Minutes of Monetary Policy Meeting

FEBRUARY 2015

Summary

At the monetary policy meeting on 11 February, the Executive Board of the Riksbank decided to cut the repo rate to –0.10 per cent and to adjust the repo-rate path downwards somewhat. At the same time, the interest rates on the fine-tuning transactions in the Riksbank's operational framework for the implementation of monetary policy are being restored to the repo rate +/–0.10 percentage points. The Riksbank will also buy government bonds for SEK 10 billion. These measures and the readiness to do more at short notice underline that the Riksbank is safeguarding the role of the inflation target as a nominal anchor for price setting and wage formation.

It was noted at the meeting that the Executive Board agreed on the picture of economic prospects and the inflation outlook described in the draft Monetary Policy Report.

The global economy is expected to continue recovering. But the uncertainty over economic developments abroad and the volatility on the financial markets has increased since the monetary policy meeting in December. The low oil prices are positive for global GDP growth but also lead to low global inflation. Apart from the movements in oil prices, the increased uncertainty is also partly due to recent developments in economic-policy conditions in Greece and the conflict between Russia and Ukraine. The economic outlook differs from country to country and region to region. This is reflected in increasing differences in monetary policy. The central banks in the United States and the United Kingdom are expected to raise their policy rates this year, while the ECB and several other central banks have made monetary policy more expansionary. These differences have contributed to substantial fluctuations on the foreign-exchange markets.

An economic recovery abroad will reinforce economic activity in Sweden and the labour market will improve going forward. Inflation is still low, but there are signs that underlying inflation has bottomed out. However, lower oil prices risk dampening inflation expectations and thereby inflation more than was assumed in the forecast. To this can be added the increased uncertainty about developments abroad and on the financial markets.

The Executive Board agreed that monetary policy needs to be even more expansionary to reduce the risk of long-term inflation expectations continuing to fall and to support inflation rising towards the target sufficiently fast.

All of the Board members advocated that the repo rate should be cut by 0.10 percentage points to –0.10 per cent, that the repo-rate path should be adjusted downwards and that the interest rates on the fine-tuning transactions in the Riksbank's operational framework for the implementation of monetary policy should be restored to the repo rate +/–0.10 percentage points.

A majority of the Board members also decided that the Riksbank shall buy nominal government bonds for SEK 10 billion. One member entered a reservation against the decision to buy government bonds now.

If these measures were to prove insufficient to get inflation to rise towards the target, the Riksbank can quickly make monetary policy even more expansionary. The measures taken and the readiness to do more underline the Riksbank's aim to safeguard the role of the inflation target as a nominal anchor for price setting and wage formation.

The Board also discussed at the meeting the effects of a negative repo rate, the matching problems on the labour market, the effects of structural changes in the economy and the risks of increased household indebtedness and the need for further measures to deal with this.

MINUTES OF MONETARY POLICY MEETING
Executive Board, No. 1

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DATE: 11/02/2015
TIME: 09.00

PRESENT:

Stefan Ingves, Chair
Martin Flodén
Per Jansson
Kerstin af Jochnick
Henry Ohlsson
Cecilia Skingsley

Claes Berg
Charlotta Edler
Heidi Elmér
Lena Eriksson
Frida Fallan
David Forsman
Eric Frieberg
Christoffer Grände (§ 1)
Kerstin Hallsten
Henrik Lundvall
Ann-Leena Mikiver
Christina Nyman
Bengt Pettersson
Carl-Fredrik Pettersson (§ 1)
Kasper Roszbach
Henrik Siverbo
Maria Sjödin
Ulf Söderström
David Vestin
Anders Vredin

It was noted that Bengt Pettersson and Henrik Siverbo would prepare draft minutes of § 3 and 4 of the Executive Board’s monetary policy meeting.

§1. Economic developments

Carl-Fredrik Pettersson of the Markets Department began by presenting the latest developments on the financial markets. Since the Monetary Policy Update was published in December, developments have been marked by monetary policy easing and more expansionary monetary policy signals abroad, falling market rates and increased uncertainty on the financial markets. The Swiss National Bank discontinued its minimum exchange rate for the Swiss franc against the euro, which caused the franc to strengthen considerably. The policy rate was cut to –0.75 per cent. There was also appreciation pressure on the Danish krone, which caused Danmarks Nationalbank to intervene on the foreign exchange market and cut its policy rate in several stages to –0.75 per cent. Uncertainty on the financial markets has increased as a result of the political developments in Greece, the escalating conflict between Russia and Ukraine and the question of when the Federal Reserve will raise its policy rate and how quickly the monetary policy stimulus in the United States will be reduced in the coming period. Long-term interest rates in the United States and the United Kingdom have diverged in relation to other countries' interest rates over the past week as they have risen, partly due to an unexpectedly strong outcome on the US labour market.

Oil prices continued to fall rapidly after the monetary policy meeting in December, but have risen slightly in the past week. However, oil prices are still clearly lower than they were at the time of the monetary policy meeting in December.

Stock exchanges have risen in general in Europe, supported by the ECB's decision on asset purchases in mid-January. In the United States, the stock exchange has been weaker, as the market is concerned about negative effects on the US economy resulting from the dollar appreciation and negative effects for the US production of shale oil as a result of the lower oil price. Companies' profit expectations have fallen, probably as a result of this.

The Swedish krona has weakened somewhat in trade-weighted terms since the monetary policy meeting in December. The main reason for this is the general appreciation in the US dollar, given the strong macroeconomic outcome in the United States. Most analysts believe in either a repo-rate cut, a restoration of the interval for fine-tuning transactions around the repo rate or a combination of the two at today's monetary policy meeting. A lower repo-rate path appears to be entirely expected.

Christina Nyman, Deputy Head of the Monetary Policy Department, presented the draft Monetary Policy Report 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 29 and 30 January and on 3 February. In addition, the Executive Board discussed complementary monetary policy measures at the meetings on 15 and 27

January and on 5 and 9 February. The draft Monetary Policy Report was tabled at a meeting of the Executive Board on 5 February.

Economic developments abroad have been roughly in line with the forecasts made by the Riksbank in connection with the previous monetary policy decision in December. New statistics received since the December meeting support the picture of a continued gradual recovery in the global economy. Developments in the United States are strong, while they are still sluggish in the euro area. The economic policy developments in Greece contribute to the uncertainty over GDP growth in the euro area, while the ECB's new stimulation measures in the form of asset purchases provide a positive contribution to economic developments. A slowdown in GDP growth has occurred in China and GDP has fallen in Japan. The economic conditions in Russia and Ukraine have continued to deteriorate as a result of the conflict between these countries.

The volatility on the foreign exchange market has increased and the krona has weakened. The strengthening of the krona envisaged in the December Monetary Policy Update is now expected to take longer. The weaker krona and the lower oil price will stimulate the economy in Sweden. However, GDP growth in Sweden will be held back by increased uncertainty over international developments. Developments abroad are expected to be weaker than forecast in the December Monetary Policy Update. GDP is expected to grow by 2.7 per cent this year and 3.3 per cent in 2016, and then to slow down to 2.2 per cent in 2017, which entails only marginal revisions in relation to the forecast in December.

The forecast for unemployment is revised up somewhat, as the forecasts for the population and the labour force are revised up further than employment. The forecast for households' debt ratio remains largely unchanged.

Inflation is still low, but there are signs that it has bottomed out. The outcome for CPIF inflation excluding energy for December was 1.1 per cent, which was 0.3 percentage points higher than was forecast in December, and the forecast for the coming months has therefore been revised up. Lower oil prices than predicted in the Monetary Policy Update published in December will contribute to holding back CPIF inflation, however. The revisions to the forecasts for inflation are therefore marginal on the whole. CPIF inflation is forecast to attain the inflation target of 2 per cent in 2016. However, there is a risk that inflation will be lower than forecast. Inflation expectations have continued to fall and expectations for five years ahead are well below the inflation target.

The assessment is that the repo rate needs to be cut to –0.10 per cent to stimulate consumption and investment, to reduce the risk of long-term inflation expectations continuing to fall and for inflation to rise towards the target sufficiently quickly. The forecasts in the Monetary Policy Update are based on the repo rate remaining at around –0.10 per cent until the second half of 2016 and then gradually rising to 1.4 per cent at the beginning of 2018. The forecasts in the draft Monetary Policy Report are also conditional on the interest rate on the Riksbank's fine-tuning transactions being restored at the repo rate +/–10 basis points and on the Riksbank purchasing nominal government bonds issued by the state of Sweden to a value of SEK 10 billion.

§2. The economic situation and monetary policy

Deputy Governor **Martin Flodén** began by saying that he agrees with the economic outlook described in the draft Monetary Policy Report and also with the need for a more expansionary monetary policy. However, he pointed out that he nevertheless does not have the same view of the strategy to make monetary policy more expansionary. He supports the proposal to cut the repo rate to –0.10 per cent, to lower the repo-rate path and to restore the interval for fine-tuning transactions. On the other hand, he does not consider it appropriate to begin buying government bonds now. Mr Flodén explained first why he sees a need for more expansionary monetary policy and why a small repo-rate cut is an appropriate measure. He then explained why he does not agree with the proposal to buy government bonds now.

The main scenario for economic developments, as described in the draft Monetary Policy Report, including developments in inflation, has not really changed particularly much since the meeting in December, according to Mr Flodén. But behind the overall outlook of the main scenario a lot has happened. The rapid and large fluctuations in oil prices contribute to increased uncertainty regarding future inflation. Similarly, it is uncertain how the Swedish economy will be affected by the ECB's decision to begin an extensive asset purchase programme. The draft Monetary Policy Report also mentions further causes for concern, such as economic policy developments in Greece and the potential effects of lower oil prices on inflation expectations.

Unlike the situation at many monetary policy meetings in recent years, Mr Flodén felt that it was now easier to also see factors that could mean the Swedish economy performs better than expected. The positive factors include signs that the underlying inflationary pressure in Sweden has begun to rise. Import prices have risen and there are now also some signs that the export sector is beginning to improve. In both cases one can suspect that the weakened krona is an important explanatory factor and that the recent continued weakening of the krona can reinforce these inflationary impulses in the coming period. Further support to the Swedish economy, primarily the export sector, can come from a slightly better development in the euro area when the lower oil prices and the ECB's expansionary monetary policy stimulate the real economy. Such factors have in any case made some analysts begin to revise up their forecasts for GDP growth in the euro area.

Despite these positive signs, Mr Flodén considered there was justification to cut the repo rate now. As inflation has been well below the target of two per cent for several years it would according to Mr Flodén be much worse if we experience continuing low inflation than if inflation rises faster than in the Riksbank's forecast. Continued low inflation would lead to a significant risk that the credibility of the inflation target would be damaged. Moreover, falling inflation expectations could contribute to even more difficulty in getting inflation to rise. This background means that a situation where inflation rises faster than in the Riksbank's forecast would actually be desirable, even if it means that inflation clearly overshoots the target for a limited period of time.

On the basis of this reasoning, Mr Flodén considered that monetary policy should focus on limiting the negative effects that can arise if the inflationary pressure turns out lower than in the Riksbank's forecast. As at the previous monetary policy meeting, he therefore considered it justified, at least in principle, to conduct a more expansionary monetary policy. A repo-rate cut of 10 basis points may then appear to be a modest step. When inflation expectations have also fallen, one can question whether monetary policy will actually become more expansionary after such a cut, as the real interest rate will not necessarily have fallen. While he considers that the repo rate could have been cut a little further, he believes that roughly the same effect will be attained with the proposed cut. The important thing about today's proposed repo-rate cut is to show that the floor for the repo rate is not zero, and that the proposed cut probably does not entail the floor either. The experiences obtained through this repo-rate cut will of course contribute to the Riksbank's assessment of how much the repo rate can be cut.

Since the meeting in December, following its own investigations and discussions with other public authorities and market participants, the Riksbank has clearer indications that a weakly negative repo rate will not cause any technical problems that would be difficult to manage. However, other problems could arise when the repo rate is cut from already low levels. One possibility is that the banks' funding costs will not fall as much as when the repo rate is cut from a higher level. This could mean that the banks' lending rates are not cut as much as the repo rate. However, such problems will probably arise gradually when the Riksbank cuts the repo rate from positive levels. And so far monetary policy appears to have had full impact on market rates. This is best illustrated by noting that the banks' average lending rates to both households and companies have fallen by around two percentage points since autumn 2011, a period when the repo rate has been cut by two percentage points. Mr Flodén's assessment is therefore that today's proposed repo-rate cut will have roughly the same impact on the economy as usual and that this will apply even if the repo rate is cut slightly more.

Mr Flodén noted that so far he has argued in favour of the proposal to cut the repo rate, which he supports. He then went on to describe his objections to the proposal to now purchase government bonds for the sum of SEK 10 billion. He felt that he did not have a different opinion of how expansionary monetary policy needs to be at present; it was rather the balance between the different monetary policy tools, the strategy for how these should be used and perhaps also what effects the tools are expected to have.

As Mr Flodén understood the proposal to buy a limited amount of government bonds now, the main purpose is to signal that larger purchases may be made if the need arises, and to show that the Riksbank has the capacity to use this tool at short notice. Although he thinks it is important that the Riksbank should have this readiness to act and that it should be communicated to the market, he believes this could have been done without buying bonds now. Mr Flodén said that his objections to this strategy are linked to what one can expect to achieve with the asset purchases.

A central bank can use asset purchases to influence economic developments in several different ways. The effects that are achieved probably depend on many factors, including which assets are purchased, how the asset purchases are combined with communication, how market pricing functions and how strained public finances are.

One situation that might justify buying government bonds or other financial assets is if asset prices are pushed down to unjustifiable levels during a financial crisis. The economy would then risk being held back by high risk and term premiums that would dampen the willingness to invest and by negative wealth effects that would dampen willingness to consume. The central banks' asset purchases can then contribute to restoring confidence in the functioning of the market and to holding back interest rates in the economy. This is a form of market care.

Another situation that might justify asset purchases is when a country's fiscal policy is limited by weak public finances that give rise to high risk premiums on government bonds. If the central bank is not exposed to the same risk premiums, the purchases of government bonds will remove some of the interest expenditure from the government budget and thereby give scope for a more expansionary fiscal policy. And if the asset purchases also push down the interest rate on government bonds, public finances will also benefit from lower costs for new borrowing.

A further situation that might justify asset purchases is when the central bank wishes to make monetary policy more expansionary, despite the policy rate having reached its lower bound. The central bank can then try to push down interest rates for longer maturities, for instance, by communicating that the policy rate will be kept low for a long time. If such communication is not credible, purchases of government bonds can instead push up bond prices and thereby push down long-term interest rates, in particular long-term real interest rates.

It is also conceivable that the government bond purchases, by reducing the number of bonds in the market, will force or entice investors to instead hold other, more risky assets. Companies and households will then find it easier to obtain funding, which could stimulate economic activity. Alternatively, the exchange rate may weaken if investors instead choose to re-allocate to foreign assets. This so-called portfolio channel is based on market participants not seeing holding central bank assets as a good alternative to holding government bonds.

The first two situations mentioned above are of course not relevant to today's monetary policy in Sweden, according to Mr Flodén. There is nothing to indicate that the financial markets are not functioning properly or that asset prices are undervalued. Nor do risk or term premiums on government bonds appear to be high, they are instead unusually low. Another mechanism that he believes can be dismissed is that the bond purchases entail an increase in the money supply that will automatically lead to higher inflation. The bond purchases will mean that deposits with the Riksbank will increase, and thus that the monetary base by definition becomes larger. But what actually happens is that the Riksbank reduces the amount of government bonds on the market and replaces them with Riksbank Certificates that have a similar yield and risk profile. There is a maturity transformation that probably contributes to pushing down term premiums and long-term interest rates, but this need not entail an upturn in the broader credit aggregates.

The effect of the bond purchases that remains, and that Flodén believes can be effective, is that long-term interest rates fall. But if the Riksbank wants to make monetary policy more expansionary by pushing down interest rates in general, Mr Flodén argued that the repo rate and communication of the future repo-rate path should be used first and foremost. The arguments he mentioned for making monetary policy more expansionary mainly concern dealing with downside risks in the near term. Both the repo-rate cut and the government bond purchases can contribute to higher inflation in the short term through exchange rate effects. On the other hand, the repo rate is more important for effects on lending rates, partly because most lending in Sweden, to both companies and households, is at short maturities. Mr Flodén therefore considers that until the repo rate has reached its lower bound, continued repo-rate cuts are the first choice for making monetary policy more expansionary.

Mr Flodén also believes that purchases of government bonds in the Swedish context have the greatest potential to influence interest rates and raise inflation expectations if the purchases are presented as part of a systematic monetary policy strategy. It will then be problematic to buy government bonds when market rates are already much lower than is indicated by the repo-rate path presented in the draft Monetary Policy Report. Another means of describing this is that the bonds are overvalued if one relies on the repo-rate path. Mr Flodén said he was afraid that the communication regarding what the Riksbank is trying to achieve with the bond purchases becomes unclear if the Riksbank does not at the same time have a repo-rate path that is lower than, or at least roughly compatible with, the bond prices prevailing on the market. Mr Flodén said that he found it strange to buy government bonds now without at the same time making a large downward revision to the repo-rate path.

A remaining question for Mr Flodén was whether it is currently justified to make a large downward adjustment to the repo-rate path, and at the same time begin purchasing government bonds. He did not think it is. The forecast in the draft Monetary Policy Report is for inflation to rise in the coming years, and he sees fairly good prospects for this to be the case. But if there are major changes in the inflation outlook, for instance, if a clearer risk arises that the economy will become stuck in a situation with persistent low inflation, he would see stronger reasons to purchase government bonds. Mr Flodén envisages this as a large-scale programme for asset purchases that would be presented at the same time as the forecast for inflationary pressure and future repo rates was adjusted down significantly. Such changes can be implemented rapidly if necessary, so he therefore did not see any reason to begin taking small, and difficult to explain, steps in this direction now.

To summarise, Mr Flodén supported all parts of the proposal for a monetary policy decision, except the proposal to buy government bonds now.

Deputy Governor **Per Jansson** began by noting that the outcome for CPIF inflation in December was a good 0.5 per cent, which was scarcely 0.2 percentage points higher than forecast in the Monetary Policy Update published in December. The positive development with a somewhat faster upturn in inflation than predicted is thus continuing for the third month in a row. If the volatile energy prices are excluded, the outcome was 1.1 per cent. This was almost 0.3 percentage points higher than the forecast in December. Although inflation was affected by some price upturns that are probably not lasting, the underlying development is in the right direction. This is of course pleasing after a long period of low inflation and systematic overestimation of price developments, noted Mr Jansson.

He went on to say that the indicators for the real economy also appear fairly bright on the whole. In January, the National Institute of Economic Research's overall economic tendency survey was around half a standard deviation above its historical average. The confidence indicators are particularly strong for the retail trade and construction and civil engineering. The indicator for the manufacturing industry is also well above its average level and is continuing to improve. The only confidence indicator that gives a little cause for concern is the one for households. The National Institute of Economic Research's January survey showed that this indicator had fallen somewhat and is now just over a tenth of a standard deviation below its normal level.

Swedbanks/Silfs purchasing managers index largely confirms the relatively favourable economic situation. After a relatively heavy fall in August last year, the indexes for both the manufacturing sector and the services sector have risen and were in January clearly in the growth zone. Earlier major falls in oil prices and a depreciation of the krona also mean that the economic situation in the near term has good prerequisites to further strengthen.

Mr Jansson's conclusion was thus that changes in neither the inflation outlook nor economic prospects appear to indicate a need to make monetary policy more expansionary now. Nevertheless, an easing of monetary policy is proposed in the draft Monetary Policy Report. More precisely, it is proposed to cut the repo rate to –0.10 per cent, to restore the interest rates for fine-tuning transactions to the repo rate +/–0.10 percentage points, to adjust the repo-rate path down somewhat, and to purchase nominal government bonds for the sum of SEK 10 billion. An important question to answer is of course how this can be, said Mr Jansson.

The reason why a more expansionary monetary policy is needed relates to the shift in the risk outlook that has taken place since the monetary policy meeting in December, stated Mr Jansson. He noted that there are a number of large risks that are difficult to quantify and which, if realised, could significantly change the conditions for economic developments in the coming period. He then went on to comment on some of these risks.

The Greek economy is now in a very serious situation. The new government has announced that it is not interested in continuing to make the economic reforms that are a necessary condition for the financial support it receives from other countries. If the reform work is discontinued and the financial support is not paid, then Greece runs the risk of total economic collapse and the whole euro collaboration would enter a very difficult and hard-to-assess political situation. By extension, there is also the threat of further financial strains for countries that are already financially weak and have difficulty managing large debts. If Greece's lenders were instead to continue funding the country but to compromise on the reforms, then there is a risk that other countries with debt problems would demand similar relief. This could create extensive unease on financial markets and comprise a serious setback for the recovery of the euro area and its growth prospects.

Another serious risk arises from the conflict between Russia and Ukraine. If there is an escalation and the conflict spreads, the negative effects on both trade and financial markets would aggravate. And the economic downturn in Russia and the crisis in Ukraine would of course further deteriorate. It is more or less impossible to assess the probability of such a course of events and to quantify its consequences. But it is nevertheless clear that the situation in a poor scenario could be very worrying and create substantial economic problems in several countries.

Mr Jansson went on to say that a further risk factor is linked to the differences in monetary policy between different currency areas. For instance, the European Central Bank, ECB, will soon embark on an extensive asset purchase programme, while the US central bank, the Federal Reserve, has ceased its purchases and is heading more towards policy rate increases. If the ECB's monetary policy easing contributes to strengthening economic activity in the euro area and pushing up inflation, then Sweden will of course ultimately also benefit. This would both contribute to stimulating Swedish exports and improve our capacity to attain an inflation rate in line with the target.

However, the ECB's measures also create challenges, at least in the shorter-term perspective. The plan is to make very extensive purchases of financial assets, equivalent to at least almost three times Swedish GDP, over a period of just over a year. Of course it is very difficult to assess what significance this will have for the krona exchange rate, in particular against the euro. In the event of a more tangible and rapid appreciation of the krona, it will be even more difficult for the Riksbank to attain an inflation rate in line with the target within a reasonable time perspective. This is a factor that needs to be taken into account when designing monetary policy, both now and going forward.

The final risk on which Mr Jansson wished to comment was a continued fall in the more long-term inflation expectations. At the most recent monetary policy meeting in December it was noted that expectations of inflation five years ahead had fallen for all groups surveyed in December, compared with September.[1] It was particularly worrying that the decline was largest for employer and employee organisations, where inflation five years ahead was expected to be around 1.7 per cent.

The reason why it is particularly problematic in the current situation to have low long-term inflation expectations among the social partners is connected with the fact that in 2016 new wage agreements are to be signed covering around three million employees in the private and public sectors. If the parties agree that the inflation target is a good baseline for the negotiations, this will facilitate wage formation in itself and it should also contribute to the end result being an overall wage increase at a reasonable level.

No new survey of inflation expectations among the social partners has been made since December. On the other hand, Prospera has published its monthly survey of expectations among money market participants in January. According to this, there have not been any dramatic changes, but expectations are continuing to fall somewhat on all time horizons. The expectations of inflation five years ahead among money market participants now amount to 1.65 per cent, which can be compared with 1.73 per cent in the December survey. Like the krona exchange rate, more long-term inflation expectations should be given considerable weight when formulating monetary policy, both now and going forward.

Given the risk outlook, which is discussed in greater detail in the draft Monetary Policy Report and which is taken into consideration as far as possible in the proposed forecasts, Mr Jansson supported both the monetary policy and the macroeconomic forecasts suggested. As before, the fact that inflation has been low for a long time means that he prefers to err on the expansionary side rather than to run the risk of the opposite. He felt

[1] According to TNS Sifo Prospera, see http://www.prospera.se/inflation-expectations/.

that this also agrees with his earlier promise not to vote in favour of an increase in the repo rate until CPIF inflation picks up and exceeds 1.5 per cent.

With regard to the changes in monetary policy proposed in the draft Monetary Policy Report, it can be noted that none of the measures in themselves would have any great effect on inflation, but that it is hoped the measures will together comprise an effective package. The fact that detailed preparations have been made so that monetary policy can become even more expansionary, even between the ordinary monetary policy meetings, should also contribute to this and further emphasise the Riksbank's determination to bring inflation up to the target, concluded Mr Jansson.

First Deputy Governor **Kerstin af Jochnick** began by saying that she supports the proposal to cut the repo rate to –0.10 per cent and to revise the repo-rate path down somewhat. She also considered it reasonable that the relationship between the fine-tuning interest rate and the repo rate should be restored as it aims to facilitate the implementation of the repo rate on the overnight market.

Further, Ms af Jochnick said that she supports the proposal that the Riksbank will shortly purchase government bonds for SEK 10 billion at maturities of up to five years. She considered that the proposed decision is a clear signal that the Riksbank is reacting at an early stage and making monetary policy more expansionary, given that there is a risk that the low oil prices and the turbulence on the financial markets could lead to lower inflation expectations and lower inflation.

The proposed decision is also an important matter of principle for several reasons. For one thing, the proposed decision means that the Riksbank for the first time in history sets a negative repo rate, and for another thing the Riksbank describes how it intends to make monetary policy more expansionary if necessary, through complementary monetary policy measures.

The draft Monetary Policy Report paints a picture of a gradual improvement in economic activity both in Sweden and abroad. Things are going very well for the United States, but developments in the euro area are still weak. Sweden is doing reasonably well thanks, for instance, to household consumption and a high level of housing investment. The picture of real economic developments painted is rather like the picture presented in the Monetary Policy Update published in December. However, the picture is affected by the uncertainty abroad that could affect developments in Europe in particular. GPD growth in the euro area is low to start with, but can be even more negatively affected by the recent political developments in Greece and the conflict between Russia and Ukraine. On the other hand, GDP growth should benefit from the asset purchase programme announced by the ECB.

Another difference from the December assessment is that oil prices have fallen further. The effects of the large fall in oil prices are as yet difficult to assess. The underlying factors come from both the supply and the demand sides, according to Ms af Jochnick. An important question in assessing the global effects on GDP growth and inflation is how lasting the price falls will be. If the lower oil prices persist, the effect on household consumption and company production will probably be greater than in the forecast contained in the draft Monetary Policy Report. Persistent low oil prices could thus be very beneficial for global GDP growth. In the short term, however, the low oil prices mean that global inflation will be lower than the forecast in the December Monetary Policy Update. As taxes on fuels are lower in the United States than in the euro area and Sweden, the impact on consumer prices will be greater in the United States. For Sweden, the lower oil prices offer some contribution to higher GDP growth at the same time as they pull down the already low inflation.

Ms af Jochnick considered it a good thing that the draft Monetary Policy Report contains scenario analyses on the theme of how changed oil prices will impact the real economy and inflation. Her conclusion from the analysis so far is that the fall in oil prices largely has positive effects on global growth, but that inflation will be pushed down both in Sweden and abroad.

Given the fact that inflation expectations have declined over the past year, there is reason to be vigilant with regard to the effect that lower oil prices may have, particularly on inflation expectations five years ahead. As described in an article in the draft Monetary Policy Report, there is research which shows that there is a risk that inflation expectations in countries with low inflation are affected more by low outcome figures for inflation than by the inflation target itself.

Ms af Jochnick concluded that if one looks at underlying inflation, it appears to have bottomed out and to be on its way up again. One explanation why prices are rising is of course that the krona has weakened over the past year, but one can also see price increases in other areas than import prices. Ms af Jochnick also pointed out that even if underlying inflation appears to have bottomed out, it is important that the Riksbank considers what effect lower oil prices may have on inflation expectations. In the current situation with very low inflation and a large fall in oil prices, it is important that the Riksbank clearly underlines the importance of, and capacity to, anchor inflation around two per cent so that the inflation target will continue to function as an important anchor in price-setting and wage formation.

There have been major fluctuations on the foreign exchange markets in recent months, for various reasons. The lower oil prices have been one reason and another is the ECB's planned asset purchase programme. Countries such as Switzerland and Denmark, with currencies linked to the euro, have recently been affected by large currency flows, probably partly linked to the ECB's announcement of a large-scale securities purchase. In addition, the United States and the euro area are out of step with regard to economic activity and the timing of future policy-rate increases. This makes it difficult to assess how the krona will fare in 2015 and one cannot rule out the possibility that the krona will strengthen more than in the forecast in the draft Monetary Policy Report.

Further, Ms af Jochnick said that the situation is uncertain, with continuing low inflation, a risk that the lower oil prices will pull down inflation expectations further and a foreign exchange market that is difficult to assess. It is reasonable to make monetary policy even more expansionary to support what appears to be the coming development in the form of higher underlying inflation and to counteract the lower oil prices pushing down inflation expectations.

The proposal to cut the repo rate by 0.10 percentage points is a small change, but at the same time important in principle as it entails a negative repo rate. Several central banks have previously applied a negative policy rate and experiences from this point to a negative policy rate on the whole having had the intended effect with regard to transmission into the banking system.

However, the experiences of negative interest rates are limited. It is therefore important to follow up and ensure that interest rates in the banking system are cut to stimulate demand. One cannot exclude the possibility that even lower interest rates could lead to changes in behaviour among both banks and the general public, however, which could affect the expansiveness of the monetary policy the Riksbank wants to attain.

Supplementing the cut in the repo rate with purchases of government bonds is a step towards a more expansionary monetary policy. It also facilitates further government bond purchases on a larger scale if this is deemed necessary for monetary policy purposes.

With regard to further measures, in the form of, for instance, loans to companies, it is important to develop a programme and to make it clear what conditions the Riksbank can make for this lending so that it actually comes to companies and makes it easier for them to invest.

Finally, Ms af Jochnick once again pointed out the risks of increased indebtedness in the household sector and said that this would increase the vulnerability of the Swedish economy. Housing prices are continuing to rise, as are debts and the debt ratio. The risks the Riksbank has earlier described will increase with an even more expansionary monetary policy. The need for measures to create a healthier development in household debt is urgent. This applies to both measures to create a more efficient housing market and measures to reduce the risk of household debt resulting in negative effects on growth and financial stability further ahead.

Deputy Governor **Cecilia Skingsley** began by saying that she supports the picture of the economic outlook presented in the draft Monetary Policy Report, as well as the proposed repo-rate decision.

New economic statistics for Sweden have been relatively thin on the ground since the previous monetary policy meeting in December. In her view, however, those statistics that have become available confirm the Riksbank's forecast in December of a gradual recovery of economic activity in Sweden and good potential for rising inflation.

The price level adjusted for the effects of interest rates and energy prices is clearly rising according to the latest outcome, the annual change in December was 1.1. per cent. According to the forecast in the draft Monetary Policy Report, this measure of inflation has now bottomed out and is increasing.

However, in her opinion the major change since the December policy meeting is that the risk outlook has clearly changed to the effect that a significantly more negative development of inflation has become more likely.

Ms Skingsley said that this was due to three things: The fall in oil prices, the response of other central banks to the lower inflation prospects and a number of country-specific risks.

It is likely that the development of oil prices is having a positive overall impact on growth in the Swedish economy. However, falling oil prices also entail a further decline in the rate of inflation. This is evident both globally and in Sweden.

In a more normal economic situation with an inflation rate close to the target, small output gaps and a more neutral monetary policy, a supply-driven fall in oil prices could have been seen as a temporary change that required little monetary policy response. But the Swedish economy is not in such a situation. It is not self-evident that old rules of thumb regarding the effects of oil prices on GDP growth, inflation and monetary policy apply.

A number of countries with weak demand, low inflation and an expansionary monetary policy at the outset have already begun to react with monetary policy easing. In addition there is the growing uncertainty about Greece's relationship with the other euro countries with regard to economic policy and the serious course of events in the conflict between Russia and the Ukraine with potential contagion effects that also pose risks to growth and the development of prices in Sweden via financial, trade and confidence channels. Growing uncertainty about economic developments and the political responses to them has also increased volatility on several financial markets.

The forecasts in the draft Monetary Policy Report have taken these international factors into account to some extent. However, Ms Skingsley wished to point out that this is a question of potentially substantial effects on Sweden that are difficult to assess and the downward revisions could very well have been more substantial. One example is that the forecast for the krona, which of course is always difficult to make, has been revised downwards for the entire forecast period. Considering the extended monetary policy stimulation measures that are in the pipeline in the euro area, Ms Skingsley believed that there was rather a greater risk of a stronger krona.

In this situation, she said that the choice for the direction of monetary policy was either to wait and see whether the risks materialise and inflation risks falling even lower or to take decisive action in the near term to maintain favourable economic conditions in Sweden.

As she believed that the latter choice may reduce the need to act even more forcefully in the future she supported the proposal to cut the repo rate and lower the repo-rate path.

The proposed repo-rate cut of 10 basis points may be minor in mathematical terms but represents a major step as it would be the first time the Riksbank has allowed the most important policy rate to be negative. The technical possibility of letting the repo rate be negative is something the Riksbank has already discussed for several years. However, this discussion has been theoretical and as a negative repo rate has never been tested in Sweden in reality it is reasonable that this first step into negative territory, which may need to be followed by others, is less than the usual step of 25 basis points.

Ms Skingsley saw the proposal to purchase nominal government bonds for SEK 10 billion as a good complement to the proposal to make the repo rate negative. She hoped that a decision to buy would be perceived as the Riksbank now making a clear commitment to reduce any inflation-dampening effects stemming from the international risks mentioned earlier. This also means that a decision to buy today can be followed by several other such decisions.

Ms Skingsley also commented on the fact that in the draft Monetary Policy Report the Executive Board expresses its readiness to also take monetary policy measures between monetary policy meetings. She did not see taking monetary policy measures between the Executive Board's previously announced meetings as a working method that should be used permanently in the future, but as a possibility to take action over the course of the months ahead, given that there is an unusually high degree of uncertainty in a number of important areas that could potentially have a major impact on the Swedish economy.

She also underlined the point that had been made earlier that low interest rates over a long period of time in Sweden continue to drive the expansion of credit in the household sector, thus leading to growing vulnerabilities in the economy as a whole. She repeated her previous stance that with a monetary policy focused on price stability and a favourable development of GDP growth and employment, it is of central importance that other policy areas do their part to reduce the risk that the households' debts trigger a scenario with a really poor development of the economy.

It is therefore important to support the proposed amortisation regulation for a loan-to-value ratio of 50 per cent. Part of the debate has been about whether such a reform would actually trigger the crisis that it is designed to avoid. However, this is obviously not the assessment of the households as their expectations of the development of prices on the housing market recently reached a new all-time high.

Deputy Governor **Henry Ohlsson** began by saying that he supports the proposal to cut the repo rate to –0.10 per cent, to restore the interest rate for fine-tuning transactions to the repo rate +/–0.10 percentage points, to revise the repo-rate path downwards and to purchase government bonds to a value of SEK 10 billion.

In his assessment that monetary policy should be more expansionary he attached particular importance to three observations.

First, there are signs that the rate of inflation has bottomed out. However, this is not clear cut, there are also factors that indicate the opposite. It was still not entirely evident to him that the inflation target would be reached within the intended period of time if monetary policy remained unchanged.

His concern on this point was underlined by the fact that inflation expectations are falling on all of the time horizons studied. This second observation must, in his opinion, be taken extremely seriously. The latest surveys show that the expected inflation rate as far ahead as five years is closer to 1.5 per cent than to the inflation target of 2 per cent.

The third point is that unemployment is still high and has fallen only marginally over the last 12 months. The labour force surveys report a (not seasonally adjusted) unemployment rate of 7.0 per cent in December 2014, compared to 7.5 per cent in December 2013. An alternative is to look at those who qualify for unemployment benefit. The percentage of openly unemployed members of unemployment funds was 3.0 per cent in 2014, according to statistics from the Swedish Public Employment Service. This represents a fall of 0.4 percentage points compared to the corresponding month last year.

However, the ability of monetary policy to affect unemployment is limited. There are significant matching problems on the Swedish labour market at present. According to Statistics Sweden statistics on vacancies, the number of job vacancies as a percentage of the number of employees is currently approximately the same as during the first half of 2008, that is before the financial crisis. Unemployment, on the other hand, is currently almost 2 percentage points higher. Another way of illustrating the matching problems is to look at the Economic Tendency Survey of the National Institute of Economic Research. This shows an increasing shortage of labour. Policy areas other than monetary policy are more able to influence these matching problems.

In Mr Ohlsson's view, there are also other good reasons to make make monetary policy more expansionary already now. One important reason for his stance is that the ECB has announced a more expansionary monetary policy for the euro area. This risks leading to an appreciation of the Swedish krona, which would dampen inflation in Sweden.

Today, the repo rate is zero. It is a challenge to make monetary policy more expansionary in such a situation. The central banks in Switzerland and Denmark have decided to adopt negative policy rates. As far as we can see today, the implementation of negative policy rates has not created any obvious problems.

At the same time, a negative repo rate is not only a minor quantitative change, it is also a major qualitative change. It moves monetary policy from a plus world to a minus world. Mr Ohlsson said that he is concerned about the problems that such a step might entail. There are three reasons for this.

First, laws, regulations and contractual conditions cannot always be expected to be designed for a reality with negative interest rates. There is thus a risk that situations will arise for which no existing regulations are applicable. Second, there is an exceptionally widespread asset with a zero return – cash. Portfolio adjustments may lead to an increase in the demand for cash. It is not clear just how great this increase in demand may be.

Finally, Mr Ohlsson said that he was worried about how the economic players may react when interest rates are negative. As far as he was concerned, it was an open question as to whether behaviour in a plus world can really be translated into a minus world.

However, the modest negative interest rate of 0.10 per cent and the experience gained in Switzerland and Denmark eased his concern. Together with the proposed purchase of government bonds, he believed that this was a very well-balanced expansionary monetary policy in the prevailing situation in the Swedish economy.

Governor **Stefan Ingves** began by saying that on the whole he shared the view of developments abroad and the Swedish economy presented in the draft Monetary Policy Report. He supported the proposal to cut the repo rate to –0.10 per cent, to restore the interest rates for fine-tuning operations to the repo rate +/–0.10 percentage points, to revise down the forecast for the repo-rate path somewhat and to complement this by purchasing government bonds for SEK 10 billion. Mr Ingves also considered that it was reasonable to continue working on a possible loan scheme for companies and that the Riksbank should be ready to take measures even between the monetary policy meetings if necessary.

The recovery is continuing abroad but rather sluggishly, and the strength of the recovery varies from country to country and region to region. In the United States the recovery is quite strong and it is also benefiting from the fact that oil prices have fallen since the previous meeting. The forecasts for inflation in the draft Monetary Policy Report has been revised downwards significantly due to the fall in oil prices, and it is even likely that there will be a period of negative inflation as a consequence of this, but inflation will become positive and rise again in the early part of next year.

The recovery in the euro area is weaker than in the United States due to a slow adjustment of the imbalances in several countries, but here too the recovery should benefit from the downturn in oil prices. GDP growth will also be stimulated by the ECB's asset purchase programme. The draft Monetary Policy Report's inflation forecast for the euro area this year has also been revised downwards, but it is predicted that inflation will begin to rise again later in the year.

Mr Ingves also noted that the economic prospects are somewhat weaker in Asia and Latin America and much weaker in Russia than assessed in the Monetary Policy Update in December. The transformation of the Chinese economy from investment-led GDP growth to consumer-driven growth entails a slowdown in GDP growth there, which is affecting many other countries.

In addition, uncertainty abroad has increased in several other ways since the previous monetary policy meeting.

In Greece there has been a considerable increase in uncertainty regarding economic policy and the financial situation in recent weeks, which may affect the economy in the euro area and also indirectly the Swedish economy in a way that is difficult to forecast.

The worsening of the conflict between Russia and Ukraine means that the geopolitical risks have increased. Ukraine is experiencing very serious economic and financial problems. The Russian economy has been severely weakened by the fall in oil prices and the sanctions imposed by the European Union and the United States. This is contributing to the build-up of a high degree of uncertainty, especially for countries that trade extensively with Russia, and also entails potential indirect risks for the Swedish economy.

On the financial markets, uncertainty has increased about the effects of the differences between the monetary policies pursued by different central banks. The ECB has decided to conduct substantial asset purchases in order to make monetary policy more expansionary and to ensure that inflation rises. The differences in monetary policy between the euro area and the United States have thus increased. There has also been a change of direction in the monetary policies conducted in a number of smaller European countries. The Swiss central bank has abandoned its exchange-rate floor in relation to the euro and has cut its policy rate to –0.75 per cent. In Denmark, the central bank has intervened on the foreign exchange market and lowered the policy rate to –0.75 per cent to defend the fixed exchange rate in relation to the euro. Norway is also affected by the fall in oil prices.

Mr Ingves said that all this means that it is extremely difficult to make mean value forecasts for the real economy and inflation, in both Sweden and abroad. It is particularly difficult to predict the development of exchange rates. The forecasts have not changed very much but the "playing field" is different now compared to the situation in December. Events since then have increased uncertainty and this uncertainty will probably endure.

In Sweden, GDP growth will benefit from the lower oil prices and the weaker krona, but will be held back by the fact that the international recovery is proceeding rather slowly. The GDP forecast is largely unchanged in relation to the forecast in December. However, the assessment in the draft Monetary Policy Report for 2016 and 2017 is that increased demand abroad will contribute to a more rapid increase in exports and investment in Sweden. Without expansion abroad it is difficult to keep demand up by domestic means alone. When economic activity recovers abroad and the labour market improves, consumption will be able to continue to contribute GDP growth during the forecast period.

Compared to the assessment in the December Monetary Policy Update, unemployment is expected to be somewhat higher during the forecast period and to gradually fall to 6.7 per cent. However, Mr Ingves' assessment was that there is a risk that the assumptions concerning GDP growth and the forecast for unemployment may be slightly too optimistic. Developments abroad may be worse or much worse than outlined in the main scenario due to the uncertainty he mentioned previously.

The labour market in Sweden appears to be working less effectively than in, for example, Germany, as Mr Ingves has pointed out at previous meetings. This relates to structural problems and poor matching between job vacancies and that part of the labour force that lacks employment. Unemployment in the period ahead will therefore be affected by several uncertain factors, for example the development of matching and demography. These are issues that lie far beyond the control of monetary policy. On the other hand, the number of newly-registered job vacancies is now at approximately the same level as in 2007, so it seems rather clear that unemployment is falling, although at what rate and to what level is harder to assess.

Inflation is low and lower energy prices are contributing to this. However, inflation is still low even if we adjust for energy prices and falling interest costs, with an annual rate of increase of 1.1 per cent in December for the CPIF excluding energy.

Inflation has been low in several countries, as discussed in an article in the draft Monetary Policy Report. Service prices, for example, have been increasing only slowly for some time in Sweden and the euro area. The rate of increase for service prices is still lower than the average, approximately 1.8 per cent per year since 2000, but it is rising. Goods prices fell in 2014 at approximately the same rate as the average since 2000, that is by around 0.5 per cent per year. Energy prices, on the other hand, have fallen much more rapidly than expected. However, there are signs that the downward trend is reversing for several sub-groups in the CPI, such as food, goods and services.

Mr Ingves said that underlying inflation, for example measured in terms of the CPIF excluding energy, appears to have bottomed out and to be increasing. Increased resource utilisation should lead to gradually higher wage increases, and greater possibilities for the companies to raise their prices suggest that inflation will rise during the forecast period. Import prices should also rise when the international economy recovers. According to the draft Monetary Policy Report, inflation measured in terms of the CPIF excluding energy will initially rise more rapidly than the CPIF and reach 2 per cent in early 2016.

The assessment is that lower energy prices will also hold down CPIF inflation in the year ahead. However, this will partly be counteracted by the weakening of the krona. The krona is expected to remain at a weaker level for slightly longer than forecast in December, which will help to keep inflation up. CPIF inflation is expected to reach 2 per cent in mid-2016.

However, the risk of a setback for both the real economy and the financial markets has increased. This also increases the risk of a further fall in inflation expectations and of inflation not beginning to rise in line with the path in the main scenario.

In Mr Ingves' view there is considerable uncertainty about inflation in the future. This applies, for example, to the magnitude of the direct and indirect effects of the downturn in energy prices on Swedish consumer prices. Inflation in Sweden has been low for some time and inflation expectations in the long term have gradually fallen. In such a situation, the fall in oil prices may affect inflation expectations more than normal, which would risk holding down inflation. This is illustrated in an alternative scenario in Chapter 2 of the draft Monetary Policy Report.

The Business Survey published by the Riksbank on 6 February also carries a reminder that technological advances and increased global competition are holding down prices and leading the companies to try to cut costs. According to the companies, demand needs to increase to provide scope for significant price increases.

Given the monetary policy conducted abroad, there is also a risk that the krona will be stronger than forecast in the draft Monetary Policy Report. Sweden is extremely dependent on its exports to the rest of the world. The situation in Europe is uncertain. It is therefore important that the krona does not begin to strengthen too quickly. The exchange rate is highly affected by the monetary policy conducted in the United States and the euro area. In a sense, the krona is thus positioned between the US dollar and the euro. In a situation with low inflation in both Sweden and the euro area the krona is now closer to the euro and it is important that it remains so. Mr Ingves pointed out that the Riksbank will have to keep a watchful eye out for any contagion effects when liquidity increases in the euro area as a result of the asset purchases. Increased growth in Europe is basically good for Sweden, but exchange rate effects in the short term may also have an impact on the development of inflation.

A central problem is that housing prices continue to increase sharply, which is contributing to increased borrowing with major risks to economic stability going forward. Despite the fact that the Riksbank has called for measures in other areas for several years, far too little has been done. Finansinspektionen's proposed amortisation requirements are not enough. They will have only marginal effects. The list of other measures includes lowering the mortgage ceiling, reducing tax deductions for mortgage-interest payments, introducing minimum levels in the banks' discretionary income calculations and improving the workings of the housing market. Rising asset prices and a rapid increase in lending for the purchase of housing are side effects of the current low interest rate policy and these side effects must be counteracted so that the risks do not become too great. Mr Ingves said that a failure to do this will create risks that we should not take in this country.

Mr Ingves then went on to discuss the proposed monetary policy decisions that he listed initially. The measures now being proposed, which can be scaled up if necessary, can together be seen as a kind of insurance against poor outcomes and the risk of lower inflation and lower inflation expectations against the background of uncertain and diverging developments abroad that we have no control over.

The textbooks teach us that a central bank's monetary policy works through several channels. Interest rates at long and short maturities are reduced by a lower repo rate and a lower repo-rate path. Complementary purchases of government securities contribute to lower risk and forward premiums and thus to lower interest rates. Lower interest rates relative to those abroad help to weaken the exchange rate. Unconventional measures also help to increase the central bank's balance sheet. This means that liquidity (the amount of money) increases in the economy. This in turn means that the balance sheets of players in the private sector also increase, which enables more consumption and investment and, ultimately, rising prices.

Mr Ingves then reviewed the arguments that he believed were most important when considering the monetary policy decision. In practice the magnitude of the effects of these various channels is difficult to estimate, but together they represent a form of insurance against a too low rate of inflation in an uncertain international situation. This is also a form of insurance that is needed. There are clear risks of events that in a statistical sense lie some distance from the mean value forecasts but that in practice would have severe negative consequences. These actions will demonstrate our determination to safeguard the inflation target and the fact that we are ready to take further measures. We are essentially prepared to do all we can to uphold the inflation target as an anchor for price setting and wage formation in Sweden. This means that we must also be prepared to use our balance sheet to attain our target.

In conclusion, Mr Ingves said that if more is needed to make monetary policy more expansionary there are several alternatives. It is possible to lower the repo rate and the repo-rate path more than today. It is also possible to increase the purchase of government bonds. In addition, the Riksbank should be prepared to begin lending to companies through the banks with the aim of increasing corporate investment. If our forecast is correct inflation will soon begin to rise, and if this turns out not to be the case we will have to do a little more. Finally, it may be worth noting that if we compare the situation in other countries and look at the interest rates offered to companies, households and governments there when they want to borrow, then Swedish monetary policy is now highly expansionary.

§3. Discussion

Deputy Governor **Per Jansson** began the discussion by raising a question relating to the proposal to cut the repo rate to –0.10 per cent and the deposit rate for the fine-tuning transactions to –0.20 per cent: Is there not now a risk that banks will in turn introduce negative interest rates, or some kind of fee, for the customers' savings or wage accounts?

Mr Jansson's assessment was that this risk is limited for at least two reasons. First, this would of course not be a very popular measure among the banks' customers. Bank customers are already forced to pay a range of fees for bank services and it would be no easy matter for the banks to justify why yet another fee, or a negative interest rate, was appropriate for a "service" that is ultimately about improving the Swedish economy.

Second, the costs that the banks will incur as a result of the negative interest rates are not particularly substantial. If they are set in relation to the profits in the banking sector at present they are more or less negligible. The same applies if the costs are compared to the dividends paid to the banks' owners. Such small costs hardly justify negative interest rates or fees for savings or wage accounts.

As pointed out in the draft Monetary Policy Report, it is also more likely that the banks, if they wish to prevent a deterioration in their earnings at any price, will instead choose to not lower their lending rates to the same extent they usually do when the repo rate is cut, said Mr Jansson. All in all, this would mean that the monetary policy transmission mechanism would become somewhat weaker than normal when the repo rate is cut below zero. However, repo-rate cuts below zero would still affect the economy through both lower interest rates and other channels in the transmission mechanism, for example a weaker exchange rate. And, of course, it cannot be ruled out that the banks will actually accept somewhat lower earnings and allow their lending rates to fall to the same extent as when the repo rate is positive.

Deputy Governor **Cecilia Skingsley** began her contribution to the discussion by saying that she shared Mr Ohlsson's analysis of the matching problems on the labour market, that it is difficult for monetary policy to compensate for this and that other policy areas need to work with improving matching.

It is part of the Riksbank's analysis work to monitor and understand not only the economic cycle but also the structural changes taking place in the economy. It is therefore positive that one of the articles in the draft Monetary Policy Report takes up the issue of structural changes in the form of the development of digital technology and the possible impact this will have on the economy in a broad sense. The article concludes that technical changes have a dampening effect on inflation but that this effect is difficult to measure and other factors have played a greater role for the low level of inflation in recent years.

The fact that technical changes are important factors for the economy is also confirmed by the Riksbank's latest Business Survey. Investments currently relate to improving the efficiency of existing operations rather than to expansion, which means there is a need to increase the skills and expertise of employees. In the draft Monetary Policy Report, the Riksbank is cautious about just how substantial these changes are, but if digital technology is seen as an important issue in the business sector the companies will act accordingly.

New behaviours follow in the wake of new technologies. For example, the fact that the production of newsprint has halved in Sweden over the course of a few years is largely because the consumers are demanding what they see as a better product, namely reading material in digital format. There is no monetary policy that can get consumers to change back to an old product if they have found a better one.

Ms Skingsley also commented on Mr Flodén's statement that a lower repo-rate path should take precedence over the purchase of government bonds. She agreed that the repo rate and the forecast for the repo-rate path are the Executive Board's primary monetary-policy instruments, but also said that we should not exaggerate the signalling power of a changed repo-rate path. This is in part because the Riksbank is clear about the accuracy of its forecasts. The forecast at the far reaches of the horizon means, given the so-called uncertainty bands, the the repo rate in three years' time may be between –2.0 and 4.9 per cent. It is also partly because it is up to the fixed-income market to price what it perceives to be the most likely monetary policy in the future, and the market's current reading shows that it expects future rates to be lower than forecast in the draft Monetary Policy Report.

If the repo-rate path materialises in the future there is a technical risk that that the bonds purchased now will fall in value. However, Ms Skingsley's assessment was that this risk is limited when weighed against the more acute risk of a further fall in inflation in Sweden, with greater difficulties to keep inflation expectations anchored to the inflation target.

Deputy Governor **Martin Flodén** agreed with Mr Ohlsson's view that a negative repo rate is unexplored territory and that this entails a number of uncertain factors. As Mr Ohlsson said, legislators have perhaps not considered the possibility of a negative interest rate when drawing up laws and regulations, and it is possible that the demand for cash will increase. Mr Flodén said that it was important to point out that the Riksbank has thought quite a lot about such issues before today's decision. As already stated, this is unexplored territory, so we can of course not be certain about what the effects will be. Nevertheless, the Riksbank's investigations indicate that any problems relating to laws and regulations can be managed. And the assessment is that the demand for cash will not increase significantly as longs as the repo rate is not cut to very negative levels. The Riksbank is also ready and able to manage an increase in the demand for cash if it nevertheless arises.

Like Mr Ohlsson, Mr Flodén believes that a negative repo rate may be considered strange by many people. It is therefore hard to predict how behaviours will change. However, a cut to a negative rate should not really have such different effects. When the Riksbank cuts the repo rate it always becomes less attractive to save and more attractive to borrow. The difference this time is possibly that this effect will be weaker than normal as the interest rates for savings accounts and wage accounts will probably not be lowered quite as much as in the case of repo-rate cuts from higher levels.

Mr Flodén then commented on Ms Skingsley's questions. He made it clear that he was not advocating a different repo-rate path to the one proposed in the draft Monetary Policy Report. And, like Ms Skingsley, Mr Flodén believes that the signalling value of the repo-rate path is weak, especially at the tail-end of the forecast horizon. The Riksbank's possibilities to make monetary policy more or less expansionary by changing the repo-rate path are therefore limited. Mr Flodén said that what he was trying to say earlier was that communication concerning the monetary policy strategy is important and that the credibility of the repo-rate path can be strengthened by bond purchases that make it more likely that the repo rate will really develop as forecast and that mean that it will be expensive for the Riksbank to deviate from the presented repo-rate path. Similarly, communication concerning the repo-rate path can reinforce the effects that the bond purchases aim to achieve. However, Mr Flodén did not see how such effects could be achieved if the Riksbank communicates a forecast for the repo-rate path that is considerably higher than market rates at the same time as the Riksbank purchases bonds in order to put further downward pressure on market rates.

Deputy Governor **Henry Ohlsson** then commented on Ms Skingsley's and Mr Flodén's contributions. He made it clear that he is not concerned about cutting the repo rate to –0.10 per cent but that he does not believe it can go much very much below that. He wondered whether zero is a magic figure or not, and whether a negative repo rate will work as intended or whether the players in the economy will act differently than in the case of a positive repo rate.

Governor **Stefan Ingves** commented that one can choose which way to go and either implement a measure up to a certain level one at a time or implement several measures at the same time. According to Mr Ingves, it was reasonable to use several measures at the same time. He thought it was appropriate to take the discussion at the monetary policy meeting held in December a step further and to act in order to demonstrate that the Executive Board is not all talk and no action. He also said that he was aware that it will be difficult to work with both price and quantity but does not see this as an obstacle to increasing liquidity in the economy in one way or another. He pointed out that he also shares the uncertainty about developments abroad that several others had mentioned.

Governor **Stefan Ingves** then summarised the various contributions. He noted that the Executive Board agreed on the picture of economic prospects and the inflation outlook described in the draft Monetary Policy Report.

The global economy is expected to continue recovering. But the uncertainty over economic developments abroad and the volatility on the financial markets has increased since the monetary policy meeting in December. The low oil prices are positive for global GDP growth but also lead to low global inflation. Apart from the movements in oil prices, the increased uncertainty is also partly due to recent developments in economic-policy conditions in Greece and the conflict between Russia and Ukraine. The economic outlook differs from country to country and region to region. This is reflected in increasing differences in monetary policy. The central banks in the United States and the United Kingdom are expected to raise their policy rates this year, while the ECB and several other central banks have made monetary policy more expansionary. These differences have contributed to substantial fluctuations on the foreign-exchange markets.

An economic recovery abroad will reinforce economic activity in Sweden and the labour market will improve going forward. Inflation is still low, but there are signs that underlying inflation has bottomed out. However, lower oil prices risk dampening inflation expectations and thereby inflation more than was assumed in the forecast. To this can be added the increased uncertainty about developments abroad and on the financial markets.

The Executive Board agreed that monetary policy needs to be even more expansionary to reduce the risk of long-term inflation expectations continuing to fall and to support inflation rising towards the target sufficiently fast.

All of the Board members advocated that the repo rate should be cut by 0.10 percentage points to –0.10 per cent, that the repo-rate path should be adjusted downwards and that the interest rates on the fine-tuning transactions in the Riksbank's operational framework for the implementation of monetary policy should be restored to the repo rate +/–0.10 percentage points.

A majority of the Board members also decided that the Riksbank shall buy nominal government bonds for SEK 10 billion. One member entered a reservation against the decision to buy government bonds now.

If these measures were to prove insufficient to get inflation to rise towards the target, the Riksbank can quickly make monetary policy even more expansionary. The measures taken and the readiness to do more underline the Riksbank's aim to safeguard the role of the inflation target as a nominal anchor for price setting and wage formation.

The Board also discussed at the meeting the effects of a negative repo rate, the matching problems on the labour market, the effects of structural changes in the economy and the risks of increased household indebtedness and the need for further measures to deal with this.

§4. Decision on the Monetary Policy Report and the repo rate

The Executive Board decided after voting

- to adopt the Monetary Policy Report according to the proposal, Annex A to the minutes,
- that the repo rate would be lowered to –0.10 per cent and that this decision would apply from Wednesday 18 February 2015,
- and to publish the Monetary Policy Report on 12 February 2015, at 9.30 a.m..

As a result of the Executive Board's decision to introduce a negative repo rate, some parts of the Riksbank's Terms and Conditions for RIX and Monetary Policy Instruments need to be amended so that they also work in a situation with a negative repo rate. The Riksbank's Terms and Conditions for Loro Accounts will also need to be complemented to enable the Riksbank to debit its loro customers a negative interest rate.

§5. Decision to purchase government bonds

Heidi Elmér presented this agenda item.

The Executive Board decided in accordance with the proposal, Annex B to the minutes.

Deputy Governor Martin Flodén entered a reservation against the decision to purchase government bonds now.

§6. Decision on interest rates for fine-tuning transactions and standing facilities

Heidi Elmér presented this agenda item.

The Executive Board decided in accordance with the proposal, Annex C to the minutes.

§7. Other decisions

The Executive Board decided

- to publish the decisions under §4, §5 and §6 at 9.30 a.m. on Thursday 12 February 2015 with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on Wednesday 25 February 2015 at 9.30 a.m..

This paragraph was verified immediately.

Minutes by

Lena Eriksson

Verified:

Martin Flodén	Stefan Ingves	Per Jansson
Kerstin af Jochnick	Henry Ohlsson	Cecilia Skingsley

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