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# MINUTES OF THE EXECUTIVE BOARD'S MONETARY POLICY MEETING, No. 5

DATE: 25 October 2010

TIME: 9 a.m.

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

Leif Pagrotsky, Vice Chairman of the  
General Council

Sigvard Ahlzén  
Hanna Armelius  
Claes Berg  
Carl-Johan Belfrage  
Heidi Elmér  
Eric Frieberg  
Gudrun Gunnarsdottir (§ 1)  
Jesper Hansson  
Ann-Christine Högberg  
Per Jansson  
Hanna Larsson (§ 1)  
Pernilla Meyersson  
Marianne Nessén  
Christina Nyman  
Mattias Persson (§ 1)  
Cecilia Roos Isaksson  
Øistein Røisland  
Olof Sandstedt (§ 1)  
Britta von Schoultz  
Jonas Söderberg (§ 1)  
David Vestin  
Staffan Viotti

## § 1. Economic developments

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

Gudrun Gunnarsdottir of the Financial Stability Department began by presenting recent developments regarding financial stability. She observed that the underlying public

finance problems in Europe remained, but that they formed less of a risk for financial stability now that the European fund EFSF was in place and that the borrowing costs of the southern European countries had decreased compared with Germany.

The low policy rates abroad have led investors to seek assets providing higher returns. This has led to increasing commodity prices, and to both capital inflows and rising share prices in emerging economies.

The balance sheets of the European Central Bank (ECB) and the Riksbank have decreased, while the Federal Reserve and Bank of England have not started to scale down their extraordinary measures. In Sweden, the final fixed-interest rate loan has now matured and, in conjunction with this, certain disruptions have occurred on the interbank market.

Mattias Persson, Head of the Financial Stability Department, made the assessment that these disruptions of the interbank market were of a temporary nature. The banks have access to funding and the markets are now functioning without support from the Riksbank.

Hanna Larsson of the Monetary Policy Department presented the most recent developments on the financial markets. Pricing on the market indicated that an increase in the repo rate of 0.25 percentage points was expected at today's meeting. Repo rate increases were also expected at the following two meetings. According to Prospera's investigation, monetary policy expectations up to two years ahead had increased by 30–40 points compared with the previous survey. Forward pricing also indicates that monetary policy expectations are somewhat higher now than they were in both September and mid-October. A similar development has taken place in the eurozone.

Per Jansson, Head of the Monetary Policy Department, first presented the statistics that had become available since 14 October, when assessments of economic developments in Sweden and abroad had been presented to the Executive Board at a meeting. Following this, he presented a basis for the Executive Board's discussion in the form of a draft Monetary Policy Report. He noted at the start that the basis for the draft in the form of an international outlook and status report had been presented by the Monetary Policy Department and discussed at meetings on 5 and 6 October. Forecasts and texts were tabled at a meeting of the Executive Board on 19 October.

Since the last monetary policy meeting on 1 September, second quarter GDP growth in Sweden has been adjusted significantly upwards, while unemployment has fallen more than expected. At the same time, inflation in August and September has been marginally higher than expected, primarily as a result of higher energy prices.

According to the forecast in the draft Monetary Policy Report, the broad upswing in the Swedish economy is continuing in accordance with the normal pattern of economic recoveries, namely with the strong development of exports, followed by rising investments and consumption. A steady improvement of the labour market is predicted and all measures of resource utilisation will be normalised during the forecast period, i.e. by 2013 at latest. CPIF inflation will initially fall due to the appreciation of the krona, but will then increase to amount to approximately 2 per cent from mid-2013. CPI inflation will increase to above 2 per cent in 2012 as a temporary effect of repo rate increases on

mortgage costs. The repo rate will be increased successively, reaching 3.5 per cent at the end of 2013.

The development of the real economy in Sweden is expected to be strong, particularly in the short term, at the same time as the recovery of the United States and eurozone will take time, as explained in an article. The strength of the Swedish economy can currently largely be explained by the high share of exports, and its emphasis on investment goods and durable consumer goods, the high level of household saving, very strong public finances and the stable financial system.

The forecasts for GDP and inflation abroad have been marginally adjusted from those presented in the Monetary Policy Update from September. However, this development is considered to require support in the form of lower policy rates than those in that forecast. The development of the real economy in Sweden has been revised upwards at the same time as inflation is slightly lower due to productivity effects and the appreciation of the krona resulting from the lower policy rates abroad. It is proposed that the repo rate be increased at a slower rate than that indicated in the previous forecast in light of the decreased inflationary pressures.

## § 2. Economic outlook abroad

First Deputy Governor **Svante Öberg** began by supporting the picture of international developments presented in the draft Monetary Policy Report. He observed that the revisions made since September were minor. However, he wished to touch upon his view of developments and risks.

Developments in the United States are troublesome. GDP growth is moderate, unemployment is high and inflationary pressures are low. Experience from previous financial crises suggests that a long period of dampened GDP growth and high unemployment can be expected in the United States. Developments in Europe are better, but not good. GDP growth is moderate and unemployment is high. Several countries are facing major problems with their banks and public finances, while most European countries must tighten their fiscal policies. Inflationary pressures are not as low as in the United States. The ECB has cut back on lending to the banks and short-term interest rates in the eurozone have thus increased in recent months, largely to the same degree as in Sweden. In contrast, growth in the world as a whole is strong. GDP growth is estimated to be just above 4 per cent per year during the forecast period, not far from the level prevailing prior to the crisis. This is because of the rapid growth in emerging and developing economies. Together, they are responsible for half of the world's GDP and three quarters of the world's GDP growth. Inflation is also high in many of these countries. The strong growth in the world as a whole is contributing both to increasing exports from the United States and Europe, including Sweden, and to rising prices for energy and commodities and thus, ultimately, also to rising consumer prices.

As regards risks, Mr Öberg's assessment was that uncertainty has increased recently. There is a risk that growth in the United States will be below forecast. The possibilities of stimulating the economy via fiscal policy have largely been exhausted by the large deficit in public sector finances. On the other hand, an expansionary monetary policy is being conducted to support the recovery and the Federal Reserve is discussing the possibility of

providing further stimuli through the purchase of bonds. It is, as yet, unclear as to how this may help the situation. Another risk is that the major differences in different parts of the world may lead to problems. The financial crisis has led to a downwards shift in world trade in relation to previous trends. Furthermore, the low interest rates in the United States and the eurozone have led to problems in other countries with capital inflows which are pushing up exchange rates and asset prices. There is thus a risk that these countries may attempt to counteract the appreciation of their own currencies in order to strengthen their own exports and growth, introducing protectionist elements into the trade exchange and placing restrictions on capital flows. This may trigger a negative spiral.

On the other hand, there may be a rapid upswing once the US housing market starts to improve and employment starts to increase rapidly enough to bring unemployment down. Interest rates for US government bonds with long maturities are presently depressed by the weak economic growth, flight to quality and expectations that the Federal Reserve will increase its purchases of bonds. If growth in the United States picks up faster than expected, interest rates for US government bonds with long maturities may increase rapidly. The last time we saw this was in the first six months of 2009, when the interest rate for ten-year government bonds increased from 2 to 4 per cent. The interest rate for ten-year US government bonds functions as a benchmark for other assets across the world. Better growth in the United States may therefore affect long-term interest rates not just in the United States, but also in other countries, including Sweden.

Deputy Governor **Karolina Ekholm** stated that she shares the view of inflation and GDP presented in the draft Monetary Policy Report. However, she was sceptical towards the forecast for foreign policy rates as expressed in the TCW-weighted curve in Figure 1.18 of the draft Monetary Policy Report, even though it implies a downwards revision from the equivalent path in the September Monetary Policy Update. The curve follows implied forward rates for four quarters but then deviates in that historical relationships between policy rates and macrovariables such as inflation and GDP growth affect the forecast where the forecast values for inflation and GDP are used as a basis.

According to Ms Ekholm, there are a number of factors that argue in favour of lower policy rates in the period ahead. Communications from the US central bank, the Federal Reserve, the European central bank, the ECB, and the Bank of England indicate that, given their own forecasts, they see a need to hold their policy rates unchanged longer than is implied by the TCW-weighted curve in Figure 1.18 of the draft Monetary Policy Report. The existence of such a need is supported by the apparent sluggishness of the recovery in the United States. Housing prices have not recovered, unemployment has become entrenched at a high level and scope for further fiscal policy stimulation is limited. At the same time, the public finance situation in the eurozone and the United Kingdom means that fiscal policy, by all appearances, will be restrictive in the period ahead, justifying a monetary policy counteracting the effect on the economy by continuing to be expansionary. Furthermore, as Mr Öberg has already pointed out, the desire to avoid the strengthening of exchange rates having a negative effect on net exports may lead to generally low policy rates abroad.

All in all, Ms Ekholm considered that the blue curve in Figure B11 in the draft Monetary Policy Report forms a more reasonable forecast for monetary policy outside Sweden and

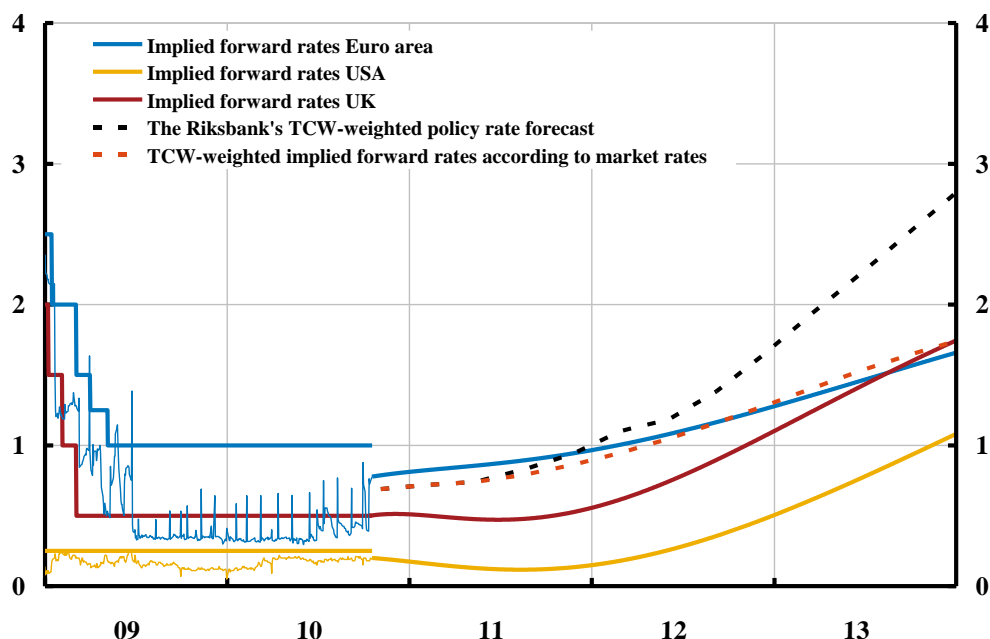
pointed out that this has implications for her assessment of an appropriate monetary policy in Sweden in the period ahead.

Deputy Governor **Lars E.O. Svensson** said that he largely shares the view of developments abroad presented in the draft Monetary Policy Report as regards inflation and GDP, but, like Ms Ekholm, his opinion differs as regards the development of foreign interest rates and assumptions of current foreign long-term interest rates. He shared Ms Ekholm's view of future foreign policy rates, but wished to develop the reasons for a deviation from the main scenario slightly further.

During the decision-making process, there have been several intensive discussions regarding foreign interest rates. It is, of course, very important which assumptions are made regarding foreign interest rates, in particular foreign long-term interest rates. These have a direct effect upon the Riksbank's interest rate path. The situation for a small, open economy such as Sweden's is, of course, that domestic short-term and long-term interest rates (i.e. the domestic yield curve) cannot deviate excessively from foreign short-term and long-term interest rates (the foreign yield curve) without this having major effects on the exchange rate – and, of course, the exchange rate, in turn, has a major effect on inflation, exports and GDP.

In the main scenario in the draft Monetary Policy Report, it is forecast that, in a couple of years, the TCW-weighted interest rate will be significantly above present market interest rates. In Figure 1, the yellow curve indicates implied forward rates for the federal funds rate (the US policy rate), which can be interpreted as reflecting market expectations for this interest rate. The red curve shows the corresponding implied forward rates for the Bank of England's policy rate. The blue curve shows the corresponding implied forward rates for the Eonia, the overnight rate in the eurozone. The red dashed curve near the blue curve shows corresponding TCW-weighted implied forward rates, also including Norges Bank's interest rate path. The red dashed curve is thus the TCW interest rate path that represents current short-term and long-term foreign market interest rates and that can also be interpreted as reflecting TCW-weighted market expectations for foreign policy rates. The black dashed curve shows the main scenario's forecast of TCW-weighted foreign policy rates. This is thus above market expectations in 2012 and significantly above market expectations in 2013.

**Figure 1. Implied forward rates and the main scenario's forecast for policy rates abroad.**



Note: Forward rates have been adjusted for risk premiums and describe the expected overnight rate.

Sources: Reuters EcoWin and the Riksbank

Behind the main scenario's TCW-weighted interest rate path lies the assumption that the Federal Reserve, ECB and Bank of England will start raising their policy rates sooner than is indicated by current market interest rates. For example, both the Federal Reserve and the Bank of England are assumed to start raising their policy rates within one year.

If a forecast is to be made for foreign policy rates that deviates from that implied by market pricing, Mr Svensson maintained that considerable emphasis should be placed upon the assessments made and signalled by the Federal Reserve, ECB and Bank of England themselves. These institutions have better information on their own economies, greater resources for analysis and investigation and, above all, better information regarding their own plans for the future. He considered that very strong and clear reasons would be necessary to justify arriving at another conclusion than that stated and signalled by these central banks themselves.

So, on the basis of which statements and signals should we proceed? As regards the Federal Reserve, very clear signals have been given recently. The Chairman of the Federal Reserve, Ben Bernanke, recently held a speech at a conference at the Federal Reserve Bank of Boston that received a great deal of attention. In this speech, he emphasised that forecasts of inflation and unemployment in the United States indicated a rate of inflation lower than that wished by FOMC and an excessively high level of unemployment. Mr Bernanke claimed that the zero lower bound for the federal funds rate was binding, that is that a lower policy rate would have been desirable had this been possible. He claimed that "there would appear – all else being equal – to be a case for further action". He also discussed possible policy measures, namely a new round of quantitative easing (QE2) and the possibility of announcing that the period of time during which the Federal Reserve plans to maintain an extremely low interest rate is longer than what is currently priced in by the market.

Charles Evans, President of the Federal Reserve Bank of Chicago and member of the FOMC, also held a speech at this conference. He argued that a more expansionary monetary policy was needed in the United States, and that real interest rates should be -3 or -4 per cent until the end of 2012, compared with the present rate of -1 per cent. He also discussed a price level target to increase inflation expectations and decrease the real interest rate.

These clear signals from the Federal Reserve are hardly compatible with a forecast suggesting it will start to raise its policy rate during 2011. Many analysts no doubt expect that the current interval of 0–0.25 per cent will remain until the end of 2012, and even into 2013. So, if market interest rates and associated forward rates are not to be used as a starting point for a forecast of the federal funds rate, a lower interest rate path should be used rather than a higher one.

As regards the ECB, Mr Svensson argued that the best information and signals could be obtained in the ECB Staff Forecast, which was presented in the beginning of September. This is based on the assumption that the Eonia interest rate, the overnight rate in the eurozone, follows market expectations. It shows that inflation will be below the ECB's target of "below, but close to, 2 per cent" and that the real economy will be very weak. If anything, this indicates that the ECB will also be implementing a monetary policy corresponding to an interest rate path that is below market expectations.

As regards the Bank of England, its latest inflation report presents a forecast, also based on a policy rate equal to market expectations, in which inflation will fall below target in just over one year's time and in which the real economy is relatively weak. The latest minutes from the Bank of England discuss the possibility of continued quantitative easing, and many analysts deem it highly likely that a new round of this will be announced soon. This also indicates that the Bank of England will be conducting a monetary policy corresponding to an interest rate path below, rather than above, market expectations.

If the statements and signals from these central banks indicate interest rate paths below market expectations, it is not reasonable to assume that foreign interest rate paths will be above market expectations – as the main scenario does. In circumstances such as these it would be more reasonable, at the very least, to base the forecast on market interest rates and market expectations. Mr Svensson could not see any reason to assume higher interest rate paths.

He maintained that assumptions regarding foreign interest rate paths are highly critical. This is because, in practice, they also imply assumptions regarding foreign long-term market interest rates – even if the draft Monetary Policy Report is not particularly transparent in this regards. In the main scenario, higher long-term foreign market interest rates are assumed than exist at present. As it is the difference between long-term Swedish and foreign market interest rates that affects the exchange rate, this has major effects on the development of the exchange rate, a subject Mr Svensson intended to return to later in the meeting.

Deputy Governor **Lars Nyberg** said that he essentially shares the analysis of the international situation as presented in the draft Monetary Policy Report. He desired merely to complement it in a few points. Growth in the world is, of course, expected to be

higher than normal in the years ahead, just over 4 per cent. This should actually provide a stable basis for the positive development of economic activity. However, as we know, there are problems in both the United States and Europe. The toughest of these seem to be in the United States, where uncertainty on the housing market is continuing and unemployment is not retreating as expected. However, at the same time, industrial production is increasing and companies are earning money and increasing investments. Consumption is growing, albeit at a low rate. In total, GDP is expected to grow by 2.5 to 3 per cent per year in the coming years, which, of course, is not really such bad news. The messages sent by these signals are thus somewhat varied and far from uniformly negative.

One problem is that growth would have to be even higher for unemployment to seriously decrease. Another is that inflationary pressures are non-existent. Both of these circumstances argue in favour of a continued expansionary monetary policy, which is also what the central bank, the Federal Reserve, has announced. The market expects a continued low policy rate, in addition to continued quantitative easing in the form of bond purchases.

The fact that liquidity is flowing in the United States and is expected to continue to flow has meant that many financial markets have now largely returned to normal, i.e. that they are now functioning approximately as they did before the start of the financial crisis at the start of the summer of 2007. This is a positive development for the banks borrowing and relieving risks on these markets, not least the Swedish. However, the artificial feel of the situation cannot be ignored. How would the markets function without the extraordinary liquidity provided by the central bank?

The low US interest rates are also contributing towards other problems. Major private capital flows are looking for better yields in a number of the newly industrialised countries, where expected yields are higher. This has led many of them to place restrictions or fees on capital inflows as they have had negative experiences, for example from the Asia crisis, and know that this kind of capital can rapidly disappear. In the international discussion, capital controls have once again become acceptable, unlike the situation during the last decade. This is not a fortunate development, Mr Nyberg stated.

Furthermore, he pointed out that it is not only the short-term interest rates in the United States that are unusually low, but also the long-term interest rates. The yield curve is depressed for its entire duration, which can reasonably be regarded as being connected with the exaggerated liquidity and the fact that many investors value the security and liquidity that US government bonds are considered to provide. This may seem remarkable, considering that it is common knowledge that the extensive US budget deficit (and others too, for that matter) must be financed during the years ahead. This should contribute towards rising interest rates, rather than falling ones.

Consequently, even if the interest rate is low, US government bonds continue to be regarded as the most secure and liquid assets in the world economy and many countries with current-account surpluses, not least in Asia, continue to accumulate them. As these countries do not seem able to adjust their exchange rates, for various reasons, the imbalances towards the United States that have built up over a long period are continuing to grow. As yet, this has just led to raised voices in the international

discussion, but the threat of trading restrictions is undeniably becoming increasingly worrying. If these threats become reality, we will all be the losers.

The very special situation we currently see on the interest rate markets also makes it difficult to interpret the yield curve and the implied forward rates that can be calculated from it. Quite simply, it is difficult to reconcile the low future forward rates with other information on the world economy – and this applies to both the United States and Europe. This itself contributes toward increased uncertainty. However, it is worth remembering that forward rates have often functioned poorly as forecasting instruments for future interest rates. At present, the assumptions regarding international interest rate developments made in the Monetary Policy Report seem reasonable, claimed Mr Nyberg.

Governor **Stefan Ingves** expressed his support for the description of the international outlook presented in the draft Monetary Policy Report, which he thought was an accurate reflection of the state of the world economy. Even so, he wished to address a few issues in slightly more detail. The recovery abroad looks likely to continue more or less in line with the previous assessment. In the world as a whole, GDP growth is deemed to be between 4 and 4.5 per cent per year during the forecast period. However, there are differences between different countries and groups of countries. On the whole, the recovery has been stronger in emerging economies than in the United States and Europe, which have been impacted by the consequences of the crisis to a greater extent. The Swedish economy has benefited from the rapid global growth. The composition of Swedish exports is such that we are benefiting from the strong level of world growth, at the same time as growth in our immediate vicinity (i.e. Germany and our Nordic neighbours) is also strong. On one hand, this has meant that more than half of our exports are going to countries with strong economic growth, which has influenced and continues to influence the Swedish economy in a positive direction. On the other hand, countries with large financial markets, such as the United States, are experiencing weaker growth with increasing tensions between exchange rates, currency flows and monetary policy as a result.

Even if GDP growth in the United States has been revised upwards by a few tenths of a percentage point, concern over the recovery has increased somewhat. The housing market is continuing to develop weakly, which is probably contributing to the high level of unemployment. Following the crisis, demand has generally been low in domestic sectors such as the construction industry and the housing sector. Even if demand has increased in the commercial manufacturing sector, demand for labour in this sector has been restrained by the introduction of more effective methods, which have benefited productivity. Inflation is excessively low, according to the Federal Reserve. The yield curve has shifted downwards at the same time as the dollar has weakened. The effectiveness of monetary policy under the prevailing circumstances will no doubt be the subject of much debate in the period ahead. The repossession of homes is an example of a problem that monetary policy cannot influence.

Given the dominance of the US dollar on many markets around the world, the rest of the world, at the same time, is affected by the monetary policy pursued by the United States. These effects arise either through influences on interest rates or through the exchange rate or through both of these simultaneously. For example, recently, the Philippines, Thailand, Indonesia, Malaysia, Taiwan, Israel and Brazil have attempted, one way or

another, to counteract the immediate exchange rate effects following the depreciation of the dollar. This means that the focus of recent years is now moving from the financial sector back towards global imbalances and strategies to correct these, with or without the active coordination of economic policy. This is contributing towards another type of international uncertainty. In this regards, we are now in a new situation. It will probably take a good while to correct the international imbalances, with further imbalances arising as a consequence along the way.

The expected slow recovery of the eurozone is no news. Unlike in Sweden, weak public finances there are hampering potential growth. The European crisis management mechanism, the EFSF, has now been established. However, countries with lingering problems in the financial sector or government finances will continue to be particularly exposed should the recovery of the global economy be disrupted. On the other hand, Mr Ingves did not believe that the same acute situation that was experienced during the spring would return. At present, the focus lies upon the long-term management of the balance sheet problems faced by a number of both states and banks. The general funding situation also seems to have improved.

All in all, Mr Ingves considered that global growth would benefit the Swedish economy during the forecast period, at the same time as tensions between different currencies, capital flows and the possible (re)introduction of regulations now form difficult-to-quantify uncertainty factors.

Deputy Governor **Barbro Wickman-Parak** agreed with the reasoning of Mr Nyberg and Mr Ingves regarding global imbalances and tensions on the foreign exchange market. However, she did not wish to repeat what had already been said, but merely observed that, should the situation lead to protectionism, this could have a severe impact on small, open economies such as Sweden's.

Uncertainty remains regarding economic developments abroad and, as Per Jansson pointed out during his presentation, this is currently more focused on the US economy, while, previously, the focus lay more upon the Eurozone. However, as a forecaster, uncertainty is a part of life, even if it feels particularly great at present, in the wake of a deep recession.

She wished to emphasise a few factors that she considered to support the forecast that a recovery is underway in the United States, even if it will take some time. One factor is that revised figures indicate that the household saving ratio is significantly above the level indicated by previous figures, which is positive for consumption in the period ahead. Another factor is that business sector investments have picked up. New orders and strong profits in companies indicate that this development may continue. Finally, it can be observed that the decline in housing investments has now been underway for almost five years and that the flow of investments has decreased by just below 60 per cent. As a proportion of GDP, these investments are on a historically extremely low level. In the last quarter, this proportion has levelled off at approximately 2.5 per cent of GDP. Such a low level has never been measured in the post-War period, during which the average was approximately 4.5 per cent. This suggests that, after a while, we will see housing construction creep upwards before it starts to make a clearer contribution to growth during the forecast period.

The eurozone as a whole is certainly experiencing sluggishness, but the area's largest economy, Germany, forms an exception. While exports have been a driving force, the most positive and promising development is that we are also seeing increased domestic demand in the form of an increase of corporate investments. Consumer confidence has made a thorough recovery, which also applies to optimism in the retail sector. This may herald increased consumption in the period ahead. The eurozone is facing major problems. The savings requirements that governments must work under may cause the budding upturn to come to a halt. The forecast assumes that the upturn will continue, albeit sluggishly. At the same time, the effects of the growth of the area's largest economy should not be underestimated. This will have systemic effects and may help boost the economies and banks of the most severely affected southern European countries. It is worth remembering the exceptionally difficult situation the Baltic states seemed to be facing previously. The stabilisation of this situation, even if it remains extremely troubled, is largely due to the international recovery. One further positive factor she wished to emphasise was the increase of domestic demand at a strong pace in the Chinese economy.

In summary, she considered that the international forecast was a reasonable assessment which did not err too much on the side of optimism, compared with other analysts. There has been much discussion of the downside risks in international economic activity, and these certainly exist. However, the possibility that events may develop in a slightly more positive direction than is being predicted at present should not entirely be discounted.

Finally, she wished to comment on the views of Mr Svensson and Ms Ekholm on the forecast of international policy rates. Disruptions in the forward rate curves make it difficult to translate these directly to expected future policy rates. For example, it is likely that term premiums are depressed or possibly even negative today. Furthermore, the forecast will not deviate more significantly until some time into 2012. She explained that she has great respect for her colleagues abroad. However, they do not publish any policy rate paths and it is difficult to base more long-term assessments of policy rates on the central banks' various statements. If the forecasts for GDP and inflation are correct, policy rates should move more in line with historical relationships than what is implied by current forward rates.

Governor **Stefan Ingves** then summed up the discussion of the economic outlook abroad by saying that all the members of the Executive Board appeared to support the assessment presented in the draft Monetary Policy Update as regards GDP and inflation. However, opinions were divided regarding the forecast of international policy rates and the determination of the exchange rate. As this, in turn, has implications for developments in Sweden, there could be reason to return to it in the monetary policy discussion.

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

First Deputy Governor **Svante Öberg** said that he agreed with the picture of economic developments in Sweden presented in the draft Monetary Policy Report. He also supported the proposal to increase the repo rate by 0.25 percentage points and the repo rate path presented in the draft Monetary Policy Report. The Swedish economy is growing

at a faster rate than the economies of the United States and the eurozone, and unemployment is falling. The revisions made since September are not extensive. GDP growth and the labour market look a little better, but the Swedish krona has appreciated and inflation has been revised slightly downwards.

The interest rate path implies a successive raising of the repo rate towards a more normal level. With reference to the increased international uncertainty, it is appropriate to decrease the interest rate path slightly over the longer term, compared with the path published in September, but Mr Öberg pointed out that, as far as he is concerned, this decrease does not imply any change in the assessment that the average repo rate, over the longer term, will be approximately 4 per cent.

For Sweden, the risks are connected with uncertainty over international developments, among other things. There would be consequences for growth in Sweden if international developments should be significantly worse than forecast. The forecast may also be slightly too optimistic as regards GDP growth in Sweden next year. The Riksbank's forecast is higher than those of other forecasters.

Mr Öberg particularly wished to address two interconnected questions, resource utilisation and inflation. He said that, in recent years, he has cultivated a particular interest in the manner of measuring and assessing resource utilisation and considers it positive that the Riksbank has now developed both an aggregate indicator to summarise survey information and labour market data (the RU indicator), and measures based on a production function approach. This improves the possibilities of making an overall assessment of resource utilisation.

The GDP gap, estimated using the production function approach, will be approximately -3.5 per cent this year and approximately -1 per cent next year. Mr Öberg's own assessment is that the GDP gap for this year is less negative and that, according to current forecasts, it will be closed next year. This is because he assesses that the fall in potential GDP due to the financial crisis is concentrated more on the crisis itself, as opposed to being spread across a number of years. He developed this theme in a recent speech. However, he felt that this difference should not be exaggerated. The uncertainty level in estimates and assessments of this kind is high.

The overall picture from the Riksbank's measures of resource utilisation is that, under the current forecasts and monetary policy, a normal level of resource utilisation will be attained during the forecast period. However, there are significant differences between the measures when it comes to assessing future inflation.

The Riksbank's target is, of course, for CPI inflation to be 2 per cent. According to current forecasts, CPI inflation will be above 2 per cent in the later part of the forecast period. However, Mr Öberg considered that this was defensible as the slightly too high level of CPI inflation is a delayed consequence of the decrease of the repo rate to a record low level during the crisis. The successive return of the repo rate to a normal level will contribute towards raising CPI inflation.

Underlying CPI inflation will be low over the year ahead. This is also reasonable considering that we are in the process of emerging from the deepest economic downturn since the start of the 1990s. Wage increases are moderate and productivity is increasing,

keeping cost pressures low. Furthermore, the krona has appreciated. This suggests low inflation. According to current forecasts, CPIF inflation will stabilise close to 2 per cent towards the end of the forecast period, indicating that inflationary pressures will have been held at a reasonable level at this point. It is of course possible for inflation to be even lower than anticipated in the forecast.

On the other hand resource utilisation is rising fast. The shortage of labour may be up to a normal level already at the end of the year, while unemployment is still high. This indicates increased matching problems on the labour market, with rising wages as a consequence. The RU indicator and capacity utilisation in the manufacturing industry may also be at normal levels by the end of the year. In Mr Öberg's assessment, the GDP gap according to current forecasts will also close next year. With a normal delay of one to two years, this may lead to higher inflation towards the end of the forecast period than has been predicted.

Deputy Governor **Karolina Ekholm** observed that she considered that the proposed repo rate path risked becoming overly restrictive by way of a greater strengthening of the krona exchange rate than is included in the forecast. Consequently, she proposed allowing the repo rate to remain unchanged at 0.75 per cent and advocated a repo rate path amounting to approximately 2.7 per cent at the end of the forecast period.

Furthermore, she explained that she shares the opinion, expressed in the draft Monetary Policy Report, that developments in Sweden appear very strong in terms of growth. GDP has increased strongly in recent months, with a sharp upward revision of GDP in the second quarter. The forecast for unemployment has again been revised downwards. Confidence indicators for households are very high and indicate continued high growth in the period ahead. She pointed out that, despite this, we are seeing no sign of strong inflationary pressures, which is linked to the circumstance that we are still in a situation in which resource utilisation is lower than normal. On the contrary, according to the forecast, underlying CPIF inflation will fall over the next year, before increasing to 2 per cent towards the end of the forecast period. Considering this, it is justifiable to revise the repo rate path downwards, compared with the Monetary Policy Update from September, as in the main scenario.

However, she advocated a repo rate path in which the interest rate is revised downwards by just above 1.0 per cent, rather than just below 0.5 per cent at the end of the forecast horizon – to be precise, a path ending at approximately 2.7 per cent instead of approximately 3.5 per cent. As at the previous meeting, Ms Ekholm said that there is scope for a more expansionary monetary policy than that proposed in the draft Monetary Policy Report. At the previous meeting, she considered that the proposed monetary policy, according to the current forecast, entailed poorer target achievement than would an alternative monetary policy having a slower rate of increase for the repo rate. At this meeting, she feared that the proposed monetary policy would be more restrictive than had been assumed in the forecast. There are, in principle, two reasons for this, but she attaches more weight to one of these.

The first reason – to which, Ms Ekholm explained, she does not attach such great importance – is that the proposed path actually implies higher long-term interest rates than currently prevail on the market. This is a consequence of the great difference

between the repo rate path and the market's monetary policy expectations that prevails at present. The market's expectations of the repo rate a couple of years ahead certainly do not seem to have been influenced so much by the repo rate path, which should suggest that long-term interest rates do not necessarily need to be increased appreciably just because the repo rate path implies higher long-term interest rates. However, if expectations were to be adjusted to the repo rate path, long-term interest rates would increase significantly. Ms Ekholm explained that one reason that she does not attach such great importance to this argument that monetary policy risks becoming excessively restrictive is that she believes that it could very well be that interest rates will actually be pushed slightly downwards by the proposed path. Market participants mainly seem to expect an unchanged repo rate path from today's meeting, which implies that a downwards revision such as that in the main scenario would probably surprise the market by being more expansionary than expected. If interest rates are pushed downwards rather than upwards, this will demonstrate that the connection between the repo rate path, expectations and market interest rates is significantly more complicated than the Riksbank's models suggest.

The second reason – to which Ms Ekholm attaches more importance – is that the forecast assumes that overseas policy rates will be raised more during 2012 and 2013 than she considers believable. The increase of the Swedish policy rate according to the proposed repo rate path may be reasonable if overseas policy rates can really be expected to be raised so much and if this is actually incorporated into market expectations as they are expressed in implied forward rates. If the implied forward rates overseas instead remain as low as they are at present, there is a high risk that the proposed repo rate path will lead to a considerably greater strengthening of the krona exchange rate than is included in the forecast. The example calculation in the section "The repo rate path and monetary policy expectations according to implied forward rates" illustrates how events may unfold if the implied forward rates overseas remain at their current low levels. The krona exchange rate would strengthen more than is indicated in the main scenario, inflation would be lower and unemployment higher. Based on the monetary policy rule-of-thumb incorporated in the Riksbank's own model Ramses, the repo rate would need to be raised at a slower pace than the main scenario intends. In this case, the repo rate path in the main scenario would entail a tightening of monetary policy in so far as the appreciation of the krona would reduce inflation through lower import prices in kronor and would reduce resource utilisation by making domestically-produced goods and services relatively more expensive, compared with goods and services produced abroad.

Ms Ekholm explained that she thus has greater confidence in the scenario portrayed in the section "The repo rate path and monetary policy expectations according to implied forward rates" – more specifically, the scenario called "lower policy rates abroad". Such a scenario would require the repo rate to be increased at a more restrained pace than in the main scenario, so as to better stabilise inflation close to the inflation target of 2 per cent and to contribute to the rapid return of resource utilisation to normal levels. Ms Ekholm wished to emphasise that her position was not about avoiding a strengthening of the krona exchange rate. Considering the strong growth in the Swedish economy and the very high current account surplus that Sweden has had for a long period of time, she explained that she considers that a strengthening of the real krona exchange rate is strongly justified. However, according to Ms Ekholm, pains should be taken to avoid a

situation in which this strengthening proceeds so rapidly that inflation ends up far below target.

Like Ms Ekholm, Deputy Governor **Lars E.O. Svensson** advocated an unchanged repo rate at this meeting, followed by an interest rate path increasing at a steady rate to a level of 2.7 per cent by the end of the forecast period. His reasons for this were largely the same as those presented by Ms Ekholm. However, he wished to justify his position in more detail.

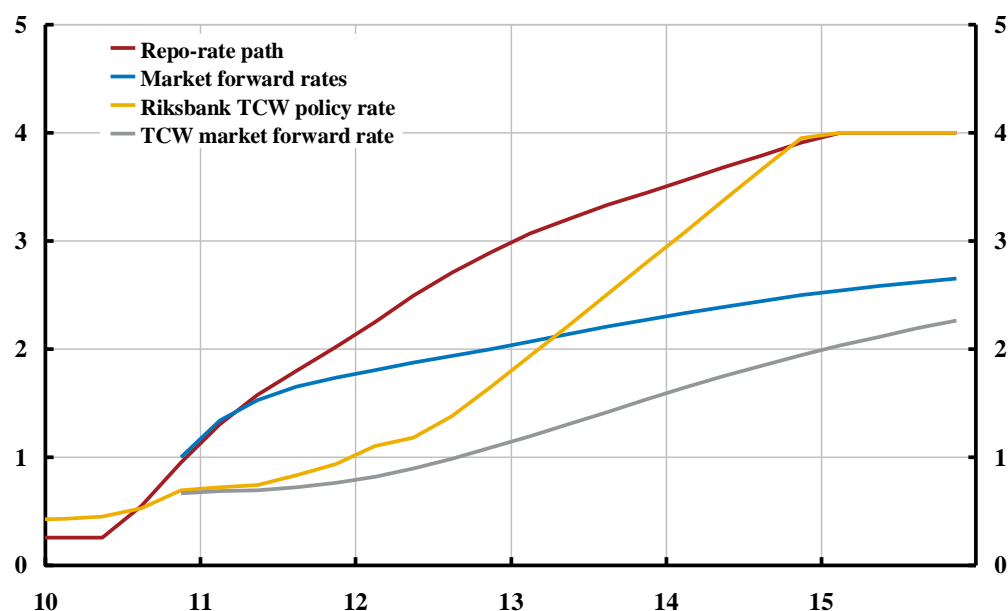
Before he justified his position, he wanted to take the opportunity to express his appreciation of the work carried out by the members of the Monetary Policy Department in this decision-making process. It has been a difficult and demanding process, to a significant degree due to the problems he described during the previous monetary policy meeting. Varying opinions have been voiced within the Executive Board, and a number of demanding forecasts, according to various assumptions, have been ordered. Mr Svensson himself has been the source of several of these. Under time pressure and facing significant analytical problems, the members of staff have delivered excellent background material for this monetary policy meeting. If this monetary policy decision is not the best possible, it will not be the fault of the staff members, at any rate.

In Mr Svensson's view, the main scenario contains two serious contradictions. The first of these concerns the high repo rate path. Even if he is pleased to see it being shifted downwards, compared with the path presented in September, it has not, in his view, been shifted downwards sufficiently. It is still much higher than market expectations. If it would be credible, this would entail a significant increase in long-term interest rates and a major strengthening of the Swedish krona, which, in Mr Svensson's judgment, would cut off the recovery of exports and GDP, as well as reduce inflation and increase unemployment.

The main scenario includes a fairly moderate appreciation of the krona. Why doesn't it include a much greater appreciation of the krona, asked Mr Svensson. And this is where the second contradiction comes in, continued Mr Svensson. Mr Svensson claimed that the lack of a greater appreciation of the krona was due to the main scenario's assumption, in reality, of long-term foreign interest rates that are higher than current market rates. As the exchange rate depends upon the difference between long-term domestic and foreign market interest rates, or, more precisely, upon the difference between domestic and foreign market yield curves, the main scenario will thereby underestimate the appreciation of the krona this implies.

Mr Svensson wished to clarify his reasoning with the assistance of a few figures. Figure 2 shows the interest rate path in the main scenario (red), implied forward rates according to Swedish market interest rates (blue), the TCW interest rate forecast in the main scenario (yellow), and TCW-weighted implied forward rates according to foreign market interest rates (grey). The curves have been extended beyond the usual three-year horizon, to a five-year horizon. The repo rate path and the TCW interest rate forecast beyond the three-year horizon are according to Mr Svensson's own assessment. The degree of uncertainty regarding forward premiums is slightly greater for implied forward rates beyond the three-year horizon, but this does not change the conclusions drawn by Mr Svensson.

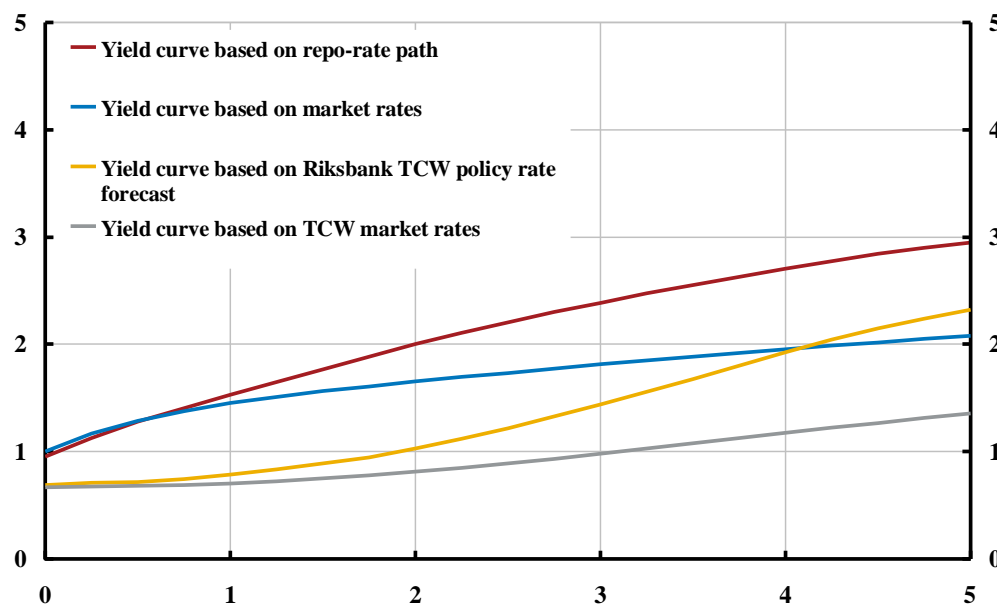
**Figure 2. The repo rate path, implied forward rates in Sweden and abroad and forecast foreign policy rates**



Sources: National sources, the Riksbank and own calculations

Figure 3 shows the yield curves that correspond to the forward-rate curves in Figure 2. The yield curves show short-term and long-term interest rates, more precisely a zero coupon rate as a function of maturity measured along the horizontal axis. The blue curve in Figure 3 thus shows the current market yield curve for Swedish interest rates. The red curve shows the yield curve that corresponds to the repo rate path. The difference between the two yield curves shows what would happen to interest rates of different maturities if the repo rate were to become credible. This would cause the blue yield curve to shift up to the red one. A three-year interest rate would thus increase by approximately 60 basis points, while a five-year interest rate would increase by closer to 90 basis points. As was discussed in the minutes from September, the corresponding increases then were 120 and 150 basis points, so Mr Svensson pointed out that an improvement had taken place, but that the increases remained large.

**Figure 3. Yield curves**



Note: In order to make the yield curves in Figure 3 comparable with the yield curve that corresponds to the repo rate path, they have been forward premium-adjusted and are constructed on the basis of the forward premium-adjusted implied forward rate curves in Figure 2. Consequently, they deviate somewhat from the unadjusted zero coupon yield curves.

Sources: National sources, the Riksbank and own calculations

Normally, the Riksbank's wish and endeavour is for the repo rate path to be credible, to be incorporated into market expectations and to be priced into market rates. In this way, monetary policy will have the largest possible impact. This time, this seems to be less desirable. Credibility of the repo rate at this point in time would entail a drastic increase in interest rates at these maturities and a very dramatic tightening of monetary policy compared to the present situation.

Mr Svensson pointed out that, during the discussions preceding the monetary policy meeting, he had asked the question of whether it would be very harmful to the Swedish economy for the repo rate path to become credible and for long-term interest rates to increase so much. Typically, the answer he received was that it was not likely that the repo rate path would become credible. His own opinion is that this is a somewhat strange attitude – presenting an interest rate path and then proceeding from the assumption (or possibly even hope) that it will not be credible. Personally, while previously voting for a certain repo rate path, he has always wished and hoped that it would be credible – that the Monetary Policy Report or Update would be so convincing that the repo rate path would be credible.

Mr Svensson pointed out that the above reasoning applies to the first contradiction he mentioned above, namely that the main scenario would entail significantly higher long-term interest rates than at present and would thus entail such a severe tightening of monetary policy as to jeopardise the recovery. Next, he addressed the second contradiction, namely that the main scenario underestimates the strengthening of the exchange rate by assuming that long-term market interest rates abroad will be higher than the actual prevailing market interest rates.

It is important to understand that it is the actual difference between Swedish and foreign long-term market interest rates that affect the current exchange rate. This applies regardless of whether these long-term interest rates correspond to market expectations of future short-term interest rates and regardless of whether long-term interest rates are affected by downward pressure on forward premiums. This also applies regardless of whether market expectations are good or bad forecasts of future interest rates.

If Swedish long-term interest rates were to increase because the repo rate path had become credible, this would also entail an increase in the difference between Swedish and foreign long-term interest rates. This would entail a strong appreciation of the krona. This can be seen in Figure 3. The grey curve in Figure 3 shows the yield curve for foreign market interest rates, the yield curve corresponding to the grey TCW-weighted implied foreign forward rate curve in Figure 2. The blue curve shows the Swedish market yield curve. The difference between a Swedish and a foreign five-year interest rate is approximately 70 basis points. If the repo rate path were now to become credible, the blue curve would shift upwards towards the red one. The difference between a Swedish and a foreign five-year interest rate would then be 160 basis points, considerably greater. Why doesn't this large interest rate differential lead to a major appreciation of the krona in the main scenario? Such an appreciation of the krona would, in turn, contribute towards significant tightening over and above the raising of long-term interest rates, which would have a particularly severe impact on exports and inflation.

As far as Mr Svensson could see, this was because the main scenario assumes that all market agents in Sweden and abroad will not only believe the repo rate path, but will also believe the Riksbank's forecast of foreign interest rates. This belief is assumed to have been incorporated in the market expectations for foreign interest rates and to have been included in the pricing of foreign market interest rates. The yellow curve in Figure 3 shows the foreign yield curve that would then arise, the yield curve consistent with the Riksbank's forecast of foreign interest rates in Figure 2. Without stating it explicitly in the Monetary Policy Report, the main scenario thus assumes that foreign long-term interest rates are given by the yellow yield curve in Figure 3, with significantly higher long-term foreign interest rates than the current market interest rates as represented by the grey curve. The difference between a Swedish and a foreign five-year interest rate according to the yellow curve is approximately 60 basis points, significantly less than the difference of approximately 160 basis points described above. According to the latter (and, according to Mr Svensson, correct and greater) difference, the main scenario would lead to a much stronger appreciation of the krona.

If the main scenario were instead to be based on current actual long-term interest rates abroad, the krona, under the main scenario's repo rate path, would thus become significantly stronger and inflation and GDP would become significantly lower. If monetary policy were then to follow the Riksbank's historical monetary policy reaction function, the interest rate path would be significantly lower. This is exactly what one of the articles in the draft Monetary Policy Report examines. It has the heading "The repo rate path and monetary policy expectations according to implied forward rates". According to Mr Svensson, a more correct and transparent heading would be "The repo rate path with actual short-term and long-term market interest rates abroad". The main scenario's assumption of high foreign long-term interest rates is unrealistic, Mr Svensson

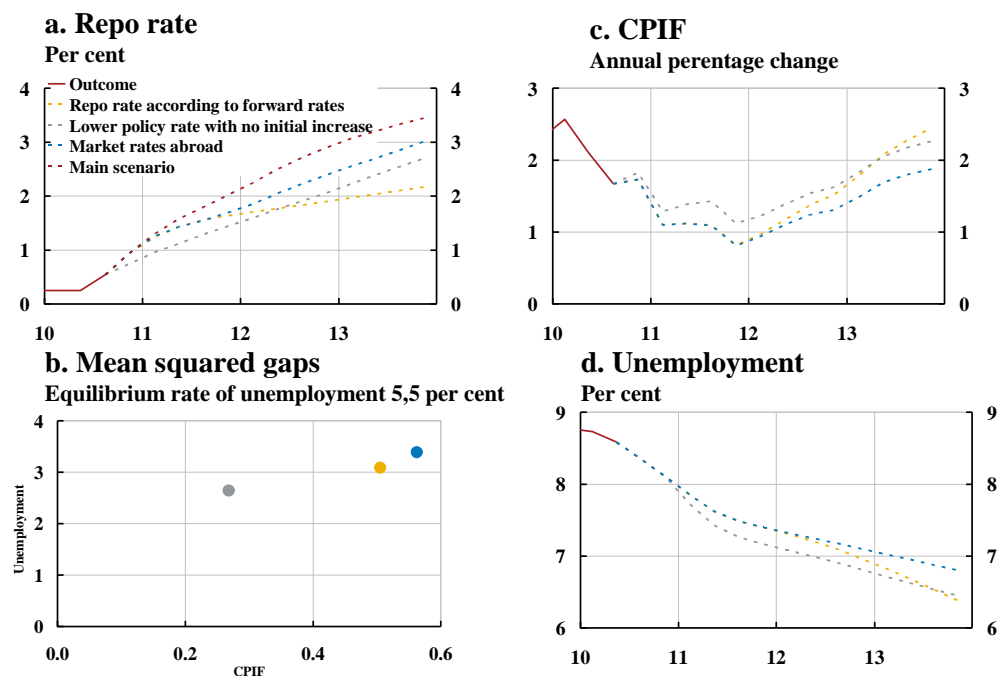
claimed. It can be directly observed that current foreign long-term interest rates are much lower. It seems more reasonable to proceed on the basis of the actual long-term foreign interest rates. As has been said, it is these that actually affect the exchange rate.

According to Mr Svensson, the article that is based on actual market interest rates abroad is thus more relevant than the main scenario, which is based in higher interest rates.

Figure 4 shows monetary policy alternatives under the assumption that short-term and long-term interest rates abroad are those actually observed, which Mr Svensson feels should be called "Market interest rates abroad", but which is called "Lower policy rates abroad" in the article. Mr Svensson regarded this figure as an example of the excellent background material produced by the staff of the Monetary Policy Department.

Panel a shows various repo rate paths. The red dashed curve is the main scenario's repo rate path. The blue dashed curve, designated "Market interest rates abroad", is designated "Lower policy rates abroad" in the article. It shows the interest rate path produced by the Riksbank's historical reaction function if foreign market interest rates are assumed to be as they are. The yellow dashed curve, designated "Market interest rate in Sweden", shows current market expectations for the repo rate. The grey dashed curve designated "Low interest rate path without initial increase" shows an interest rate path with an unchanged repo rate now and thereafter a gradual increase up to approximately 2.7 per cent at the end of the forecast period, that is, the interest rate path preferred by Ms Ekholm and Mr Svensson. Panels c and d use the same colours to show the corresponding forecasts for the CPIF and unemployment respectively. However, the main scenario's forecasts are not presented here, as they are based on another (and, in Mr Svensson's assessment, unrealistic) assumption about foreign long-term interest rates. As has been discussed above, a forecast based on both the main scenario's high repo rate path and actual low market interest rates abroad should result in an inflation forecast significantly below the forecasts shown in panel c and a level of unemployment significantly above the forecasts shown in panel d.

**Figure 4. Monetary policy alternatives, October 2010 (foreign interest rates according to market listings)**



Sources: Statistics Sweden and the Riksbank

Panels c and d clearly show that the low interest rate path without initial increase provides the best outcome, with a CPIF forecast closest to target and with the lowest unemployment forecast. This can also be illustrated with the aid of the mean squared gaps in panel b, in which this interest rate path results in a point corresponding to a lower mean squared gap for both the CPIF and unemployment. The mean squared gap for the unemployment gap is calculated on the basis of an equilibrium unemployment rate of 5.5 per cent. The long-term interest rate path dominates even if the equilibrium unemployment rate is assumed to be as high as 6.5 per cent.

Judging from this figure, an even lower interest rate path could result in an even better outcome for CPIF and unemployment – for example, an interest rate path that initially coincides with the grey interest rate path but which then moves over to the yellow path formed by market expectations from mid-2012. However, it could be argued that more careful analysis and alternative forecasts will be needed before the best repo rate path can be established, particularly because so much of the analysis on this occasion has focused on what Mr Svensson describes as the unrealistic main scenario. Consequently, he considers that the grey repo rate path, which reaches a level of 2.7 per cent by the end of the forecast period (approximately midway between the main scenario and market expectations), may be a reasonable compromise this time, ahead of a fresh discussion for the next monetary policy meeting.

Mr Svensson then went on to the specific issue of whether it would be better to raise the interest rate or leave it unchanged at present. The Swedish economy is currently growing strongly and the recovery is proceeding at good speed. However, the levels of GDP, exports and investment are still lower and unemployment higher than before the crisis. The CPIF forecast is below target. Raising the interest rate now would hamper the upturn,

keep unemployment above equilibrium unemployment and keep CPIF inflation below target. In contrast, an unchanged interest rate would decrease unemployment, bringing it closer to a normal level, and increase CPIF inflation, bringing it closer to target.

If monetary policy is intended to stabilise inflation around the target and unemployment around a normal level, the choice is a simple one, according to Mr Svensson: an unchanged interest rate at present. He claimed that this is also demonstrated with great clarity by the interest rate scenario with an unchanged interest rate presented at the end of Chapter 2 of the draft Monetary Policy Report. This scenario is another example of the excellent supporting material provided by members of staff. In this scenario, it is clear that the lower interest rate path with unchanged interest rate now provides better target fulfilment for inflation and resource utilisation than the main scenario's path.

Deputy Governor **Barbro Wickman-Parak** requested a clarification from the staff as to whether the main scenario's forecast is really based on an assumption that interest rates in Sweden and the rest of the world differ from the actual observed interest rates, as Mr Svensson maintained.

Per Jansson, head of the Monetary Policy Department, stated that the analysis in the main scenario naturally takes account of current observed interest rates. He also said that Mr Svensson's picture of deviations between actual interest rates and those on which the forecast is based proceeds from specific assumptions for translation of forward pricing to policy rate expectations and the translation of policy rate expectations to long-term market rates. In a model world with rational expectations it is difficult to take into account the fact that the monetary policy expectations of the market and of the Riksbank can differ. But the forecast in the main scenario is not a pure model forecast and it is possible there to use expert assessments in order to adjust for events that cannot be taken into account in models. The forecast of future interest rates uses plenty of information apart from forward pricing, which led to an assessment that is close to the average for other forecasters' interest rate forecasts.

Deputy Governor **Lars E.O. Svensson** again explained that, as far as he could see, the main scenario is based on the credibility of both the repo rate path and the Riksbank's forecast of foreign policy rates – that is, that all market operators and other participants actually believe the Riksbank's forecasts for both the repo rate and foreign interest rates, and that this belief is priced into market interest rates. In this case, the Swedish yield curve becomes the red curve in Figure 3, and the foreign yield curve becomes the high yellow curve in Figure 3, instead of the lower grey curve. However, these are questions that must be thoroughly sorted out ahead of the next monetary policy meeting.

Deputy Governor **Barbro Wickman-Parak** stated that she believes the forecast in the main scenario is based on reasonable assumptions and supported the picture of Swedish economic developments as presented in the draft Monetary Policy Report. She also supported the proposal to increase the repo rate by 0.25 percentage points and the repo rate path presented in the draft Monetary Policy Report.

An unambiguous message of the analysis in the Monetary Policy Report is that the Swedish economy is developing strongly. The strength of the upturn has been a surprise yet again. The upward adjustment of Swedish GDP is quite large for this year and is due to a considerably stronger outcome for the second quarter and that there are strong

indicators of higher growth in the two last quarters than was previously predicted. Growth for next year has also been adjusted upwards but this is primarily because growth at the end of this year has been adjusted upwards.

With the repo rate path on which the forecast is based, inflation is close to target at the end of the forecast period, while resource utilisation is back to a more or less normal level. Resource utilisation is in itself difficult to pin down but all measurements used by the Riksbank point the same way. Unemployment is falling relatively quickly and is just over 6.5 per cent at the end of the forecast period.

Ms Wickman-Parak considered that the interest rate path presented in the report was well balanced. We are emerging from a deep decline with large output and labour market gaps and so it is not surprising that inflation is low and below the target. Inflation below target, in the same way as inflation above target, can be tolerated for a period. What matters most is that it approaches the target within a reasonable time horizon. Also important in this context is that there are no expectations either of persistently low inflation or, even worse, deflation. All measurements of inflation expectations are clear on that point.

Unemployment of just over 6.5 per cent at the end of the forecast period is still a high unemployment figure and may indicate that resource utilisation in the labour market is lower than normal. But Ms Wickman-Parak thought that one should be careful when drawing this type of conclusion since there is no reliable measure of what is to be regarded as long-term equilibrium unemployment. The various model estimates made by the Riksbank (shown in Figure R22 in the draft Monetary Policy Report) give highly varying results. Mr Svensson bases his argument on equilibrium unemployment of 5.5 per cent. Ms Wickman-Parak questioned this figure. It is possible that various reforms and other factors may entail a fall in long-term unemployment, but it is impossible to know the extent and time perspective.

In this connection she wanted to repeat what she has said on previous occasions, namely that she feels far from sure that labour market matching will work smoothly enough to enable a rapid increase in the demand for labour to be easily met. The shortage data in the NIER business tendency survey is already rapidly rising, which Mr Öberg already mentioned. Unfilled vacancies in the National Labour Market Board statistics are also increasing fairly fast. According to Ms Wickman-Parak these are important indicators that should be kept an eye on. When it is only possible to have a dim perception of long-term unemployment these indicators can be used as a more concrete guide to the actual labour market situation. It may be that bottlenecks arise if not during then just beyond the forecast horizon.

Ms Wickman-Parak also wanted to give her view of household borrowing. A slightly higher interest rate now could make households begin to adjust, which should contribute to a more subdued development. In that way the risks to the real economy and inflation going forward are reduced. If households enter a phase in which they feel uncertainty about their financial situation they may soon start to drastically reduce their debt and consumption. Checking such a process with reduced interest rates may be difficult. What we have seen in the USA is a clear illustration of this.

In summary Ms Wickman-Parak noted that the interest rate path in the draft Monetary Policy Report gives good target fulfilment as regards inflation and resource utilisation. Now that the Riksbank is carefully easing back on the accelerator, the risks of problems further down the road are also decreasing. Because it is precisely a matter of easing back on the gas; monetary policy will be expansionary for a long period. At the end of 2012 the real repo rate is expected to be as low as about one per cent.

During the crisis the Executive Board of the Riksbank stepped heavily on the gas as they believed it was necessary, but also because the risks associated with not doing enough were great. Now Ms Wickman-Parak thought it reasonable instead to consider the possible risks associated with maintaining a low interest rate and this led her to the argument concerning what consequences today's decisions may have in the slightly longer term. She believes that gradual adjustment of the interest rate is preferable. The risks of going "completely wrong" will then be less. The entire Executive Board do, after all, agree that the Swedish economy is developing strongly. Nor can it be ruled out that the Riksbank may again be surprised by the strength of domestic developments. But if it should prove that international developments are considerably worse than forecast there is every opportunity to take a break from interest rate increases or even to move back if necessary.

Governor **Stefan Ingves** stated that he shared the picture of developments in Sweden as presented in the draft Monetary Policy Report and that he supported the proposal to raise the repo rate by 0.25 percentage points and the interest rate path presented in the draft Monetary Policy Report. In his opinion, the recovery in the Swedish economy has become stronger since the last meeting. GDP growth has been revised upwards this year. In line with the arguments he put forward on international developments, Sweden, which is an export-dependent economy, is deriving particular benefit from the international recovery. Strong government finances and sound development of household saving and income also benefit domestic demand. It is worth noting that GDP will soon have reached the same level as before the crisis and in the draft Monetary Policy Report the Riksbank now expects the resource utilisation gap to close somewhat faster than thought previously. Unemployment has been revised downwards by 0.1 percentage point at the end of the forecast period, to 6.7 per cent in 2013. At the same time we see that productivity is recovering faster than expected, which contributes to lower unit labour costs at the beginning of the period than were forecast in the September Update. This, together with a stronger exchange rate, contributes to a slight reduction in inflationary pressure, despite a new assessment of resource utilisation.

Altogether the new information entails fairly small changes in the inflation forecast. Next year inflation will be somewhat lower than in the previous forecast and is expected to be 1.3 per cent measured by the CPIF and 1.7 per cent measured by the CPI. Inflation will then climb again and is expected to be in line with the target in 2013 measured by the CPIF, while CPI inflation will be 2.6 per cent.

The forecast is based on a slightly lower interest rate path than earlier. Several factors have a bearing here. The draft Monetary Policy Report now expects interest rate developments in the rest of the world to be slightly more subdued. Conventional and non-conventional measures by the large central banks will contribute to this. The situation with low interest rates supports recovery in the rest of the world but it also puts

some appreciation pressure on the krona, which helps subdue inflation in Sweden. All in all, this means that normalisation of monetary policy may be carried out at a slightly slower rate than was predicted in September. This should give a suitable balance between stabilisation of inflation and stabilisation of the real economy.

Mr Ingves said that it was appropriate to gradually continue to make monetary policy somewhat less expansionary. He therefore thought it appropriate to raise the repo rate by 0.25 percentage points today. Together with the maturity of the fixed interest rate loans this should contribute to a continued normalisation of monetary policy. The Riksbank has now in all essentials concluded the extraordinary lending of the last few years. It can be said that the "exit" is complete. It also supports the Riksbank's continued willingness to help to prevent the build-up of new financial imbalances in Sweden, which is a risk if the interest rate is kept low for too long or if the Riksbank otherwise keeps the financial markets overly liquid. Now that the Riksbank's balance sheet has normalised it is leading to some portfolio rebalancing in the market and to some extent to a different interest rate structure than before. This is a process of adaptation that is not particularly remarkable and is anticipated, but which of course should be followed. With restricted central government borrowing and a continued rise in mortgage borrowing the interest rate margin between government bonds and housing bonds may need to increase. Before the crisis, that interest rate margin was severely depressed. Regardless of what happens to this interest rate margin he has on several occasions before noted that an interest rate increase is also justified to avoid future financial imbalances beyond the normal forecast horizon. Continued increases in household debt mean that he holds fast to that view. Finansinspektionen's recently introduced borrowing restrictions are also a step in the right direction in this context. Going forward it is matter of finding the right balance between supervisory regulations and interest rate setting so that the risks are manageable.

If upside risks develop so that inflation takes off this will lead to future interest rate increases over and above those now forecast. Even in this light it is preferable to gradually raise interest rates instead of having to make rapid interest rate hikes later on. On the other hand, if the opposite should be the case, that is that the situation gets worse than forecast, it is possible to withhold future interest rate increases. Seen in this way the monetary policy now being discussed is well balanced. Now as the Swedish interest rate level is adjusting to current economic developments in Sweden, the interest rate will be higher than in countries that are growing more slowly and where the inflationary pressure is low. In this world the effect on the Swedish economy will be a combination of an interest rate effect and an exchange rate effect. In that case Mr Ingves thought that it was safer to rely on interest rate setting rather than the exchange rate, since exchange rate effects are always uncertain and very difficult to forecast. If events in this regard should differ completely from the forecast then this must be taken into account later on.

Mr Ingves also wished to comment on the forecast for policy rates in the rest of the world. The question is which factors are to influence that forecast: Assessments of other central banks' interest rate signals, market participants' assessments as expressed in forward prices or surveys, or macroeconomic relationships. This is reminiscent of the discussion that took place before the Riksbank started to publish its own interest rate path. Ultimately it was a matter of making the best assessment based on available information.

The current method is similar to that used for forecasts of our own interest rate path and Mr Ingves stated that he believes this to be a reasonable method. He also pointed out that it was good that this had come up in the discussion and that the method had been illuminated using an illustrative calculation.

Finally he wanted to comment on Mr Svensson's contribution concerning the credibility of the interest rate path. Mr Ingves has never imagined that market expectations must immediately adapt to the Riksbank's forecast, but that the adjustment would take place gradually. It must be accepted that the Riksbank, market participants and other forecasters make different assessments. In summary it is a reasonable assignment of priorities that is presented in the report.

Deputy Governor **Lars Nyberg** expressed support for the proposal to raise the repo rate by a quarter of a percentage point and at the same time adjusting the interest rate path downwards somewhat from the end of 2011 onwards. This gives good target fulfilment both as regards approaching the inflation target of two per cent during the forecast period and achieving reasonable resource utilisation.

As regards growth in the real economy reality has yet again exceeded the expectations of the last monetary policy meeting. This has been true at every meeting since July last year and that is of course something to be thankful for, said Mr Nyberg. This time the expected growth for the current year has been adjusted upwards from 3.9 to 4.6 per cent calendar adjusted. In other words, the uniquely large fall in GDP of 5.1 per cent that took place last year has almost been recouped in one year. All parts of the economy contribute; consumption, investment and exports. The worries about a "divided" economy, in which industry and exports lagged behind domestic demand, now seem to have essentially disappeared. As a consequence of the strong upturn the labour market has also developed considerably better than expected. Unemployment has peaked a couple of percentage points lower than was forecast last summer. At the same time a certain capacity gap remains and inflation expectations are well established close to the two per cent target.

This, in itself, makes it reasonable to raise the interest rate in line with the repo rate path presented at the last monetary policy meeting. But Mr Nyberg considered that it was not improbable that the Riksbank may have underestimated the dynamics of Swedish growth this time too. Consumer confidence according to the National Institute of Economic Research survey is currently at the same level as before the IT crisis of 2000, higher than before the crisis we have just experienced. In some rapidly expanding industries, above all construction, there are signs of incipient overheating. Mr Nyberg shared Mr Öberg's and Ms Wickman-Parak's fears in this respect.

In addition there is still the worry that households will continue to borrow at a rate far above income growth and that housing prices will not level off. Mr Nyberg did not believe that there is any housing bubble in Sweden at the moment, but he thought that there are clear signs of a build-up of risks of future imbalances. The problems may perhaps not arise before the next downturn, beyond the forecast horizon, but they could then be considerable, in the same way as they have been in a number of other countries. In his opinion it is a factor that should be considered in the monetary policy decisions, even though as time goes by there may be alternative and better instruments for

handling imbalances. On a positive note in this context, housing construction seems to be picking up again. In the long term this could contribute to less volatile price movements and consequently to a decrease in the rate of build-up of debt.

Despite the suspicion that the Executive Board of the Riksbank in the short perspective may err on the side of underestimation this time too, he considered it wise to adjust the interest rate path downwards at a later point. The signals from the USA and Europe are, it is true, ambiguous, but uncertainty has undeniably increased. The picture also includes the question-marks concerning what the extremely low interest rate expectations really mean. Mr Nyberg believed that this time there was particular reason to take into account not only the point estimate for the repo rate path but also its range of uncertainty. Despite everything we know very little about how the world will look one year ahead. There are credible scenarios that give both slower and faster interest rate increases than in the main scenario.

Mr Nyberg pointed out that even in Sweden market rates have proved to be bad forecast instruments for future interest rates. As Mr Ingves pointed out, it was partly due to that that the Riksbank a few years ago decided to leave forward interest rates and use its own interest rate path. Consequently, it is not so strange that the Riksbank has another interest rate path than the market. Incidentally, until the end of next year, the paths are in fairly good agreement. And we will have many opportunities to discuss what will happen then at coming meetings.

Mr Nyberg also wanted to touch on market reactions to the Riksbank's winding up of the extraordinary measures introduced during the crisis. Since the last monetary policy meeting, all the one-year loans at fixed rates granted by the Riksbank to the banks as part of the crisis management have matured. The Riksbank has thereby in all essentials completed the planned windup of the extraordinary monetary policy measures occasioned by the crisis. The banks have taken back responsibility for their short-term liquidity management by settling the surpluses and deficits that arise at the close of every day on the overnight market rather than via the Riksbank. By and large this has gone well. Some disagreement over the procedures arose in the first days, but where there is disagreement one or more banks must lend to the Riksbank at zero interest, while one or more others must borrow the corresponding amount from the Riksbank at 1.5 per cent interest, given a repo rate of 0.75 per cent. If there is disagreement it is also easy for unease to spread to other markets such as tomorrow/next or even longer-term segments. Altogether, these incentives seem to have been sufficient to get the overnight market working again satisfactorily, even though there still seems to be some room for discussion remaining in today's situation, both between banks and between banks and the rest of the market. In any case there is no reason for the Riksbank to intervene. The responsibility for handling the banks' daily surpluses and deficits in the overnight market must in normal circumstances lie with the banks, not with the Riksbank. Naturally there is no reason to believe either that the transfer to normal conditions could have a negative long-term effect on monetary policy.

From the start of 2009 until mid-2010 (i.e. approximately during the period of time that the Riksbank contributed liquidity to the market for monetary policy purposes), the stock of mortgage bonds has grown by approximately SEK 340 billion, or 27 per cent. Parts of that growth seem to have been funded via the Riksbank's loans to the banks. Now that

this liquidity has disappeared, funding has become more expensive, which may lead to a slight increase in the interest rate differential between mortgage bonds and government bonds. This seems to have led to a certain degree of unease on the market. But when the banks received access to extra liquidity through the loans, the purpose was to support monetary policy and add extra downward pressure on the slightly longer interest rates. As these loans disappear, it is not unreasonable to expect the opposite effect. There may possibly be reason to express a certain amount of surprise over the manner in which certain parts of the market seem to have been taken unawares when the loans matured. The approaching maturity had, of course, been known for a long time and all parties had had plenty of time to adjust their portfolios. Now, a few participants who failed to pay attention may perhaps lose a little money. However, there is no reason to believe that the market is not mature enough to cope with this.

Deputy Governor **Lars E.O. Svensson** wanted to comment on Ms Wickman-Parak's and Mr Ingves' contributions. He explained that he perceives Ms Wickman-Parak's contribution to mean that she tolerates both resource utilisation and inflation being too low due to the deep recession. However, neither resource utilisation nor inflation are independent of monetary policy. More expansionary monetary policy can increase both. He wished to give a reminder of Jan Qvigstad's criterion for a well-balanced monetary policy, namely that if inflation is too high, resource utilisation should be low and vice versa. If both are too low or both too high a more expansionary or contractionary monetary policy can improve target fulfilment.

As regards the design of the interest rate path, that is to say if it is better to raise it now and raise it less later rather than leaving the interest rate unchanged now and increasing it more later, as several colleagues have said, in Mr Svensson's opinion it is only a matter of seeing which alternatives give better target fulfilment for inflation and resource utilisation. According to his argument above on an unchanged or increased interest rate now, it now seems clear that it is better to have an unchanged interest rate now.

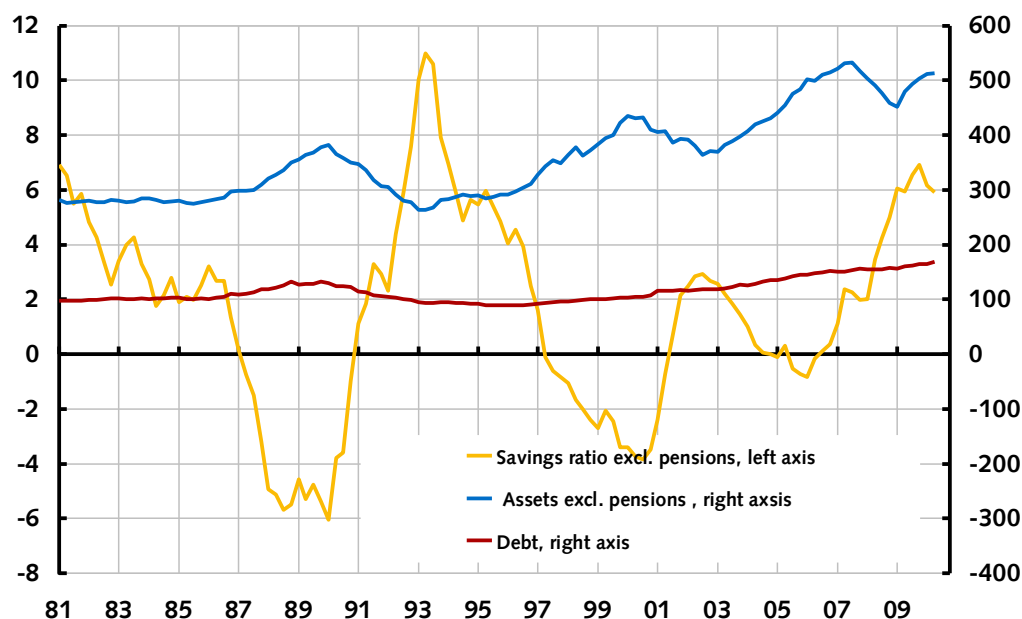
As regards Ms Wickman-Parak's comment on equilibrium unemployment, Mr Svensson pointed out that his opinion that for the time being it is 5.5 per cent is based on Anders Forslund's report to the Fiscal Policy Council in 2008 and his discussions with labour market economists. Mr Forslund's assessment, after going through several estimates is that equilibrium unemployment at the beginning of 2008 was about 6.2 per cent and that the labour market reforms carried out in 2006–2007 may entail a further 1–2 percentage points lower equilibrium unemployment. Mr Svensson's view is that later reforms in 2008–2010 may give a few tenths lower level, while the crisis and increase in unemployment perhaps give a couple of tenths higher level. Finally, a changed composition of the labour force with new groups with somewhat higher unemployment may perhaps raise the level up to a half percentage point. This gives an interval of about 4.5 to 5.6 per cent, in which Mr Svensson's assessment of 5.5 accordingly lies in the upper part.

In this context, Mr Svensson wishes to comment on resource utilisation, which this time is analysed in an article in the Monetary Policy Report. He said that it perhaps is clear that he has started to attach greater importance to the unemployment gap as a measure of resource utilisation. There are several reasons for this. Unemployment is measured frequently and with relatively great precision. Unemployment figures are not revised other than as a consequence of amended definitions. This can be compared with GDP,

where precision is poor and large revisions common. The difficulty with the unemployment gap is of course to estimate equilibrium unemployment. However, this can be estimated in and outside the Riksbank using various methods and approaches. It is possible to conduct a transparent discussion and debate on the level of equilibrium unemployment in and outside the Riksbank. This is a great advantage, stressed Mr Svensson and pointed out that it is considered a great advantage that the CPI and CPIF are measured by others than the Riksbank. It would not be appropriate for the Riksbank itself to calculate the price index against which target fulfilment is measured. As regards output and hours worked gaps, a complicated and difficult estimate of potential GDP and hours worked is required. It may be tempting to manipulate the measure so as to support the prevailing policy. Mr Svensson said that he has heard the opinion expressed that there is always some measure of resource utilisation that can be used to justify the present interest rate path. In this context, the unemployment gap appears as a more robust, transparent and less easily manipulated indicator of resource utilisation than the alternatives. He explained that, consequently, he is inclined to continue to attach great importance to the unemployment gap.

Mr Svensson wished to go on to comment on his colleagues' discussion of household borrowing. He said that, as regards housing prices and monetary policy, it is worth noting that there are no indications to suggest that house prices are forming a bubble. Prices are entirely in line with high demand and limited supply. In Sweden, buy-to-let does not occur, only buy-to-live. In other words, homes are primarily bought to be lived in, rather than as investments. The average household has very strong balance sheets. Balance sheet levels are more important than flows in the assessment of possible vulnerabilities. These strong balance sheets are evident in Figure 5, which illustrates households' wealth, including housing, but excluding pensions as a share of disposable income, household debt as a share of disposable income, and saving ratios excluding pensions. The average household thus has debts equal to only one-third of assets, while equity is equal to two-thirds. According to Finansinspektionen's report from February, marginal mortgage holders, who have new loans and the highest levels of indebtedness, are by no means particularly vulnerable and can pass very extreme stress tests. According to Mr Svensson, the household saving ratio is at a healthy high level – there are no indications that mortgages are being used to finance consumption to any significant degree. Falling house prices also imply a fall in the cost of housing – one of the reasons that we say that "housing wealth is not really wealth". Mr Svensson pointed out that he had already explained at the July meeting that the consequences for monetary policy of a fall in housing prices are not particularly problematic. Any resulting fall in consumption would only be a demand shock which would lower both inflation and resource utilisation and which could be counteracted by an expansionary monetary policy. He referred to the discussion in the minutes for July of the article on housing prices in July's Monetary Policy Report.

**Figure 5. Household wealth, debt and saving ratio (percentage of disposable income)**



Sources: Statistics Sweden and the Riksbank

If problems should nevertheless arise with house prices and household borrowing Finansinspektionen has effective instruments, including the loan-to-value ceiling that has been introduced. In addition Finansinspektionen has a mandate that includes consumer protection. The policy rate is a highly ineffective and blunt instrument for influencing house prices and household borrowing.

Finally, Svensson asked how the current situation could best be handled, with differences between market rates in Sweden and the rest of the world on the one hand, and the Riksbank's forecast for the repo rate and foreign policy rates on the other. In his opinion, the solution, which Ekholm had brought up at one of the meetings in the decision-making process, is to first forecast inflation and the real economy conditional on Swedish and foreign interest rate paths given by market expectations estimated from observed market rates. This forecast can be the point of departure and can be used for comparison in subsequent analysis.

If the forecast for inflation and resource utilisation "looks good", the repo rate path can then be selected equal to market expectations. If the forecast does not look good, for example if inflation and resource utilisation are too low, it will be appropriate to make a forecast for inflation and the real economy for an alternative interest rate path that deviates from market expectations, for example is lower than market expectations. The forecast conditional on this alternative interest rate path can then be calculated on the basis of two alternative assumptions. One is that the alternative interest rate path is credible and that, consequently, market expectations will immediately adjust to the alternative interest rate path, in other words that the alternative interest rate path is implemented with anticipated deviations. The second is that it is not credible and that the market and economic actors are surprised that the Riksbank is following the alternative path and then gradually adjust their expectations. The alternative interest rate path is then implemented with unanticipated deviations. If the Riksbank prefers another forecast

for foreign policy rates than the one that is consistent with foreign market rates and market expectations derived from them, this should be implemented with unanticipated deviations, where foreign market expectations can be assumed to gradually adjust to actual outcomes of foreign policy rates. These are also questions that must be sorted out ahead of the next monetary policy meeting.

Deputy Governor **Karolina Ekholm** agreed with Mr Svensson's argument about how the basis for monetary policy decisions could be improved by making forecasts based on implied forward rates and comparing the outcome with the proposed repo rate path.

She also wanted to comment on the argument that the interest rate may need to be raised today and rise faster in the near future so as to reduce the risk of imbalances building up in the economy, perhaps primarily in the housing market. She considers that developments as regards household debt and the housing market generate some unease. In her opinion the housing market constitutes a source of potential imbalances, since prices have been increasing over a long period at a rate that does not seem sustainable in the long term. At the same time she does not believe that there is so much that monetary policy can do to check this trend just now. Everyone knows that interest rates are on their way up, since they have in fact started to be raised. Finansinspektionen has introduced a lending ceiling, which she declared that she, like Mr Ingves, is positive to. The possible overvaluation of Swedish housing is often discussed in the media. If, despite this, households and their banks consider it justified for households to borrow at the prices now prevalent, then Ms Ekholm stated that she would find it hard to interpret otherwise than that it is consistent with their incomes. She continued that she believes that in certain situations it may be justified to adapt interest rate policy to the risk of building up imbalances in the economy linked to developments in the housing market, but that in the current situation she attaches little importance to this risk as regards the monetary policy decision.

Deputy Governor **Svante Öberg** stated that he has great respect for the fact that one can have different assessments of monetary policy in the rest of the world and that this has consequences for monetary policy in Sweden in the way Ekholm argues. But he does not believe that the assessments can be based on implied market forward rates in the way Svensson argues. Forward rate curves are simply not good as a basis for forecasts of policy rates in three years' time. The uncertainty is too great. For Sweden's part this is shown by the very broad confidence intervals for the repo rate that are regularly presented in the monetary policy reports. They are based on the market's ability, or rather inability, to predict the repo rate.

On the other hand, uncertainty is not as great in the short term. At the moment forward rate curves correspond well with the Riksbank's interest rate path in one to two quarters' perspective. It also transpires that the forward rate curves in the short term partly adapt to the Riksbank's interest rate path when there is a new decision, but that on the other hand differences remain in the longer term.

He therefore considered it to be reasonable, at present, to assume that policy rates in the rest of the world in the short term will follow the market forward rate curve, but in the longer term when uncertainty is very great they are based on historical relations between policy rate, inflation and resource utilisation and, like other variables, approach historical

mean values. A common technique in both forecasting and econometric modelling is for the level of different variables, in the longer term, to approach a normal value. Policy rates are extremely low at present. Sooner or later, they will return to a normal level. The difficulty is in predicting how this will take place.

Mr Öberg said that in his experience long-term expectations vary with the economic cycle. If it looks gloomy now then long-term expectations are also gloomy, and vice versa. But this can rapidly change, with gloomy long-term expectations turning into optimism within a short period. For him this is the main reason for not believing that current long-term expectations of policy rates constitute a sound basis for assumptions about the level of short-term interest rates in three years' time.

Also as regards the Swedish repo rate, the Riksbank should use its own estimates as a basis, given the rest of the picture of economic developments, including assumptions about interest rates in the rest of the world. Most other forecasters expect an interest rate path that is in line with the path presented in the Monetary Policy Report. No-one expects it to lead to a disaster for the Swedish economy. Prospera's latest survey of expectations among money market participants shows that expectations about the repo rate have risen since the last survey and that they now coincide with the interest rate path in the draft Monetary Policy Report. They do not expect any disaster for the Swedish economy either, but rather continued strong GDP growth and inflation in line with the inflation target.

Deputy Governor **Lars Nyberg** pointed out that he believes the majority proposal is good, entirely regardless of what happens to house prices. However, he wanted to express the thought that it is a good thing if monetary policy reacts in good time before major imbalances have time to build up. He was not sure if what has happened in Ireland, Spain, the United States and Australia could never happen here. Many reasons for believing that house prices were not overvalued were also given in Sweden in the early 1990s, including the strength of household balance sheets. Nevertheless, as we know, prices fell sharply.

Deputy Governor **Barbro Wickman-Parak** wanted to comment on Mr Svensson's contribution. She pointed out that when you come from a situation in which the economy has suffered a major demand shock with low inflation and large output and labour market gaps, it is not reasonable to expect the Riksbank to be able to quickly get inflation back to target and resource utilisation back to a more normal level via monetary policy. She regarded the achievement of this towards the end of the forecast horizon as a good result.

She also wanted to say that, as regards resource utilisation, everyone is aware of the difficulties of measuring it. It is therefore important to have many different measurements. Including unemployment is reasonable but this cannot be the only measurement. More measurements will be needed in the future as well. Together they can provide a guide before monetary policy decisions.

She referred to what Svensson had said about household balance sheets and their strength. That is correct, but at the same time one must separate assets and liabilities. The assets can melt away if asset prices such as various financial assets and house prices fall. This does not apply to liabilities, which remain constantly intact. Finally she agreed that

the interest rate can be a blunt instrument and of course other tools can be used to hold down exaggerated credit expansion. But this does not mean that the interest rate lacks importance. She does not believe that the price of money plays no part in households' willingness to borrow.

Deputy Governor **Lars E.O. Svensson** replied that, as regards house prices before the crisis of the 1990s, in the late 1980s there was considerable financing of household consumption by means of increased mortgages, housing equity withdrawal. This is a dangerous situation, since continued price increases then become a condition for continued mortgage increases and upholding consumption. But this shows up in a low saving ratio. It can be seen in Figure 5. The saving ratio at the end of the 1980s was strongly negative, which indicates that households were living above their means. As has been said, this is not a sustainable situation. This was also the case in the United States before the crisis, when the saving ratio fell considerably and consumption was financed with housing equity withdrawals. The situation in Sweden is now quite different. The savings ratio is now at a healthy high level, which is a clear indicator that consumption is not to any significant extent being financed by increased mortgages.

Governor **Stefan Ingves** stated that the important thing is to avoid major falls in house prices. Many other countries have had to learn that it is not that easy to handle the problems that may arise when house prices fall just by cutting the interest rate.

Deputy Governor **Lars E.O. Svensson** interposed that, when it comes to the impact of monetary policy on housing prices, there is a considerable amount of theoretical and empirical research, including the Swedish Walentin-Sellin model, which was discussed at the July meeting. This research has arrived at highly consistent results. A policy rate increase of 1 percentage point reduces housing prices by about 1.5 per cent, so a cut in housing prices of 15 per cent would require an interest rate increase of as much as 10 percentage points. In that case, GDP would fall by about a third of the house price fall - about 5 per cent. Of course this is an unreasonably high cost. Consequently, the policy rate is a highly ineffective way of controlling housing prices, as well as being costly for the real economy.

Governor **Stefan Ingves** said that he is not so sure that the last word has been said on the relationship between policy rates and housing prices.

Mr Ingves then summarised the monetary policy discussion. The Swedish economy is developing well. The global recovery has contributed to an increase in world trade, which benefits Swedish exports. A combination of strong public finances, a high level of household saving and optimism among households is creating the conditions for rising consumption. The broad upswing in the Swedish economy is also contributing to a rapid increase in employment.

At the same time, developments overseas remain uncertain. The recovery will take time in the United States, while the major fiscal policy tightening measures in several European countries are dampening growth in Europe. The slow recovery of these countries is leading to moderate inflationary pressures and low international interest rates.

Even if inflationary pressures in the Swedish economy are presently low due to the weak economic climate abroad, low labour costs for Swedish companies and the stronger

Swedish krona, they are expected to increase in tandem with the strengthening of economic activity in Sweden. In order to stabilise inflation at a level close to the target of 2 per cent and to achieve a normal level of resource utilisation, there is a need to gradually increase the repo rate towards more normal levels. Moreover, households' debts have increased substantially in recent years. If debts continue to increase at a considerably faster rate than income over a longer period of time, there is a risk of imbalances building up in the Swedish economy.

In October, the last of the three fixed-interest rate loans provided to the banks in 2009 matured. These loans have not been replaced by new loans. The phasing out of these loans is an important part of the normalisation of monetary policy.

## **§ 4. Monetary policy decision**

The Executive Board decided after voting

- to adopt the Monetary Policy Report according to the proposal, Annex A to the minutes,
- to publish the Monetary Policy Report on Tuesday, 26 October 2010 at 9.30 a.m.,
- to raise the repo rate by 0.25 percentage points to 1.00 per cent and that this decision would apply from 27 October 2010,
- to publish the decision above at 9.30 a.m. on Tuesday, 26 October 2010 with the motivation and wording contained in a press release, and
- to publish the minutes of today's meeting on Monday, 8 November 2010 at 9.30 a.m.

The Chairman pointed out that no separate decision on deposit and lending rates needed to be taken, as, earlier in the meeting, the Executive Board had decided that, until further notice, these interest rates would always follow the applicable repo rate (+/- 75 basis points) – see minutes no. 7 in particular.

Deputy Governor Karolina Ekholm and Deputy Governor Lars E.O. Svensson entered a reservation against the decision to raise the repo rate by 0.25 percentage points to 1.0 per cent and against the repo rate path in the Monetary Policy Report.

They advocated a repo rate of 0.75 per cent and a repo rate path that then gradually rises to 2.7 per cent at the end of the forecast period. They considered that the repo rate path of the main scenario entails a tighter monetary policy than presented in the Monetary Policy Report. It would lead to a further strengthening of the krona than in the report forecast and considerably higher long-term interest rates than at present. This would reduce inflation and raise unemployment. The expectation that the main scenario's interest rate path will lead to greater strengthening of the krona than in the forecast is based on the view that foreign policy rates will rise more slowly and that the exchange rate is affected by the current low foreign long-term market rates.

This paragraph was verified immediately. Minutes by: Ann-Christine Högberg  
Verified by: Stefan Ingves, Karolina Ekholm, Lars Nyberg, Lars E.O. Svensson, Barbro Wickman-Parak, Svante Öberg