Minutes of monetary policy meeting

APRIL 2013
Summary

At the monetary policy meeting on 16 April, the Executive Board of the Riksbank decided to hold the repo rate unchanged at 1.0 per cent and to adjust the repo-rate path downwards. Slow increases in the repo rate are not expected to begin until the second half of 2014.

It was noted at the meeting that the recovery in the economy was expected to be gradual and that the labour market would improve next year. An increasing number of indicators, in the form of both soft and hard data, support the picture of growth prospects improving in Sweden and other parts of the world. Inflationary pressures are low. It is now expected to take longer before inflation rises, and CPIF inflation is not expected to reach 2 per cent until 2015. At the same time, there are signs that housing prices are increasing at a faster pace and this contributes to the upward revision in the forecast for household debt. The largest changes in relation to the forecasts in the February Monetary Policy Report concern inflation in the coming period and developments in household debt.

The Executive Board was unanimous that monetary policy needs to be more expansionary, given the low inflation. A majority of Executive Board members considered at the same time that the high level of household debt was something that should be taken into consideration in their monetary policy. Rising debt is considered to increase the risk of a sharp increase in unemployment and long-lasting difficulties in attaining the inflation target.

A majority of four members thus assessed that it was appropriate to hold the repo rate unchanged at 1 per cent until the second half of 2014, which is around one year longer than was forecast in the Monetary Policy Report published in February. The monetary policy conducted is expected to stimulate economic developments and inflation at the same time as taking into account the risks linked to households’ high indebtedness.

Two members considered that there was scope for a lower repo-rate path and they advocated cutting the repo rate to 0.75 and 0.50 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 more quickly. They assessed that these lower repo-rate paths would lead to very minor increases in the household debt ratio and would not tangibly affect possible risks connected with household debt.

The future development of the repo rate was also discussed at the meeting. If the repo rate needs to be adjusted in the coming period, it is slightly more likely that it will be cut than that it will be raised, which is due to the low inflationary pressures and continuing uncertainty over developments in the euro area. The Executive Board also discussed developments abroad, both the risk of poorer developments and the possibility of more positive outcomes. The members raised the question of the Swedish krona and its significance for the economy and inflation, as well as whether monetary policy should take into account the risk of high debt. There was also discussion of how far monetary policy can influence unemployment and the debt ratio.
MINUTES OF MONETARY POLICY MEETING
Executive Board, No. 2

DATE: 16/04/2013
TIME 09.00

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

Hanna Armelius
Meredith Beechey Österholm
Claes Berg
Charlotta Edler
Mattias Erlandsson
Kerstin Hallsten
Mia Holmfeldt (§ 1)
Ann-Christine Högberg
Anna Lidberg
Tomas Lundberg
Ann-Leena Mikiver
Marianne Nessén
Christina Nyman
Maria Sandström (§ 1)
Lena Strömberg
Åsa Sydén
Ulf Söderström
David Vestin
Staffan Viotti
Anders Vredin
Veronica Wahlberg (§ 1)

It was noted that Hanna Armelius and Anna Lidberg would prepare draft minutes of § 1, 2 and 3 of the Executive Board’s monetary policy meeting.
§1. Economic developments

Maria Sandström of the Financial Stability Department began by describing recent developments in Sweden and the euro area with regard to crisis measures in the problem countries in Europe and the price of credit risk for banks and governments.

Veronica Wahlberg of the Monetary Policy Department presented developments on the financial markets. Since the monetary policy meeting in February, government bond yields in Sweden, Germany, the United States and Japan have fallen, while stock markets have risen. However, share indexes have fallen somewhat recently, partly as a result of weaker statistics from China than expected. The Swedish krona has appreciated by around 2 per cent since February, when measured in KIX-weighted terms. According to market prices and survey responses, as well as market analyses, the repo rate is expected to be held unchanged at today’s meeting. The first increase from the current level is not expected until during the second half of 2014.

Christina Nyman, Deputy Head of the Monetary Policy Department, presented the draft Monetary Policy Update which, in the assessment of the Monetary Policy Department, should gain the support of the majority of the Executive Board members. She began by noting that the forecasts in the draft report were discussed by the Executive Board at meetings held on 18 March and 3 and 8 April. The text of the draft Monetary Policy Update was discussed at a meeting of the Executive Board on 11 April.

All in all, the new information received since the monetary policy meeting in February has been largely in line with the assessment made then. Confidence indicators abroad show a general improvement, apart from the euro area, which has showed signs of a somewhat poorer development than expected. However, overall the gradual recovery abroad is expected to continue. Despite the continuing problems in the euro area, developments on the financial markets have been relatively stable, with so far limited contagion effects from the uncertainty over the outcome of the parliamentary elections in Italy and the problems in Cyprus. With regard to Sweden, the GDP figures for the fourth quarter of 2012 were weak, but slightly better than expected, and indicators for the beginning of 2013 point to a gradually recovery in Sweden, too. Sentiment among households and companies has improved in recent months. Consumption showed strong development towards the end of last year and has been followed by rising retail sales during the current year.

New calculation methods from Statistics Sweden mean that the figures for unemployment have been revised up and employment revised down since 2010. However, labour market statistics have been stable in January and February and both unemployment and employment are in line with the assessment made in February. Labour market indicators point to continued stable development in the coming period.
CPI inflation was in line with the forecast in March, while CPIF inflation, that is, the CPI with a fixed mortgage rate, was slightly higher than expected.

The forecasts in the draft Monetary Policy Update show that GDP growth is expected to be slower during the first half of 2013 and then to normalise during the second half of the year. Unemployment and the employment rate are expected to remain at their current levels for the rest of the year. Inflationary pressures are expected to be low in the coming period, but will then rise as economic activity strengthens. Household debt will increase more quickly in the coming period, compared with the earlier assessment. It is expected to take longer for inflation to attain the target as a result of new assessments of how quickly companies pass on costs to consumers and developments in the exchange rate. CPIF inflation is expected to reach 2 per cent at the beginning of 2015. The annual rate of change in the CPI will be slightly negative for most of the year, which can be largely explained by a fall in households’ mortgage costs. The rate of increase in the CPI is expected to be around 2 per cent at the end of 2014, and to be around 3 per cent at the end of the forecast period.

Ms Nyman also noted that the most recent statistics received from the United States and China over the past few days were relatively weak. However, this was partly expected and thus does not change the international forecast as a whole.

The repo-rate path has been adjusted downwards, given the lower forecast for inflation, and the repo rate is now expected to remain unchanged at 1 per cent until the second half of 2014, and then rise gradually to 2.5 per cent at the beginning of 2016. This path is expected to stimulate economic developments so that inflation attains the target, at the same time as taking into account the risks linked to households’ high indebtedness. If the repo rate needs to be adjusted in the coming period, it is slightly more likely that it will be cut than that it will be raised, which is due to the low inflationary pressures and continuing uncertainty over developments in the euro area.

§2. The economic situation and monetary policy

Deputy Governor Lars E.O. Svensson began by referring to some figures that he had brought with him. The first figure, Figure 1, shows inflation in February 2013 for a number of countries measured in terms of the HICP, so that it is comparable between countries. It is clear from the figure that inflation in Sweden, which is marked as a red bar, is among the lowest of all. The green bar shows what inflation could have been if one had conducted a more expansionary monetary policy with effect from June 2010, according to an analysis by Mr Svensson. Figure 2 shows unemployment in these countries, where Sweden’s red bar is high, with an unemployment rate of 8.2 per cent. Among the advanced economies in Europe that are not in a direct crisis, only France has a higher unemployment rate than Sweden. The green bar shows the unemployment rate, just
below 7 per cent, that would have resulted from conducting a more expansionary monetary policy from June 2010.

Mr Svensson went on to present this analysis in Figure 3, which shows the results of a counterfactual experiment he had referred to at the previous monetary policy meeting, and which he had described in greater detail in his reservation against the Riksbank’s Account of monetary policy 2012.¹ The experiment is based on Mr Svensson’s own calculations. In the counterfactual experiment, the policy rate is held at 0.25 per cent from 2010 onwards. Mr Svensson had updated the experiment, using Statistics Sweden’s new revisions of the figures for unemployment. The seasonally-adjusted unemployment rate is currently 8.2 per cent. With a more expansionary monetary policy, it might have been down at 7 per cent. Mr Svensson pointed out that of course the calculations were uncertain, but said that they were no more uncertain than other alternative scenarios made using similar standard methods.

Mr Svensson referred to the consequences for household debt in the experiment, which he had mentioned earlier, namely that the debt ratio would have been around 3 percentage points higher with the more expansionary monetary policy, which means 177 per cent of disposable income instead of the current 174 per cent. This was shown in the lower left-hand panel in Figure 3. The important thing, said Mr Svensson, was not the exact figures but the fact that the effect of the policy rate on debt was so slight. He pointed out that the figures were in line with extensive research and investigation in this field – including essays from the Riksbank’s inquiry into risks in the Swedish housing market – to which Mr Svensson referred in the minutes of the monetary policy meeting in February and in his reservation against the Account of monetary policy 2012.² Moreover, according to this extensive research, it has been shown that the policy rate has no effect on the debt ratio in the longer run, as housing prices and the debt ratio are determined by conditions over which monetary policy has no influence when inflation is low and stable; for example, the long-run real mortgage rate after tax.

Mr Svensson observed that to think the actual outcome was better than the counterfactual outcome one would have to claim that a debt ratio around 3 percentage points higher would entail so much greater risks for future inflation, unemployment or financial stability that it would be worth the cost of now having an inflation rate far below the target and an unemployment rate 1.2 percentage points higher. Mr Svensson believed that most people would agree that such a small increase in the debt ratio would scarcely

have any effect on potential risks connected with household debt. However, he noted that a majority of the members of the Executive Board did not seem to agree with him.

Mr Svensson pointed out that the Riksbank shall, without prejudice to the price stability target, support the objectives of general economic policy with the purpose of achieving sustainable growth and high employment. As emphasized in the Spring Fiscal Policy Bill 2013, the objective of the Government’s economic policy is full employment. The bill also mentions a clear headwind that is holding back the recovery in Sweden following the global financial and debt crisis. Mr Svensson claimed that the Riksbank was unfortunately contributing to this headwind, by in practice neglecting both the price stability target and the target of full employment and was thus counteracting the Government’s target of full employment. Mr Svensson said that this was being done in an ineffectual and misguided attempt to limit household debt. He explained that it was in the light of these circumstances that he had said that the monetary policy conducted in recent years was a clear and serious failure.

Mr Svensson pointed out that with regard to household debt, a majority of the Executive Board members usually said that when no other authority was doing anything, the Riksbank was forced to act. However, on closer examination, it appeared that the Riksbank’s tighter monetary policy since June 2010 had been a completely empty gesture with regard to debt, as debt had only been around 3 percentage points lower than it would have been with a lower repo rate, according to Mr Svensson’s calculations. However, it was a gesture that had hit the Swedish people, in the form of higher unemployment and lower inflation. The Government and Finansinspektionen (the Swedish Financial Supervisory Authority), on the other hand, have taken action and taken or announced effective measures, namely the mortgage cap (which has a clear effect according to Finansinspektionen’s Swedish Mortgage Market Reports in 2012 and 2013), tougher capital adequacy requirements for systemically-important banks, higher risk weights on mortgages and a thorough examination of the mortgage market and mortgage borrowers in Finansinspektionen’s Swedish Mortgage Market Reports in 2012 and 2013. The banks have also contributed with thorough credit assessments and by following the recommendation regarding the mortgage cap, according to Finansinspektionen’s Swedish Mortgage Market Reports.

Mr Svensson advocated, as at the previous monetary policy meeting, a much lower repo-rate path than the one in the main scenario of the draft Monetary Policy Update. As at the previous meeting, Mr Svensson considered that the forecasts in the Update for policy rates and growth abroad were exaggeratedly high. Mr Svensson considered that inflationary pressures were probably still overestimated in the forecast, despite the inflation forecast being much lower than at the previous meeting. He pointed out that the National Institute of Economic Research and the Swedish Ministry of Finance had much
lower forecasts for inflation, with CPIF inflation not reaching 2 per cent until 2017, despite their assumption of a lower repo-rate path.

He also asserted that even if one were to accept all of the assumptions in the draft Monetary Policy Update, a lower repo-rate path than in the main scenario would give better target fulfilment for CPIF inflation and unemployment. He referred to Figure 4, which shows the main scenario and forecasts for alternative repo-rate paths using the Riksbank’s model, Ramses. According to Mr Svensson, this conclusion also applied if one assumed that inflation and unemployment reacted more slowly to interest rate changes than in the Ramses model. If the reaction were slower, it would, as before, be an argument in favour of a larger and earlier repo-rate cut, not for a later and smaller cut.

In the lower left-hand panel of the figure, Mr Svensson had entered the effect of the debt ratio according to the rule of thumb mentioned at the previous monetary policy meeting, that is, that a 1 percentage point lower policy rate for four quarters gives a debt ratio roughly 1 per cent higher, around 1.7 percentage points with a debt ratio of around 170 per cent of disposable income, within a couple of years. This means that a policy rate that is 0.25 percentage points lower gives a debt ratio that is roughly 0.4 percentage points higher. Mr Svensson pointed out that this was so small that it could hardly be detected in the figure.

He emphasised that what is important in the choice between different repo-rate paths with regard to debt is the difference between the corresponding forecasts for the debt ratio, not the actual level of the forecasts. If the differences are small, then reasonably the differences in the risk ought to be small. In that case the debt ratio does not play a role in the choice between repo-rate paths, regardless of whether or not one is concerned about the debt ratio.

Mr Svensson further considered, as at previous monetary policy meetings, that a forecast for policy rates abroad in line with forward rates (the grey line in Figure 5) was a more realistic forecast for policy rates abroad at present than the forecast in the main scenario (the yellow line). He pointed out that although the difference was smaller than before, there was still a technical assumption that policy rates abroad would rise beyond the forecast horizon (this was not shown in Figure 5 but could be seen in the corresponding figure from the monetary policy meeting in September 2012). All in all, Mr Svensson said that this provided arguments in favour of a significantly lower repo-rate path, as shown in Figure 6. Under the assumption of policy rates abroad following forward rates, Figure 6 shows the forecasts for CPIF inflation and unemployment with the main scenario’s repo-rate path and a lower repo-rate path. 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 lower repo-rate path led to clearly better target attainment for both inflation and unemployment (the blue curves in the right-hand panels).

Mr Svensson had also added an assessment of the effect on the debt ratio of lower policy rates abroad in the lower left-hand panel in Figure 6, which is calculated in line with the rule of thumb he mentioned earlier. According to these calculations, the debt ratio would be around 2 percentage points higher at the end of the forecast period, that is, around 180 per cent instead of 178. Mr Svensson found it difficult to see that this would entail any tangible increase in potential risks connected with the debt ratio, even if the debt ratio were to rise slightly more. Moreover, the loan-to-value ratio could fall somewhat and the leverage ratio (net worth to total assets) could increase somewhat. This is because housing prices would rise for all types of housing, but loans would only increase for new borrowers. He pointed out that in the long run, there would be no effect on the debt ratio, the loan-to-value ratio or the leverage ratio.

Given this, Mr Svensson preferred cutting the repo rate by 0.5 percentage points to 0.5 per cent and then a repo-rate path that stays at 0.25 per cent from the third quarter of 2013 through the third quarter of 2014, and then rises gradually to 1.5 per cent by the end of the forecast period. This repo-rate path then 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. It therefore constitutes a better-balanced monetary policy, according to Mr Svensson. He said that this lower repo-rate path might increase the household debt ratio by a couple of percentage points within a couple of years, but not in the long term. It would thus not have any noticeable effect on any risks associated with household debt.

Deputy Governor Karolina Ekholm began by saying that developments in Sweden and abroad were in line with the forecasts made at the last meeting. She therefore did not see any obvious reason to revise the forecast for this reason. The information received recently could possibly be perceived as poorer than expected with regard to international developments, and slightly better than expected with regard to Sweden. But prospects are largely the same. Ms Ekholm noted that the fairly substantial revision of the forecast was due to a review of the Riksbank’s own inflation forecast that had led to a new assessment, where the forecast for inflationary pressures was revised down. This means that the Riksbank is now more in line with other forecasters, who did not believe in a rapid rise in inflation to 2 per cent.

The Riksbank’s earlier forecast was based on CPIF inflation excluding energy increasing more quickly than unit labour costs in the coming period. For one thing, this assessment was justified by the observation that unit labour costs had been increasing more than the price level for some time now, which should lead to falling profit margins. Companies may need to restore these as economic activity improves. The forecast is now based on
prices in the slightly longer run increasing at roughly the same rate as unit labour costs, which implies that companies are expected to absorb some of the cost increases that have arisen into their profit margins. Ms Ekholm thought that it seemed a reasonable assumption, which was also supported by several of the Riksbank’s forecasting models. She supported this revision and the forecast for prospects for the Swedish economy as a whole.

However, Ms Ekholm did not support the proposed repo-rate path. She pointed out that although it had been revised down in the sense that increases from the current level were now expected to come much later during the forecast period, the arguments against cutting the repo rate in the near term were not tenable, according to Ms Ekholm. The starting point was already that inflation is expected to be below the target level for most of the forecast period, and unemployment is expected to be fairly high above what can be considered a long-run sustainable level. Moreover, inflation has been below the target for a period of time, while unemployment has been high. Ms Ekholm noted that people outside the Riksbank have begun to question whether the Riksbank is even trying to attain its inflation target. When making a substantial downward revision to the forecast for inflationary pressures, it ought to be fairly self-evident that the repo rate needs to be cut. This would ensure that inflation reached the target sooner and would push down unemployment further. With the proposed repo-rate path CPIF inflation is expected to reach 2 per cent at some point in 2015, that is, a couple of years from now. Unemployment is not expected to approach 6.25 per cent, which is the midpoint of the interval the Monetary Policy Department considers a long-run sustainable rate of unemployment, until very late in the forecast period. Ms Ekholm feared that failing to cut the repo rate in this situation, with the downward revision to the forecast for inflationary pressures, could make external analysts more convinced that the Riksbank has abandoned the inflation target as the basis for its monetary policy decisions.

Ms Ekholm pointed out that the reason stated in the draft Monetary Policy Update against cutting the repo rate is that this would increase the risks associated with household debt, that is, that it would be a policy alternative that entailed higher risk. It is this higher risk that must be weighed against fairly certain gains in the form of lower unemployment. Ms Ekholm was not convinced that the alternative with a lower repo rate actually entailed higher risk. By not cutting the repo rate, the risk of losing confidence in the inflation target increases and Ms Ekholm did not consider it clear which of these alternatives entailed the greatest risk.

Ms Ekholm said that, given the emphasis put on the potential increase in risks connected with household debt if the repo rate were cut, one would expect a thorough analysis of what these risks are and how monetary policy affects them. But in her opinion there were only fairly loose claims that a lower repo rate would increase the risk of imbalances building up, and that such imbalances would be difficult to manage if there was an
upward trend in housing prices and debt. There is no explanation of what the imbalances consist of nor how monetary policy is expected to influence them. There is merely a claim that they would be difficult to manage if there was an upward trend in housing prices and debt. An upward trend has been noted for a fairly long time since the mid-1990s, and this does not appear to have been particularly strongly linked to the repo rate. Ms Ekholm wondered what it was that said that the repo rate would govern this trend now.

In recent years, developments with regard to housing prices and debt have been fairly subdued, although prices of tenant-owned apartments have continued to rise recently. There are several possible reasons why developments have slowed down, but measures directly aimed at housing credits, such as the recommendation of a mortgage cap of 85 per cent, have probably played a role. It says in the draft Monetary Policy Update that there is great uncertainty over the effects of such measures and whether they are sufficient, implying that the repo rate must therefore be held up to restrain developments with regard to household debt. Ms Ekholm argued that it is rather strange to claim that as the effects of direct measures to influence lending to households are uncertain, the monetary policy rate, which has a broad effect on the whole economy and extremely uncertain effects on mortgages, should be used here. One thing that can be said for certain is that using the policy rate for this purpose will have substantial negative side-effects for the economy.

Ms Ekholm considered it very unfortunate that there was no thorough analysis of the relationship between monetary policy and the risks connected with financial imbalances. This means that it has been made clear that monetary policy is no longer conducted on the basis of a medium-term flexible inflation target, without giving the outside world any clear information on what monetary policy is based on instead. Ms Ekholm said that the focus on household debt in this context was unfortunate and far too narrow. The significance of a relatively high level of household saving, which distinguishes Sweden from most countries that have experienced problems in connection with falling house prices, must also be assessed. The high level of saving has led to households' financial assets having increased almost as much as their debts, which can be expected to alleviate their vulnerability to such shocks as loss of income and falls in house prices.

The benefits of inflation targeting have been to create credibility in monetary policy by making it clearer and more predictable. In this way, the Riksbank has been able to anchor inflation expectations around 2 per cent, which has made it possible to stabilise developments in the real economy with the aid of monetary policy, so that the repo rate has been able to serve as an efficient stabilisation policy instrument. Now this framework is changing, without any proper discussion or analysis of whether this is really a sensible strategy.

Ms Ekholm claimed that this strategy was fairly risky and said that households' mortgages were probably growing for structural reasons, and that there was not very much that
monetary policy could do about it. Sweden has a poorly functioning housing market, where rent regulations, tax deductions on mortgage interest and regulations regarding land-use planning create major distortions. Housing construction has been extremely low for 20 years and this has led to a significant housing shortage in most growth regions. Moreover, the percentage of households that own their own home has increased rather substantially, probably as a result of the strong incentives to convert rental properties to tenant-owned properties in metropolitan regions. Ms Ekholm said that this development is not something that monetary policy can influence. She saw a considerable risk that the Riksbank, by ascribing too much importance to household debt, could jeopardise the anchor provided by inflation targeting. Monetary policy risks losing credibility, at the same time as household debt merely continues to increase. Ms Ekholm did not see any gains in this; on the contrary she saw the loss of something that had taken a long time to build up.

Given this reasoning, Ms Ekholm argued that the repo rate should be cut now and she advocated a cut of 0.25 percentage points, to 0.75 per cent. She preferred a repo-rate path where the repo rate remains at this level until the second half of 2014, and then rises to around 1.75 per cent at the end of the forecast period. According to model simulations, such a repo-rate path would lead to somewhat better target attainment with regard to inflation and unemployment than the repo-rate path in the Monetary Policy Update, when taking all of the other parts of the forecast for granted. Moreover, it would give a significantly better target attainment if one bases the forecasts for policy rates abroad on implied forward rates. Regardless of which of these two forecasts for foreign policy rates one chooses – the one used in the draft Monetary Policy Update or the one based on implied forward rates – Ms Ekholm’s repo-rate path entailed better target attainment for inflation and unemployment according to the macro model Ramses. According to the rule of thumb for the relationship between the repo rate and the debt ratio referred to by Mr Svensson, this repo-rate path entails a debt ratio that is around 1 percentage higher at the end of the forecast period compared with the repo-rate path in the draft Monetary Policy Update (around 178 instead of 177 per cent). Ms Ekholm considered this to be a far too small increase to be able to influence any risks linked to financial imbalances.

Deputy Governor Barbro Wickman-Parak began by pointing out that despite the election in Italy having the worst possible outcome for forming a stable government, despite the crisis in Cyprus and despite the recent discussions on Portugal, there had not been any major disruptions on the financial markets. The Riksbank assumes in its forecasts that the problems in the euro area will be resolved so that acute crises can be avoided. Increased political uncertainty could have a negative effect on confidence and the conditions for growth. Something of this is illustrated by recent developments in the
euro area. Confidence indicators there have fallen recently and this may be connected to the situation in Italy and Cyprus, for instance.

Ms Wickman-Parak recalled that the assumption that the euro area would hold back growth was not new, but had been included in the forecasts for some time now. But at the same time, growth in the global economy as a whole was expected to develop fairly well. The recovery in the United States is making good headway despite the fiscal policy tightening, although the effects had not yet been fully felt. The emerging economies, with China in the lead, are continuing to grow at a good pace. There have recently been some slightly weaker statistics than expected regarding the United States and China. This has led to headlines in the media. But Ms Wickman-Parak’s assessment was that the positive signals have clearly outweighed the negative ones during the period since the previous monetary policy meeting.

She thought that developments in the Swedish economy appeared more reassuring than in February. Confidence indicators for companies have strengthened and production plans look more positive. The improvement is mainly visible in the indicators, but now perhaps the more positive signals will cautiously enter the outcome figures, too. Slightly higher retail figures than expected and stronger order intakes, according to the most recent monthly figures from Statistics Sweden, may herald this. A longer period with positive outcomes is needed before drawing any firmer conclusions. So far, neither the indicators nor the outcome data signalled a strong recovery in the near term, but they were pointing in the right direction and Ms Wickman-Parak considered this to be positive.

What worried her most at the end of last year was that household confidence had deteriorated rapidly, the service sector had shown signs of weakening and the signs on the labour market were ominous. Things looked a little better on all of these fronts back in February, and the positive tendencies have continued since then. Perhaps the most positive thing, in Ms Wickman-Parak’s opinion, was that household confidence had returned so strongly that it was currently close to its normal level. Her assessment was that the strength of the domestic economy now looked positive. This meant that the conditions are better for dealing with the coming period of continued weak export demand.

Ms Wickman-Parak then went on to comment on the decision regarding the repo rate and the repo-rate path. She noted that the forecast for inflation had been revised down and that it was expected to take longer before inflation attains the target. At the same time, resource utilisation is below a normal level. Following a mechanical reasoning, the repo rate should be cut and the decision today would therefore be a simple one. However, she found that this was not the case. She advocated that the Executive Board hold the repo rate unchanged and notify that it may need to remain unchanged for a long period of time, in line with the proposal in the draft Monetary Policy Update.
Ms Wickman-Parak thought that if one looks beyond the growth that can be expected in the immediate future, one can see the conditions for better growth building up abroad, at the same time as the domestic parts of the economy appear to be on firmer ground than before. Although Ms Wickman-Parak supported the growth forecasts and thought it wise to be cautious in making revisions, especially given the uncertainty in the euro area, she could easily imagine that the growth outlook would be stronger later this year. She thought that this had some bearing on the stance she took.

She emphasised that inflation had so far been in line with the earlier forecast. One of the reasons why inflation is and has been so low recently is that companies’ price mark-ups have been lower than normal, given the way their costs have developed. Weak demand has probably contributed to this. There could also be more long-run changes that are concerned with generally tougher competition. The assessment on this occasion is that it will take longer before companies can raise their prices more in line with costs. Ms Wickman-Parak thought this was reasonable. This, together with the forecast for a somewhat stronger krona, had contributed to the downward revision in the forecast for inflation, particularly in 2014.

It is emphasised in the draft Monetary Policy Report that companies’ price behaviour is one source of uncertainty in the forecasts. Ms Wickman-Parak thought this was an important observation. When demand strengthens in the coming period, one can obtain a better indication of how this component has affected company pricing. The other source of uncertainty is the development of the krona. It could be either stronger or weaker than forecast. If there were to be substantial movements in one direction or the other, this could have consequences for monetary policy through the effects on demand and inflation.

Ms Wickman-Parak’s assessment was that the inflation outlook was not entirely uncomplicated, even taking into account these uncertainty factors. On the one hand, goods prices have been falling over a long period of time, which can be largely attributed to impulses from abroad. On the other hand, services prices have been at around 2 per cent on average over a long period of time. She had already discussed this dichotomy at the previous monetary policy meeting. Goods prices continued to fall in March, but less than previously. The most recent figures, for March, showed a smaller fall than expected. This could be temporary, but if one extends the time period backwards, it looks as though the trend of an accelerating fall in goods prices was broken with effect from the middle of last year. She did not want to be alarmist with regard to inflation, but she thought that the Executive Board should be observant of how, for instance, changes in demand abroad could affect the domestic price outlook fairly quickly. This does not concern the period immediately ahead. However, the Riksbank should always have its focus on the longer run, too.
Ms Wickman-Parak said that the same applies to a high degree to household debt, which has been discussed on repeated occasions. The debt ratio is expected to continue rising, even with the current repo-rate path. She did not think that the increase was alarming, but felt that this type of consideration should also be taken account in the decision. Ms Wickman-Parak pointed out that the problem was that it is difficult to know when the debt level reaches a critical point, but small increases entail a constant accumulation; “the tyranny of small steps”, she felt one could call this.

The households that have jobs can expect good increases in real income and optimism is beginning to return. An even lower repo rate and repo-rate path could very well entail a return to a faster rate of borrowing. It could mean that inflation approached the target sooner, but on the other hand it could involve a risk of problems with growth, employment and inflation in the slightly longer run. It is important for a central bank with an inflation target to focus on attaining its inflation target. However, it is a difficult question how quickly one should try to attain it.

Ms Wickman-Parak argued that she could see opportunities for better growth than that presented in the draft Monetary Policy Update. She was also uncertain with regard to inflation slightly further ahead. In addition, there was the build-up of risk that can occur in households and that can affect resource utilisation and inflation further ahead, that is, the variables that are always central to monetary policy. To her, the proposed repo-rate path presented an appropriate balance on the basis of her own assessments. She pointed out that she would probably have reached a different conclusion if it were not the case that monetary policy was already very expansionary and the effects of earlier repo-rate cuts from 2 to 1 per cent could not be seen.

She argued that this reasoning came within the scope of a flexible inflation-targeting policy. It is not a question of having new targets for monetary policy, but of the time perspective in which monetary policy has an impact. She wondered whether the clarity of monetary policy could be damaged by this type of reasoning, but said that this should not be the case in a complex world that was very uncertain. Ms Wickman-Parak was for her part sceptical to reasoning that could indicate too great a reliance on the precision of the forecasts, even far into the future, and on the precision of the monetary policy impact.

First Deputy Governor Kerstin af Jochnick began by saying that she shared the assessment in the draft Monetary Policy Update of developments in Sweden and abroad, and that she supported the proposal to hold the repo rate unchanged at 1 per cent and to adjust the repo-rate path in accordance with the proposal. As a result of the contributions to the debate already presented, Ms af Jochnick wished to clarify that there was no doubt that the discussion of monetary policy focuses on the inflation target and that the aim is to reach 2 per cent within the forecast period.
Ms af Jochnick noted that developments in recent months had largely followed the 
assessment made in February. However, there are some modifications to the international 
outlook. The recovery in the United States is continuing roughly as expected, although 
the labour market is recovering slowly. Developments in the euro area have been 
somewhat weaker than expected, and the growth forecast for Japan has been revised up 
as a result of the stimulation measures. She said that it was still difficult to assess what 
effects this might have. The global economy is expected to grow at a relatively good 
pace.

In addition to the description of the international outlook in the Monetary Policy Update, 
Ms af Jochnick wished to comment further on developments in Europe, as this is 
important in the assessment of Sweden’s future growth. A small, open economy like 
Sweden’s is sensitive to developments abroad. Developments in the coming period are 
dependent on developments in Europe, and not least on a number of political factors. 
The continued uncertainty in Europe makes it difficult to make accurate forecasts. Growth 
in the euro area is still weak, and Ms af Jochnick agreed with the assessment in the draft 
Monetary Policy Update that growth will recover towards the end of the year. There are, 
however, downside risks to this assessment. Although the most acute part of the financial 
crisis has abated, and the financial markets are now functioning again several 
problems that still remain and need to be managed. Several countries in the euro area have 
structural problems that need to be remedied so they can regain competitiveness. This 
applies not only to some of the smaller crisis countries, but also to larger countries such 
as Italy and France. The downside risks also consist of uncertainty over how several 
countries’ banking and sovereign debt problems will be managed. A number of crisis 
packages have been decided on in the euro area. These have concerned injections of 
capital and liquidity but also major amendments to regulations and establishing new 
authorities. However, the monetary policy transmission mechanism is still disrupted. 
Interest rates charged to households and companies in several crisis countries are still 
much higher than the monetary policy rates. Growth is very weak in several countries and 
unemployment is worryingly high. There are therefore still risks in the euro area. Ms af 
Jochnick feared that the adjustment of the imbalances in the crisis countries could take 
time and that the weakening could spread to larger countries.

With regard to the Swedish economy, sentiment has improved more or less as expected, 
but the picture has changed more distinctly on one point: inflationary pressures are lower 
than expected. This is primarily due to the weak developments in prices internationally, to 
the appreciation of the krona and to the fact that it appears more difficult for companies 
to pass on their cost increases to higher prices. The world has experienced one of the 
most difficult crises in modern times and its after-effects will have an impact on economic 
developments in Sweden and abroad for quite some time, said Ms af Jochnick. Given the 
protracted international crisis, weak growth and the weaker inflationary pressures in
Sweden, the Riksbank will need to retain a low interest rate level for longer than was previously assumed.

Unlike 2012, households are now more positive regarding future developments. The low interest rates contribute to a rise in house prices which will probably be followed by increased household debt. This needs to be taken into account in the monetary policy discussion in the coming period, as household debt is already at a high level. Ms af Jochnick considered that it was not possible to disregard the possibility that high household debt could contribute to macroeconomic problems further ahead. Several external analysts, most recently the European Commission, have also pointed to the Swedish housing market as a potential source of future instability in Sweden. It has been stated in earlier contributions to the debate that the debt ratio would not change very much if interest rates were lower. Ms af Jochnick said that it is not the exact figure for the debt ratio that is important; what worried her was that the debt ratio was high and was expected to increase further when house prices rise.

Ms af Jochnick also considered it important to assess the effects of monetary policy on unemployment. Unemployment is expected to be relatively high during 2013 and then to fall. In the current economic situation the labour market has shown relatively good resilience. The employment rate is among the highest in Europe and the labour supply has increased in recent years. At the same time, there are signs that matching on the labour market is functioning less efficiently and that it is taking longer to recruit staff. The problems for vulnerable groups to enter the labour market still remain. This means that there are signs that the Beveridge curve has shifted outwards, which means that unemployment at a given job vacancy rate is higher. This relationship indicates that the structural problems on the labour market may have increased. Ms af Jochnick said that as monetary policy only affects the cyclical part of unemployment and is not able to correct structural problems on the labour market, it was many other measures than monetary policy that needed to be taken to bring down structural unemployment.

Ms af Jochnick agreed with the assessment that monetary policy should continue to be expansionary until the end of 2014 to attain the inflation target of 2 per cent, measured in terms of the CPIF, at the end of the forecast period. She considered that there was a slightly greater probability of a repo-rate cut than an increase in the coming years, depending on the low inflationary pressures and the uncertainty in Europe. With regard to the exchange rate, the Riksbank does not have any target for this. However, it is possible that it may strengthen more or less than expected. In that case - and all else being equal - the inflation forecast may be affected in such a way that monetary policy needs to be adjusted.

Deputy Governor Per Jansson observed that since the previous monetary policy meeting on 12 February economic developments have been largely as expected both in Sweden and abroad. The Swedish economy has stabilised after a gloomy development during the
latter part of 2012 and most indicators are now pointing to a gradual upswing in economic activity.

Given this, Mr Jansson said that it was natural to approach monetary policy on the basis that the repo-rate path from February need not be changed either, or at least changed only marginally. However, the draft Monetary Policy Update proposes a fairly sizeable revision to the repo-rate path. The repo rate will now remain at 1 per cent until the second half of 2014, which is scarcely one year longer than the forecast in February. The revision is largest during the third quarter of 2014, as the repo rate will now be almost 0.6 percentage points lower than was previously forecast.

Mr Jansson had finally decided, taking all factors into account, that he could support both the macroeconomic forecast and the monetary policy described in the draft Monetary Policy Update. Given that he had expressed considerable concern on many previous occasions with regard to developments in the housing market and in household debt, he was particularly anxious to clarify as far as possible why he felt that such a large change in the repo-rate path was justified. Mr Jansson wished to clearly emphasise that this did not mean in any way that the risks linked to household debt had declined or that he viewed them in a different manner to any great extent.

The fact that he now considered it necessary to make a relatively large revision to the repo-rate path was because inflation would otherwise risk becoming unacceptably low in the years ahead. CPIF inflation took rather a long time, even in the forecast made in February, to come close to 2 per cent. If the repo-rate path were not adjusted, CPIF inflation would not attain 2 per cent at all during the current forecast period, with the changes now made to the inflation forecast. To assume such a low repo-rate path is only legitimate under extreme circumstances, said Mr Jansson, and added that he did not think that circumstances were extreme now.

Mr Jansson took up the question of what had caused the inflation forecast to be revised down. He emphasised that this was not due to any individual aspect that had been recently discovered, but the result of fairly extensive work that had been under way for some time. An important basis for this work has been the analysis of the Riksbank’s inflation forecasts made in connection with the report Account of monetary policy 2012, which was published a few weeks ago. This report shows that the Riksbank, together with other forecasters, has overestimated inflationary pressures in 2012 and that unexpectedly low price mark-ups by companies had systematically contributed to the forecasting error during the year. It can be noted in this context that unit labour costs have increased by a good 2 per cent on average in recent years, while CPIF inflation has been just over 1 per cent. This gives further support to the assessment that companies now have limited opportunities to pass on their cost increases to consumer prices, said Mr Jansson. Against

---

this background, it is therefore assumed in the draft Monetary Policy Update that companies will be more cautious in increasing their prices over the coming years.

Another factor that has contributed to the downward adjustment of the inflation forecast is the exchange rate for the krona. The krona has strengthened a little more than expected recently and although the present level should not pose any real problems to the Swedish export companies it does exert further downward pressure on inflation. The situation can thus be summed up by saying that the inflation forecast is now lower than in February, mainly due to changed assumptions about the companies’ price-setting behaviour and a stronger krona. The largest adjustment is for the spring of 2014, where the new forecast is almost 0.6 percentage points below the forecast in February. CPIF inflation is now expected to reach 2 per cent in 2015, which is approximately one year later than estimated previously.

The new inflation forecast thus entails a slow adjustment of inflation towards the target. Mr Jansson noted that a repo-rate cut today, or an even more substantial downward adjustment of the repo-rate path, would in all likelihood entail better target attainment during the forecast period. However, he wished to point out that it would also further increase the risks associated with the high level of household indebtedness, which even without such an even more expansionary monetary policy are expected to rise compared to February. The analysis suggests that the debt ratio will rise to just over 177 per cent by the end of the forecast period, which is approximately 3.5 percentage points higher than previously. An important reason for this is that housing prices are now increasing more rapidly in terms of actual outcomes and are expected to increase during the forecast period.

A fundamental issue to determine is whether the Riksbank should concern itself with the risks associated with household indebtedness or not. He noted that there were those who claimed that this would mean that the Riksbank had adopted a new target and/or that monetary policy would become less predictable. Mr Jansson said that it was not a question of a new target, as had already been pointed out on a number of occasions. What the issue is all about is that risks arise of imbalances building up. When these imbalances are corrected, the consequences may be a substantial rise in unemployment and protracted difficulties in attaining the inflation target. In this sense, exaggerated indebtedness poses a threat to macro stability. There is therefore no doubt at all that this is an issue the Riksbank should concern itself with.

But even if this does not imply a new target, will it not at least make monetary policy less predictable? Here Mr Jansson said that we cannot address a difficult problem by oversimplifying things or, even worse, ignoring the problem completely. It is an empirical fact that an excessive level of indebtedness has caused very serious problems in many countries in recent years. Such problems were often toned down or even ignored by the
decision-makers in these countries, prior to the eruption of the crisis. Mr Jansson’s guess was that many of these decision-makers now regret this.

A new feature in the forecast presented now is that housing prices are picking up again. A reasonable increase in housing prices is, of course, not a problem but what may be a cause for concern is if there is once again a balance-sheet build-up in which housing prices and household indebtedness increase in a mutually reinforcing process. Such a process would be particularly dangerous if it encompasses unrealistic expectations on the part of the households about the future development of interest rates or housing prices. It is therefore important to prevent this from happening. Mr Jansson said that it was clear to him that the Riksbank and monetary policy have a role to play in this context, but that other Swedish authorities and agents also need to take responsibility. Having said this, he once again underlined the importance of acting while there is still time.

Another important issue is to determine the nature of the relationship between monetary policy on the one hand and housing prices and household indebtedness on the other. Mr Jansson pointed out that it is positive and important that intensive work is now being carried out in this field, but he also wished to emphasise that it will not be possible to arrive at the absolute truth on this issue. This almost never happens in economic science, although there are those who would like to think otherwise. However, this should of course prevent the Riksbank from trying to improve and deepen its thinking and its analysis.

Mr Jansson said that it was important to be clear about how monetary policy should react to such potential imbalances at a conceptual level and he referred to a study by Michael Woodford which he felt had made a highly valuable contribution to the debate. The fundamental insight in this study is that it is not a question of identifying a bubble and then taking decisive action with monetary policy in order to burst it. Monetary policy instead functions as an insurance against low-frequency risks. One may perhaps decide to keep the interest rate at a slightly higher level than one would otherwise do for a certain period of time, or to refrain from making one or two cuts. This would avoid falling into the trap of what Ms Wickman-Parak so aptly called “the tyranny of small steps”. The role of monetary policy in this context is dedramatised when viewed in this way and the task no longer appears to be insurmountable. Woodford himself describes this by saying that the possibilities of monetary policy to play a role are often dismissed incorrectly. He claims that even relatively small changes in short interest rates could have a significant impact.

---


Another important insight in this context is that there are good reasons for believing that the relationship between monetary policy on the one hand and housing prices and household indebtedness on the other hand is not stable over time. There is both theoretical and empirical research that provides evidence of this. A circumstance of particular interest to a central bank is that it can influence the development of housing prices and loans through its communication, perhaps without needing to change its policy rate at all. This works in exactly the same way as standard forward guidance, which is now considered to be one of the most effective tools used in interest rate policies.

Mr Jansson’s conclusion was that it was far from self-evident that monetary policy would have only small effects on housing prices and household indebtedness. The honest answer is that there is no consensus at present on what the effects would be, and that these effects probably vary over time. There will certainly be times when the effects are small, but there may also be times when they are rather substantial.

Mr Jansson ended by saying that he believed that the repo-rate path in the draft Monetary Policy Update represented a well-balanced compromise. By letting it take a little longer for inflation to reach 2 per cent, the Riksbank can continue to make a contribution towards dampening the risks associated with household indebtedness. The fundamental thing is that monetary policy is highly expansionary at present and will remain so in the coming years. This underlines the fact that the Riksbank is giving priority to its inflation target and to attaining this target within a reasonable period of time.

The Governor of the Riksbank, Stefan Ingves, shared the view of developments abroad and in Sweden presented in the draft Monetary Policy Update and also supported the proposal to leave the repo rate unchanged and the new repo-rate path with the forecast that the repo rate needs to remain at one per cent longer than previously assessed before it begins to be raised again.

Mr Ingves noted that developments abroad have been roughly as expected since the previous monetary policy meeting. The recovery continues to be stronger in the emerging economies than in the industrialised countries. There is no reason to make any significant adjustments to the overall international forecast. However, the development of the macroeconomy in the euro area is somewhat weaker than expected and the figure for GDP growth this year has been revised downwards. In the United States, on the other hand, GDP growth is expected to be somewhat stronger this year.

In the case of Europe, which plays an important role for the Swedish economy, the ongoing adjustment of the banks’ balance sheets is proceeding too slowly. The picture regarding interest rates is disjointed and the fact that the adjustment at the banks is taking time is having a negative impact on companies and households. The interest rates that customers have to pay on mortgages and corporate loans are significantly higher in the problem countries than in the core countries. The situation for small and medium-
sized companies is particularly problematic as the risk premiums for new loans are high. The too slow adjustment of the banks’ balance sheets is therefore disrupting the monetary policy transmission mechanism. In addition, Mr Ingv sites noted the need to strengthen public finances and competitiveness. As long as the adjustment of the financial sector lags behind, the monetary policy transmission mechanism will also be disrupted. This is affecting the recovery throughout Europe, where the situation is still in the balance. Developments in the euro area could be better or worse than in the main scenario. Irrespective of what happens, a structural adjustment that will take many years will be required in the countries that have the most serious problems.

In Sweden, the most severe phase of the slowdown in the economy is thought to be over. Mr Ingv sites expected economic activity abroad to improve and the confidence of the Swedish households and companies to gradually strengthen in the period ahead. This means that both domestic demand and exports will grow more quickly. Unemployment has remained more or less unchanged recently, while the number of redundancy notices has declined. So far, the collective bargaining process has led to moderate wage demands, which is to the benefit of the country and the recovery. The assessment is that employment will rise and unemployment will fall, although there will be a certain time lag compared with GDP growth, in accordance with the normal pattern between GDP and employment. Inflation is still low as a result of price pressure in the economy, lower energy prices, limited price increases abroad and the strengthening of the krona, which has contributed to low import prices. Mr Ingv sites said that given this background it was reasonable to revise the inflation forecast as presented in the draft Monetary Policy Update.

All in all, he said that developments have been roughly in line with the forecast in February. A recovery is underway, but it is a slow recovery. The inflation forecast indicates that the repo rate should be left unchanged at one per cent for a somewhat longer period of time and that the repo-rate path should be adjusted downwards for 2014 and 2015, but Mr Ingv sites saw no reason to radically reassess monetary policy at present and pointed out that the monetary policy transmission mechanism is not impaired in Sweden. The repo rate is somewhat higher than policy rates abroad, but the interest rates that households and companies have to pay are not very different from those in other countries. In addition to this, Swedish households are now more indebted than households in many of the countries that have been hit by dramatic falls in housing prices in recent years. Monetary policy must take into account the risk of the level of indebtedness becoming excessively high.
§3. Discussion

Deputy Governor Per Jansson wished to comment on two aspects that had been taken up in the discussion of the economic situation and monetary policy. First, he wished to respond to Lars E.O. Svensson’s claim that a counterfactual scenario with a repo rate that remained at 0.25 per cent from mid-2010 and onwards was not more uncertain than the standard monetary-policy scenarios that the Riksbank usually calculates. As this counterfactual experiment entails a substantial deviation from the monetary policy actually conducted it was, in Mr Jansson’s opinion, undoubtedly so that the level of uncertainty was higher than in the usual monetary-policy scenarios, which are based on small deviations for the repo rate. Mr Jansson pointed out that this is in part because the counterfactual monetary policy is implemented with unexpected monetary-policy shocks. In this specific case this means that, from mid-2010 and onwards, economic agents are constantly surprised by the fact that the repo rate remains at 0.25 per cent. The fact that it entails substantial deviations from the monetary policy actually conducted makes this a strange experiment that is difficult to interpret. Mr Jansson said that a perhaps more reasonable experiment would be to assume that economic agents in advance expect the repo rate to remain at 0.25 per cent throughout the period. This would result in different, probably much larger, effects on household indebtedness.

Mr Jansson also wished to emphasise that none of the members of the Executive Board advocated this alternative when the decisions were actually made. He himself was not an Executive Board member when these decisions were taken but he noted that the minority had also voted for gradual increases in the repo rate, although with a certain time lag in relation to the majority at that time.

He pointed out that the calculations and figures that Mr Svensson presented were Mr Svensson’s own estimates of the effects of monetary policy on the household debt ratio. They were not therefore calculations of effects that had been produced by the Monetary Policy Department and that the Department regards as part of the material on which the monetary-policy decision can be based. It is very important to investigate how monetary policy affects housing prices and household indebtedness. This is also something the Riksbank is working hard on. The Monetary Policy Department has already presented a number of circumstances under which monetary policy could have rather significant effects on household indebtedness, perhaps even in the long run. Mr Jansson expected that it will gradually be possible to publish the results of these investigations in the Riksbank’s reports once the quality of the results is regarded as assured.

Second, Mr Jansson wished to respond to Ms Ekholm’s statement that it would be strange if the uncertainty concerning how other policy measures affect housing prices and indebtedness constituted an argument for using the repo rate to try to dampen the risk of imbalances. His view was that it is probably only possible to deal with the problems in
this area by implementing several measures at the same time. Each single measure has uncertain effects, but taking several measures at the same time increases the chances of achieving the desirable end result, and here we should not assume that the repo rate is of no significance. Mr Jansson pointed out that Norges bank had recently expressed a similar view in its new report on monetary policy and financial stability.7

Deputy Governor Barbro Wickman-Parak also wanted to comment on Mr Svensson's counterfactual experiment. She though that experiments of this type were interesting but that one should be cautious about using them as a yardstick against which to assess the monetary policy actually conducted. In the world of experiments we have the results at hand, which is not the case when the decisions are made. She also pointed out that all of the members of the Executive Board agreed, for example, to leave the repo rate unchanged at two per cent in September 2011 and that Mr Svensson himself had thus not advocated the policy analysed in the experiment, although one could almost get the impression that he had.

She also wondered why in the Figures he usually presented at the monetary policy meetings Mr Svensson never outlined how CPI inflation would develop given his repo-rate path. This is after all the measure on which any subsequent assessment of the Riksbank should be based. She also thought that Mr Svensson was a little unfair in his criticism. She felt that there was an undertone in this criticism that could suggest that the Riksbank did not take inflation targeting seriously and that there seemed to be a bias in the inflation forecasts. She thought that this did not paint a fair picture of the efforts of the staff to always produce the best possible forecasts. Several evaluations also show that the Riksbank produces good inflation forecasts in comparison with other analysts. This is made clear, for example, in the report "Account of Monetary Policy 2012". Söderström and Vredin (2013) have investigated whether the Riksbank’s inflation forecasts have been systematically higher than those of other analysts in periods of low inflation. The results of this study are not clear cut. The Riksbank forecast the low inflation in the period 2003-2004 better than others, while the reverse is true for 2009 and 2012.8

Ms Wickman-Parak said that the fact that inflation in 2012 was low, and lower than previously forecast by the Riksbank, was because one could not have predicted the weakening of economic activity that would come. In early 2011, all of the forecasters had a much more positive picture of economic activity abroad than proved to be the case. This also contributed to a too-high inflation forecast. She pointed out that Mr Svensson had not entered a reservation against the economic forecasts at that time but had rather focused on the forecasts for international policy rates.

---

Governor Stefan Ingves wished to highlight some of the central trade-offs made in connection with the repo-rate decision. He said that we should not have blind faith in the ability of monetary policy to fine tune all economic variables. Monetary policy cannot, for example, solve the structural problems on the labour market. It appears, for instance, that recruitment periods in the private sector are rather long, and they have not shortened despite the increase in unemployment. This contributes to the uncertainty about how much the unemployment rate will fall over the next few years. Nor is it possible with one instrument, the interest rate, and one target, inflation, to fine tune the development of financial variables such as the debt ratio or the exchange rate. However, monetary policy cannot ignore them either.

The low rate of inflation at present is mainly due to falling goods prices while prices for services are increasing more quickly. Goods prices have fallen due to the weak development of prices abroad and the stronger krona. The world thus appears to be divided in this respect, but the Executive Board can only set one interest rate. While developments abroad and the exchange rate are holding down goods prices, interest-rate policy is helping to push up service prices. This is an issue that the Riksbank may need to highlight in the period ahead.

Mr Ingves pointed out that that there are risks of other imbalances in the domestic sector emerging, as has been previously discussed by the Executive Board several times. Monetary policy is currently highly expansionary and it now appears that the economic outlook is a little better at the same times as inflationary pressures are low. Together with already low interest rates, this has contributed to a situation in which housing prices have begun to increase slightly faster. The assessment in the Monetary Policy Update is that the households’ debts will also increase somewhat more than forecast in the Monetary Policy Report published in February. Mr Ingves thought that this must be taken into account in the decision. Cutting the repo rate today in order to generate a more rapid increase in CPI inflation would increase the risk of imbalances associated with household indebtedness arising. Mr Ingves said that the risk of CPI inflation becoming more volatile and higher than three per cent at the end of the forecast period should also be taken into account.

Furthermore, there is still a lack of tools to manage the systemic risks arising from a too rapid increase in housing prices and indebtedness. Mr Ingves said that until we have such tools monetary policy will need to take these risks into account to a greater degree than otherwise, even though fine tuning is not possible. Even if one wished that households borrowed less and companies borrowed more, it would be difficult to achieve this with a single interest rate. If inflation were to be lower than expected in the period ahead and the need arose to cut the repo rate, one or more tools would be needed to ensure that mortgage costs did not fall. Amortisation requirements, higher risk weights for mortgages, lower tax deductions for interest-rate payments or restrictions on the amount.
households can borrow in relation to their incomes may be appropriate instruments. Mr Ingves said it was worth noting that the IMF recently called on Denmark to phase out interest-only mortgages.

The Riksbank does not have a target for the exchange rate. However, if exchange-rate fluctuations are large and lasting, inflation will be affected. The exchange rate is influenced by several factors that relate Swedish real macro variables to corresponding variables abroad. The forecast in the draft Monetary Policy Update also indicates that Sweden will continue to have a current account surplus. A possible explanation of the stronger krona since the Monetary Policy Report in February is the relatively stronger development of the Swedish economy. Mr Ingves said that it is always difficult to forecast the exchange rate and the Monetary Policy Update assumes that no significant changes in the development of the krona will take place during the forecast period. If development takes a different course and, for example, the krona strengthens significantly and the forecast for inflation is affected, the Executive Board may need to react to this. The same applies if the krona were to weaken significantly.

Finally, Mr Ingves wished to remind the meeting that the situation abroad is now more volatile than it was before the crisis. This is an issue he has raised earlier. There is still considerable uncertainty about economic development and policy in Europe. This means that the ability of the Riksbank to exercise detailed control should not be overestimated. In his view, the Executive Board should not have blind faith in its ability to fine tune economic outcomes.

Deputy Governor Lars E.O. Svensson began by discussing his counterfactual experiment, which Mr Jansson and Ms Wickman-Parak had referred to. He pointed out that it was one thing if in retrospect it was clear that it would have been better with a low repo-rate path since June 2010. But it was another thing, as Ms Wickman-Parak had noted, if given the information available at the monetary policy meeting in June 2010 there were good reasons to retain a low repo rate instead of beginning a series of repo-rate increases. Mr Svensson reminded the others of the fact that this was an issue he had addressed in detail in an article published in Brookings Papers on Economic Activity in the autumn of 2011.9 This article showed that the inflation forecast in June 2010 was below the target and that the forecast for unemployment was above a reasonable long-run sustainable rate. The forecasts for inflation and unemployment in Sweden and the United States were rather similar in June 2010. The majority of the Executive Board of the Riksbank began a series of repo-rate increases despite these forecasts, while the FOMC (the committee of the Federal Reserve System that sets the policy rate) kept the policy rate at its lowest level and began preparing QE2.

---

Mr Svensson also wished to respond to Ms Wickman-Parak's comment that he had not consistently advocated a repo rate of 0.25 per cent since June 2010. Initially he wished to point out that there was no reason to limit counterfactual experiments to repo-rate paths that he himself had proposed. He said that it may also be the case that he had not gone far enough, and in retrospect should have advocated an even lower repo-rate path.

If, nevertheless, one wished to assess the stances of certain members of the Executive Board - if one wanted for example to examine the decisions previously made by Ms Ekholm and Mr Svensson - one could in this case do as follows. Assume that they had received support for letting the repo rate remain at 0.25 per cent in June 2010. Would they then have advocated leaving the repo rate unchanged in September? Mr Svensson said that they probably would. Assume that they had also received support for this argument. Would they then have advocated leaving the repo rate unchanged in October 2010? And so on. Mr Svensson also wished to stress that from June 2009 he had advocated a zero repo rate. If his counterfactual experiment were to be repeated with a zero repo rate from June 2010 instead of a repo rate of 0.25 per cent, then CPIF inflation would be a couple of tenths higher and unemployment a few tenths lower. The counterfactual outcome would thus be even better.

With regard to Mr Jansson's questioning of the unanticipated shocks used in the experiment to implement the low repo-rate path, Mr Svensson wished to make it clear that if firms and households were to change their expectations and begin to believe in a lower repo-rate path, so that the shocks became partly anticipated, the effects on inflation and unemployment would be greater, with lower unemployment and higher inflation and probably a better target attainment overall for inflation and unemployment.

Mr Svensson said that it is claimed in the "Account of Monetary Policy 2012" that the four-panel figures he regularly presents cannot handle the risks associated with household indebtedness. He maintained that there are no grounds for this claim and this is one of the reasons why he entered a reservation against the report. As he showed in Figure 4, it is possible for those who wish to do so to take into account how much the forecast for household indebtedness shifts for different repo-rate paths. Those who have rules of thumb different to those that he has arrived at based on existing extensive research and investigation, can explain and apply these rules of thumb and present the corresponding forecasts for indebtedness. Given the links that are assumed between the debt ratio and risks they can then explain how risks vary with different repo-rate paths and how this affects the choice of repo-rate path.

Mr Svensson said that it was not enough to be concerned about household indebtedness, the crucial point was instead to what extent monetary policy can affect indebtedness. For him the important question was how much the policy rate can affect indebtedness and what trade-offs between indebtedness, inflation and unemployment arise when the policy rate is used. According to rules of thumb, a 1 per cent (that is a 1.7 percentage points)
lower debt ratio requires an approximately 1 percentage point higher policy rate, which leads to as much as approximately 0.5 percentage points higher unemployment. That a 1.7 percentage points lower debt ratio requires an approximately 0.5 percentage points higher unemployment rate was in Mr Svensson’s opinion an unreasonably high cost for using the policy rate to affect the debt ratio. If someone wished to claim that there were rules of thumb other than those that appear in the research and investigations that he has referred to, then the burden of proof should lie with them. In the existing literature, however, there is no uncertainty about the fact that the effects of the policy rate on the debt ratio are small; there is only uncertainty about exactly how small they are. In other words, there is no doubt that the costs in the form of higher unemployment are very high if one wants to have any impact on indebtedness.

The results and rules of thumb from the research and investigations that Mr Svensson has presented are well known to all the members of the Executive Board. He wondered why he should need to present his own calculations on the basis of these well-known rules of thumb and why different forecasts of the debt ratio for different repo-rate paths were not included in the monetary policy reports. He also wondered why we should not be clear and transparent about this, as it appeared that debt ratio was a decisive factor for the majority’s monetary policy.

Mr Svensson also asked why only debts are shown in a figure in the draft Monetary Policy Update and not the household’s assets, as the households’ overall balance sheet, including assets, must be taken into account to assess their financial position and their resilience to shocks. Figure 7 shows that the households have real assets that are almost double the amount of their debts, and total assets excluding collective savings that are approximately three times greater than their debts. In Figure 8, Mr Svensson showed that the households’ leverage ratio of approximately 67 per cent was at the same level as that of Sweden’s most well-capitalised companies. Figure 9 showed the development of the leverage ratio over time, including the current forecast. He said that the development of the leverage ratio shown in this figure was hardly cause for concern or indicated any imbalance.

The draft Monetary Policy Update states that the monetary policy conducted “takes into account the risks associated with household indebtedness” (page 8). However, how these risks were taken in to account was not at all apparent to him. In his view, the wording on indebtedness was extremely obscure and cryptic, and he referred to this section of the text: “An even lower repo-rate path would further increase the risk of imbalances building up. Such imbalances can become particularly difficult to manage if developments were to move towards a strong upwards trend in both housing prices and debt. It is important to

---

prevent this from happening. A number of measures have been taken by various authorities in recent years, such as the introduction of a mortgage cap. However, there is great uncertainty over the effects of these measures and whether they are sufficient. Swedish authorities and other participants should therefore consider carefully whether further measures are needed to ensure that developments in the Swedish economy are sustainable in the long run.” (page 8).

Mr Svensson said that this was among the most confusing and vague pieces of reasoning that he had encountered during his almost six years at the Riksbank, and that it gave rise to many questions. What are the imbalances referred to here? What determines the trend for housing prices and indebtedness? Are housing prices compatible with fundamentals or not? Do loan-to-value-ratios and leverage ratios at historical levels entail risks or not? What are the criteria for a long-run sustainable development? Is there any mechanism through which monetary policy affects housing prices, indebtedness, loan-to-value ratios and leverage ratios in the long run? In his view, these unanswered questions demonstrated a clear lack of analysis of the potential risks of household indebtedness and to what extent they could be affected by monetary policy, despite the fact that it appeared to him that indebtedness was a decisive factor in the majority’s monetary policy.

First Deputy Governor Kerstin af Jochnick wished once again to underline the fact that the target for monetary policy is to achieve a rate of inflation of two per cent within the forecast period, but noted that the members of the Executive Board had different assessments of how quickly this could be done and the best way to do it. Many different factors have to be taken into account. Ms af Jochnick supported Mr Ingves’ view that the ability to control and fine tune the development of various economic variables should not be overestimated.

She said that there had been a great deal of concern about the high household debt ratio for some time and she herself has called for macroprudential measures to ensure that monetary policy can to an even greater extent focus on using the policy rate to stabilise inflation and the real economy in the shorter term. It is important to not only look at the short term but to also adopt a long-term perspective with regard to the responsibility for achieving price stability. The build-up of financial imbalances makes it more difficult to implement monetary policy.

Ms af Jochnick said that the households have been rather negative about the development of the Swedish economy for a while now and noted that the confidence of the households in their own financial situation also weakened last year. During this period the household debt ratio has levelled off at a high level. However, the gloomy mood of the consumers has improved since the end of 2012 and a turnaround in the households’ perception towards a more positive view of both their own financial situation and the
Swedish economy as a whole can be discerned. The increasing optimism of the households is reflected in higher housing prices than expected.

In the light of the new forecast, the need to develop macroprudential policy appears to be even more urgent. Ms af Jochnick’s assessment was that there was a rather substantial risk that the household debt ratio would increase over the next 12 months as housing prices rise, and she therefore wished once again to point to the need to take the problems associated with household indebtedness seriously. There is otherwise a risk that these problems, which have been discussed for several years, will become even more serious. The measures taken so far to limit household indebtedness have not been powerful enough and monetary policy alone cannot manage the financial imbalances associated with the housing market and household indebtedness.

Ms af Jochnick said that the greatest risk with the high level of household indebtedness is that in the event of a fall in housing prices it could lead to a substantial fall in private consumption with negative effects on unemployment, growth and inflation, and she pointed out that there have been several such examples in Europe in recent years. In addition, the European Commission has pointed out in its in-depth study of macroeconomic imbalances that the Swedish housing market may be a source of economic instability in the future. The Commission also presents a number of underlying problems that it believes are the causes of an inefficient market that is creating upward pressure on housing prices and household debt.

Given this background, Ms af Jochnick concluded that there is a need to build more housing and that the regulations governing rents should be reviewed, as well as other taxes and regulations that give the households the wrong incentives. There was also a need to establish a healthier attitude to mortgages, primarily with reference to amortisation payments and the balance between fixed and variable mortgage rates. The regulatory frameworks simply need to ensure that the households are robust and able to withstand, for example, a fall in housing prices and higher interest rates without this having a negative impact on demand in the economy.

Deputy Governor Karolina Ekholm said that it seemed as though the different members of the Executive Board were speaking at cross purposes. She thought that it was obvious that they approached the problems associated with household indebtedness from completely different angles. Her view was that there could be situations in which the development of household debt should be taken into account in the monetary policy decisions. However, this required being clear about one’s response to three questions. 1. Is indebtedness a problem? 2. If it is seen as a problem, are other authorities doing anything to deal with it? 3. If you do not think that others are doing enough to manage the problem, what trade-offs are you prepared to make between the expected effects of monetary policy on the problem and any costs that may arise in terms of poorer target attainment with regard to inflation and resource utilisation. It was particularly the lack of
clarity regarding trade-offs that she was critical of. In principle, only two significant revisions of the forecast have been made this time: a downward adjustment of inflationary pressures and an upward adjustment of the household debt ratio. As a significant downward adjustment of inflationary pressures, all else being equal, would entail a repo-rate cut, it is obvious that it is the upward adjustment of the debt ratio that is keeping up the repo rate this time. However, as it is not clear how the trade-off between the effects on the development of debt, inflation and resource utilisation has been made, monetary policy becomes less clear and therefore less predictable.

Ms Ekholm noted that several members of the Executive Board had mentioned that monetary policy must take many different, highly-uncertain factors into account, and that it cannot fine tune various variables. But this does not prevent monetary policy from being predictable. It does, however, require a clarification of on what grounds a particular decision is based so that external stakeholders can form correct expectations regarding how monetary policy decisions adapt to changed circumstances. This can be done by having a clear link between the forecasts and the monetary policy decisions.

Ms Ekholm also commented on Mr Jansson’s claim that monetary policy should be seen as part of a whole package of measures to reduce the risks associated with household indebtedness and that the fact that other measures are in place does not therefore prevent the repo rate also being used for this purpose. However, when it comes to all types of policy decision it is important to perform a thorough target/means analysis to determine which means are appropriate to achieving which targets. In the case of household indebtedness there is a mortgage cap and Finansinspektionen have announced higher risk weights for mortgages. In addition, proposals are in the pipeline on setting up amortisation plans in order to establish a better amortisation culture. All of these measures are directly aimed at affecting household indebtedness and are therefore appropriate as means of dampening the growth of this indebtedness. The policy rate, on the other hand, is not an appropriate means of achieving this target.

Ms Ekholm said that in principle she thought it was a good idea to perform counterfactual experiments as Mr Svensson had done. Looking back and asking how the economy would have developed with a different monetary policy can yield important insights into the trade-offs that must be made in monetary policy. The need to conduct this type of analysis was discussed by the Executive Board at an earlier monetary policy meeting in connection with the delayed effects of monetary policy being cited as a reason not to cut the repo rate in the light of low inflation and high unemployment. She thought at that time that in this event it was important to determine when the repo rate should have been cut in order for the course of development to have been one that the Executive Board was more satisfied with. She still thought that it was a good idea to conduct this type of analysis and would like to see it done more regularly.
Finally, she wished to comment on what Ms Wickman-Parak had said with regard to the fact that the Riksbank’s inflation forecasts had received so much criticism for being inaccurate. Ms Ekholm wished to concur with Ms Wickman-Parak’s defence of the inflation forecasts and also agreed that the staff at the Riksbank had done a very good job in their forecasting work. This is reflected, for instance, in the fact that the Riksbank’s forecasts for CPIF inflation have actually been fairly accurate, which Ms Wickman-Parak also pointed out. However, the forecasts for CPI inflation have unfortunately been less accurate. The Spring Fiscal Policy Bill shows that the Riksbank has been the poorest out of ten forecasters with regard to predicting CPI inflation, based on the method for assessing forecasts developed by the Riksbank to take into account the fact that the point in time at which the forecast is made plays a role for access to relevant information. The difference between CPIF and CPI inflation can largely be explained by how repo-rate decisions have affected mortgage rates, so what this implies is that it is the Executive Board that has made poor repo-rate forecasts rather than the staff of the Riksbank that has made poor inflation forecasts.

Deputy Governor Lars E.O. Svensson wanted to respond to Ms af Jochnick’s comments on looking at developments in a longer perspective. He pointed out once again that according to the existing and extensive research and studies to which he has referred, monetary policy does not have any long-run effect on housing prices, debt or leverage ratios.

Mr Svensson said that to justify using monetary policy to influence debt, then three assertions would have to be correct. The first is that the level of household debt in Sweden entailed sufficiently large risks to need remedying. The second is that a higher repo rate could significantly reduce these risks and that the reduced risk is worth the lower inflation and higher unemployment caused by the higher repo rate. The third assertion is that there is no better instrument available, with a greater or similar effect on the risks and less effect on inflation and unemployment. Mr Svensson said that assertions number two and three did not hold true, and it was also doubtful whether the first one was true.

Deputy Governor Barbro Wickman-Parak reminded the meeting that the reason there was no thorough analysis regarding debt was probably because it had not been in focus for monetary policy in general prior to the crisis and that it is now a research area in which intensive work is being carried out.

She also commented on Mr Svensson’s analysis of the leverage ratio, and pointed out that there were many examples where things had looked good prior to a crisis, for instance the United States before the financial crisis in 2008-2009. One therefore could not regard a good leverage ratio as an insurance against crises.
Deputy Governor **Lars E.O. Svensson** answered Ms Wickman-Parak, saying that his point with regard to the leverage ratio was that it was not sufficient to look at one single indicator.

Mr Svensson said that the analysis of the risks connected with debt to which the majority referred appeared to mainly consist of superficial comparisons with other countries, without a proper discussion of the causes and triggers of crises in other countries. "The Swedish debt ratio is at a level that has caused problems in other countries" is a typical statement. Mr Svensson said that it was not at all self-evident that it is household debt that has entailed problems. It could be the case that housing has been overvalued, that lending standards have been inadequate or that banks or borrowers have had insufficient resilience. He posed the question of whether there has been any example at all of an economy that has had the same debt ratio as Sweden and at the same time had a low rate of construction, stringent lending standards, well-capitalised banks, a loan-to-value ratio and leverage ratio for households at stable historical levels, historically-high household saving, strong public finances, a stable current account surplus and not been overheated, but has nevertheless suffered a crisis.

Mr Svensson also wanted to emphasise that with regard to the repo-rate paths he had advocated, it was reasonable to allow the current situation to have significance for the alternative repo-rate path. When there is a high repo rate to start with, it is not self-evident that one should take one single step down to 0.25 per cent; rather it may be more appropriate to bring it down in several steps. The repo rate and repo-rate path he has advocated over the years have been those he has considered appropriate given the initial situation at the time, not the ones he would have advocated if the repo rate had been 0.25 per cent to start with.

**Marianne Nessén**, Head of the Monetary Policy Department, wished to emphasise that several of the calculations to which Mr Svensson referred during the meeting were his own, and had not been quality assured by the Monetary Policy Department. 11

**Governor Stefan Ingves** summarised the discussion at the monetary policy meeting on 16 April. He noted that the Executive Board was envisaging a gradual recovery in the economy and assuming the labour market would improve next year. At the same time, inflationary pressures are low. Developments since the Monetary Policy Report was published in February have been more or less in line with the assessment made then. An increasing number of indicators, in the form of both soft and hard data, support the picture of growth prospects improving in Sweden and other parts of the world. However, developments in the euro area are still very uncertain and there is a risk of setbacks.

---

11 See Mr Svensson’s figures in appendix 1 for further information.
The largest changes in relation to the forecasts in the February Monetary Policy Report concern inflation in the coming period and developments in household debt. It is now expected to take longer before inflation rises, and CPIF inflation is not expected to reach 2 per cent until 2015. At the same time, there are signs that housing prices are increasing at a faster pace and this contributes to the upward revision in the forecast for household debt.

Mr Ingves noted that the Executive Board members agreed that monetary policy needs to be more expansionary, given the low inflation, but that opinions were divided as to how expansionary it should be. A majority of Executive Board members considered at the same time that the high level of household debt was something that should be taken into consideration in their monetary policy. Rising debt is considered to increase the risk of a sharp increase in unemployment and long-lasting difficulties in attaining the inflation target.

A majority of four members thus assessed that it was appropriate to hold the repo rate unchanged at 1 per cent until the second half of 2014, which is around one year longer than was forecast in the Monetary Policy Report published in February. The monetary policy conducted is expected to stimulate economic developments and inflation at the same time as taking into account the risks linked to households’ high indebtedness.

Two members considered that there was scope for a lower repo-rate path and they advocated cutting the repo rate to 0.75 and 0.50 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. They assessed that these lower repo-rate paths would lead to very minor increases in the household debt ratio and would not tangibly affect possible risks connected with household debt.

Mr Ingves noted that at today’s meeting there had also been discussion of the future development of the repo rate. If the repo rate needs to be adjusted in the coming period, it is slightly more likely that it will be cut than that it will be raised, which is due to the low inflationary pressures and continuing uncertainty over developments in the euro area. The Executive Board had also discussed developments abroad, both the risk of poorer developments and the possibility of more positive outcomes. The members had raised the question of the Swedish krona and its significance for the economy and inflation, as well as whether monetary policy should take into account the risk of high debt. There was also discussion of how far monetary policy can influence unemployment and the debt ratio.

§4. Monetary policy decision

The Executive Board decided after voting
• to adopt the Monetary Policy Update according to the proposal, Annex A to the minutes,

• to publish the Monetary Policy Update on 17 April 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 24 April 2013,

• to publish the decision above at 9.30 a.m. on Wednesday 17 April 2013 with the motivation and wording contained in a press release, and

• to publish the minutes of today’s meeting on Monday, 29 April at 9.30 a.m.

Deputy Governor Karolina Ekholm entered a reservation against the decision to hold the repo rate unchanged 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 third quarter of 2014, and then rises to around 1.75 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 Update and the decision about the repo rate and the repo-rate path in the Update. He advocated lowering the repo rate to 0.5 per cent and then a repo-rate path that stays at 0.25 per cent from the third quarter of 2013 through the third 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 Update’s forecasts of foreign policy rates further ahead and foreign growth were exaggeratedly high and that its CPIF forecast exaggerates inflation pressure. His repo-rate path then 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. It therefore constitutes a better-balanced monetary policy. His lower repo-rate path might increase the household debt ratio by a couple of percentage points within a couple of years, but not in the long term. It would not have any noticeable effect on any risks associated with household debt.

This paragraph was verified immediately.

Minutes by
Ann-Christine Högberg
Verified by:

Karolina Ekholm  Stefan Ingves  Per Jansson

Kerstin af Jochnick  Lars E.O. Svensson  Barbro Wickman-Parak
Appendix 1.

Figure 1. HICP inflation in selected countries
February 2013, annual percentage change

Note. Some observations are from January and December.
Sources: Eurostat and own calculations.

Figure 2. Unemployment in selected countries
February 2013, per cent of labour force

Note. Harmonised unemployment. Some observations are from January and December.
Sources: Eurostat, the OECD and own calculations.
Figure 3. Low policy rate in relation to actual outcomes 2010-2012

Sources: Statistics Sweden, the Riksbank and own calculations.

Figure 4. Monetary policy alternatives around the main scenario including effects on the debt ratio

Note. Interest rates abroad according to the main scenario. Long-run unemployment 6.25%. Effects according to Ramses, partly expected. Effects on debt ratio according to own calculations. Sources: Statistics Sweden, the Riksbank and own calculations.
Figure 5. Repo-rate path, forward rates and forecast for KIX-weighted policy rate, April 2013, per cent

Note. Forward rates from 3 April.
Sources: National sources, Reuters EcoWin, the Riksbank and own calculations.

Figure 6. Monetary policy alternatives, April 2013

Note. Interest rates abroad according to forward pricing.
Effects on the debt ratio according to own calculations.
Sources: Statistics Sweden, the Riksbank and own calculations.
Figure 7. Households’ total assets, real assets, debt and savings
Per cent of disposable income

Sources: Statistics Sweden and the Riksbank.

Figure 8. Net worth/assets ratio for households, some large listed companies and Swedish banks
Net worth as a percentage of total assets

Sources: Dagens Industri and the Riksbank.
Figure 9. Households’ leverage ratio
Net wealth as a percentage of total assets (excl. collective insurance savings), per cent

Sources: Statistics Sweden and the Riksbank.