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# Minutes of the Executive Board's monetary policy meeting, No. 3

DATE: 3 July 2012

TIME: 9:00

■ PRESENT: Stefan Ingves, Chairman  
Karolina Ekholm  
Per Jansson  
Kerstin af Jochnick  
Barbro Wickman-Parak  
Lars E. O. Svensson

Carl-Johan Belfrage  
Claes Berg  
Marianna Blix-Grimaldi (§ 1)  
Carl Andreas Claussen  
Charlotta Edler  
Eva Forsell  
Mia Holmfeldt (§1)  
Ann-Christine Högberg  
Pernilla Meyersson  
Marianne Nessén  
Christina Nyman  
Mattias Persson (§ 1)  
Maria Sandström (§ 1)  
Maria Sjödin  
Ulf Söderström  
David Vestin  
Staffan Viotti  
Anders Vredin

It was noted that Carl-Johan Belfrage and Carl Andreas Claussen would prepare draft minutes of § 1, 2 and 3 of the Executive Board's monetary policy meeting.

## § 1. Economic developments

Marianna Blix Grimaldi of the Monetary Policy Department began by presenting the most recent developments on the financial markets. Since the monetary policy meeting in April, yields on Swedish 10-year government bonds have fallen somewhat, while share prices have remained more or less unchanged. The TCW-weighted krona rate depreciated after

the monetary policy meeting in April, but has since strengthened and is now back at the same level as at the meeting in April. According to surveys and forward rates, expectations of the repo rate have shifted downwards and are lower than the repo-rate path the Riksbank presented in April. Interest-rate expectations in the euro area and the United States have also shifted downwards.

Maria Sandström of the Financial Stability Department described recent developments with regard to relief given to banks and countries with debt problems in the euro area.

Marianne Nessén, Head of the Monetary Policy Department, presented the draft Monetary Policy Report which, in the assessment of the Monetary Policy Department, would gain the support of the majority of the members of the Executive Board. She began by noting that the forecasts in the draft report were discussed by the Executive Board at meetings held on 1, 7 and 18-20 June. The text of the draft Monetary Policy Report was tabled at a meeting of the Executive Board on 27 June. Since the monetary policy meeting in April, concerns over the sovereign debt crisis in Europe have increased, while growth in Sweden was unexpectedly strong during the first quarter of this year. It is assumed in the draft that the debt crisis in Europe will be managed so that the acute phase successively wanes and long-run sustainable solutions are gradually put in place. The unease is expected to subside in 2013, which is slightly later than was assessed in April. Given this, the repo-rate path has been adjusted downwards somewhat. The repo rate is now expected to be unchanged at 1.5 per cent for around one year. GDP in Sweden is expected to grow slightly in 2012. Growth is then expected to increase gradually in 2013 and 2014. The labour market will deteriorate somewhat this year, but is expected to improve gradually in 2013. Inflation is expected to be low this year, but to rise in 2013 in line with resource utilisation beginning to rise again and cost pressures increasing. All in all, relatively minor revisions have been made to the forecasts for the Swedish economy in relation to the April Monetary Policy Update.

Governor Stefan Ingves reminded the members of the Executive Board that this monetary policy meeting has a slightly different structure. Members can now comment during the first discussion on developments and forecasts both for Sweden and abroad. This is followed by the monetary policy discussion.

## § 2. Discussion of economic developments

Deputy Governor **Lars E.O. Svensson** began by claiming that the Riksbank's forecasts for growth in the euro area have been revised down too little and too late. The negative effects on growth of the fiscal policy tightening have been greater than expected, and the risk of poor outcomes has steadily increased. Mr Svensson went on to point out that the forecasts by, for instance, the IMF, the OECD and Consensus Forecasts could reasonably

be described as mode forecasts, while it is mean forecasts, which weigh in risks, that are relevant for monetary policy. The Riksbank therefore endeavours to produce mean forecasts. At present, the downside risks are dominant, and the mean forecast should therefore be lower than these mode forecasts, all else being equal, even if one does not take into account catastrophic outcomes.

According to Mr Svensson, the risk of catastrophic outcomes is at present a separate argument for an even more expansionary monetary policy. This is because the economy is now out of balance, with too low inflation and too high unemployment. If the economy were instead in balance, the resilience to shocks would be greater. A more expansionary monetary policy would bring the economy back in balance more quickly, with inflation close to the target and unemployment close to a long-run sustainable rate.

As at earlier meetings, the forecast for policy rates abroad in the draft Monetary Policy Report is too high (see Figure 1 in Appendix 1). The forecast (the yellow curve) is according to Mr Svensson much higher than forward rates abroad (the grey curve), particularly beyond the ordinary forecast horizon, where the broken yellow curve shows the technical assumption used in the Ramses model with regard to how the interest rate develops beyond the forecast horizon. This contributes, all else being equal, to a higher repo-rate path. As far as Mr Svensson knows, the Riksbank is unique among central banks in making such high forecasts for policy rates abroad. As he has emphasised at earlier monetary policy meetings, he sees no good reason for this.

Furthermore, Mr Svensson claimed that the Riksbank's repo-rate path is not credible, as Swedish forward rates (see the blue curve in Figure 1 in Appendix 1) are much lower than the repo-rate path (the red curve) and this cannot possibly be explained by risk premiums alone. As a result, the actual financial conditions are much more expansionary than is indicated by the repo-rate path. Mr Svensson thinks that this is in itself good, as the economy now needs more stimulation. The difference between yield curves based on the Riksbank's repo-rate path and Swedish government securities show the same picture (see Figure 2 in Appendix 1).

The initial position for the Swedish economy is not good, with inflation below the target and unemployment way above a reasonable estimate of the long-run sustainable unemployment rate. Mr Svensson says that the Riksbank's tight monetary policy since summer 2010 has contributed to this. Long-term unemployment is high and means that unemployment is becoming entrenched. According to Mr Svensson, a more expansionary monetary policy, as advocated by Ms Ekholm and Mr Svensson since summer 2010, would have given a better position now, with CPIF inflation closer to the target and unemployment closer to a sustainable rate. This would at the same time have made the economy more resilient to the euro crisis.

Mr Svensson then referred to the estimate of the long-run sustainable rate of unemployment in the article “Long-run developments in the Swedish labour market” in the draft Monetary Policy Report. He considers the estimate to have an upward bias and to overestimate the long-run sustainable rate of unemployment by around 0.75 percentage points and that the central point of the stated interval for the long-run sustainable rate of unemployment should be 5.5 per cent instead of 6.25 per cent. According to Mr Svensson, this bias arises because one has not taken into account the fact that average inflation has undershot the target over the past 15 years, while inflation expectations have remained anchored to the target. He referred to his technical note about this (see Appendix 2).

Finally, Mr Svensson referred to a report published by the International Monetary Fund (IMF) in June this year, which contains a discussion of possible reasons why inflation in Sweden has on average undershot the target over the past 15 years.<sup>1</sup> For instance, there is a discussion of whether the Riksbank has overestimated the long-run sustainable unemployment rate. According to Mr Svensson, this argument is reminiscent of Athanasios Orphanides’ argument that inflation in the United States in the 1970s was too high because the Federal Reserve had underestimated the long-run sustainable unemployment rate in the United States.

Deputy Governor **Karolina Ekholm** noted that international developments had deteriorated since the monetary policy meeting in April. Until the recent EU summit meeting there was a mood of almost resignation with regard to developments in the euro area. At the same time, developments in Sweden have exceeded expectations. According to Ms Ekholm, it is not so easy to reconcile these two development tendencies, but it is reasonable to lower the forecast for GDP growth in Sweden in the coming quarters in relation to what was assumed in April, as is done in the draft Monetary Policy Report.

According to Ms Ekholm, the increased concerns over developments in the euro area appear to have led households and companies around the world to postpone their investment and consumption decisions. When the same thing happened in autumn 2008, the Swedish economy was hit particularly hard in that it led to a large fall in demand for the type of capital and investment goods that comprise a large share of Swedish exports. So far, however, exports have developed relatively well, and world trade has continued to grow. But according to Ms Ekholm there is a risk that the demand for Swedish exports will decline substantially if the uncertainty over developments in the euro area persists.

The initial reactions to the most recent attempt by the EU’s heads of state and heads of government to manage the crisis have been fairly positive, but according to Ms Ekholm it is difficult to believe that the measures agreed on entail an adequate solution to the

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<sup>1</sup> IMF (2012), Sweden: Selected Issues, section III.D, Country Report No. 12/155. [www.imf.org](http://www.imf.org).

problems. There is still uncertainty over how a joint banking supervision facility within the euro area will work and how the European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESM) will be used in practice.

However, Ms Ekholm feels that it is still reasonable to have as the main scenario that the problems are resolved in one way or another and that growth in the euro area will be positive, albeit fairly low, from next year. For the main scenario to be realised, however, it is necessary for political leaders to clarify how public finances will be made sustainable in the long run and how they will manage banks in distress. There are fairly large downside risks and developments could be much worse than anticipated.

Ms Ekholm pointed out that the Swedish economy has still not fully recovered from the downturn in 2008-2009. Unemployment is still higher than it was prior to the financial crisis, and inflation is still well below the target of 2 per cent. According to Ms Ekholm, it is difficult to bring inflation up and unemployment down when the most important export market, the euro area, is so weak. Ms Ekholm finds that more monetary policy stimulation is required. The weakening of the krona in connection with the increased unease on the financial markets could have helped, but as one could hear from Marianna Blix Grimaldi's presentation, the value of the krona is more or less back where it was at the time of the monetary policy meeting in April.

Further, Ms Ekholm pointed out that the interest rate differentials between Sweden and other countries are significant to the development of the Swedish krona. The forecast for policy rates abroad is at present, as at previous monetary policy meetings, higher than market expectations when measured in terms of implied forward rates (see Figure 1 in Appendix 1). As before, Ms Ekholm claimed that it would be better if the forecast for policy rates abroad was based entirely on forward rates as long as there are no clear reasons why policy rates abroad should increase faster than is indicated by forward rates. As discussed previously, particularly at the monetary policy meeting in April, even fairly small differences between forward rates and the Riksbank's forecast can have large consequences, at least according to the model simulations, for inflation and resource utilisation in Sweden.

First Deputy Governor **Kerstin af Jochnick** stated that she agrees with the assessment of developments in Europe and Sweden described in the draft Monetary Policy Report. As noted at the monetary policy meetings in spring 2012, the situation abroad and in the euro area in particular, is very uncertain. Moreover, the risks in Europe have increased since April.

Ms af Jochnick claimed that developments in Sweden were still relatively good and close to the forecast made by the Riksbank in April 2012. At the beginning of 2012 domestic demand was maintained despite weak demand abroad. In the draft Monetary Policy

Report, weaker growth is expected in the coming quarters. Growth is expected to increase again during 2013 and 2014.

Global growth has deteriorated somewhat compared with the Riksbank's assessment in April, but is still relatively good. However, developments in the euro area have become even more uncertain. This has increased the risks of a poorer development in growth and in the stability of the financial system in several countries.

The risks of a poorer development in the euro area are thus greater now than in April. Europe is struggling with several problems. Weak public finances, undercapitalised banks in weak financial systems, and low growth. These problems are also linked. Weak financial systems contribute to weak public finances, and vice versa.

Moreover, growth in the euro area has been weak in recent years. However, there are considerable differences between the growth rates in different euro area countries. Growth is still positive in several countries in northern Europe, while it has more or less collapsed in southern Europe. The euro area also has problems with competitiveness between countries. If the countries in southern Europe experiencing problems are to regain competitiveness they must reduce their relative cost situation, says Ms af Jochnick.

Furthermore, Ms af Jochnick considers that the situation in the euro area must be assessed from both a short-term and long-term perspective. In the short term, a number of measures need to be taken to bring the euro area out of the crisis. It is a question of quickly resolving the problems in Greece and Spain in a sustainable manner at the same time as limiting the contagion effects. Long-term measures must also be taken to make the countries less vulnerable to future crises.

Strengthening confidence in the euro and the monetary union will require solutions that take longer to implement. The cooperation in the euro area will probably need to be developed significantly to ensure that the euro and the single market can survive new trials and tribulations. According to Ms af Jochnick, a strong cooperation is required with regard to both fiscal policy and the supervision and crisis management of cross-border banks. A major problem in the current crisis situation is that the decision-making process in the EU takes a long time.

The past month has been characterised by increased risk that the crisis will worsen. This has been expressed, for instance, in higher rates on government securities in countries with problems, volatile stock markets, and several cases of downgrading of both states and banks. Given this, Ms af Jochnick feels it is difficult to evaluate the decisions taken to improve the functioning of the euro area, such as the firewalls now being built, the reinforced fiscal policy regulations, the relief loans to the banking systems in Spain and Cyprus, and now most recently the European Council's decision at the end of June. It remains to be seen how and when the decisions will have an impact.

If Europe is to regain efficiently-functioning financial markets that can support a recovery in the real economy it is important that the European banking system functions properly. The European Banking Authority's capitalisation exercise in 2011 identified a number of major banks that are in need of new capital. At the same time, several small and medium-sized national banks have problems. Ms af Jochnick has not yet seen any concrete proposals as to how these problems can be resolved. It is not just a question of recapitalising banks; it is also necessary to cut balance sheets and to reconstruct banks that are not viable. This process is difficult and painful, but Ms af Jochnick considers it to be necessary, nevertheless. Greater transparency and openness is required to be able to assess the need for measures and the size of the firewalls. In addition, it is necessary to strengthen the process for monitoring that the countries in crisis actually fulfil their obligations.

Compared with developments in the euro area, developments in Sweden are still relatively good. However, Ms af Jochnick pointed out that the increased unease in the euro area will spill over to Sweden. Demand from the euro area is declining and it is likely that Swedish companies and households will be more cautious in their investment and consumption, because of concern over how developments in Europe will affect Sweden. Growth will therefore slow down in 2012, and it will take time before the recovery comes, according to Ms af Jochnick.

In conclusion, Ms af Jochnick commented on Mr Svensson's analysis of the level of long-run sustainable unemployment. As she sees it, long-run sustainable unemployment can be calculated in different ways. This is also reflected in the span of 5-7.5 per cent described in the draft Monetary Policy Report. Given the current economic situation and a number of factors that affect this assessment, she preferred to be cautious about stating a more exact figure.

Deputy Governor **Barbro Wickman-Parak** noted that the acute crisis in the euro area requires resolute measures. There has been no lack of measures on the part of the euro area countries, but the effects that they have had on financial market confidence have been transitory. Last week's EU decision caused the stock markets to jump for joy and interest rates for Spain and Italy fell. It is good that they are trying to deal with the acute problems, such as the banks in Spain. This increases the scope for the countries in crisis to work on creating long-run sustainable public finances and to create better competitiveness through reforms. But it will take time and cannot be resolved at summit meetings, but only by the countries themselves.

Last week's decision by the European Council so far lacks important details regarding the actual implementation of the decision. With the wisdom gained from experience, Ms Wickman-Parak therefore thinks that one should not draw too far-reaching conclusions from the first positive reactions on the financial markets.

Despite the considerable uncertainty, monetary policy must be based on forecasts. Ms Wickman-Parak says that catastrophe scenarios should be set aside, but that the forecast should take into account the risk of a poorer development. This is not the same as being unaware of the possibility of a really bad scenario taking place. The Riksbank has the scope to deal with such events if they occur.

The forecast for growth in the euro area this year is lower than in the April Monetary Policy Update, and this reflects weaker indicators and outcomes, as well as the fact that the new assessment is that it will take longer to resolve the sovereign debt crisis and generate increased confidence among economic agents. On the whole, the main scenario in the draft Monetary Policy Report sketches a fairly gloomy picture of growth in the euro area in the coming years.

There has been considerable focus, for natural reasons, on the crisis countries in the euro area. But this should not, according to Ms Wickman-Parak, overshadow the fact that other countries in the region are nevertheless expected to grow, albeit at a slow pace. Countries outside of the euro area, such as the United States and the emerging markets, can be expected to grow at a fairly good pace. Norway, which is an important export market for Sweden, is expected to show strong growth.

Ms Wickman-Parak said in summary that she supports the international forecasts in the draft Monetary Policy Report.

As far as Sweden is concerned, Ms Wickman-Parak observed that growth has surprised on both the upside and downside over the past six months. It was lower than expected in the last quarter of 2011, primarily due to export demand slowing down more than expected. The forecast for the first quarter of 2012 from April entailed slightly better growth. However, the forecast was cautious in relation to what the Riksbank's various models indicated. Nevertheless, it was optimistic in relation to other analysts' forecasts. The outcome was higher than the Riksbank forecast as domestic demand surprised on the upside. Although various indicators have weakened and production outcomes have been weaker since then, Ms Wickman-Parak finds that this points to an underlying strength in the Swedish economy.

The poorer prospects in the euro area hit exports and will together with weaker confidence hold back investment and consumption in the coming period. Ms Wickman-Parak therefore found it reasonable to revise down the growth forecast for the near future. She pointed out that the revision did not involve any major changes in the forecast for Swedish growth in relation to the forecast in April. The same applies to the inflation forecast.

Good news in the flow of statistics is that the labour market has developed better than expected. Ms Wickman-Parak is not expecting any major deterioration in the labour



market in the coming period, and this picture is supported by the National Institute of Economic Research's economic tendency survey, by other labour market indicators and by the Riksbank's company surveys. After seeing some increase in the risk of one's own unemployment during the autumn, households' assessment of this risk has declined in recent months. If the labour market continues to be resilient as forecast in the main scenario, Ms Wickman-Parak feels that there may be opportunities in the longer run for somewhat stronger consumption than forecast. However, this is merely a nuance. On the whole, she supports the forecast regarding Sweden and the analysis behind it.

Ms Wickman-Parak thinks that the article "Long-run developments in the Swedish labour market" in the draft Monetary Policy Report shows very clearly the uncertainty involved in assessing long-run unemployment. As the forecast horizon for the current monetary policy decisions is three years, she considers it important to closely monitor the functioning of the labour market in this time perspective, as is the case now. She also said that it is evident that monetary policy cannot affect the functioning of the labour market; this task falls to other political areas.

Deputy Governor **Per Jansson** began by clarifying that he supports the forecasts for developments in Sweden and abroad presented in the draft Monetary Policy Report. Mr Jansson's starting point is that the repo-rate path in the Monetary Policy Update published in April was compatible with a reasonably good development of economic activity and inflation over the coming years. Compared with April, the adjustments to the forecasts for inflation and the real economy are fairly small and thus no major changes have occurred with regard to the more fundamental determinants of monetary policy.

Having said this, Mr Jansson went on to discuss a few aspects of the forecast that he perceived as particularly important on this occasion. The first particularly important aspect of the forecast relates to the problems in the euro area. The risks and uncertainty in the euro area are considerable and may very well have increased since the previous forecast in April. Although some progress was made at the EU summit meeting last week, it is unclear how long the optimism will last. Furthermore the fundamental problems have not been resolved at all. All in all, the new main scenario, compared with the April Monetary Policy Update, entails a relatively large downward revision to the forecast for GDP growth in the euro area in 2013 and 2014, by -0.7 and -0.4 percentage points respectively.

The Riksbank's forecasts are so-called mean forecasts. This means that consideration is given to all possible outcomes and that these are weighted by their respective probabilities. The growth forecast for the euro area should thus take into account all possible development paths, including everything from a more or less untidy escalation of the crisis to a collapse of the single currency. All development paths with a probability that is positive should be taken into consideration. But this is easier said than done. The

Riksbank does its best to construct these mean forecasts, but it is extremely difficult to quantify both effects and associated probabilities of the euro crisis worsening in various ways. The most difficult thing is to do this for scenarios where the current single currency collapses.

According to Mr Jansson, there are good reasons to believe that the current forecast for growth in the euro area does not fully manage to take these types of extreme outcome into account. However, a mean forecast that is affected by improbable outcomes with potentially large effects is very difficult to interpret, and according to Mr Jansson it is in principle not entirely clear that one really wants to fully take into account extreme development paths in the calculation of mean forecasts. To put it simply, this is because the mean forecasts are too much affected by improbable events that one would thus act on in advance. Jansson explained that he would come back to how this complicating aspect has affected his monetary policy stance.

The second aspect of the forecast that Mr Jansson considered to be particularly important concerns the Swedish economy and the way it developed at the beginning of this year. Developments abroad are characterised by large risks and the outlook is gloomy. The opposite applies so far to developments in Sweden. GDP growth for the first quarter was surprisingly positive. The seasonally-adjusted increase from the fourth quarter was 0.8 per cent, while the Riksbank had been expecting 0.4 per cent. Mr Jansson noted that the Riksbank's forecast was relatively optimistic, compared with those of other forecasters. Their median forecast was for a growth rate of around 0.2 per cent. Several analysts were even expecting no growth or negative growth.

In addition, the indicators for the second quarter look relatively bright. The Riksbank's indicator models suggest that seasonally-adjusted growth amounted to between 0.3 and 0.6 per cent during the second quarter. The forecast in the draft Monetary Policy Report is 0.2 per cent, that is, slightly below the forecasts suggested by the indicator models, which appears reasonable in this situation.

Another pleasing factor is the resilience of the Swedish labour market. Compared with what was expected in April, all volume measures on the labour market have shown a better development than expected: the number of hours worked, the number of people in the labour force and the number of people employed have become higher at the same time as unemployment has become lower. Moreover, there is now reason to believe that unemployment will not rise as much in the coming period as was assumed in earlier forecasts. Mr Jansson pointed out in this context that many other forecasters had an evengloomier picture of the labour market than the Riksbank, and they are therefore now being forced to revise down their forecasts even more than the Riksbank.

Inflation has at the same time followed the paths predicted in April. This applies to all measures that are normally taken into account: CPI inflation, CPIX inflation and CPIX inflation excluding energy prices.

Mr Jansson noted in conclusion that in his discussion of the forecast in the draft Monetary Policy Report he has tried to point to a couple of aspects that he perceives as particularly important for his monetary policy stance on this occasion. In short, it is a question of weighing a very risky and uncertain international situation against a Swedish economy that shows resilience and has tended towards positive surprises.

Governor **Stefan Ingves** stated that he shares the view of international developments and the Swedish economy presented in the draft Monetary Policy Report. Increased unease in several European crisis countries has led to a downward revision in the forecast for growth in the euro area. In the world as a whole, however, growth prospects are still relatively good. In the United States the recovery will benefit from reduced household debts and good profits in the corporate sector, although the need for budget consolidation means that the growth figures will be modest in coming years. The emerging economies are continuing to grow, although a slight slowdown has been noted in some countries.

Mr Ingves then added that, with regard to developments in Europe, the problems in several countries are interlinked. Weakened financial systems and weak competitiveness have contributed to weakened public finances. Weakened public finances have held back the possibilities and willingness to strengthen the financial systems. Relief programmes from other countries require measures that will correct the fundamental imbalances and problems, but these measures will take time.

It is important to restore confidence in the euro area as a whole and in individual crisis countries. Many types of measures are needed and they differ according to the country concerned. Banks need to be recapitalised, the ESM needs to be established, new regulations for public finances need to be observed and measures to improve the cost situation need to be implemented. Essentially, it is a question of strengthening expectations of the future and the confidence in credible and sustainable solutions which will resolve the interlinked problems. The issues that need to be resolved are structural rather than cyclical.

According to Mr Ingves, the risk with short-term solutions is that they only move the risks around in the system. Then reliefs only arise for a short period that lasts until the markets have figured out where the risks have gone.

The starting point in the main scenario is that the most acute debt crisis will be managed and that long-run sustainable solutions will be implemented. As far as Sweden is concerned, it is also important to note that there are still major differences in economic

developments between the countries in Europe. Many of the countries that are Sweden's most important trading partners are still growing. It is a question of a north-south divide rather than euro area countries versus non-euro area countries. Mr Ingves claimed that no major changes had been made to the forecast for the world as a whole since the previous monetary policy meeting.

Strong fundamentals give the Swedish economy a good foundation for growth. These include stable public finances, a competitive export sector that has contributed to large current account surpluses, and moderate wage increases.

Both CPI and CPIF inflation are low at present. The main scenario assumes that rising resource utilisation will pull up CPIF inflation to around 2 per cent in 2014, while CPI inflation, which is affected by repo-rate increases, will scarcely reach 3 per cent in the same year.

Mr Ingves claimed, with regard to the forecast for the krona exchange rate, which entails some strengthening in competition-weighted terms during the forecast period, that it is genuinely difficult to make such forecasts. The krona normally weakens in times of economic unease, but given the economic developments in Sweden, one could also argue that the krona will strengthen. Given this uncertainty, the forecast is reasonable.

With regard to monetary policy and the labour market, it is fairly uncertain to what extent monetary policy can be fine-tuned with regard to developments on the labour market. There are limits to what monetary policy can achieve. Many of the problems on the labour market are of a structural nature. The structural problems include the possibility for new groups joining the labour force to find work, matching of vacancies to job-seekers and the flexibility of the wage formation process. There is considerable uncertainty over the long-run unemployment rate, and according to Mr Ingves the interval of 5-7.5 per cent described in the draft report is reasonable.

Deputy Governor **Karolina Ekholm** then commented on a couple of points that had been raised. She agrees with Mr Jansson that it is difficult to manage extreme outcomes with a low probability in the forecast, but considers that one can nevertheless take these outcomes into account in the monetary policy decision. According to Ms Ekholm, a lower repo rate today means that the Swedish economy is in a better initial position if an extremely negative outcome were to occur during the forecast period. If the extreme outcome does not occur, which is most probable, the cost of this more expansionary monetary policy is negligible, as there is no great inflation risk at present. A possible cost of a lower repo rate could be that low interest rates could lead to an increased build-up of debt among Swedish households and thus make them more vulnerable. However, the growth rate in household credits has now shown a downward trend for a couple of years, despite the repo rate being low. Ms Ekholm therefore did not perceive this as any clear cost that should be offset against the advantages of a lower repo rate.

In addition, Ms Ekholm commented on what was said about long-run sustainable unemployment. She considers that this has little significance for the current monetary policy stance, as actual unemployment is much higher than all of the reasonable assessments of the long-run sustainable rate. The monetary policy stance now concerns how quickly unemployment can be brought down to the long-run sustainable rate, wherever this may be. On the other hand, the assessment of the long-run sustainable rate does have considerable significance when determining why inflation in Sweden has undershot the inflation target over a long period of time. As Mr Svensson mentioned, one hypothesis is that the long-run sustainable unemployment rate has been overestimated. It is important to analyse this hypothesis further. Ms Ekholm realises that this is difficult, but claimed that it would be an advantage if one could specify the long-run sustainable unemployment rate more clearly than as now with a broad interval.

Deputy Governor **Lars E.O. Svensson** agreed with Ms Ekholm on this. With regard to the question of an interval or point estimate for the long-run sustainable rate of unemployment, he claimed that an interval, without any further information on the distribution within the interval, can be interpreted to mean that all estimates within the interval are equally probable. In this case there is an implicit assumption of a so-called uniform distribution within the interval. The central point of the interval then becomes both mean and median. What is important to monetary policy is the mean, which is then given by the central point. There is thus, from a monetary policy point of view, no practical difference between an estimate in the form of an interval and a point estimate.

Mr Svensson then referred to Mr Jansson's comments on how monetary policy should relate to extreme outcomes with a low probability. According to Mr Svensson there is a lot that can be said here and a lot of interesting international research. The research has been stimulated by, for instance, the question of how the Bank of England should manage the strong pound around 10 years ago, and the risks with a rapid and large depreciation. Mr Svensson reminded the board that he has himself written a paper that attempts to systematise how these questions should be dealt with in monetary policy. The paper also contains a number of references to international academic research on this.<sup>2</sup>

Deputy Governor **Per Jansson** agreed with Mr Ingves that one must take many factors into account when discussing the Swedish labour market and long-run unemployment. It does not merely concern tax policy and inflation expectations. According to Mr Jansson, the functioning of wage formation is given too little emphasis in the debate on long-run unemployment in Sweden. The more flexible the wage-formation process, the smaller the

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<sup>2</sup> Svensson, Lars E.O. (2003) "Optimal Policy with Low-Probability Extreme Events," in *Macroeconomics, Monetary Policy, and Financial Stability - A Festschrift for Charles Freedman*, Proceedings of a conference held by the Bank of Canada, Ottawa, s, 79-104, [www.larseosvensson.net](http://www.larseosvensson.net).

effect of various shocks will be on jobs and unemployment. The potential for low unemployment in the long run will then be good.

Mr Jansson emphasised that it is good and important that the Riksbank continues to work on various questions related to the labour market. He felt that it was particularly important to work more with disaggregated micro data rather than with aggregated macro data.

Governor **Stefan Ingves** summarised the discussion of economic developments. With regard to international developments, the main focus has been on the euro area. There is agreement that developments there will be weak, but there are differences in the assessments of how weak they may be and how the forecasts should deal with the risk of an even poorer development. There are also differences with regard to the forecast for policy rates abroad and their consequences. It appears that there is agreement that the Swedish economy is moving towards weaker developments, after a strong start to the year.

### § 3. Monetary policy discussion

Deputy Governor **Lars E.O. Svensson** advocated a significantly lower repo-rate path than the one in the main scenario of the draft Monetary Policy report. He believed that the forecasts for foreign policy rates and growth in the euro area were too high and that a lower repo-rate path would provide a better-balanced monetary policy as it would lead to a higher rate of CPIF inflation closer to the target and a lower rate of unemployment closer to a long-run sustainable rate.

Mr Svensson claimed that it follows from the Sveriges Riksbank Act and its preparatory works that the mandate of monetary policy is to maintain price stability and achieve the highest possible sustainable rate of employment. He explained this in detail in a speech at SNS on 8 June.<sup>3</sup> In practice, monetary policy thus entails choosing a repo-rate path so that one best stabilises CPIF inflation around the inflation target and unemployment around a long-run sustainable rate throughout the forecast period, not just at the end of the forecast period. Mr Svensson believed that monetary policy should focus on employment and unemployment, not on resource utilisation in a more general and diffuse way as measured using a number of different, unreliable indicators.

A higher or lower repo-rate path should not provide better target attainment than the repo-rate path that is actually chosen. In order to compare different repo-rate paths and the corresponding forecasts for inflation and unemployment, Mr Svensson at this monetary policy meeting, as at previous meetings, referred to his so called four-panel

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<sup>3</sup> Svensson, Lars E.O. (2012), "Different views of monetary policy", speech at SNS, 8 June 2012.

figures (see Figures 3 and 4 in Appendix 1). Mr Svensson said that these figures are very useful and even necessary when choosing repo-rate paths, when justifying the repo-rate path chosen and when evaluating whether monetary policy has been well-balanced.

He reminded the meeting that in its report of 7 June on monetary policy in the period 2009-2011, the Riksdag Committee on Finance commented on the article "A method for assessing different monetary policy alternatives" in the Riksbank's material for assessing monetary policy in 2011, which discusses the four-panel figures.<sup>4</sup> The Committee on Finance emphasises that the use of these figures, which present alternative repo-rate paths and the corresponding forecasts for monetary policy's target variables, facilitate and illuminate decision-making, make it easier to understand the repo-rate decisions and clarify the basis on which the decisions were made. Mr Svensson said that it was important to take note of the comments of the Committee on Finance and to develop the use of these figures. He found it regrettable that these figures have been largely disregarded in the draft Monetary Policy Report and that only two of the draft Report's approximately 60 pages are devoted to them. The Report should make it very clear whether monetary policy is well-balanced or not and these figures are necessary in this context.

Mr Svensson then went on to comment on alternative repo-rate paths for the decision at this meeting. He claimed that a lower repo-rate path provides better target attainment for CPIF inflation and unemployment even if one accepts the assumptions on growth in the euro area and future policy rates abroad in the main scenario in the draft Monetary Policy Report (see Figure 3 in Appendix 1). According to Mr Svensson, this conclusion also applies if one assumes that inflation and unemployment react more slowly to interest rate changes than is the case in the model Ramses. Then there is an argument for a larger and earlier repo-rate cut.

A forecast for policy rates abroad in line with foreign forward rates is, according to Mr Svensson, a more realistic forecast at present and provides arguments in favour of a much lower repo-rate path in Sweden (see Figure 4 in Appendix 1). The forecasts for inflation and unemployment in the figure are based on the corrected estimate of the long-run sustainable rate of unemployment of 5.5 per cent. According to Mr Svensson, it is clear that the lower repo-rate path leads to much better target attainment. A less optimistic forecast for the euro area gives further arguments in favour of a lower repo-rate path.

Given this, Mr Svensson could not support the draft Monetary Policy Report and the repo-rate path in its main scenario and advocated that the repo rate should now be cut by 0.5 percentage points to 1.0 per cent and then a repo rate path of 0.75 per cent from the

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<sup>4</sup> Riksdag Committee on Finance (2012), "Assessment of monetary policy 2009-2011", Report 2011/12: FIU24, p. 35-36.

beginning of the fourth quarter 2012 to the end of the fourth quarter 2013, followed by a gradual increase to 2 per cent at the end of the forecast period.

Mr Svensson said that he could see no reason to set aside the mandate of price stability and highest sustainable employment in order to conduct some form of “leaning against the wind” policy and thereby a tight monetary policy, in the belief that one will thereby improve financial stability, for example by limiting mortgage growth. There is no theoretical or empirical support for the claim that a higher repo rate in Sweden under current conditions would have a significant impact on financial stability in Sweden and that this would be a reason for keeping inflation below the target and unemployment above a long-run sustainable rate.

Deputy Governor **Karolina Ekholm** declared that she, like Mr Svensson, believes that more monetary policy stimulation is justified. Inflation is well below the target and unemployment well above what can be regarded as a long-run sustainable rate. In such a situation, monetary policy should help to increase inflation and resource utilisation by setting a relatively low repo rate. Ms Ekholm said that she did not think the repo-rate path in the main scenario in the draft Monetary Policy Report was low enough, as illustrated by the simulation with a lower repo-rate path in the section on alternative repo-rate paths. In this simulation, CPIF inflation reaches 2 per cent more quickly and the outcome for unemployment is lower than in the main scenario.

The draft Monetary Policy Report emphasises that these simulations do not capture all the factors of significance to whether monetary policy is well balanced or not. However, Ms Ekholm claimed that such marginal deviations from the main scenario’s repo-rate path still capture the most relevant factors. Ms Ekholm’s conclusion is therefore that the main-scenario’s repo-rate path is too high and does not constitute a well-balanced monetary policy.

According to Ms Ekholm, a cut of 50 points to 1 per cent is justified. Given the current situation in the Swedish economy, with unease on the financial markets and a great deal of uncertainty about the future course of events in the euro area, Ms Ekholm believed that a larger cut than the 25 points that the repo rate is usually changed by was justified. She said that the repo rate could then remain at 1 per cent till the end of the third quarter 2013 and then gradually rise to a level half a percentage point lower than the level in the main scenario at the end of the forecast period.

Ms Ekholm admitted that there was an arbitrary element in the path that she advocated as she could not demonstrate that this particular path would achieve the best possible outcome for the forecasts of inflation and resource utilisation. In model simulations it provides a significantly better outcome than the path in the main scenario when policy rates abroad are forecast using implied forward rates, but there are several uncertain factors in the simulations. However, Ms Ekholm said that the main point was that the



currently low level of inflation and the relatively high and rising rate of unemployment justify more monetary-policy stimulation. She also believed that the slight downward revision of the repo-rate path proposed in the draft Monetary Policy Report is not sufficient to achieve this.

Deputy Governor **Barbro Wickman-Parak** referred to her previous statement that it is reasonable to adjust the near-term forecast for the euro area downwards. However, the course of development a year or so ahead is extremely uncertain and largely dependent on political measures. A variation on the draft Report's alternative scenario based on a more rapid recovery of confidence could, in her opinion, turn out to be as realistic as the second alternative scenario in which the crisis of confidence worsens and becomes more prolonged.

After weighing together the somewhat poorer prospects abroad and the growth potential demonstrated by the Swedish economy, Ms Wickman-Parak's assessment was that it was appropriate to hold the repo rate unchanged at 1.5 per cent. This is a low rate and it can remain low for quite some time as inflation is not a problem in the short-term. She said that if domestic factors were all that needed to be considered she would also be happy to keep to the repo-rate path adopted in April. However, given the poorer outlook, and above all the high degree of uncertainty, in the euro area it is reasonable to indicate that the likelihood of a repo-rate cut in the autumn is somewhat greater than the likelihood of an increase.

In the forecast, inflation approaches the target towards the end of next year. Ms Wickman-Parak said that this was an acceptable target attainment. Cutting the repo rate by 0.25 percentage points now and adopting a slightly lower repo-rate path would have marginal effects on inflation and demand. Although a larger cut, as advocated by Ms Ekholm and Mr Svensson, could bring inflation up to the target more quickly, and the forecast would thus "look better", Ms Wickman-Parak's assessment was that the effects on the real economy would not be particularly significant and that there were risks associated with such a policy.

It is not an excessively high interest rate that is holding back investment; this is due to the high level of uncertainty about the future course of the economy. It is true that households with variable-rate loans would have a better cash flow and, all else being equal, greater opportunities to increase their consumption somewhat if the repo rate was reduced, but more substantial effects would only be achieved if borrowing increases. However, Ms Wickman-Parak said that she would not like to see a return to a rapid growth in the level of debt as this could lead to problems later on.

As the repo rate acts with a time lag, the effects of a cut would moreover come when demand is already increasing, resource utilisation is close to normal and CPIF inflation is slightly above 2 per cent.

Ms Wickman-Parak said that there is too much focus on the current low level of inflation instead of on the forecast for inflation. Although there is no risk of inflation in the short term the situation may be different in the slightly longer term when the demand for labour increases. In the main scenario, unemployment is just over 6 per cent at the end of the forecast period. This may, as in the forecast in the draft Monetary Policy Report, be compatible with a rate of inflation that is only marginally above two per cent. However, given the problems on the labour market, which she discussed in more detail in a speech at the beginning of the year, Ms Wickman-Parak was not convinced that an increased demand for labour could easily be met without the risk of pushing up inflation.<sup>5</sup>

She concluded by noting that the repo rate will of course not be fixed at 1.5 per cent no matter what happens. The outlook may obviously deteriorate in the period ahead, in which case monetary policy should be revised. In such a situation, however, there may be good reasons for discussing the possibilities and effectiveness of monetary policy in relation to other measures to stimulate the economy.

First Deputy Governor **Kerstin af Jochnick** declared that she supported the proposal in the draft Monetary Policy Report to keep the repo rate unchanged at 1.5 per cent and to adjust the repo-rate path downwards somewhat. Ms af Jochnick's assessment was based on the fact that the development of the Swedish economy continues to look rather good. However, uncertainty about the situation in Europe has increased and it is difficult to assess the future course of development there. The increased risks of a weaker development in Europe are reflected in the slight lowering of the repo-rate path. If the problems in Europe result in a lower inflation forecast and weaker growth than in the main scenario in the draft Monetary Policy Report, then a repo-rate cut could be justified.

Ms af Jochnick pointed out that the Riksbank is currently conducting an expansionary monetary policy. Inflation is low at present, but will attain the target within the forecast period. She then clarified why a lower repo rate today would not contribute to a better-balanced monetary policy. The very difficult international situation at present is the most important factor for monetary policy. In the present situation with large downside risks, cautious consumers and very low interest rates one must be cautious about applying historical relationships to the impact of monetary policy. It is likely that this impact is limited at the moment.

A further repo-rate cut now would therefore take a fairly long time to have an impact on the interest rates met by companies and households. Quite simply, the transmission mechanism is slower in this situation. Moreover, the problems on the labour market are primarily of a structural nature. She believed that the expansionary monetary policy in the main scenario would contribute to reducing unemployment to just over six per cent at

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<sup>5</sup> "Monetary policy and unemployment – a constantly topical debate" 24 January 2012.

the end of the forecast period. This means that it would then be in the middle of the interval for long-run unemployment, which is estimated to be 5-7.5 per cent in the draft Monetary Policy Report.

There is a risk that low interest rates will provide incentives for a build-up of debt, which Ms af Jochnick said is not desirable. She also said that she has previously pointed out that the Executive Board should discuss the potential negative effects that low interest rates over a long period of time could entail, such as behaviours and imbalances that are not sustainable. The Executive Board must therefore continue, at the same time as attaining the inflation target and stabilising the real economy, to give consideration to the danger of a build-up of risk in the private sector.

Deputy Governor **Per Jansson** referred to the fact that in his discussion of economic developments he pointed out that there is a trade-off between a high-risk and uncertain situation abroad on the one hand and a Swedish economy that has demonstrated resilience and has surprised on the upside on the other.

Given the considerable risks that exist abroad, it is possible to conclude, if one looks at these risks alone, that immediate and rather substantial cuts in the Swedish repo rate are called for. However, Mr Jansson believed, as mentioned earlier, that it is extremely difficult to estimate the probabilities and the possible consequences of the very negative outcomes in the risk outlook. At the same time, it is not self-evident that in expected value terms we would really want to fully take into account these unlikely outcomes with potentially major economic effects, even if we could. The conclusion reached by Mr Jansson, and which is also presented in the draft Monetary Policy Report, is that if these extreme outcomes are realised then monetary policy in Sweden will be faced with an entirely new situation.

In the case of the Swedish economy the situation is clearly different. Viewed in isolation, the robust and surprisingly strong development of the Swedish economy could instead call for immediate repo-rate increases. To avoid misunderstanding, Mr Jansson said that in this context it was important to point out that he of course shares the view that the Swedish economy is not in need of a tight monetary policy at the moment. It would instead be a question of easing off a little from a level corresponding to a repo rate of 1.5 per cent to ensure that economic activity and inflation develop at the right pace and in a sustainable way.

Mr Jansson saw the policy proposal in the draft Monetary Policy report as reasonable and natural. In the current situation, in which a number of factors are counteracting each other, leaving the repo rate unchanged is a reasonable decision. The poorer prospects for recovery in the euro area will also affect Sweden and this leads to a slight lowering of the repo-rate path compared with the assessment in April. This lowering of the repo-rate

path is of course not a fully-comprehensive insurance against all of the major risks in the international economy, but as previously explained this is not the intention either.

Mr Jansson concluded by pointing out that household indebtedness, as in February and April, continues to be a factor on the margin that in his opinion weighs against making further cuts in the repo rate. He did not feel that the risk situation was now more serious than previously, but the high debt ratio of the households continues to make the Swedish economy more vulnerable and fragile than it would be if the level of indebtedness was lower. If household indebtedness began to increase significantly again for some reason, then those responsible for various policy areas in Sweden should discuss conceivable measures to limit risks in this area.

Governor **Stefan Ingves** said that he supported the proposal to leave the repo rate unchanged at 1.5 per cent and to adjust the repo-rate path downwards somewhat for 2012 and 2013. The draft Monetary Policy Report provides a nuanced picture with an appropriate balance between the situation abroad and the development of the Swedish economy.

It is predicted that monetary policy will be expansionary for some time. The weaker prospects in the euro area justify a downward revision of the repo-rate path. The real repo rate is expected to be negative in 2012 and 2013. After this, however, the repo rate will need to be gradually raised to ensure that inflation is around the target and that resource utilisation is normal.

The main scenario is the Riksbank's best assessment, but it is also important to be aware that an entirely different course of development cannot be ruled out. If the debt crisis in Europe worsens and a negative scenario materializes, then the Swedish economy will also be affected. However, it is not possible to use monetary policy to counteract the realisation of such a scenario in advance. If developments take an entirely different course then the situation will have to be handled at that time. In a really negative scenario, it is not primarily a case of weighing minor adjustments of the repo rate against each other. It is more a case of how the financial sector as a whole is affected and what this means for monetary policy. In such a world it is not even certain that the conventional models and analysis methods will work.

Deputy Governor **Lars E.O. Svensson** then returned to the issue of the short-term tradeoff between inflation and unemployment taken up by Ms Wickman-Parak. When unemployment has been high and long-term unemployment is high, unemployment tends to become entrenched. This means that the short-term tradeoff between inflation and unemployment becomes less favourable in the sense that a more expansionary policy, with the associated higher rate of inflation, is required to bring unemployment down to a long-run sustainable rate and also to attract people who have previously left

the labour force back to the labour market. This means that we must accept higher inflation for a while, and above all inflation above the target.

In this context, Mr Svensson reminded the meeting that inflation expectations in Sweden have been anchored around the target and that average inflation has deviated from the target. In such a situation the long-term Phillips curve is no longer vertical but downward-sloping, and average inflation below the target entails higher average unemployment. This makes it important to ensure that average inflation is on target for an extended period of time. Inflation must thus be above the target as often and by as much as it is below the target. This means that we should not be afraid to let inflation overshoot the target, particularly when unemployment is high and we want to reduce it to a long-run sustainable rate.

Mr Svensson then went on to discuss whether household indebtedness is an argument against cutting the repo rate. He referred to his four-panel figures which in his opinion show that a lower repo-rate path, even given the main scenario's assumptions regarding foreign policy rates and higher growth in the euro area, provides better target attainment (see Figure 3 in Appendix 1). This applies in particular given that, following a correction of the Riksbank's assessment, the long-run sustainable rate of unemployment appears to be approximately 5.5 per cent. The main scenario is thus not well-balanced according to this.

Mr Svensson pointed out that the draft Monetary Policy Report presents two reasons why the main scenario could nevertheless be regarded as well balanced. The first reason is that the lower repo-rate path would lead to a higher level of household indebtedness and that this would make the economy more vulnerable and sensitive to shocks in the future. According to Mr Svensson, there is no analysis that supports this claim. On the contrary, the analysis that does exist indicates the opposite. A typical result in Assenmacher-Wesche and Gerlach (2010), Claussen, Jonsson and Lagerwall (2011) and other papers is that a percentage point lower policy rate can lead to 1-3 per cent higher housing prices within a few years.<sup>6</sup> This means that a 25-point lower repo-rate path could increase housing prices and indebtedness by perhaps half a per cent. As disposable income is also increasing, the debt ratio would thus increase by less than half a per cent. Such a small increase in the debt ratio has an insignificant effect on any vulnerability.

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<sup>6</sup> Assenmacher-Wesche, Katrin, and Stefan Gerlach (2010), "Monetary policy and financial imbalances: facts and fiction", *Economic Policy*, July 2010, pages 437-482. Claussen, Carl Andreas, Jonsson, Magnus and Lagerwall, Björn (2011), "A macroeconomic analysis of housing prices in Sweden", *The Riksbank's commission of inquiry into risks on the Swedish housing market*, Chapter II.1.

The analysis in Finansinspektionen's (2012) report on the mortgage market also shows that new mortgage holders are highly resilient to shocks.<sup>7</sup> The new, and thus the most indebted, mortgage holders pass very severe stress tests. It is estimated that if house prices fall by 40 per cent and unemployment increases by 20 percentage points, less than 6 per cent of the households with a new mortgage will be in deficit in a so-called "left-to-live-on" calculation and at the same time have a loan-to-value ratio of more than 100 per cent (Finansinspektionen 2012, page 12). Mr Svensson also reminded the meeting that the Swedish mortgage holders and the Swedish housing market have been subjected to and passed stress tests in real time during the financial crisis of 2008-2009, and once again during the on-going crisis in the euro area in 2011-2012. These "real-time stress tests" have had rather moderate effects on house prices and consumption. Mr Svensson's conclusion was that the Swedish mortgage holders are now highly resilient to shocks.

Mr Svensson also claimed that an economy in balance with inflation on target and unemployment at a sustainable rate is more resilient to shocks than the current weaker economy. A more expansionary monetary policy would thus reduce vulnerability.

Mr Svensson also pointed out that in the current situation higher policy rates in Sweden may if anything weaken rather than strengthen financial stability. Swedish banks choose to a large extent to fund their operations by means of short-term borrowing abroad. As Swedish short-term rates are higher than short-term rates abroad due to the higher repo rate it is attractive for foreign investors to invest in Swedish kronor, which offers opportunities for foreign funding to Swedish banks. However, as is emphasised in the Riksbank's Financial Stability Reports, this entails risks as foreign investors may stop lending. When the Swedish policy rate is raised in relation to foreign rates it becomes even more attractive for foreign investors to fund Swedish banks and even easier for Swedish banks to increase their foreign funding. This is a phenomenon that has attracted attention in the context of capital flows to emerging economies from advanced economies with low interest rates, but it also occurs for advanced economies with higher rates than the rest of the world. According to Mr Svensson, this is an example of a situation where raising the policy rate will if anything increase the risks to financial stability.

The second reason mentioned in the draft Monetary Policy Report as to why the main scenario could be regarded as well balanced, and which was also highlighted by Ms Wickman-Parak, is that at present the economy would react more slowly and to a lesser extent to the repo rate than normally. Mr Svensson claimed that this was an argument for cutting the repo rate more rapidly and by more, not more slowly and by less. It is,

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<sup>7</sup> Finansinspektionen (2012), Den svenska bolånemarknaden (The Swedish Mortgage Market), Report 13 March 2012.

moreover, an argument for saying that monetary policy should have been more expansionary previously, as this would have led to a better situation now.

It has also been said that increased uncertainty would reduce the impact of monetary policy and the repo rate and hold back consumption. This may of course be the case, but Mr Svensson knew of no study or analysis that has demonstrated this. The experience gained during the crisis of 2008-2009 argues against this. Uncertainty was very high at that time, probably higher than it is today, and unemployment was expected to increase much more than it subsequently did. Nonetheless, consumption fell fairly moderately initially and then increased quite well when substantial repo-rate cuts were made.

Deputy Governor **Karolina Ekholm** then commented on what Kerstin af Jochnick and Barbro Wickman-Parak had said about monetary policy acting with a time lag which is perhaps particularly long in today's uncertain situation. Several members of the Executive Board had mentioned that there were good reasons for waiting until it was evident that the economy was really being negatively affected before beginning to adjust monetary policy. She said that there is something of a conflict between these viewpoints as it may be too late to make monetary policy more expansionary in order to stabilise the economy when data becomes available that actually does show a negative trend. Mr Ingves said earlier that minor adjustments of the repo rate will not be enough if a really negative outcome is realised. Ms Ekholm agreed with this, but believed that it was important to adjust the repo rate on the basis of the forecast – even if it is only a question of small adjustments – to ensure that the initial situation is anyway as positive as possible if the really negative outcome occurs.

First Deputy Governor **Kerstin af Jochnick** then commented on Mr Svensson's discussion of the effects of the current level of the repo rate on household indebtedness.

In historical terms interest rates are very low today and our experience of what incentives low interest rates can create over a long period of time is limited. Concern that the level of indebtedness of the Swedish households is too high is expressed in the Riksbank's own analysis of financial stability as well as in several international analyses of Sweden. This is an area that the Riksbank must continue to monitor closely.

Deputy Governor **Per Jansson** said that much of his concern about household indebtedness relates to what a number of countries have had to go through in recent years. Events in these countries clearly demonstrate why one should definitely want to avoid a situation in which the level of indebtedness becomes too high. Adapting down to a lower loan-to-value ratio is a very painful process for the households and bad for the economy. It can also be noted that many analysts claimed that there were no problems in these countries before it turned out that the situation was untenable.

Finally, Mr Jansson wanted to emphasise, as he did in April, that he considers the monetary policy he advocates to be a wise and good monetary policy given the outlook for inflation and economic activity. As in April, he underlined that to him household indebtedness is a factor that is of significance on the margin, but is not really needed as part of the fundamental justification of monetary policy.

As a comment on Mr Jansson's discussion of household indebtedness, Deputy Governor **Lars E.O. Svensson** pointed out that the studies conducted by the Riksbank do not provide any evidence that Swedish housing is overvalued and that the households are thus over-indebted, with debts that are insufficiently matched by assets. All of the studies that Mr Svensson is aware of indicate that housing prices are entirely compatible with the fundamentals, high demand, partly as a result of rising disposable incomes and a long-term falling trend for real long-term mortgage rates, and limited new construction.

Deputy Governor **Barbro Wickman-Parak** pointed out that household indebtedness may constitute a problem irrespective of the development of housing prices. The higher the level of indebtedness the more restrained the households can be expected to be in their spending if, for example, the situation abroad deteriorates and economic activity in Sweden weakens, thus increasing the risk of unemployment.

With regard to Ms Ekholm's comment on a conflict between the view that monetary policy is currently acting with a particularly long time lag and the view that we should wait to take action until a negative impact begins to materialise, Ms Wickman-Parak said that it is not necessarily the case that there is such a conflict. The fact that monetary policy is now acting with a particularly long time lag also means that the positive effects are small in the short term at the same time as the risk of a build-up of imbalances that can lead to costs in the longer term is high.

The Chairman, Governor **Stefan Ingves**, summarised the discussion at the meeting by saying there was unease in Europe that casts a shadow over the Swedish economy. He noted that an important issue for the monetary policy decision for several board members has been how the unexpectedly strong development of the Swedish economy should be seen in relation to the increased concern about weaker developments in the euro area. The Executive Board agrees that the repo rate needs to be low to stimulate the economy. However, there are differences in the view of how expansionary monetary policy should be.

A majority of the members of the Executive Board consider that an unchanged repo rate at today's meeting and the repo-rate path proposed in the draft Monetary Policy Report, where the repo rate remains at 1.50 per cent for just over one year to come, entail a well-balanced monetary policy and lead to the attainment of the inflation target as well as to resource utilisation stabilising around a normal level.



Two members consider that a lower repo rate now and a lower repo-rate path would mean that inflation would attain the target more quickly and that unemployment would be lower and that monetary policy would then be better balanced. According to them, a lower repo rate would also put the economy in a better starting position if the problems in the euro area were to escalate. Several members think, on the other hand, that current monetary policy cannot take into account improbable catastrophe scenarios. If such a scenario were to occur, monetary policy would face an entirely different situation.

The majority of the members are of the opinion that it is not possible to entirely disregard the risks that could arise when the repo rate is low for a long period of time, and mentioned in this context the high debt ratio among households and the vulnerabilities this creates for the economy.

Otherwise, there is agreement that actual unemployment is currently higher than the long-run sustainable unemployment rate, although there are different assessments of what this rate is. There are also different assessments of what monetary policy can achieve at the present time with regard to developments in unemployment.

## § 4. Monetary policy decision

The Executive Board decided after voting

- to adopt the Monetary Policy Report according to the proposal, Annex A to the minutes,
- to publish the Monetary Policy Report on Wednesday, 4 July 2012, at 9.30 a.m.,
- to hold the repo rate unchanged at 1.5 per cent and that this decision would apply with effect from Wednesday, 11 July 2012,
- to publish the decision above at 9.30 a.m. on Wednesday 4 July 2012 with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on Tuesday, 17 July 2012, at 9.30 a.m.

Deputy Governors Karolina Ekholm and Lars E.O. Svensson entered reservations against the decision to keep the repo rate unchanged and against the repo-rate path in the Monetary Policy Report. They both advocated a lowering of the repo rate to 1.0 per cent and a lower repo-rate path than in the Monetary Policy Report. Karolina Ekholm preferred a repo-rate path that stays at 1 per cent through the third quarter of 2013, and then rises to 2.6 per cent by the end of the forecast period. This was justified by her assessment that a repo-rate path that is associated with a higher forecast of CPIF inflation and a lower forecast of unemployment constitutes a better-balanced monetary policy.



Lars E.O. Svensson preferred a repo-rate path that stays at 0.75 per cent from the fourth quarter of 2012 through the fourth quarter of 2013, and then rises to 2 per cent by the end of the forecast period. This was justified by his assessment that the Report's forecasts of foreign policy rates further ahead and euro area growth are too high and that his repo-rate path is associated with a forecast of CPIF inflation that is closer to the inflation target and a forecast of unemployment that is closer to a long-run sustainable rate and therefore constitutes a better-balanced monetary policy.

This paragraph was verified immediately.

Minutes by

Ann-Christine Högberg

Verified by:

Karolina Ekholm

Stefan Ingves

Per Jansson

Kerstin af Jochnick

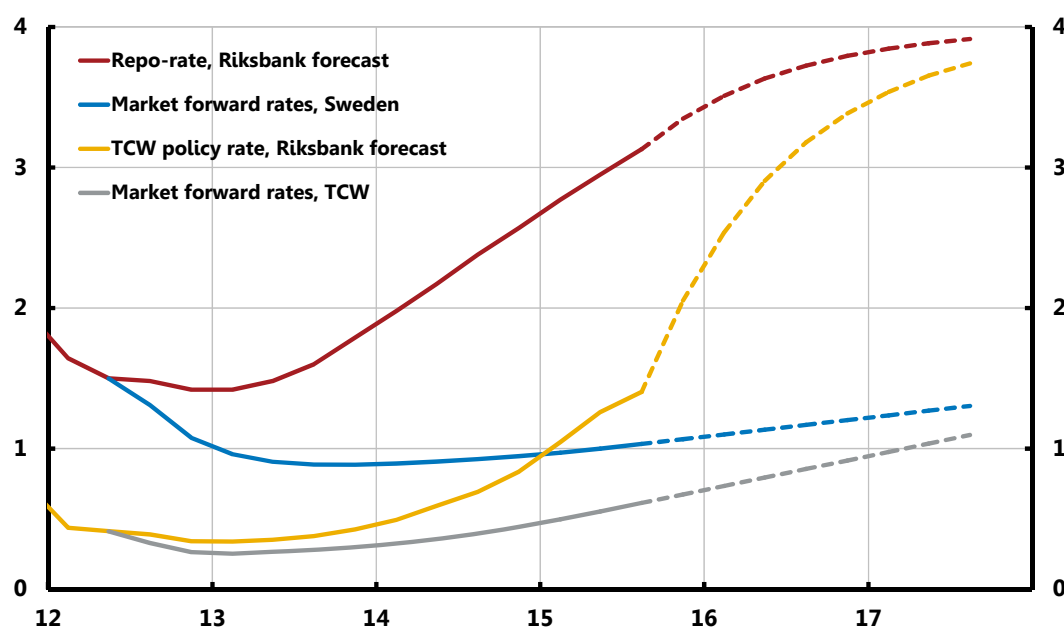
Lars E.O. Svensson

Barbro Wickman-Parak

## Appendix 1. Figures

**Figure 1. Repo-rate path, forward rates and forecast for TCW-weighted policy rate, July 2012**

Per cent. Forward rates from 27 June

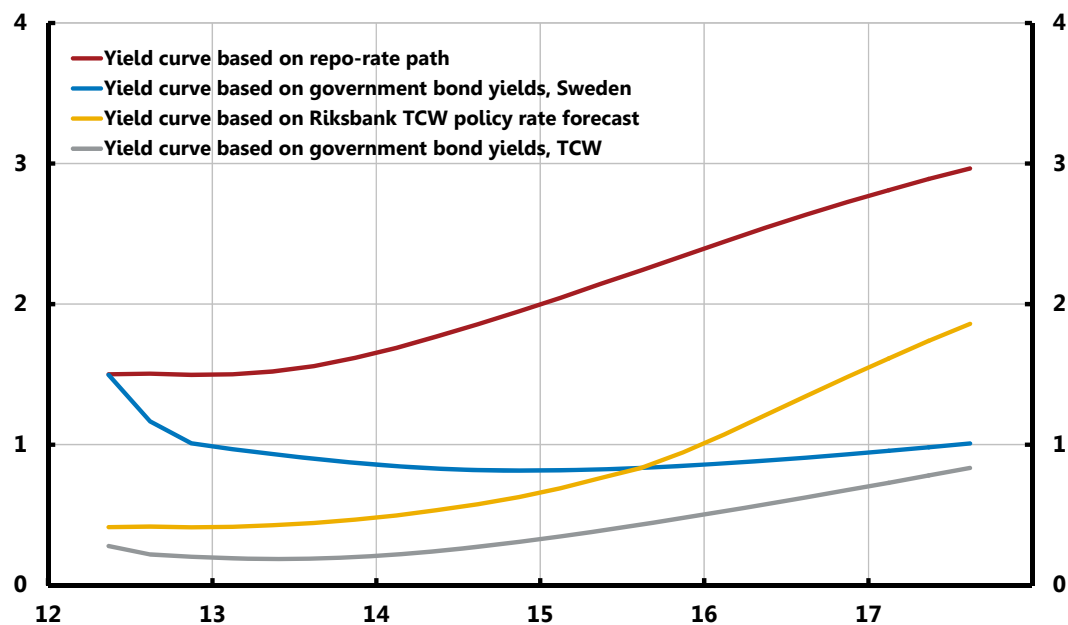


Note: The implied forward rates exclude credit risk and maturity premiums in accordance with a rule of thumb of 1 basis point per month. The curves are extrapolated with an unchanged curve for the quarters beyond the forecast horizon (2015, Q4) and not based on actual market pricing.

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

**Figure 2. Yield curves, July 2012**

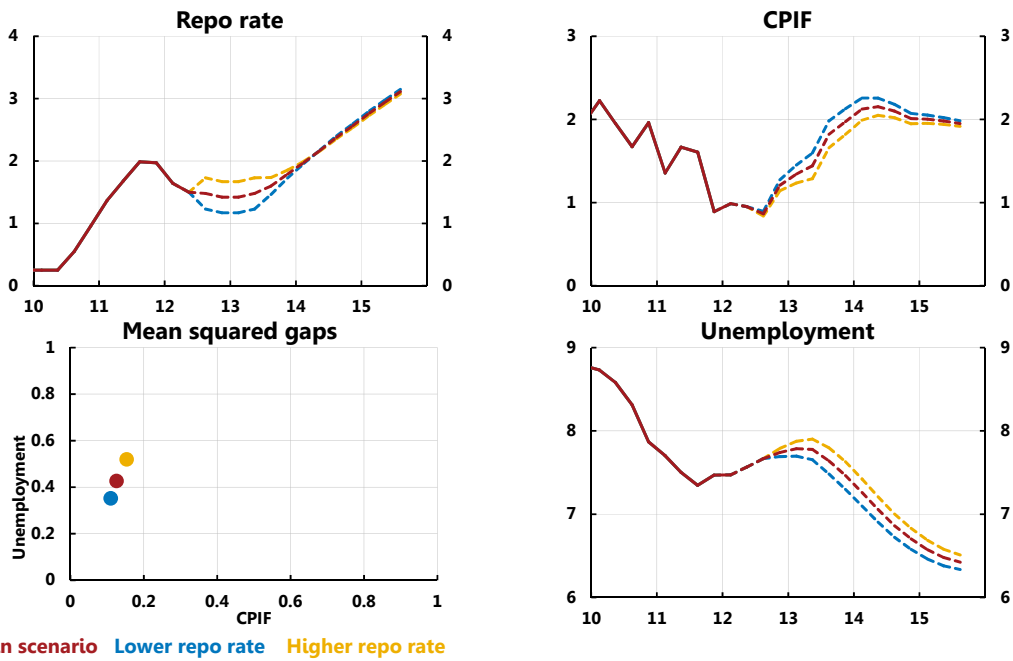
Per cent. Government bond rates from 20-25 June



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

**Figure 3. Monetary policy alternatives, July 2012**

Policy rates abroad according to the main scenario. Long-run sustainable rate of unemployment 6.5per cent Deviations according to Ramses

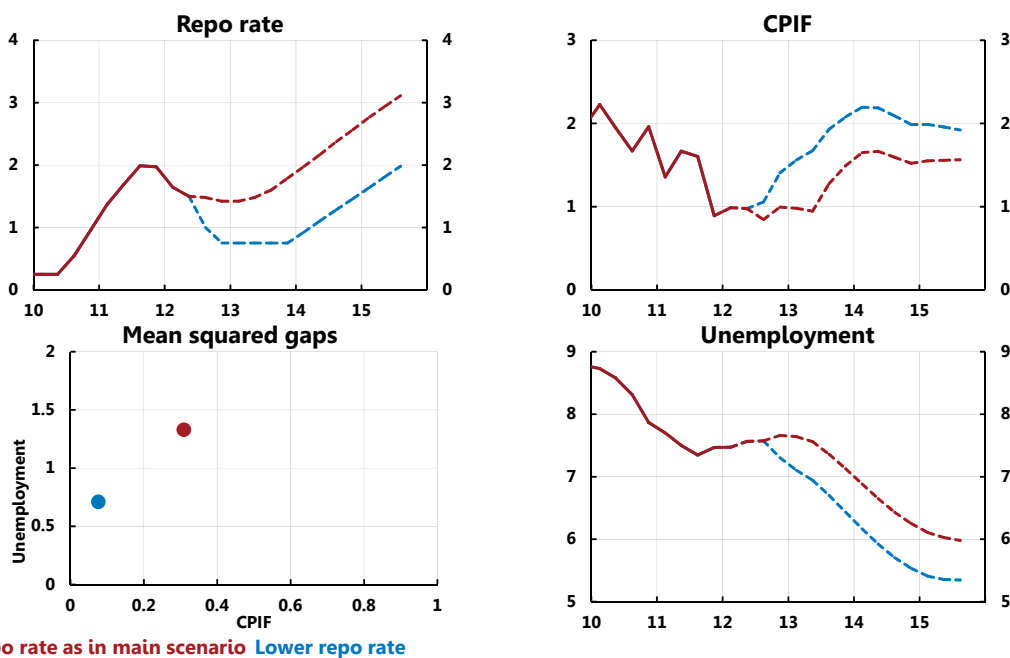


Main scenario Lower repo rate Higher repo rate

Sources: Statistics Sweden and the Riksbank

**Figure 4. Monetary policy alternatives, July 2012**

Policy rates abroad according to implied forward rates. Long-run sustainable rate of unemployment 5.5 per cent



Sources: Statistics Sweden and the Riksbank

## Appendix 2. Comment from Lars E.O. Svensson

The views expressed in this comment are Lars E.O. Svensson's own and are not necessarily shared by the other members of the Riksbank's Executive Board or staff.

### Correcting the Riksbank's estimate of the long-run sustainable rate of unemployment

**Lars E.O. Svensson**

July 5, 2012

*The Riksbank's new (mid)point estimate of the long-run sustainable rate of unemployment, 6.25 per cent, has an upward bias of about 0.75 percentage points. Corrected, the point estimate is hence about 5.5 per cent.*

Sveriges Riksbank (2012) presents an estimate of the long-run sustainable rate of unemployment (LSRU), defined as the rate of unemployment in a steady state where inflation expectations are equal to actual inflation. The method used to estimate the LSRU consists of two steps. In the first step, the LSRU that prevailed in 2006 before the government's reforms were begun is estimated to be in the interval of 6.5–7.5 per cent, that is, with a midpoint of 7 per cent. In the second step, the effect on the LSRU of the government's reforms and changes in the composition of the labour force since 2006 is estimated to be a decrease of the LSRU in the interval of 0–1.5 percentage points (pp), that is, with a midpoint of 0.75 pp. Subtracting the latter from the former results in an interval of 5–7.5 per cent with a midpoint of 6.25 per cent. Thus, the midpoint 6.25 per cent can be seen as the Riksbank's new point estimate of the LSRU.

This comment focuses on the first step, the (mid)point estimate of 7 per cent for the LSRU, and argues that it has an upward bias of about 0.75 pp. That is, a corrected point estimate of the LSRU in 2006 is about 6.25 per cent. In the second step, subtracting the Riksbank's estimate of 0.75 pp of the effect of the government reforms and changes in the composition of the labour force then results in a corrected Riksbank point estimate of the new LSRU of about 5.5 percent.

In this comment I derive the bias of 0.75 pp in two different ways. The first way relies on an estimated long-run expectations-augmented Phillips curve for CPI inflation and unemployment. It calculates the bias from the observation that average inflation has fallen below average inflation expectations, which together with the estimated long-run Phillips curve implies that average unemployment exceeds the LSRU. The second way

relies on an estimated long-run Phillips curve that uses the Riksbank's previous estimate of the unemployment gap (Sveriges Riksbank 2010) instead of the rate of unemployment. It calculates the bias from the observation that the average unemployment gap, conditional on average inflation being equal to average inflation expectations, is not zero but negative, about 0.75 pp below zero.

The Riksbank's method for estimating the LSRU in 2006 is to start from the average of the rate of unemployment over 1999-2006, which is 7 per cent, and then to make this the midpoint of the estimated interval of 6.5-7.5. As summarized in Sveriges Riksbank (2012, p. 47, italics added): "Seen across the whole period 1999-2006, actual unemployment has varied between 6 and 8 per cent, with *an average of around 7 per cent*. Indicators of resource utilisation in the labour market give reason to believe that the long-run unemployment rate during this period was somewhat higher than 6 per cent and somewhat lower than 8 per cent. This entails a narrower interval for long-run unemployment than for actual unemployment. The Riksbank's overall assessment is that long-run unemployment was between 6.5 and 7.5 per cent during the period 1999-2006."

However, the average rate of unemployment is an unbiased estimate of the LSRU only if average inflation expectations have been equal to average inflation. Furthermore, the indicators of resource utilization referred to are indicators of labour-market tightness that indicate above- and below-normal tightness, but that does not prevent the "normal" tightness depending on the deviation between average inflation and average inflation expectations.

As documented in Svensson (2012), during the last 15 years average inflation expectations have been close to 2 per cent but average CPI inflation has been 1.4 per cent. The systematic difference between inflation expectations and CPI inflation is illustrated in Figure 1 (from Svensson 2012), which shows moving 5-year averages of CPI inflation and expectations of inflation one and two years ahead from the TNS Sifo Prospera survey.<sup>8</sup>

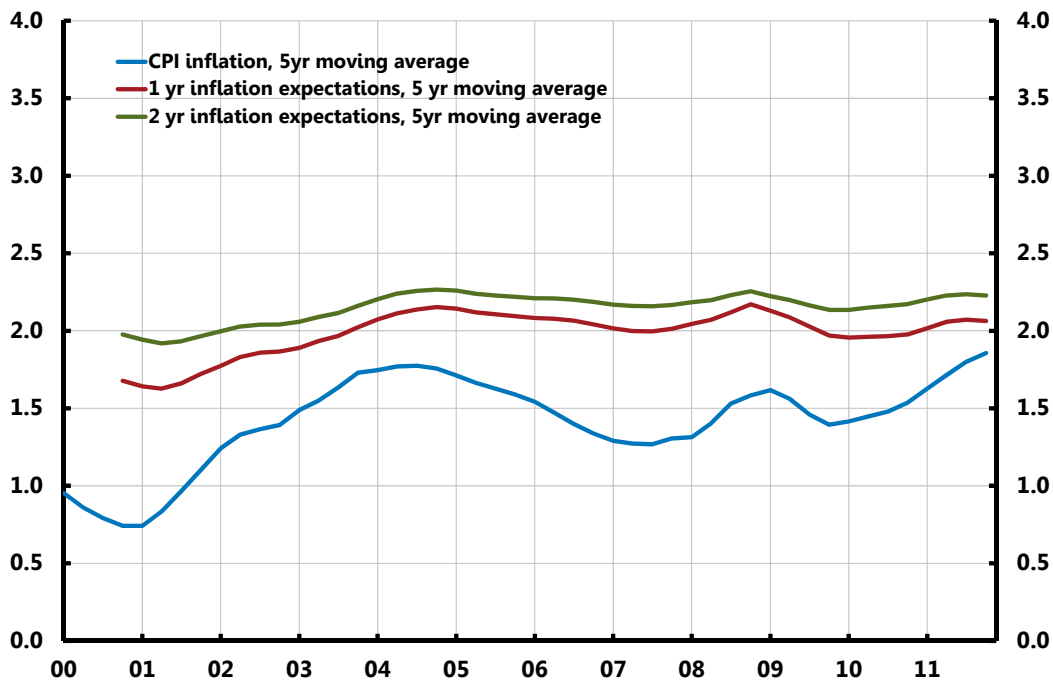
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<sup>8</sup> Sveriges Riksbank (2012, Figure A5) also refers to several econometric models that estimate different concepts of short-run and long-run equilibrium rates of unemployment. But these models implicitly or explicitly assume rational expectations, so their estimates would be subject to the same bias as discussed here.



**Figure 1. CPI inflation expectations one and two years ahead (all interviewees) and CPI inflation, five-year moving averages**

Per cent



Sources: Statistics Sweden and TNS Sifo Prospera. CPI inflation from real-time data.

The first way to estimate the bias relies on one of the most basic and established relationships in monetary macroeconomics and in monetary policy, the so-called expectations-augmented Phillips curve, the relation between inflation, inflation expectations, the rate of unemployment, and the LSRU. The *long-run* expectations-augmented Phillips curve represents the relation between the *long-run averages* of these variables and can be written

$$\pi - \pi^e = -\gamma (u - u^*),$$

where  $\pi$  denotes average inflation,  $\pi^e$  denotes average inflation expectations,  $u$  denotes the average rate of unemployment,  $u^*$  denotes the LSRU, and  $\gamma$  is a positive constant. Svensson (2012) estimates a long-run Phillips curve for Sweden using data for CPI inflation and unemployment for 1997-2011. The coefficient gamma is estimated to equal 0.76. It follows that

$$u - u^* = -1.32 (\pi - \pi^e),$$

where I have used that  $1/\gamma = 1/0.76 = 1.32$ .

If average inflation and average inflation expectations are equal, that is, if  $\pi = \pi^e$ , it follows that the average rate of unemployment and the LSRU are equal,  $u = u^*$ . Then the observed average rate of unemployment is an unbiased estimate of the LSRU. This is the

conventional case of a vertical long-run Phillips curve, where equality between inflation expectations and inflation implies that average unemployment is independent of average inflation.

For Sweden, survey data indicate that average inflation expectations have been anchored at the inflation target of 2 per cent during the last 15-16 years, that is,  $\pi^e = 2$ . But average CPI inflation has consistently fallen below 2 per cent. During 1997-2011, average CPI inflation was 1.4 per cent, 0.6 pp below 2 per cent. The fact that average inflation expectations and average inflation are not equal for Sweden means that the long-run Phillips curve is no longer vertical but downward sloping – at least for moderate deviations of average inflation from 2 per cent. Using this in the equation above gives  $u - u^* = 1.32 \cdot 0.6 = 0.8$  pp. During the shorter sample 2000-2006, average CPI inflation was about 1.5 per cent, 0.5 pp below 2 per cent. This gives  $u - u^* = 1.32 \cdot 0.5 = 0.7$  pp. Taking the average of these two estimates, the result is a bias of about 0.75 pp. That is, the corrected LRSU is about 0.75 pp below the average rate of unemployment of 7 per cent and hence equal to about 6.25 per cent.

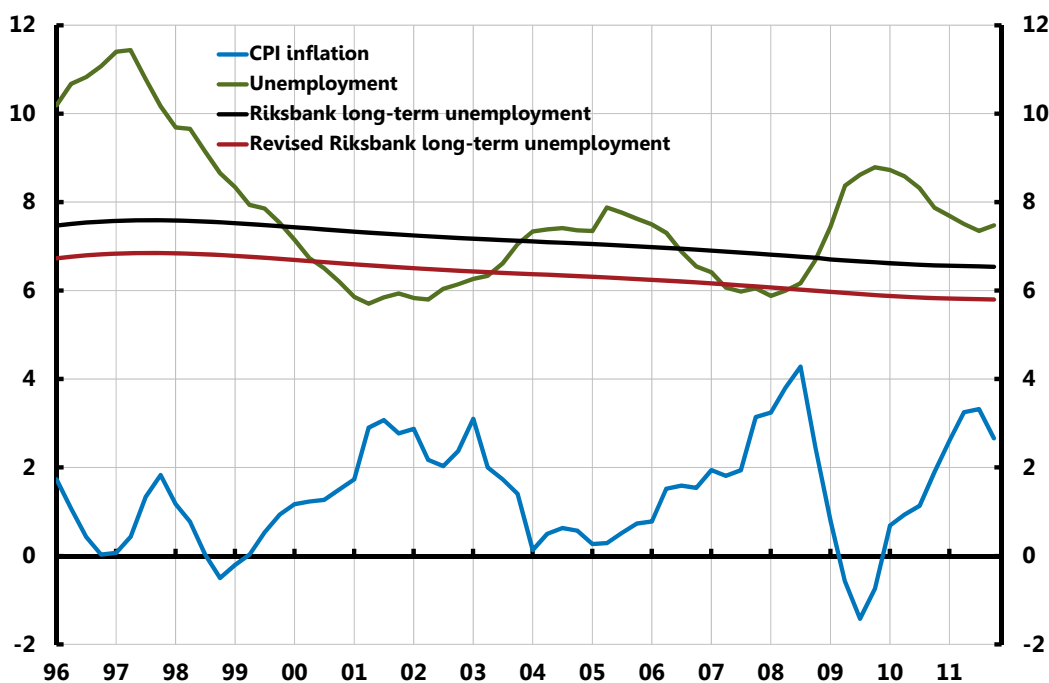
The second way to estimate the bias is to estimate a long-run Phillips curve using the gap between the rate of unemployment and the Riksbank's previous estimate of "long-term" unemployment in Sveriges Riksbank (2010, Figure B23). This long-term rate of unemployment is shown as the black line in Figure 2 (from Svensson 2012); the rate of unemployment is shown as the green line. Svensson (2012) estimates a Phillips curve for CPI inflation and this unemployment gap for the period 1998-2011.<sup>9</sup> The resulting long-run Phillips curve is shown in Figure 3 (from Svensson 2012). The red circles are the quarterly observations of CPI inflation and the unemployment gap and the black line shows the estimated long-run Phillips curve.

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<sup>9</sup> Thus, this long-run Phillips curve allows a trend in unemployment and the LRSU, which presumes a trend in the parameters determining the LRSU.

**Figure 2. CPI inflation and the Riksbank's previous and revised estimate of long-term unemployment**

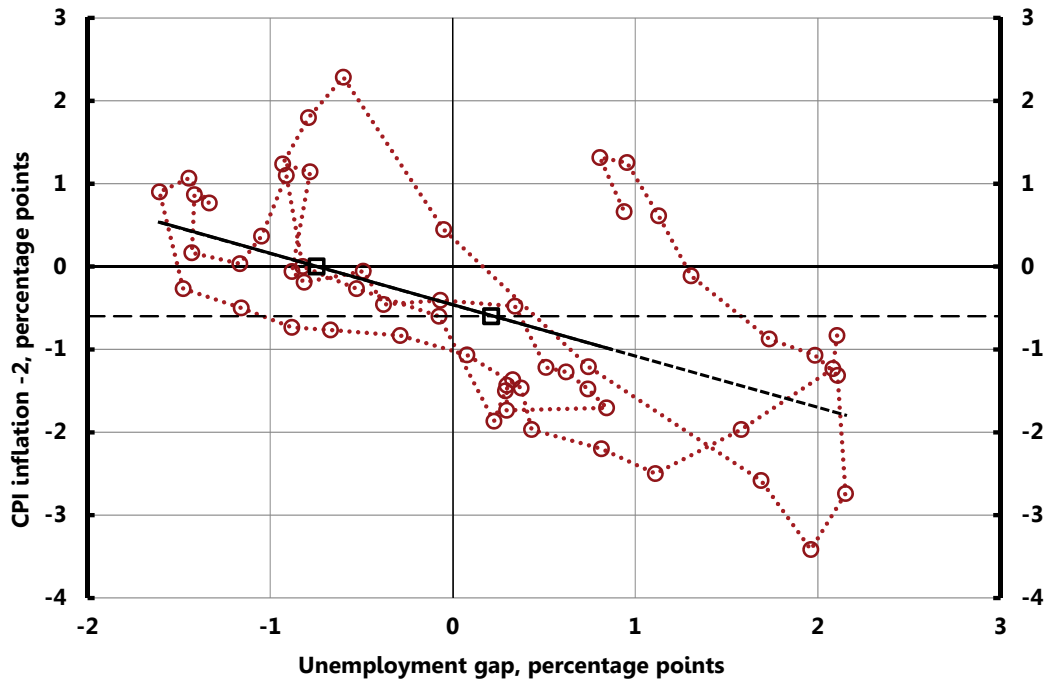
Per cent



Sources: The Riksbank, Statistics Sweden, and own calculations. CPI inflation is from real-time data.

The average unemployment gap associated with average inflation equal to 2 per cent is – 0.74 pp rather than zero (the leftmost square in Figure 3). This indicates that the Riksbank's estimate of the long-term rate of unemployment is biased upwards by about 0.75 pp.

**Figure 3. The long-run Phillips curve with CPI inflation and the Riksbank's unemployment gap, 1998Q1-2011Q4**



Sources: The Riksbank, Statistics Sweden, and own calculations. CPI inflation is from real-time data.

The red line in Figure 2 shows a revised Riksbank estimate, constructed by subtracting 0.74 from the Riksbank's estimate of the long-term rate of unemployment. For 2006, according to Figure 2 the Riksbank's previous estimate of long-term rate of unemployment is about 7 per cent (consistent with the new (mid)point estimate of 7 per cent), so the revised previous estimate of the long-term rate of unemployment in 2006 is about 6.25 per cent.

In summary, both ways of deriving the bias result in the same bias, about 0.75 pp. The corrected (mid)point estimate of the LRSU in 2006 is hence 6.25 per cent, not 7 per cent. Subtracting the estimated effects of government reforms and changes in the composition of the labour force then results in a corrected (mid)point estimate of the LRSU of 5.5 per cent, not 6.25 per cent.

## References

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