

Minutes of monetary policy meeting

FEBRUARY 2013

Summary

At the Monetary Policy Meeting on 12 February, the Executive Board of the Riksbank decided to leave the repo rate unchanged, at 1.0 per cent.

It was noted at the meeting that growth in the Swedish economy is weak and that inflationary pressures are low. New information supports the picture presented in the December Monetary Policy Update that GDP fell in the fourth quarter of last year, but indicates that the situation has stabilised since then and that the economy will gradually strengthen during 2013. Some positive signs have emerged; companies in Sweden and abroad have become a little more optimistic about the future, for example. As the labour market lags behind the business cycle, the assessment is nevertheless that employment will level out and that unemployment will increase somewhat in the year ahead. However, the concern that there would be a greater decline in economic activity that several members of the Executive Board expressed in December has now lessened.

Given that inflationary pressures are low and that resource utilisation is lower than normal, the Executive Board agreed that the repo rate should continue to be low. However, as at previous meetings, there were differences with regard to how expansionary monetary policy should be.

The assessment of a majority of four of the Board members was that letting the repo remain at 1 per cent during the year ahead would enable inflation to reach the target of 2 per cent after just over a year and resource utilisation to normalise. They did not believe that a slightly lower repo rate would alter this assessment in any decisive way. They also regarded the chosen repo-rate path as appropriate considering that the risks that the high level of household indebtedness poses to economic development in the long term still remain.

Two members considered that there was scope for a lower repo-rate path and they advocated cutting the repo rate to 0.75 and 0.5 per cent respectively and lower repo-rate paths so that CPIF inflation would reach the target of 2 per cent more quickly and unemployment would come closer to a long-run sustainable rate. Their assessment was that that there was no reason to take any extra account of household indebtedness at present.

In addition, the meeting discussed to what degree monetary policy can influence unemployment and the debt ratio, to what extent monetary policy can be used to exert detailed control over economic development and different views of developments abroad. The meeting also discussed the inflation forecast, the reasons why inflation has been lower than was expected two years ago and what the consequences of a lower repo rate since 2010 would have been. There was also a discussion of the larger differences than normal in the development of prices for goods and services and what this means for economic development and inflation in the future.



MINUTES OF MONETARY POLICY MEETING

Executive Board, No. 1

DATE: 12/02/2013
TIME 09:00

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

Johan Gernandt, Chairman of the
General Council

Meredith Beechey Österholm
Claes Berg
Hans Dellmo
Charlotta Edler
Mattias Erlandsson
Johannes Forss Sandahl (§ 1)
Eric Frieberg
Kerstin Hallsten
Mia Holmfeldt (§ 1)
Ann-Christine Högberg
Pernilla Johansson
Martin W Johansson (§ 1)
Tor Johansson (§ 1)
Tomas Lundberg
Ann-Leena Mikiver
Marianne Nessén
Christina Nyman
Tommy Persson
Bengt Pettersson
Ulf Söderström
David Vestin
Staffan Viotti
Anders Vredin
Veronica Wahlberg (§ 1)

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

§1. Economic developments

Johannes Forss Sandahl of the Financial Stability Department began by describing recent developments in Sweden and the euro area with regard to government bond yields, the price of credit risk for the banks and risk premiums on the interbank market.

Veronica Wahlberg of the Monetary Policy Department presented developments on the financial markets. Share prices on stock exchanges in the United States, Europe and Sweden have risen since the monetary policy meeting in December, but following the latest political developments in southern Europe there has been a downturn in the euro area. The recent significant strengthening of the euro has come to a halt and the Swedish krona has weakened somewhat over the week measured in KIX terms. According to market pricing, the likelihood that the repo rate will be left unchanged at today's monetary policy meeting is greater than the likelihood that it will be cut, although pricing still indicates the expectation that there will be a further cut before the summer. The repo rate is not expected to rise above the current level of 1 per cent until next year.

Marianne Nessén, Head of the Monetary Policy Department, presented the draft Monetary Policy Report which, in the assessment of the Monetary Policy Department, will 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 22, 29-30 and 31 January. The text of the draft Monetary Policy Report was tabled at a meeting of the Executive Board on 6 February.

Since the monetary policy meeting in December, indicators for the situation abroad have developed approximately in line with the forecast from December. Outcomes for GDP in the United States and the United Kingdom have been somewhat weaker than expected, while there are signs of improvements in confidence indicators. Spreads and so-called CDS premiums are now generally lower, while there has been a slight increase in the government bond yields of the core countries in the euro area. Forward rates have shifted upwards. In Sweden, monthly data indicates that GDP fell in the fourth quarter of 2012. However, other indicators, such as the purchasing managers' index, have improved and suggest that the situation is stabilising, which is in line with the forecast in the Monetary Policy Update in December. Employment has increased somewhat and unemployment has decreased somewhat compared to the forecast in December, but the indications are that there will be some deterioration in the period ahead. Inflation in December was somewhat higher than forecast in the December Update. The rate of CPI inflation was – 0.1 per cent in December, while inflation measured in terms of the CPIF, which is CPI inflation with a fixed mortgage rate, was 1.0 per cent.

The draft Monetary Policy Report predicts a continued improvement on the financial markets, although it stresses that there is a risk of a setback. Most of the indications are that 2012 ended weakly for the economy in the euro area, but the indicators also suggest

that the cycle may have bottomed out. The indicators are strong in the United States and China and the forecast predicts that the rate of GDP growth abroad will gradually increase during the forecast period. The rate of GDP growth in Sweden slowed down during the autumn and the assessment is that growth in the fourth quarter was slightly negative. However, as for the euro area, the assessment is that growth will gradually increase during the second half of this year. Inflationary pressures are low and are expected to remain so in the year ahead and thereafter to increase as the business cycle improves and the rate of wage increases rises.

Recent developments in Sweden and abroad have been largely in line with the assessment in the December Monetary Policy Update and the forecasts remain more or less unchanged. This also applies to the household debt ratio, which is expected to remain at approximately the current level. The low level of resource utilisation and the low rate of inflation mean that there is a need for monetary policy to continue to be expansionary. The forecast is that the repo rate will remain at approximately 1 per cent in the year ahead and then that it will gradually be raised. In real terms, the repo rate will be negative more or less throughout the forecast period. The repo-rate path has been marginally lowered compared to the path in the Monetary Policy Update. The assessment is that with this path economic activity will gradually be strengthened so that inflation rises towards 2 per cent.

§2. The economic situation and monetary policy

Deputy Governor **Lars E.O. Svensson** began by stating that in order to assess which monetary policy should be conducted it is important to view monetary policy in a broader context. He claimed that what we have been witnessing for some time now is a clear and serious failure of monetary policy. His first point in support of this claim was that CPIF inflation was close to the target of 2 per cent in 2010 but that since then it has steadily trended downwards to arrive at or below 1 per cent in 2012. At the same time, unemployment is now high and rising, and far above a long-run sustainable rate. He wondered what happened in 2010 that can explain the fall in CPIF inflation. From and including the monetary policy meeting in June 2010, the majority on the Executive Board steadily raised the repo rate at every monetary policy meeting, from 0.25 in June 2010 to 2 per cent in July 2011, an increase of 1.75 percentage points. Mr Svensson referred to an article he wrote for Brookings Papers on Economic Activity in the autumn of 2011¹ in which he showed that these repo-rate increases began despite the fact that the CPIF forecast in June 2012 was below the target and the unemployment forecast well above a reasonable long-run sustainable rate (Figures 1 and 2, from the Brookings article). Since

¹ Svensson, Lars E.O., "Practical Monetary Policy: Examples from Sweden and the United States", *Brookings Papers on Economic activity*, Fall 2011, pp. 289-332.

December 2011, the majority on the Executive Board has, somewhat reluctantly, lowered the repo rate to 1 per cent in December 2012, a cut of 1 percentage point. On average, the repo rate has been approximately 1.5 percentage points higher than if it had remained at 0.25 per cent till now. In terms of the real policy rate, this has entailed a much tighter monetary policy than in the euro area, the United Kingdom and the United States despite the fact that inflation in Sweden has been lower than in these economies while unemployment is now approximately as high as in the United Kingdom and United States (Figure 3).

Mr Svensson then wondered what would have happened if the repo rate had remained at 0.25 per cent until now. This can be examined using the standard methods to calculate the effects of alternative repo rate paths that the Riksbank has at its disposal and that form the basis for the so-called four-panel figures that he usually presents. Such an analysis implies that CPIF inflation would have remained fairly stable at around 2 per cent or a little higher instead of falling to 1 per cent and below. Target attainment for CPIF inflation would then have been as perfect as it can be. Unemployment would have fallen and would now be just over 1 per cent lower, at a rate between 6.5 and 7 per cent. Around 60 000 fewer people would be unemployed. This figure is compatible with a different calculation that came to a figure of approximately 65 000 fewer unemployed, which Mr Svensson presented in a speech at the Swedish Trade Union Confederation (LO) recently.² Target attainment for unemployment would have been much better than at present, irrespective of whether one compares with a long-run sustainable rate of unemployment of 5.5 or 6.25 per cent. Mr Svensson pointed out that these calculations are of course uncertain, but they provide a clear indication of the magnitudes we are talking about and how much better the situation would have been if the Riksbank had not begun to increase the repo rate in the summer of 2010. It is against this background that he maintained that it was reasonable to speak of a clear and serious failure of monetary policy.

So much for the costs of this policy, but have there been any gains, wondered Mr Svensson? What has the aim of this policy been? Many external observers have been mystified by the thinking of the majority and by the fact that monetary policy has been and remains so tight despite the fact that CPIF inflation has fallen steadily while unemployment has been high. The majority has, for example, been criticised in the media for not being clear. It was not until last autumn, when an article by Stefan Ingves was published in Svenska Dagbladet on 18 October 2012, slightly less than a week before the monetary policy meeting, that a clear explanation came; namely that the aim was to take into account the long-term consequences for household debt, as low interest rates over a

² Svensson, Lars E.O., Sveriges Riksbank, "Monetary policy and employment: monetary policy is too tight", speech at the Swedish Trade Union Confederation", Stockholm, 16 January 2013.

long period of time would increase household indebtedness and thus increase the risks associated with this.

Mr Svensson said that there are, however, several obvious problems with focusing monetary policy on an attempt to influence household debt. One might, for example, think that one should not introduce what in practice is a new target for monetary policy without first investigating whether it is compatible with the Sveriges Riksbank Act and its preliminary works and whether monetary policy can actually affect the attainment of the new target. There seems to be a misunderstanding about what monetary policy can achieve with regard to household indebtedness. Extensive research and inquiries, as well as practical experience, have led to the conclusion that monetary policy has very little impact on household indebtedness in the short term and - with low and stable inflation - no effect in the long term.³ According to this research and the Riksbank's own inquiries, a policy rate that is raised by 1.5 percentage points in one step, is held at this higher level for a year and then gradually returns to its original level leads to a household debt ratio that is approximately 1.5 percentage points lower a couple of years ahead than would otherwise be the case. That is, a debt ratio of 175 per cent of disposable income would fall to just over 172 per cent. Mr Svensson asked whether anyone believed that this would reduce the potential risks of household indebtedness and be worth more than the costs in the form of the lower rate of inflation and the higher rate of unemployment. Moreover, the thinking in Mr Ingves' article is based on the assumption that monetary policy can reduce indebtedness in the long term. But monetary policy has no long-term impact on indebtedness according to established research and science. So how does this hang together?

He pointed out that the important thing here was not the precise figures but the magnitude of the impact; the fact that the effects on the debt ratio are very small and, indeed, practically negligible.

Mr Svensson's conclusion was that the only right thing to do was to focus monetary policy on stabilising inflation around the target and unemployment around a long-run sustainable rate. The potential risks of household indebtedness have to be managed by other means, means that have a significant effect. We should not use monetary policy to limit household indebtedness. This will only serve to run the economy into the ground.

³ See, for example, Walentin K. and P. Sellin (2010), "Housing collateral and the monetary transmission mechanism", Sveriges Riksbank Working Paper No. 239; Iacoviello, M. and S. Neri (2010), "Housing market spillovers: Evidence from an estimated DSGE model," *American Economic Journal* 2(2), pp. 125-64; Assenmacher-Wesche, K. and S. Gerlach (2010), "Credit and Bubbles", *Economic Policy*, vol. 25, pp. 437-482; Claussen, C A, M. Jonsson and B. Lagerwall (2011), "A macroeconomic analysis of housing prices in Sweden," the Riksbank's inquiry into risks on the Swedish housing market, Sveriges Riksbank; Bean, C., M. Paustian, A. Penalver and T. Taylor (2010), "Monetary Policy after the Fall," *Federal Reserve Bank of Kansas City Annual Conference*. Jackson Hole, Wyoming and Kuttner, K. (2012), "Low Interest Rates and Housing Bubbles: Still No Smoking Gun," *Williams College, Department of Economics Working Paper*, 2012-01.

He said that this conclusion was important to current monetary policy and to today's monetary policy decision. An interesting point is also made in the preliminary works of the Sveriges Riksbank Act in a discussion of potential target conflicts and whether the Riksbank should be able to use the policy rate to avoid a crisis in the banking system (Government bill 1997/98:40, p. 54): "However, the monetary policy instruments shall, in accordance with the government's proposal, only be used to maintain price stability." Mr Svensson said that this revealed a certain degree of foresight when applied to the potential risks of household indebtedness and in his opinion was a point that should not be forgotten.

With regard to today's monetary policy decision on the repo rate and the repo rate path, Mr Svensson advocated, as at the previous monetary policy meeting, a significantly lower repo-rate path than in the main scenario of the draft Monetary Policy Report. As at the previous meeting, he believed that the Report's forecasts for foreign policy rates and growth abroad are overestimates and thus too high. He also believed that the Report's forecast for inflation in Sweden is an overestimate and too high. A lower repo rate and a lower repo-rate path would lead to a higher rate of CPIF inflation closer to the target and lower unemployment closer to a long-run sustainable rate and thus represent a better-balanced monetary policy, said Mr Svensson.

Even if one were to accept the assumptions in the draft Report with regard to growth abroad and higher future policy rates abroad, a lower repo-rate path than that in the main scenario provides better target attainment for CPIF inflation and unemployment. This is illustrated clearly in Figure 4, which shows the main scenario and forecasts for alternative repo-rate paths with the aid of the Riksbank's model Ramses. This conclusion applies regardless of whether one measures the unemployment gap against 6.25 or 5.5 per cent sustainable long-run unemployment. This conclusion also applies if one assumes that inflation and unemployment react more slowly to interest rate changes than is the case in the Ramses model. If the reaction is slower, this is an argument in favour of a larger and earlier cut in the repo rate.

As at the previous meeting, Mr Svensson wished to question the main scenario's forecast that CPIF inflation will quickly rise to 2 per cent. As can be seen in Figure 5, the forecasts from 2010 and onwards have systematically overestimated CPIF inflation for 2012. The forecasts predict a rather rapid rise to 2 per cent, while actual outcomes have trended downwards. Why should the current forecast, which also predicts a rapid rise to 2 per cent, be better than the earlier forecasts? In comparison, the National Institute of Economic Research has in the December issue of its report "The Swedish Economy" a forecast for CPIF inflation that is 1.4 per cent for 2014, 1.5 per cent for 2015 and 1.7 per cent for 2016 but does not reach 2 per cent until 2017. This is despite the fact that the Institute assumes a lower repo-rate path than the Riksbank.

In Mr Svensson's view, foreign forward rates (the grey line in Figure 6) provide a more realistic forecast of foreign policy rates than the forecast in the main scenario (the yellow line) at present. Although the difference is smaller than previously, there is still a technical assumption according to which an upward bend in the forecast is assumed beyond the forecast horizon (this is not shown in Figure 6 but can be seen in the corresponding figure from the meeting held in September 2012). Mr Svensson said that, all in all, this provides arguments in favour of a significantly lower repo-rate path, as can be seen in Figure 7. Under the assumption of policy rates abroad following forward rates, Figure 7 shows the forecasts for CPIF inflation and unemployment with the main scenario's repo-rate path and two lower repo-rate paths. With the main scenario's repo-rate path, lower foreign policy rates in line with forward rates provide a greater differential between the repo-rate path and foreign rates, a stronger krona, a lower inflation forecast, lower exports and a higher forecast for unemployment (the red curves in the two right-hand panels in the figure). The lowest repo-rate path in Figure 7 leads to the best target attainment (the blue curves in the right-hand panels).

Given this, Mr Svensson advocated cutting the repo rate by 0.5 percentage points to 0.5 per cent and then a repo rate path at this level to the end of the first quarter 2014, followed by a gradual increase to 1.5 per cent at the end of the forecast period. His assessment was also that this lower repo-rate path would not have a noticeable effect on potential risks relating to household indebtedness as monetary policy normally only has very minor short-term effects on indebtedness and, with low and stable inflation, no long-term effects.

Deputy Governor **Barbro Wickman-Parak** supported the forecasts presented in the draft Monetary Policy Report. The forecasts for the outlook abroad are largely unchanged compared with the assessment presented in the Monetary Policy Update in December. Nevertheless, she believed that a number of things had happened that now reinforced the view that the economy will recover during the course of the year. The December forecast predicted that unease would wane on the financial markets and, although there may be setbacks, things have moved in the right direction so far. Another prediction in the forecast was that the United States would avoid the so-called fiscal cliff, that is a severe tightening of fiscal policy if the parties in Congress were unable to reach agreement at the turn of the year. They did manage to agree, although the fundamental and more long-term budget problems are still far from being resolved.

Ms Wickman-Parak's assessment now, as in December, was that development abroad may be slightly better than predicted in the Riksbank's forecast, and she said that she was now slightly more convinced that this will be the case. Upturns in various confidence indicators in the euro area have been more frequent and somewhat clearer recently, but positive signals have above all continued to come from the United States and China. However, she believed that it was nevertheless reasonable to wait to revise the forecasts

until more statistics than those that have appeared in the short period since December become available. A certain degree of political uncertainty also remains. Recent events in Spain, where confidence in the government has weakened, and concern about the result of the elections in Italy illustrate this uncertainty. All in all, this meant that she supported the main scenario's more cautious international forecast in the draft Monetary Policy Report. An alternative scenario in the Report illustrates the consequences that stronger growth abroad could have for the Swedish economy and monetary policy.

Ahead of the monetary policy meeting in December, we received a certain amount of worrying Swedish statistics which indicated that domestic components of the economy, which had previously been rather resilient, had weakened significantly. There were also ominous signs on the labour market; there was a rapid increase in redundancy notices in both October and November.

We have now received a number of new monthly indicators. Ms Wickman-Parak said that we should not jump to conclusions on the basis of outcomes for a single month, but it was pleasing to note that it seems that the situation has not continued to deteriorate but has stabilised or improved slightly. For example, the production of services increased again in December and it appears that the inflow of export orders has improved somewhat. The Economic Tendency Survey of the National Institute of Economic Research for January shows that confidence in the retail and service sectors increased somewhat, although from low levels. Household confidence increased slightly from a low level, but the component that reflects the households' view of their own financial situation showed a marked upturn. The number of redundancy notices has also fallen from the high level registered in October and November. The December figures for employment were also slightly higher than forecast in December.

Ms Wickman-Parak considered it was reasonable that the forecasts for the Swedish economy are largely unchanged compared with the assessment in December. However, she believed that there are now signs that we can be more confident about the forecasts for the Swedish economy too. She therefore supported the forecasts in the draft Monetary Policy Report. She would not be surprised, however, if it turned out that economic development was better in the period ahead than we now predict.

Ms Wickman-Parak said that it is always difficult to make forecasts, but she thought it had been particularly difficult in recent years as outcomes and indicators have varied sharply over short periods of time. At the end of 2011, for example, we also saw a slowdown in economic activity that was sharper than expected but that was quickly followed by rising indicators and relatively strong growth in the first six months of 2012.

A small, open economy like the Swedish economy is extremely sensitive to events abroad and when political factors play such a major part in determining the way ahead the forecasts become extremely uncertain. Ms Wickman-Parak therefore believed that it

would be a wise strategy to proceed cautiously with forecast revisions and not to react too quickly to, for example, sudden upward or downward changes in the statistics as such changes may later prove to be of a temporary nature. She thought that the staff at the Riksbank dealt with these problems in a very reliable way in the course of their forecasting work.

The Executive Board has made several repo-rate cuts over a relatively short period of time. The most recent was two months ago and we have not yet seen the overall impact of this cut. Ms Wickman-Parak's assessment was that GDP growth may be higher than forecast in the draft Monetary Policy Report and that it was therefore appropriate to leave the repo rate unchanged this time. However, she also believed that there were still risks that could rapidly weaken confidence and growth prospects. If the need to alter the repo rate arises in the near term, then a cut is somewhat more likely than an increase. This is reflected in the repo-rate path proposed in the draft Monetary Policy Report, which she supported.

Ms Wickman-Parak then raised a couple of issues relating to monetary policy at a more general level. The fact that monetary policy, in relation to fiscal policy, plays a prominent role in stabilisation policy rests among other things on the idea that the more direct decision-making process offers better scope to parry fluctuations in the economy. There is a lot to be said for this. But even monetary policy has to be based on forecasts. It is easy with hindsight to say that development took a different course than forecast and would perhaps have justified a different monetary policy. The Riksbank compares favourably with other forecasters and Ms Wickman-Parak emphasised that we should constantly work to fine-tune our forecasting methods. However, she also pointed out that we should not underestimate the difficulties involved in making forecasts. This is not just a question of uncertainty increasing as the horizon is extended; the assessment of the current situation is also marked by uncertainty. She did not wish to play down the role of monetary policy when it comes to mitigating fluctuations in the economy, but we should not have unrealistic expectations about the ability of monetary policy to fine tune the economy.

Another problem, according to Ms Wickman-Parak is that it is difficult to distinguish changes of a structural nature from those of a cyclical nature. This may be a case, for example, of a downward shift in trend growth so that calculations of the output gap provide a misleading picture of resource utilisation. The discussion that the Executive Board has had about the causes of the high rate of unemployment is an example of problems of this type. The appropriate monetary policy response to rising unemployment depends on the degree of cyclical or structural factors, which is illustrated in one of the scenarios in Chapter 2 of the draft Monetary Policy Report.

Ms Wickman-Parak also made some points about inflation. CPIF inflation has been at around one per cent over the last 12 months and the forecast is that it will also remain at

approximately this level in the 12 months ahead. Ms Wickman-Parak said that there are several reasons for this but she wished to highlight the dampening effects of low import prices on inflation. In a small country with a high import share, inflation is highly affected by impulses from abroad that monetary policy cannot affect. At present, the Riksbank has no good method for more precisely distinguishing inflation impulses that emanate from abroad, but work is underway to improve our methods. Nevertheless, we can get some rough indications if we examine the development of goods prices (excluding energy and food) and compare this with the more domestically-influenced prices for services. Figure 3.27 in the draft Monetary Policy Report illustrates this. It shows that goods inflation has largely been negative over the last ten years. The only time inflation in goods prices was clearly above zero was during the financial crisis when the krona weakened significantly and prices were at approximately 2 per cent for a short while. Inflation in the prices of services has varied but has been close to 2 per cent for some time now; it was also at this level throughout last year.

Ms Wickman-Parak said that it would certainly have been possible to achieve better target attainment for inflation by pursuing a more aggressive monetary policy, as Mr Svensson has already suggested in his comments. Even lower interest rates would have weakened the krona and thus increased goods inflation, and the more expansionary policy would also have pushed up more domestically-generated prices such as those for services. But her assessment was that this would also have led to a higher debt ratio and even more vulnerable households. Higher debts make the households more vulnerable to changes in income and interest rates, irrespective of what happens with housing prices. It is often said that it should be possible to use tools other than the policy rate to limit household borrowing. But the Riksbank has not had and still does not have any other tools at its disposal.

Inflation-target attainment would of course look better in the short term, but monetary policy must also look ahead and take into account the risks associated with the monetary policy conducted in the slightly longer term. What would happen in a situation where the prices of imported goods began to rise and domestic inflation had been pushed up? We would perhaps have to quickly change the direction of monetary policy. This would happen in a situation in which there had been a further increase in household debt and thus an increase in the households' sensitivity to changes in interest rates. There would be a clear risk of monetary policy increasing rather than reducing fluctuations in the economy.

A weak krona can have positive short-term effects on exports and the Swedish economy benefited from this during the crisis. But having a weak currency is hardly a good thing in the long term. Due to a lack of conversion pressure, there is a risk that this would lead to the capital stock being both smaller and of poorer quality than would otherwise be the case. This would in turn lead to weaker potential for long-term growth.

Ms Wickman-Parak concluded her comments by saying that she was digressing slightly by referring to a longer period than the forecast horizon for today's monetary policy decision. However, in light of the discussion on target attainment it may be worth considering that a rather difficult balancing act is required and a monetary policy that may look good in the short term can entail risks that materialise in the slightly longer term and extend beyond the Riksbank's normal forecast horizon.

Deputy Governor **Karolina Ekholm** began by saying that economic activity seems to be in line with what was expected at the monetary policy meeting in December and she supported the assessment that the prospects for the Swedish economy are in principle the same as described in the Monetary Policy Update in December. Developments on the financial markets have been surprisingly positive for most of this period, with narrower spreads between government borrowing rates in heavily-indebted countries in the euro area and rising share prices on the stock exchanges, although the situation has looked a little different in recent days. However, the development of the real economy has not been as positive, although there are some signs that the downturn in the euro area may be levelling out. At the same time there is a tangible risk of setbacks, as pointed out in the draft Monetary Policy Report and mentioned earlier by Ms Wickman-Parak. Important factors behind the optimism on the financial markets seem to be the European Central Bank's (ECB) announcement of the OMT programme⁴ and the statement by Mario Draghi, the Governor of the ECB, that everything that is required to hold together the euro area will be done. So far, however, the ECB has not needed to act and has thus not needed to clarify how the OMT programme will work in practice. When it is actually activated there is a risk that it will not really meet the market participants' expectations and that this will lead to a new wave of pessimism, said Ms Ekholm.

The new information about the Swedish economy that has become available since the monetary policy decision in December is also in line with the Riksbank's expectations at that time. There are some indications that the economic cycle may have bottomed out and that we are hopefully moving towards a recovery. However, given the problems in the euro area it is difficult to believe that the Swedish economy will be able to receive any real impetus from abroad. A lot depends on the return of confidence among households and firms and on this leading to increased domestic consumption and higher investment.

So, what does this entail for the decision on the repo rate? The apparent halt in the economic downturn may perhaps suggest that the repo-rate cuts should also come to a halt. However, the starting point for what is an appropriate repo rate is how one views the development of inflation and resource utilisation in the period ahead. With the repo-rate path proposed in the draft Monetary Policy Report – with an unchanged rate of 1 per cent

⁴ OMT stands for "Outright Monetary Transactions" and is the ECB's programme for purchasing bonds on the secondary market given that certain conditions are met.

for approximately a year and then gradual increases – CPIF inflation is expected to continue to be below 2 per cent until mid-2014 while unemployment will at no time during the forecast period fall to 6.25 per cent, which is the midpoint in the interval for the long-run sustainable unemployment rate estimated by the Monetary Policy Department. With the proposed monetary policy, inflation will thus remain below 2 per cent for some time to come while unemployment will be above what can be regarded as a long-run sustainable rate. It is also unclear what it is that will drive inflation up to 2 per cent given the weak situation on the labour market throughout the forecast period and the forecast that the exchange rate will remain largely unchanged. Like Mr Svensson, Ms Ekholm saw a risk of CPIF inflation remaining below 2 per cent throughout the forecast period with the proposed repo-rate path. To her mind, this did not seem to represent a well-balanced monetary policy.

The type of target conflict that usually entails difficult trade-offs in monetary policy - that is weighing the costs of overshooting the inflation target against the gains of lower unemployment - is not relevant to the Riksbank in the current economic situation. According to Ms Ekholm, a more expansionary monetary policy would lead to better target attainment in both respects - that is in terms of attaining the inflation target and reducing unemployment. This is also well illustrated in the analysis of alternative paths for the repo rate in Chapter 2 of the draft Monetary Policy Report. The analysis is accompanied by the comment that the effects of monetary policy in reality may perhaps take longer than in the analysis, and in Chapter 1 it says that a repo-rate cut now would risk CPIF inflation rising to above 2 per cent towards the end of the forecast period, which is understood to be an argument against a cut. However, Ms Ekholm considered this argument to be irrelevant. If the effects of repo-rate cuts are really more sluggish then this would suggest that the repo rate should have been lowered quickly when economic activity declined, not slowly as has been the tendency recently. Moreover, greater sluggishness is no reason to reject a cut of 0.25 percentage points now by saying that CPIF inflation may be 2.2 per cent instead of 2 per cent some time in 2015. As inflation is currently so far below 2 per cent, the credibility of the inflation target can hardly be damaged by inflation perhaps being two-tenths above 2 per cent in two or three years' time. Striving not to overshoot 2 per cent at all, given that unemployment is expected to be higher than what is considered to be a long-run sustainable rate throughout the forecast period, gives the impression of an asymmetrical inflation target; that is that the target is to keep inflation below 2 per cent. Really, however, we think of the target as being symmetrical, with inflation being above the target as often as it is below the target.

Ms Ekholm said that another argument put forward against a cut is that it will be difficult to achieve a significantly lower rate of unemployment in the years immediately ahead because a large part of the observed unemployment is due to structural factors. The impact of monetary policy on household indebtedness is also put forward as another

argument against a cut. It is thus argued that the ability of monetary policy to have a significant impact on unemployment must be demonstrated before it is used to support the labour market. At the same time, there is a willingness to use monetary policy to affect household indebtedness despite there being no evidence that it actually can have any significant impact on indebtedness. Ms Ekholm said that to her this represents an unfortunate reinterpretation of what monetary policy should be used for. It is after all well documented that monetary policy has an impact on inflation and resource utilisation, and the Riksbank has a reasonably clear mandate in these areas. On the other hand, as Mr Svensson pointed out earlier, there is no evidence that monetary policy has significant effects on household indebtedness. The analyses that have been carried out indicate that the impact of changes in the repo rate is relatively small, or indeed negligible. It is also unclear what mandate the Executive Board of the Riksbank has to influence the level of household indebtedness. As noted in the draft Monetary Policy Report, the rate of growth in household lending has fallen and is now approximately in line with the growth in disposable incomes. Housing prices also appear to be more or less stable. Ms Ekholm said that at least as far as she was concerned it was thus unclear what more the Executive Board was expected to achieve in this area.

However, the reinterpretation makes it clear that the potential target conflict that lies behind the proposal to leave the repo rate unchanged in the draft Monetary Policy Report is that between stabilising the macroeconomy over the next three years and the possible risks associated with high housing prices and household indebtedness. Despite all our efforts and attempts to analyse these risks, however, they remain vague and difficult to grasp. In the draft Report, there is a very readable article about the household balance sheet and the macroeconomic assessment that examines the structure of the household balance sheet and in what way household indebtedness could have a negative impact on macroeconomic development. The conclusion that can be drawn is that it is primarily through the effects on saving that a fall in the value of the households' assets - that is in practice a fall in housing prices - could lead to negative macroeconomic development. However, Ms Ekholm said that more detailed analysis is required before we can say whether this poses a risk to the Swedish economy. In contrast to many of the countries that have had problems following a fall in housing prices, and in contrast to the situation during the Swedish crisis of the 1990s, the households have a rather high level of saving. It also this high level of saving that makes the households' balance sheets look rather healthy - they have relatively large assets even if we discount their real assets in the form of housing. Another difference is the low level of housing construction. The typical pattern when there is a dramatic fall in housing prices is that this has been preceded by a building boom. To be able to assess to what extent household indebtedness constitutes a risk to macroeconomic development in Sweden, the Riksbank should analyse the role played by these factors.

It was therefore Ms Ekholm's view that the proposed repo-rate path with an unchanged repo rate did not constitute a well-balanced monetary policy. Given the low rate of inflation and the high rate of unemployment, she believed that there was scope for making monetary policy more expansionary. This would ease a recovery and reduce the risk of the high rate of unemployment becoming entrenched. It is also important that inflation does not remain far below 2 per cent for too long in order to prevent a loss of confidence in the inflation target. She believed that the repo rate should be cut to 0.75 per cent and advocated a repo-rate path that stays at 0.75 per cent through the first quarter of 2014, and then gradually rises to just below 2 per cent. This is approximately the same repo-rate path that she advocated at the meeting in December.

Deputy Governor **Per Jansson** began by saying that Mr Svensson, Ms Wickman-Parak and Ms Ekholm had touched upon many important issues. He said that he would get back to some of them a little later in the monetary policy discussion.

Mr Jansson pointed out that it is nearly always the case that the Monetary Policy Reports or Monetary Policy Updates contain things that one does not entirely agree with but is anyway prepared to accept because a compromise has to be reached. However, as far as he was concerned there were unusually few things in the draft Report that he could not support this time. This also meant that he could be rather brief in his comments on the current forecast and monetary policy.

Mr Jansson thus supported both the macro forecast and the proposed path for monetary policy presented in the draft Monetary Policy Report. He particularly wished to point out that the discussion of monetary policy considerations at the end of Chapter 1 captures very well the aspects that he perceives to be the most important on this occasion with regard to the pros and cons of making monetary policy even more expansionary.

When the Executive Board discussed the state of the economy and monetary policy in December, the mood around the table was rather gloomy. The Riksbank expected GDP growth to be negative in the fourth quarter and there are now strong reasons for believing that in a few weeks' time, when Statistics Sweden publishes the figures for GDP growth, that it will indeed be confirmed that economic activity in Sweden was very weak at the end of last year. Given the rapid decline in economic activity, several members of the Executive Board considered cutting the repo rate by 0.5 percentage points. It was hoped that the economy would recover in early 2013, but this was far from self-evident.

Since then, most of the leading indicators have begun to rise, in both Sweden and abroad. For example, in January the purchasing managers' index in Sweden increased significantly in both the manufacturing and service sectors and the Economic Tendency Survey of the National Institute of Economic Research has shown an upturn, although from a low level. Certain hard data, for example data on the production of services, manufacturing output and new orders, have also been rather positive recently. The

appetite for risk has begun to return on the financial markets, as illustrated by rising share prices and somewhat narrower spreads between government bond yields for crisis countries and countries that are regarded as less of a risk.

As one can now be a little more certain that the recovery the Executive Board hoped for in December has actually begun, Mr Jansson had reached the conclusion that it was reasonable to leave the repo rate unchanged at 1.0 per cent, in line with the assessment in December.

It is of course still possible that developments will be weaker than expected and there are still risks of a setback. This is underlined not least by the recent political unrest in Spain and Italy. However, the positive signs are clear and for the first time in a long while Mr Jansson felt that, at least from the second half of 2013, there was an equal chance that developments in the real economy would be better than forecast by the Riksbank as there was that they would be worse.

Mr Jansson continued by saying that given that he did not have so much to say about the current forecast this time he wished to discuss a somewhat more general question, that is to what extent it is self-evident that a more expansionary monetary policy over the last two or three years would have been much better than the monetary policy actually conducted. He said that it was perhaps not surprising that he personally did not believe this was self-evident. He wished to highlight a couple of aspects that he thought were relevant in this context.

First, it is often pointed out that the risks associated with household indebtedness have declined in recent years. This relates to the slowdown in credit growth, the fact that the debt ratio has stopped increasing and the fact that housing prices are no longer rising as quickly as before. However, when people say that a more expansionary monetary policy would obviously have been preferable in recent years it seems that they "forget" that the development of lending to households and housing prices are conditioned by the monetary policy conducted and that in fact we cannot know how these variables would have developed with a more expansionary policy.

It would be very interesting to know what would have happened with credit growth and the rate of increase in housing prices if, for example, the repo rate had not been raised by 1.75 percentage points from mid-2010 to mid-2011 in an initial situation in which GDP growth increased at a record rate of 6 per cent, the increase in credit growth was still just under 10 per cent and real housing prices were rising significantly. There is of course no one who can tell us this with any degree of certainty. But it is up to those who claim it is self-evident that a more expansionary policy would have been better to prove that this is the case.

The claim that a more expansionary monetary policy would have been preferable in recent years should presumably mainly be understood against the background of the

currently low inflation rate and relatively weak labour market. Mr Jansson wanted to emphasise that he in every respect supported the view that the current low rate of inflation and the weak real economy meant that monetary policy must be expansionary. And he did not of course wish to question the fact that a more expansionary monetary policy would have led to slightly higher inflation and a better development of the labour market. But the question is how much better the outcomes would have been with such a policy. There is no easy answer to this question either. But he thought that the experience gained in other countries, where monetary policy has de facto been more expansionary than in Sweden, can provide some perspectives.

In the United States, the policy rate has now been at 0.25 per cent since the end of 2008. In addition, the Federal Reserve (the US central bank) has further stimulated the economy in this period through various asset purchase schemes. The Federal Reserve's balance sheet currently amounts to around 19 per cent of GDP. Despite this, the development of employment has been much weaker in the United States than in Sweden. In the United States, the employment rate has hardly improved at all since the end of 2009, while it has risen by approximately 2.5 percentage points in Sweden. It is true that the United States has done relatively better with regard to unemployment, but this is largely because the labour force has increased more rapidly in Sweden, which in the long term is beneficial to both employment and unemployment.

The ECB has also conducted a monetary policy that has been more expansionary than the Riksbank's. With the exception of a few quarters in 2011, the ECB's policy rate has been 1 per cent or lower since the spring of 2009. Like the Federal Reserve, the ECB has also taken extensive extraordinary monetary policy measures to stimulate the economy. At present, the ECB's balance sheet amounts to approximately 31 per cent of GDP in the euro area. But employment has not developed more favourably in the euro area than in Sweden either. Since the end of 2009, the employment rate in the euro area has fallen somewhat, while, as just mentioned, it has increased rather substantially in Sweden. In addition, in the euro area, unemployment has also increased continuously since 2008, from just over 7 per cent to almost 12 per cent.

Mr Jansson concluded his comments by emphasising that he did not mean that the points he had made "prove" that a more expansionary monetary policy would not have been better than the monetary policy conducted. On the other hand, he thought that they demonstrated that it is difficult, not to say almost impossible, to determine whether one policy would have been so much better than another. Mr Jansson said that Mr Svensson apparently thought that it was easy to quantify such matters, but this was a view that he at least did not share. It was thus in his opinion anything but self-evident that a more expansionary monetary policy over the last two or three years would have been much better than the monetary policy that the Riksbank had actually conducted.

First Deputy Governor **Kerstin af Jochnick** began by stating that she shared the assessment in the draft Monetary Policy Report with regard to developments abroad and in Sweden. She also supported the proposal to hold the repo rate unchanged at 1 per cent and for a new repo-rate path.

At the monetary policy meeting in December, the Executive Board had to assess the strength of the fall in demand for Swedish goods and services and its effect on inflation and the labour market. One important parameter in the Board's assessment then was greater influence from the weak developments abroad. The crisis in the euro area contributed to dampening confidence in the future in Sweden. In addition, there was the risk of the fiscal cliff in the United States, and the consequences its management might have on the US economy and ultimately on global demand.

In the euro area the real economic situation remains weak, but there are positive signals. There has been progress in some countries with regard to competitiveness and current account balance. Indicators of financial fragmentation point to fewer problems.

Ms af Jochnick went on to say that decisions had been taken in the United States that enabled them to avoid the fiscal cliff as a whole. The fiscal policy tightening as a percentage of GDP is expected to be limited to 1.5 per cent for 2013, compared with 4 per cent, which would have been the case if an agreement had not been reached. The agreement in Congress was in line with the Riksbank's assessment in December. It is assumed in the report that the fiscal policy consolidation will continue throughout the forecast period. However, the fiscal policy tightening will gradually decline and growth can rise at a faster pace in 2014 and 2015. The underlying demand in the US economy is continuing to develop relatively well. Ms af Jochnick's assessment is that this will continue for some time to come. Contributing factors are the continued improvement in the housing market, a better situation in the banking sector and a recovery in the labour market, where employment is rising at a relatively rapid rate. In several emerging economies, for instance China, the recovery is continuing.

Ms af Jochnick went on to say that one factor that was important during the autumn was developments on the financial markets. Towards the end of 2012 one could see that the financial markets were functioning better and it is now possible to see that this trend was continuing at the beginning of 2013. So-called CDS premiums on borrowing by governments and banks have in several cases been reduced to levels corresponding to those prevailing before the financial crisis broke out. In addition, the volatility in the fixed income and foreign exchange markets has declined significantly.

However, Ms af Jochnick warned that there was a risk that the financial markets' positive outlook was not yet matched by fundamental factors. One condition for the financial markets functioning in the future was that there would not be any decisive setbacks with regard to the obligations of the problem countries in the euro area to implement

structural reforms. For example, there are still problems and risks in some large countries with regard to competitiveness and stability in the banking system. Before one can assume the danger is over, further measures must be implemented to put the financial markets on more stable ground.

Stable financial markets can then contribute to a recovery in the real economy. It is also important that the euro area succeeds in implementing a decision on joint supervision, crisis management and a deposit guarantee so that confidence in the euro area collaboration can gradually be restored. The road ahead will be marked by surprises, but hopefully they can be managed. Ms af Jochnick's overall assessment of developments abroad is that they are largely following the forecast made in December.

New information has been received regarding Sweden. However, Ms af Jochnick's assessment is that the information received since the repo-rate decision in December does not indicate that the expansionary policy conducted should be changed. It is still important to have a low interest rate to support the Swedish economy and create the right conditions for attaining the inflation target of 2 per cent within the forecast period.

If one can evaluate the nuances in the information received and its significance for our view of developments in Sweden in 2013, she said that the nuances appeared positive. What still weighs heavily is the negative development of Swedish industry and the problems in the labour market. The services sector appears fairly positive, on the other hand.

The National Institute of Economic Research's Economic Tendency Survey shows that households' confidence in the economic situation rose in January 2013, but is still lower than normal. In the short term, the Riksbank is assuming that households will increase their saving and that consumption will increase more slowly than normal. However, as the crisis in the euro area is managed and confidence in the future increases, consumption in Sweden will increase at a faster pace. Companies' exports and investments are also expected to increase, and GDP growth will increase gradually.

With regard to the views expressed regarding the Executive Board's responsibility for attaining the target in the Sveriges Riksbank Act, Ms af Jochnick wanted to make the following comment. The Riksbank has a clear objective to maintain price stability and has an explicit independence with regard to the conduct of monetary policy. In addition, the Riksbank has the task of promoting a safe and efficient payment system.

In Ms af Jochnick's opinion, developments in recent years have shown that central banks should have an overall perspective with regard to both monetary policy and financial stability, as financial stability is a necessary condition for monetary policy to function efficiently. This is also documented in research and analysis. What this means is the focus is on the inflation target and our independence, but that we thus cannot disregard the slightly longer run effects with regard to financial imbalances building up, for instance.

As long as the Riksbank does not have any other tools than the repo rate to use to counteract the build-up of financial imbalances, Ms af Jochnick considered that it is reasonable for the Executive Board to take these risks into account in its discussions. Monetary policy is a blunt instrument when it comes to counteracting the build-up of financial bubbles, but financial imbalances can lead to major problems for companies and households and ultimately cause lower growth and higher unemployment. Just the fact that the Riksbank has talked about the risks entailed in the high level of household debt has contributed to stabilising the household debt ratio, albeit at a high level, according to Ms af Jochnick.

Governor **Stefan Ingves** shared the view of international developments and the Swedish economy described in the draft Monetary Policy Report, and also supported the proposal to hold the repo rate unchanged at 1 per cent and for the new repo-rate path.

Mr Ingves noted that in terms of figures, the forecast in the main scenario is close to the one in December, which means it is hardly surprising that the view of monetary policy should then be the same. The basis assumption is that there will be a gradual normalisation of economic developments in Sweden and abroad.

International developments have been largely as expected. In the euro area, the real economic situation remains weak, but there are signs that it has bottomed out. Risk premiums have declined on government securities in the crisis countries and on the interbank market. There has been some progress with regard to managing the structural imbalances that were built up prior to the crisis. For instance, in Spain and Ireland unit labour costs have fallen and the current account balance is close to zero. The forecast assumes that the crisis management will continue and will contribute to a gradual increase in confidence among companies and households, although there is a risk of setbacks.

In the United States, the most acute problems have been avoided. However, the fiscal policy consolidation needs to continue and the main scenario assumes that this will be the case. There are also some signs of a recovery in the economy, for instance, in the housing sector and the labour market.

The recovery in world trade is continuing. But there is still a clear difference between the emerging economies with a stronger rate of increase and the more developed economies.

All in all, there are slightly more signs of a recovery abroad, in line with the main scenario. At present, however, the situation in Europe is undecided. Developments in the euro area could be better or worse than in the main scenario. The repo-rate path in the main scenario reflects a compromise between these two possibilities. It is possible that the turnaround will come sooner than the Riksbank is expecting. One indication of this is the positive signals on the financial markets. Another alternative is that the crisis

management will take longer and the turnaround will be delayed. Sweden's experiences from the 1990s crisis show that it can take time before one reaps the benefits of crisis management and new regulation. Here it is also necessary to distinguish between the stabilisation of the markets and, for instance, the stock market upturn and developments in the real economy. It is a question of different time perspectives, where the fairly slow real economic adjustment is in line with our forecast.

In Sweden developments in the real economy weakened towards the end of last year. The problems in the euro area contributed to dampening demand. The current situation is still weak, according to the Riksbank's company interviews. This applies in particular to the manufacturing industry. There are some forward-looking indicators pointing to the business cycle having bottomed out, although this is not confirmed clearly in actual outcomes. Companies are expected to manage with the staff they have now for some time to come, and employment is not expected to rise until the middle of next year. Households' confidence in the future has increased, but is still lower than normal. Inflation is currently low. This is a consequence of weak resource utilisation and the stronger krona, which has contributed to low import prices. In a situation with low inflation, monetary policy should stimulate. The repo rate has been halved since last winter. The real repo rate is expected to be negative throughout the forecast period. This will contribute to strengthening economic activity, which will mean that resource utilisation becomes more normal and inflation rises towards the target.

With the current low interest rates, one must be aware of the link between household debt and monetary policy. All in all, it is reasonable to hold the repo rate unchanged at 1 per cent and to adjust the repo-rate path downwards somewhat.

§3. Discussion

Deputy Governor **Lars E.O. Svensson** began by commenting on what had been said earlier. Mr Svensson noted that some of the members consider that the higher household debt ratio makes households more vulnerable to interest rate increases. But at the same time, households' higher real and financial assets make them less vulnerable. According to Mr Svensson, the best survey so far of households' resilience to interest-rate increases and other shocks is contained in Finansinspektionen's mortgage reports. According to the report published in March 2012, the new mortgage borrowers, who are more sensitive than earlier mortgage borrowers, pass very severe stress tests, including much higher interest rates. The banks' credit assessments and estimates of mortgage costs also take into account relatively high mortgage rates, on average 7.7 per cent. The resilience to stress was also better in the 2012 report than in the one published two years before, 2010.

Mr Svensson commented that Ms Wickman-Parak believed it was difficult to balance inflation and unemployment against potential risks connected to household debt. It was this balance that Mr Svensson wanted to detail in his discussion of the consequences of the interest-rate increases that began in summer 2010, compared with retaining the interest unchanged at a lower rate. It is a matter of balancing a 1-percentage point lower CPIF inflation and just over 1 percentage point higher unemployment rate, around 60 000 jobs, against around 1.5 percentage points lower debt ratio, a debt ratio that instead of being 175 per cent of disposable income would be 172 per cent within a couple of years' time. Moreover, in the long run the debt ratio is not affected at all. Mr Svensson considered it was a simple choice. Although the figures are fairly rough, their magnitude is clear; substantial effects on inflation and unemployment and insignificant effects on household debt ratios.

Mr Svensson pointed out that several Executive Board members had said that one should monitor developments in household debt. He had nothing against this. But the crucial point is whether monetary policy can have any tangible effect on the debt ratio. Mr Svensson was surprised at Mr Jansson's statement that this is not known, despite the long list of references with similar results that Mr Svensson had mentioned.

When it comes to whether an expansionary monetary policy causes house price bubbles, Mr Svensson referred to Figure 8. This is from a speech by US Federal Reserve Governor Ben Bernanke at the AEA meeting in January 2010.⁵ It illustrates the relationship between more expansionary monetary policy and increases in house prices for a number of countries. The horizontal axel measures average deviations in monetary policy from a Taylor rule. Observations further to the left correspond to more expansionary monetary policy relative to a Taylor rule. The average increase in real house prices is measured on the vertical axel. If more expansionary monetary policy leads to house price bubbles, there should be a negative relationship between deviations from the Taylor rule and increases in house prices. However, there is no such relationship, as shown by the regression line that has been inserted. It explains only 5 per cent of the variation and its slope is not significantly different from zero.

Mr Jansson had questioned in an earlier contribution to the discussion whether a more expansionary monetary policy since summer 2010 would have led to a better outcome. Mr Svensson considered this to be like asking whether there would be any effect in Sweden of a policy rate that was on average 1.5 per cent lower over a couple of years. It would be very surprising and would go against all practical experience and all theoretical and empirical estimates if this did not increase CPIF inflation and reduce unemployment significantly. Mr Svensson pointed out that his calculations of the effects on CPIF inflation

⁵ Bernanke, Ben S. (2010), "Monetary policy and the housing bubble", speech at the American Economic Association's meeting in January 2010, Figure 9.

and unemployment were made in the usual way with the Riksbank's model, RAMSES, which is explained, for instance in his speech in Umeå in 2010.⁶

Mr Jansson also referred to developments in the euro area and the United States not being so good, despite their policy rates being lower than the Swedish repo rate. Mr Svensson did not consider this to be a relevant comparison, as the situation for these economies in general is quite different from the Swedish one. A better comparison would be to ask what would have happened in these economies if one had conducted a policy like the one conducted in Sweden. If one looks at Figure 3, one can see that the real policy rate in the euro area was roughly minus 2 per cent in the United States it was between minus 2 and minus 3 per cent. The Swedish real policy rate has on average been positive. What would have happened in the euro area and the United States if they had conducted a monetary policy that on average entailed a 2 percentage points higher real interest rate? Mr Svensson said that most people would agree that the results would have been terrible.

Deputy Governor **Karolina Ekholm** referred to Lars Svensson's and Per Jansson's discussion of what the outcome might have been with a different monetary policy than the one conducted and the consequences of the policy that was conducted. It is, of course, difficult to make a counterfactual analysis, but the Riksbank should look at this issue and try to make such an analysis. This should make it possible to distinguish how the monetary policy conducted has affected developments both with regard to macroeconomic developments and household debt and what role unforeseen shocks and other measures affecting household debt, such as the loan-to-value ceiling, have played. Making an analysis of how the policy conducted has affected the economy in retrospect can teach us something about the monetary policy transmission mechanisms. It also has the advantage of capturing the trade-offs that have been made implicitly so that one can specify these trade-offs ex post.

Ms Ekholm also took up a deeper question linked to the discussion on the objectives of monetary policy. She said that one concern with the objective appearing slightly unclear was that an unclear objective is not compatible with the Riksbank's high-degree of independence. A high degree of independence assumes a clear objective so that target attainment can be regularly assessed. Ms Ekholm felt that there appeared to be two main strategies. One is to safeguard the Riksbank's independence, which would require a clearly-worded objective for monetary policy. The other is to draw the conclusion, on the basis of experiences in countries that have faced major problems in connection with the financial crisis, that a clearly-formulated objective such as achieving price stability is not enough to ensure macroeconomic stability. One may perhaps need a broader objective where it is more difficult to specify the target and thus evaluate whether it has been

⁶ Speech by Lars E.O. Svensson entitled "Why a lower repo-rate path?" Umeå University, 24 February 2010.

attained. But with an objective whose attainment is difficult to evaluate, the Riksbank might perhaps also need to give up the high degree of independence it currently enjoys.

Deputy Governor **Per Jansson** wanted to comment on some aspects of the discussion. Mr Jansson considered that Mr Svensson had misunderstood his parallel to developments in employment in the United States and the euro area. The point was that the outcome for employment in these countries has not been better than in Sweden, despite a much more expansionary monetary policy. Mr Jansson noted that Mr Svensson had said on many occasions that monetary policy had very large effects on production and employment. But now that the US central bank (the Fed) and the ECB are conducting perhaps the most expansionary monetary policy they have ever pursued, with extremely low policy rates and extraordinary measures over a long period of time, should it then not be at least a little surprising to Mr Svensson that the employment rate has scarcely increased at all in the United States since 2009 and that it has actually declined slightly in the euro area? Mr Jansson could not understand how Mr Svensson could get these fairly poor outcomes to go together with monetary policy that has very large effects on the real economy.

When it comes to household debt, several important circumstances had been discussed. Ms Ekholm and Mr Svensson wondered whether taking household debt into account would not entail changing the monetary policy objective or making it unclear, and if it might be necessary to clarify this in the Riksbank's mandate. Moreover, Mr Svensson held the view that the monetary policy trade-off was very simple since monetary policy has large effects on inflation and unemployment but only minor effects on household debt.

With regard to the question of unclear objectives and mandates, Mr Jansson did not see any problems of principle as taking into account household debt was in his opinion a question of trying to sustain a balanced macroeconomy, and thus price stability, in the longer run. This is entirely in line with the current legislation and the preliminary works that state that the objective of the Riksbank's activities shall be to maintain price stability and, without neglecting the price stability objective, to support the objectives of general economic policy to attain sustainable growth and high employment.

Mr Svensson argues that the trade-off in monetary policy is very simple. This is a view that Mr Jansson does not share, given the experiences in recent years of problems with over-indebtedness in many countries. It may be possible to excuse the fact that this type of problem was not taken seriously before the financial crisis, but Mr Jansson finds it difficult to understand how anyone can be so sure today that there are no problems here. It is also the case that the commonly-held view in this field has changed in recent years, from a perspective that involved bursting bubbles to one that entails gradually counteracting the build-up of risks. And in this context monetary policy has a role to play, according to

Mr Jansson. He said that he was not alone in this opinion.⁷ He also wanted to emphasise that it was not easy to determine the time perspective in which monetary policy could affect household debt. This depends, for instance, on how expectations of the future are formed. Mr Jansson agreed that macroprudential policy tools could be a better alternative than the repo rate for counteracting this type of risk, but unfortunately this policy field is as yet relatively undeveloped.

Mr Jansson concluded with a clarification regarding the discussion on counterfactual scenarios. His earlier point was not that the Riksbank should not try to analyse such scenarios. As a matter of fact, he had himself inquired about a counterfactual scenario that examines whether it would have been possible to conduct monetary policy since the introduction of the inflation target in a way that would entail better target attainment for both the CPI and the CPIF at the same time. This type of numerical scenario could not with all likelihood give a clear answer to whether or not it would have been possible, but it might nevertheless provide a further piece of the puzzle with regard to the discussion of the Riksbank's target attainment in the longer run. Mr Jansson thus did not mean that the Riksbank should not try to calculate these types of scenario. He merely wanted to emphasise that one should be clear that counterfactual scenarios are very difficult to make as they are based on a number of simplified assumptions. They must therefore be interpreted with great caution.

Governor **Stefan Ingves** did not consider it possible to assess how expansionary the monetary policy conducted in different countries was merely by comparing the real policy rates. It is also important to look at the interest rates paid by end-consumers, households and companies. In the euro area, for instance, the monetary policy transmission mechanism has been partly put out of action, which has led to relatively high interest rates for consumers in relation to the policy rate in some countries. One should also take into account developments in the credit supply when assessing how expansionary monetary policy is. Mr Ingves also considered that monetary policy was short-sighted when it came to managing issues relating to household debt. One should discuss events with a low probability but which could also have serious consequences beyond the forecast horizon. He considered that the high indebtedness among households could be regarded in more or less the same way as an excessively high sovereign debt. Both are untenable in the long run and it is therefore good that the household debt ratio is expected to stabilise in the coming period. Mr Ingves also commented on Mr Svensson's contribution to the discussion in which he said that monetary policy should not try to influence household debt. It is too easy to say that everything should be taken care of by

⁷ See, for instance, Michael D. Bordo and John Landon Lane (2012), "Does Expansionary Monetary Policy Cause Asset Price Booms; Some Historical and Empirical Evidence".

<http://www.udesa.edu.ar/files/UAEconomia/Seminarios/2012/Bordo.pdf>

someone else. He pointed out that these other measures to counteract high household indebtedness could be regarded as another way of raising the repo rate. Mr Ingves considered it unfortunate that it takes so long to establish a new regulatory framework for decision-making in this field. This is needed now and it is good that it is being discussed.

Mr Ingves then went on to reflect on some issues the Riksbank needs to work on and which may affect the view of monetary policy in an open economy like the Swedish one. He noted that monetary policy is very stimulative at present. Nevertheless, inflation will be low in the period immediately ahead. CPIF inflation is expected to be on average just below 1 per cent during the coming six months.

The exchange rate has functioned as a shock absorber in earlier economic downswings. But at present the Riksbank cannot count on upward price effects through a weaker exchange rate as there has been no such weakening. Prices of imported goods have fallen. Prices of consumer goods in the producer channel, which affect prices paid by consumers with a time lag, have developed slowly over the past year. The link between the interest rate spreads between Sweden and other countries and the exchange rate is also uncertain. In structural terms, it would appear that service prices are rising, while goods prices are falling. The main scenario also assumes that wage increases will be modest this year, and that the growth rate in labour productivity will increase. Unit labour costs will therefore increase less this year than they did last year. Moreover, the household sector has a historically high level of indebtedness and households should not borrow more in relation to their incomes, in Mr Ingves's opinion. This means that the efficiency of monetary policy through the so-called credit channel is limited in this respect. It could mean, all in all, that the possibility to use monetary policy to increase demand is more limited now than under normal circumstances. One cannot rule out the possibility that inflation will undershoot the target for a long period of time, regardless of the monetary policy conducted.

Moreover, there is uncertainty over the equilibrium assumptions in our models. How have these equilibrium assumptions been affected by the crisis, after five years of volatility? How are potential GDP growth and the output gap affected if it takes time to move resources to new sectors? How high is the long-run unemployment rate? What level is the neutral real repo rate? What do the answers entail for the future rate of inflation? These are important questions to work on. The draft Monetary Policy Report contains, for instance, an analysis of the difficulties in separating structural and cyclical problems on the labour market. If cyclical reasons mean that unemployment is higher than in the main scenario, inflation will be held back. But another possibility is that the matching on the labour market is functioning poorly and that it is taking longer to recruit staff than is assumed in the main scenario. This means that long-run unemployment may have increased. The gap between the actual and long-run levels is not increasing as much as

when unemployment rises due to cyclical reasons. Keeping the repo rate very low in this situation could contribute to inflation overshooting the target. There is then a risk that the inflation target will lose its role as anchor. Nor can one disregard the significance of risks linked to low interest rates for over-indebtedness in various sectors. In addition, there are risks that companies' allocation of capital will not be efficient and that the innovation pressure in the economy could be held back by very low interest rates.

These questions did not change Mr Ingves's view of the forecasts, the repo-rate decision nor the repo-rate path, but they point to a catalogue of important issues the Riksbank has to struggle with when looking ahead to future forecasts and repo-rate decisions. Will the world be as it was before, or does the Riksbank need to change some of the assumptions? These are very important issues in an open economy like the Swedish one, said Mr Ingves.

First Deputy Governor **Kerstin af Jochnick** shared Mr Ingves's view that the Riksbank needs to look more closely at some of the issues discussed at today's meeting. The Riksbank should make a deeper analysis of the effects of monetary policy on unemployment and the underlying factors behind developments in inflation.

Ms af Jochnick wished to clarify that she does not consider the Riksbank should deviate from the inflation target of two per cent, but that it is at the same time important to give consideration to the Riksbank's objective of promoting financial stability. The Riksbank has a responsibility not to simplify and merely see the inflation target; it must also assess whether risks are building up in the financial system. Risks that could later result in market or macroeconomic problems. Ultimately, financial imbalances can lead to problems in implementing monetary policy efficiently.

Ms af Jochnick noted that the draft Monetary Policy Report contains a useful article in which various future scenarios are analysed. This includes an analysis of what would happen if the labour market is weaker than expected and how the labour market would react to a change in the repo rate.

The analysis points to the importance of assessing whether the increased unemployment is structural or cyclical, to be able to understand the effect that a more expansionary monetary policy would have on unemployment. According to Ms af Jochnick, there are many indications that the matching on the Swedish labour market has deteriorated. This would mean that the structural problems have increased. In turn, this would mean that long-run unemployment may have risen. If the Riksbank uses monetary policy to influence structural unemployment, there is a risk that the effects will be limited, at the same time as there is a risk that the household debt ratio will increase further from the current high level.

Ms af Jochnick said that households' vulnerability has increased over the years as a result of the higher debt ratio and because a large percentage of households' loans are at

variable interest rates. Finansinspektionen's mortgage report also contains information on new borrowers in the Stockholm region having loans in the magnitude of 600 per cent in relation to their disposable incomes. This high indebtedness can create vulnerability in the case of a loss of income, higher interest rates or fall in house prices.

Ms af Jochnick commented on Lars Svensson's views that the banks make calculations using a higher interest rate in their credit assessments and that households would not have any problems with much higher interest rates. Ms af Jochnick considered it dangerous to draw the conclusion that this would not create problems in a different market situation. Higher interest rates could gradually lead to households' interest payment increasing, which would have effects on consumption and growth.

Deputy Governor **Barbro Wickman-Parak** commented on Ms Ekholm's discussion of the formulation of a new target for monetary policy and the lack of clarity. No one has mentioned having a target for indebtedness or house prices. The Riksbank must be clear about its policy and the ideas behind it. However, clarity should not be maintained at the cost of ignoring risks that are assessed to be present but cannot yet be managed in the Riksbank's apparatus for analysis. Stefan Ingves has mentioned many interesting questions that there is every reason for us to discuss. It is a good idea to broaden the discussions. Ms Wickman-Parak noted that Mr Ingves mentioned that one should be able to take into account the fact that the decisions made could have consequences beyond the forecast horizon and that this was an issue she had herself brought up in many contexts. Mr Ingves mentioned the question of the risk of having a low interest rate over a long period of time. In this context one can refer to Norges Bank, the central bank of Norway. They have included in their loss function for monetary policy the difference between actual interest rates and "normal" interest rates. The weight of this variable is low in the loss function, but nevertheless marks their view that the interest rate affects risk-taking and the build-up of financial imbalances. Ms Wickman-Parak did not want to comment on whether this method of weaving in these questions into the monetary policy decisions was the most appropriate alternative. At Norges Bank they say that this is a preliminary step, that they are to a great extent in unknown waters and that the methods could be adapted as new knowledge is gained. Ms Wickman-Parak considered this open attitude to bode well for the future. The research is still in its infancy, but disregarding risks because research has not yet come up with any clear answers is not a wise attitude. It could make things less clear, but Ms Wickman-Parak considered this was worth it.

Ms Wickman-Parak then put a question to Mr Svensson and Ms Ekholm. Mr Svensson and Ms Ekholm consider that inflation in the main scenario rises too fast. Which part of the inflation forecast do they not believe in? Is it the forecast for wages, productivity or the exchange rate they do not believe in? Or is it something else?

Ms Wickman-Parak also had a question for Mr Svensson. Mr Svensson's advocated repo-rate path shows a CPIF inflation rate of around 2.5 per cent some way into 2014, and it

then remains at this level until 2016, which is as far as the forecast extends. Ms Wickman-Parak wondered whether one should interpret the fact that the inflation forecast is so far above the target to mean that Mr Svensson advocates a transition to a price level target?

Deputy Governor **Lars E.O. Svensson** considered that Mr Jansson's comparison with the United States should take into account the special conditions there. Mr Svensson noted that the Federal Reserve's Vice Chair Janet Yellen held a speech on 11 February this year in which she emphasised that the recovery from this recession was hampered by a number of circumstances that differ from earlier recessions. Ms Yellen mentioned here fiscal policy, the housing sector, negative expectations of a delayed recovery, and structural problems as a result of the construction sector previously being too large. These circumstances make direct comparisons with developments in Sweden difficult.

Mr Svensson noted that several members of the Executive Board had claimed that the Riksbank has no other means than the repo rate to influence indebtedness. Mr Svensson pointed out that there is now a mortgage cap, which Finansinspektionen claims has an effect and which has contributed to the loan-to-value ratio for new borrowers falling for the first time since 2002. There are also taxes and mortgage-rate deductions. The abolition of the wealth tax and the property tax on housing and the cap on the municipal property charge have contributed to the increase in housing prices. If one wishes to influence housing prices one can, for instance, influence the real long-term mortgage rate after tax. This can be achieved by changing mortgage- rate deductions, but not by monetary policy. It is also the case that both the debt ratio and housing prices have been stabilising over the past couple of years and housing prices are currently increasing at a quite moderate pace.

Mr Svensson then commented on Mr Jansson's discussion of the role played by expectations of future housing prices in the development of house prices. Unrealistic and over-optimistic expectations of future housing prices and poor credit assessments could contribute to house price bubbles. It is therefore important that such expectations are prevented and that credit assessments are thorough and strict. But these circumstances cannot be affected by monetary policy.

In a situation where there are large and certain costs in the form of lower inflation and higher unemployment and according to established research small or insignificant gains in the form of insignificantly lower debt ratios, Mr Svensson considered that the burden of evidence lay with those who nevertheless advocated that one should bear these large and certain costs. These advocates should be able to point to studies and practical experiences that support the claim that there is some specific gain.

Mr Svensson pointed out that when it comes to how monetary policy should react to large negative shocks – such as a fall in house prices – that have a small probability, he

himself has written an article on this subject.⁸ One vital point here is whether monetary policy can tangibly influence the probability or size of the negative shock.

Mr Svensson then commented on Mr Ingves's statement that monetary policy could have a lower effect on inflation and unemployment at present and the monetary policy would have difficulty in bringing up inflation and bringing down unemployment. Even if this is true, said Mr Svensson, it is no reason for not doing the best one can to try to meet the targets. That is to say, to cut the repo rate to zero if necessary and then, if this is not enough, to use unconventional methods to stimulate the economy.

Mr Svensson noted that Ms af Jochnick had mentioned that the debts in metropolitan areas were as high as 600 per cent of disposable incomes. The figure of 600 per cent for Stockholm was put forward by Mr Jansson in a hearing of the Riksdag Committee on Finance last autumn and was then included in the Riksbank's Financial Stability Report. Mr Svensson considered this figure to be misleading and said it was a shame that it had spread without noting that it had been calculated in a dubious manner. According to Finansinspektionen's mortgage report from March 2012, the debt ratio in Stockholm was only 325 per cent. This difference is due to two things. Firstly, the higher figure is an unweighted average. This explains most of the deviation from Finansinspektionen's figures. A borrower with a modest loan and small disposable income will have a high debt ratio. When using an unweighted average, this gets the same weight as another borrower with a very large loan and a large disposable income. It is instead reasonable to weight the individual debt ratios using the borrowers' disposable incomes. Secondly, the higher figure includes loans that do not directly or indirectly have the home as collateral and thus loans that are not related to the home. Some borrowers may have very large loans that are not related to their homes. If, for example, we are looking at the consequences of a fall in housing prices, it is reasonable to include only loans that are directly or indirectly related to the home.

Finally, Mr Svensson commented on Ms Wickman-Parak's question regarding the CPIF forecast in the main scenario, the CPIF forecast for the lower repo-rate path in Figure 7 at the end of the forecast period and his view on an average-inflation target or price-level target. Mr Svensson did not consider that a CPIF inflation of 2.5 per cent at the end of the forecast period was such a major problem, at least not greater than a CPIF inflation of 1.5 per cent. However, the calculations in Figure 7 only take into account a lower forecast for policy rates abroad. They do not take into account the fact that Mr Svensson also considers the forecast for growth in the euro area to be unrealistically high or the general tendency of the Riksbank to over-estimate inflationary pressures as illustrated in Figure 5 and that the National Institute of Economic Research's forecast for CPIF inflation is much

⁸ Svensson, Lars E.O. (2004), "Optimal Policy with Low-Probability Extreme Events", <http://people.su.se/~leosven/papers/lpeabs.htm>

lower than the Riksbank's, despite the NIER assuming a lower repo-rate path. If the Riksbank overestimates the long-run sustainable rate of unemployment, which Mr Svensson claims it is doing, this will mean that it also overestimates inflationary pressures. If one were to take these circumstances into account, both the CPIF forecast in the main scenario in the Figure 4 and the CPIF forecast in Figure 7 would be lower at the end of the forecast period. Both forecasts thus represent an overestimate, according to Mr Svensson.

When it comes to the question of an average-inflation target and a price-level target, this question has been raised in connection with Mr Svensson's article on the long-run Phillips curve and that average CPI inflation below the target in Sweden during 1997-2011 has led to higher average unemployment during the same period.⁹ An important policy conclusion for the future is that it is desirable that CPI inflation on average is 2 per cent over a longer period of time. An explicit price-level target or average-inflation target for inflation would ensure this. However, it is the case that in Australia, Canada and the United Kingdom, which have had an inflation target for as long as Sweden, inflation has on average been on or very close to the target in 1997-2011 (in the case of the United Kingdom up to the end of 2007). Sweden is the major exception that has been so far below the target. Experiences from Australia, Canada and the United Kingdom thus show that it is fully possible to hold inflation on average around the target with a normal inflation target like the one Sweden has. The important thing is probably that the target is symmetrical, that it is not, for instance, a ceiling but that inflation can overshoot the target by as much as it can undershoot the target.

Deputy Governor **Barbro Wickman-Parak** commented on Mr Svensson's response to her earlier questions. She had asked, for instance, what specifically lay behind the view that the inflation rate in the main scenario rose too quickly. It is implicit in this question that the conditions applying to inflation in the main scenario, such as the forecast for GDP growth abroad and the assumption of long-run unemployment in Sweden, are as they are. These are also the same conditions as in Mr Svensson's own inflation forecast, as it is a marginal calculation of the inflation forecast in the main scenario.

Now Mr Svensson states that he had a different view of growth in the euro area, which is not encompassed within the question. He also repeats what he said in his main contribution to the discussion that the Riksbank had earlier underestimated inflation and that the National Institute of Economic Research has a lower inflation forecast. This type of argument can be used to support Mr Svensson's evidently more general feeling that the Riksbank's inflation forecast is too high, but it was not really an answer to the question she asked.

⁹ Svensson, Lars E.O. (2012), "The Possible Unemployment Cost of Average Inflation below a Credible Target", www.larseosvensson.net.

Mr Wickman-Parak found it rather difficult to see why Mr Svensson in his own forecast bases his comments on the inflation forecast of the main scenario, to which he evidently has serious objections. Her conclusion after listening to Mr Svensson was that he did not himself believe his own inflation forecast in Figure 7.

Deputy Governor **Karolina Ekholm** responded to Ms Wickman-Parak's question on which part of the inflation forecast she does not agree with. She explained that she did not mean that she does not support the forecast, but that she quite simply does not understand what it is in the forecast that makes CPIF inflation rise relatively quickly to 2 per cent. According to the forecast, growth in unit labour costs is expected to fall from just over 2.2 per cent to below 2 per cent in 2014 and 2015. With falling growth in unit labour costs and an in principle unchanged exchange rate, which means that there is no inflationary impulse from import prices, what is it that will make inflation rise?

Ms Ekholm wanted to comment on Ms af Jochnick's comments that there had been no movement with regard to the Riksbank's target for monetary policy, but that the Riksbank has a clear target with regard to financial stability. According to Ms Ekholm it is not clear how this target fits in with monetary policy. She said it did not appear to be concern over financial stability that made several members of the Executive Board want to take household debt into account in the repo-rate decision. Ms Ekholm's impression was that it was primarily, as Mr Jansson mentioned, a question of the potential effects of falling house prices on consumption and saving, that meant they considered debts to be an important factor, and not the risk of banks suffering problems. She thought it would be a good idea to clarify this.

According to Ms Ekholm, the Riksbank's mandate with regard to preventing financial crises is also rather unclear, as it is a mandate shared with other authorities and the division of responsibility is not clear. An unclear mandate and unclear division of responsibility make it difficult to evaluate the target attainment. This means that the independence the Riksbank has in the monetary policy field cannot self-evidently be applied to financial stability in the same way.

In conclusion, Ms Ekholm wished to comment on Ms Wickman-Parak's contribution to the discussion on how Norges Bank have chosen to manage the risks of a low interest rate over a long period of time. In Norway, inflation is also far below the target, but unlike Sweden there does not appear to be any spare capacity in the economy; rather the reverse, that is, some overheating. It is understandable not to want to cut the policy rate to bring up inflation in this situation, without including financial stability in the picture. Ms Ekholm was a little sceptical towards their approach of adding a term to the loss function, as Ms Wickman-Parak mentioned. This approach does not facilitate an evaluation of how well monetary policy achieves its objectives, as one still does not know what the grounds are for including this term in the loss function. However, Ms Ekholm

agreed with Ms Wickman-Parak that it is positive to have an open discussion on these issues.

Governor **Stefan Ingves** then summarised the monetary policy discussion.

It was noted at the meeting that growth in the Swedish economy is weak and that inflationary pressures are low. New information supports the picture presented in the December Monetary Policy Update that GDP fell in the fourth quarter of last year, but indicates that the situation has stabilised since then and that the business cycle will gradually strengthen during 2013. Some positive signs have emerged; companies in Sweden and abroad have become a little more optimistic about the future, for example. As the labour market lags behind the business cycle, the assessment is nevertheless that employment will level out and that unemployment will increase somewhat in the year immediately ahead. However, the concern that there would be a greater decline in economic activity that several members of the Executive Board expressed in December has now lessened.

Given that inflationary pressures are low and that resource utilisation is lower than normal, the Executive Board agreed that the repo rate should continue to be low. However, as at previous meetings, there were differences with regard to how expansionary monetary policy should be.

The assessment of a majority of four of the Board members was that letting the repo remain at 1 per cent during the year ahead would enable inflation to reach the target of 2 per cent after just over a year and resource utilisation to normalise. They did not believe that a slightly lower repo rate would alter this assessment in any decisive way. They also regarded the chosen repo-rate path as appropriate considering that the risks that the high level of household indebtedness poses to economic development in the long term still remain.

Two members considered that there was scope for a lower repo-rate path and they advocated cutting the repo rate to 0.75 and 0.5 per cent respectively and lower repo-rate paths so that CPIF inflation would reach the target of 2 per cent more quickly and unemployment would come closer to a long-run sustainable rate. Their assessment was that there was no reason to take any extra account of household indebtedness at present.

In addition, the meeting discussed to what degree monetary policy can influence unemployment and the debt ratio, to what extent monetary policy can be used to exert detailed control over economic developments and different views of developments abroad. The meeting also discussed the inflation forecast, the reasons why inflation has been lower than was expected two years ago and what the consequences of a lower repo rate since 2010 would have been. There was also a discussion of the larger differences

than normal between prices increases for goods and services and what this means for economic development and inflation in the future.

§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 13 February 2013, at 9.30 a.m.,
- to hold the repo rate unchanged at 1.00 per cent and that this decision would apply with effect from 20 February 2013,
- to publish the decision above at 9.30 a.m. on Thursday 13 February 2013 with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on Tuesday, 26 February at 9.30 a.m.

Deputy Governor Karolina Ekholm entered a reservation against the decision to maintain the repo rate at its current level and against the repo-rate path in the Monetary Policy Report. She advocated a lowering of the repo rate to 0.75 per cent and a repo-rate path that stays at 0.75 per cent through the first quarter of 2014, and then rises to just below 2 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.

Deputy Governor Lars E. O. Svensson entered reservations against the Monetary Policy Report and the decision about the repo rate and the repo-rate path in the Monetary Policy Report. He advocated lowering the repo rate to 0.5 per cent and then a repo-rate path that stays at 0.5 per cent through the first quarter of 2014, and then rises to 1.5 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, foreign growth and Swedish inflation are too high and that given these circumstances his repo-rate path implies a forecast for CPIF inflation that is closer to the inflation target and a forecast for unemployment that is closer to a long-run sustainable rate and therefore constitutes a better-balanced monetary policy. In addition, he considered that his lower repo-rate path would not have a noticeable effect on household indebtedness as monetary policy normally only has very minor short-term effects on indebtedness and, with low and stable inflation, no long-term effects of this kind.

This paragraph was verified immediately.

Minutes by

Ann-Christine Högberg

Verified by:

Karolina Ekholm

Stefan Ingves

Per Jansson

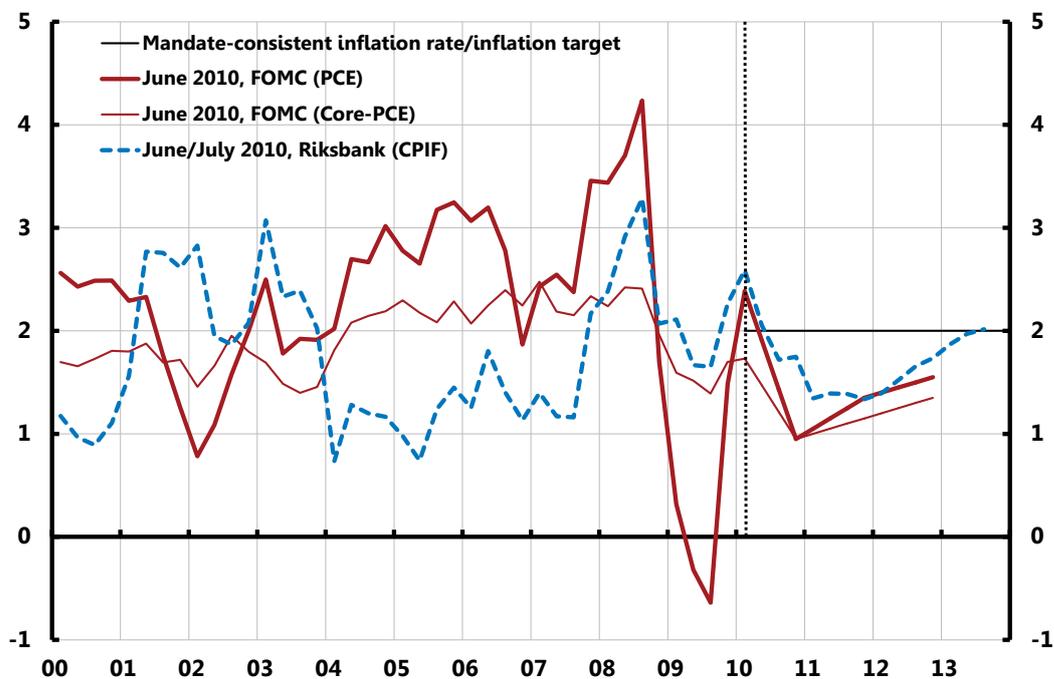
Kerstin af Jochnick

Lars E.O. Svensson

Barbro Wickman-Parak

Figure 1. Inflation forecasts; the FOMC and the Riksbank; June/July 2010

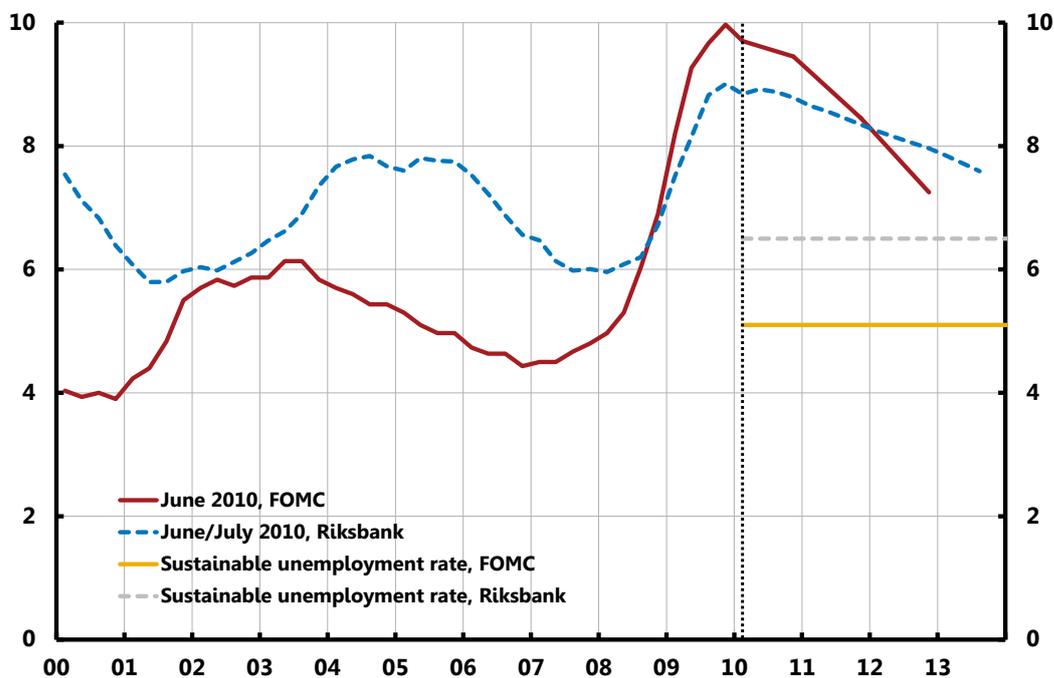
Per cent



Sources: Bureau of Economic Analysis, FOMC, the Riksbank, Statistics Sweden and Svensson, Lars E.O., "Practical Monetary Policy: Examples from Sweden and the United States", *Brookings Papers on Economic activity*, Fall 2011, pp. 289-332.

Figure 2. Unemployment forecasts; the FOMC and the Riksbank; June/July 2010

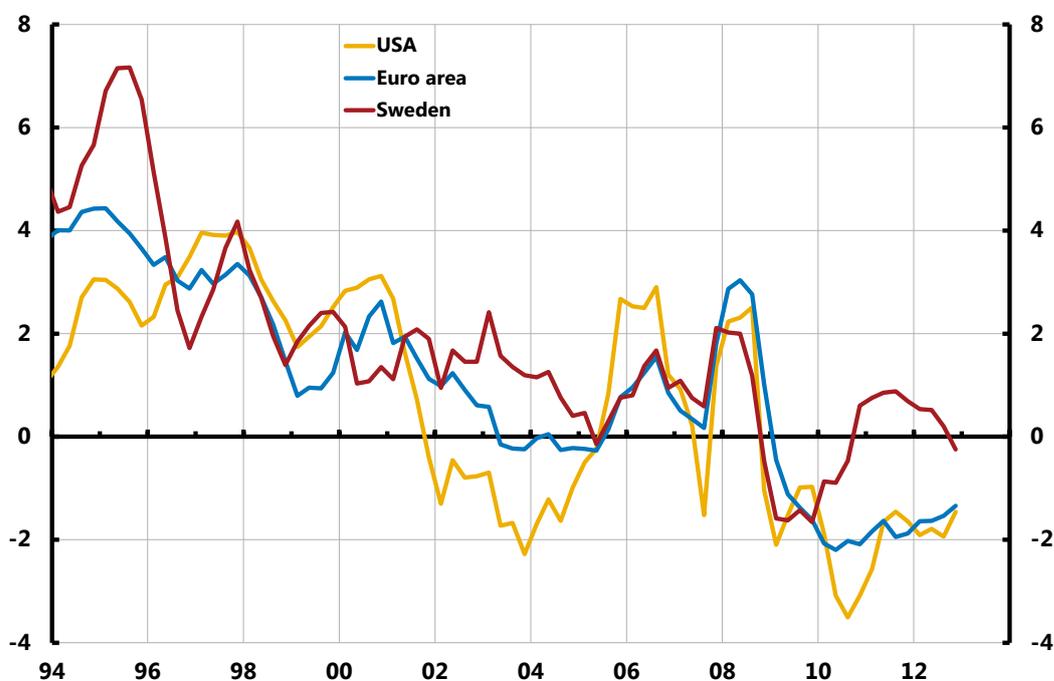
Per cent



Sources: The Bureau of Labor Statistics, the FOMC, the Riksbank and Statistics Sweden.

Figure 3. Real one-year interest rate

Per cent

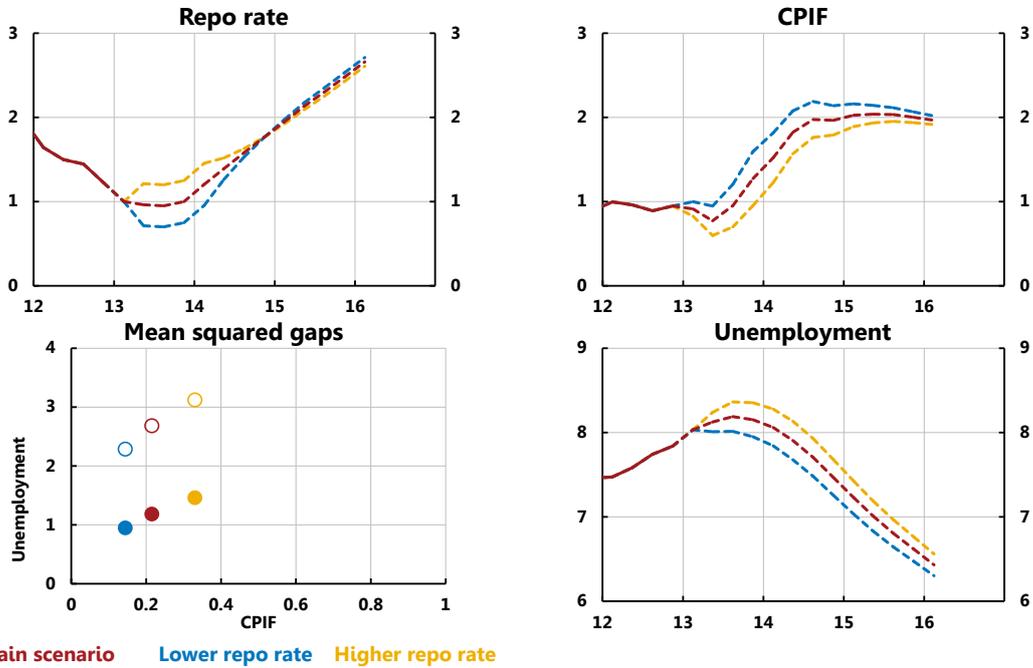


Sources: The ECB, the Bureau of Labor Statistics, the IMF, the OCED, Statistics Sweden and the Riksbank.

Figure 4. Monetary policy alternatives around the main scenario

Effects according to RAMSES, partly expected monetary policy shocks.

Policy rates abroad according to the main scenario. Long-run sustainable unemployment 6.25 %

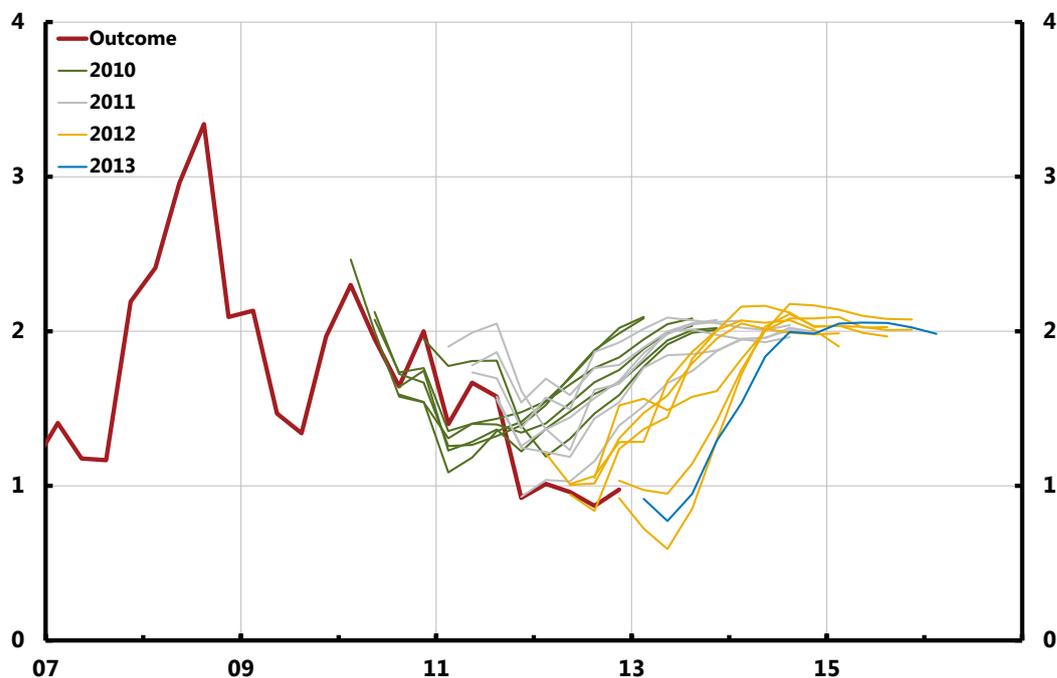


Sources: Statistics Sweden and the Riksbank.

Note. Empty circles indicate mean squared gaps calculated with long-run sustainable employment of 5.5%

Figure 5. CPIF inflation, outcome and forecasts for 2010-2013

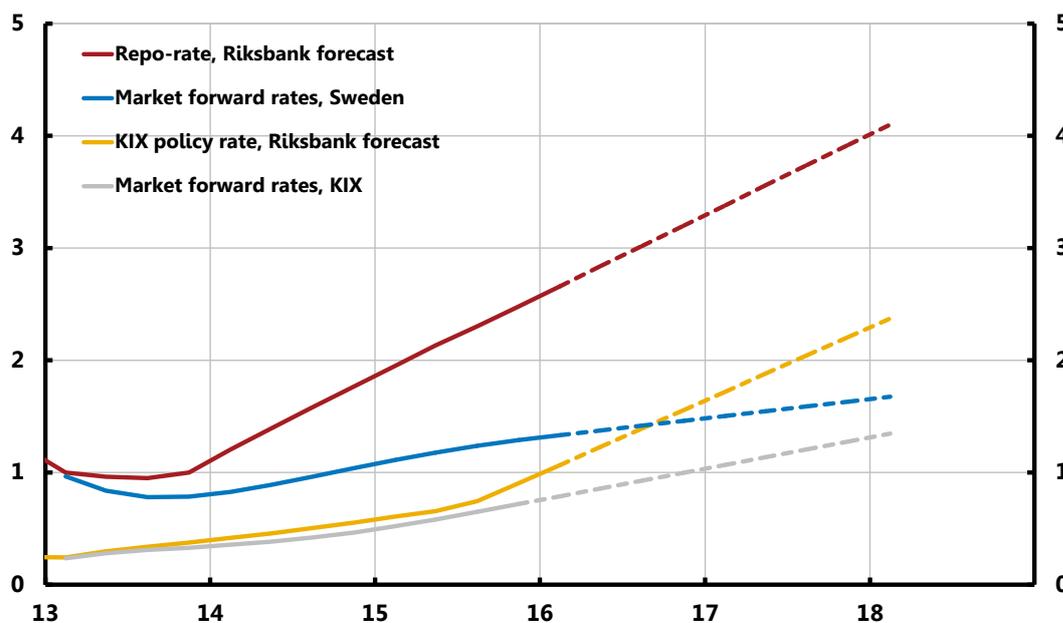
Per cent



Sources: Statistics Sweden and the Riksbank.

Figure 6. Repo-rate path, market forward rates and forecast for KIX-weighted policy rate, February 2013

Per cent

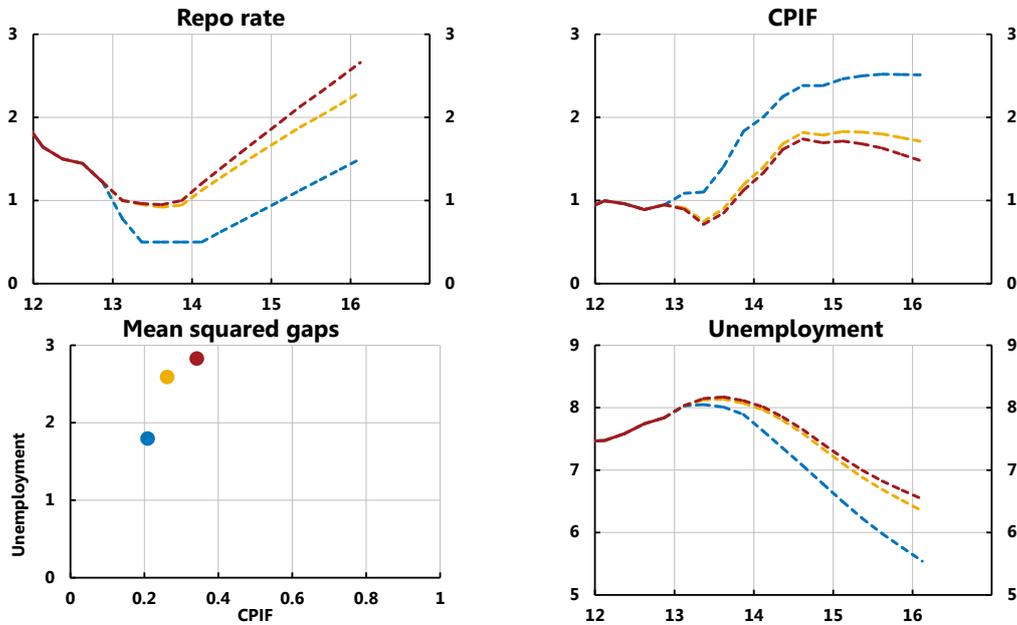


Sources: National sources, Reuters EcoWin, the Riksbank and own calculations

Figure 7. Monetary policy alternatives, February 2013

Interest rates abroad according to forward pricing. Assessed forecast for unemployment with a low repo-rate path. Mean squared gap calculated on a sustainable rate of unemployment of 5.5%

Per cent

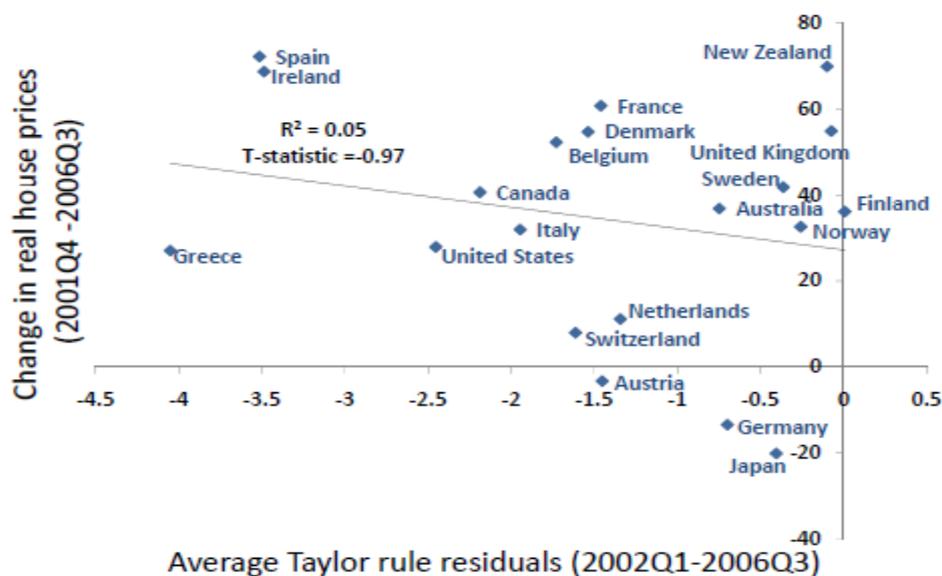


Main scenario repo rate path Lower repo rate at 0.5% Ramses endogenous response

Sources: Statistics Sweden and the Riksbank.

Figure 8. Monetary policy and house prices in developed countries

Per cent



Source: Bernanke, Ben S. (2010), "Monetary policy and the housing bubble", AEA meeting, January 2010



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