Monetary Policy Report

2008:1

SVERIGES RIKSBANK

Monetary Policy Report

The Riksbank's Monetary Policy Report is published three times per year. The report describes the deliberations made by the Riksbank when deciding what would be an appropriate monetary policy to conduct.[1] The report contains a description of the future prospects for inflation and economic activity based on the interest rate path that the Riksbank currently considers will provide a well-balanced monetary policy. Each report also contains a description of the new information received since the previous report and an assessment of how the Riksbank views the current economic situation.

The purpose of the Monetary Policy Report is to produce background material for monetary policy decisions, and to spread knowledge about the Riksbank's assessments. By publishing the reports, the Riksbank aims to make it easier for external parties to follow, understand and assess its monetary policy.

The Riksbank must submit a written report on monetary policy to the Riksdag (Swedish Parliament) Committee on Finance at least twice a year (see Chapter 6, Article 4 of the Sveriges Riksbank Act (1988:1385)). In this spring this takes the form of a report entitled "Material for assessing monetary policy". In the autum this takes the form of the Monetary Policy Report.

The Monetary Policy Report is available on the Riksbank's website, www.riksbank.se. From this address a printed version of the report can be ordered free of charge or the report can be downloaded as a PDF file.

To subscribe to the Monetary Policy Report, please contact the Riksbank.

E-mail: penningpolitiskrapport@riksbank.se

Address: Sveriges Riksbank, SE-103 37 Stockholm, Sweden

Telephone: +46 8 787 00 00

Further information on the Riksbank can be found at: www.riksbank.se

1 See *Monetary policy in Sweden* on the following page for a review of monetary policy strategy and of what can be regarded as a desirable monetary policy.

Monetary policy in Sweden

MONETARY POLICY TARGET

According to the Sveriges Riksbank Act, the statutory objective of monetary policy is "to maintain price stability". The Riksbank has specified this objective in terms of an inflation target according to which the annual change in the consumer price index (CPI) is to be two per cent. The Riksbank has set a tolerance band around the target of plus/minus one percentage point. This band draws attention to the fact that it is beyond the powers of monetary policy to exactly attain the target all of the time. It also serves to underline that excessively large deviations are unacceptable if the target is to remain credible.

MONETARY POLICY STRATEGY[2]

- Monetary policy is guided by, in addition to CPI, various measures of "underlying inflation". One such measure is CPIX. This measures inflation adjusted for the direct effects of changes in indirect taxes and subsidies and mortgage interest expenditure. However, there is no single measure of inflation that at all times indicates the proper stance of monetary policy.
- Monetary policy is normally focused on achieving the inflation target within two years. This is partly because monetary policy has an effect on economic developments after a time lag. The two-year horizon also gives the Riksbank scope to take into account real economic developments (GDP growth, unemployment, employment and so on).
- The Riksbank's monetary policy decisions routinely take into account changes in asset prices and other financial variables.
- The Riksbank's forecasts are based on the assumption that the repo rate will develop in such a way that monetary policy can be regarded as well-balanced. In the normal case, a well-balanced monetary policy means that inflation is close to the inflation target two years ahead without there being excessive fluctuations in inflation and the real economy. At the same time, it is important to point out that the level of output and employment in the long term is not affected by monetary policy but is governed by other factors such as technology and access to labour.
- Openness and clarity in monetary policy are prerequisites for the successful combination of credibility for the inflation target and a flexible application of the target in the short term.

DECISION-MAKING PROCESS

The Executive Board of the Riksbank usually holds six monetary policy meetings during a year, at which it makes decisions regarding the repo rate. In connection with three of these meetings, a Monetary Policy Report is published and in connetion with the other three meetings, a Monetary Policy Update is published. Approximately two weeks after each monetary policy meeting the Riksbank publishes minutes from the meeting, in which it is possible to follow the discussion that led to the interest rate decision and to see how the different Executive Board members voted.

PRESENTATION OF THE INTEREST RATE DECISION

- The interest rate decision is presented in a press release at 9.30 a.m. on the day following the monetary policy meeting.
- A press conference is held on the day following the monetary policy meeting.

2 A detailed description of the monetary policy strategy is available as a PDF file and as a printed publication that may be ordered from the Riksbank's website www.riksbank.se under the heading Monetary policy/Price stability.

Contents

Monetary policy considerations – a summary

At its meeting on 12 February, the Executive Board of the Riksbank decided to raise the repo rate to 4.25 per cent. Inflation is expected to be high, while economic activity remains good. A repo rate of around 4.25 per cent over the coming year will contribute to bringing inflation back towards the target of 2 per cent a couple of years ahead. It will also lead to a balanced development in production and employment. However, there is still considerable uncertainty regarding the economic outlook and inflation prospects.

The Riksbank's assessment of the economic outlook and inflation prospects for the Swedish economy remains largely the same as in December. Economic activity in Sweden remains good and the labour market is strong. GDP growth will slow down over the year and the increase in employment will slacken. Resource utilisation in the economy will nevertheless be higher than normal.

Inflation has risen rapidly in Sweden in 2007 and will remain high over the coming year. The inflation rate has been pushed up by higher energy and food prices, but there are also high cost pressures in the background. Inflation expectations have also risen.

The turmoil in the financial markets has continued and there is great uncertainty over economic developments in the United States and the contagion effects abroad. Recent developments in the financial markets mean that the risk of weaker growth in the world economy has increased.

The Riksbank has largely the same view of how the repo rate will develop in the future as in December. The repo rate needs to be raised to 4.25 per cent and the assessment is that it will remain at roughly the same level over the coming year. But there is considerable uncertainty in this assessment. Monetary policy must take into account different forces that offset one another. On the one hand, inflation and domestic cost pressures are high. On the other hand, there are risks linked to the turmoil in the international financial markets and to slower international economic activity. The future direction for monetary policy will depend on how new information on economic developments abroad and in Sweden will affect the prospects for economic activity and inflation in Sweden.

The minutes from the Executive Board's meeting will be published on 25 February. The next monetary policy meeting will be held on 22 April. The next Monetary Policy Report will be published on 3 July 2008.

The Executive Board of the Riksbank

CHAPTER 1 – The economic outlook and inflation prospects

Inflation is expected to be high and exceed the target over the coming year. This is largely linked to temporary effects of rising energy and food prices. More central to monetary policy is that underlying inflationary pressures and inflation expectations have also risen which can pose a threat to the inflation target in the slightly longer term, too. Good growth has led to production resources being more strained than normal and production costs rising at a rapid pace. Productivity growth is weak and hourly wages are rising at a higher rate than in recent years.

GDP growth has been high in recent years. A slight slowdown occurred in 2007 and growth will be subdued further during the forecast period both in Sweden and abroad. However, in the main scenario forecast by the Riksbank, the slowdown in economic activity will not be great. The turmoil in the financial markets has continued however and there is great uncertainty over economic developments in the United States and the contagion effects abroad. There is a risk of weaker economic growth than in the main scenario. But there is also a risk of continued high inflation. Domestic cost and international price developments can give rise to new inflation impulses.

As in December, the Riksbank must therefore take into consideration various counteracting forces: on the one hand, high domestic cost pressures and high inflation, on the other hand, risk associated with the turmoil in the international financial markets and slower international economic activity. The Riksbank's collective assessment is largely the same as in the Monetary Policy Update in December. The main scenario is that a level for the repo rate of around 4.25 per cent over the coming year is needed in order to bring inflation towards the target of 2 per cent a couple of years ahead. The forecast also means that economic activity will gradually slacken so that the economic climate normalises.

Figure 1. Repo rate with uncertainty bands
Per cent, quarterly averages

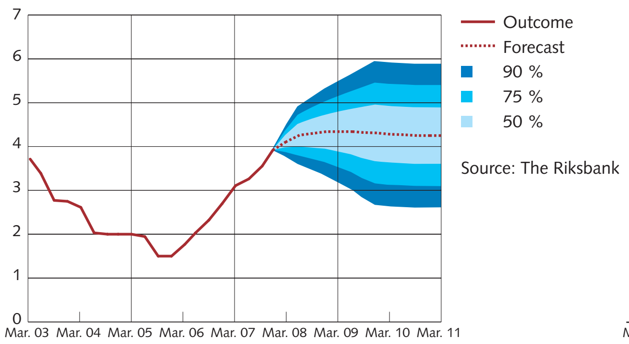


Figure 2. GDP with uncertainty bands
Annual percentage change, seasonally adjusted data

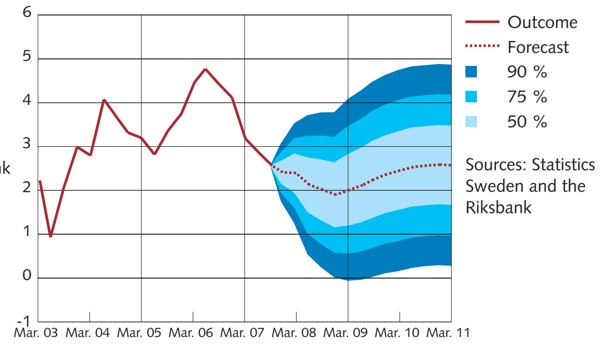


Figure 3. CPI with uncertainty bands
Annual percentage change

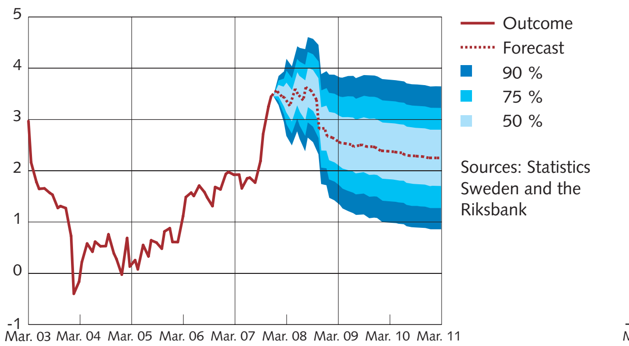
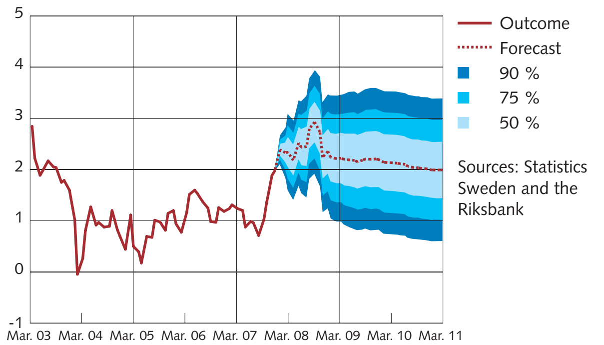
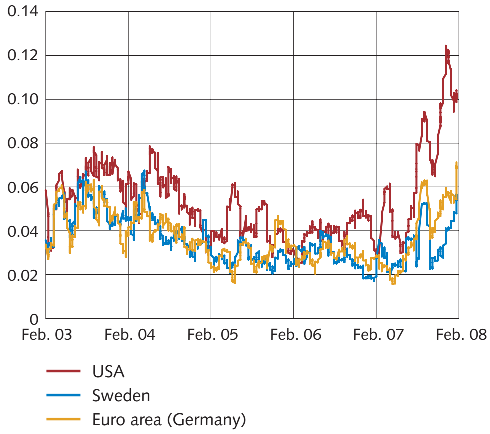


Figure 4. CPIX with uncertainty bands
Annual percentage change



Note. The uncertainty bands in Figures 1-4 are based on historical forecast errors. See the article entitled "Calculation method for uncertainty bands" in MPR 2007:1

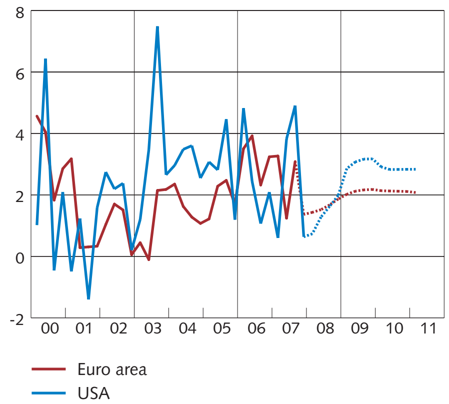
Figure 5. Fluctuations in government bond rates
Per cent



Note: Calculated as 30-day rolling standard deviation for 2-year rates.

Source: Reuters EcoWin

Figure 6. GDP in the USA and the Euro area
Quarterly change in per cent, in annualised terms, seasonally adjusted data



Note. Broken lines represent the Riksbank's forecast.

Sources: Bureau of Economic Analysis, Eurostat and the Riksbank.

■■ Greater concern over an economic downturn following the financial turmoil

The turmoil in the financial markets continues to mark international developments. Interbank rates continue to be high in many countries. Companies and private persons have therefore experienced a larger upturn in borrowing costs than is motivated by expectations of the future direction of monetary policy and future policy rates.

Uncertainty about economic prospects and the consequences of the problems on the US housing market have been reflected, for instance, in substantial fluctuation in interest rates on government securities in different countries (see Figure 5). During November and December the short interbank rates for credits extending into the New Year were particularly high. Since the Monetary Policy Update in December the interbank rates have fallen back, but the difference between interbank rates and the central banks' policy rates is still substantial.

The financial turmoil has been accompanied by a growing uncertainty about economic developments more generally. A credit crunch can affect plans for investment and consumption. During autumn 2007 the financial turmoil was mainly reflected in increasing compensation requirements for risk. Since the Update in December there have been signs that the financial problems will spread to other sectors, which has, among other things, been reflected in substantial fluctuations on the stock markets at the beginning of the year.[3] So far, the financial turmoil of the autumn has had little direct effect on Swedish companies' business activities, according to what they say in the Riksbank's company survey, although companies note some weakening in economic activity (see the article "The Riksbank's company survey: a minor slowdown during the autumn and increased concern over economic activity"). There is a slackening in international economic activity and in Swedish activity also. This slackening has, however, so far been at roughly the pace forecast by the Riksbank.

■■ Weaker growth expected in the United States

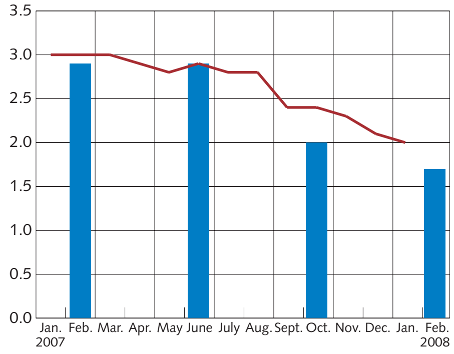
US GDP growth fell sharply in the fourth quarter last year. In the forecast continued weak growth is expected over the coming quarters (see Figure 6). Housing construction is expected to continue to contribute negatively to GDP growth. Employment is expected to grow only marginally this year. At the same time, the high oil price is eroding households' scope for consumption and is pushing up inflation. This involves weaker development of disposable incomes and thus a substantial dampening of households' consumption growth. Housing prices are expected to continue to fall further. A recovery in the economy is expected at the beginning of 2009 when the necessary correction on the housing market has occurred. Growth somewhat above the trend rate is forecast thereafter. All in all, GDP growth is expected to be 1.7 per cent this year

3 Chapter 3 contains a description of the recent financial turmoil.

before increasing to 2.5 per cent in 2009 and 3.0 per cent in 2010 (see Table A4). The Riksbank made the assessement in the October report that GDP growth in the United States would slacken. The Riksbank's forecast for US growth in 2007 was then around a half percentage point lower than the average for a large number of forecasts for US GDP growth, the so-called Consensus forecasts. Figure 7 shows the Riksbank's assessments since 2006 of US GDP growth in 2008. The Consensus forecasts are also shown in the same Figure.

There is much uncertainty over the future development of the US economy. It cannot be ruled out that it will take longer for the problems on the housing market to wane and that the contagion effects via the financial markets to other areas of the economy - the labour market in particular and thus consumption – will be greater that assumed in the forecast. The effects of the financial turmoil having a greater and more prolonged impact than assumed in the main scenario are studied in the alternative scenario "A deeper downturn abroad – leads to lower inflation" (see Chapter 2). At the same time, US households' and companies' balance sheets are initially stronger than was the case during earlier corrections on the housing market, for instance, in connection with the recessions at the beginning of the 1980s and the beginning of the 1990s. The weakening of the US dollar has been a stimulus for the export sector. The Federal Reserve's monetary policy can also be expected to lead to domestic demand being maintained. Fiscal policy measures have also been proposed in order to maintain demand.

Figure 7. Consensus and the Riksbank's forecasts for GDP growth in the United States in 2008 at different points in time
Annual percentage change



Note. Consensus forecasts are a compilation by Swedish and international forecasters. The forecasts' dates follow the Consensus compilation which can differ from the actual publication date by a month or two.

Source: Consensus and The Riksbank

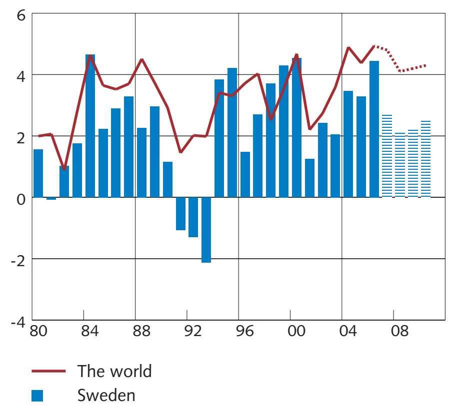
■■ Growth in the euro area will also dampen

The turmoil in the world's financial markets and the weakening of the US economy are expected to have a negative effect on growth in the euro area. Demand from abroad is subdued at the same time as the euro has strengthened against the dollar. High risk premiums cause the financing of investments and consumption to be more expensive. The global stock market decline also acts to dampen consumption and investment.

One factor that indicates that the economic decline in the euro area will nevertheless be moderate is that household consumption has not increased at a particularly high rate in recent years despite the fact that GDP growth has been relatively good. Households have therefore held up their savings. Developments in the housing market have also differed between countries and the price rises for houses do not include the entire euro area. In Germany, for instance, house prices have largely stood still over a long period. A general fall in house prices is thus less probable. All in all, these conditions indicate that there will not be any great slackening in demand in the euro area. The differences between the countries in the euro area are great, however, for instance with regard to conditions for continued developments in house prices.

GDP growth in the euro area is expected to be 1.7 per cent this year and around 2 per cent in 2009 and 2010 (see Table A4).

Figure 8. GDP in Sweden and the world
Annual percentage change, calendar adjusted data



Note. Broken lines and striped bars represent the Riksbank's forecast.

Sources: IMF, Statistics Sweden and the Riksbank

Figure 9. Total Swedish exports and export market index for goods
Annual percentage change

Note. The outcomes are based on quarterly data and the forecasts on annual data. See note in Table A4 for a definition of export market index. Dots represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

Growth abroad slackens but remains firm

Growth in countries that are important recipients of Swedish exports, such as the United Kingdom and Norway, will decline during the forecast period. Economic growth in mainland Norway is expected to slacken from 5.6 per cent last year to 3.2 per cent this year. Household and public sector consumption demand is expected to increase, but higher interest rates have a subduing effect on both consumption and investment. Growth in Denmark slowed down considerably in 2007. Housing prices have fallen in parts of the country and the earlier rapid consumption growth has slowed down. During 2008 weaker export demand growth will also contribute to moderate growth in the Danish economy.

Indicators suggest that growth prospects in the Japanese economy are weak even if the Purchasing Managers Index for the manufacturing industry has risen somewhat in the past few months. Over the coming years the economy is expected to grow by around 1.5 per cent per year. Taking into account the negative development of the work age population, among other things, this implies a growth rate close to its long-term potential.

Emerging markets such as China and India are expected to grow at a continued high pace during the forecast period, which will contribute to holding up global growth. However, there is a risk that the turmoil in the financial markets around the world and the slowdown in the US economy will lead to dampened growth in these countries also. If this were to happen, it should have a subduing effect on the development of commodity prices, among other things. Lower commodity prices have a dampening effect on inflation but can also entail that growth in commodity-producing countries will be lower.

Overall, global GDP growth will slacken during the forecast period but growth is expected to remain firm, seen from an historical perspective (see Figure 8 and Table A4).4 Growth in those countries that have by tradition been important for Swedish foreign trade, the so-called TCW-weighted GDP growth, will decline somewhat more (see Table A4). From a level of around 3 per cent during 2006-2007, the aggregate growth in these countries will fall to around 2 per cent during 2008-2010.

Inflation abroad rose sharply at the end of 22007. This is mainly due to rising energy and food prices. Inflation is expected to remain comparatively high this year, and will subsequently fall back relatively quickly. This forecast is based on the assumption that commodity prices do not continue to rise, which has been supported by recent developments. However the possibility that inflation abroad will remain high cannot be ruled out. The consequences of such a development are illustrated in an alternative scenario in Chapter 2.

Export growth slackens

Market growth for Swedish export goods is expected to amount to around 6 per cent per year during the forecast period (see Figure 9 and

4 The World Bank's weights to weigh together different countries when global GDP growth is calculated to have changed. The effect of the changed weights is that the level of the growth path is lowered by around 0.2 percentage points.

Table A4). Weaker economic growth abroad will hold back exports at the beginning of the forecast period. Exports of services are expected to grow faster than exports of goods in the period ahead as well. However, exports of goods still account for just over two-thirds of total exports. All in all, export growth is expected to be between 5 and 6 per cent per year in future.

■■ Stronger exchange rate and less of a surplus in the current account

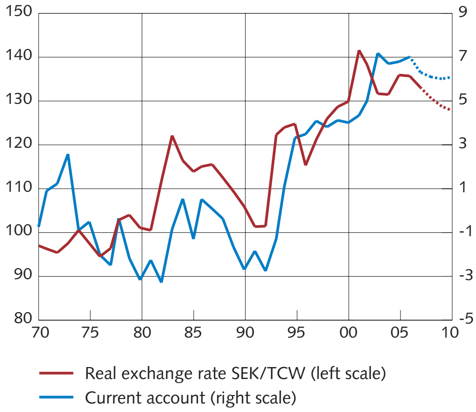
Historic and international experience indicates a connection between the current account in a country and the price level in relation to abroad. The lower the price level in relation to abroad, (measured in a single currency, the so-called real exchange rate) the greater the surplus tends to be.[5] This also agrees well with the Swedish experience (see Figure 10). As the Swedish current accout surplus has grown in the past decade, this has gone hand in hand with a slow growth in prices in Sweden in relation to other countries. But is is also a reflection that the value of the Swedish krona has fallen in relation to foreign currencies. Sweden's exports have been relatively cheap for other countries, while Sweden's imports have become more expensive. Net exports have therefore developed very strongly, and are the primary driving force behind the strong development in the current account.[6]

This development is expected to go in the opposite direction in the future. The Swedish current account has shown a substantial surplus over a long period of time. It is reasonable to assume that this will decrease in the long term. The forecasts indicate a surplus of around 6 per cent of GDP in 2010 compared with 7 per cent in 2006 (see Figure 10). Sweden's relative price level will rise somewhat, partly by an increase in the value of the Swedish krona (see Figure 10 and 11). However, the increase in value (appreciation) will be fairly moderate. Compared with the October Monetary Policy Report and the Monetary Policy Update in December, a somewhat weaker Swedish krona is now forecast; around one per cent weaker on average during 2008-2010. This is largely due to the outcome being weaker than expected. The krona is still expected to rise during the forecast period.

■■ GDP growth in Sweden slowing down

GDP growth has declined significantly since 2006 (see Figure 8 and Table A5). During 2007 export growth was considerably weaker than in the previous year at the same time as imports increased at a more rapid rate. The credit crunch that followed in the wake of the turmoil in the financial markets and weaker international economic development contribute to subduing growth further during the forecast period. In 2007, GDP growth was an estimated 2.8 per cent (calendar-adjusted). This year the

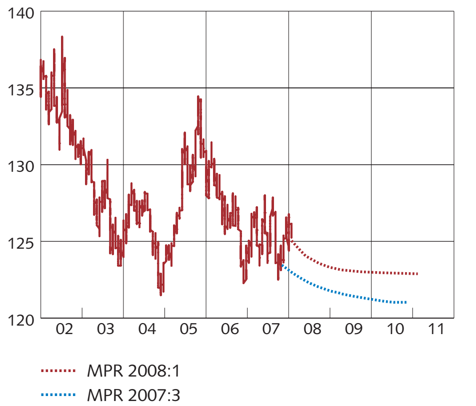
Figure 10. Real exchange rate and current account
TCW index, 18 November 1992 = 100 and percentage of GDP



Note. A higher value for real SEK/TCW means a lower relative price level in Sweden. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

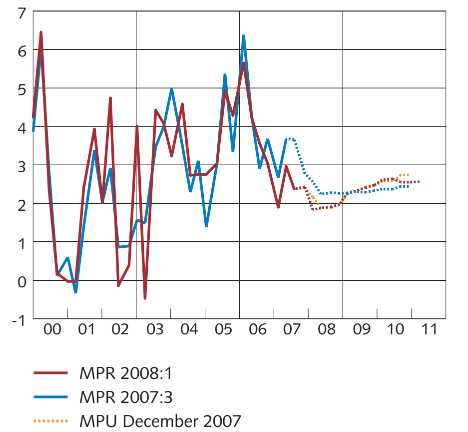
Figure 11. TCW exchange rate
Index, 18 November 1992 = 100



Note. Outcomes represent daily rates and forecasts refer to quarterly averages. Broken lines represent the Riksbank's forecast.

Source: The Riksbank

Figure 12. GDP
Quarterly change in per cent, in annualised terms, seasonally adjusted data



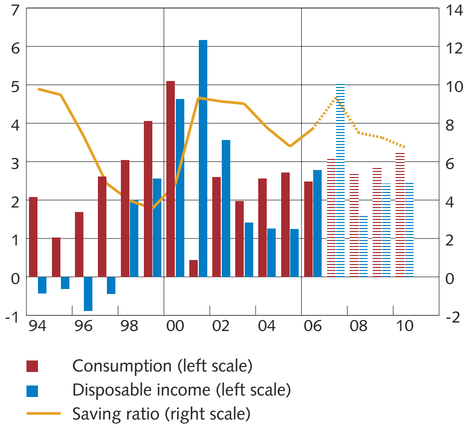
Note. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

5 See Lane, P., "The Swedish External Position and the Krona", Sveriges Riksbank Working Paper Series No. 200, 2006.

6 See also "How do large current-account surpluses co-exist with a weak international investment position?" Blomberg G. and M. Falk, Sveriges Riksbank Economic Review 2006:1.

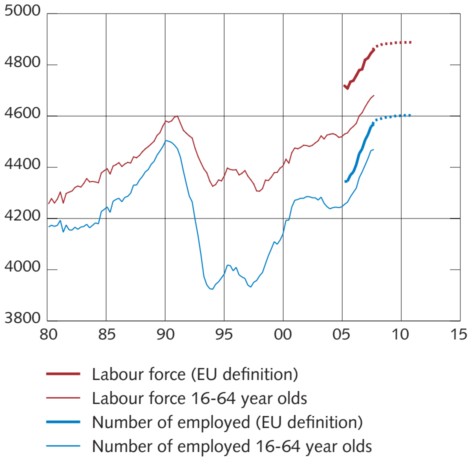
Figure 13. Households' disposable income, consumption and saving ratio
Annual percentage change, fixed prices and percentage of disposable income



Note. Broken lines and bars represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

Figure 14. Labour force and number of employed
Thousands, seasonally adjusted data



Note. Broken lines represent the Riksbank's forecast. Pre-1993 data has been spliced by the Riksbank.

Sources: Statistics Sweden and the Riksbank

growth rate is expected to decline to 2.1 per cent. Growth is forecast to be weaker in 2008 but will then increase again (see Figure 12). The development means that growth in 2009 is expected to be 2.2 per cent, while growth in 2010 is expected to increase to 2.5 per cent. Resource utilisation is currently assessed to be higher than normal and will gradually fall during the forecast period (see Figure 66).

■■ Growth in domestic demand will be somewhat lower

The continued weakening of economic activity this year is, to a great extent, attributable to developments in domestic demand. Above all, companies are expected to cut their rate of investment significantly in relation to the strong investment rate of recent years. A substantial build-up of stocks last year also contributed to GDP growth, this year the winding-up of unwanted stocks will contribute to holding down growth.

In the past year prices in the housing market has begun to show signs of a slowdown after a period of exceptionally strong development. The slackening will also gradually filter through to housing investments. Public sector investment is however expected to increase somewhat in the coming years. All in all, investment growth is expected to amount to 4.4 per cent this year. Investment growth is expected to fall further to 1.9 per cent in 2009 (see Table A5). Bank lending to companies and households is still growing at a fast pace.

Household consumption will, however, be somewhat weaker this year than last (see Figure 13). Growth in household consumption is subdued at the beginning of the year as increasing uncertainty about the development of the economy and falling share prices is expected to lead to an increase in precautionary saving. Weaker development in real disposable incomes is also curbing consumption somewhat. This year consumption is expected to increase by 2.7 per cent, to then increase by 2.9 per cent and by 3.2 per cent respectively in 2009 and 2010 (see Table A5).

Public consumption is expected to increase by 1.0 per cent in 2008 and by 0.4 per cent in 2009 (see Table A5).

■■ Strong public finances

General government net lending has been higher than previously forecast in 2007 (see Chapter 3). The Riksbank does not make any new assessment of the fiscal stance compared with the previous Report. A labour market that is still strong is contributing to keeping up public sector income and to holding down public expenditure, but the economic slowdown means that net lending will fall during the forecast period. Even though the forecast assumes increased expenditure and tax cuts in 2009 and 2010, the public sector's financial balance will remain high however. The public sector's financial balance will decrease during the forecast period but will be well above the Government's target of 1 per cent of GDP.

■■ Calmer labour market development

Employment increased strongly in 2006 and 2007, calculated in terms of both hours worked and the number of persons. The number of employed is expected to increase only marginally during the forecast period (see Figure 14). This is partly due to a slowdown in the economic upswing and partly to the higher wage increases contributing to lower demand for labour .

The supply of labour is expected to increase during the forecast period. The rate of increase in the labour supply will, however, slacken gradually as economic activity slows down and as the rate of increase in employment decreases (see Figure 14). Over the coming years the labour supply will also be held back somewhat by demographic factors. The percentage of people in the age groups with the highest participation in the labour force, those aged between 35 and 55, will decline, while the percentage of younger and older people will increase. The effects of the age composition of the labour force are expected to be countered, to some extent, by an increase in labour immigration and increased integration of immigrant refugees. The Government has put forward proposal for an integration package, the aim of which is to create good conditions for integration on the labour market. The immigration surplus has increased sharply in the past two years but is expected to decrease during the forecast period, according to Statistics Sweden's population forecast.

Since the number of persons employed increased faster than the number of persons in the labour fore in 2006 and 2007, the number of unemployed decreased substantially. During the forecast period the proportion of unemployed is expected to cease falling and to be just below 6 per cent (see Figure 15).

■■ Productivity growth is low but is expected to gradually increase

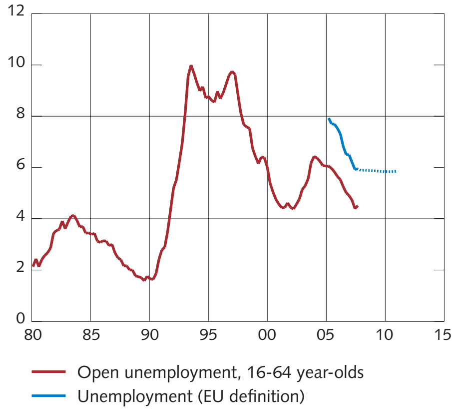
Last year's weakening of productivity in the Swedish economy is considered mainly to be a temporary effect of a fall in absenteeism and a high number of hours worked. The stronger labour market has also meant that more inexperienced labour has been hired to a greater extent than before. Since more resources are required in order to train new employees this affects productivity negatively during a transition period. Productivity growth is expected to increase in the future and to develop in line with the trend rate of increase (see Figure 16 and Table A7).

■■ Wages increasing more rapidly but moderately so far in relation to wage agreements

Preliminary statistics for 2007 suggest that hourly wages have so far increased at a moderate rate in relation to the wage agreements signed during the year. However, wage inflation is expected to rise when more retroactive wage increases are included in the statistics.

It is possible that the relatively moderate wage increases in 2007 can to some extent be explained by the composition effects in the

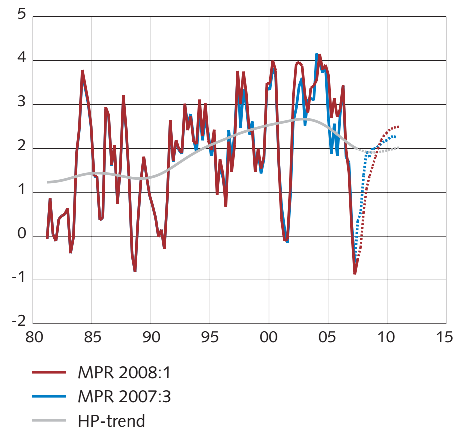
Figure 15. Unemployment
Percentage of the labour force, seasonally adjusted data



Note. Pre-1993 data has been spliced by the Riksbank. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

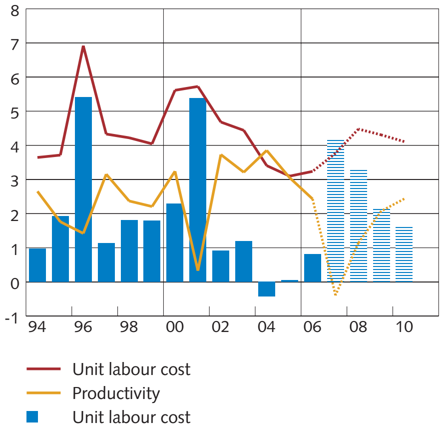
Figure 16. Actual and trend labour productivity for the economy as a whole
Annual percentage change, seasonally adjusted data



Note. Trend calculated using the HP filter. Broken lines represent the Riksbank's forecast.

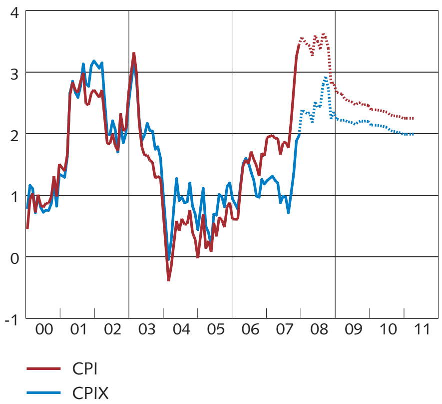
Sources: Statistics Sweden and the Riksbank

Figure 17. Unit labour costs for the economy as a whole
Annual percentage change, seasonally adjusted data



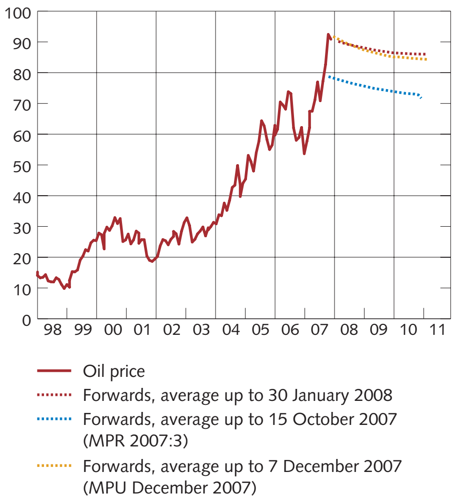
Note. Broken lines and striped bars represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 18. CPI and CPIX
Annual percentage change



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 19. Oil price, Brent crude
USD per barrel



Note. Forward rates are calculated as a 15-day average.
Sources: Intercontinental Exchange and the Riksbank

wage statistics. If new groups in the labour market, to a greater extent than before, are hired to low initial wages, the average rate of wage increase in the statistics will be lower. There are also indications that the locally-agreed wage increases in 2007 have been lower than previously expected. It has been assumed in the forecast that these factors will curb wage drift somewhat even in the coming two years.

All in all, wages are expected to increase by 4.2 per cent and 4.0 per cent respectively in 2008 and 2009 (see Table A7). Wages are assessed to have increased by 3.6 per cent in 2007. A new round of wage bargaining will begin in 2010. This makes it difficult to assess this year, on top of the considerable uncertainty already inherent in forecasts of the economy three years ahead.

■■ Production costs rising

In 2007 labour costs per unit produced are expected to have risen by 4.2 per cent. The sharp rise is mainly explained by the weak growth in productivity. At the beginning of the forecast period also production costs are expected to increase considerably as a result of continued weak growth in productivity and the higher rate of increase in hourly wages. As growth in productivity increases once more, the rate of cost increases will fall back to more normal levels in 2009 and 2010.

This year the rate of increase in labour costs per hour will be subdued by a number of changes in employers' contributions. The special wage tax for older employees was scrapped and payroll taxes for young people were halved at the end of June 2007. During the period 2008-2012 occupational pension premiums for blue-collar workers in the business sector will gradually increase, which will contribute to an increase in labour costs per hour.

All in all, labour costs per unit produced will increase by 3.3 per cent in 2008 in the Riksbank's main scenario. The rate of increase in production costs will be subdued in 2009 and 2010 to 2.2 and 1.6 per cent respectively (see Figure 17 and Table A7). As before, there is, however, a risk that cost pressures will rise faster, due to lower productivity and higher wage increases than expected.

■■ High inflation this year

Inflation is expected to continue to be high over the coming year. CPIX inflation is expected to amount to 2.5 per cent in 2008, which can be compared with the average rate of increase in 2006 and 2007 of 1.2 per cent (see Figure 18 and Table 1). The increase in inflation is partly linked to rising energy prices. In January Brent oil cost an average of just over USD 90 per barrel. Greater political uncertainty and continued high demand are important reasons for the rising oil price. Electricity prices have also risen, partly as a result of rising prices for carbon dioxide emission rights. In 2008 energy prices are expected to rise by an average of some 5 per cent, expressed as an annual percentage change, and will thus be a strong contributory factor to the rise in inflation. Forward rates indicate a slight fall in oil prices during the forecast period (see Figure 19).

See the article "Energy prices and Swedish inflation" for a more detailed discussion on energy price developments and their impact on inflation.

But, even adjusted for energy prices, the inflation rate is expected to increase in 2008 compared with previous years. When adjusted for energy prices, CPIX inflation will gradually rise and amount to 2.2 per cent in 2008 (see Figure 20). This is connected with higher than normal resource utilisation and with production costs increasing at a rapid pace, which contributes to underlying inflationary pressures rising in the economy. Food prices will also increase more rapidly in 2008 than they have done in recent years. Food prices are expected to rise by an average of some 4 per cent in 2008. See the article "Rising food prices" for a more detailed discussion about food price developments and their significance to inflation.

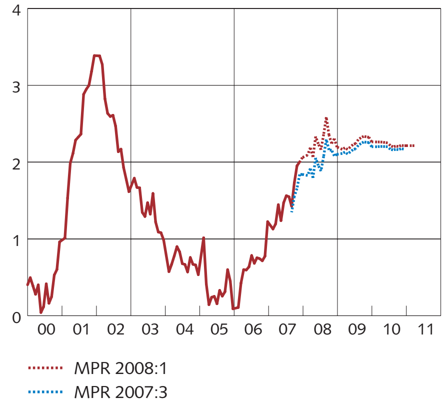
The economy is expected to gradually enter a calmer phase at the same time as the effects of the recent rise in energy and food prices will decline. According to the Riksbank's main scenario, this means that CPIX inflation will decrease and stabilise around 2 per cent (see Figure 18 and Table 1). There is, however, a risk that the drop in inflation will be delayed. This could be the case if, for example, wages rose more quickly or if productivity rose more slowly than expected, a risk the Riksbank emphasised in earlier Monetary Policy Reports. But there is also a risk of high imported inflation if the international price increases, for instance on oil, continue. The risks of higher inflation via these channels and the consequences for monetary policy are illustrated in two of the alternative scenarios in Chapter 2. Various measures of inflation expectations also indicate that there is a risk that inflation will not be curbed in line with the forecasts in the main scenario (see Chapter 3).

Rising interest rate costs for home-owners will contribute to CPI inflation reaching 3.4 per cent as an average in 2008 (see Figure 18 and Table 1). CPI inflation will exceed CPIX inflation at the end of the forecast period, too, as a result of household interest expenditure continuing to rise more quickly. Household mortgage interest expenditure is partly attributable to interest rate levels, partly to the purchase price of the houses the mortgages are financing. It is assumed in the forecast that the interest rates on mortgages will gradually stabilise. The value of the housing stock will, however, continue to increase over a long period of time since the higher market prices will have an impact on the value of the housing stock first as houses change owners.

■■ A higher repo rate contributes to subduing inflation

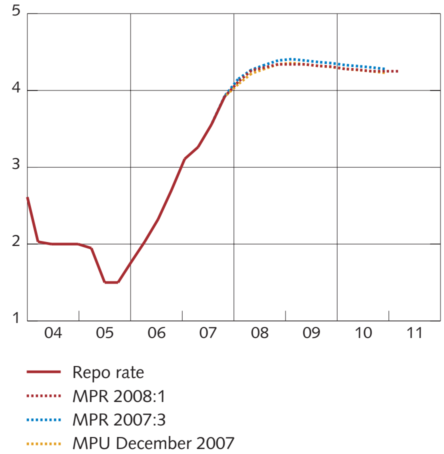
The Riksbank holds largely the same view of how the repo rate will develop in the future as in the December Update. Both inflation and the real activity in the economy have so far developed roughly in line with the December forecast. The development in the financial markets around the world has indeed continued to be turbulent, which reflects that there is considerable uncertainty regarding international economic developments. But the Riksbank's overall assessment is that economic activity over the coming three years will continue to slow down roughly in the way

Figure 20. CPIX excluding energy
Annual percentage change



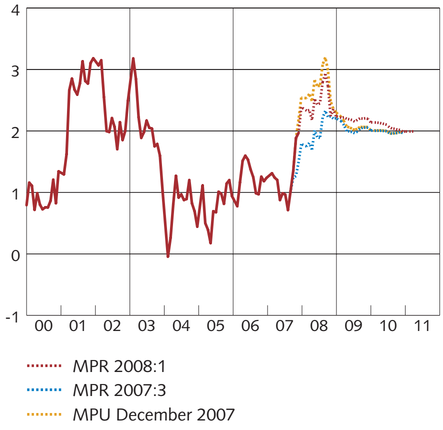
Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 21. Repo rate forecasts on different occasions
Per cent, quarterly averages



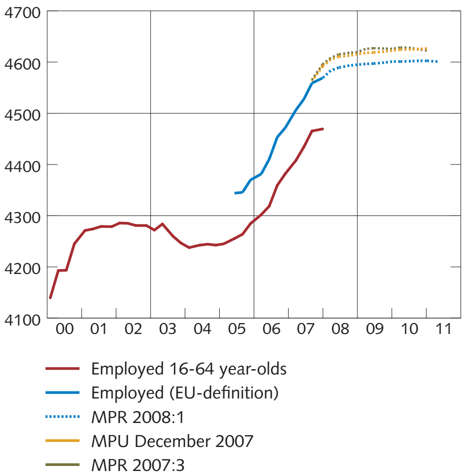
Note. Broken lines represent the Riksbank's forecast.
Source: The Riksbank

Figure 22. CPIX forecasts on different occasions
Annual percentage change



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 23. Employment forecasts on different occasions
Thousands, seasonally adjusted data



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

that was expected in December. At the same inflation at the outset is significantly higher than the target of 2 per cent. The forecast implies inflation roughly in line with the target from the end of 2009.

The Riksbank's forecasts in the main scenario are based on the repo rate being raised to 4.25 per cent in February. It is then assumed that the repo rate would, in principle, remain unchanged (see Figure 21). The repo rate needs to be raised because inflationary pressure is high. According to the forecast, CPI inflation is expected to be 2.6 per cent one year from now (see Table 2). Prospera's survey, which was published in January, shows that inflation-expectations one year ahead have increased to an average of 3.0 per cent. This means that the real interest rate, measured as the difference between the repo rate and one of these two measures of expected inflation, is around 1.5 per cent at the beginning of 2008 in the Riksbank's main scenario. This is not a high level for the real interest rate in an historical perspective. In this sense, the increase in the repo rate does not involve any great tightening of monetary policy.

Thus, in the main scenario, the Riksbank's assessment is that a level for the repo rate of around 4.25 per cent over the coming year is needed in order to bring inflation towards the target of 2 per cent a couple of years ahead. The forecast also means that economic activity will gradually slacken so that the economic climate normalises. However, there is a considerable amount of uncertainty in the assessment. Developments in the financial markets show that there is a risk that developments abroad will be weaker than in the Riksbank's main scenario. In this case, GDP growth, inflation and the repo rate in Sweden may also be lower than in the main scenario. But at the same time there is a risk that domestic cost developments or international price developments will cause the drop in inflation to be delayed. In such a case, a higher repo rate would be required than the one in the main scenario.

This forecast compared with the previous forecast

■■ Minor revisions since December

Both the inflation forecast and the assessment of developments in the real economy are mainly the same as in the December Update. This year inflation measured as both CPI and CPIX is expected to be 0.2 percentage points lower than in the December forecast, men in 2009 and 2010 will be marginally higher (see Figure 22 and Table 1). The fact that the forecast remains largely the same is due to different factors counteracting one another.

What partially tends to pull down the forecast is that the inflation outcome was somewhat lower than expected in December. In addition, forward prices on electricity suggest lower prices in the short-term but roughly unchanged in the longer-term, which indicates a lower rate of increase in 2008 but slightly higher in 2009. The rate of wage increases has also been revised downwards (see Table 3). Wages have so far increased less than expected and, moreover, the low outcomes suggest that last year's wage bargaining rounds will result in a slower increase in wages in the future than was assumed in the earlier assessment.

Rents and exchange rates indicate the reverse. Rent agreements for the municipal housing companies have been somewhat higher than expected. The nominal exchange rate is weaker in the forecast compared with both the assessment in December and in the October Monetary Policy Report. The downward revision is due to weaker outcomes and to the fact that the krona has a tendency to weaken in times of unease. A weaker krona leads to higher import prices than previously expected.

GDP growth (calendar-adjusted) is expected to be largely the same as in the Update forecast. This year growth is expected to be 0.1 percentage points lower (see Table 3). The number of persons employed and the number of hours worked this year is also expected to increase at a marginally slower rate than in the December assessment (see Figure 23 and Table 3).

The Riksbank's view of growth in the United States and the euro area is largely the same as in the December Update. A number of indicators suggest a weaker development in the United States than expected, but at the same time the Federal Reserve has cut the interest rate considerably. Seen as a whole, growth in the world is expected to be somewhat weaker than in the December Update. International inflation this year is forecast to be marginally higher compared with the December assessment; the forecast is unchanged for 2009-2010.

■■ Larger revisions compared with the October assessment

Compared with the October Monetary Policy Report the rate of inflation has been revised upwards and GDP growth has been revised downwards. This year inflation measured as both the CPI and the CPIX is expected to be 0.5 percentage points lower than in the October report (see Figure 22). GDP growth (calendar-adjusted) this year is forecast to be 0.6 percentage points lower compared with the forecast in the October Report.

Oil prices have risen sharply on the world market since the previous Monetary Policy Report. Forward prices for oil are now around USD 15 higher per barrel in the slightly longer term than in October.

In relation to the October Monetary Policy Report growth in the United States 2008-2010 is forecast to be 0.3 percentage points lower. Continued weak growth in the United States and more prolonged effects of the financial turmoil are forecast to lead to somewhat weaker growth in the euro area. The forecast for global growth is weaker than in the October Report.

Weaker economic activity abroad means that market growth for Swedish export goods is forecast to be somewhat lower this year than was assumed in the October Report. Compared with the forecast in the previous Monetary Policy Report, export growth is now expected to be lower during the forecast period. Growth in private consumption is also assessed to be lower than the forecast in the October Report, particularly this year but in 2009 and 2010 also. Growth in investment is revised downwards, particularly the forecast for 2009. The forecast for public sector consumption in current prices is unchanged since the Monetary Policy Report for the period 2008 - 2010. The change of method to calculate the development of the public sector's consumption volume (see Chapter 3) does, however, cause the forecast for volume development to be revised downwards at the same time as price developments have been revised upwards by as much.

In relation to the assessment made in the October Report, growth in productivity will be lower this year. The number of hours worked and employment will also develop more weakly this year than in the October Report. The Riksbank's assessment is that, taking into account differences in the number of working days between the years, GDP will grow 0.6 percentage points more slowly this year than in the forecast in the October Report. Resource utilisation is assessed to be slightly lower than assumed in the October forecast.

Wage forecasts for 2008 and 2009 have been revised down by 0.3 percentage points and 0.2 percentage points respectively, compared with the forecasts in the October Monetary Policy Report. The growth of unit labour costs is expected to be somewhat lower than the assessment in the previous Monetary Policy Report. The lower rate of wage increase will be offset in 2008 by lower productivity growth in 2009 and during 2008-2009 by a somewhat higher contribution from changed payroll taxes.

The assessment of the future path of fiscal policy has not changed. Compared with the October Report, however, general government net lending is weakened by the fact that the forecast path for hours worked and hourly wages is lower during the forecast period. At the same time, higher inflation will lead to somewhat higher expenditure during the period. The forecast for general government net lending is on average 0.4 percentage points weaker during the forecast period than in the previous Monetary Policy Report.

Table 1. Inflation, annual average
Annual percentage change

	2006	2007	2008	2009	2010
CPI	1.4	2.2 (2.2)	3.4 (3.6)	2.5 (2.4)	2.3 (2.2)
CPIX	1.2	1.2 (1.2)	2.5 (2.7)	2.2 (2.1)	2.1 (2.0)
CPIX excl. energy	0.6	1.5 (1.4)	2.2 (2.3)	2.2 (2.2)	2.2 (2.2)

Note. The assessment in the Monetary Policy Update in December 2007 is stated in parentheses. CPIX is CPI excluding household mortgages interest expenditure adjusted for direct effects of changed indirect taxes and subsidies.

Sources: Statistics Sweden and the Riksbank

Table 2. Inflation, 12-month figures
Annual percentage change

	Mar-07	Mar-08	Mar-09	Mar-10	Mar-11
CPI	1.9	3.4 (3.6)	2.6 (2.6)	2.4 (2.3)	2.2
CPIX	1.2	2.3 (2.6)	2.2 (2.2)	2.1 (2.0)	2.0
CPIX excl. energy	1.2	2.2 (2.2)	2.2 (2.2)	2.3 (2.3)	2.2

Note. The assessment in the Monetary Policy Update in December 2007 is stated in parentheses. CPIX is CPI excluding household mortgages interest expenditure adjusted for direct effects of changed indirect taxes and subsidies.

Sources: Statistics Sweden and the Riksbank

Table 3. Key figures
Annual percentage change unless

	2006	2007	2008	2009	2010
GDP, the world*	4.9	4.8 (4.8)	4.1 (4.3)	4.2 (4.2)	4.3 (4.2)
Crude oil price, Brent USD/barrel, annual average	65	73 (73)	89 (89)	87 (86)	86 (85)
Exchange rate, TCW index annual average	127.4	125.2 (125.2)	124.1 (122.5)	123.1 (121.5)	122.9 (121.1)
Repo rate, per cent annual average	2.2	3.5 (3.5)	4.3 (4.2)	4.3 (4.3)	4.3 (4.3)
General government net lending, percentage of GDP	2.2	3.1 (2.7)	2.3 (2.6)	1.7 (2.2)	1.6 (1.8)
GDP	4.1	2.5 (2.6)	2.4 (2.4)	2.0 (2.1)	2.8 (2.8)
GDP. calender adjusted	4.4	2.8 (2.8)	2.1 (2.2)	2.2 (2.2)	2.5 (2.5)
Numbers employed (EU-definition)	1.9	2.5 (2.5)	1.1 (1.4)	0.2 (0.2)	0.1 (0.1)
Unemployment (EU-definition)	7.0	6.1 (6.1)	5.9 (5.9)	5.9 (5.8)	5.8 (5.8)
Hourly wage in economy as a whole	3.1	3.6 (3.8)	4.2 (4.4)	4.0 (4.1)	3.8 (3.8)

* New weights from the World Bank have been used for the aggregate world growth for the previous forecast, too. These values thus do not correspond to those published in the Monetary Policy Update in December 2007.

Note. The assessment in the Monetary Policy Update in December 2007 is stated in parentheses

Sources: IMF, Intercontinental Exchange, National Mediation Office, Statistics Sweden and the Riskbank

Table 4. Repo rate forecast
Per cent, quarterly average

	Q 1 2008	Q 2 2008	Q 3 2008	Q 4 2008	Q 1 2009	Q 1 2010	Q 1 2011
Repo rate	4.1 (4.1)	4.3 (4.2)	4.3 (4.3)	4.3 (4.3)	4.3 (4.4)	4.3 (4.3)	4.3

Note. The assessment in the February Monetary Policy Update in December 2007 is stated in parentheses.

Source: The Riksbank

CHAPTER 2 – Alternative scenarios and risks

The Riksbank's assessment is that a well-balanced monetary policy this time is to raise the repo rate by 0.25 percentage points. This is expected to contribute to inflation being close to the target of 2 per cent at the end of 2009 and onward. Total resource utilisation in the economy is currently assessed to be higher than normal. During the forecast period resource utilisation is expected to gradually fall towards normal levels.

The Riksbank's view of the future repo rate path is therefore largely the same as in December. However, there is considerable uncertainty over future developments. It is just as likely that the repo rate will need to be raised as to be cut in the future.

A lower interest rate could be motivated if the turmoil in the financial markets deepens and growth abroad and inflation are lower than in the main scenario. A higher interest rate could be motivated if high inflation in 2008 leads to rising inflation expectations and to rising inflation in 2009 and 2010 as well. It could also be motivated if companies' costs or inflation abroad increases more than in the main scenario.

In this chapter the Riksbank describes two different types of alternative scenario that differ from the main scenario. Firstly we present scenarios that describe what could happen to economic developments if the Riksbank were to conduct a different monetary policy than the one in the main scenario. Then we describe three scenarios based on another economic development in Sweden and abroad than the one in the main scenario and which, in turn, affects how monetary policy is conducted.

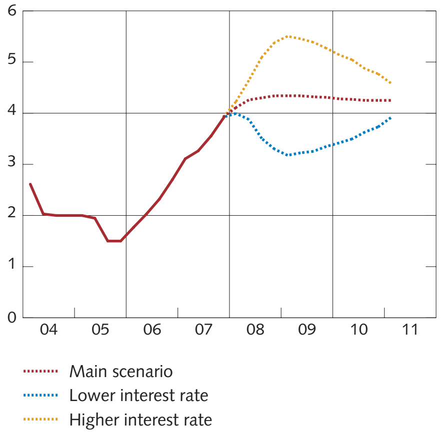
Forecasts of future economic developments are always uncertain. This is illustrated by an uncertainty interval around the main scenario (see Figures 1-4 in Chapter 1). The alternative scenarios are produced with the aid of various models used by the Riksbank, primarily the general equilibrium model RAMSES.[7] The results reported here should be regarded as explanatory examples and illustrations. A large number of alternative development paths are also possible, which, all in all, gives rise to the uncertainty in the forecasts and are described by the uncertainty interval.

Alternative scenarios for the repo rate

A well-balanced monetary policy normally means that inflation is close to the inflation target of 2 per cent. Monetary policy does not have sufficient precision to keep inflation at exactly 2 per cent all of the time. Normally, monetary policy is aimed at achieving the target within two years since monetary policy affects the economy with a time lag. In the event of a deviation from the target, the two-year horizon provides scope so that monetary policy does not need to react so strongly that it creates large fluctuations in the real economy. This way of managing the balance between inflation and the real economy is usually termed flexible inflation-targeting. To make it clear that inflation may temporarily deviate from the target, the inflation target has been supplemented with a tolerance interval of +/- 1 percentage point.

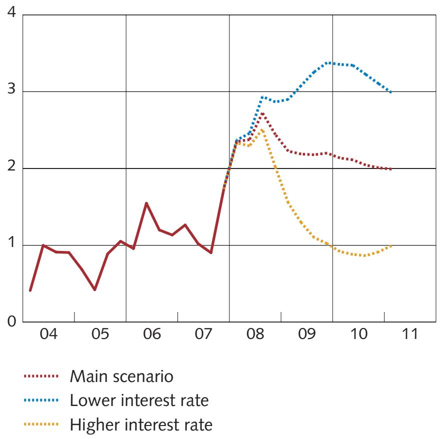
7 See, for instance, the box "RAMSES – a tool for monetary policy analysis" in the Monetary Policy Report 2007:1.

Figure 24. Repo rate assumptions
Per cent, quarterly averages



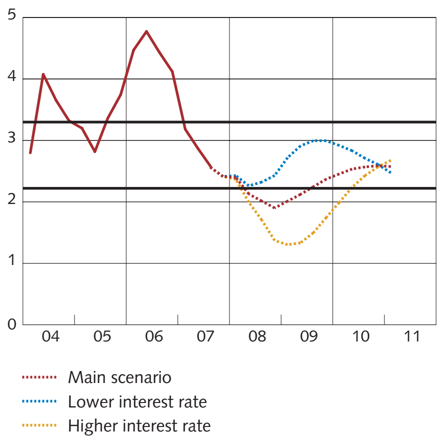
Note. Broken lines represent the Riksbank's forecast.
Source: The Riksbank

Figure 25. CPIX
Annual percentage change



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 26. GDP
Annual percentage change, seasonally adjusted data



Note. GDP has grown by an average of 2.2 per cent per year between 1980 and 2006 and by 3.3 per cent between 1998 and 2006. These averages are shown by the two horizontal lines. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

The development of the repo rate is thus steered by striking a balance between bringing inflation close to the target and stabilising fluctuations in inflation and economic activity. To illustrate the considerations made, a couple of alternative scenarios for the repo rate are described below.

Below is an illustration of the effects on GDP, the labour market and inflation of conducting a monetary policy other than that described in the main scenario. The effects on inflation, GDP and the labour market of the alternative repo rate paths shown here are based on how these variables usually change when changes in the repo rate are unexpected. Two alternative scenarios are shown; one with a higher interest rate path and one with a lower interest rate path than in the main scenario.

■■ Higher interest rate gives lower inflation and GDP growth, lower interest rate gives higher inflation and GDP growth

If the interest rate is raised more than in the main scenario, demand in the economy will be lower. A higher interest rate makes it more advantageous to save. This means that households consume less and demand declines. A higher interest rate also means that fewer investment projects are profitable and that investment growth is not as high. When demand and investment are lower, production increases more slowly, which means that demand for labour is lower. Wages and thereby companies' costs do not increase as rapidly either. Lower demand thus leads in this case to prices rising more slowly. How quickly prices are affected also depends on how the exchange rate develops. When the interest rate is raised more in Sweden, the exchange rate strengthens more than in the main scenario. In turn a stronger exchange rate means that prices of imported products are lower. In addition, the exchange rate affects inflation indirectly, as it also influences demand for Swedish exports and imports so that the trade balance deteriorates.

If the interest rate is instead lower than in the main scenario, inflation will be higher than in the main scenario. A lower interest rate stimulates demand and growth in GDP and the number of hours worked which rise. This leads to raised costs for companies and higher inflation.

Developments in the repo rate in one scenario (called High scenario) mean that the repo rate is raised to around 5.5 per cent over the coming year. It will then fall slowly down to the level of the main scenario. On average, the repo rate is approximately 0.8 percentage points higher than in the main scenario over the coming three years (see Figure 24 and Table A8). The development of the interest rate in the second alternative (called Low scenario) instead means that the repo rate is lowered to approximately 3.2 per cent over the coming year. Over the coming three years it is on average around 0.8 percentage points lower than the path in the main scenario. The lower interest rate means that inflation on average is 0.8 percentage points higher than in the main scenario over the coming three years (see Figure 25 and Table A9). At the beginning of 2011, CPIX inflation in this scenario is approximately 3 per cent. The higher interest rate has, however, the opposite effect and means that inflation will on average be 0.8 percentage points lower than in the main scenario and will only be 1 per cent at the beginning of 2011. Compared with the main scenario, GDP growth will be on average 0.4 percentage points lower per year in the scenario with a higher interest rate and 0.4 percentage points higher in the scenario with a lower interest rate (see Figure 26 and Table A10).

■■ Differing consequences for resource utilisation

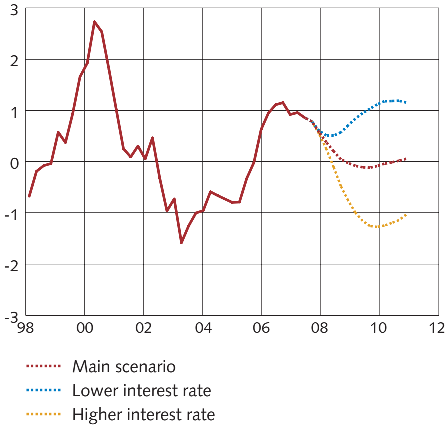
An important question when assessing the consequences for the real economy of various types of monetary policy is how much the resources in the economy are used at the outset and during the forecast period. There are different ways of estimating the amount of spare capacity in an economy. One common method is to calculate the percentage deviation from a long-term trend for production and the number of hours worked respectively. Calculations of the trend can be made for instance with the aid of a Hodrick-Prescott filter (see Figures 27 and 28). According to these measures, production resources are being utilised more than normal at present. In the main scenario resource utilisation measured in terms of the production gap falls fairly quickly to a normal level during the year. According to the labour market gap also, resource utilisation will decline in the future but at a somewhat slower pace.

The scenario with a higher interest rate gives a lower resource utilisation than normal at the end of the forecast period. The scenario with a lower interest rate, on the other hand, means that resource utilisation in terms of both the labour market gap and the production gap remains at a higher level than normal throughout the entire forecast period.

The Riksbank also studies other measures of real economic development. Forecasts for developments in the number of hours worked, the employment rate and unemployment are shown in Figures 29-31. These also show the historical averages for two periods, 1980-2006 and 1998-2006. These averages provide a picture of what can be regarded as a normal development from an historical perspective for the respective variable, but they are not necessarily reasonable long-term equilibrium values. One problem with the historical averages in the labour market is that there have been major changes in recent years. For instance, the level of unemployment compatible with a stable economic development has probably changed. The crisis at the beginning of the 1990s led to unemployment rising markedly and this change still affects the average. This makes it difficult to assess what level of unemployment and employment is sustainable in the long term.

In the alternative scenario with a lower interest rate unemployment declines to 5 per cent at the end of the forecast period, while the higher interest rate path means that unemployment is around 6.7 per cent at the same point in time. The scenario with a higher interest rate means that the currently high activity in the economy slows down quickly according to different measures of real economic development; while the scenario with a lower interest rate means that the level of activity rises further or remains at a high level.

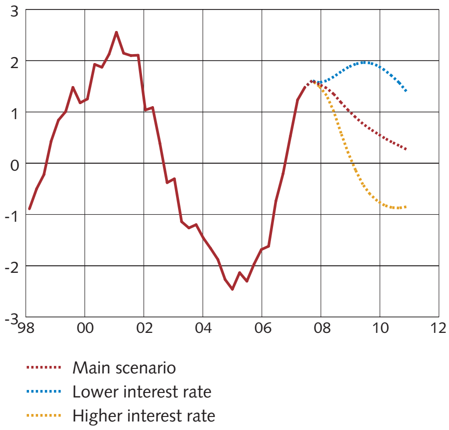
Figure 27. Output gaps (GDP)
Percentage deviation from the HP trend



Note. The HP gap is the deviation in GDP from the main scenario's HP trend. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

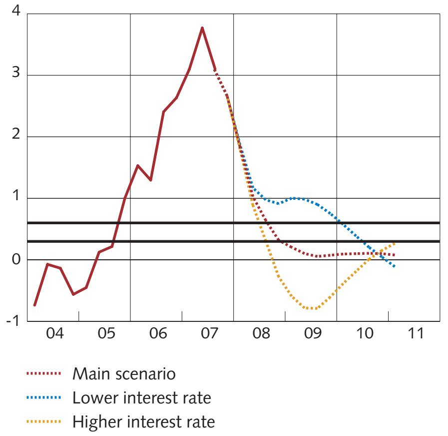
Figure 28. Labour market gaps
Percentage deviation from the HP trend



Note. The HP gap is the deviation in the number of hours worked from the main scenario's HP trend. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

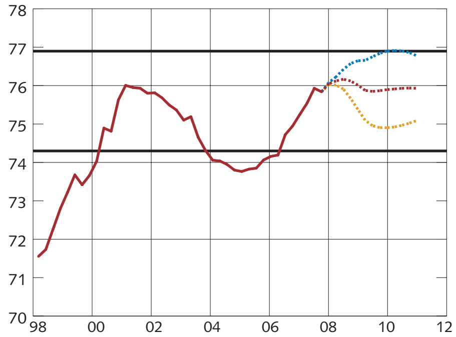
Figure 29. Number of hours worked
Annual percentage change, seasonally adjusted data



Note. The number of hours worked has grown by an average of 0.3 per cent per year between 1980 and 2006 and by 0.6 per cent between 1998 and 2006. These averages are shown by the two horizontal lines. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

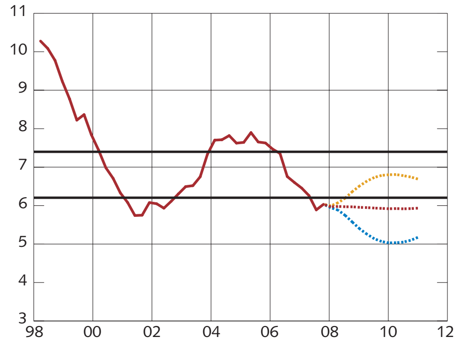
Figure 30. Employment rate
Per cent, seasonally adjusted data



Note. Number of employed in relation to the population aged 16-64. The average employment rate was 76.9 per cent during the period 1980-2006 and 74.3 per cent during the period 1998-2006 according to the Riksbank's splicing of the old labour market survey to the new one. These averages are shown by the two horizontal lines. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

Figure 31. Open unemployment according to the ILO definition
Percentage of the labour force, seasonally adjusted data



Note. According to the ILO definition, full-time students who are seeking work are included in the definition of unemployment. According to the ILO definition, unemployment averaged 6.2 per cent during the period 1980-2006 and 7.4 per cent during the period 1998-2006. Pre-1993 data has been spliced by the Riksbank. These averages are shown by the two horizontal lines. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

The Riksbank's assessment is that developments in the main scenario are compatible with a balanced development in the labour market and the real economy during the forecast period. At the same time, inflation was close to the target one to two years ahead. If the repo rate is raised less than in the main scenario, inflation is expected to be above 2 per cent in the coming years, at the same time as resource utilisation both in the labour market and in production is expected to be at an unsustainably high level. A higher repo rate than in the main scenario would lead to CPIX inflation being clearly below 2 per cent a couple of years ahead.

Alternative scenarios for economic development

In this section three alternative scenarios for economic developments are presented. This time the scenarios described are coupled to events abroad. In the first scenario, we describe how monetary policy, inflation and GDP develop if the international economic slowdown and the financial turmoil is greater and more prolonged than expected in the main scenario. In the other two scenarios, we describe what would happen in Sweden if prices abroad were to increase more than in the main scenario; in the one case this is linked to generally higher inflation abroad, and in the other case the oil price will be higher.

Inflation may also be higher as a result of domestic factors . The forecasts for developments in wages and productivity are still surrounded by considerable uncertainty. A higher rate of increase in wages and lower productivity growth would also lead to higher inflation and thus motivate a higher interest rate path. This scenario has been described in the previous Monetary Policy Report from October 2007 and, therefore, is not discussed here.

The fact that there are more scenarios in this chapter that involve higher rather than lower inflation should not be interpreted as though, as a whole, there are greater risks for higher inflation than in the main scenario. The total risk outlook is at the present time regarded as balanced.

A central assumption in the alternative scenarios is that the Riksbank does not have complete information from the start regarding the future economic development to which a particular scenario will lead, but instead gradually become aware of this during the forecast period. This of course means that monetary policy is adjusted more gradually than if all information were available immediately.

In this context it is also important to point out that the repo rate paths shown here are mainly based on how the repo rate usually changes when various shocks occur. The shaping of monetary policy in the various scenarios reported below does not exactly follow the historical pattern of behaviour estimated in Ramses. This is in part due to the fact that the policy rule in Ramses is a simplified description of monetary policy. It is also due to the fact that the Riksbank can choose to make various adjustments depending on the shocks that occur.

■■ A deeper downturn abroad leads to lower inflation

In the first scenario, we assume that growth in the United States falls at the same time as the borrowing costs for households and companies in the world are higher. This could be the case if, for instance, house prices in the United States fall substantially at the same time as the financial turmoil deepens, resulting in higher credit spreads in the world.[8]

The higher borrowing costs for households and companies lead to a general dampening in demand in the world since household consumption and business investment decrease. At the same time, it is assumed that house prices in the United States fall more than in the main scenario, which further strengthens the negative effects on household consumption and demand in the US economy. When demand falls in the United States, inflation is lower. The American central bank, the Federal Reserve, is then expected to cut the interest rate. Both the decline in demand from the United States and the higher credit spreads affect growth and inflation in the euro area, which is lower and which also causes the ECB to cut its policy rate. The scenario is similar to the one with weaker international growth, which was presented in the previous Monetary Policy Report, but now with the added effect of a global credit crunch. [9]

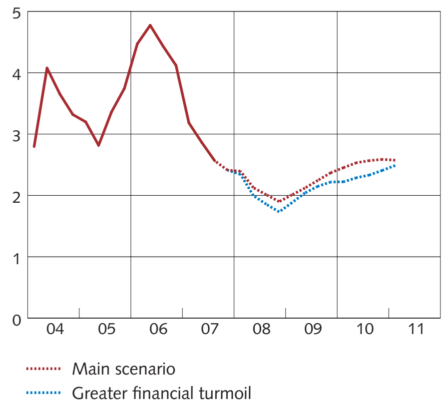
The falling house prices and the global tightening of credit results in GDP growth abroad being on average 0.4 percentage points lower than in the main scenario during the forecast period (see Table A13). Inflation abroad gradually falls to around 1 per cent at the end of 2010. At the same time the central banks abroad cut interest rates by, at most, some 1.2 percentage points up to the end of 2010.

The lower growth abroad has a negative effect on the demand for Swedish exports. Household consumption and business investment are affected by the higher credit spreads and less is consumed and invested than in the main scenario during the first year. The weaker demand means that Swedish GDP growth is on average 0.1 percentage points lower than in the main scenario during the forecast period (see Figure 32 and Table A13). Weaker economic activity also means that Swedish inflation will be on average 0.3 percentage points lower than in the main scenario during the forecast period (see Table A13). The effects on inflation will be greatest in 2010 when it will be 0.6 percentage points lower than in the main scenario (see Figure 33). Lower inflation and weaker growth mean the repo rate will begin to be lowered in the middle of 2008 and it will be on average 0.7 percentage points lower over the coming three years.

8 By credit spreads is meant the difference between interest rates on loans secured by households and companies compared with interest rates on central government borrowing.

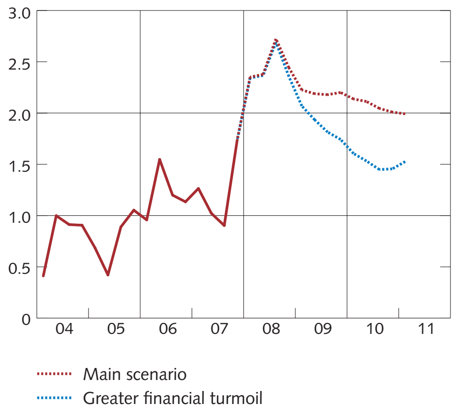
9 In the scenario the results of simulations that Frederic Mishkin presented in his paper "Housing and the Monetary Transmission Mechanism" at the Jackson Hole Symposium in August 2007 were used. The results used here are those where monetary policy reacts in an "optimal" manner and the transmission between the housing sector and the rest of the economy is strengthened. These indicate how the US economy is affected by a 20 per cent fall in house prices over two years. The contagion effects from the United States to the euro area are calculated in a so-called Bayesian Vector Autoregressive (BVAR) model. The results from the BVAR model were then used in Ramses to calculate the effects on the Swedish economy of the fall in foreign inflation, GDP growth and interest rates. In addition, a higher credit spread is assumed in Ramses, that is, an increased cost for companies and households to borrow money compared with what can be motivated by monetary policy expectations. This affects both Sweden and other countries. The credit spread is assumed to constantly be 50 points higher than in the main scenario in four quarters. It then slowly returns to more normal levels.

Figure 32. GDP, scenario with greater financial turmoil
Annual percentage change, seasonally adjusted data



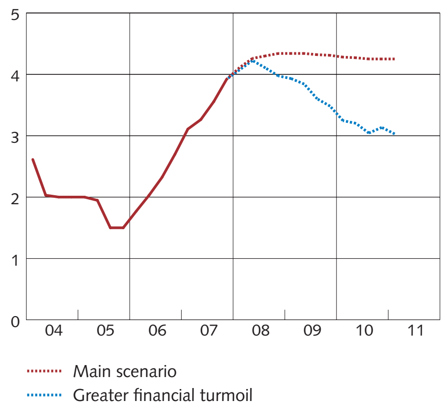
Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 33. CPIX, scenario with greater financial turmoil
Annual percentage change



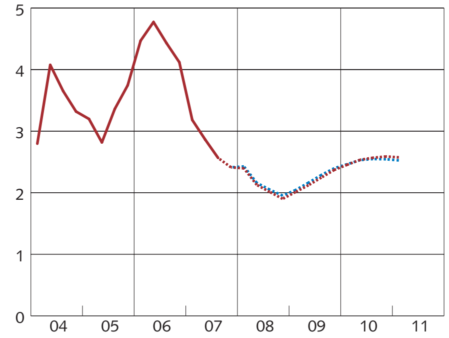
Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 34. Repo rate, scenario with greater financial turmoil
Per cent, quaterly averages



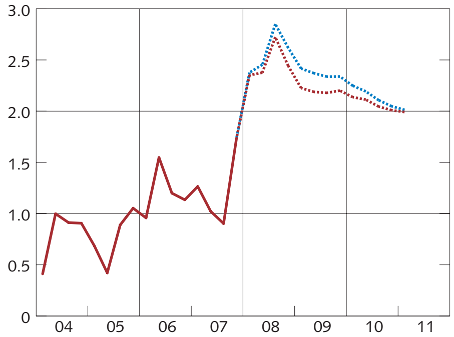
Note. Broken lines represent the Riksbank's forecast.
Source: The Riksbank

Figure 35. GDP, scenario with higher international inflation
Annual percentage change, seasonally adjusted data



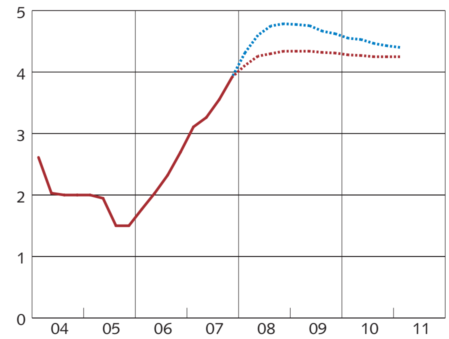
Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 36. CPIX, scenario with higher international inflation
Annual percentage change



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Figure 37. Repo rate, scenario with higher international inflation
Per cent, quarterly averages



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

At the end of 2010 the interest rate is just over 1 percentage point lower than in the main scenario (see Figure 34).

■■ Higher inflation abroad can contribute to higher Swedish inflation

In the main scenario, it is assumed that inflation abroad will continue to rise at the beginning of 2008, and will subsequently fall back. The upturn in inflation is largely due to a sharp increase in oil and food prices. The rate of price increase on these products is expect to fall or stabilise during the forecast period. Given that inflation abroad has been surprisingly high recently, it is possible that it will also be underestimated in the future. For instance, unexpectedly high rates of wage increases in Europe or unexpectedly high global price increases for food or energy could lead to a different development in inflation than that in the main scenario, alternatively the indirect effects of earlier prices increases could be more prolonged.

The second alternative scenario therefore illustrates a development whereby inflation abroad is on average some 0.7 percentage points higher than in the main scenario during the forecast period, at the same time as GDP abroad is assumed to develop largely in line with the main scenario (see Table A14). The central banks abroad react and raise the interest rate so that it is, on average, some 0.5 percentage points higher during the coming three years.

Swedish GDP growth is not substantially affected in this scenario (see Figure 35).This is because the different effects offset each other. Inflation in Sweden will be an average 0.1 percentage points higher over the coming three years (see Figure 36). Inflation will rise more abroad than in Sweden, which means that Swedish products will be cheaper relative to foreign products. This relative price effect means that demand for Swedish exports increases at the same time as imports to Sweden decrease, and GDP growth is affected positively. The Riksbank raises the interest rate by up to 0.5 percentage points more than in the main scenario in the second half of this year. The repo rate will be an average 0.3 percentage points higher during the coming three years (see Figure 37). The higher interest rate will lead to a decline in demand for both consumption and investment and thus GDP growth will be dampened.

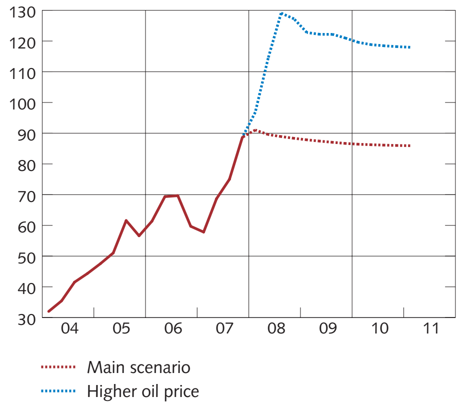
■■ Developments in the oil price are an uncertainty factor for inflation in Sweden and abroad

In the last scenario we calculate what will happen in Sweden if the oil prices rises by a further USD 40 per barrel over the coming three quarters (see Figure 38 and Table A15). The relative price increase in this alternative scenario is more or less as large as the one that occurred during the last three quarters last year. The alternative scenario thus also gives an idea of the conceivable effects of the upturn that did actually occur in 2007. The oil price fluctuates sharply and the future development is uncertain. It can not be ruled out that the oil price will instead be lower than the forecast in the main scenario. The reasoning and the effects below will then be the reverse.

The effects on Sweden and abroad are analysed in a Vector AutoRegressive (VAR) model.[10] According to this model, the higher oil price has minor effect on GDP abroad.[11] Inflation abroad will be on average 0.2 percentage points higher and the interest rate will be at most 0.6 percentage points higher at the end of 2008 and is on average 0.4 percentage points higher during the forecast period (see Table A15).

Swedish GDP growth will be affected slightly more than GDP abroad. It will be 0.4 and 0.3 percentage points lower in 2009 and 2010 respectively. Sweden is a small open economy and GDP growth is more sensitive to external shocks than large economies or aggregates of economies such as, for instance, TCW-weighted GDP. This applies in particular as some countries in the TCW aggregate are oil producers. The fact that the Riksbank raises the interest rate slightly more than other central banks also contributes to lower GDP growth. The interest rate is at most almost 1 percentage point higher at the end of 2008 compared with the main scenario and on average 0.6 percentage points higher during the forecast period. Inflation will nevertheless be on average 0.3 percentage points higher than in the main scenario during the same period.

Figure 38. Oil price, scenario with higher oil price
Crude oil price, Brent, USD/barrel



Note. Broken lines represent the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

10 It is not possible to analyse with Ramses what a change in the price of oil has for implications abroad and in Sweden, since the oil price is not explicitly included in the model.

11 Since this scenario is produced in a VAR model, it is, relatively speaking, harder to identify an oil price shock exogeneously for abroad than for Sweden. This is because the collective international demand affects the oil price more than Swedish demand affects the oil price.

CHAPTER 3 – The current economic situation

Inflation was higher than had been forecast in the October Monetary Policy Report. The main factor behind this was unexpectedly high energy prices. However, the inflation outcome in December was slightly lower than expected compared with the assessments made in connection with the monetary policy meeting in the same month.

Rising cost pressures in companies have contributed to the recent rise in inflation. At the same time as inflation has risen, inflation expectations have been adjusted upwards, according to surveys.

World growth has so far been relatively good, which is primarily connected with the strong developments in parts of Asia. GDP growth during the third quarter of last year was stronger in both Europe and the United States than had been anticipated in the October Monetary Policy Report, but prospects in both the United States and the euro area have deteriorated since then. Developments in the financial markets have been characterised by concern over a possible recession in the US economy and potential contagion effects on the rest of the world economy. International stock markets have also been weak and shown high volatility.

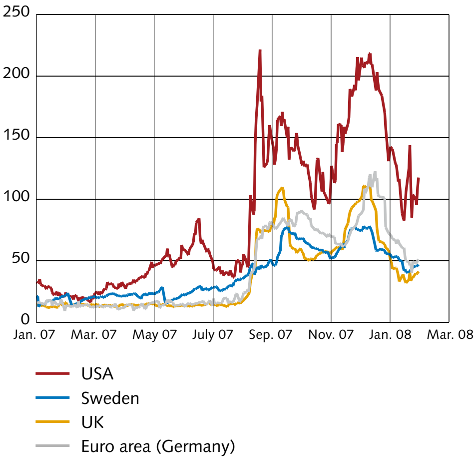
The Swedish economy is growing more slowly than was anticipated in the Monetary Policy Report published in October. New indicators, such as the Economic Tendency Survey, nevertheless on the whole support the picture of continuing relatively good growth and a continued strong labour market. Total resource utilisation in the economy is currently estimated to be higher than normal, but no longer rising. Forward rates in Sweden have fallen since the Monetary Policy Update in December, which reflects the fact that market expectations regarding the repo rate have been adjusted downwards.

■■ Turmoil in the financial markets

The concern over the US economy and its contagion effects has set the tone for developments in the financial markets since the December Monetary Policy Update. The market agents' uncertainty regarding the consequences of mortgage market problems has been one important factor behind this. Among other things, the concern has also created distrust between market agents regarding counterparties' credit ratings. This has meant that it has become more expensive to borrow in the markets and the interest rate spread between US corporate and government bonds, for instance, has risen considerably. The concern has also resulted in sharply rising spreads between interbank rates and government bond rates (see Figure 39). During November and December short interbank rates for credits extending into the New Year were particularly high. It is primarily the interbank markets in the United States, the euro area and the United Kingdom that have been affected. The rising interest rate spreads led to several central banks, such as the Federal Reserve, the ECB and the Bank of England, offering the banks liquidity on special terms during this period. From mid-December and into the new year, however, the interbank rates have fallen back, but the spreads between interbank rates and T-bills remain substantial.

The spread between interbank rates and the corresponding durations in government bonds on the Swedish market returned temporarily in November and December to the same levels seen in connection with the start of the financial turmoil in August-September. In particular, interbank rates with durations extending over the new year rose (see Figure 40). Higher interbank rates as a result of increased risk aversion can be regarded as a contractive interest rate

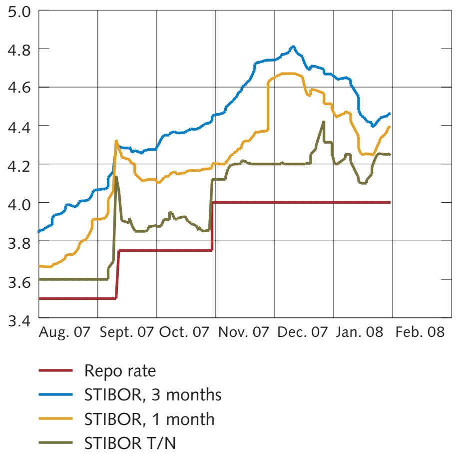
Figure 39. The spread between interbank rates and government bond rates (TED spread)
Basis points



Note. The differential is calculated as the difference between the three-month interbank rate and three-month government bond rate in the respective country.

Source: The Riksbank

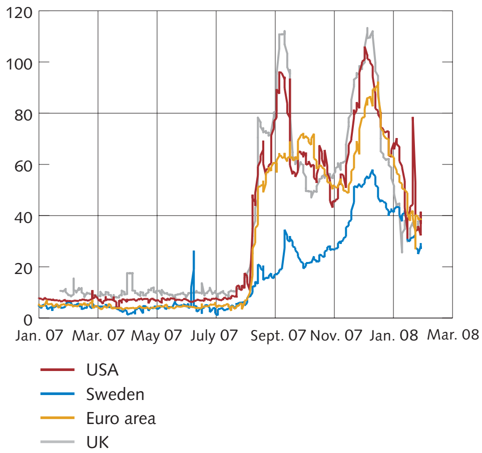
Figure 40. Interbank rates in Sweden
Per cent



Note. STIBOR T/N refers to the overnight rate from tomorrow until the day after.

Source: The Riksbank

Figure 41. Spread between interbank rates and expected monetary policy
Basis points



Note. The spread is calculated as the difference between the three-month interbank rate and three-month overnight index swap.

Source: The Riksbank

raise in addition to monetary policy. A calculation of how much the three month interbank rates have risen above what can be motivated by expectations regarding the future direction of monetary policy shows an upturn in Sweden of at most 50 basis points (see Figure 41). The spread has declined slightly since the middle of December. The contraction has also had an impact on short-term mortgage rates, as the interbank rates affect the mortgage institutions' short-term financing costs (see Figure 42).

■■ Deterioration in international growth prospects

GDP growth in the OECD area slowed down in 2007 (see Figure 43), but growth in both Europe and the United States was stronger during the third quarter of last year than was expected in the October Monetary Policy Report. This has meant that the GDP forecast for the OECD area has been revised up slightly for 2007 compared with the assessment made in October. At present there are many signs that growth prospects for the international economy have deteriorated. The uncertainty regarding the consequences of the problems on the US mortgage market remains. Households' and companies' confidence has declined. The situation in the US labour market has deteriorated. The high oil price means that households' scope for consumption has declined. There are signs that households' consumption demand will fall in both the United States and the euro area.

■■ Weak fourth quarter and poorer growth prospects in USA

GDP growth in the United States slowed down considerably during the fourth quarter. This was also expected in the forecasts made in the October Monetary Policy Report. However, the slowdown in growth was slightly larger than expected. GDP grew according to preliminary statistics by 0.6 per cent on an annual rate, which can be compared with the forecast in October of 1.3 per cent. Stocks fell unexpectedly, which contributed to reducing growth in demand by just over 1 percentage point. On the other hand, household consumption expenditure rose slightly more than expected. Sales of durable goods were high. The outcome of other parts of the sales balance is well in line with the forecast from October. Investment continued to fall during the fourth quarter, primarily as a result of housing construction falling by a good 24 per cent on an annual rate. Export growth slowed down, but so did imports.

The order intake to companies has fallen, particularly in the manufacturing industry, but also in the service sector. Company profits showed only a slight increase during the third quarter, compared with the same quarter the year before. One explanation is that profits in the bank sector have declined as a result of the problems with mortgages.

Households' optimism has declined, which may have a negative effect on consumption demand. At the same time, households' scope for consumption has declined as a result of the high oil and petrol prices. The trend for consumption increase has thereafter slowed down. Consumption decreased somewhat in December.

■■ Weakened labour market in the USA and continued weak housing market

The situation in the US labour market has continued to deteriorate. Unemployment has, since its lowest point in March last year, risen by 0.5 percentage points to 4.9 per cent in January this year. Employment growth in January was 0.7 per cent compared with January 2007 (see Figure 46). The weak labour market growth is linked to both falling housing construction and a deterioration in activity in the manufacturing industry.

The downward adjustment in the housing market has continued. In December last year, sales figures for new housing were just under half of the figure from autumn 2005 and sales figures for existing housing have fallen by just over 30 per cent. As a reaction to the decline in demand, housing construction has also fallen substantially. House prices are falling according to most price indices and the number of months it takes to sell the houses is at a very high level in historical terms. This is a sign that house prices and housing construction will fall further. However, the level of construction of commercial property was high in the fourth quarter last year.

In December CPI inflation was 4.1 per cent compared with the same month in 2006. However, inflation fell from 4.3 per cent in November. The underlying inflation rate (adjusted for energy and food prices) was 2.4 per cent in December, compared with the same month in 2006.

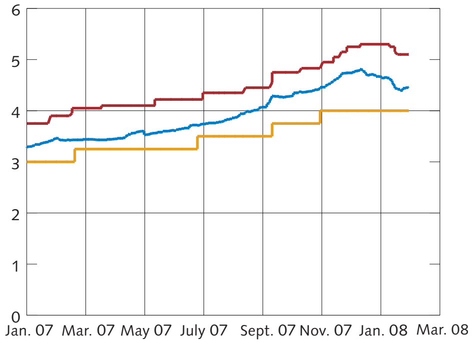
■■ Strong third quarter but some slowdown expected in euro area

In the euro area GDP increased by 3.1 per cent on an annual rate during the third quarter of 2007. This increase, which followed on from an upturn of only 1.2 per cent in the previous quarter, was slightly larger than expected. All components of final demand increased in relation to the previous quarter and the growth in both exports and imports was strong.

GDP growth for the third quarter was fairly evenly distributed between the large countries in the euro area. The German, French and Spanish economies all showed roughly the same increases as the euro area on average. In the Netherlands, however, GDP increased by a good 7.5 per cent on an annual rate. In Finland GDP growth has slowed down during the first three quarters of 2007. During the third quarter growth was nevertheless 3.0 per cent on an annual rate. Household consumption continued to increase at a relatively high rate, while fixed gross investment fell during the third quarter.

In the euro area as a whole, all demand components showed increases during the third quarter of 2007. Household consumption, which has increased at an average annual rate of around 1.0 per cent since the beginning of 2006, increased by 1.2 per cent on an annual rate. Public consumption and fixed gross investment also continued

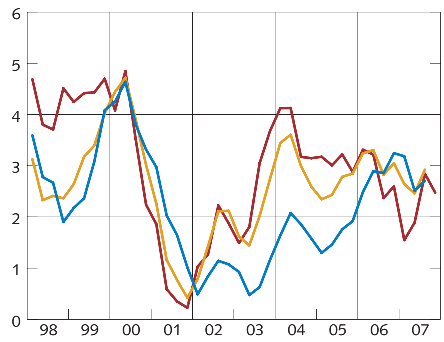
Figure 42. Interest rates in Sweden
Per cent



Note. Refers to the three-month mortgage rate from SBAB and the three-month interbank rate.

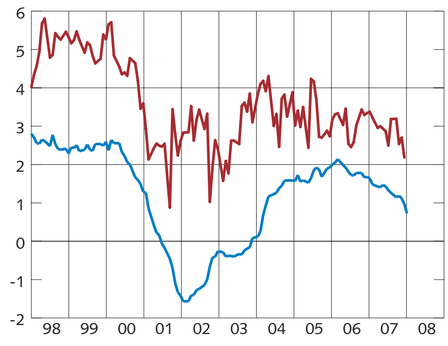
Source: SBAB and the Riksbank

Figure 43. GDP
Annual percentage change



Sources: Eurostat, OECD and the US Department of Commerce

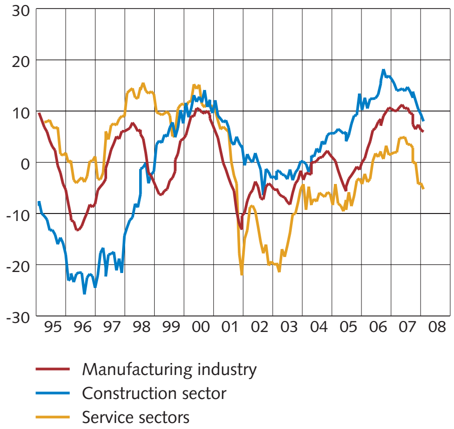
Figure 44. Employment and private consumption in the United States
Annual percentage change



Note. Employment according to employer survey (non-farm payrolls).

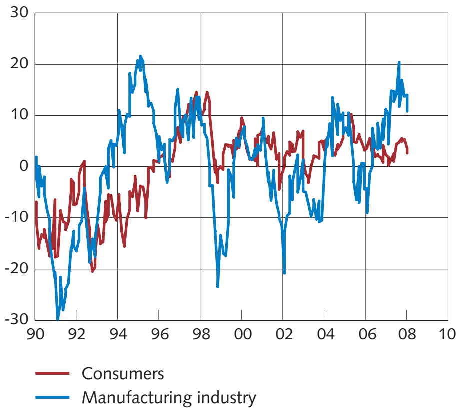
Sources: Bureau of Labor Statistics and Department of Commerce

Figure 45. Confidence indicators in the euro area
Balance, deviation from averages 1995-2007



Source: European Commission

Figure 46. Confidence indicators for households and for manufacturing companies in the United Kingdom
Balance, deviation from averages 1990 - 2007



Source: European Commission

to rise at a moderate pace. Seen over several quarters, the trend in investment growth is declining. Changes in stocks provided a positive contribution to growth during the third quarter, after having provided a negative contribution in the previous quarter.

During the third quarter employment increased by 1.1 per cent on an annual rate, while GDP increased by 3.1 per cent. This means a relatively good productivity growth, but in the previous quarter employment rose more than production and altogether during the first three quarters of 2007 GDP per employed increased by only half a percentage point compared with the corresponding period in the previous year. Unemployment was 7.2 per cent in October and November, which can be compared with 8.0 per cent and 7.9 per cent respectively during the corresponding months one year earlier. Capacity utilisation in the euro area's manufacturing industry is still high in historical terms, although it has fallen back somewhat since last spring.

During the fourth quarter of 2007 growth in the euro area is expected to slow down to around 1.5 per cent on an annual rate. Outcomes in the form of monthly data for the fourth quarter point to a slowdown in growth. For instance, the retail trade turnover slowed down somewhat during October to December. Most indicators for the euro area in the form of survey data for different parts of the business sector and for the household sector also point to weaker growth, although the confidence indicators in most sectors were still above their historical averages for the period in January (see Figure 45).

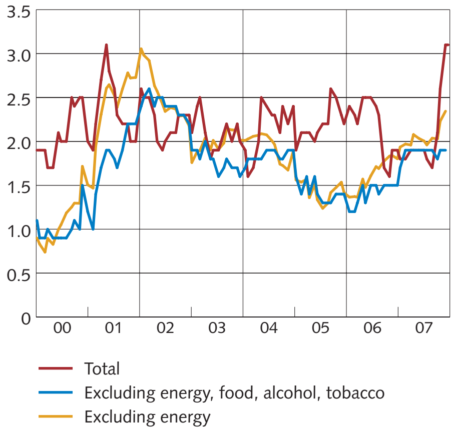
■■ Weaker GDP development also in the rest of Europe

In the United Kingdom GDP increased by 2.7 per cent on an annual rate during the third quarter and by a preliminary 2.4 per cent in the fourth quarter. The steady growth in household consumption continued during the third quarter. Investments also showed strong growth during the third quarter, although there is nevertheless a slowdown trend in investment growth, seen over several quarters. There is as yet no information about the development for the demand components in GDP for the fourth quarter, but growth in the service sector has slowed down according to the preliminary information. As in the euro area, survey data indicates weaker economic activity. The purchasing manager's index for the service sector, which has been the part of the business sector that has accounted for a large part of the growth in the British economy in recent years, has deteriorated significantly. Retail trade turnover, which showed fairly stable growth up to the end of November, increased only slightly in December compared with the corresponding month in the previous year. Household optimism also appears to have deteriorated in recent months (see Figure 46).

The Norwegian national accounts for the third quarter show a very strong growth in the mainland economy. The GDP in mainland Norway increased by 7.7 per cent on an annual rate after an almost equally large increase in the previous quarter. On the other hand, production in oil businesses declined, as did foreign shipping, during the second and third quarters. Consumption growth in the Norwegian economy has been very strong in 2007 and despite the rate of increase in household consumption having slowed down during the year, it is estimated to have been around 7 per cent during the whole year 2007. Investment growth has also been strong in both the mainland economy and the oil extraction sector.

In Denmark GDP increased by 3.3 per cent on an annual rate during the third quarter. However, the quarterly growth figures for Danish GDP have fluctuated considerably and compared with the corresponding quarter in the previous year growth was weak. During the whole year 2007 GDP is expected to increase by less than 2 per cent.

Figure 47. HICP in the euro area
Annual percentage change



Source: Eurostat

■■ Higher inflation than expected in Europe

Consumer prices in the euro area rose by 3.1 per cent in both November and December compared with the corresponding months in the previous year (see Figure 47). The preliminary outcome for January is 3.2 per cent, which is in line with the assessment in the Monetary Policy Update in December. However, the outcome during the months October-December was much higher than was expected in the most recent Monetary Policy Report. It is rising energy and food prices that have contributed to the higher inflation in the euro area in recent months. If energy, food, alcohol and tobacco are excluded, inflation was 1.9 per cent in December. If energy alone is excluded, inflation was 2.4 per cent.

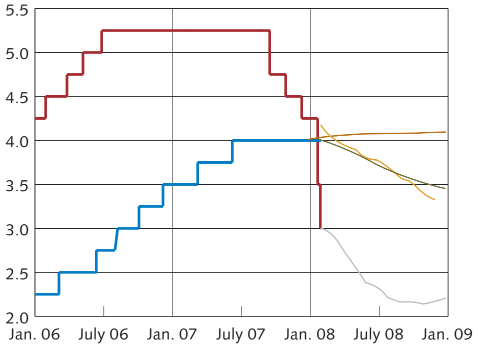
Inflation has also risen in the United Kingdom, but at a more moderate rate. In September it was 1.8 per cent. During October to December consumer prices rose by 2.1 per cent compared with the corresponding months in the previous year. The increases in fuel prices have contributed to raising consumer prices. At the same time, falling electricity and gas prices have had a dampening effect.

■■ Good but slowing growth in the rest of the world

In Japan GDP increased by 1.5 per cent on an annual rate during the third quarter. The increase followed on from a reduction of 1.8 per cent on an annual rate during the second quarter. Investments have fallen three quarters in a row. Household consumption has increased, but the rate of increase has been very modest in the past two quarters. Exports, which have increased at a good but somewhat varying rate in recent years, rose fairly strongly during the third quarter.

In emerging economies growth was strong in 2007. However, there are signs that growth in the Chinese economy slowed down slightly at the end of the year. Exports and industrial production accounted for the slowdown, while household consumption appears to have continued to increase strongly. Growth in the eastern and central European economies was high last year and in many countries household consumption has increased strongly. The upturn in inflation in 2007 has been pronounced in most of the emerging economies.

Figure 48. Monetary policy expectations in the Euro area and the United States
Per cent

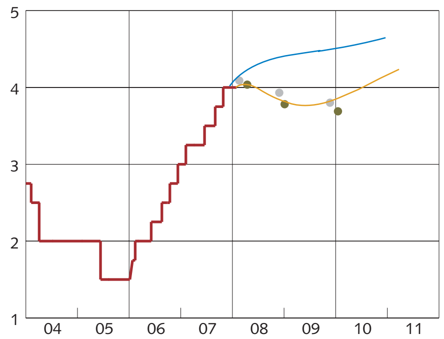


- Fed funds
- Fed funds, 18 December 2007
- Fed funds, 31 January 2008
- Refi
- Refi, 31 January 2008
- Refi, 18 December 2007

Note. Expectations calculated on the basis of implied forward rates for the euro area and Fed Funds futures contracts for the United States. Calculation methods for forward interest rates in the euro area have been updated since MPR 2007:3.

Source: The Riksbank

Diagram 49 Monetary policy expectations in Sweden according to money market agents
Per cent



- Repo rate
- Based on bank securities (STINA & FRA) 18 Dec. 2007
- Based on bank securities (STINA & FRA) 31 Jan. 2008
- Survey average (Prospera), 5 Dec. 2007
- Survey average (Prospera), 16 Jan. 2008

Note. Forward rates calculated on the basis of bank securities are adjusted downwards by 10 basis points since the bank securities with the shortest maturities (overnight rate) were listed at 10 basis points over the repo rate. These 10 basis points do not reflect expectations of future monetary policy. Note that the calculation method for the implied forward rate curve has been updated since MPR 2007:3 and is now, among other things, based on listings for STINA swaps.

Sources: Prospera Research AB and the Riksbank

Monetary policy expectations revised down in USA and euro area

The Federal Reserve has cut its rate in four stages by a total of 1.75 percentage points since the previous Monetary Policy Report. The two first cuts of 0.25 percentage points each were largely expected by market agents, although there were some expectations of a larger cut in December. The cuts were motivated on the basis of poorer prospects for the US economy. On 22 January the interest rate was cut by 0.75 percentage points at an extraordinary meeting. On this occasion the motivation was a weakening of the economic prospects and increased downside risks for growth. This was the first time since September 2001 that the Federal Reserve had taken action between its ordinary scheduled meetings. At the ordinary meeting one week later the interest rate was cut further by 0.50 percentage points. Market expectations regarding the interest rate are now much lower than the path expected in connection with the Monetary Policy Update in December. The pricing in the financial markets currently indicates that the US fed funds rate will be cut further in 2008 (see Figure 48).

With regard to the euro area the policy rate remains unchanged at 4.0 per cent. The expected path for the policy rate is lower than when the Monetary Policy Update was published in December and now indicates future cuts. However, it is difficult to read monetary policy expectations from market prices, as the risk premiums in the financial instruments used in the analysis are higher than normal due to the financial turmoil. It is therefore a complicated matter to distinguish what are risk premiums and what are monetary policy expectations, especially for the coming months. However, surveys to some extent support the picture of market expectations of a cut in the refi rate during the second half of 2008.

Downward revision in monetary policy expectations in Sweden too

Forward rates in Sweden have also fallen since the Monetary Policy Update in December, which indicates that market expectations regarding the repo rate have been adjusted downwards (see Figure 49). Expectations of monetary policy have fluctuated substantially during the period, which can be seen in forward rates. For Sweden, too, risk premiums related to the uncertainty make it difficult to calculate monetary policy expectations. However, the survey data confirm the picture that market expectations of the repo rate have been adjusted downwards one to two years ahead since the Monetary Policy Update in December. The fluctuations in forward rates indicate that there is considerable uncertainty over how the repo rate will develop in the future. The Swedish situation entails a monetary policy balance between strong domestic cost pressures, high inflation outcome and slower international economic activity. The financial turmoil and its consequences for the real economy have probably also contributed to the recent volatile market expectations.

■■ Lower long-term rates

Long-term interest rates in Sweden, the United States and Europe have fallen since the Monetary Policy update in December (see Figure 50). The main reason was weaker economic statistics than expected particularly regarding developments in the United States. The long-term Swedish and European rates are affected by both the downside tendencies from the financial turmoil and the upside tendencies from inflationary pressures, and have therefore not fallen as much. The US long-term rates on the other hand have fallen substantially (approximately 0.4 percentage points) since December. Government bond rates have also fallen as a result of market agents seeking safe investments during times of unrest.

■■ Krona weaker than expected

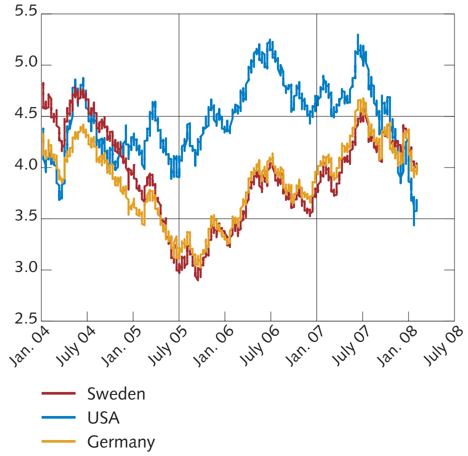
The weakening trend of the dollar against the euro has continued, despite a temporary period of appreciation at the end of November and beginning of December. In the past two years the dollar has weakened around 20 per cent against the euro, and since the end of the year 2000 the weakening has amounted to almost 50 per cent. Between the October Monetary Policy Report and the December Monetary Policy Update the krona weakened relatively substantially, against both the dollar and the euro (see Figure 51). Since the December Monetary Policy Update, however, the krona has strengthened against the dollar and remained in principle unchanged against the euro. Although the krona has strengthed in terms of the TCW by almost one per cent since December, the average outcome during the first quarter of this year has so far been weaker than expected (see Figure 52). Developments at the beginning of the first quarter of this year mean altogether that the TCW forecast for the first quarter of this year is around 1.5 per cent lower than the assessment made in October.

■■ Falling stock market prices

Developments in the international stock markets since the October Monetary Policy Report have been characterised by increased risk aversion (see Figure 53). Some quarterly reports have also shown lower profits than expected, which has contributed to lower share prices during the period. Swedish share price developments have been relatively weak since the previous Monetary Policy Report compared with foreign stock markets. This weakening began when Swedish telecom company Ericsson published a warning of lower profits in October.

A survey of the sector shows that it is the value of public listed companies in the financial sector and the manufacturing industry that has fallen the most in the United States, Europe and Sweden. The relatively weak stock market development in Sweden probably has several causes, but one important reason is that the Swedish stock market is dominated by companies in these sectors. Subdued growth prospects in the United States and a weaker dollar have increased

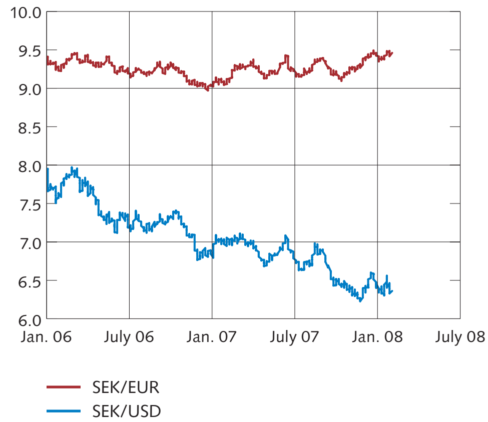
Figure 50. Long-term interest rates
Per cent



Note. Government bonds with approximately 10 years left to maturity.

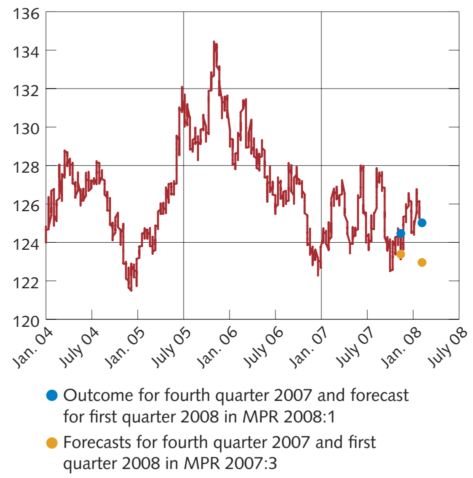
Source: Reuters EcoWin

Diagram 51. Växelkursutveckling
SEK/EUR och SEK/USD



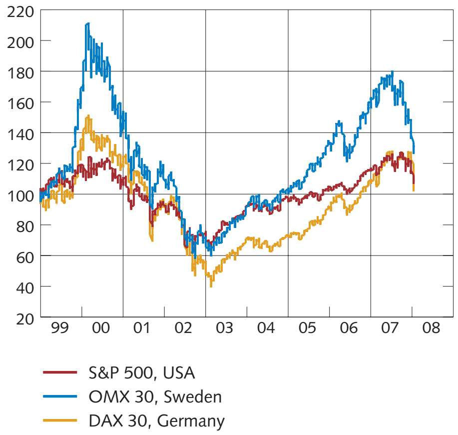
Source: The Riksbank

Figure 52. TCW exchange rate
Index, 18 November 1992 = 100



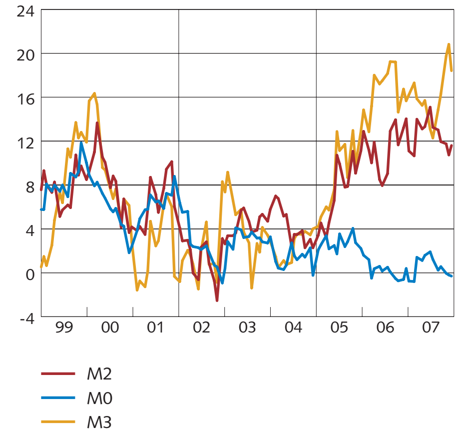
Source: The Riksbank

Figure 53. Stock market movements
Index, 1 January 1999 = 100



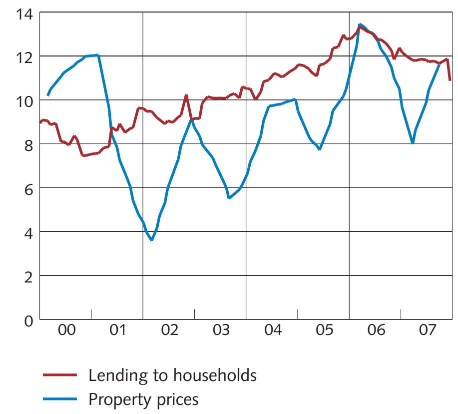
Source: Reuters Ecowin

Figure 54. The money supply
Annual percentage change



Sources: Statistics Sweden and the Riksbank

Figure 55. House prices and total lending to Swedish households
Annual percentage change



Note. Quarterly observations of house prices and monthly observations of lending to households.

Sources: Statistics Sweden and the Riksbank

the uncertainty regarding future orders and profit growth for the cyclically-sensitive Swedish export companies. The financial turmoil may also have contributed to weak stock market growth for the financial sector (see also the analysis of the Swedish bank sector in the Riksbank's Financial Stability Report published in December 2007).

■■ Growth in money supply remains high

Growth in the money supply defined as M0 has declined since July 2007 (see Figure 54).[1] The annual growth rate was negative in December. However, the money supply defined as M2 (which also includes households' and companies' bank deposits) has increased at an average growth rate of more than 10 per cent a year since 2005. The main explanation for this is that companies and households have increased their short-term bank deposits. Recently, households' deposits with conditions attached have also increased. The money supply measured as M3 also includes the general public's holdings of repos, shares in money market funds and debt securities with a duration up to two years issued by Swedish banks, mortgage institutions and other credit market companies. The general public's increased holdings of debt securities with a duration of up to two years accounts for a large part of the rising rate of increase in M3 since the second half of 2005. However, the rate of increase in M3 did slow down somewhat in December. The Financial Accounts for the third quarter of 2007 show that households' have sold shares and unit trusts, net, over the past six quarters. Households have instead re-invested in safer asset types. Holdings of index-linked bonds have also shown a trend increase since 2004. In recent months, households have to a greater extent re-invested in safer asset types, probably as a result of the financial turmoil.

■■ Rate of increase in house prices and lending slackens

The rate of increase in house prices during the third quarter of 2007, compared with the corresponding period in the previous year, was 11.5 per cent (see Figure 55). According to the Statistics Sweden Real Estate Price Index, the rate of increase slowed down to some 10 per cent during the fourth quarter. At the same time, estate agents' statistics indicate a different development in the tenant-owned apartment market, with falling prices in metropolitan areas. Lending to households from banks, mortgage institutions and other credit market companies has been relatively high over a long period of time. However, the annual rate of increase in lending to households did slow down, from 11.9 per cent in November to 10.9 per cent in December. However, growth in lending to companies increased in December.

12 M0 is defined as the general public's holdings of banknotes and coins. The general public as holding sector includes other sectors, that is, the government sector excluding the Swedish National Debt Office, municipalities and county councils, non-monetary securities funds, financial service companies, financial companies' non-profit organisations, investment companies, non-monetary credit market companies, other financial institutions, households including households' non-profit organisations (HIO) and the non-financial corporate sector.

■■ Lower Swedish GDP growth

At the time the Monetary Policy Update was published in December the National Accounts for the third quarter and some indicators for the fourth quarter were available. In the third quarter of 2007 seasonally-adjusted GDP growth amounted to 2.4 per cent on an annual rate (see Figure 56). This was lower than expected compared with the Monetary Policy Report in October. Compared with the same period in the previous year, GDP growth was 2.5 per cent (calendar-adjusted), which was almost one percentage point lower than expected. Contributing to this, apart from a weaker third quarter was also a substantial down revision to the outcomes for the first half of 2007 according to the National Accounts. The revision primarily concerns fixed gross investment, exports and public sector consumption, and was made from 1993 onwards. Indicators in December pointed to a continued slowdown in GDP growth in Sweden. It was primarily consumer confidence in the Consumer Tendency Survey and statistics on retail trade turnover that contributed to the assumption now that the slowdown will be slightly more pronounced for the fourth quarter of 2007 and the first quarter of 2008 compared with the forecasts in the October Monetary Policy Report.

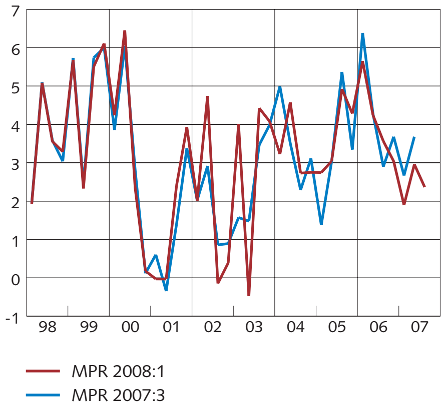
Table 5. Indicators for GDP in the short term

Indicator	Most recent outcome	Tendency
Exports of goods	Dec. 07	+/-
Imports of goods	Dec. 07	-
Retail trade	Dec. 07	-
Industrial production	Nov. 07	-
National Institute of Economic Research's Business Tendency Survey	Jan. 08	+/-
Consumer Tendency Survey	Jan. 08	-
Purchasing Managers Index	Jan. 08	+/-

Note. + = stronger/higher than expected, - = weaker/lower than expected and +/- = in line with expectations.
Sources: National Institute of Economic Research, Statistics Sweden and the Riksbank

Since the Monetary Policy Update was published in December business tendency survey information has been received for December to January, as well as some data on outcomes up to the end of December (see Table 5). The confidence indicators in the business tendency survey support the picture of continued relatively good economic activity with a stronger situation than normal in most sectors of industry, although some slowdown has occurred in recent months (see Figure 57). The purchasing managers' index for the manufacturing industry also indicates that there has been a slowdown, although according to this index the sector is currently in a growth phase (see also the article on company surveys in this report). Industrial production and orders for the first months in the fourth quarter of 2007 indicate a slowdown compared with the exceptionally strong growth during the corresponding period in the previous

Figure 56. GDP
Quarterly change in per cent, in annualised terms, seasonally adjusted data

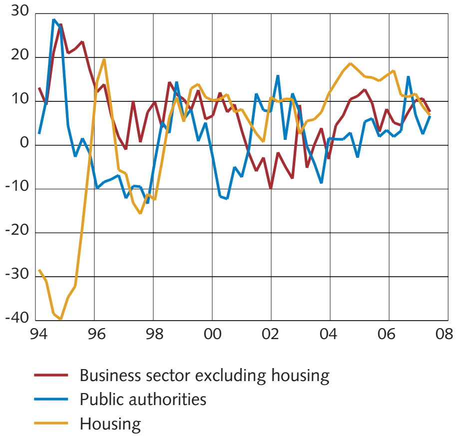


Sources: Statistics Sweden and the Riksbank

Figure 57. Confidence indicators for major industries
Seasonally adjusted balance

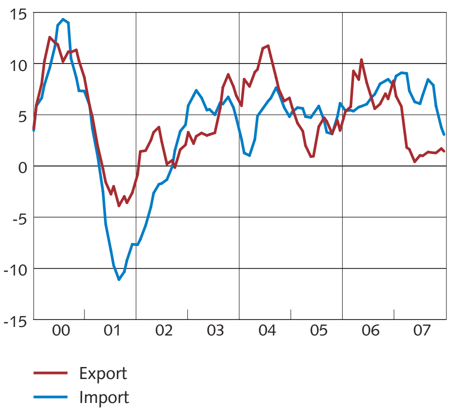
Source: National Institute of Economic Research

Figure 58. Gross fixed capital formation
Annual percentage change



Source: Statistics Sweden

Figure 59. Foreign trade with goods at fixed prices
Annual percentage change, seasonally adjusted data



Note. Three month moving average.
Sources: Statistics Sweden and The Riksbank

year. Exports of goods were roughly as expected in November and December, while retail trade statistics were weaker than expected.

Taking into account all of the new information, the GDP forecast for the fourth quarter of 2007 remains unchanged compared with the forecast from the Monetary Policy Update in December. At the same time, the forecast for GDP growth during the first quarter of 2008 is revised down somewhat.

■■ Slightly lower investment growth

All in all, fixed gross investment increased by almost 8 per cent during the first three quarters of 2007, compared with the same period in the previous year (see Figure 58). However, the rate of increase for investment in housing has declined since 2005. Growth in business sector investment excluding housing also slowed down during the third quarter of 2007, while public sector authorities' investment showed strong growth. However, data for public sector investment should be interpreted with some caution, as the quarterly statistics are volatile and are usually revised substantially. The forecast for investment growth for the whole year 2007 has been revised down by just over one percentage point compared with the previous Monetary Policy Report, given the outcome for the third quarter and the investment survey from November.

■■ Market growth slowed down 2007

Market growth for Swedish exports, that is, other countries' imports of goods aggregated with Swedish export weights, slowed down in 2007 after showing very strong growth in the previous year. During the first three quarters, compared with the corresponding period in the previous year, the export market grew by 3.3 per cent, which can be compared with 9.4 per cent during the whole year 2006. Import growth has slowed down in most countries that are important recipients of Swedish exports. The most pronounced was the turnaround in the United Kingdom, where imports of goods fell during the first two quarters of 2007, compared with the corresponding period in the previous year. During the third quarter, however, British imports of goods also showed an increase. For the whole year 2007 market growth for Swedish exports is expected to have been just over 4 per cent.

■■ Some recovery in exports in recent months

During the third quarter of the year exports showed slightly weaker growth than expected, while imports were stronger. It is primarily exports of goods that have slowed down, while exports of services have continued to show strong growth. Service exports' share of the total value of exports has increased from 22 per cent to 28 per cent over the past 10 years. However, exports of goods are still predominant and accounted during the third quarter of 2007 for just over two thirds of the total export value. Imports have on the whole shown strong growth in recent years, which can be partly explained by the high domestic demand in Sweden. During the third quarter of 2007 both imports of goods and imports of services showed a strong increase.

Since the Monetary Policy Update was published in December new information has been received in the form of monthly statistics on foreign trade in goods for November and December 2007. Exports of goods stabilised during the autumn, after having fallen substantially earlier last year (see Figure 59). The rate of increase in imports has slowed down considerably in recent months. Imports are expected to be weak during the fourth quarter of 2007. There are several reasons for this. The build-up of stocks that took place in industry and trade during the third quarter is expected to decline in the future, which means that companies' stocks will decline at the cost of imports. The retail trade was also weaker than expected during the fourth quarter, which is expected to contribute to slowing down imports. Compared with the Monetary Policy Update in December there has been some upward revision in the contribution of net exports during the fourth quarter of 2007 and the first quarter of 2008.

■■ Strong consumption growth but indicators look weak

The general revision of the National Accounts from 1993 onwards, which was published in November 2007, shows that private consumption grew more quickly than was indicated by earlier figures. All in all for the period 1994 to the second quarter of 2007, the annual growth rate was revised up by 0.2 percentage points on average. The largest revision was in 2002, when the annual growth rate was revised up by a good 1.1 percentage points.

Household consumption was 3.5 per cent higher in the third quarter of 2007 compared with the corresponding period in the previous year (see Figure 60). The first and second quarters were revised upwards. The quarterly change in consumption, on the other hand, was slightly weaker during the third quarter compared with the assessment in the October Monetary Policy Report.

New information received since the Monetary Policy Update in December includes the Consumer Tendency Surveys for December and January and retail trade turnover for November and December. The survey shows a decline in the sentiment regarding unemployment and measured by the aggregate consumer confidence index, CCI (see Figure 61). In the fourth quarter the annual rate of increase in the retail trade turnover was some 6 per cent and the seasonally-adjusted three-monthly change was only 0.4 per cent at an annual rate.

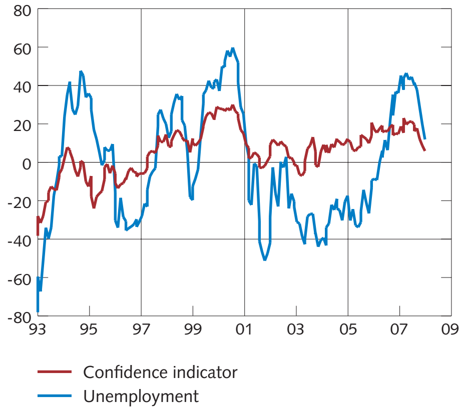
Given the relatively weak outcomes for retail trade turnover and the confidence indicator, the forecasts for private consumption is revised downwards in the short term. The forecasts for the fourth quarter of 2007 and the first quarter of 2008 are being revised downwards compared with the previous Monetary Policy Report by around 1 percentage point at an annual rate.

Figure 60. Retail sales and household consumption
Annual percentage change

Note. Non-calendar-adjusted data.

Sources: The National Institute of Economic Research and Statistics Sweden

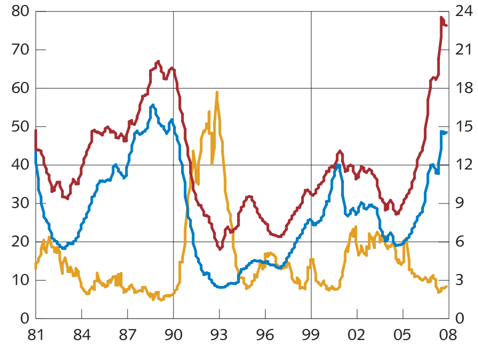
Figure 61. Household expectations of the future
Balance



Note. Unemployment is defined here as the percentage of households that believe unemployment will fall minus the percentage who believe that unemployment will rise.

Source: The National Institute of Economic Research

Figure 62. New and unfilled vacant jobs and redundancy notices
Thousands, seasonally adjusted data

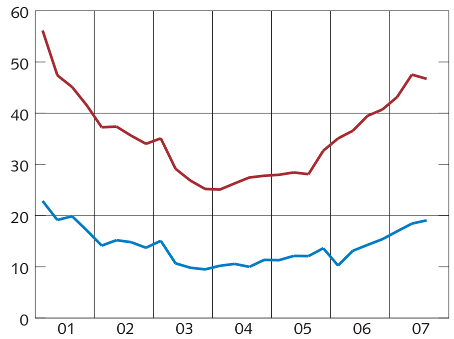


New vacancies (left scales)
Unfilled vacancies (left scale)
Redundancy notices (right scale)

Note. Three month moving average.

Source: Swedish Public Employment Service

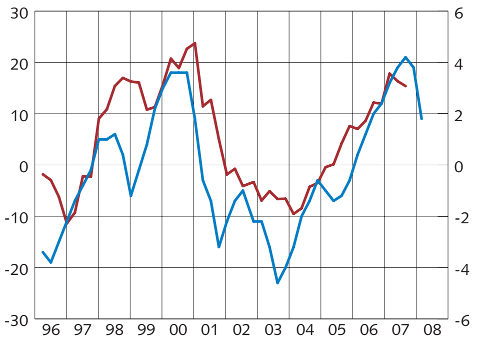
Figure 63. Vacancies and redundancy notices
Thousands, seasonally adjusted data



Redundancy notices
Vacancies

Source: Statistics Sweden

Figure 64. Hiring plans and number of employed in the business sector
Balance and annual percentage change



Number of employed according to N.A. (right scale)
Hiring plans according to NIER's quarterly business tendency survey (left scale)

Note. The balance is defined as the difference between the proportion of firms that have reported a wish to increase the number of employees and the proportion of firms that have reported a wish to reduce numbers.

Sources: National Institute of Economic Research and Statistics Sweden

■■ Weaker growth in public sector consumption

The volume growth for public sector consumption has been adjusted down in 2007 as a result of weaker outcomes than expected. It is primarily municipal sector consumption that is being revised down, which is largely a result of the new measuring methods in the National Accounts which were introduced in the general revision. The forecast for growth in the public consumption in 2007 is for this reason revised down from 1.5 per cent to 0.3 per cent compared with the previous Monetary Policy Report.

Parts of public sector consumption in fixed prices are now calculated on the basis of performance instead of cost summary. One example is education, where the consumption volume is measured as the number of pupils. During 2007 the number of pupils in compulsory schooling has declined, which thus results in falling consumption. However, the number of teachers has not declined at a corresponding rate. According to the old method of calculation, consumption had not declined. This development thus gives an increased teacher frequency in schools and thus calculated lower productivity. Public sector consumption in current prices in 2007 is revised downwards, primarily as a result of lower wage outcomes in the public sector.

■■ Strong public sector finances

General government net lending remains strong. New information received since the previous Monetary Policy Report includes the National Accounts figures for November and forecasts from the Swedish National Financial Management Authority and the Swedish National Debt Office. Net lending for 2006 was revised downwards slightly. New information indicates that net lending will be high in 2007. The figures have therefore been revised upwards by 0.5 percentage points as a share of GDP in 2007 compared with the forecast in the previous Monetary Policy Report. Strong economic activity and a strong labour market situation contribute to keeping income up and holding down public sector expenditure. Since the previous Monetary Policy Report, GDP growth has been revised down, but it is primarily productivity in 2007 that has been revised down, and this only marginally affects net lending. Other positive effects on net lending come from temporarily higher tax income. In addition, expenditure regarding ill-health and the labour market has shown weak growth in 2007.

■■ Slightly subdued employment growth[13]

Newly-received statistics regarding new vacancies and redundancies up to the end of December confirm the picture of a continued strong labour market situation. However, labour market indicators point to demand for labour levelling off. Statistics from the Swedish Public

13 Starting from this Report, forecasts of labour market statistics will only be reported in accordance with international recommendations, that is, the statistics will cover the age group 15-74 and full-time students who have applied and been able to work will be classified as unemployed in the statistics.

Employment Service show that the number of vacancies has increased at a slightly slower rate in recent months (see Figure 62). Statistics Sweden's figures regarding vacancies, which have shown a rising trend over the past year, levelled off during the third quarter of 2007 (see Figure 63). Employment plans as described in the most recent Business Tendency Survey from January also point to employment growth slowing down during the first quarter of 2008 (see Figure 64).

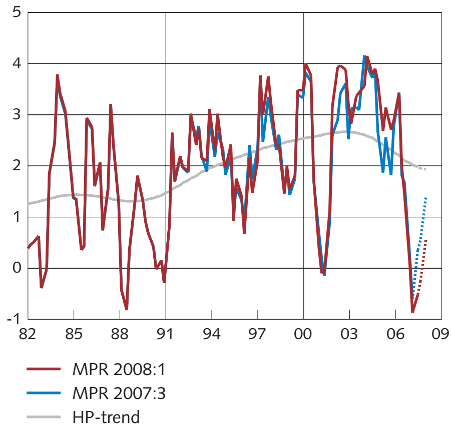
During the third quarter the number of hours worked increased in line with the forecast. From the fourth quarter of 2006 to the fourth quarter of 2007 the number of persons employed increased by 97,000 or 2.2 per cent, according to the labour market survey, and this is around 20,000 persons fewer than forecast in the most recent assessment from December (see Figure 23). However, the percentage of unemployed was in line with the previous forecast as the labour force also increased less than expected. In the short term, the labour market survey outcome for December and labour market indicators suggest a slightly lower growth in employment. However, unemployment appears to be in line with the Monetary Policy Update published in December. Given this, the forecasts for the number of hours worked and the number of employed have been revised down slightly for the coming six months. The forecast for the percentage of unemployed remains largely unchanged.

■■ Productivity has weakened

In the previous Monetary Policy Report, productivity growth was expected to slacken in 2007 as the economic upturn continued and employment rose, but the slowdown was more severe than expected. During the third quarter, productivity declined by 0.5 per cent compared with the same period in the previous year, which was 0.9 percentage points lower than expected (see Figure 65). At the same time, the negative productivity development in the first half of the year was revised down further in the most recent National Accounts. However, indicators for GDP and employment point to productivity growth being stronger during the fourth quarter of 2007 than in the previous quarter. All in all, this means that the forecast for 2007 is being revised down by 0.5 percentage points, to -0.4 per cent.

The reasons for the productivity slowdown have not been entirely mapped out. One important reason for this is that GDP growth has slowed down at the same time as employment growth has been relatively high, a common pattern in the latter part of a cyclical upswing. Another reason could be that the effects of investment in information technology, which have contributed to higher productivity growth over several year, have declined somewhat. Another explanation could be that when employment has increased substantially new groups of more inexperienced labour have entered the labour market. It is reasonable to assume that it takes some time to learn a new job, which in turn contributes to reducing the average productivity growth in the economy. This theory is supported by our own company survey (see the article "The Riksbank's company

Figure 65. Labour productivity for the economy as a whole
Annual percentage change, seasonally adjusted data



Note. Trend calculated using the Hodrick-Prescott filter. Broken lines represent the Riksbank's forecast.

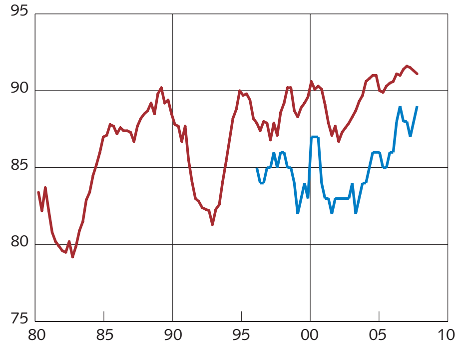
Sources: Statistics Sweden and the Riksbank

Figure 66. Estimated HP gaps
Percentage deviation from HP trend

Note. Broken lines represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

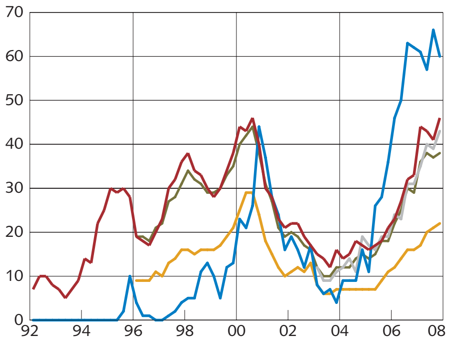
Figure 67. Capacity utilisation in industry
Per cent, seasonally adjusted data



Statistics Sweden, actual capacity utilisation in industry
NIER, current capacity utilisation in the manufacturing industry

Sources: The National Institute of Economic Research and Statistics Sweden

Figure 68. Proportion of firms reporting a shortage of labour
Per cent, seasonally adjusted data



Manufacturing industry
Construction sector
Retail trade
Private service sector
Business sector

Source: National Institute of Economic Research

Figure 69. Employment rate
Proportion of the population aged 16-64 in the labour force

Note. Pre-1993 data has been spliced by the Riksbank.
Sources: Statistics Sweden and the Riksbank

survey: a minor slowdown during the autumn and increased concern over economic activity" in this Report). In addition, administration and other auxiliary services increase in connection with companies expanding, which temporarily brings down the growth rate for productivity. When the new job has been learnt, productivity will gradually increase for the groups of new employees and in time they will contribute to higher productivity growth in the economy. Moreover, industry is being exposed to strong international competition, which forces companies to constantly become more productive. The low productivity growth is expected to be largely of a temporary nature.

■■ Resource utilisation has levelled off at a relatively high level

There are different ways of measuring resource utilisation in the economy. The view of resource utilisation may therefore vary depending on which method is used, but also depending on which part of the economy is studied. However, all of the measures studied indicate that resource utilisation has risen relatively quickly in 2006 and 2007. Some measures indicate that the use of resources in the economy or parts of it are no longer increasing.

One way of assessing resource utilisation is to study how much different measures of output and resource use deviate from their respective long-term trends. The size of the deviations or "gaps" is affected by which method is used to calculate the trend. The development of these gaps should therefore be interpreted with caution. The gaps for GDP, the number of hours worked and the number of employed, where the trends have been calculated using an HP filter, all show that resource utilisation has been rising since the beginning of 2005 and is now higher than normal but not quite as high as at the previous cyclical peak at the end of 2000/beginning of 2001 (see Figure 66). The GDP gap has declined recently, while the hour and employment gaps have continued to grow.

The various measures of capacity utilisation in industry have risen since 2002 and are at historically high levels (see Figure 67). The shortage of labour in the business sector has risen relatively sharply since 2004 (see Figure 68). However, the shortage has levelled out in 2007 at a slightly lower level than it was at in 2000. The shortage of labour in industry as a whole has continued to rise during the fourth quarter after some slowdown during the second and third quarters of last year. This also applies to the shortage of labour in private service industries, which fell back slightly during the third quarter of last year but has risen since then. The shortage of labour in the retail trade has gradually increased in recent years. However, the shortage of labour in the construction sector fell during the fourth quarter, compared with the previous quarter.

Another measure of resource utilisation is the employment rate, that is, the number of employed as a percentage of the working age population. The employment rate has risen since 2005 and has now reached the level of the last cyclical peak at the beginning of the 2000s (see Figure 69).

The Riksbank's overall assessment is that resource utilisation has recently levelled off somewhat and that it is currently higher than normal.

■■ Low rates of wage increase in 2007

According to the short-term wage statistics from the National Mediation Office, wages had preliminarily risen during 2007 up to the end of November by 3.1 per cent for the whole economy. As a comparison, wages rose by almost 3.1 per cent in 2006 (where eleven months is the definite outcome). Retroactive payments will be added to the wage payments for 2007. In a year when many new central wage agreements have been signed these retroactive payments can be expected to be particularly high.

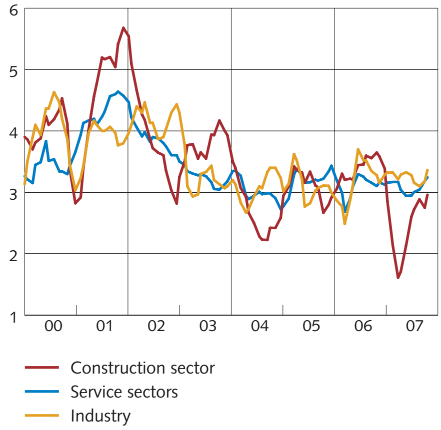
The rate of wage increase in 2007 has been at its highest for white-collar and blue-collar workers in the retail trade, hotel and restaurant industries (4.4 and 4.2 per cent respectively). This is in line with the Riksbank's earlier assessments. Workers in this sector have received higher agreed levels than the rest of the business sector. The rate of wage increase has also been relatively high, approximately 3.6 per cent, for workers in industry and the transport sector. This is also in line with earlier assessments. For employees in the construction sector, on the other hand, the preliminary rate of wage increase in 2007 has been low, around 2.6 per cent, despite a high labour shortage in this sector (see Figure 70). The Riksbank's company surveys indicate that the low wage drift in the sector could be partly due to the increased use of foreign labour in many construction companies. For employees in municipalities and county councils the wage outcome has also been low, despite one-off payments being made in June 2007, which have been included in the statistics. However, the outcome is preliminary and will be revised upwards. The forecast for the rate of wage increase for employees in the municipal sector has been revised down compared with the October Monetary Policy Report.

■■ New groups may hold back the rate of wage increase

One reason for the moderate rate of wage increase in 2007 may be that new groups in the labour market are becoming employed. Should new employees receive low starting salaries, the average rate of wage increase in the sector and in the whole economy will be held back. Such composition effects have been seen in the statistics earlier. For example, the wage outcome for employees in the retail trade, hotel and restaurant industry was just under 0.2 percentage points lower in 1999 than the level of the agreed wage increases. In 1999 employment also increased strongly. For the sectors of the labour market with a high turnover of labour the composition effects on average wages may be substantial.

In connection with Statistics Sweden's mailout to companies in the short-term wage statistics sample survey in October, they included a survey which contained questions regarding whether the companies had implemented a wage revision as a result of new agreements in

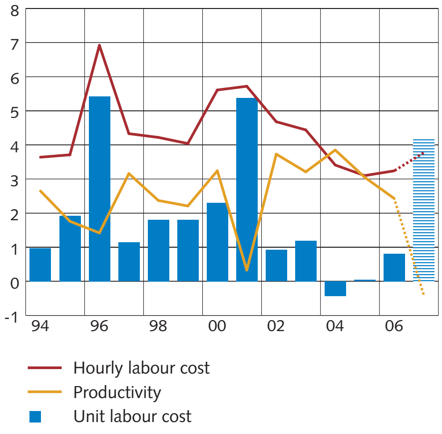
Figure 70. Wages in the business sector
Annual percentage change



Note. Three-month moving average. Preliminary outcomes the past 12 months, which will be revised upwards.

Sources: National Mediation Office and the Riksbank

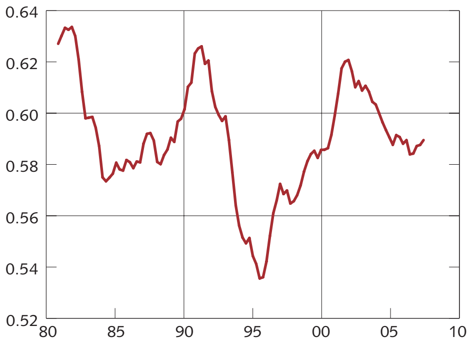
Figure 71. Unit labour costs for the economy as a whole
Annual percentage change, seasonally adjusted data



Note. Broken lines and striped bars represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank

Figure 72. Wage share
Labour costs' share of the added value



Note. Four-quarter moving average.

Sources: Statistics Sweden and the Riksbank

2007. The results indicate that 82 per cent of white-collar workers in the business sector and 88 per cent of the blue-collar workers have received their new agreed wages in their October pay-packets.[14] According to the National Mediation Office, there was no distortion in the industry allocation in the survey, that is, the new agreements have not only been paid out in certain industries. In November the preliminary outcome was 4.0 per cent for blue-collar workers and 3.0 per cent for white-collar workers. In October the preliminary outcome was 3.8 per cent for blue-collar workers and 3.2 per cent for white-collar workers. This indicates that the definite rate of wage increase in the business sector from April 2007 may be on average 3-5-3.6 per cent. One interpretation of the results is that companies pay out the centrally-agreed levels but that the locally-agreed wage increases are low. But it can also be due to composition effects in the wage outcomes. Wages in the economy as a whole are now expected, according to the National Mediation Office's statistics, to increase by 3.6 per cent in 2007, which is a downward revision of around 0.3 percentage points compared with the previous Monetary Policy Report.

■■ Low hourly wage agreements according to national accounts

The payroll expense statistics for the third quarter of 2007 have been published in the National Accounts. The outcome for payroll expense was relatively low during the second and third quarters, which together with the relatively high outcomes for the number of hours worked means that hourly wages according to the National Accounts were relatively low in these quarters. However, growth in hourly wages is expected to be high during the fourth quarter of this year. This is because the retroactive wage payments made in accordance with the new agreements are expected to enter the statistics during the fourth quarter of 2007 and beginning of 2008. All in all, the forecast for the fourth quarter means that hourly wages as reported in the National Accounts are expected to increase by 3.8 per cent in 2007. Since December the wage outcome for October and November in accordance with the National Mediation Office's statistics and the results from the Office's survey have been published, which has contributed to a marginally lower forecast for hourly wages.

■■ Unit labour costs increased more rapidly in 2007

Growth in unit labour costs in the economy as a whole was on average 3.6 per cent during the first three quarters of last year. In 2007 growth is expected to be 4.2 per cent (see Figure 71). This is slightly lower than was forecast in the previous Monetary Policy Report. This is partly due to the unexpectedly low rate of increase in hourly wages according to the National Accounts and also to the

14 See the National Mediation Office (2008), "Preliminary results. The National Mediation Office's survey of the time of local wage revisions due to new central wage agreements for 2007", www.mi.se.

cost contribution from changed employers' contributions having been lower than expected in 2007.[15]

■■ The business sector wage share is normal

Labour costs as a share of the added value, the so-called wage share, have stabilised at a historically normal level (see Figure 72). The falling trend since 2002 has been broken as a result of the weaker productivity growth over the past year. But as wages have also increased slightly and export and import price developments have been favourable for the Swedish business sector, the wage share has not risen more than marginally. In the future the rate of wage increase is expected to rise, but as productivity growth is assumed to rise, companies should not need to increase their prices so much more quickly to avoid lower profits. According to this measure, therefore, profitability can be maintained in the business sector, or at least will not deteriorate substantially, even without large price rises.

■■ Higher inflation expectations

According to the Prospera survey published in January, inflation expectations one year ahead were to 3.0 per cent. The expectations were adjusted upwards by 0.4 percentage points in relation to the December survey. All categories of those asked adjusted their inflation expectations upwards in relation to the earlier survey. According to the National Institute of Economic Research's Consumer Tendency Survey in January 2008, households' inflation expectations 12 months ahead were adjusted down from 2.7 per cent in December 2007 to 2.5 per cent. Inflation expectations according to these surveys are in the short term roughly in line with the Riksbank's CPI forecast. Over the past 12 months inflation has been higher than households and companies expected (see Figure 73).

According to Prospera's survey, average inflation expectations two years ahead were adjusted up by 0.3 percentage points, compared with the survey in December, to 2.8 per cent. All categories of those asked adjusted their inflation expectations upwards in relation to the earlier survey (see Figure 74). Inflation expectations at this time horizon are on average higher than the Riksbank's CPI forecast.

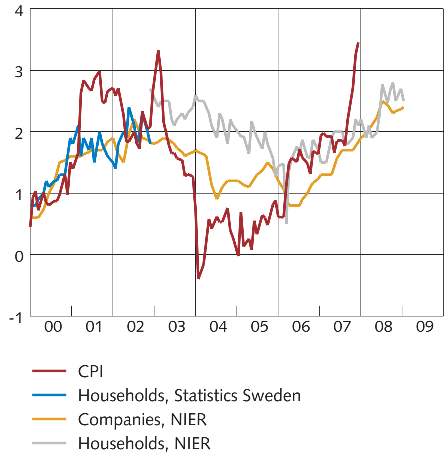
A rough measure of the fixed income market's long-term inflation expectations is the difference between a nominal and a real market rate with the same duration (so-called break-even inflation). This measure indicates largely unchanged inflation expectations since the October Monetary Policy Report (see Figure 75).

■■ Rising energy prices

Energy prices have fluctuated sharply during the past year. Electricity prices, which comprise just over 4 per cent of CPI, rose at the end of

15 In 2006 companies were given a temporary discount on pension premiums, which contributed to lowering the agreed employers' contributions. As the discount was largely withdrawn in 2007, it should provide a higher cost contribution from the employers' contributions during this year. However, no such effect is visible in the National Accounts figures for November 2007.

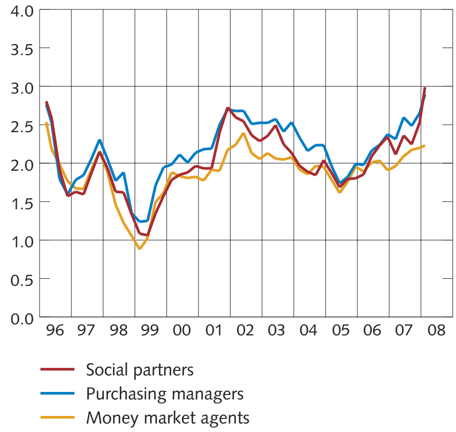
Figure 73. Actual inflation (CPI) and households' and companies' expectations of inflation one year ahead
Annual percentage change



Note. The curves for inflation expectations have been shifted ahead 12 months to coincide with the point in time to which the expectations refer.

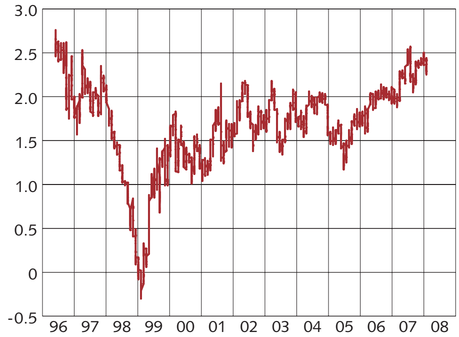
Sources: National Institute of Economic Research and Statistics Sweden

Figure 74. Different agents' expectations of inflation two years ahead
Annual percentage change



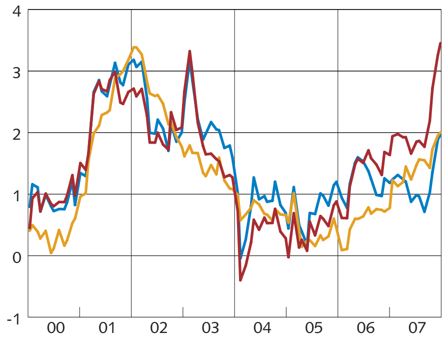
Source: Prospera Research AB

Figure 75. The difference between nominal and inflation-linked five-year rates (break-even inflation)
Percentage points



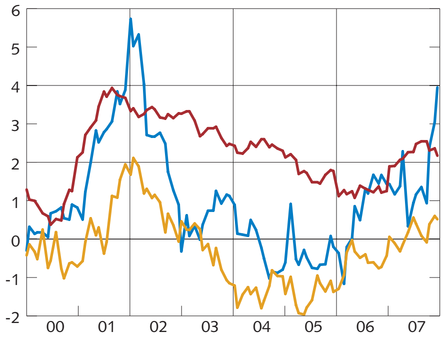
Source: The Riksbank

Figure 76. CPI, CPIX and CPIX excluding energy
Annual percentage change



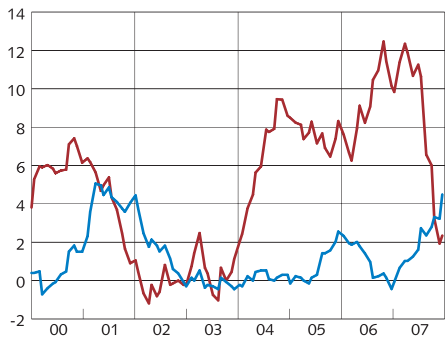
Sources: Statistics Sweden and the Riksbank

Figure 77. CPIX excluding energy, broken down into goods, services and food
Annual percentage change



Note. The figures in parentheses show the percentage share of CPIX.
Sources: Statistics Sweden and The Riksbank

Figure 78. Producer prices
Annual percentage change



Note. The price index for domestic assets weighs together the import price index and the domestic market price index within the system for the producer price index.
Source: Statistics Sweden

2007. But consumer electricity prices were nevertheless just over 5 per cent lower in December 2007 compared with the same month in 2006. Over the coming months, consumer electricity prices are expected to rise as a result of price developments in the Nordpool exchange (see also the article "Energy prices and inflation in Sweden" in this Report).

Oil prices have risen sharply on the world market since the previous Monetary Policy Report. In January 2008 the oil price amounted to an average of just over 90 dollars a barrel, which is over 10 dollars more than indicated by forward pricing in October. Political uncertainty and continued high demand are important reasons for the rising oil price. Forward prices for oil are now around 15 dollars higher per barrel in the slightly longer term than in October, but at roughly the same level as in December. Forward rates indicate a slight fall in oil prices during the forecast period.

Prices of oil products included in the CPI (fuels and heating oils, which comprise around 5 per cent of the CPI), have increased rapidly in recent months. In December 2007 the annual rate of increase amounted to around 10 per cent. The rate of price increase is expected to remain high over the coming months. All in all, energy prices are expected to increase by around 5 per cent on an annual rate during the coming months and to contribute to keeping inflation up. This is an upward revision compared with October, and is the most important reason for CPI and CPIX inflation now being expected to be higher in 2008.

■■ Inflation adjusted for higher energy prices is also rising

The CPI and the CPIX increased by 3.5 per cent and 2.0 per cent respectively on an annual rate in December 2007 (see Figure 76). Compared with the forecast in the December Monetary Policy Update the outcome for the CPI and CPIX was 0.1 percentage points and 0.2 percentage points lower than expected. When adjusted for energy prices the rate of increase in the CPIX was 2.0 per cent, which was approximately 0.2 percentage points lower than expected. It was primarily food and electricity prices that showed unexpectedly slow growth in December.

Compared with the forecast in the most recent Monetary Policy Report, on the other hand, CPI and CPIX inflation were 0.7 percentage points and 0.5 percentage points higher than expected. This was mainly because energy and food prices increased unexpectedly rapidly in October and November in relation to the October forecast.

Over the past year productivity growth has declined at the same time as the rate of wage increase has begun to rise. This has led to rising costs for companies. This is probably an important reason why inflation adjusted for energy prices has begun to rise. CPIX inflation adjusted for energy prices increased by an average of 1.5 per cent in 2007, which can be compared with an average annual rate of increase of 0.6 per cent in 2006.

Goods prices (excluding energy and foods) have begun to rise after having increased very slowly or even falling during the years 2004-2006 (see Figure 77). In recent months, however, the rate of increase has slowed down and is now just over 2 per cent. Prices of services are also increasing more rapidly. The rate of increase in food prices has risen significantly during the autumn. In addition to rising domestic cost pressures, rising world market prices for foods have contributed to this (see also the article "Rising food prices" in this Report). Food prices are expected to continue to rise over the coming months, which is indicated by the non-durables sector's own expectations of future prices in the National Institute of Economic Research's Business Tendency Survey. Interviews with representatives of the food industry as part of the Riksbank's company surveys also support the assumption that food prices will continue to rise (see the article on company surveys in this Report).

The rate of increase in intermediate goods prices for producers has slowed down after having risen quickly in recent years (see Figure 78). However, the rate of increase in consumer prices has continued to rise, which is primarily due to higher food prices. Commodity prices for metals have fallen recently, after having risen rapidly from 2006 (see Figure 79).

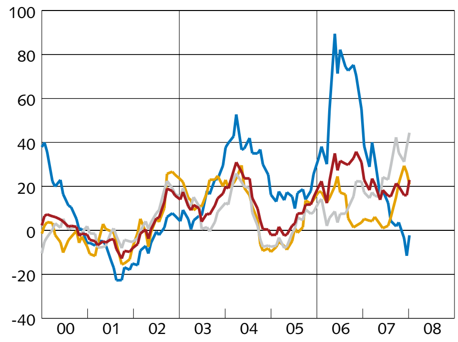
■■ CPI increasing more rapidly than CPIX

The CPI is currently increasing much more rapidly than the CPIX, as the CPI is affected by the recent year's rising interest rates and increased indirect taxes. When calculating the CPIX, interest costs for home-owners are excluded, as well as the effects of changes in indirect taxes and subsidies. The difference between the CPI and the CPIX was 1.5 percentage points in December. The CPI is also affected by changes in the value of the stock of property the mortgages finance. In December interest costs in the CPI increased by around 27 per cent on an annual rate and contributed around 1.2 percentage points to the rate of increase in the total CPI of 3.5 per cent. Of these 1.2 percentage points, higher interest rates contributed 0.9 percentage points and a rising value in the property stock contributed 0.3 percentage points. The CPI is expected to continue to increase more rapidly than the CPIX during the forecast period.

■■ Underlying inflation has risen

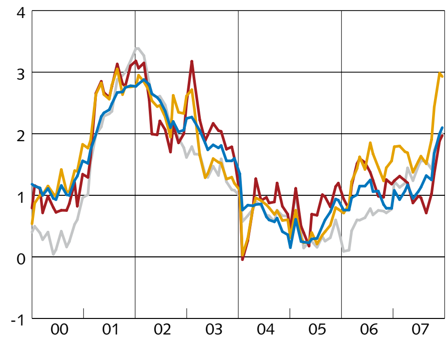
To analyse how inflation has developed when adjusted for various temporary factors, the Riksbank studies a number of measures of underlying inflation. The aim of the different measures is to try and distinguish the common trend change in the general level of prices. A common method is to remove a number of goods and services from the CPI, whose prices vary considerably due to temporary factors, such as oil products, electricity and vegetables. It is also common to calculate underlying inflation by using various statistical methods that eliminate or reduce the significance of certain products whose prices vary the most. Figure 83 presents different measures of underlying inflation. These have shown an upward trend since the middle of 2005. This coincides with the general strengthening in economic activity according to the measures of resource utilisation described above.

Figure 79. Commodity prices
USD, annual percentage change



Source: The Economist

Figure 80. Different measures of underlying inflation
Annual percentage change



Note. The alternative measures are calculated on the basis of CPI divided into around 70 subgroups. UND24 is weighted and adjusted for the historical standard deviation. In TRIM85 the 7.5 per cent most positive and negative yearly price changes each month have been excluded.

Sources: Statistics Sweden and the Riksbank

Energy prices and Swedish inflation

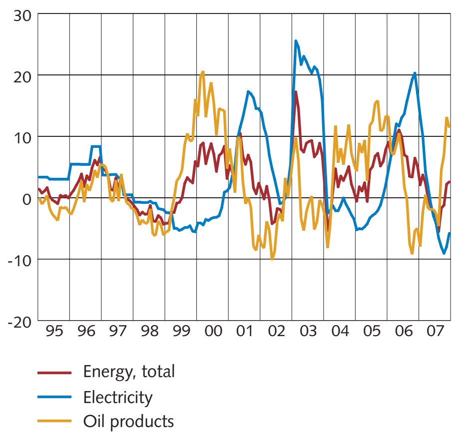
Energy prices have risen steeply for producers and consumers in recent years. Rising energy prices affect inflation directly via rising prices for fuels, heating oils and electricity in the CPI. Inflation is also affected indirectly via rising costs for companies. The indirect effect is significant when energy prices rise over a long period of time.

Why do energy prices rise?

Energy prices have risen steeply since the October Monetary Policy Report. Oil prices on the world market were approximately 70 per cent higher in January this year, compared with the same month last year. At the beginning of last year the oil price was around USD 50 per barrel and exceeded USD 90 per barrel in January this year (see Figure 19). The rise in Swedish krona has not been as steep however since the US dollar has weakened during the same period. Expressed in Swedish krona the oil price rose by around 55 per cent during the same period. Both demand and supply factors have contributed to the price rise. The political uncertainty in the Middle East is high at the same time as demand for oil has remained high, particularly in emerging markets such as China. High growth in China, India and the Middle East, for instance, offsets the slowdown in the USA, which is the country that uses most oil in the world. Even the fact that the US dollar has weakened has probably contributed to the high level of oil prices. Oil is priced in USD and when the US dollar weakens oil producers often demand a higher dollar price in order to receive the same payment for the oil in their domestic currency.

Electricity prices have also risen and in January 2008 were just over SEK 0.40/kWh on the Nordic Power Exchange, Nord Pool, which is a two-fold increase in the price since the beginning of 2007. One important reason for this is rising prices for carbon dioxide emission rights, which affects Swedish electricity prices despite the fact that a relatively large part of the electric power produced in Sweden comes from renewable sources. Just over half of electricity production in the Nordic countries is made up hydroelectric power, around a fourth is nuclear power, a fifth is thermal power and approximately 2 per cent is wind power. Water levels are therefore of great significance to electricity price developments since they determine the extent to which more expensive electricity production is necessary in order to meet a greater need for electricity. However, the market price of electricity is determined by the cost to produce the last unit of electric power (so-called marginal cost pricing) and the price is, therefore, often determined on the basis of the production costs for other, and more expensive, electricity production than hydroelectric power. In turn, this cost depends on fuel prices as well as the price of carbon dioxide emission rights. A rising oil price on the world market can therefore lead to prices of electricity produced mainly using hydroelectric power in Sweden rising.

Figure B1. Energy prices in the CPI adjusted for direct effects of changes in indirect taxes
Annual percentage change



Sources: Statistics Sweden and the Riksbank

How do altered energy prices affect inflation?

A change in energy prices affects Swedish inflation in a number of ways. It is common to differentiate between the direct and indirect, or delayed, effects on inflation. The direct effects are the effects on consumer electricity and oil product prices (see Figure B1). One example of a direct effect is that fuel prices rise when the oil price rises.

Since inflation is often measured as the annual rate of increase in price levels, the direct effect on inflation of a change in energy prices will mainly persist over 12 months. However, a permanent increase of the level of energy prices raises the general price level permanently.

The size of the direct effects is often relatively easy to estimate. For instance, the fuel price comprises around 5 per cent of the CPI and consists, besides the actual product price on oil products, of taxes and trading margins. Taxes reduce the impact of a change in the price of crude oil since the taxes are mainly quantity taxes, expressed as a certain number of krona per litre and are thus not affected by a change in the price of crude oil. Calculations of the direct effect show that approximately 30 per cent of a change in the oil price in Swedish krona impacts as a change in the price of oil products in the CPI. A permanent ten per cent increase of the oil price expressed in Swedish krona will then increase inflation measured with the CPI by some 0.15 percentage points (=10*0.05*0.3) for one year ahead.

It is possible to reason in a similar way to achieve the direct effect of a changed electricity price. The direct impact of a change in electricity prices on the CPI does, however, occur with a time lag since a large part of the index for electricity prices in the CPI consists of net tariffs, semi-flexible prices and fixed-price contacts for one year, which are not directly affected by a change in the price of electricity on the Nord Pool Power Exchange. A change in the price of a one-year fixed-price contract affects the CPI calculations as a moving average over the past 12 months' fixed-price contract. A change in the price of electricity will, therefore, have an effect on the annual rate of increase in the CPI for a longer period than twelve months. The expenditure weight of electricity in the CPI is just over 4 per cent. According to the Riksbank's calculations, a ten per cent increase in the price of electricity on the Nord Pool Power Exchange will increase CPI inflation directly via rising electricity prices by approximately 0.15 percentage points on average in the first year after the increase and by 0.05 percentage points in the second year.

The direct effect on inflation of an energy price increase will thus remain for around 24 months ahead, with the greatest effect being visible during the first 12 months. After that the energy price increase will no longer affect the twelve-month comparisons.

Indirect effects are difficult to measure

The size of the indirect effects are far harder to quantify. These effects arise when companies' costs change as a result of the change in energy prices. One example of an indirect effect is the rising price of bus tickets, which arises when the bus company raises prices as a result of rising fuel prices. Rising energy prices can also affect inflation expectations and thereby affect inflation via higher wage demands, for instance. The Riksbank has tried to estimate the size of the indirect effects of a change in oil prices with the aid of econometric analysis tools that take into account the historical correlations between the variables.[16] This analysis suggests that a change in the price of oil affects the price level roughly as much indirectly as directly, but is spread over a longer period (see Table B1).

A corresponding estimate has been made for the effect of a ten per cent increase in electricity prices for producers. These estimates indicate there is almost as large an indirect effect from a change in electricty prices as a change in oil prices. Studies of so-called input-output tables from the National Accounts indicate that the use of electricity in input production is almost as great as the use of oil. Therefore, it is reasonable to assume that the indirect effect of a change in the electricity price is almost as great as the indirect effect of a change in the oil price. Table B1 shows the results of an econometric estimate of the historical relationship between energy prices and the CPI.

It should be stressed however that this type of estimate is extremely uncertain. For instance, the variables that are included and the choice of estimation period are often decisive to the result. Moreover, the estimated results show the average impact of a change in energy prices on the CPI, which, among other things, means that the results require an average monetary policy response on the change in energy prices. Should monetary policy react in a different way, the impact may be somewhat different to the result shown in Table B1.

Table B1. Estimates of direct and indirect effects of a permanent ten per cent increase of energy prices on the annual rate of increase in the CPI

	Effect of change in oil prices	Effect of change in electricity prices	Total effect
Year 1	0.15	0.17	0.32
Year 2	0.08	0.10	0.18
Year 3	0.14	0.08	0.22
Accumulated effect	0.37	0.35	0.72

Note. The results are the effect on the CPI of a change in the price of oil on the world market and a change in the price of electricity for producers in Sweden (see footnote 16).
Source: The Riksbank

16 The model that has been estimated is a VAR model, which is a system of equations with lagged explanatory variables. The variables included are the currency weighted TCW–GDP abroad, GDP in Sweden, the currency weighted exchange rate, the dollar price of oil, producer prices for electricity in Sweden, unit labour costs in the business sector and the CPIX excluding energy. All series are logarithmed and expressed in first differences. The time series are quarterly observed 1985-2007. The series for GDP, unit labour costs and the CPIX excluding energy are seasonally-adjusted. The maximum lag length chosen in the model is four quarters. In the model GDP abroad and the oil price are block-exogenous. This means that international variables affect the Swedish variables (GDP, exchange rate, unit labour costs, electricity prices and inflation) but not the opposite. The effects of two different developments in energy prices have been simulated. One development entails a 10 per cent one-off increase in energy prices. The second entails an identical development with the actual development of energy prices 2002-2007. This was done by adding a sequence of shocks to the unexplained part of the equations for energy prices (the residuals).

How far has inflation been affected by energy prices to date?

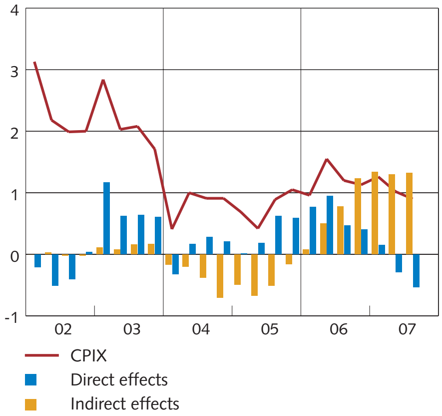
With the aid of the same analysis tool, it is also possible to estimate how much of the variation in inflation in recent years is attributable to direct and indirect effects of fluctuating energy prices. Figure B2 shows how CPIX inflation has developed during the period 2002 to 2007. The Figure also shows how great the direct and indirect effects of fluctuating energy prices have been according to the estimated model. Observations for the fourth quarter of 2006 can serve as an example. The line shows that CPIX inflation was approximately 1.1 per cent. During the same period the direct effect of a change in energy prices was approximately 0.4 percentage points and the indirect effect some 1.2 percentage points. This means that the rate of inflation, when the impact of the energy price is excluded, was approximately -0.5 per cent (=1.1-0.4-1.2). If energy prices had not risen since 2002 CPIX inflation would then have been negative during the fourth quarter of 2006, according to this analysis.

The analysis provides an indication of how the indirect effects often are of the same size as the direct effects. The results also indicate that if energy prices rise sharply over a longer period of time, as has been the case in recent years, the indirect effects also become significant. This is well-illustrated by the third quarter of 2007. The direct effect here is negative as a result of energy prices falling compared with the corresponding quarter the year before (see Figure B2). The indirect effect is however positive as a result of earlier upturns in the price of energy. In addition, the positive indirect effect is greater than the negative direct effect, which means that the total effect is positive.

How do energy prices affect inflation during the forecast period?

During the forecast period energy prices are expected to fall marginally from the current high levels, which there is support for in the pricing on the forward market. This assumption means that the direct effects from energy prices will provide a positive contribution to CPI inflation approximately one year ahead (the rate of price increase for the energy components in the CPI will be high). Thereafter, the recent energy price increases will fall out of the twelve-month comparisons and no longer affect inflation directly. The energy price increases will, however, continue to affect inflation indirectly for a while.

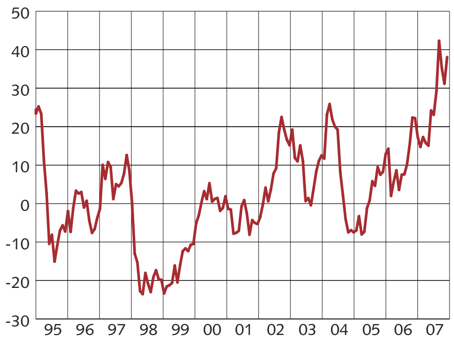
Figure B2. CPIX inflation and direct and indirect effects of changes in energy prices during the period 2002-2007
Annual percentage change and percentage points



Sources: Statistics Sweden and the Riksbank

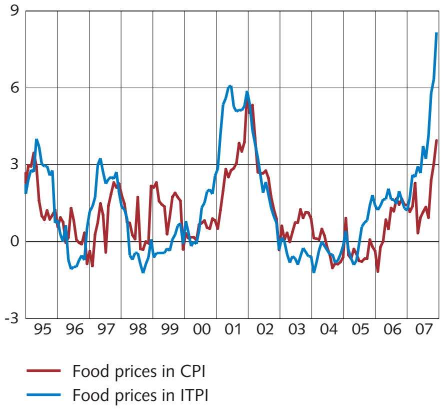
Rising food prices

Figure B3. The Economist's commodity price index for food
USD, annual percentage change



Source: The Economist.

Figure B4. Consumer and producer food prices
Annual percentage change



Note. ITPI refers to the index for domestic supply, which weighs together the import price index and the home sales price index within the system for the producer price index. The index for food in the CPI is adjusted for changes in indirect taxes.

Sources: Statistics Sweden and the Riksbank

Food prices have risen over the past year, both on the world market and in Sweden. This has been a contributory factor to the rise in CPI inflation over the past year. The level of food prices is expected to remain high, but the rate of increase is expected to subside. The effects of the rising food prices on CPI inflation are thus expected to be largely temporary.

Food prices have increased

The Swedish food industry has undergone extensive structural changes during the past decade. Stiffer competition has led to greater efficiency and rationalisation in both manufacturing and distribution, which has contributed to holding back consumer prices. However, over the past year food prices have risen relatively quickly. The rate of increase has risen both on the world market and for consumer prices in Sweden. In December 2007 food prices on the world market were almost 40 per cent higher compared with the same month in the previous year (see Figure B3). Food prices (in the CPI) in Sweden rose at the same time by around 4 per cent compared with December 2006.

Food prices have also risen in the producer stages. In December 2007 they were more than 8 per cent higher, measured as a weighted average of the domestic market price index and the import price index (ITPI), compared with the same period one year earlier (see Figure B4).

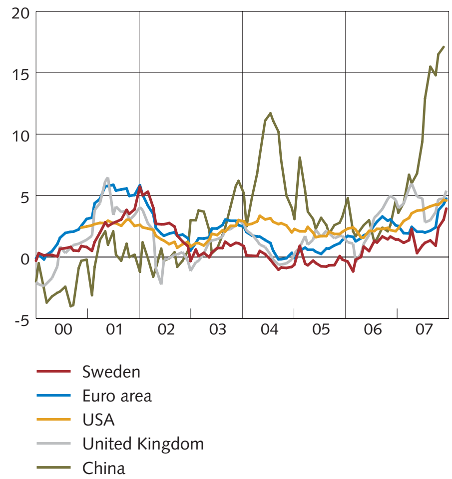
Why are food prices increasing?

Several factors have contributed to the rapid rise in food prices on the world market; higher energy and fertiliser prices, lower stocks and shortages of some crops. The shortages are partly due to weather conditions, particularly the draught in Australia, but also to a substantial increase in the demand for certain crops. This can be explained, for instance, by the increased welfare in rapidly-expanding growth economies, such as China and India, which has contributed to an increase in the consumption of meat and milk products in these countries.

In addition, investments in ethanol and biodiesel have meant that the demand for the crops used to produce these alternative fuels has risen sharply. The investments in alternative fuels in many parts of the world can be explained by the high energy prices and increased government incentives for making such investments with the aim of reducing emissions. One example is maize, which is an important component in the manufacture of ethanol. In the United States the price of maize rose at the beginning of 2007 to the highest level in ten years. This contributed to US farmers increasing their production of maize at the cost of a reduction in the production of other crops. This led to the price of these crops also rising on the world market.

It is also reasonable to assume that the price pressure on food prices in Sweden stemming from the stiffer competition has begun to fade. Some representatives of the food industry consider that the industry is over-established, and that the rate at which new businesses are established will probably slow down over the coming years. This has become clear in conversations with representatives of the food industry held in connection with the Riksbank's company surveys. On top of this, transport and production costs for foods have increased recently as a result of rising energy prices.

Figure B5. Food price in the CPI in some countries
Annual percentage change



Sources: The respective countries' statistical agencies

How much have food prices risen for consumers in other countries?

The rate of increase in food prices has risen in many countries (see Figure B5). In Sweden food prices began to rise in the middle of 2006 after a period of almost unchanged prices during the years 2003-2005. A similar pattern can be found in many other countries. The rate of increase in food prices has also been higher in 2007 than in previous years in the United States, the United Kingdom and the euro area. The most dramatic rise in the rate of increase can be seen in China, where food prices increased by more than 15 per cent on an annual rate at the end of the year.

How do food prices affect inflation in Sweden?

One central question is whether what we are seeing now is a lasting upturn in world market food prices. One factor indicating that prices may remain high is that the reason for the high prices is not primarily weather conditions or another more transitory phenomenon, but the rising global demand for agricultural products. There is reason to believe that this will continue for the foreseeable future. Continued high growth in the world economy and rising incomes will contribute to keeping the demand for food at a high level. Although global demand will remain high in the future, prices are not expected to continue to increase as quickly as they have done over the past year. The high food prices will reasonably also entail an increase in supply. The overall assessment is that food prices will remain at a high level but that the rate of price increase will slow down.

Food prices comprise around 17 per cent of the CPI, if alcohol and tobacco products are also included. In December 2007 food prices, as mentioned above, increased by around 4 per cent compared with the same month in the previous year, and they contributed approximately 0.7 percentage points to the annual rate of increase in the CPI of 3.5 per cent. Food prices are expected to continue to increase by around 5 per cent on an annual rate during the greater part of 2008. After this the recent rapid price increases no longer affect the annual rate of increase and this therefore falls back to more normal levels.

The effects of the rising food prices on CPI inflation are thus expected to be largely temporary. However, there is a risk that the high food prices will affect inflation expectations and thereby give rise to indirect effects on inflation, such as increasing wage demands (see the discussion on energy prices in the article on energy prices and Swedish inflation in this report).

The Riksbank's company survey: a minor slowdown during the autumn and increased concern over economic activity

Companies report that both production and employment have continued to increase in the most recent quarter compared with the previous one. However, companies' responses suggest that there has been a certain slackening of activity during the autumn. Expectations ahead of the coming quarter/year have been revised downwards. Above all, this is evident in companies' pricing plans for the coming year. Companies now report that the price increases will be lower than suggested in the previous survey in September. There are few indications that demand and supply conditions in various markets have changed significantly during the autumn, according to the companies. In their replies, companies appear to be more concerned over the general unease about economic development than over the actual change in conditions. The financial turmoil of the autumn has had little direct effect on companies' business activities to date. As in the previous survey, food producers and companies in the non-durables sector anticipate that certain food prices will continue to rise as a result of higher international prices on feed and grain.

Facts about the survey

The Riksbank carries out a survey among companies in the business sector prior to the publication of each Monetary Policy Report, that is, three times a year. The main purpose of the survey is to obtain in-depth information on how the companies view the current economic situation and how they intend to plan and act on the basis of the present conditions. Another purpose is to increase the Riksbank's knowledge of the conditions for companies and sectors in the business sector in general. The results of the survey thus supplement other statistical sources and methods used by the Riksbank.

There are limits as to how the results can be generalised, as the number of companies interviewed is relatively small (approximately 60) and the sample is not particularly representative for the business sector as a whole. The advantage of carrying out in-depth interviews is instead the fact that they provide a large amount of detailed information about how the companies act in the current economic circumstances. With the aid of this information it should be possible over time to distinguish different patterns of action among the companies that are specific to particular economic conditions. An analysis of these patterns could also improve the possibilities for interpretation of the general statistics. These patterns are not easy to classify but are valuable to the Riksbank in building up knowledge about the companies' situation and behaviour.

Around 60 companies were interviewed, mainly in december 2007

Staff at the Riksbank interviewed around 60 companies between week 48 and week 2. Medium-sized and large companies alone take part in the survey and companies mainly other than those that took part in the previous survey were interviewed this time.

Together, the interviewed companies employ just over 300 000 in Sweden, approximately 11 per cent of the total number employed in the business sector. In most cases the interviews, which lasted roughly 1 hour, were carried out with representatives of the company management at the companies. Those interviewed have responded to questions on how they view the company's present situation with respect to production, employment and prices, for instance. The responses have then been marked on a three-point scale: "increased", "unchanged" or "declined" and in certain cases as "yes" and "no".

Continued good development in the business sector but a slackening during the autumn and greater unease

The central issues in the Riksbank's company survey concern the companies' assessments of developments in production/sales, employment and prices. In addition, questions were also asked about assessments of capacity utilisation, competitive situation, shortage of labour, profitability and investment plans. In the survey, which has been carried out during the winter, the companies state that there was some slackening of activity during the autumn and that they are concerned over future economic activity. The results of the Riksbank's survey are in line with those of other sources, for example, the business tendency survey, which also shows that there has been a slackening of activity in the business sector. The most important conclusions from the Riksbank's survey can be summarised in the following points:

- Production, employment and prices have continued to increase in the most recent quarter/year but there has been some slackening of activity compared with the previous survey at the beginning of the autumn. This is most clearly seen in industry and in the retail trade.
- Expectations ahead of the next quarter are generally more subdued now compared with the September survey, above all with respect to the companies' production/sales as well as industry's and construction companies' employment plans. The downward revision to expectations can also be seen in the companies' views of price developments for the coming year, which are lower than in the previous survey.
- There are few indications that the financial turmoil in the world has had a direct impact on the companies. However, there is concern that a general slowdown in the economy may be imminent.
- The companies continue to state that productivity growth has been good and do not recognise the picture of declining productivity growth from the National Accounts' statistics. They also say that they have not noticed that costs have increased significantly.

- The outcome of last year's wage bargaining rounds is described by the companies themselves as "high" and this is expected to lead to further rationalisation of operations and/or higher prices.
- Rising world market prices on grain, for instance, have lead to price rises on foodstuffs. According to both producers and traders, further price increases for some products such as meat and bread can be expected in 2008.

Production/sales increasing but subdued expectations

Companies in industry, the construction sector, the retail trade and private service industries state that both production/sales and employment continued to increase in the most recent quarter. The development is strongest in the construction sector, where all companies interviewed state that building volumes have increased in the most recent quarter. In the service industries also a majority of companies state that sales or demand for the company's services has increased. The companies in these sectors generally state that the economic climate continues to be very good. The answers can be illustrated as follows: "It's an incredibly good economic climate", "We read about crises in the newspapers, it's not something we have noticed".

In parts of industry and the retail trade there are clearer signs that a slackening of activity has occurred during the autumn and the way the situation is described can, for example, be of the following nature: "After the summer the rate of increase in demand has slowed down", "Slightly more sluggish in the market", "Inventories has increased more than desired in the autumn, there is a slight slowdown under way", "It's not as heated as it has been previously".

Ahead of the next quarter companies' expectations are somewhat more subdued compared with the previous survey. The majority of companies still believe that production and sales will increase but the proportion has decreased somewhat compared with the previous survey. The responses from construction companies and parts of the manufacturing industry are, however, still very positive. It is instead among the services companies and, above all, in the retail trade that expectations of further increases in sales have been revised down compared with the previous survey. Among other things, in the non-durables sector there is concern that the higher food prices could subdue other sales and thus reduce sales volumes.

There are more industrial companies now compared with the previous survey stating that they can, at present, manage to increase production if an unexpected increase in demand occurs, which suggests that companies have more spare capacity now compared with the previous survey. Some of the responses among the large companies suggest that it is mainly the subcontractors who have more spare capacity. In the retail trade and service industries, companies state that the labour shortage is somewhat less now than in the previous survey. In the construction sector, companies still state that there is a shortage of labour. As in the previous survey, companies state that above all there is a shortage of people with different types of specialist skills. All in all, there is still relatively little in the companies' responses to suggest there is a general shortage of labour in the Swedish economy. Most companies state that they can find the labour they need.

Employment plans are revised down

The companies state that employment has increased in the most recent quarter but fewer companies now than in the previous survey say there is an increase in employment. This is most evident in industry where just a few of the companies interviewed state they have increased the number of employees in the most recent quarter. New recruitment would appear to have continued to increase among companies in the construction sector and in the retail trade and service industries recently.

The results suggest that companies in general are more cautious about increasing the number of employees in the future. Companies in the construction sector, which unambiguously stated in the previous survey they had increasing employment plans, are now more divided in their view ahead of the coming quarter. To some extent this may be a seasonal effect (construction normally declines during the winter) but there are examples of companies that describe the situation as though "the construction sector no longer has full capacity utilisation". In industry also plans to increase the number of employees are now lower than in the previous survey. The changes are small in the service industries and the retail trade compared with September.

Staffing services companies' view of the coming employment trend is not clear-cut. Staffing services companies state that any potential slowdown in employment is noted first in the recruiting companies' employment plans. Some of the staffing services companies state that they have not observed any change in the companies' actual demand for staff or in their recruitment plans. However, others state that the companies are somewhat more cautious in their plans to hire staff and that they do not sign such long contracts as previously.

Companies now expect lower price rises than they did in the previous survey

The majority of the companies state that in the past year prices have increased more than is generally common. Compared with the results of the previous survey in September the differences are small on the whole. However, the differences are greater with regard to the price plans for the coming year. Construction companies state that they will raise prises less than usual in the coming year. Among other things, they state as a reason that price developments for housing and commercial premises have stabilised already. Some companies also expect a slowdown on the property market and in the economy in general this year and therefore expect the rate of price increase to be lower. In other sectors also there are signs that the plans to raise prices are more subdued compared with the September survey. Some of the companies refer to the uncertain economic prospects. In other cases there are sector-specific reasons why the rate of price increase can be lower. In the energy field, for example, the major investments lead to an expansion in electricity production which, according to companies, should squeeze prices in the longer term. There are also plans to raise prices more than normal. Some of the food producers have raised prices during the autumn and have stated that further price rises will occur this year. As in the previous survey, they state that this is the result of rising international prices on feed, meat and grain, for instance. In turn, the food industry states that it will pass on the price increases to consumers. Other reasons stated for the price rises are higher transport and wage costs in the retail trade.

Cost and productivity development remains controlled

Companies state that the outcome of the year's centrally-agreed wage increases was higher than in the previous round of wage negotiations. Several companies describe the agreement as "expensive". At the same time they state that the cost increases will lead to continued rationalisation of operations and even to fewer employees but also to higher prices. Above all it is companies in the retail trade and service industries that state that the wage cost increases are difficult to manage with higher productivity which is why the effects on employment and prices may also be greater. The companies in other branches in the business sector – for example, parts of industry and construction companies – appear to be somewhat less concerned about developments in wage costs. This, in turn, may be because these companies assess that it is easier to offset the cost increases via higher labour productivity and/or that it is easier to pass over the cost increases to customers in the form of higher prices.

As in the previous survey, the companies generally state that productivity development remains firm. Companies say that they do not recognise the decline in productivity registered by the National Accounts for the Swedish business sector in their own operations. Although it is difficult to measure and compare changes in productivity over time, the companies do not appear to have observed any major negative change in production efficiency or in costs recently. In those cases the companies state they have problems with productivity, this has been due to bottlenecks arising and production shocks that temporarily lower productivity. In other sectors declining demand and production has entailed that average labour productivity has fallen when employment has not declined to the same extent. The companies do not state either that profitability development in general has been affected by poorer productivity growth.

"We are worried about the turmoil. There is much nervousness but we have not seen any downturn."

The companies were asked in the survey if they had noted any effects of the financial turmoil of the autumn in their operations. In general the companies had few direct observations. Some companies stated that borrowing had become somewhat more expensive and that it could also be slightly more difficult to receive a short-term loan but that it was not a question of any dramatic development. In businesses that are more sensitive to interest rates the higher short-term interest rates have led to increased costs for companies and/or customers. In turn, this may affect demand and profitability but this does not appear to be a question of any major effects here either. Other companies expressed some concern that the banks could reduce lending in the future but at present there is nothing to suggest this. All in all, there are then few indications that the financial turmoil of the autumn has had any direct, observable effects for the companies themselves.

Appendix

- Tables
- Outline of articles published 2004–2007
- Earlier interest rate decisions
- Glossary

Tables

The figures in parentheses show the forecast stated in the previous Monetary Policy Report.

Table A1. Inflation, 12-month rate
Annual percentage change

	Mar. -07	Mar. -08	Mar. -09	Mar. -10	Mar. -11
CPI	1.9	3.4 (2.8)	2.6 (2.5)	2.4 (2.3)	2.2
CPIX	1.2	2.3 (1.8)	2.2 (2.1)	2.1 (2.0)	2.0
CPIX excl. energy	1.2	2.2 (1.9)	2.2 (2.1)	2.3 (2.2)	2.2

Note. CPIX is CPI excluding household mortgages interest expenditure adjusted for direct effects of changed indirect taxes and subsidies.
Sources: Statistics Sweden and the Riksbank

Table A2. Change in CPI compared to change in CPIX
Annual percentage change and percentage points

	2006	2007	2008	2009	2010
CPIX excl. Energy	0.6	1.5 (1.4)	2.2 (2.0)	2.2 (2.2)	2.2 (2.2)
CPIX	1.2	1.2 (1.1)	2.5 (2.0)	2.2 (2.0)	2.1 (2.0)
Changes in mortgage interest expenditure*	0.1	0.9 (0.8)	0.8 (0.8)	0.4 (0.4)	0.3 (0.3)
Changes in indirect taxes and subsidies*	0.1	0.1 (0.1)	0.1 (0.2)	0.0 (0.0)	0.0 (0.0)
CPI	1.4	2.2 (2.1)	3.4 (2.9)	2.5 (2.4)	2.3 (2.2)

* Contribution to CPI inflation, per cent
Note. Due to rounding the contributions may not add up. CPIX is CPI excluding household mortgages interest expenditure adjusted for direct effects of changed indirect taxes and subsidies.
Sources: Statistics Sweden and the Riksbank

Table A3. Interest rates, exchange rates and public finances
Percent, annual average

	2006	2007	2008	2009	2010
Repo rate	2.2	3.5 (3.5)	4.3 (4.3)	4.3 (4.4)	4.3 (4.3)
10-year rate	3.7	4.2 (4.2)	4.5 (4.6)	4.8 (4.9)	5.0 (5.1)
Exchange rate, TCW index, 1992-11-19=100	127.4	125.2 (124.9)	124.1 (122.4)	123.1 (121.5)	122.9 (121.1)
General government net lending	2.2	3.1 (2.6)	2.3 (2.6)	1.7 (2.2)	1.6 (1.8)

Source: Statistics Sweden and The Riksbank

Table A4. International conditions
Annual percentage change

GDP	2006	2007	2008	2009	2010
USA	2.9	2.2 (2.0)	1.7 (2.0)	2.5 (2.8)	3.0 (3.3)
Japan	2.2	1.9 (1.9)	1.5 (1.7)	1.6 (1.6)	1.5 (1.5)
Euro area	2.8	2.7 (2.5)	1.7 (1.9)	2.0 (2.1)	2.1 (2.0)
OECD	3.0	2.7 (2.5)	2.1 (2.3)	2.5 (2.6)	2.7 (2.7)
TCW weighted	3.1	2.8 (2.7)	1.9 (2.1)	2.1 (2.2)	2.3 (2.3)
World*	4.9	4.8 (4.8)	4.1 (4.5)	4.2 (4.3)	4.3 (4.4)
CPI					
USA	3.2	2.9 (2.8)	2.6 (2.2)	1.8 (2.1)	2.2 (2.4)
Japan	0.2	-0.1 (-0.1)	0.2 (0.2)	0.4 (0.6)	0.5 (0.6)
Euro area (HICP)	2.2	2.1 (2.0)	2.5 (2.0)	2.1 (1.9)	1.9 (1.9)
OECD	2.6	2.4 (2.3)	2.4 (2.1)	2.0 (2.1)	2.1 (2.2)
TCW weighted	2.1	2.0 (1.9)	2.3 (1.9)	1.9 (1.8)	1.9 (1.9)
Crude oil price, USD/barrel, annual average	65	73 (70)	89 (77)	87 (75)	86 (74)
Swedish export market growth	9.4	4.3 (4.1)	5.8 (6.3)	6.2 (6.3)	6.4 (6.3)

* New weights from the World Bank have been used for aggregate world growth for the previous forecast, too. These values thus do not correspond to those published in the Monetary Policy Update in December 2007.
Note. CPI refers to HICP for the Euro area. Swedish export market growth refers to import of goods for around 70 per cent of the countries that are recipients of Swedish exports. The forecast is weighted together on the basis of each country's share of Swedish export of goods.
Sources: IMF, Intercontinental exchange, OECD and the Riksbank

Table A5. GDP and GDP by expenditure
Annual percentage change

	2006	2007	2008	2009	2010
Private consumption	2.5	3.1 (2.8)	2.7 (3.4)	2.9 (3.1)	3.2 (3.2)
Public consumption	1.5	0.3 (1.5)	1.0 (1.2)	0.4 (0.8)	1.1 (1.0)
Gross fixed capital formation	7.7	8.0 (9.3)	4.4 (4.7)	1.9 (2.5)	2.4 (2.5)
Inventory investments*	0.2	0.9 (0.3)	-0.1 (0.0)	0.0 (0.1)	0.1 (0.1)
Exports	8.9	5.0 (5.3)	5.5 (5.9)	4.8 (5.4)	5.9 (5.9)
Imports	8.2	9.0 (7.5)	6.2 (7.0)	5.1 (6.2)	5.9 (6.3)
GDP	4.1	2.5 (3.1)	2.4 (2.8)	2.0 (2.3)	2.8 (2.6)
GDP, calendar-adjusted	4.4	2.8 (3.3)	2.1 (2.7)	2.2 (2.3)	2.5 (2.4)

*Contribution to GDP growth, percentage points
Note. No calendar-adjusted data, annual growth rate, otherwise else stated.
Sources: Statistics Sweden and the Riksbank

Table A6. Output, employment and unemployment
Annual percentage change, unless otherwise indicated

	2006	2007	2008	2009	2010
Population, aged 16-64	1.0	0.9 (0.9)	0.4 (0.6)	0.5 (0.3)	0.1 (0.1)
GDP, Calendar-adjusted	4.4	2.8 (3.3)	2.1 (2.7)	2.2 (2.3)	2.5 (2.4)
Number of hours worked, calendar adjusted	2.0	3.2 (3.2)	1.0 (1.2)	0.1 (0.2)	0.1 (0.0)
Number of employed (EU definition)	1.9	2.5 (2.7)	1.1 (1.5)	0.2 (0.2)	0.1 (0.0)
Labour force (EU definition)	1.1	1.5 (1.7)	0.8 (1.1)	0.1 (0.1)	0.1 (0.0)
Unemployment (EU definition)*	7.0	6.1 (6.1)	5.9 (5.8)	5.9 (5.7)	5.8 (5.8)
Labour market programmes, per cent of labour force*	2.9	1.8 (1.9)	1.8 (1.8)	1.9 (1.9)	1.8 (1.8)

* Percentage of the labour force
Sources: Statistics Sweden and the Riksbank

Table A7. Wages, productivity and unit labour costs for the economy as a whole
Annual percentage change, calendar-adjusted data

	2006	2007	2008	2009	2010
Hourly wage, NMO	3.1	3.6 (3.9)	4.2 (4.5)	4.0 (4.2)	3.8 (3.8)
Hourly wage, NA	3.4	3.8 (4.3)	4.5 (4.7)	4.3 (4.5)	4.1 (4.1)
Employer contributions*	-0.2	-0.1 (0.6)	0.0 (-0.1)	0.0 (-0.2)	0.1 (0.1)
Hourly labour costs, NA	3.2	3.8 (4.9)	4.5 (4.6)	4.3 (4.3)	4.1 (4.2)
Productivity	2.4	-0.4 (0.1)	1.1 (1.5)	2.1 (2.1)	2.4 (2.3)
Unit labour cost	0.8	4.2 (4.8)	3.3 (3.1)	2.2 (2.2)	1.6 (1.8)

* Contribution to the increase in labour costs, percentage prints
Note. NMO refers to the National Mediation Office's short-term wage statistics and NA refers to the National Accounts. Labour cost per hour is defined as the sum of actual wages, collective charges and wage taxes divided by the seasonally adjusted total number of hours worked. Unit labour cost is defined as labour cost divided by the seasonally adjusted value added for the whole economy, i.e. GDP at market prices. Due to rounding the contributions may not add up.
Sources: National Mediation Office, Statistics Sweden and the Riksbank

Table A8. Repo rate
Per cent, annual average

	2006	2007	2008	2009	2010
The main scenario	2.2	3.5	4.3	4.3	4.3
Lower interest rate	2.2	3.5	3.7	3.3	3.6
Higher interest rate	2.2	3.5	4.8	5.4	5.0

Source: The Riksbank

TableA9. CPIX
Annual percentage change

	2006	2007	2008	2009	2010
The main scenario	1.2	1.2	2.5	2.2	2.1
Lower interest rate	1.2	1.2	2.7	3.2	3.3
Higher interest rate	1.2	1.2	2.3	1.2	0.9

Sources: Statistics Sweden and the Riksbank

Table A10. GDP
Annual percentage change, calendar-adjusted data

	2006	2007	2008	2009	2010
The main scenario	4.4	2.8	2.1	2.2	2.5
Lower interest rate	4.4	2.8	2.4	2.9	2.8
Higher interest rate	4.4	2.8	1.9	1.5	2.3

Sources: Statistics Sweden and the Riksbank

Table A11. Hours worked
Annual percentage change, calendar-adjusted data

	2006	2007	2008	2009	2010
The main scenario	2,0	3,2	1,0	0,1	0,1
Lower interest rate	2,0	3,2	1,2	0,9	0,3
Higher interest rate	2,0	3,2	0,7	-0,7	-0,1

Sources: Statistics Sweden and the Riksbank

Table A12. Percentage of unemployed 16-64 year-olds, according to ILO definition.
Per cent of labour force, calender adjusted data

	2006	2007	2008	2009	2010
The main scenario	7.0	6.2	6.0	5.9	5.9
Lower interest rate	7.0	6.2	5.8	5.2	5.1
Higher interest rate	7.0	6.2	6.2	6.7	6.8

Note. According to the ILO definition, full-time students who are seeking work are included in the unemployed concept.
Sources: Statistics Sweden and the Riksbank

Table A13. Scenario with greater financial turmoil
Annual percentage change unless otherwise specified

	2007	2008	2009	2010
GDP	2.8 (2.8)	2.0 (2.1)	2.1 (2.2)	2.3 (2.5)
CPIX	1.2 (1.2)	2.4 (2.5)	1.9 (2.2)	1.5 (2.1)
Repo rate*	3.5 (3.5)	4.1 (4.3)	3.7 (4.3)	3.2 (4.3)
TCW-weighted GDP	2.8 (2.8)	1.9 (1.9)	1.7 (2.1)	1.6 (2.3)
TCW-weighted CPI	2.0 (2.0)	2.3 (2.3)	1.6 (1.9)	1.1 (1.9)
TCW-weighted short-term rates*	4.3 (4.3)	3.7 (3.8)	2.8 (3.5)	2.9 (4.1)

* Per cent, annual average
Note. Main scenario forecast in brackets. GDP refers to seasonally adjusted data.
Sources: Statistics Sweden and the Riksbank

Table A14. Scenario with higher international inflation
Annual percentage change unless otherwise specified

	2007	2008	2009	2010
GDP	2.8 (2.8)	2.1 (2.1)	2.2 (2.2)	2.5 (2.5)
CPIX	1.2 (1.2)	2.6 (2.5)	2.4 (2.2)	2.1 (2.1)
Repo rate*	3.5 (3.5)	4.6 (4.3)	4.7 (4.3)	4.5 (4.3)
TCW-weighted GDP	2.8 (2.8)	1.9 (1.9)	2.1 (2.1)	2.2 (2.3)
TCW-weighted CPI	2.0 (2.0)	2.9 (2.3)	2.7 (1.9)	2.4 (1.9)
TCW-weighted short-term rates*	4.3 (4.3)	4.1 (3.8)	4.1 (3.5)	4.7 (4.1)

* Per cent, annual average
Note. Main scenario forecast in brackets. GDP refers to seasonally adjusted data.
Sources: Statistics Sweden and the Riksbank

Table A15. Scenario with scenario with higher oil price
Annual percentage change unless otherwise specified

	2007	2008	2009	2010
Crude oil price, USD/barrel	73 (73)	117 (89)	122 (87)	119 (86)
GDP	2.8 (2.8)	2.1 (2.1)	1.8 (2.2)	2.2 (2.5)
CPIX	1.2 (1.2)	2.7 (2.5)	2.8 (2.2)	2.3 (2.1)
Repo rate*	3.5 (3.5)	4.8 (4.3)	5.0 (4.3)	4.7 (4.3)
TCW-weighted GDP	2.8 (2.8)	1.9 (1.9)	2.0 (2.1)	2.1 (2.3)
TCW-weighted CPI	2.0 (2.0)	2.6 (2.3)	2.2 (1.9)	1.9 (1.9)
TCW-weighted short-term rates*	4.3 (4.3)	4.2 (3.8)	3.9 (3.5)	4.4 (4.1)

* Per cent, annual average
Note. Main scenario forecast in brackets. GDP refers to seasonally adjusted data.
Sources: Statistics Sweden and the Riksbank

Outline of boxes published 2004-2007[17]

Inflation and prices

2004:1 Recent developments in inflation

2004:2 The exchange rate and imported inflation

2004:2 Recent developments in inflation

2004:2 Changes in calculation methods for the inflation rate

2004:3 Oil prices and monetary policy

2004:3 Recent developments in inflation

2004:4 Recent developments in inflation

2005:1 Recent developments in inflation

2005:2 Why are Swedish import prices so low?

2006:1 The path of the krona and inflation

2007:2 The effects of the abolition of property tax on housing prices and inflation

2007:3 Households' inflation expectations

Monetary policy

2004:1 Material for assessing monetary policy 2001-2003

2004:3 Oil prices and monetary policy

2004:4 The significance of fiscal policy for monetary policy

2005:1 Material for assessing monetary policy, 2002-2004

2006:1 Material for assessing monetary policy 2003-2005

2006:1 Uncertainty regarding future interest rate movements

2006:2 Monetary policy in Sweden

2006:2 What is a normal level for the repo rate?

2006:3 Monetary policy in Sweden

2007:1 Riksbank to publish its own forecast for the repo rate

2007:1 Material for assessing monetary policy 2004-2006

Fiscal policy

2004:4 The significance of fiscal policy for monetary policy

2005:4 The stance of fiscal policy

17 A list of the boxes published since 1993 can be found on our website www.riksbank.se.

Labour market, wage agreements, productivity, resource utilisation

2004:1 Calendar effects on production, hours and costs

2004:1 Economic activity and the labour market

2004:1 How persistent is the recent rise in productivity?

2004:2 Indicators of resource utilisation

2005:2 Future labour market developments – experiences in other countries and the significance of growth composition

2006:2 Resource utilisation, costs and inflation

2006:3 The 2007 wage bargaining round

2006:3 Perspectives on the quantity of unutilised resources in the labour market

2007:2 Wage bargaining round indicates higher rates of wage increase

2007:2 Productivity drivers

2007:2 The matching of supply and demand in the labour market

Forecasts and the Riksbank's forecasting work

2004:3 Developments in the longer term

2005:1 Changes in the Riksbank's forecasting methods

2005:1 Longer-term forecasts under the assumption that the repo rate evolves in line with implied forward rates

2005:2 Longer-term forecasts under the assumption that the repo rate evolves in line with implied forward rates

2005:3 Forecasts up to 2007 under the assumption that the repo rate is held constant for two years

2005:3 GDP indicators

2006:3 Inflation indicators

2007:1 RAMSES – a tool for monetary policy analysis

2007:3 The Riksbank's company survey

GDP and its components

2005:3 Household consumption, debt and saving

International

2007:3 Some lessons learned from earlier financial crises

Earlier interest rate decisions[18]

Date of meeting	Repo rate (per cent)	Decision (percentage points)	Monetary Policy Report
2003			
6 February	3.75	0	no report
17 March	3.50	-0.25	2003:1
24 April	3.50	0	no report
4 June	3.00	-0.5	2003:2
3 July	2.75	-0.25	no report
14 August	2.75	0	no report
15 October	2.75	0	2003:3
4 December	2.75	0	2003:4
2004			
5 February	2.50	-0.25	no report
31 March	2.00	-0.50	2004:1
28 April	2.00	0	no report
27 May	2.00	0	2004:2
23 June	2.00	0	no report
19 August	2.00	0	no report
13 October	2.00	0	2004:3
8 December	2.00	0	2004:4
2005			
27 January	2.00	0	no report
14 March	2.00	0	2005:1
28 April	2.00	0	no report
20 June	1.50	-0.50	2005:2
23 August	1.50	0	no report
19 October	1.50	0	2005:3
1 December	1.50	0	2005:4
2006			
19 January	1.75	+0.25	no report
22 February	2.00	+0.25	2006:1
27 April	2.00	0	no report
19 June	2.25	+0.25	2006:2
29 August	2.50	+0.25	no report
25 October	2.75	+0.25	2006:3
14 December	3.00	+0.25	no report

18 A list of the historical interest rate decisions with effect from 1999 onwards can be found on the Riksbank's website www.riksbank.se.

2007			
14 February	3.25	+0.25	2007:1
29 March	3.25	0	no report
3 May	3.25	0	no report
19 June	3.50	+0.25	2007:2
6 September	3.75	+0.25	no report
29 October	4.00	+0.25	2007:3
18 December	4.00	0	Monetary Policy Update

Glossary

Asset prices: The prices of bonds, shares and property.

Business tendency survey: A survey in which firms respond to questions about their sales, output, hiring plans, etc.

Capacity utilisation: The degree to which production capacity is utilised, i.e. the maximum output that can be achieved with the existing workforce, machinery and premises.

CPI: The consumer price index is a measure of the price level and is calculated on a monthly basis by Statistics Sweden. The Riksbank's inflation target is expressed in the annual percentage change of the CPI.

CPIX: A measure of underlying inflation. Calculated on a monthly basis by Statistics Sweden as the CPI excluding household mortgage interest expenditure and the direct effects of changes in indirect taxes and subsidies.

ECB: The European Central Bank.

Econometric estimates: Usually a statistical calculation made on the basis of historical data.

ESCB: European System of Central Banks. Institutional framework for co-operation between the central banks of EU Member States.

Executive Board of the Riksbank: The Executive Board governs the Riksbank and takes decisions concerning areas such as monetary policy.

Export market growth: Intended as a measure of the growth in those markets (countries) to which Swedish goods and services are exported. See also the note to Table A2.

FED: The Federal Reserve Bank of the United States.

Financial markets: The financial markets comprise the equity market, the money market, the bond market and the foreign exchange market.

Forward prices: The price for buying or selling an asset for future delivery.

Forward rate: A forward rate agreement entails a liability for the contracting parties to complete the purchase or sale of an interest rate asset at a predetermined rate, the forward rate, and at a predetermined point in time.

Hodrick-Prescott filter (HP filter): A statistical method for breaking down the movements of a variable into trend and cyclical components. The method can be described as a weighted double-sided moving average where greater weight is placed on observations close at hand and gradually decreasing weight on observations further removed.

ILO: The ILO (International Labour Organization) is the UN body focusing on employment and working life.

Implied forward rate: The forward rates that can be implied by basing calculations on the yield curve.

Inflation: General price rises that cause a reduction in the value of money. The opposite is known as deflation.

Labour costs: The total cost of labour per hours worked according to the National Accounts, i.e. the sum of wages, bonuses, employers' contributions, agreed collective charges and payroll-based taxes on output.

LFS: Labour Force Surveys. Monthly surveys conducted by Statistics Sweden to measure the size of the labour force, employment and unemployment.

Monetary policy: The measures taken by the Riksbank in order to maintain the value of money.

Money market: The market for interest bearing securities with a time to maturity less than one year.

Money market instruments: Securities traded in the money market.

MPR: Monetary Policy Report.

MPU: Monetary Policy Update

Net lending (general government): General government income minus expenditure.

P/E ratio: Price/earnings ratio. This is used to measure how cheap or expensive a share is in relation to profits.

Productivity: The amount of goods and services produced in relation to the resources utilised in the form of labour and capital. The most common measure is labour productivity, which measures the output per the number of hours worked.

Repo rate: The Riksbank's policy rate. The interest rate that banks pay when they borrow money from the Riksbank.

Resource utilisation: The utilisation of the production resources labour and capital.

Risk premium: An extra return on a high-risk investment that an investor wants in order to be able to feel that an investment that involves risk and one that entails no risk are equivalent.

Shortage rates: The proportion of firms reporting a shortage of staff.

Spot market price: The price of a commodity for its immediate delivery.

Statistics Sweden: The Swedish office of national statistics, Statistics Sweden. The central government authority for official statistics.

STIBOR: Stockholm Interbank Offered rate. STIBOR is a reference rate used in many loan contracts.

Sveriges Riksbank Act: The Act stipulating the tasks of the Riksbank.

TCW index: An index for the Swedish krona's exchange rate, based on competitive weighting.

TCW-weighted: An aggregate of, for instance, GDP, CPI or exchange rates in 20 countries that are important to Sweden's international transactions. The weights are based on the IMF's competitive weights.

Total Competitiveness Weights (TCW) exchange rate: The Swedish krona's exchange rate measured against a basket of other currencies, where the weighting is determined primarily by the amount of trade we have with each of the respective countries.

Underlying inflation: A measure of inflation that in some way excludes or attributes a different weighting to those goods and services included in the CPI. Underlying inflation can be calculated by excluding changes in the prices of certain goods and services for which the price tends to fluctuate sharply. Underlying inflation can also be calculated with the aid of econometric methods.

Unit labour cost: Labour cost per unit produced.

Yield curve: The yield curve shows the relationship between yield and maturity dates.

Sveriges Riksbank
SE-103 37 Stockholm

Tel +46 8 787 00 00
Fax +46 8 21 05 31
registratorn@riksbank.se
www.riksbank.se

SVERIGES RIKSBANK

PRODUCTION: SVERIGES RIKSBANK. PRINT: JERNSTRÖM OFFSET AB
ISSN 1654-1030