maturity today and a further SEK 100 billion at the end of August. The ECB's large fixed-interest rate loan of EUR 442 billion will mature the day after the Executive Board's monetary policy meeting. Market participants have had plenty of time to prepare for these maturities, and both the Riksbank and the ECB will continue offering loans with shorter maturities, so this should not lead to any problems in the markets. However, with the generally heightened uncertainty that now prevails, one cannot rule out the possibility that spreads will increase somewhat in connection with the maturities. This is a further reason why Ms Ekholm considered it wise to hold the repo rate unchanged over the coming period.



Thirdly, the increased uncertainty regarding developments abroad, combined with the fact that Finansinspektionen (the Swedish Financial Supervisory Authority) is planning to introduce a mortgage ceiling, should have a dampening effect on the growth in household credit and house prices. There is thus, according to Ms Ekholm, less reason right now to use the repo rate to stave off potentially unsustainable developments in the housing market than there may have been earlier.

Ms Ekholm's opinion was all in all that it was therefore best to hold the repo rate unchanged at 0.25 per cent. However, she considered that the strong recovery in the Swedish economy indicated that the repo rate should be raised from this level soon, so she did not advocate a repo-rate path with a long continuing period at this low level. She would prefer a repo-rate path with an increase at the next monetary policy meeting in September. It is above all the increased uncertainty prevailing in connection with the sovereign debt problems in the euro area that has made her want to wait before raising the repo rate. The relatively low inflationary pressure also makes it possible to wait before increasing the repo rate, without neglecting the inflation target.

Governor **Stefan Ingves** began by saying that the real economy in Sweden has shown a good development so far this year. GDP increased substantially during the first quarter, the recovery is widening and the previous division in the economy has declined somewhat. Productivity, employment and the number of hours worked are showing a positive development. A number of indicators are pointing in the same direction and indicate continuing good development during the second quarter.

Resource utilisation is still low, but has been revised upwards since the forecast in April, and is expected to rise to a normal level at the end of the forecast period. Mr Ingves went on to point out that the inflation rate can be regarded from different aspects. CPIF inflation has slowed down in line with the forecast in the Monetary Policy Update published in April. The CPIF is expected to be roughly in line with the target at the end of the forecast period, but below the target for most of the period. On the other hand, CPI inflation will be above the target. In each respective case inflation is relatively close to the target and the rate of price increase therefore appears fairly stable given the proposed change in monetary policy.

At the same time, the Swedish economy has a different starting point than the countries that have problems with their public finances or external balances. Public finances in Sweden are in good shape and the current account shows a large surplus. There are nevertheless evident risks related to public finances in the euro area.

On most of the occasions when problems arise in the rest of the world, the krona tends to weaken. This dampens the effects for Sweden of a lower demand from the euro area. In addition, the countries in the euro area that are most affected; Greece, Ireland, Italy, Portugal and Spain, account for only 7 per cent of Swedish exports. The Swedish bank sector is also in relatively good shape. It is only if the crises in these countries were to have serious global effects that a Swedish recovery would risk being subdued further.

Mr Ingves also reminded the meeting of the situation one year ago when the economy was in a deep recession. Since then, the forecast for GDP growth in total for the period 2009-2011 has been revised up by 3 percentage points, export growth has been revised up by 9 percentage points for the same period, while the forecast for unemployment during the same period has been revised down from on average just over 10 per cent to below 9 per

cent. The forecast for CPI inflation has not changed much. In addition, budget outcomes in the public sector have been much better than expected. The view of the Swedish economy and of what may happen in the future has thus changed. Mr Ingves summarised by saying that economic developments were such that he considered it reasonable to begin raising the repo rate and he supported the proposal in the draft Monetary Policy Report.

Mr Ingves pointed out that monetary policy in this situation concerned four things. The first was an increase in the current repo rate; the second was an adjustment of the repo-rate path, which according to the proposal is higher in the short term and slightly lower in the longer run; the third was an increase and broadening of the interest rate corridor, which changes the terms of deposits and lending for the banks in the Riksbank's standing facilities; the fourth was that a fixed-interest rate loan of SEK 100 billion now matures and is replaced with the offer of loans at shorter maturities and at a variable rate.

These four measures together entail a normalisation of monetary policy, of how the Riksbank conducts monetary policy and gradually of the repo rate level. All in all, they entail a slightly less expansionary monetary policy, at the same time as the real interest rate will remain low. This is a gradual adjustment of monetary policy, given that inflation expectations are beginning to rise and given the general demand situation in the Swedish economy. Mr Ingves concluded by saying that he supported the proposal to raise the repo rate by 0.25 percentage points at today's meeting.

The strength of the Swedish recovery, both in terms of hard (quantified) and soft data, is the main reason why monetary policy needs to be changed. At the same time, there are risks in Europe and in the global economy. But regardless of these risks, a decision should be taken now, at the same time as it is not certain that there will be more information available in a further quarter. Now is not the right time to wait and see.

Mr Ingves further said that an interest rate increase was also a signal to avoid new financial imbalances from building up and that household indebtedness ought not to rise too much. Mr Ingves pointed out that this was something he had noted on several earlier occasions. A low interest rate for too long could lead to a troublesome situation beyond the forecast horizon as a result of a credit expansion. It is of course difficult to measure when house prices and the debt/equity ratio are reaching excessively high levels. But this does not mean it is less important to take them into account in monetary policy. By the time we know all the facts, it is often too late to slow down developments, and this often results in large costs to society. An interest rate increase today is also in line with the proposal from Finansinspektionen to limit the loan-to-value ratio for households. This is part of the work on finding a suitable combination of monetary policy and regulation so that the financial risks will not grow too large in the future. It is a reason in itself for raising the repo rate now.

Deputy Governor **Lars Nyberg** began by saying that in Sweden it is now possible to see the broad upturn which still felt uncertain at the time of the monetary policy meeting in April. The expected growth in GDP for 2010 has been adjusted upwards from 1.8 per cent to 3.5 per cent (calendar-adjusted). Households are optimistic and continuing to consume. Exports have accelerated, employment is increasing and unemployment is falling, all somewhat faster than the Riksbank assessed in April. In some areas one can even see, according to the Economic Tendency Survey, an increasing shortage of labour, even though capacity utilisation is still low on the whole. The problem with the division in the economy, where the

domestic services sector has grown much more quickly than the manufacturing sector, has declined.

Despite the rapid growth, inflation will not rise very much during the forecast period. This is because of expectations of limited wage increases and rising productivity, which will lead to low increases in unit labour costs. However, it is always difficult to make this type of forecast, and Mr Nyberg pointed out that one should be cautious with regard to what might happen with such a forceful turnaround in the economy as is now occurring. It is not unreasonable to imagine that many sectors may see a clear need to raise prices after the crisis years, and that they will do so if the demand situation allows it. Mr Nyberg therefore felt that the risk of slightly higher inflation than is being forecast should not be underestimated.

There are of course risks that the positive sequence of events will be broken; risks that were not clear at the monetary policy meeting in April and which are largely concerned with the sovereign debt problems in Europe and the effects they may have on the functioning of the financial markets and on growth in Sweden's closest export markets. As mentioned earlier Mr Nyberg's main scenario was, like the one in the Report, that the uncertainty on the markets would gradually disappear over the year and that this would also give increased stability to the economic upturn. But the risk of something going wrong in this process is far from negligible. Moreover, it is possible that a major or minor setback could come in the United States or in Asia, and such a setback might affect confidence on the financial markets and Sweden's export possibilities.

Mr Nyberg's overall view was, however, that it is wise to raise the repo rate by a quarter of a percentage point at today's meeting, as in the proposal, rather than to wait until September. Mr Nyberg also thought that the Riksbank should indicate continued repo rate increases in agreement with the proposed repo-rate path. Sweden's situation is different from that in countries which must manage large budget deficits or large current account deficits. If, for some reason, there were to be events abroad that change the circumstances, the Executive Board will as usual take this into consideration when making its next repo-rate decision.

The repo rate is not a target in itself; it is a means to achieve the inflation target. Nevertheless, Mr Nyberg considered it positive that we can now begin the adjustment towards more normal interest rate levels. Low interest rates over a long period of time tend to build up imbalances in the economy and lead to investments that are not sustainable in the long term. An important cause behind the financial crisis we have just lived through, as behind many other financial crises, was that borrowed capital was for a number of years both easily available and cheap. This led to risk taking which proved to be infelicitous. It is in this context that the Riksbank has reason to point out that real housing prices continued to rise more or less throughout the entire crisis, and housing prices have risen on average in Sweden by 70 per cent over the past decade. This is also why there is reason to express concern over the fact that household debt in relation to disposable income has increased to almost 170 per cent, and in metropolitan areas the figure is much higher. This cannot go on for ever, and if there is a sudden turnaround it could have substantial effects on the real economy. The consequences that such a sequence of events might have are described in an article in the Report. It was actually a similar sequence of events that initiated the US crisis.

Mr Nyberg felt that an adjustment to a more normal interest rate level could contribute to reducing the likelihood of this happening here.

Deputy Governor **Lars E.O. Svensson** responded to Ms Wickman-Parak's contribution to the discussion regarding risks of inflation and labour shortages by claiming that these would appear to be risks that should be included in mean forecasts for inflation and resource utilisation. Did she mean that the various forecasts for inflation and unemployment in the draft Report were wrong?

Mr Svensson wondered whether there were any situations where poorer fulfilment of the inflation target and/or lower stability in resource utilisation than was possible could be accepted. He could on the whole only imagine situations where one excluded a repo-rate path that would be best from a monetary policy perspective, because it would entail a threat to financial stability that could not be dealt with by other means, for instance, that the repo rate would be too high or too low for a fragile bank sector. This is how he interprets the sentence "The risks linked to developments in the financial markets are taken into account in the repo-rate decisions" in the sixth point of the summary of the monetary policy strategy. In any event, this of course requires that a poorer fulfilment of the inflation target and/or poorer stability of resource utilisation are explained and justified and that the advantages and disadvantages are carefully considered. However, at present he could not see that the lower repo-rate path could entail any threat to financial stability.

Mr Svensson pointed out that he had noted with interest the arguments his colleagues had used in favour of an increase now and against a lower repo-rate path. They appear to be of three types.

Firstly, Mr Svensson took up what he calls "the revision argument". As the economic outlook for Sweden looks somewhat better now than it did in April, it is reasonable, according to this argument, to conduct somewhat tighter monetary policy than in April. In his opinion, this argument appears to be circular; it assumes what it wishes to prove. It is namely based on the assumption that monetary policy was correct in April, without actually justifying this assumption. But the same criticism that he makes of the main scenario now was just as valid against the main scenario in April. Instead, he believes that each monetary policy decision should be able to stand alone and be justified independent of earlier decisions.

Another argument is what can be called "the normalisation argument". According to this, it would be better to have a repo rate closer to a normal level, even if this means poorer fulfilment of the inflation target and even lower than normal resource utilisation. He did not agree with the normalisation argument: The repo rate and the repo-rate path do not have any value in themselves, claimed Mr Svensson. They are not target variables. "A normal repo rate" is not a target for monetary policy. Mr Svensson felt that there was no support in either the Sveriges Riksbank Act or the preparatory work for this Act for a high or low repo rate being a reason to allow poorer fulfilment of the inflation target or to accept poorer stability in resource utilisation. Instead, the repo rate should in all situations be set so that inflation and resource utilisation are stabilised as far as possible, regardless of whether this requires a high or a low repo rate and regardless of whether there is a crisis or not.

A third argument was "the imbalance argument" or in more concrete terms "the housing price argument". A higher repo rate reduces the risk of a future fall in house prices and a

related fall in demand. He did not agree with the housing price argument, either. This led him to a discussion of the Report's article on the effects of a fall in housing prices.

Mr Svensson pointed out that in the discussions that had preceded this meeting he had welcomed an analysis of the role of housing prices in the monetary policy deliberations, but at the same time had asserted that this requires more time and analysis than was available prior to the meeting. The analysis and conclusions would benefit from further preparation and publication at a later date. Mr Svensson's views had not met with sympathy. Unfortunately, the article on the effects of a fall in housing prices had now become misleading and unnecessarily alarmist, for several reasons. He could not see that there were any indications of a risk of a fall in housing prices. The link to the repo rate is implied but is unclear. The consequences for the real economy of a fall in housing prices are exaggerated. The monetary policy implications are not described. It is not made clear that a low repo rate over a longer period of time can eliminate large negative effects on aggregate demand and resource utilisation. According to Mr Svensson, a correct and balanced analysis would point out that a fall in housing prices would hardly entail any problems for monetary policy.

Mr Svensson said that nor was there any discussion of a link between the repo rate and risk and the size of a fall in housing prices. All research in this area that he was aware of, both theoretical and empirical, and including the Walentin-Sellin model (the WS model) that is used in the article, indicates very minor effects of the policy rate on housing prices. Typically, a cut in the policy rate of 1 percentage point would lead to an increase in housing prices of 1-2 per cent, an insignificant increase in this context. There was thus no reason to believe that a low repo rate over a few quarters would significantly affect either the size or the probability of a fall in housing prices.

Mr Svensson said that the WS model is an excellent contribution to economic research. But he considered that there is reason to question the appropriateness of the model in examining the effects on consumption of a large fall in housing prices, given the model's very unrealistic assumptions on points that are crucial for this effect. An assumed fall of 20 per cent in housing prices would entail, according to the WS model, a fairly large fall in aggregate demand if the repo rate was held unchanged. This is because 20 per cent of all households in the model have a binding loan-to-value ratio of 85 per cent and lack other assets. In the event of a fall in housing prices of, for instance equal to SEK 100,000, they must immediately amortise 85 per cent, that is SEK 85,000. Of course it would not be strange then if their consumption falls heavily, said Mr Svensson.

In reality in Sweden only slightly more than half of all households own their own home. Not all of these have mortgages. Only 10 per cent of those who have mortgages have a loan-to-value ratio of at least 85 per cent. According to micro data, many of these have their own wealth and high incomes and would not need to reduce their consumption much, if at all, following a price fall of 20 per cent. According to a stress test in Finansinspektionen's report from February containing an analysis of new borrowers, a housing price fall of 20 per cent would mean that only 1.8 per cent of the new borrowers would have a loan-to-value ratio of more than 100 per cent and a negative surplus in a "left-to-live-on analysis". In the WS model, on the other hand, 20 per cent of the entire population find themselves in this situation and are moreover forced to make a large additional amortisation. If a household in Sweden has an excessively large loan-to-value ratio, the Swedish mortgage institutions will not require the corresponding amortisation of the loan as long as the household continues

paying interest and normal amortisation payments. As we know, Swedish mortgage institutions do not make any losses to speak of on mortgages, as the loans are full recourse loans. All in all, these circumstances led Mr Svensson to the conclusion that the fall in demand in the event of a fall in housing prices of 20 per cent was exaggerated.

Mr Svensson went on to claim that even if the fall in demand were as large as is assumed in the article, the effects on GDP or the CPIX could be eliminated by sufficiently expansionary monetary policy. A standard result in monetary policy analysis is that a demand shock does not involve any conflict between stabilising inflation and resource utilisation. A sufficiently expansionary monetary policy can in the standard case eliminate the negative effect on both inflation and resource utilisation. In this case, Mr Svensson said it can be achieved by holding the repo rate at a low level, 25 basis points, for a longer period of time, without even having to cut the rate to zero.

Mr Svensson referred to Table B2 in the article, which shows the results under the assumption that the Riksbank conducts what he considers a very bad monetary policy in the event of a fall in housing prices. According to Mr Svensson, it is quite possible in this situation to instead conduct a much better, more expansionary monetary policy, which neutralises the fall in the CPIX or the fall in the GDP gap or to some extent neutralises both at once. This is shown in Mr Svensson's Table 1, which summarises further calculations made by the Monetary Policy Department, and which he considered ought to be added to the article to make it more balanced and correct. Like Table B2 in the article, it shows the deviations from the main scenario. A better monetary policy means that the repo rate is held at a low level over a few more quarters.

The upper part of the table shows that it is possible to stabilise the CPIX entirely. This requires a low repo rate until the end of December 2010. With a low repo rate for a few more quarters it is possible to stabilise the GDP gap, according to Mr Svensson, which is shown in the lower part of the table. GDP falls during year 1, but the fall is recouped during years 2 and 3. The increase in unemployment is much less than with the monetary policy assumed in the article in the Report. Mr Svensson pointed out that the calculations by the Monetary Policy Department that he has shown are conservative and assume that the repo-rate path is not credible. If the repo-rate path is assumed to be credible, it is possible to stabilise both the CPIX and resource utilisation even better so that unemployment increases very little or not at all.

**Table 1. Better monetary policy in the event of a fall in housing prices**

<b>Better monetary policy in the event of a fall in housing prices, annual average</b>			
Deviation in percentage points			
<b>Neutralised fall in the CPIX</b>			
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
<b>Repo rate</b>	-0.7	-0.6	-0.2
<b>CPIX</b>	0.0	0.0	0.0
<b>GDP growth</b>	-0.8	-0.3	0.3
<b>Unemployment</b>	0.6	0.8	0.6

<b>Neutralised fall in GDP gap</b>			
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
<b>Repo rate</b>	-0.9	-1.5	-0.3
<b>CPIF</b>	0.1	0.8	0.9
<b>GDP growth</b>	-0.7	0.4	0.3
<b>Unemployment</b>	0.5	0.2	0.0

Sources: Statistics Sweden and the Riksbank

Mr Svensson further claimed that the above circumstances indicate that a fall in housing prices with an accompanying fall in demand need not be a problem for monetary policy. There is thus no reason why it should affect the current choice between different repo-rate paths. In his opinion, the article on the contrary gives the misleading impression, without any in-depth discussion of these circumstances, that a fall in house prices would entail serious problems.

The monetary policy implications are otherwise not clarified, said Mr Svensson. A positive likelihood of a future lower repo-rate path entails, for instance, that the present repo-rate path shifts downwards further ahead, since it is a mean path, and expected-value path. However, the main forecast for housing prices in the draft Monetary Policy Report is a moderate increase, so with this as a mean forecast, this implies that there should on the whole be an equally large probability of a housing price increase with an ensuing rise in demand as for a fall in housing prices with an ensuing fall in demand. This should have been discussed in the article. Mr Svensson pointed out that there is more to be said about the monetary policy implications, but that he did not have time to go into these now.

In conclusion, Mr Svensson wished to note that it is usually claimed that the effects of and the role of housing prices and other asset prices in monetary policy are difficult to quantify and to take into account in the forecasts for inflation and resource utilisation. However, a correctly-made analysis in accordance with the above discussion is an excellent example to the contrary. It is fully possible to make an analysis of the role of housing prices in monetary policy and to quantify the effects on inflation and resource utilisation – and to draw the conclusion that housing prices entail no problem for monetary policy.

Deputy Governor **Lars Nyberg** replied that it was important to make it clear that a repo-rate increase today was not concerned with financial stability. He personally felt no worry regarding the Swedish bank system and nor did he believe that his colleagues did. But regardless of models, he considered that the experiences from the crisis in Sweden in the 1990s and the most recent crisis in the United States show that it is not easy to correct the effects of substantial falls in house prices after the event.

First Deputy Governor **Svante Öberg** pointed out that Mr Svensson was claiming that target fulfilment with regard to inflation would be better with the lower repo-rate path described in Chapter 2, but that this is incorrect.

The inflation target is clearly defined in terms of the CPI, and inflation measured in terms of the CPI is actually further from the inflation target of 2 per cent with the lower repo-rate

path. This can be seen in Figure 2:20 in the draft Report, which Mr Svensson did not include in his account of the figures that report the effects of the lower repo-rate path. Now Mr Svensson can of course claim that this is because the repo rate is raised more quickly later on in the alternative with a lower repo-rate path. And this is so, but one cannot escape the fact that target fulfilment with regard to the inflation target is poorer with the lower repo-rate path. For his own part, Mr Öberg saw CPIF inflation as an indication of the underlying inflationary pressures. Inflation measured in terms of the CPIF is only slightly below 2 per cent during the forecast period, and is exactly 2 per cent at the end of the forecast period. This was sufficiently good for Mr Öberg.

On the other hand, Mr Svensson was right about production and employment probably showing better development with a lower repo rate. But it is a question of judgement as to what extent one should support production and employment. With the very low interest rates we are expecting to prevail, despite the fact that we are now beginning to raise the repo rate, we are supporting production and employment, said Mr Öberg. How far one should go in this support needs to be balanced against other aspects, such as the negative effects of long period with low interest rates such as Mr Nyberg just described. Mr Öberg considered that Mr Svensson went too far when he claimed that "the fall in house prices offers no problem for monetary policy". Mr Öberg further pointed out that it is difficult to measure resource utilisation. The GDP gap that is measured in real time is very uncertain at the end of the period for which there is data and thus also for the forecast period. Unemployment does not entail such difficult measuring problems as GDP, but it is difficult to estimate what can be regarded as a sustainable level in the long term. Hopefully, more robust measures of resource utilisation will be gradually developed.

Mr Öberg also commented on Mr Svensson's reasoning that it was a circular argument to refer to changes in the forecasts since the meeting in April, as Mr Svensson believes the decision reached in April was wrong. For Mr Öberg, who supported the decision in April and believes the right decision was made, it is natural to also take into account changes that have occurred since then.

Deputy Governor **Karolina Ekholm** said that Mr Svensson painted an unnecessarily negative picture of the article on housing prices. Although the model used there is based on simplified assumptions, so are other models. At the same time, this model is based on Swedish data. The article in itself does not say anything about the relationship between the repo rate and housing prices. This is difficult to estimate, partly because there may be non-linear effects. There is only a limited number of observations with regard to large falls in housing prices and we have no previous experience of situations where the repo rate is held close to zero over a long period of time. It may be correct as Mr Svensson says that monetary policy can counteract the negative effects on the economy arising when housing prices fall, if the repo-rate path is announced and becomes credible at the same time as the repo rate is held close to zero over a long period of time. But the question is whether it is credible for the Riksbank to hold such a low policy rate for several years. All experiences indicate that a fall in housing prices leads to very negative effects on the economy. Ms Ekholm said that Mr Svensson made it sound as though this was due to poorly conducted monetary policy in these countries, while she considered that it could be rather that monetary policy did not suffice in these situations.



Deputy Governor **Lars E.O. Svensson** objected and repeated that the calculations in his Table 1 were made under the conservative assumption that the low repo-rate path was not credible, but came as a surprise. Nevertheless, monetary policy could neutralise the effect on CPIF inflation or the GDP gap.

Deputy Governor **Barbro Wickman-Parak** clarified, in response to Mr Svensson's earlier comments, that she had wanted to explain in her discussion of risks part of the considerations regarding risk that she had made and which had led her to choose the repo-rate path in the main scenario over the lower path in the alternative scenario.

With regard to the article on housing prices, Ms Wickman-Parak said that the Executive Board had discussed this earlier and that her view was that it should be included in the Report. It comprises a sample calculation and does not claim to be a final and thorough analysis. But it is also the case that if one perceives a problem, one cannot push it aside by saying that there has not been time to refine the analysis and that one therefore cannot have an opinion on this question at all. Ms Wickman-Parak went on to say that she herself had earlier taken up household borrowing as a risk factor further ahead. This could be the case if the borrowing continues at a rapid rate, so that households' accumulated debts are even larger once the increases in the repo rate begin. This affects households' cash flows, which could force them to drastically cut down on consumption. This can happen regardless of how house prices develop, but the situation may worsen if house prices fall at the same time. Trying to neutralise the demand effect through interest rate policy at that stage has not proved to be easy.

Governor **Stefan Ingves** pointed out that the document "Monetary Policy in Sweden" summarises the general principles for the Riksbank's monetary policy strategy and that it was up to each of the six members of the Executive Board to interpret how these principles should be translated into actual interest rate decisions. His opinion was that the members of the Executive Board's actions were easily within the scope of this document. With regard to house prices he considered it a good thing that a further step had been taken and that it was now possible to make calculations. At the same time, there is of course a lot of work remaining to be done and one should not get caught up on one individual study, or in this case an article as a typical example. Regardless of the model, Mr Ingves said that on the basis of his practical experiences, it was better to strive to avoid the problem rather than allowing it to happen and then cleaning up afterwards with the aid of monetary policy.

Experiences from abroad show that it can be problematic to recover from a financial crisis. Mr Ingves concluded by saying that he did not consider it to be as simple as being able to manage everything with monetary policy after the fact.

Mr Ingves then summarised the monetary policy discussion. The Swedish economy is developing strongly following the severe downturn. The recovery in the world economy is continuing. Trade between countries is increasing and this benefits Swedish exports and Swedish investment. Households have become increasingly optimistic and consumption is rising. Following the substantial fall in GDP, the Swedish economy is now recovering on a broad front and employment is increasing steadily, although unemployment is still high. Inflationary pressures are currently low, but are expected to increase as economic activity strengthens. The repo rate now needs to be raised gradually towards more normal levels to attain the inflation target of 2 per cent and to ensure stable growth in the real economy.

The uncertain public finances situation abroad means at the same time that many countries need to tighten their fiscal policy substantially to reduce their budget deficits. This tightening is expected to dampen GDP growth in the euro area, which will also hold back GDP growth and inflation in Sweden in the long run. This will contribute to the repo rate not needing to be raised as much in the longer run as was forecast earlier.

#### **§ 4. Monetary policy decision**

The Chairman observed that there was a proposal to raise the repo rate by 0.25 percentage points and a proposal to hold the repo rate unchanged at 0.25 per cent. The Chairman noted that there was one proposal regarding what is known as the interest rate corridor, namely to restore the difference between the repo rate and the interest rates in the standing facilities to the level that prevailed prior to 22 April 2009.

The Executive Board decided after voting

- to adopt the Monetary Policy Report according to the proposal, Annex A to the minutes,
- to raise the repo rate by 0.25 percentage points to 0.5 per cent and that this decision would apply from 7 July 2010,
- to restore the difference between the repo rate and the interest rates in the standing facilities to the level that prevailed prior to 22 April 2009, which means that the deposit rate will be the repo rate minus 0.75 of a percentage point, and the lending rate will be the repo rate plus 0.75 of a percentage point,
- to raise the lending rate to 1.25 per cent, while the deposit rate is held unchanged at -0.25 per cent, with effect from 7 July 2010,
- to publish the Monetary Policy Report and other decisions at 9.30 a.m. on Thursday, 1 July, with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on Thursday, 15 July 2010, at 9.30 a.m.

Deputy Governor Karolina Ekholm entered a reservation against the decision to increase the repo rate, in view of the increased uncertainty prevailing as regards the public finance problems in the euro area. According to Ms Ekholm, the relatively low inflationary pressure makes it possible to wait before increasing the repo rate, without contravening the inflation target. She advocated a repo-rate path with an unchanged repo rate of 0.25 per cent until September, followed by successive increases in accordance with the profile presented in the Monetary Policy Report.

Deputy Governor Lars E.O. Svensson entered a reservation against the repo-rate path and advocated a repo-rate path with a repo rate of 0.25 per cent through the fourth quarter of 2010, and thereafter a gradual return to the repo-rate path of the main scenario. Lars E.O.Svensson maintained that such a repo-rate path results in a better outcome for both resource utilisation and inflation, with both lower unemployment and CPIF inflation closer to the target.

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