Monetary Policy Report

October 2011

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.[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 the spring this takes the form of a report entitled "Material for assessing monetary policy". In the autumn it takes the form of the Monetary Policy Report.

The Executive Board decided to adopt the Monetary Policy Report at its meeting on 26 October 2011. The 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.

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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 an appropriate monetary policy.

Monetary Policy in Sweden

MONETARY POLICY STRATEGY [2]

- According to the Sveriges Riksbank Act, the objective for monetary policy is to maintain price stability. The Riksbank has specified this as a target for inflation, according to which the annual change in the consumer price index (CPI) is to be 2 per cent.
- At the same time as monetary policy is aimed at attaining the inflation target, it is also to support the objectives of general economic policy with a view to achieving sustainable growth and high employment. This is achieved through the Riksbank, in addition to stabilising inflation around the inflation target, also striving to stabilise production and employment around long-term sustainable paths. The Riksbank therefore conducts what is generally referred to as flexible inflation targeting. This does not mean that the Riksbank neglects the fact that the inflation target is the overriding objective.
- It takes time before monetary policy has a full impact on inflation and the real economy. Monetary policy is therefore guided by forecasts for economic developments. The Riksbank publishes, among other things, its own assessment of the future path for the repo rate. The interest rate path is a forecast, not a promise.
- In connection with every monetary policy decision, the Executive Board makes an assessment of the repo-rate path needed for monetary policy to be well-balanced. A well-balanced monetary policy is normally a question of finding an appropriate balance between stabilising inflation around the inflation target and stabilising the real economy.
- There is no general answer to the question of how quickly the Riksbank aims to bring the inflation rate back to 2 per cent if it deviates from the target. A rapid return may in some situations have undesirable effects on production and employment, while a slow return may have a negative effect on confidence in the inflation target. The Riksbank's ambition has generally been to adjust the repo rate and the repo rate path so that inflation is expected to be fairly close to the target in two years' time.
- According to the Sveriges Riksbank Act, the Riksbank's tasks also include promoting a safe and efficient payment system. Risks linked to developments in the financial markets are taken into account in the repo rate decisions. With regard to preventing an imbalance in asset prices and indebtedness, the most important factors, however, are effective regulation and supervision. Monetary policy only acts as a complement to these.
- In some situations, as in the financial crisis 2008-2009, the repo rate and the repo rate path may need to be supplemented with other measures to promote financial stability and ensure that monetary policy is effective.
- The Riksbank endeavours to ensure that its communication is open, factual, comprehensible and up-to-date. This makes it easier for economic agents to make good economic decisions. It also makes it easier to evaluate monetary policy.

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 connection 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 the arguments made by the different Executive Board members.

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. The press release also states how the individual members of the Executive Board voted and provides the main motivation for any reservations entered. A press conference is held on the day following the monetary policy meeting.

[2] A detailed description of the monetary policy strategy is given in the document *Monetary Policy in Sweden*. This document is available as a PDF file on the Riksbank's website www.riksbank.se.

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Monetary policy considerations – a summary

Repo rate held unchanged at 2 per cent

The difficulties in resolving the public finance crisis in Europe has led to increased uncertainty regarding the future. In Sweden, growth is expected to be slightly weaker in the coming period. At the same time, inflationary pressure is low. The Executive Board of the Riksbank has therefore decided to hold the repo rate unchanged at 2 per cent and to wait to increase it until sometime next year.

Unease abroad subdues Swedish economy

The difficulties in creating a long-term solution to the public finance problems in both the United States and the euro area have increased uncertainty regarding the future. This has led to stock market falls, problems in the European banking sector and increased pessimism among households and companies. Tough measures will be required to rectify the deficits in public finances and the unease on the financial markets. The fiscal policy tightening will dampen economic growth in the United States and the euro area in the coming years.

Weaker developments abroad will also affect growth in Sweden. However, so far the main effect on Sweden has been a decline in confidence among households and companies. Household wealth has also declined in that share prices have fallen and the housing market has slowed down. This means that household consumption will increase more slowly, which will also lead to weaker developments in the Swedish economy in the coming period. When uncertainty declines and confidence returns, the Swedish economy is expected to grow at a more normal rate and resource utilisation is expected to rise.

CPI inflation is high. This is mainly because mortgage rates have increased. Underlying inflationary pressure is currently low, but is expected to increase as resource utilisation rises.

Repo rate remains low

There is a need to hold the repo rate at a low level to stabilise inflation around the target of 2 per cent and resource utilisation around a normal level. The Executive Board of the Riksbank has therefore decided to hold the repo rate unchanged at 2 per cent and to wait to increase it until sometime next year. Later on, when resource utilisation and inflationary pressures increase, the repo rate will need to be raised gradually.

Great uncertainty over economic developments

As always, the forecasts for the economy and monetary policy are based on the information currently available and new information further ahead may lead to changes in these forecasts. There is considerable uncertainty over economic developments abroad. On the one hand, there is a possibility that the public finance problems in the euro area in particular could become more serious and have more negative effects on the Swedish economy. In this situation, the repo rate path may need to be lower. On the other hand, it is also possible that the financial turmoil will calm down sooner than expected and that the recovery in the euro area will be less drawn out. This could justify a higher repo rate path in Sweden. There is also a possibility that the high inflation abroad will remain high in the future. This will push up Swedish inflation, which could also justify a higher repo rate path.

CHAPTER 1 – The economic outlook and inflation prospects

Growth prospects abroad have deteriorated. The difficulties in creating a long-term solution to the public finance problems in the United States and the euro area are contributing to increased uncertainty over future economic developments. The slowdown in the euro area will be greater and the recovery more long drawn-out. However, global growth is expected to be relatively good even in the period ahead. There is considerable uncertainty over future developments and any new unexpected events could have a major impact.

The Swedish economy has been strong so far. But confidence among households and companies has fallen as a result of turbulence abroad. At the same time, stock markets have fallen and the housing market has slowed down, which has led to a decline in household wealth. All in all, this is expected to lead to lower growth during the coming period. Lower inflation abroad will also slow down inflation in Sweden in the coming period.

The weaker resource utilisation and lower inflationary pressures justify a lower repo rate path. The Riksbank therefore assesses it is appropriate to hold the repo rate unchanged at 2 per cent and to wait until some way into next year before making further increases.

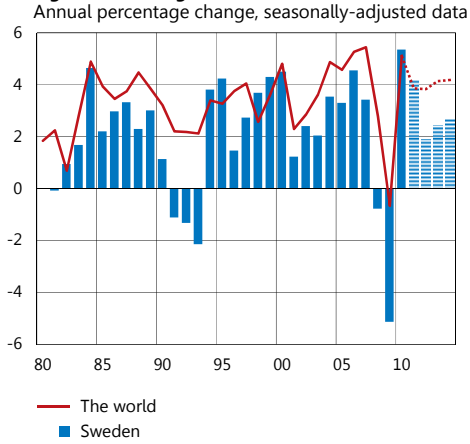
Great uncertainty and slowdown in economic cycle

Slow recovery in Europe

The weak developments abroad are largely due to the strained public finances situation in a number of countries, and to the resulting uncertainty over future developments. The Riksbank assesses that sufficient measures will be taken to resolve the most acute and immediate problems in the euro area, such as an orderly renegotiation of the Greek sovereign debt. However, it will be a long time before the underlying structural problems have been resolved and the recovery in the euro area will thus be prolonged. The current assessment assumes very low growth in the euro area over the coming period, followed by growth at a more normal rate. However, normal growth entails a slow recovery in the euro area, given that the level of GDP is low to start with.

GDP growth in the world as a whole is expected to slow down from around 5 per cent in 2010 to just under 4 per cent this year. The slowdown is mainly due to lower growth in countries such as the United States and Japan, but the emerging economies are also expected to be weaker. Over the coming years the world economy will grow at roughly the historical average rate (see Figure 1:1).

Figure 1:1. GDP growth in Sweden and the world
Annual percentage change, seasonally-adjusted data

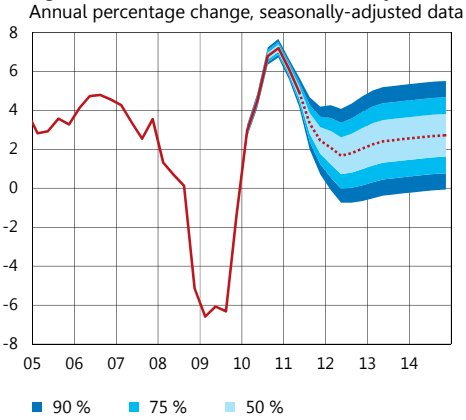


Sources: The IMF, Statistics Sweden and the Riksbank

Swedish economy also affected

The Swedish economy has so far been mainly affected by developments abroad in that confidence among households and companies has declined and share prices have fallen. But a lower rate of increase in demand on the world market will also slow down growth in Sweden in the coming period. Compared with many other OECD countries, however, the conditions for growth in Sweden are still relatively good. This is partly

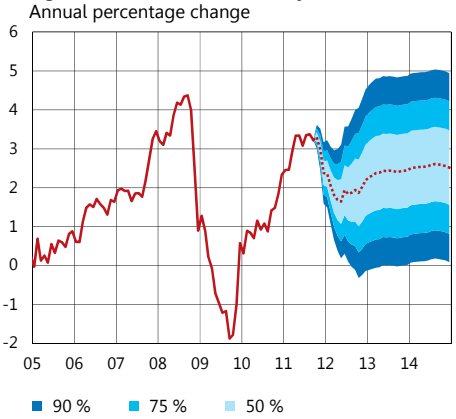
Figure 1:2. Swedish GDP with uncertainty bands
Annual percentage change, seasonally-adjusted data



Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. There is also uncertainty for the outcomes for GDP, as the figures in the National Accounts are revised several years after the preliminary publication.

Sources: Statistics Sweden and the Riksbank

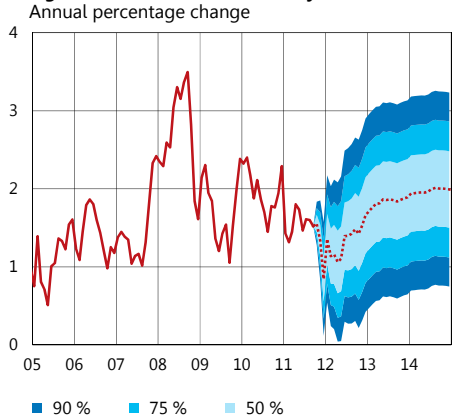
Figure 1:3. CPI with uncertainty bands
Annual percentage change



Note. The uncertainty bands are based on the Riksbank's historical forecasting errors.

Sources: Statistics Sweden and the Riksbank

Figure 1:4. CPIF with uncertainty bands
Annual percentage change



Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

due to the sound public finances, which mean that Sweden does not need to implement fiscal policy tightening and the fact that Sweden has low cost pressures and is not weighed down by the after-effects of large falls in the housing market.

After two years of rapid economic recovery, growth in Sweden has now slowed down and is expected to be lower than normal in the coming year (see Figure 1:2). The Riksbank assesses that resource utilisation in Sweden is currently slightly below normal. As developments abroad stabilise, the situation in Sweden will also improve, and resource utilisation will rise to a normal level towards the end of the forecast period. Unemployment is expected to continue falling, albeit at a slower rate over the coming year, and to be around 6.5 per cent at the end of the forecast horizon.

During the recovery productivity has improved quickly, while real wages have recovered at a moderate rate. In addition, the strengthening of the krona in 2009 and 2010 has contributed to lower imported inflation. These factors have together meant that underlying inflation is currently low. CPI inflation, on the other hand, is high (see Figure 1:3). This is mainly because mortgage rates have risen as a result of the Riksbank's repo rate increases and also because the spread between short-term mortgage rates and the repo rate has risen.

Over the coming years productivity is expected to rise at a more modest rate. At the same time, resource utilisation will normalise and the rate of wage increase is expected to increase. All in all, cost pressures in the Swedish economy will thus increase, and CPIF inflation will rise gradually towards 2 per cent (see Figure 1:4).

■ Lower repo rate path stimulates the economy

During the recovery the expansionary monetary policy has contributed to stimulating domestic demand, at the same time as the relatively weak krona has stimulated exports. One condition for resource utilisation and cost pressures normalising in the coming period, is that monetary policy will remain expansionary over the coming years. The repo rate is therefore held unchanged at 2 per cent, and the Riksbank will wait to make further increases until some way into next year (see Figure 1:5). As developments abroad stabilise and resource utilisation in Sweden rises once again, CPIF inflation will increase. It will therefore be necessary to gradually increase the repo rate to around 3.5 per cent at the end of the forecast period.

Compared with the forecast published in September, the increases in the repo rate are now expected to begin at a later date. The revision to the repo rate path is justified by growth prospects for the Swedish economy being slightly poorer and inflation slightly lower.

If the problems in bringing about solutions to the sovereign debt problems in the euro area worsen substantially and have a negative effect on the financial markets, including tighter credit granting, this will probably have a major impact on Swedish exports and investment. In this situation monetary policy would probably need to be more expansionary, which is discussed in Chapter 2. This chapter also illustrates the different

effects of another monetary policy than the one on which the main scenario is based and which is presented here in Chapter 1.

However, we should not rule out the possibility that the problems abroad turn out to be less extensive and that the financial turbulence will calm sooner than expected. If this were to happen, confidence could return quickly and the recovery could be less prolonged. It would also reduce the need for expansionary monetary policy.

Increased uncertainty over the recovery abroad

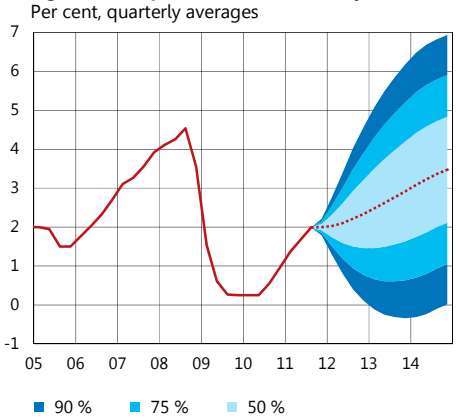
■ Increased turmoil in the financial markets

In recent months, concerns over some of the euro area countries' long-term debt-servicing ability has increased further. This is due to a combination of poorer growth prospects and a lack of long-term solutions to the sovereign debt problems. The uncertainty has resulted in falling stock markets and increased pessimism among households and companies throughout Europe (se Figures 3:12 and 3:6). The risk of increased problems in the future can be seen, for instance, in developments in government bond yields in Greece, Portugal, Italy and Spain, which have continued to rise (see Figures 3:10 and 3:11). The Riksbank assumes that the most acute sovereign debt problems will be resolved smoothly. This involves some form of renegotiation of the Greek sovereign debt.

At the same time, the uncertainty over developments in the European banking system has increased. Some banks in the euro area already have problems with capital adequacy and above all liquidity. The banks are finding it difficult to obtain market funding and have to manage liquidity problems by restricting their lending or borrowing from the central bank. The European Central Bank (ECB) has continued to support the banking system with various liquidity measures since the crisis in 2008-2009. The ECB has both the regulations and tools to meet an increased liquidity requirement in the banking system. The forecast assumes that the situation in the European banks will be strained, but not to the extent that confidence collapses and the financial markets cease to function. However, the markets will function less efficiently than normal for a period of time.

From an international perspective, the Swedish banks are currently well-capitalised and they have only limited exposure to the problem countries in Europe. Their exposure towards the Baltic countries, which was a major problem during the financial crisis of 2008-2009, is also much smaller now. The Riksbank thus assesses that the Swedish banking system is well-equipped to withstand the financial problems in the euro area (this is discussed in more detail in the article "Similarities and differences between the current situation and 2008-2009"). But Swedish banks are not completely protected against the risk of confidence and liquidity crises in Europe, as they are part of a global banking system and dependent on funding in foreign currencies. An alternative scenario, "Prolonged crisis in public finances", which involves a serious credit

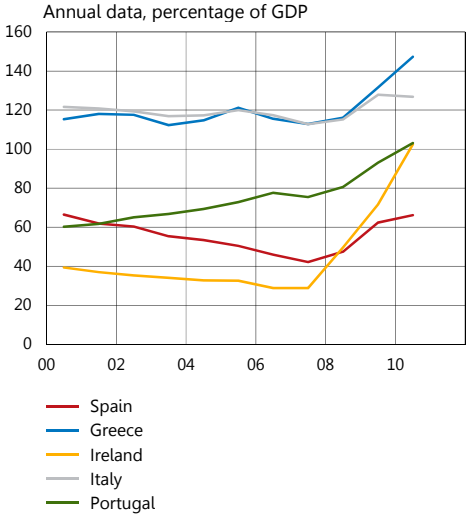
Figure 1:5. Repo rate with uncertainty bands
Per cent, quarterly averages



Note. The uncertainty bands for the repo rate are based on the ability of risk-adjusted market rates to forecast the future repo rate. The uncertainty bands do not take into account the fact that there may be a lower bound for the repo rate.

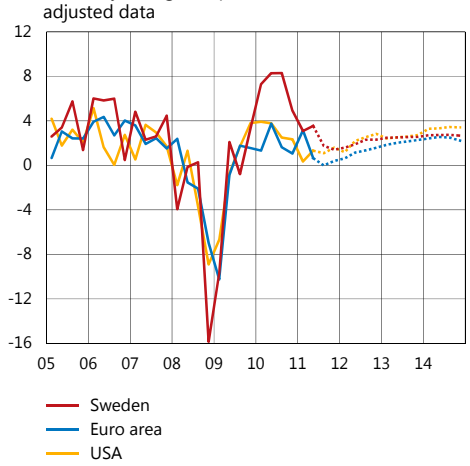
Source: The Riksbank

Figure 1:6. Development of public debt in various countries
Annual data, percentage of GDP



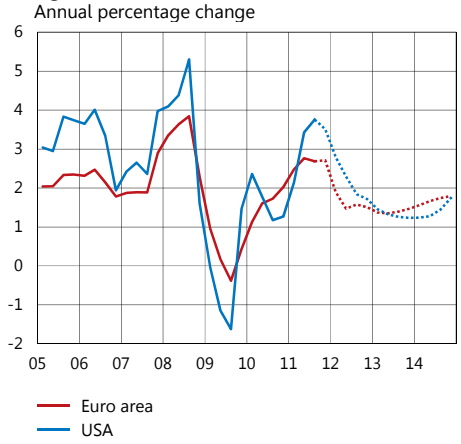
Note. Public gross debt.
Source: OECD

Figure 1:7. GDP in different regions and countries
Quarterly changes in per cent, annual rate, seasonally-adjusted data



Sources: Bureau of Economic Analysis, Eurostat, Statistics Sweden and the Riksbank

Figure 1:8. Inflation in the euro area and the USA
Annual percentage change



Sources: The Bureau of Labor Statistics, Eurostat and the Riksbank

crunch in Europe and major problems with capital adequacy in the European banking system, is described in Chapter 2.

■ Risk of lower growth in the euro area

The Riksbank assessed earlier that the recovery in the euro area would be slow, but it is now expected to take even longer. Sovereign debt has increased quickly and is now very high in several of the euro area countries (see Figure 1:6). The way that politicians manage these public finance problems will be decisive for growth in the euro area in the slightly longer run (this is discussed in more detail in the article "The debt crisis in Europe"). Uncertainty regarding the problem countries is expected to remain high in the coming period, and the risk of a deeper public finances crisis in the euro area is assessed to have increased. The forecast for GDP growth has been revised down somewhat for the whole of the forecast period, compared with the assessment in September, and growth next year is expected to be very low (see Figure 1:7).

Nevertheless, GDP growth in the euro area is not expected to fall anywhere near as much as during the global financial crisis of 2008-2009. But the initial position is currently weaker, as the countries have not yet recovered from the previous crisis. Moreover, the countries in Europe suffering sovereign debt problems are now less well-equipped to recapitalise their banking systems. Together with continued public finance problems and severe fiscal policy tightening, this will mean that growth in the euro area is dampened for a long period to come.

Unemployment is expected to remain high, and the Riksbank assesses that there will be ample spare capacity in the coming years. This will contribute to the currently relatively high inflation falling over the coming year and being relatively low for the remainder of the forecast period (see Figure 1:8). Compared with the forecast in the September Monetary Policy Update, inflation is now expected to be slightly lower in coming years. The lower inflation and weaker growth mean that the policy rate in the euro area is expected to be slightly lower than assumed in the previous forecast, and that it will begin slowly rising in 2013.

■ Fiscal policy uncertainty and a weak household sector in the United States

Fiscal policy in the United States is expected to be tightened over the coming years, but it is very uncertain how this will be achieved. The main reason for the uncertainty is the political dissension in Congress. If the parties in Congress are unable to agree on a format for the long-term budget consolidation work, fiscal policy will be automatically tightened during 2013 in accordance with decisions made earlier. This would mean considerable tightening, especially during 2013. The tighter fiscal policy is now expected to have a greater impact than before, partly because of households and companies being more cautious, and this means that the forecast for GDP growth in the United States is revised down somewhat for the coming years.

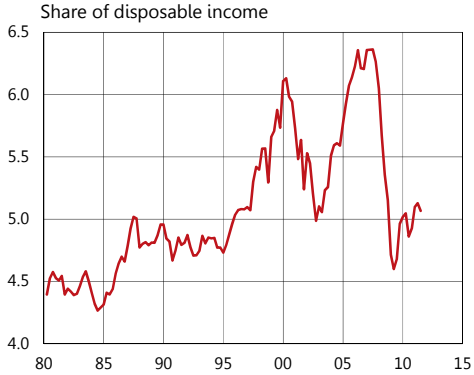
It has also become increasingly clear that private sector demand has not been able to act as growth engine now that the fiscal policy simulation has begun to be phased out. During summer and autumn new indicators have confirmed that economic growth in the United States is weak. Confidence among households and companies has fallen heavily, which slows down both consumption and investment (see Figure 3:2). The weak development in household wealth as a result of stock market falls and continuing weak house prices is expected to lead to households increasing their savings in the coming period to reduce their debts (see Figures 1:9 and 1:10). Consumption is therefore expected to remain weak, which will contribute to the relatively low growth this year and next year (see Figure 1:7).

However, company profits are at historically high levels and when households have gradually consolidated their debts and confidence increases, consumption will rise more quickly once again. As demand is expected to rise, corporate investment is also expected to increase. Thus, growth is expected rise again at the end of the forecast period.

Growth in employment is still weak and in September unemployment was still at an unchanged high level. The assessment is that employment will continue to increase slowly in the coming period. Inflation is currently high, but is expected to fall at the beginning of next year, when the effects of the rising energy prices earlier this year subside. After that, the relatively large spare capacity in the economy is expected to contribute to inflation falling (see Figure 1:8).

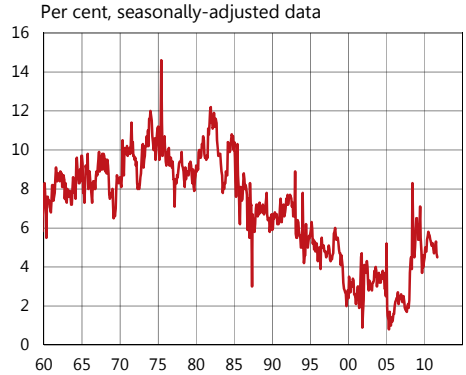
The weak growth in the labour market and the low inflation rate mean that monetary policy is expected to be very expansionary for a long period of time. This will help counteract the fall in inflation. Increases in the policy rate are not expected to begin until 2013, which is in line with the messages from the Federal Reserve.

Figure 1:9. Household net wealth in the United States
Share of disposable income



Sources: Bureau of Economic Analysis and the Federal Reserve

Figure 1:10. Household savings ratio in the United States
Per cent, seasonally-adjusted data



Source: Bureau of Economic Analysis

■ Global growth slowing down

Global GDP growth is expected to slow down from around 5 per cent in 2010 to just under 4 per cent this year. The slowdown is mainly due to lower growth in both the United States and Japan.

The emerging economies are expected to continue growing at a relatively good rate, although not as quickly as this year. A slowdown has already taken place in Asia during the first half of the year due to supply shocks following the earthquake in Japan.

In Latin America, growth has so far remained high thanks to high commodity prices, expansionary economic policy and large inflows of capital. However, it is expected to decline in the coming period, as exports to the United States and Europe slow down.

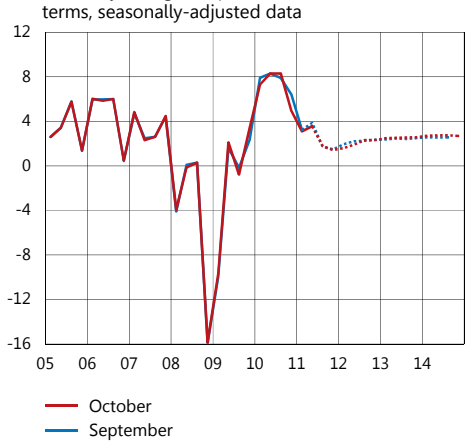
Growth in both the OECD countries and the emerging economies is expected to rise at the end of the forecast period. The world as a whole is expected to grow by around 4 per cent a year during the forecast period. However, there are still substantial differences in the recovery in different regions and countries.

Figure 1:11. TCW-weighted nominal exchange rate
Index, 18 November 1992 = 100

Note. Outcome data are daily rates and forecasts are quarterly averages.

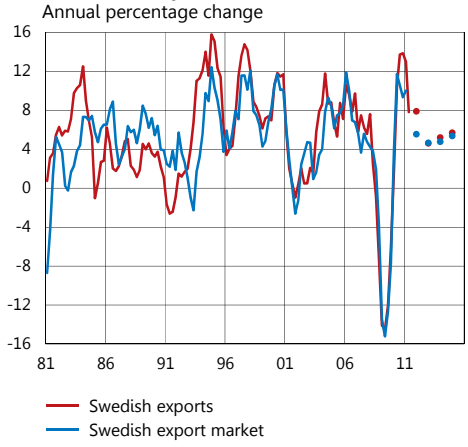
Source: The Riksbank

Figure 1:12. GDP in Sweden
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 1:13. Swedish exports and the world market for Swedish exports
Annual percentage change



Note. The export market aims to measure import demand in the countries to which Sweden exports. This is calculated by aggregating the imports of the 15 countries receiving the most Swedish imports.

Sources: Statistics Sweden and the Riksbank

■ Developments in the financial markets weaken the krona

The turbulence that has characterised developments in the financial markets during the summer and autumn has led to the krona weakening. The krona is expected to remain at this slightly weaker level for the rest of the year. When the financial turbulence has calmed, Sweden's relatively good economic growth and sound public finances will lead to a gradual strengthening of the krona (see Figure 1:11).

Concern for the future slowing down developments in Sweden

■ Weaker growth in Sweden during the second half of 2011

Growth in the Swedish economy has slowed down during the first half of 2011, following the strong recovery from the crisis in 2008-2009. During the second half of this year, growth will weaken further and the economy will grow more slowly than the historical average rate. Growth is also expected to be slightly slower than normal next year (see Figure 1:12).

The poorer growth prospects are due to a number of different factors. Swedish exports are affected through lower growth in demand from abroad. Unease on the international financial markets and the increased uncertainty regarding global growth spread to the Swedish economy mainly through two channels: confidence and wealth. A decline in confidence among Swedish companies and households is reflected in falling share prices and an increase in precautionary saving. The reduced wealth and still high saving will lead to a slow development in consumption and to companies postponing investments. Concern among companies and households in Sweden and abroad is expected to gradually decline, however, as measures are taken to resolve the most acute and immediate problems, particularly in the euro area.

Compared with the conditions in many other OECD countries, growth conditions in Sweden are good. Unlike many other countries, Sweden does not need to tighten fiscal policy and nor is it weighed down by after-effects or by major price falls in the housing market. A better starting position, declining unease among market agents in Sweden and abroad and a continued expansionary monetary policy mean that growth in Sweden will increase in the coming period. Swedish GDP will grow at an historically normal rate at the end of the forecast period.

■ Exports slowing down

So far this year Swedish exports have grown rapidly in relation to the market where Swedish companies are active. Swedish exports consist in large part of intermediate and investment goods and thus have an advantage in the recovery phase of the economic cycle when production and investment increase. This explains the relatively high export growth last year and so far this year. However, the concern over public finances has now meant that world trade has weakened and Swedish exports are therefore also slowing down (see Figure 3:25). It is mainly exports of

goods, which were earlier very strong, that have now entered a calmer phase. The slowdown is clearest within the intermediate and investment goods sectors. This is confirmed by, for instance, export orders for these sectors now looking poorer than before. During the forecast period Swedish exports are expected to grow in line with the export market (see Figure 1:13).

Imports, which have so far been strong, are also expected to be weaker now and to follow domestic demand and exports. Exports are expected to increase more than imports and the contribution of net exports to GDP will thus be positive.

■ Households more cautious

The stock market falls during the summer and autumn have meant that household wealth has declined (see Figure 1:14). Developments in the housing market are also expected to be more subdued in the coming period. This type of development often means that households save more to compensate for the loss of wealth and this dampens consumption. In addition, the financial unease ought to have contributed to an increase in uncertainty regarding future developments in incomes, which also contributes to higher saving.

The increased uncertainty, together with the subdued housing market, also means that households are not expected to increase their borrowing to the same extent as before. Lending to households is now increasing at a slower rate, which is an indication that the household sector rate of indebtedness is already decreasing (see Figure 3:18). On top of this come the new regulations on mortgage ceilings and the relatively higher (compared with a year ago) interest rates.

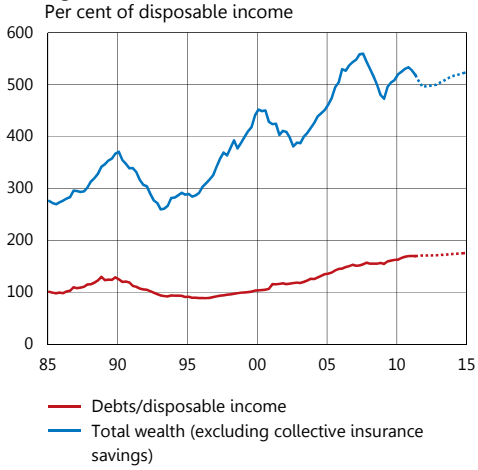
The upturn in household consumption during the first half of the year was primarily due to increased purchases of durable goods and motor vehicles. As these groups of goods are more sensitive to changes in wealth than non-durables, consumption of these goods is expected to increase relatively slowly during the autumn. The monthly statistics regarding registration of new cars and turnover in the retail trade also indicate a deterioration. As household saving is high to start with, there are good opportunities for households to gradually reduce their saving and increase their consumption more quickly when the uncertainty declines (see Figure 1:15).

All in all, consumption is expected to be slower this year and next year and then to grow more quickly. Compared with the assessment in the September Monetary Policy Update, consumption is now expected to be weaker throughout the forecast period.

■ Investment growth slowing down

Investment has increased at a good rate since the beginning of 2010, and unlike other parts of the economy it continued to rise during the first half of 2011. Housing investment as a share of GDP is expected to reach its pre-crisis level as early as this year. However, the recovery in business

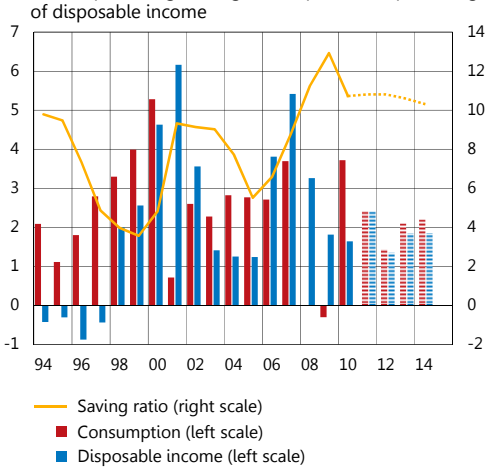
Figure 1:14. Households' total wealth and debt
Per cent of disposable income



Note. There is no official data for households' total wealth. The series refers to the Riksbank's own calculations using data from Statistics Sweden and assessments of future developments. Quarter 2 is principally outcome. Quarter 3 onwards is made up of forecasts.

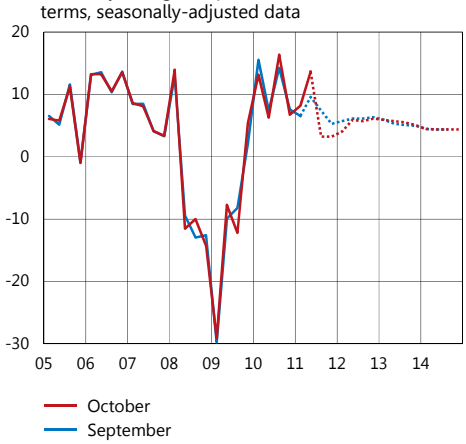
Sources: Statistics Sweden and the Riksbank

Figure 1:15. Households' disposable incomes, consumption and saving ratio
Annual percentage change, fixed prices and percentage of disposable income



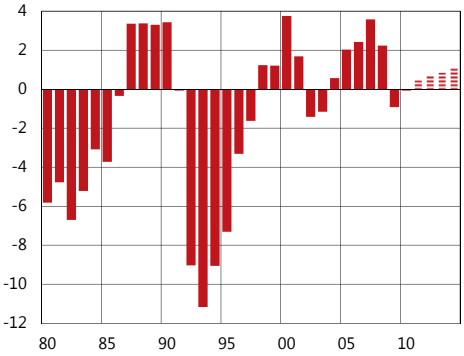
Sources: Statistics Sweden and the Riksbank

Figure 1:16. Gross fixed capital formation
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



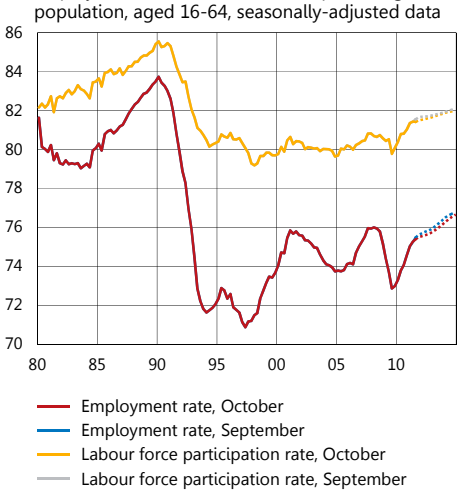
Sources: Statistics Sweden and the Riksbank

Figure 1:17. Public sector net lending
Per cent of GDP



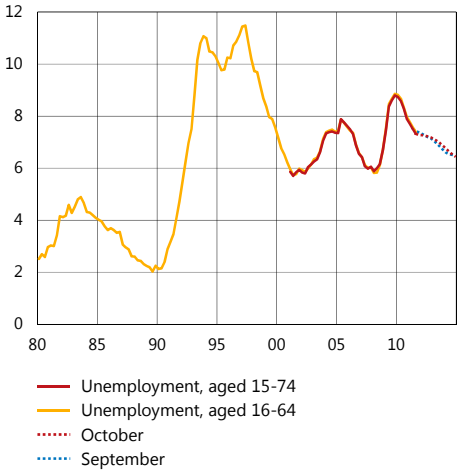
Sources: Statistics Sweden and the Riksbank

Figure 1:18. Employment and labour force participation rates
Employment and labour force as a percentage of the population, aged 16-64, seasonally-adjusted data



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

Figure 1:19. Unemployment
Percentage of the labour force, seasonally-adjusted data



Note. Pre-1987 data have been spliced by the Riksbank. The forecast relates to the 15-74 age group.
Sources: Statistics Sweden and the Riksbank

sector investment excluding housing has been somewhat slower, and its share of GDP is still lower than the pre-crisis level.

Over the coming quarters investment growth is expected to slow down (see Figure 1:16). This is partly due to growth in new construction levelling off and the rate of increase in public sector investment normalising after being pushed up by large temporary investment projects. In addition, the increased concern, which is reflected for instance in the National Institute of Economic Research's business tendency survey, means that some investment decisions are being postponed. The business sector's investment needs are also dampened by the slowdown in production growth.

Capacity utilisation in manufacturing is now in line with its historical average and as the unease on the financial markets declines and demand grows more quickly, the investment need will increase during the course of 2012. Moreover, business sector investment in relation to GDP is still expected to be below normal. This contributes to growth in investment being relatively high in relation to GDP in 2012 and 2013.

■ Strong public finances

The Riksbank's forecasts for fiscal policy are based on what can historically be regarded as a normal development for fiscal policy in relation to the economic cycle. During the first half of the year net lending was positive and for the year as a whole it is expected to be around 0.5 per cent as a share of GDP. After this it will increase to around 1 per cent of GDP (see Figure 1:17).

The government has postponed its planned tax cuts somewhat in view of the economic situation. As the economic situation improves and tax income rises, net lending will therefore strengthen. The government is expected to propose expenditure and income changes corresponding to a total of SEK 50 billion for the years 2013 and 2014. The Riksbank assesses that it will mainly be a question of tax reductions for households and companies and increased public investment. Without these changes, net lending would have been about SEK 20 billion higher per year in 2013 and 2014.

■ Labour market improvement slowing down

During 2011 the Swedish labour market has improved at a slower rate than during the previous year. Following the rapid upturn in 2010, for instance, both labour force participation and the employment rate have increased more slowly (see Figure 1:18).

The poorer economic prospects abroad gradually have an effect on the Swedish economy and this also applies to developments in the labour market, which will continue to slow down next year. The number of hours worked and the number of persons employed are increasing more slowly. The fall in unemployment will continue, although it will slow down further. This is because the number of people employed will continue to increase more than the number of people in the labour force.

Towards the end of the forecast period unemployment will amount to around 6.5 per cent (see Figure 1:19).

■ Resource utilisation close to a normal level

There is no generally-accepted view of how resource utilisation should be calculated. The Riksbank uses a number of different indicators and statistical methods to assess resource utilisation and how it will develop over the next few years.

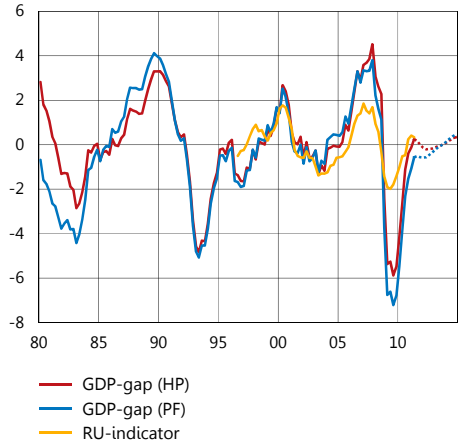
Survey-based indicators point to resource utilisation in companies having risen rapidly and now being at normal levels. In the National Institute of Economic Research's economic tendency barometer capacity utilisation in industry is close to its historical average. The labour shortage is also at an average level. The Riksbank's indicator for resource utilisation, which uses a statistical method to summarise information from surveys and labour market data, also indicates that resource utilisation for the first quarter was slightly above normal during the second quarter, but that it slowed down somewhat (see Figure 1:20). Other indicators, such as the unemployment, the employment rate and the hours worked gap, point on the other hand to more spare capacity than normal in the economy.

During 2013 and 2014, GDP and the number of hours worked will increase faster than their sustainable rates. This means that resource utilisation will increase and that most gaps, which show the difference between the actual and the sustainable levels, will close during the forecast period (see Figures 1:20 and 1:21). The overall assessment is that resource utilisation is now slightly lower than normal, but that it will rise in coming years. Compared with the assessment in September, however, resource utilisation will increase at a slightly slower rate.

■ Higher wage demands in the new bargaining rounds

A new round of wage bargaining has now begun (see the article "New round of collective bargaining in an uncertain economic climate" in this report). The collective demands are higher this time than those prior to the previous bargaining rounds and the wage agreements being renegotiated in autumn 2011 and in 2012 are therefore expected to be slightly higher on average. All in all, according to the short-term wage statistics, wages in the economy as a whole are expected to increase by on average around 3.3 per cent a year during the period 2012 to 2014. In accordance with historical patterns the hourly wages in the economy as a whole are expected to increase slightly more quickly according to the National Accounts than according to the National Mediation Office's short-term wage statistics during the period 2012 to 2014. The growth rate for labour productivity is assessed to slow down over the coming year. This is because it often takes time before companies adjust their personnel to a slowdown in demand and production. The result is that labour productivity deteriorates. Towards the end of the forecast period labour productivity is expected to grow more quickly again.

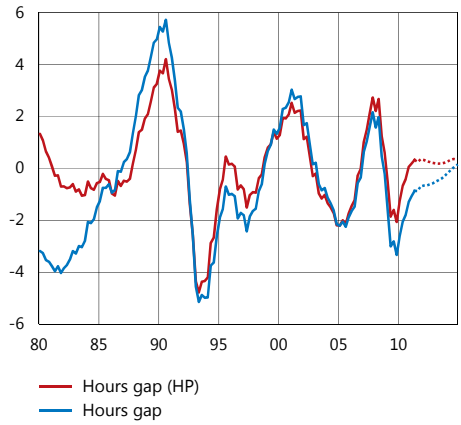
Figure 1:20. GDP-gap and RU-indicator
Per cent and standard deviation



Note. GDP gap (HP) refers to the deviation from trend in GDP calculated with a Hodrick-Prescott filter. GDP gap (PF) refers to the deviation from trend in GDP calculated with a production function. The RU indicator is normalised so that the mean value is 1.

Sources: Statistics Sweden and the Riksbank

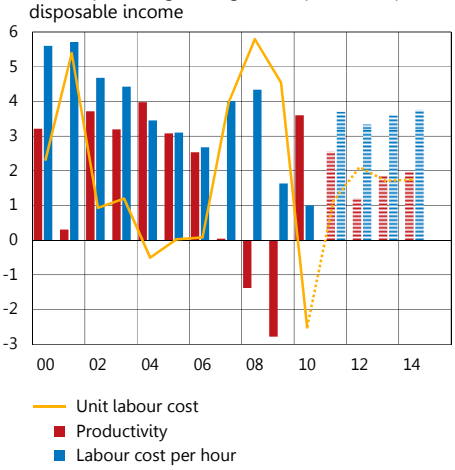
Figure 1:21. Hours gap
Per cent



Note. The hours gap (HP) refers to the deviation from trend in the number of hours worked calculated with a Hodrick-Prescott filter. The hours gap refers to the deviation in the number of hours worked from the Riksbank's assumed trend for the numbers of hours worked.

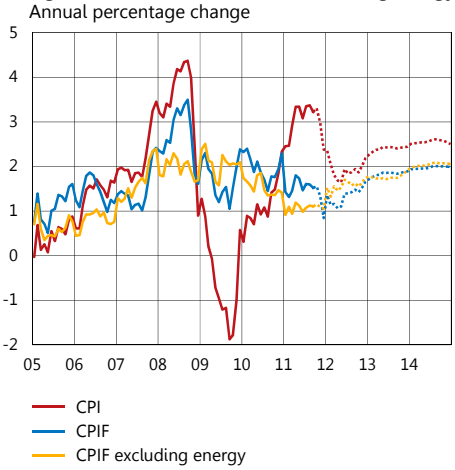
Sources: Statistics Sweden and the Riksbank

Figure 1:22. Cost pressures in the economy as a whole
Annual percentage change, fixed prices and per cent of disposable income



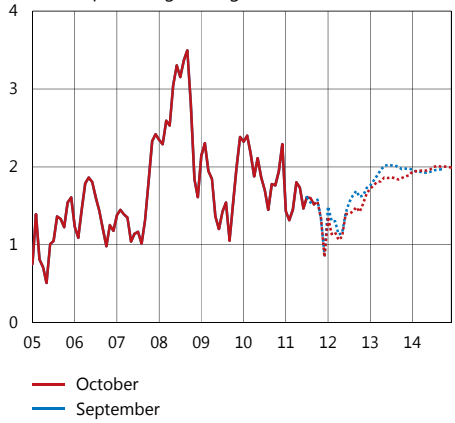
Sources: Statistics Sweden and the Riksbank

Figure 1:23. CPI, CPIF and CPIF excluding energy
Annual percentage change



Note. The CPIF is the CPI with a fixed mortgage rate.
Sources: Statistics Sweden and the Riksbank

Figure 1:24. CPIF
Annual percentage change



Note. The CPIF is the CPI with a fixed mortgage rate.
Sources: Statistics Sweden and the Riksbank

All in all, rising labour costs and declining productivity growth mean that the growth rate for unit labour costs will rise in 2012. After this the growth rate will decline as productivity increases at a faster rate (see Figure 1:22).

■ Low inflationary pressure

CPI inflation is relatively high at present. It amounted to 3.2 per cent in September. On the other hand, CPIF inflation, that is the CPI with a fixed mortgage rate, is moderate and amounted to 1.5 per cent in September. When adjusted for energy prices, CPIF inflation amounted to a low 1.1 per cent.

It is primarily the low rate of increase in unit labour costs and the stronger krona during 2010 that have contributed to holding back inflationary pressures this year. The CPIF excluding energy is expected to remain around the current levels over the coming period, while both CPI and CPIF inflation are expected to fall as the rate of increase in energy prices slows down (see Figure 1:23).

Next year inflation will rise as a result of a weaker krona and rising unit labour costs. CPIF inflation will rise slowly during the forecast period and reach around 2 per cent in 2014. However, CPI inflation will be much higher than CPIF inflation during the forecast period and this is because mortgage rates are rising, mainly due to the Riksbank's repo rate increases. However, mortgage rates have also risen more than is justified by the repo rate increases. This is a consequence of the increase in the banks' funding costs, but probably also due to the banks increasing their margins on mortgages to households. During periods with large interest rate adjustments, measures of inflation that do not include interest rate costs, such as CPIF inflation, provide a better picture of underlying inflationary pressures. In the longer run, when the repo rate has stabilised, CPI inflation and CPIF inflation will coincide. But this takes time and will not happen within the forecast period.

A gloomier world outlook and lower inflation abroad contribute to the forecast that inflation in the longer run will be slightly lower than was forecast in the September Monetary Policy Update. The forecast for CPIF inflation is thus adjusted down, particularly in 2013 (see Figure 1:24). In 2012 the downward adjustment is also due to the rate of increase in energy prices being lower (see Figure 1:25). The lower repo rate path means that mortgage rates are not rising as quickly as was forecast in September. This means that the forecast for CPI inflation has been adjusted down somewhat further compared with the forecast for CPIF inflation.

Monetary policy considerations

■ Lower repo rate path counteracts weaker economic activity

The Riksbank has decided to hold the repo rate unchanged at 2 per cent. Growth prospects in Sweden and abroad have deteriorated. The difficulties in creating a long-term solution to the public finance problems in the United States and the euro area are contributing to increased uncertainty. The slowdown will be greater and the recovery abroad will therefore be more long drawn-out. Towards the end of the forecast period, as confidence gradually returns, the economies in the United States and the euro area will grow at a normal rate again. However, there is still considerable uncertainty over future developments and any unexpected events could have a major impact.

The uncertainty over developments abroad has also affected confidence among households and companies in Sweden. The Swedish economy has so far been strong, but will be affected by the weaker developments abroad. Growth will therefore be weak over the coming year and the improvement in the labour market will slow down. This means that resource utilisation over the coming year will remain at a slightly lower level than normal. As the uncertainty over developments declines and confidence returns, the Swedish economy is expected to grow at a more normal rate and resource utilisation is expected to normalise.

Underlying inflation is still low at present. As resource utilisation in the Swedish economy rises, inflationary pressures will increase, although the weak developments abroad will have a restraining effect. One condition for resource utilisation and cost pressures normalising in the coming period, is that monetary policy will remain expansionary over the coming years. However, monetary policy needs to be gradually tightened and the repo rate will therefore be raised in stages to around 3.5 per cent towards the end of 2014 (see Figure 1:26). This will lead to CPIF inflation stabilising around 2 per cent and resource utilisation stabilising around a normal level at the end of the forecast period.

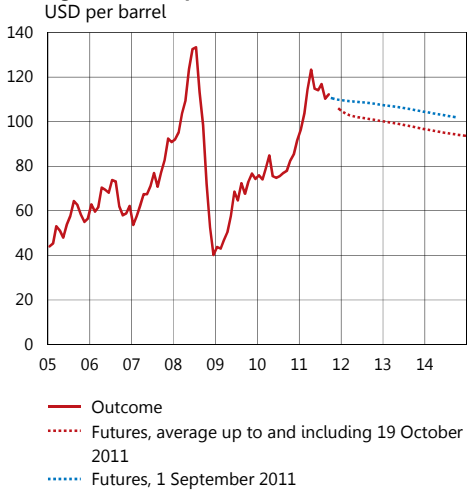
Compared with the assessment made in September, it now appears likely to take longer before resource utilisation normalises and inflation reaches 2 per cent. As the economic outlook and inflation prospects are now somewhat more subdued, the Riksbank is revising down its repo rate path and monetary policy will be more expansionary (see Figures 1:26 and 1:27).

Chapter 2 describes how a lower and a higher repo rate path respectively might affect resource utilisation and inflation.

■ Future economic developments are uncertain and could lead to a different monetary policy

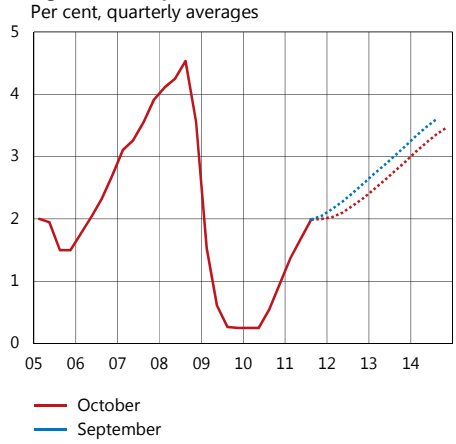
There is considerable uncertainty abroad, and developments could be both better and worse than the forecast in the main scenario. There is a possibility that the public finance problems in the euro area in particular may worsen in a way that makes the recovery more long drawn-out and

Figure 1:25. Oil price, Brent crude
USD per barrel



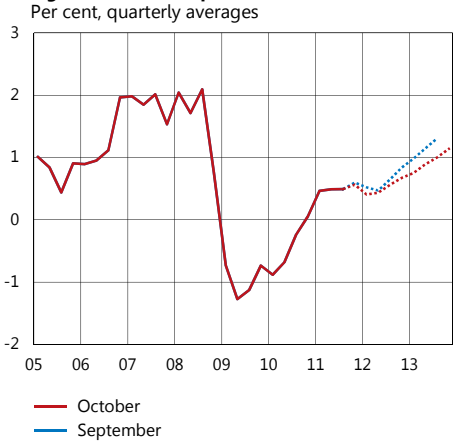
Note. Futures are calculated as a 15-day average. Outcomes represent monthly averages of spot prices.
Sources: Intercontinental Exchange and the Riksbank

Figure 1:26. Repo rate
Per cent, quarterly averages



Source: The Riksbank

Figure 1:27. Real repo rate
Per cent, quarterly averages



Note. The real repo rate is calculated as an average of the Riksbank's repo rate forecasts for the coming year minus the inflation forecast (CPIF) for the corresponding period.
Source: The Riksbank

has greater negative effects on the Swedish economy. In such a scenario monetary policy would need to become more expansionary. Chapter 2 describes the effects of this on the Swedish economy in greater detail.

However, we should not rule out the possibility that the problems abroad turn out to be less extensive and that the financial turbulence will calm sooner than expected. Whether this is the case depends to a large degree on whether sustainable political solutions can be reached in Europe and the United States. In a more favourable scenario, confidence could return rapidly and the slowdown could be less drawn-out. This could reduce the need for expansionary monetary policy in Sweden.

It is also possible that the currently high international inflation will remain high, and that this will combine with weak growth and high unemployment. If this happened, inflation in Sweden would also be pushed up through rising import prices and this could justify tighter monetary policy. Further uncertainty factors, such as higher wage increases in Sweden and a weaker krona, and their consequences for Swedish monetary policy, are also discussed in Chapter 2.

CHAPTER 2 – Alternative scenarios and risks

There is currently great concern over public finances in several euro area countries: Greece in particular, but also Portugal, Ireland and Italy. A failure to deal with these problems in an orderly way would undermine the functioning of the financial markets, resulting in an increase in interest rate spreads and a decrease in the provision of credit. This in turn would lead to a greater slump in economic activity around the world. This would result in both inflation and resource utilisation in Sweden being lower than in the main scenario. If this scenario is realised, the Riksbank will need to reduce the repo rate in order to limit the effects on inflation and resource utilisation.

Inflation in the United States, the euro area and the United Kingdom has been worryingly high recently. If the high inflation were to become entrenched, at the same time as growth falls and unemployment rises, the central banks in the countries struggling with sovereign debt problems would face a difficult dilemma. Immediate interest rate increases to dampen inflationary pressures would have a negative effect on both the real economy and the debt problems. It is probable that the central banks would wait to make interest rate increases in such a scenario, given the debt problems. Sweden does not have the same problem, and can raise the repo rate more quickly if an inflation threat were to arise.

The development of the economy in the period ahead is uncertain. There are a number of circumstances that could lead to a different course of economic development and thus justify a different direction for monetary policy than the one expected in the main scenario. This is reflected in the uncertainty bands around the forecasts in Figures 1:2-1:5. In this Chapter, the Riksbank presents two alternative scenarios for the development of the economy that differ from the main scenario. The aim of the scenarios is to highlight the uncertainty that prevails regarding the future and the risks that are regarded as being particularly important at present.

One uncertainty factor concerns the public finance situation in the euro area. In the main scenario it is assumed that the most acute and immediate public finance problems will be handled in an orderly way, although it will take time to implement sustainable, long-term solutions. However, there is considerable uncertainty about this development and the situation could be either better or worse than assumed in the main scenario.

The first alternative scenario illustrates the effects of a prolonged public finance crisis in the euro area. This scenario assumes that the problems in countries with weak public finances cannot be resolved in an orderly way. Banks suffer major loan losses and their possibilities to obtain funding in the financial markets deteriorate even more than in the main scenario. This leads to a substantial increase in risk premiums, increased interest-rate spreads and credit tightening in the euro area as a whole. The result is a deeper slump in international economic activity, which results in both inflation and resource utilisation in Sweden being lower than in the main scenario. In this scenario, the Riksbank will therefore reduce the repo rate in order to limit the effects on inflation and resource utilisation.

The problems abroad may also be less extensive and the financial turbulence may calm down sooner than expected. In a more favourable scenario, confidence could return rapidly and the slowdown could be less prolonged. This would reduce the need for expansionary monetary policy.

The second alternative scenario highlights the effects of inflation remaining high in the United States, the euro area and the United Kingdom throughout the forecast period. The high rate of inflation in these areas is largely due to high energy prices, and in the main scenario it is assumed that inflation will be dampened when energy prices fall. However, the high rate of inflation may also be due to other things, for instance that potential output has fallen since the financial crisis in 2008-2009. This means that resource utilisation, and thereby inflationary pressures, are higher to start with than is assumed in the main scenario. It is also assumed in this scenario that potential growth is lower during the forecast period, which means that actual growth falls, unemployment rises and inflation remains high. Central banks in countries struggling with public finance problems are faced with a difficult balancing act. Immediate interest rate increases to dampen inflationary pressures would have a negative effect on both the real economy and the public finance situation. It is therefore assumed that interest rate increases are not implemented until the end of 2012. Sweden does not have the same problems and is thus able to act more quickly with repo-rate increases to avert the threat of inflation.

In addition to these two alternative scenarios, there are a number of other uncertainty factors that may give rise to a different economic policy development and thereby affect the monetary policy stance. One such factor relates to wage formation. The Monetary Policy Report published in July 2011 discussed the consequences of the approaching round of collective bargaining resulting in higher wage increases than assumed in the main scenario. If wages increase faster than growth in productivity, both inflation and unemployment will increase. If this happens, the repo rate will have to be raised more rapidly than in the main scenario.

In conclusion, we discuss two alternative courses of action for monetary policy. The first entails the repo rate being raised more than in the main scenario, whereas the second alternative entails the reverse.

Alternative scenario: Prolonged crisis in public finances

There is currently great concern over public finances in several euro area countries. The situation is particularly serious in Greece, which has not managed to reduce its budget deficit to the targeted extent. However, public finance problems also pose a major challenge to a number of other countries (see the article "The debt crisis in Europe" in this report).

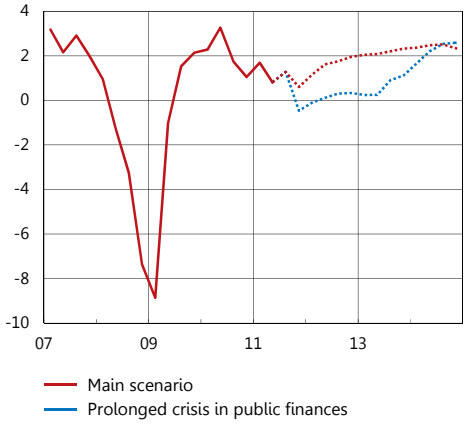
The main scenario assumes that the most acute public-finance problems will be dealt with in an orderly way and that sustainable solutions will eventually be implemented. In this alternative scenario it is assumed instead that it will not be possible to deal with these problems in an orderly way. Banks that are directly exposed to the problem countries could then suffer large loan losses. Uncertainty about which banks have such exposures will make it even more difficult for a number of banks to obtain funding on the financial markets. Some banks may then end up in an acute crisis situation and need government support in order to survive. This would apply further pressure to public finances even in the large euro countries, and could lead to expectations that more countries will experience acute problems. The crisis would thus spread to a larger number of countries. This would lead to a substantial increase in risk premiums and increased interest rate spreads. The turbulence on the financial markets would increase and there would be a credit crunch in the euro area as a whole when the banks have to improve their capital levels.

As there are strong financial links between the euro area and the United States, it is assumed that there will be a tightening of credit in the United States too, although to a lesser extent than in the euro area. However, thanks to the readiness of the authorities in both the euro area and the United States to assist with the supply of liquidity, the situation will not become as serious as it was following the bankruptcy of Lehman Brothers in 2008.

One effect of the credit tightening will be that the growth of TCW-weighted GDP will come to a standstill over the next two years (see Figure 2:1). Contributing to this is a decline in confidence among households and companies. Rising risk premiums for euro assets will cause the euro to fall against the US dollar by approximately 5 per cent, which will dampen the downturn in GDP in the euro area to some extent. In this scenario, TCW-weighted inflation will fall, above all because of low inflation in the euro area, and will remain low throughout the forecast period (see Figure 2:2). As policy rates are already very low in both the euro area and the United States, the room for manoeuvre for conventional monetary policy is limited (see Figure 2:3). Various forms of unconventional monetary policy will therefore be needed, over and above policy-rate cuts, to mitigate the crisis.

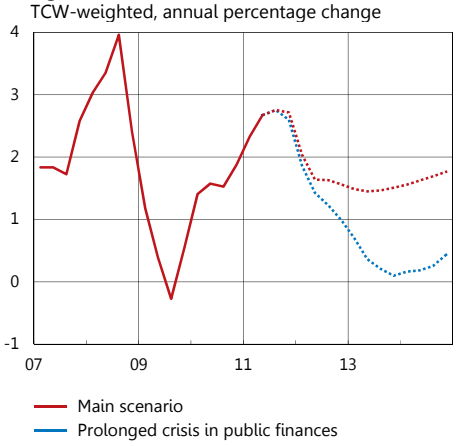
The Monetary Policy Report published in July 2011 included a similar scenario with a more severe crisis in public finances abroad. That scenario assumed it would be possible to deal with the problems relatively quickly, which meant that growth was slightly positive already

Figure 2:1. GDP abroad
TCW-weighted, quarterly changes in per cent calculated in annualised terms



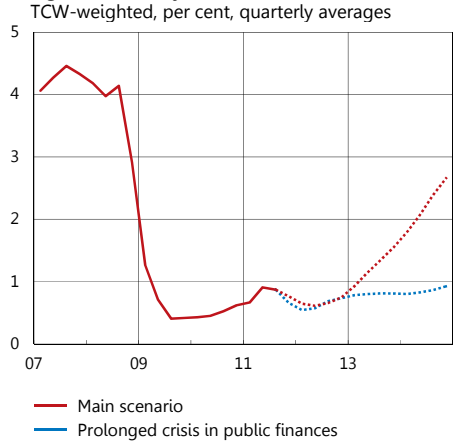
Note. TCW refers to a weighting of Sweden's most important trading partners.
Sources: National sources and the Riksbank

Figure 2:2. Inflation abroad
TCW-weighted, annual percentage change



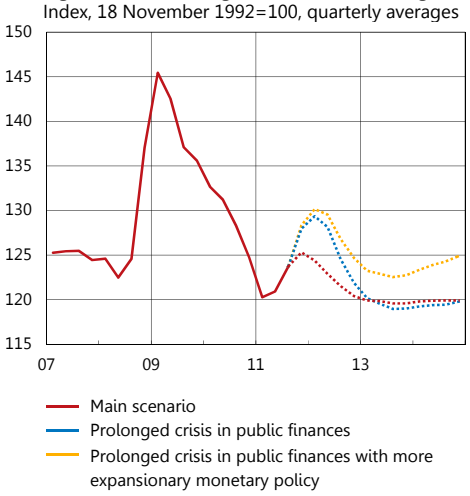
Note. TCW refers to a weighting of Sweden's most important trading partners.
Sources: National sources and the Riksbank

Figure 2:3. Policy rate abroad
TCW-weighted, per cent, quarterly averages



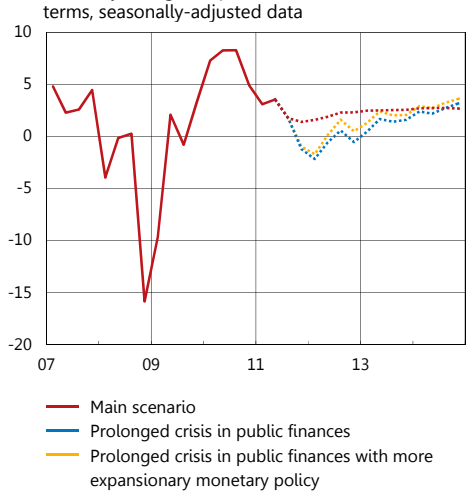
Note. TCW refers to a weighting of Sweden's most important trading partners.
Sources: National sources and the Riksbank

Figure 2:4. TCW-weighted nominal exchange rate
Index, 18 November 1992=100, quarterly averages



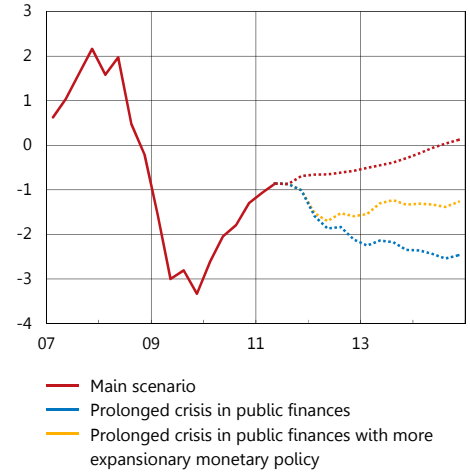
Note. TCW refers to a weighting of Sweden's most important trading partners.
Source: The Riksbank

Figure 2:5. GDP
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 2:6. Hours gap
Per cent



Sources: Statistics Sweden and the Riksbank

after a year or so. This scenario assumes instead that the crisis in public finances will be long drawn-out, above all because more countries will be affected. This means it will take longer before growth abroad is back at normal levels.

■ Sweden is in a relatively strong initial position to manage the crisis

As far as Sweden is concerned, the preconditions for coping with the effects of the crisis are relatively good. Government finances are strong at the outset, which means that it will be possible to implement fiscal policy stimulus measures if the situation deteriorates. There is also scope for a more expansionary monetary policy. Swedish banks have limited direct exposures to the problem countries in southern Europe. They have reduced their exposures to the Baltic countries since the financial crisis in 2008-2009. They have also reduced the liquidity risks and improved capital adequacy since then. Nevertheless, they may be affected. For example, they may find it difficult to obtain funding on the international financial markets if the financial turbulence increases.

■ The krona weakens in the wake of financial turbulence

It is difficult to predict what will happen to the Swedish krona in a scenario with a crisis in public finances and with contagion effects via the financial markets. On the one hand, the krona usually weakens in periods of financial turbulence, as was the case, for example, during the financial crisis of 2008-2009. On the other hand, the krona may strengthen as Sweden has strong public finances. Moreover, the krona may be perceived as a safe haven. In this scenario, however, it is assumed that the krona, as in previous periods of financial unrest, will fall in value. This can be interpreted as the market demanding an additional risk premium for investing in Swedish assets. The krona will therefore weaken by almost 5 per cent in the scenario (see the blue line in Figure 2:4).

■ Growth and inflation fall

Lower GDP growth abroad will result in a decline in the demand for Swedish goods, which will lead to a fall in Swedish exports. This will weaken the prospects for growth above all during the initial phase of the crisis (see the blue line in Figure 2:5). The tightening of credit and the decline in confidence in Sweden, which will result in lower levels of investment and consumption, will also contribute to this. The lower level of demand will in turn weaken the situation on the labour market. All of the indicators of resource utilisation will therefore be weaker in this scenario (as in the example of the hours gap, that is the difference between the actual number of hours worked and the trend, in Figure 2:6). The weaker exchange rate will lead to rising inflation initially, but when the krona strengthens once again inflation will fall (see the blue line in Figure 2:7). The lower level of resource utilisation, which will push down inflation via lower cost pressures, will also contribute to this.

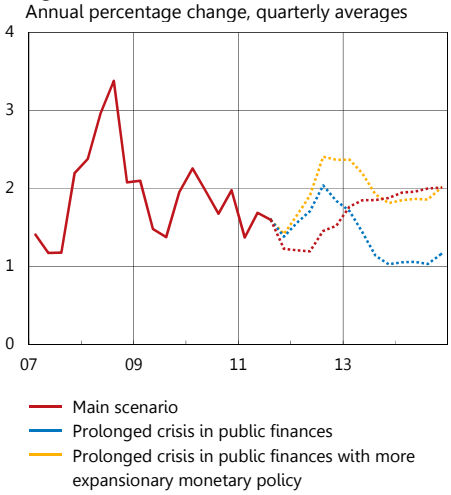
Repo rate cut to mitigate the consequences of the crisis

Behind the blue lines in Figures 2:4-2:7 is the assumption that the repo rate follows a historically-normal pattern, in the form of a simple policy rule, where the interest rate depends on developments in inflation and resource utilisation. Under this rule, the repo rate is initially raised to counteract inflationary pressures stemming from the weaker exchange rate and is then lowered when the krona strengthens and inflation falls (see the blue line in Figure 2:8). As inflation undershoots 2 per cent during the latter part of the forecast period and resource utilisation is weak throughout the forecast period there are, as in the autumn of 2008, good reasons for reducing the repo rate more, and more quickly, than follows from the simple rule. A possible policy would be to refrain from raising the repo rate and instead gradually reduce it to 1 per cent (see the yellow line in Figure 2:8). This would make it possible to limit the effects of the crisis on the real economy (see the yellow lines in Figures 2:5-2:6). A lower repo rate weakens the krona further (see the yellow line in Figure 2:4), which initially pushes up inflation slightly above 2 per cent. In the slightly longer run the development of the krona, together with higher demand, leads to inflation remaining close to 2 per cent. Further repo-rate cuts would mitigate the consequences of the crisis on the real economy even more, but would then risk leading to an increase in the more long-term inflation expectations and to other imbalances. In the scenario these two consequences are weighed against each other to produce a well-balanced monetary policy.

It is assumed in the scenario that the krona will weaken when financial turbulence increases. This leads to inflation rising at the start of the crisis. But as Sweden has strong public finances, the krona may instead strengthen. This would dampen inflationary pressures further and lead to a lower repo rate than that presented in the scenario.

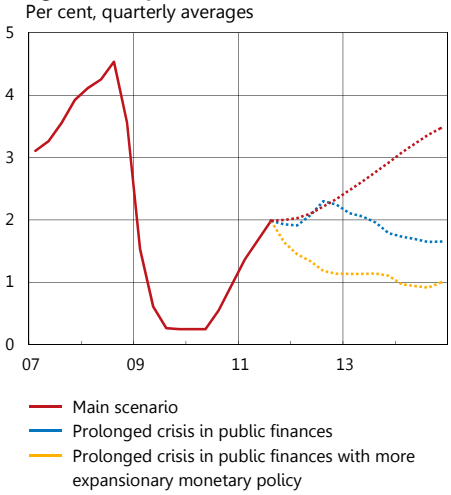
It is also assumed in the scenario that the Riksbank only uses the repo rate to counteract the macroeconomic effects of the crisis in public finances. In practice, other instruments are also available to support the economy and the financial sector. During the most recent financial crisis a number of extraordinary measures were taken to support the banks. If a similar situation were to arise again, the Riksbank will where justified use such measures to mitigate the effects on the economy and the financial sector.

Figure 2:7. CPIF
Annual percentage change, quarterly averages



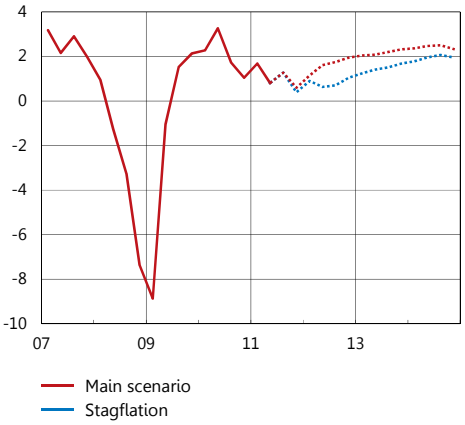
Sources: Statistics Sweden and the Riksbank

Figure 2:8. Repo rate
Per cent, quarterly averages



Source: The Riksbank

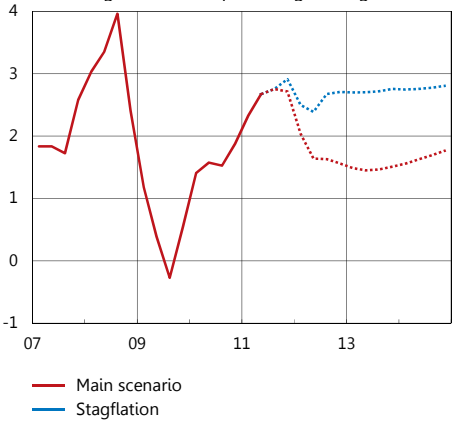
Figure 2:9. GDP abroad
TCW-weighted, quarterly changes in per cent calculated in annualised terms



Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: National sources and the Riksbank

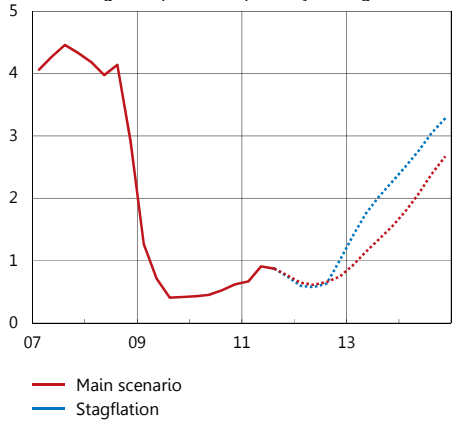
Figure 2:10. Inflation abroad
TCW-weighted, annual percentage change



Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: National sources and the Riksbank

Figure 2:11. Policy rate abroad
TCW-weighted, per cent, quarterly averages



Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: National sources and the Riksbank

Alternative scenario: Stagflation

Inflation has been high in many countries recently. In the United States, CPI inflation was 3.9 per cent in September. In the euro area, HICP inflation was 3.0 per cent and in the United Kingdom CPI inflation was 5.2 per cent in the same month. In all of these areas the measures of underlying inflation, which exclude energy prices, for instance, have also risen. Moreover, some measures of inflation expectations have also increased in pace with the increase in inflation.

In the United States, as well as in the euro area and the United Kingdom, rising energy prices have helped to push up inflation to these high levels. The fact that energy prices are rising is partly due to the development of the emerging economies, where resource utilisation is becoming increasingly strained in many cases and inflation is therefore at very high levels. The relatively high use of oil and other commodities in production and consumption in these countries has helped to push up the prices of both energy and other commodities.

In the main scenario it is assumed that resource utilisation in the United States, the euro area and the United Kingdom is lower than normal and that inflation will therefore fall as energy prices also fall. However, it cannot be ruled out that inflation will become entrenched at high levels. One reason for this may be that energy prices themselves remain high throughout the forecast period. Another may be that high inflation expectations will be reflected in the form of higher wage demands, which will create a negative spiral in which the high inflation expectations become self-fulfilling. A third reason is that potential output has fallen more since the financial crisis in 2008-2009 than is assumed in the main scenario. A lower level of potential output will make resource utilisation more strained in the initial position and inflation will not fall as quickly when energy prices fall.

In this alternative scenario it is assumed that the high level of inflation abroad becomes entrenched (see Figure 2:9). This is primarily because it is assumed that the level of potential output from 2008 and onwards is lower in the United States, the euro area and the United Kingdom than assumed in the main scenario. Lower potential output means that resource utilisation is higher in the initial position. Additionally, it is assumed in the scenario that potential growth will be lower during the forecast period, which means that actual growth abroad will also be lower than in the main scenario (see Figure 2:10). The central banks will thus face a difficult balancing act when growth slows down and unemployment rises at the same time as inflation remains high. Immediate interest rate increases to dampen inflationary pressures would have a negative effect on both the real economy and the debt problems. It is therefore assumed in this scenario that the interest rate increases do not come until the end of 2012 (see Figure 2:11).

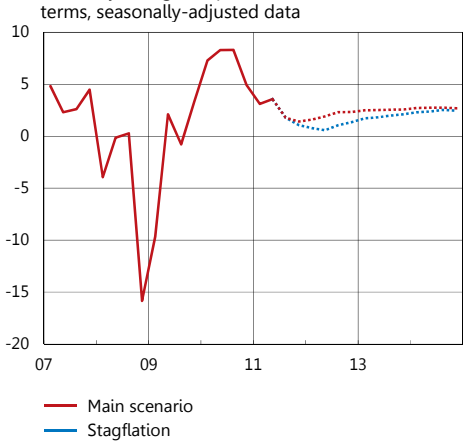
■ Tighter monetary policy dampens the effects on Swedish inflation

Weaker GDP growth abroad means that the demand for Swedish goods will increase more slowly. Lower exports will lead to declining growth in Sweden (see Figure 2:12). Lower production will lead to rising unemployment. Both the hours worked gap and the GDP gap develop roughly in line with the main scenario, however, as potential levels also fall in Sweden when potential growth abroad falls.

The higher level of inflation abroad will lead to imported goods becoming more expensive in Sweden and this means that inflation will increase here too (see Figure 2:13). Unlike the euro area and the United States, Sweden has no sovereign debt problems to take into account. The repo rate is therefore raised relatively rapidly to fend off the threat of inflation (see Figure 2:14). This increases the cost of loans for households and companies, while interest on savings will rise to a corresponding degree. This will contribute to dampening resource utilisation and the increase in inflation.

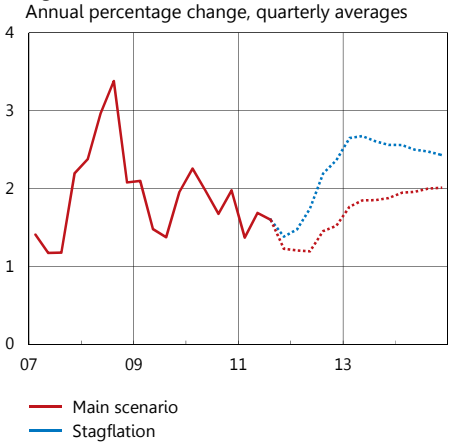
Although an even higher repo rate would mean that inflation did not overshoot the 2 per cent target as much, it would also mean that Swedish growth was even lower, which would result in even lower resource utilisation and higher unemployment. In the scenario these two consequences are weighed against each other to produce a well-balanced monetary policy.

Figure 2:12. GDP
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



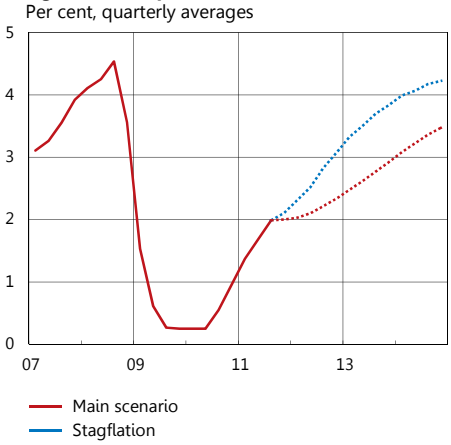
Sources: Statistics Sweden and the Riksbank

Figure 2:13. CPIF
Annual percentage change, quarterly averages



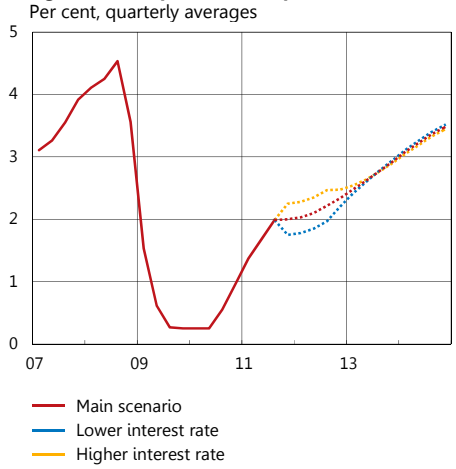
Sources: Statistics Sweden and the Riksbank

Figure 2:14. Repo rate
Per cent, quarterly averages



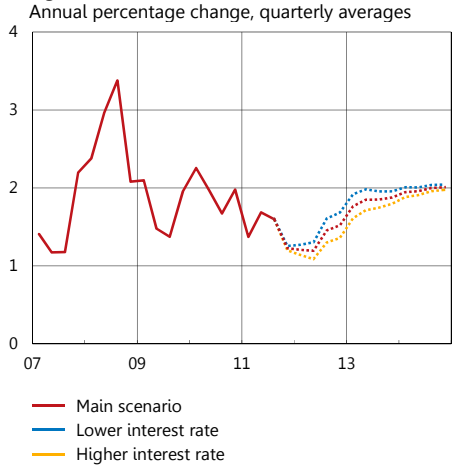
Source: The Riksbank

Figure 2:15. Repo rate assumptions
Per cent, quarterly averages



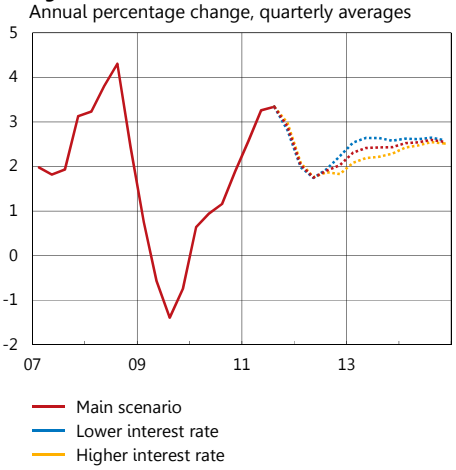
Source: The Riksbank

Figure 2:16. CPIF
Annual percentage change, quarterly averages



Sources: Statistics Sweden and the Riksbank

Figure 2:17. CPI
Annual percentage change, quarterly averages



Sources: Statistics Sweden and the Riksbank

Alternative scenarios for the repo rate

This section describes two alternative scenarios for the repo rate and the effects they entail for inflation and various indicators of resource utilisation. In the first scenario, the repo rate is set at a level 0.25 percentage points higher than in the main scenario for four quarters. The second scenario describes the effects of setting the repo rate 0.25 percentage points lower than in the main scenario for four quarters (see Figure 2:15).

■ A higher repo rate will dampen inflation and resource utilisation

It will also lead the banks and other financial institutions to raise their savings and lending rates to roughly the same extent. When households face higher interest rates, they choose to increase their savings and reduce their consumption. The consequence of this is that Swedish companies will face slightly lower demand for their goods and services. Demand for labour will thus fall and companies will slow down their investment. The higher interest rates will also contribute to this.

Higher interest rates also mean that the return on Swedish assets in relation to foreign assets will rise, which will lead to the exchange rate strengthening in relation to the main scenario. This slows down exports and means that prices of imported goods are lower. All in all, a higher repo rate means that resource utilisation will be lower than in the main scenario (see the yellow lines in Figures 2:18-2:20). Lower demand will also lead companies to slow down their rate of price increase, which together with lower imported inflation will have the result that CPIF inflation falls in relation to the main scenario (see Figure 2:16). The effect on CPI inflation will be less initially, as the households' mortgage costs increase when the repo rate is raised (see Figure 2:17).

■ A lower repo rate increases inflation and resource utilisation

In the second scenario the Riksbank reduces the repo rate instead. The effects on household saving and consumption will thereby be the reverse. The lower return on saving will lead households to increase their consumption, which will lead to higher demand. The lower interest rates will also stimulate investment. The effects on the exchange rate will also be the reverse compared with the scenario with a higher interest rate. Consequently, resource utilisation will be higher than in the main scenario (see Figures 2:18-2:20), while inflation will also be higher (see Figures 2:16 and 2:17). Here too, the effects on CPI inflation will be lessened initially by the fact that mortgage costs will be lower.

■ Well-balanced monetary policy in the main scenario

The two repo-rate paths, higher repo rate and lower repo rate, serves to illustrate how alternative paths for monetary policy affect inflation and resource utilisation. However, it is no simple task to assess which path for the repo rate gives the best balance between stabilising inflation and stabilising resource utilisation.

A lower repo-rate path means that inflation measured in terms of the CPI will be further from the inflation target during the forecast period than in the main scenario. But it also means that CPIF inflation will reach 2 per cent more quickly. A higher repo rate path means the opposite: CPI inflation will be closer to the target but it will take longer for CPIF inflation to approach 2 per cent.

In the case of resource utilisation, some measures, for example unemployment, indicate that there is still a degree of spare capacity in the economy, while other measures, for example the GDP gap, indicate that resource utilisation is largely at a normal level. The overall assessment in the main scenario is that resource utilisation is now somewhat lower than normal. However, resource utilisation will normalise towards the end of the forecast period. With a lower repo rate path, resource utilisation would be higher during the forecast period. The higher repo-rate path will instead lead to lower resource utilisation.

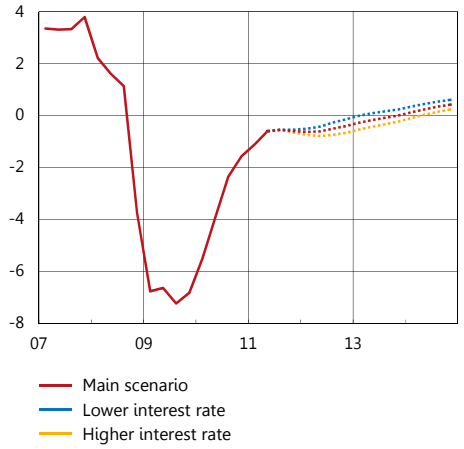
Arguments in favour of the lower repo-rate path are thus that CPIF inflation would approach the target of 2 per cent more rapidly and that unemployment would be lower. On the other hand, the lower repo-rate path would result in higher CPI inflation and a GDP gap that lies somewhat above its normal level during the latter part of the forecast period. The hours gap is also somewhat higher than normal towards the end of the forecast period with the lower repo rate.

The lines presented in Figures 2:16-2:20 are based on historically-estimated links between changes in the repo rate and their effects on the real economy and inflation. According to these estimates, changes in the repo rate have a rather immediate effect on economic development. Despite the fact that international demand is expected to decline, Sweden may be able, according to these estimated links, to withstand the effects of this decline providing that the repo rate is sufficiently reduced. The slowdown in economic activity is, however, at present largely due to the fact that companies and households are reluctant to invest and consume because of the uncertainty over future economic developments. In such a situation, it is doubtful whether monetary policy will have the same immediate effect as indicated by the historically-estimated links.

If the effects of changes in the repo rate were instead to come more gradually, the lower repo-rate path would still dampen the fall in demand and increase inflation. However, the greatest effects of a lower repo rate would come during the latter part of the forecast period, when the main scenario indicates that resource utilisation will be close to or slightly above a normal level and CPIF inflation will be close to 2 per cent and, moreover, rising. One consequence of this would be that the repo-rate cut would soon have to be followed by a repo-rate increase. Monetary policy would then be disjointed. In addition, there is a risk that such a policy would cause housing prices and household indebtedness to begin rising again in a way that could cause imbalances in the economy in the long term.

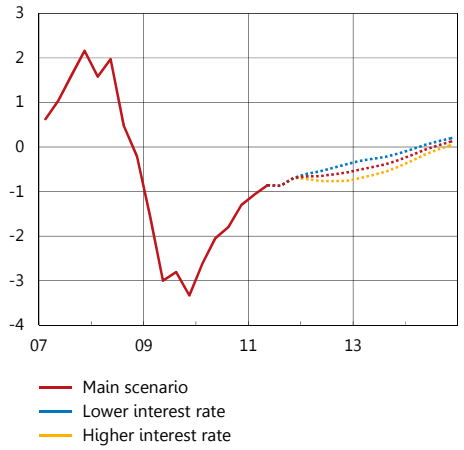
The Riksbank's overall assessment is that the repo-rate path in the main scenario provides a suitable balance between the need to stabilise inflation and the need to stabilise resource utilisation.

Figure 2:18. GDP gap
Per cent



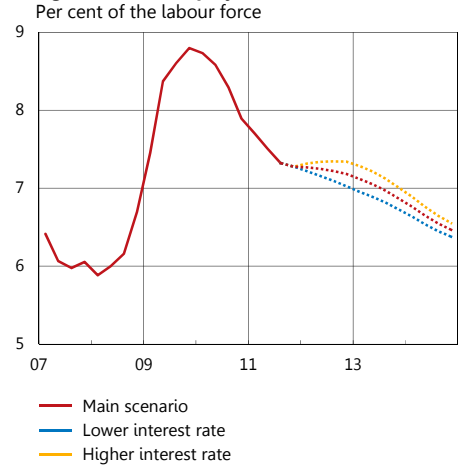
Note. Refers to GDP's deviation from trend calculated using a production function.
Sources: Statistics Sweden and the Riksbank

Figure 2:19. Hours gap
Per cent



Sources: Statistics Sweden and the Riksbank

Figure 2:20. Unemployment
Per cent of the labour force



Sources: Statistics Sweden and the Riksbank

CHAPTER 3 – Current state of the economy

This chapter presents the information received since the Monetary Policy Update was published in September and the Riksbank's assessment of economic prospects in the quarters ahead.

There are now several signs in economic statistics and confidence indicators that economic growth abroad is slackening off. The strong growth in the emerging markets has also slowed down. In addition, the sovereign debt problems in the euro area have increased in scope, with a negative effect on the recovery. There are now even signs of a slowdown in what are known as the core countries of the euro area. The recovery of the US economy also continues to be slow. However, at the same time, international inflation continues to be relatively high.

Lower international growth is expected to lead the Swedish economy to slow down slightly more rapidly than previously assumed. Swedish GDP continued to grow strongly during the second quarter of the year, but growth is expected to be weaker in the second half of the year. Underlying inflation in Sweden continues to be low, while CPI inflation is significantly higher. However, inflation expectations have fallen from high levels recently.

The international recovery is slowing down

The emerging markets are continuing to grow rapidly, if at a slightly slower rate

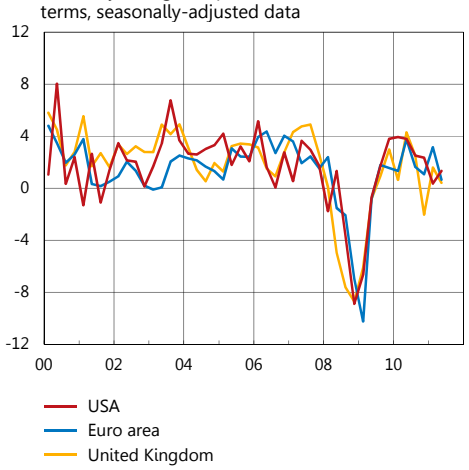
Growth in Asia has been strong over the last year. However, a slowdown took place during the first half of the year due to disruptions to output following the earthquake in Japan. Nevertheless, domestic demand in Asia has been sustained by a stimulatory economic policy, strong credit growth and rapidly rising asset prices. In Latin America, growth has continued to be high this year due to high asset prices, large inflows of capital and other factors. In several economies, there are few or no unutilised resources, and there are even signs of overheating in certain areas.

However, a tighter economic policy has meant that growth has slowed down somewhat over the last quarter. In both Asia and Latin America, industrial production has thus slowed down in recent months. The recent turbulence on the financial markets with falling share prices has also led to increased pessimism among both households and companies in both regions.

Slow recovery in the United States

Growth in the United States has been weak in the first six months of this year. Revised statistics show that GDP increased by 0.4 per cent on an annual rate in the first quarter, and by 1.3 per cent in the second quarter (see Figure 3:1). Rising energy prices and problems linked to the earthquake in Japan can partly explain this slow growth. Even though these effects have now abated, there are many indications that growth will continue to be weak in the autumn. Share prices have fallen and confidence among households and companies has fallen heavily (see Figure 3:2). Among other causes, this increased pessimism can be attributed to uncertainty on how to rectify the national budget deficit

Figure 3:1. GDP
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



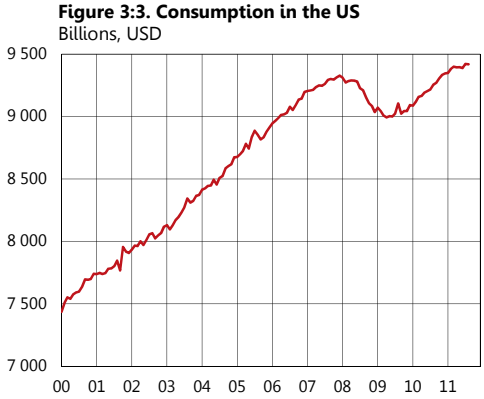
Sources: Bureau of Economic Analysis, Eurostat and OECD

Figure 3:2. Household expectations of the future and firms confidence in the manufacturing sector in the USA
Deviation from mean value, number of standard deviations

Note. Mean value and standard deviation refer to the period January 1985 to September 2011.

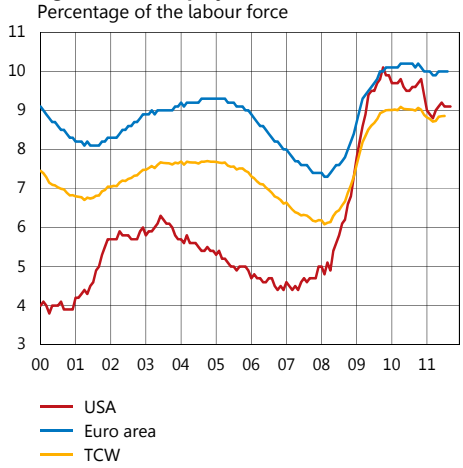
Sources: Institute for Supply Management, the Conference Board and the Riksbank

Figure 3:3. Consumption in the US
Billions, USD



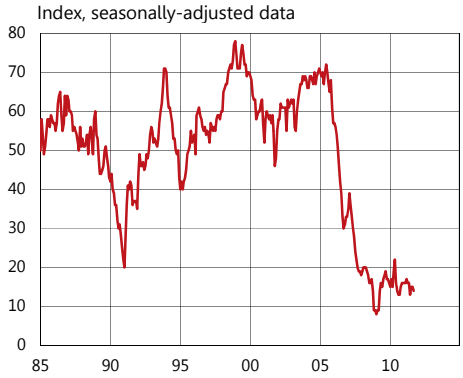
Source: Bureau of Economic Analysis

Figure 3:4. Unemployment
Percentage of the labour force



Sources: National sources and the Riksbank

Figure 3:5. Confidence index for the US housing market
Index, seasonally-adjusted data



Note. The index (the Housing Market Index or HMI) is based on monthly survey responses from NAHB members regarding demand for and sales of new housing on the US housing market.
Source: National Association of Home Builders

and the increasing public debt. Uncertainty over fiscal policy is great, not least due to difficulties in reaching agreement in Congress. The new fiscal policy stimulation measures proposed by President Obama in September are only expected to receive the partial support of Congress.

Household consumption was weak in the first six months and remained unchanged in August (see Figure 3:3). However, retail sales figures indicate increased consumption in September. Unemployment remains at a high level (see Figure 3:4). While employment rose by just over 100 000 persons in September, this rate of increase is not enough to cause a more substantial fall in unemployment. The housing market also remains weak. Sales figures for existing housing decreased slightly in September. Housing construction increased in September, but there was a decrease in the number of building permits issued. Optimism in the building sector increased in October, but remains on a low level from a historical perspective (see Figure 3:5). New statistics show that many households are finding it difficult to repay their mortgages and continued foreclosures can thus be expected. One positive factor for growth conditions is that the business sector's profits as a proportion of GDP in the second quarter were at the highest level since the early 1950s – so once companies' future expectations improve, they will have a large amount of money for new investments and new recruitment.

■ Sovereign debt problems increasing in the euro area

Growth in the euro area has been varied so far this year, with a strong first quarter and a weak second quarter. This can partly be explained by temporary effects such as the Japanese earthquake and fiscal policy measures. The postponement of construction investments from the fourth quarter of last year to the first quarter of this year is another temporary effect that contributed to high growth at the start of this year. Definitive statistics for GDP growth in the second quarter showed an increase of 0.7 per cent at an annual rate (see Figure 3:1). Domestic demand fell as household consumption decreased. However, net exports contributed positively to growth as imports did not increase as strongly as exports. Countries that had previously seen relatively rapid growth, such as Germany, also slowed down in the second quarter. Germany and France have otherwise largely recovered from the fall in GDP that occurred after the crisis of 2008–2009. On the other hand, the level of GDP continues to be significantly lower in Italy and Spain. Unemployment in the euro area is high and the assessment is that there is plenty of spare capacity in the economy (see Figure 3:4). However, it should be emphasised that there are great differences between countries.

Uncertainty over future developments has increased over the summer. There has been a marked decline in confidence indicators for households, companies and agents on the financial markets (see Figure 3:6). Scepticism about the ability of certain countries to manage their sovereign debts has become increasingly widespread. Previously, this unease primarily focused on conditions in a few small countries. However, this unease has now also started to focus on larger countries in

Europe due to certain banks' exposures towards problematic countries. This has contributed towards the banks increasing liquidity and tightening lending. Unease over the sustainability of Greece's reform programme and the debt situation there has increased again, contributing to lower stock market prices in the euro area as a whole. Politicians in Europe have recently intensified the process of limiting the fiscal problems to the more peripheral countries of the euro area (see the discussion in the article "The debt crisis in Europe" in this Report).

■ Weak GDP growth in the United Kingdom as well

In the United Kingdom, GDP increased by 0.4 per cent at an annual rate in the second quarter compared to the first quarter (see Figure 3:1). This weak outcome is partly due to temporary factors such as output problems following the earthquake in Japan. However, industrial production has been weak since the sharp decline in 2008 and 2009. The development of household consumption has also been dampened for instance due to the weak development of households' real disposable incomes. This, in turn, is due to the tighter fiscal policy and the continued unfavourable conditions on the labour market. Unemployment has remained largely unchanged at about 8 per cent over the last two years.

■ Japan's economy is recovering

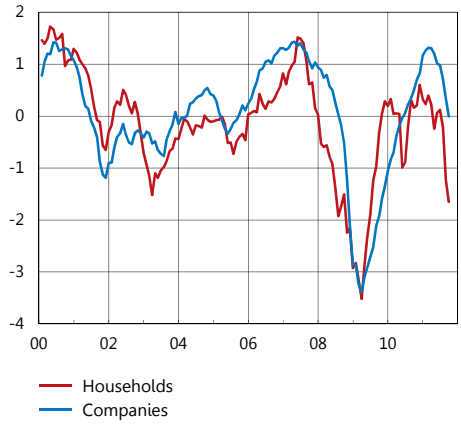
GDP in Japan fell in both the first and second quarters this year due to the earthquake and tsunami in March. However, there are clear signs of a recovery. Both retail sales and industrial production increased rapidly in July and August. But, so far, industrial production is significantly lower than it was before the sharp decline in 2008 and 2009. Optimism has also increased among companies. For all that, the Japanese yen has appreciated sharply recently, burdening the recovery of exports. The Bank of Japan has intervened on the foreign exchange market in an attempt to avoid any further appreciation of the currency. The most recent financial unease, with sharp falls in share prices, has led to the dampening of household optimism. In the short term, this may lead to a slightly weaker recovery than has previously been assumed.

■ Increased pessimism in Norway and Denmark

In Norway, GDP in the mainland economy increased by 4.1 per cent at an annual rate during the second quarter (see Figure 3:7). The high growth rate is primarily due to strong domestic demand. Both household consumption and corporate investment grew rapidly during the second quarter. Retail sales show no sign of slackening. Employment has continued to rise and unemployment fell to an average of just over 3 per cent during the period June to August.

The situation is different in Denmark. Average GDP growth was weak in the first six months, even if the second quarter saw a slight improvement (see Figure 3:7). Exports have formed the growth engine of the Danish economy, while domestic demand has grown weakly.

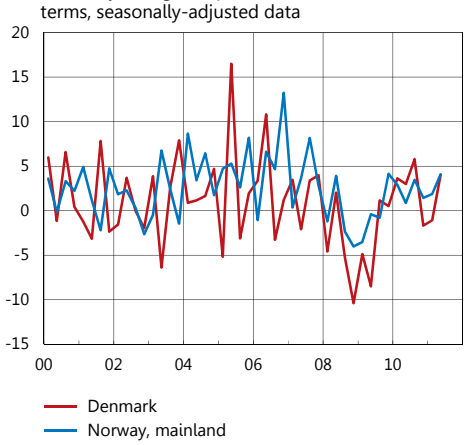
Figure 3:6. Household and corporate expectations of the future in the euro area
Deviation from mean value, number of standard deviations



Note. Mean value and standard deviation refer to the period January 1985 to September 2011.

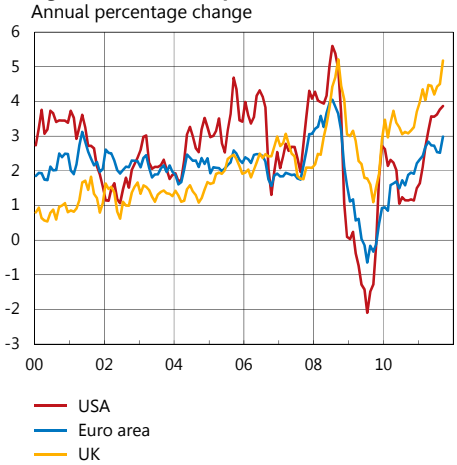
Sources: European Commission and the Riksbank

Figure 3:7. GDP in Denmark and Norway
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



Sources: Statistics Denmark and Statistics Norway

Figure 3:8. Consumer prices
Annual percentage change



Sources: Bureau of Labor Statistics, Eurostat and Office for National Statistics

Household consumption has fallen over the last two quarters and retail sales have continued on a downward trend since the start of 2008.

The financial unease, with steeply falling share prices, has contributed towards the recent distinct fall in optimism among households and companies in both Norway and Denmark. However, levels are around the historic average and clearly above those prevailing during the recession of 2008 and 2009. Industrial production has grown weakly in both countries, being far below the levels prevailing before the financial crisis.

■ Continued high international inflation

Inflation continues to be relatively high in most emerging economies, but there are large differences between countries. In September, inflation in China amounted to just over 6 per cent, while it was almost 10 per cent in India. Inflation in Latin America is generally slightly higher than in Asia. Countries with inflation targets (for example Brazil and Chile) tend to have inflation rates close to or slightly above the upper tolerance interval, while other countries (for example Argentina) have significantly higher inflation.

In the United States, CPI inflation increased to 3.9 per cent in September (see Figure 3:8). This rise was primarily due to more temporary factors linked to high energy prices and other circumstances. Underlying inflation (excluding food and energy prices) remained at 2.0 per cent. Among other reasons, the rise in underlying inflation is due to rising rents as a result of increased demand for rented housing. Underlying inflation measured in terms of the consumption deflator amounted to 1.6 per cent in August. Inflation expectations are stable.

Inflation in the euro area remains a good bit above the ECB's target of inflation close to 2 per cent, above all because energy and certain food prices are significantly higher than they were a year ago (see Figure 3:8). However, tax increases in certain countries have also contributed towards this increase in inflation. Inflation is expected to be dampened in the short term as earlier energy price increases fall out of the 12-month figures. However, higher taxes, such as increased VAT in Italy, will partly counteract this in the short term. The rate of inflation rose to 3.0 per cent in September, from 2.5 per cent in August. According to the ECB's Survey of Professional Forecasters, inflation expectations are still anchored around 2 per cent over both the long and short terms.

In the United Kingdom, CPI inflation reached 5.2 per cent in September (see Figure 3:8). This high rate of inflation is largely due to increased VAT and higher energy prices. Short-term inflation expectations continue to be high. In the longer term, the view of these is more fragmented. According to survey responses, households' long-term inflation expectations rose in August. On the other hand, inflation expectations according to forward pricing are largely unchanged.

■ Monetary policy tightening has been postponed

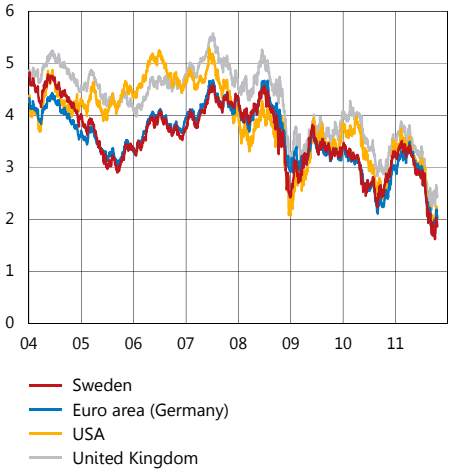
Monetary policy in both Asia and Latin America has been tightened this year. However, further tightening is now expected to be postponed as global growth is expected to slow down in the period ahead. In a number of Latin American countries with inflation targets (such as Brazil), lower policy rates are also expected in the period ahead. The central bank of Brazil has already lowered its policy rate twice this autumn.

The European Central Bank's present policy rate level is 1.5 per cent. Expectations according to surveys and market pricing give a divided view of future monetary policy. Surveys indicate an unchanged policy rate until the second six months of next year, when it is expected to be raised. In contrast, market pricing indicates that the ECB will lower the policy rate over the next year, before raising it again at some point in mid-2013.

The US central bank has held its policy rate within the interval 0-0.25 per cent since December 2008. On 20 September, the less favourable growth prospects in the United States led the central bank to decide to increase the average maturity of its holdings in bonds. Its aim is to try to lower more long-term interest rates. This will be carried out through the purchase of USD 400 billion of government securities with maturities of between 6 and 30 years, at the same time as it sells bonds with maturities of up to 3 years (an action known as Operation Twist). According to pricing in the financial markets, the policy rate is not expected to be raised until the end of 2013 or the start of 2014.

At its last monetary policy meeting in October, Norges Bank determined to hold its policy rate unchanged at 2.25 per cent. Furthermore, it has revised its policy rate path downwards relatively substantially compared with its assessment in June. The policy rate is now expected to remain at 2.25 per cent until the end of next year.

Figure 3:9. Government bonds with 10 years to maturity
Per cent



Source: Reuters EcoWin

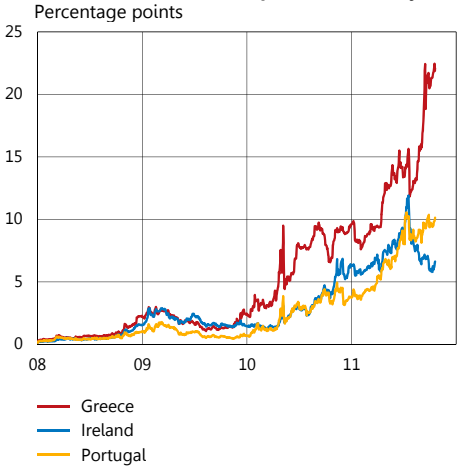
Uncertainty in the financial markets

■ Government bond rates on very low levels in certain countries

Unease over debt problems in the euro area has continued to dominate developments in the financial markets. At the same time as demand for shares and other high-risk investments has decreased, demand for certain countries' government bonds has increased. This has contributed to government bond rates in the United States, Germany and Sweden falling to very low levels (see Figure 3:9). This decline has been particularly visible in Swedish government bond rates, which have fallen further than their German equivalents.

Sweden's budget surplus and its relatively strong macroeconomic situation have made Swedish government bonds very attractive, as regards both issues by the Swedish Sovereign Debt Office and sales on the secondary market. The prospects for global growth also provide an explanation for the low Swedish government bond rates. When growth in Swedish export markets decreases, Swedish growth can also be expected to be affected. As a consequence, the expected level of the Riksbank's policy rate has been adjusted downwards on the money market.

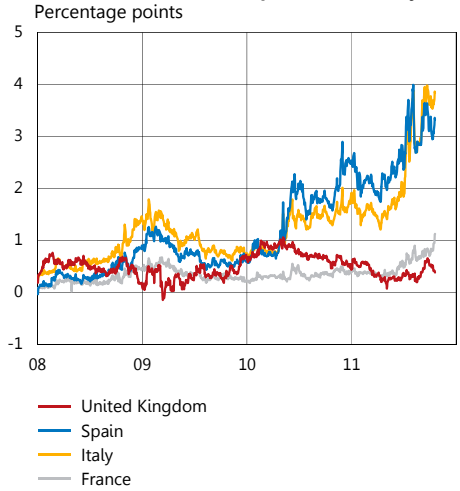
Figure 3:10. Government bonds in various euro countries (difference compared to Germany)
Percentage points



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

Source: Reuters EcoWin

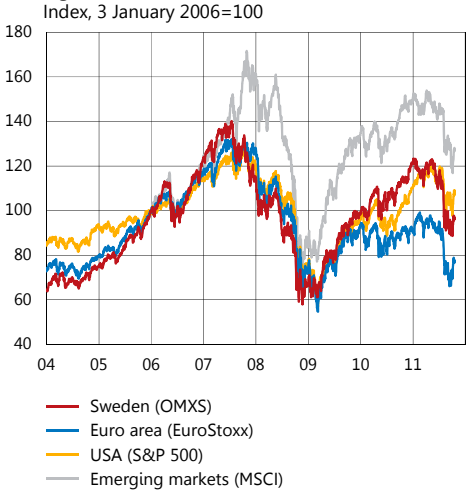
Figure 3:11. Government bonds in various euro countries (difference compared to Germany)
Percentage points



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

Source: Reuters EcoWin

Figure 3:12. Stock market movements
Index, 3 January 2006=100



Source: Reuters EcoWin

■ Southern European interest rates have risen despite the ECB's interventions

The fiscal situation in Greece has left its mark on the development of southern European interest rates since September's monetary policy decision. Greek government bond rates have increased in conjunction with the increasing likelihood of a renegotiation of the Greek sovereign debt. This increasing likelihood can be seen in the significant increase in the levels of what are known as CDS (credit default swap) premiums, which is to say the cost of insuring against a renegotiated sovereign debt. Government bond rates in Portugal, Italy and Spain have also continued to follow the Greek interest rates up (see Figure 3:11). A lack of confidence in Italy's fiscal policy has for instance contributed to higher rates there. At the same time, the ECB's continued purchases of government bonds under the framework of the Securities Markets Programme (SMP) has probably dampened interest rate increases in Italy and Spain in particular. Their government bond rates are still significantly lower than the Portuguese rates, for example.

However, the risk of contagion effects through the banking system, from Greece to Europe's larger countries, can be seen clearly in the financial pricing. The French banks' exposures towards Greece have not only resulted in lower credit ratings for these banks, but have also meant that the gap between French and German government rates has become wider (see Figure 3.11).

■ Lower asset prices in an uncertain world

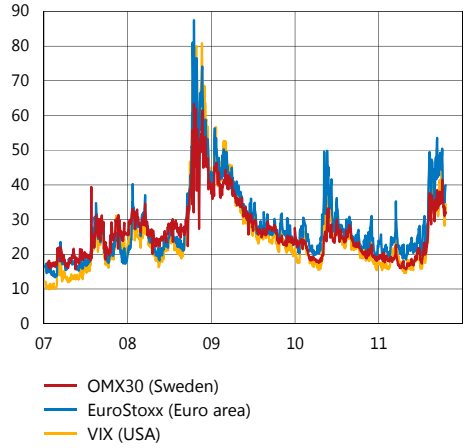
The increased unease over the development of the economy and the European banks' vulnerable position have contributed to the weak and highly varied development of the European stock markets since September's monetary policy meeting (see Figure 3:12). The same applies to the Stockholm Stock Exchange, which has largely followed an average European index. The US stock markets have not fallen as much, but fluctuations on them have also been great. In September, the so-called VIX index, a measure of financial uncertainty, was at slightly higher levels than in May 2010, when Greece received its first support package (see Figure 3:13).

The risk of weaker global growth has caused the price of commodities to decrease over the autumn (see Figure 3.14). Even the price of gold, which usually rises in times of financial unease, has decreased relatively steeply since the monetary policy meeting in September. This may be due to a reduced need to insure against inflation, but also to the depreciation of the euro against the dollar. Gold is priced in dollars, which often means that the price of gold sinks when the dollar appreciates. The price of Brent crude oil has also fallen during the autumn, but it is still on a significantly higher level than one year ago.

■ Slight weakening of the krona

The Swedish krona has depreciated since the monetary policy decision in September (see Figure 3:15). However, the current levels in terms of the TCW index are considerably stronger than those prevailing during the financial crisis of 2008–2009. The relatively strong macroeconomic developments, the strong public finances and a higher policy rate compared with other countries have probably prevented the krona from depreciating further during the recent period of financial unease. However, above all, investors have moved to those assets traditionally considered to be safe in times of high uncertainty, that is the US dollar and the Japanese yen. The US dollar has appreciated against the euro, while the yen is still on higher levels than it was during the attempt to depreciate it via interventions in the spring of 2011.

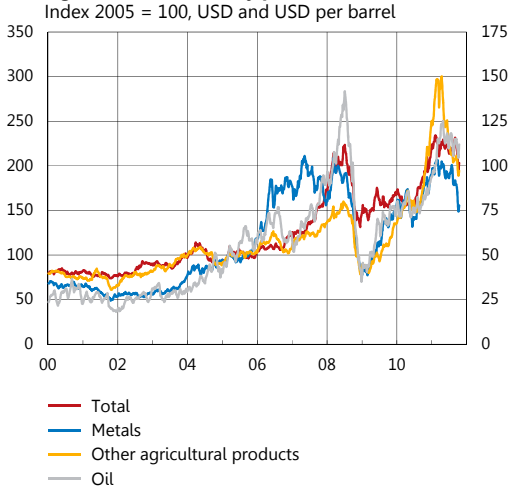
Figure 3:13. Stock market volatility
Per cent



Note. Implicit volatility is estimated on the basis of index-linked option prices.

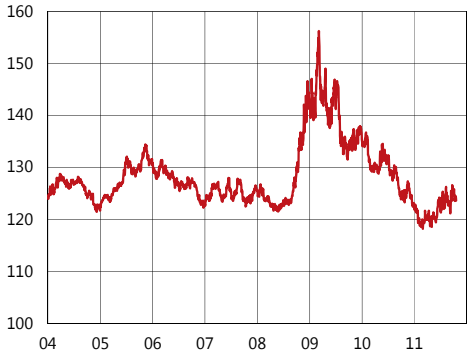
Sources: Chicago Board Option Exchange, Reuters EcoWin and STOXX Limited

Figure 3:14. Commodity prices
Index 2005 = 100, USD and USD per barrel



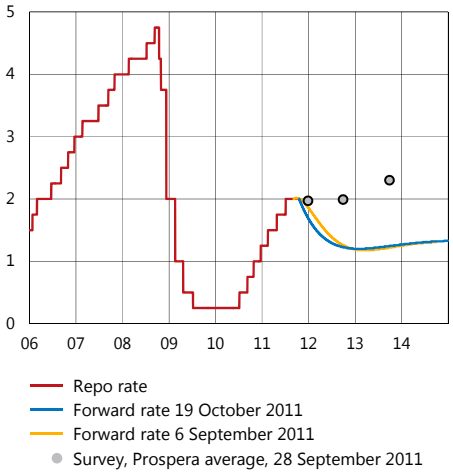
Source: The Economist

Figure 3:15. TCW-weighted exchange rate
Index, 18 November 1992 = 100



Source: The Riksbank

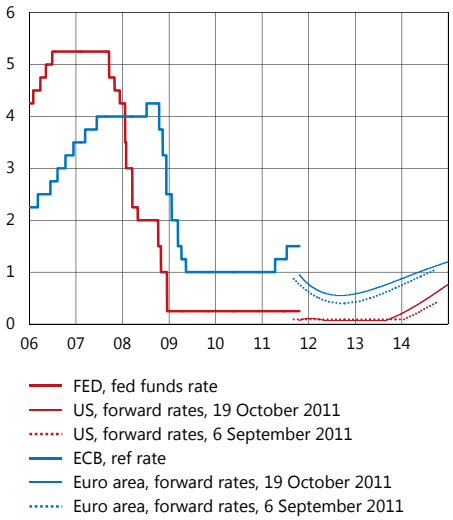
Figure 3:16. Repo rate expectations measured as market prices and surveys in Sweden
Per cent



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

Sources: Reuters EcoWin, TNS SIFO Prospera and the Riksbank

Figure 3:17. Policy rate expectations measured in terms of market prices in the euro area and the US
Per cent



Note. Forward rates have been adjusted for risk premiums and describe the expected overnight rate, which is not always equivalent to the official policy rate.

Sources: Reuters EcoWin and the Riksbank

■ Interest rates depressed on the money market

According to forward pricing, the Riksbank is expected to lower its policy rate in both 2011 and 2012, which will mean a lower repo rate than in the Riksbank's forecast (see Figure 3:16). One interpretation of this is that the money market agents have a significantly more negative view of future economic developments than the Riksbank does. At the same time however, implied forward rates are much more depressed than was expected by Prospera's latest survey of money market participants, published in October. The survey responses show that the Riksbank is expected to hold its policy rate unchanged over the next 12 months, with the policy rate being expected to be 2.2 per cent in two years.

International forward rates indicate small changes of monetary policy expectations compared with the situation at the Riksbank's monetary policy decision in September. The Federal Reserve has decided to increase the maturity of its holding of government securities and the Bank of England's monetary policy committee has decided on further purchases of securities. According to the implied forward rates, the ECB is expected to lower its policy rate (see Figure 3:17). Furthermore, the ECB, together with a number of central banks, has announced the possibility for commercial banks to borrow dollars at longer maturities than before. These loans have been offered in collaboration with the Federal Reserve.

■ The Swedish interbank market seems to be working well

Under the circumstances, the Swedish interbank market seems to be working well. The difference between the interest rate charged by the Swedish banks to each other and the Riksbank's expected policy rate, for the same maturity, is largely unchanged compared with the situation at the monetary policy meeting in September. However, this interest rate differential has increased since the spring.

For the banks in the euro area, the corresponding interest rate differential is significantly higher. For many of these banks, the possibility of issuing bonds with long-term maturities is also non-existent. This is particularly worrying as there will be a great refinancing need next year in particular. Banks in countries such as Spain and Italy are even finding it difficult to issue covered bonds, which has led the ECB to relaunch a programme for the purchase of such bonds. In addition, the ECB has announced new long-term loans in euros that will be offered to the banks from 25 October of this year.

■ Variable mortgage rates have risen more than the repo rate

The average mortgage rate for households sank between July and August, which can be explained by the sharp fall in more long-term interest rates. For the first time since December 2009, the average interest rate for household loans with fixed periods of between one and five years fell. However, since the monetary policy meeting in September, listed mortgage rates with longer maturities have remained relatively unchanged. At the same time, variable mortgage rates have risen more than can be explained by the changes to the repo rate since the end of 2010 (see Figure 3:18). Among other reasons, this difference is due to the greater funding costs faced by the housing credit institutions over the last year. This is connected with adjustments to new regulations. The housing credit institutions may also have increased their profit margins on the interest rate charged to mortgage customers. Short-term mortgage rates have continued to increase in recent months, even though the housing credit institutions' funding costs are deemed to be largely unchanged.

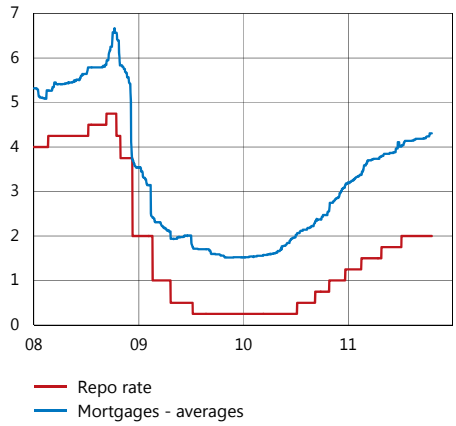
Unlike mortgage rates, the variable interest rates faced by companies have remained relatively unchanged in relation to the Riksbank's policy rate over the last year. This may be because the companies are more price-sensitive, as they can use other sources of funding, for example by issuing bonds themselves. In addition, the interest rates faced by companies for loans with maturities of one year or less fell considerably in August.

■ Lending to households is increasing more slowly

The housing credit institutions' higher interest rates and an increasingly more apparent slowdown in house prices have probably contributed to the slower increase of lending to households. In August, lending increased by 6.2 per cent, compared with the same period last year. One year ago, lending was increasing at a significantly more rapid rate (see Figure 3:19).

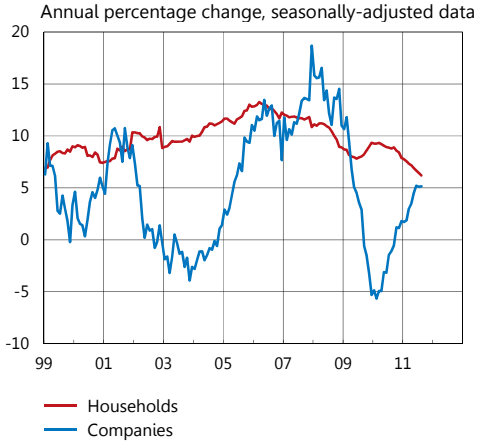
Corporate borrowing increased in August by 5.1 per cent, measured as an annual percentage change. This is a significant difference from the situation one year ago when lending to companies decreased. The financial unease thus does not yet seem to have affected companies' opportunities to fund their operations. According to the National Institute of Economic Research's Economic Tendency Survey from September, the companies asked see their funding opportunities as normal. Both the companies' rate of borrowing and the interest rates offered the companies on new contracts remained largely unchanged between July and August. Bank managers asked in Almi Företagspartner's lending indicator deem that lending to companies will continue to increase slightly over both the short and long terms.

Figure 3:18. Variable listed mortgage rate and repo rate
Per cent



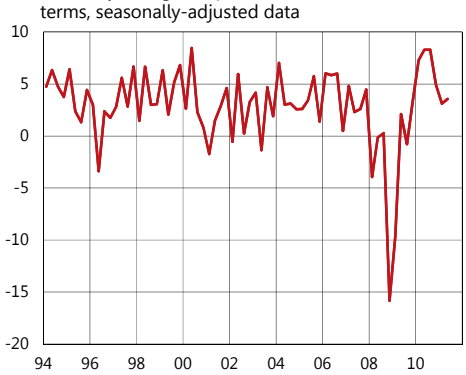
Sources: Reuters EcoWin and the Riksbank

Figure 3:19. Bank lending to companies and households
Annual percentage change, seasonally-adjusted data



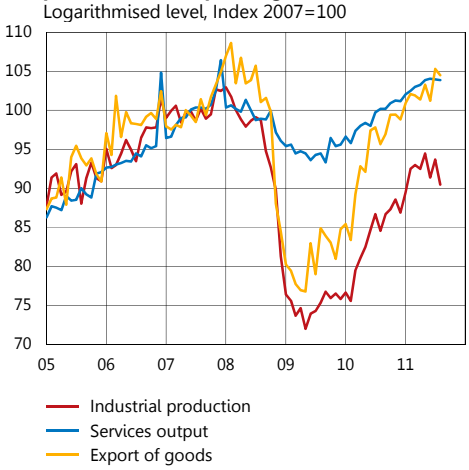
Source: Statistics Sweden

Figure 3:20. GDP
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



Source: Statistics Sweden

Figure 3:21. Industrial production, services production and export of goods
Logarithmised level, Index 2007=100



Sources: Statistics Sweden and the Riksbank

Sweden is also affected by the financial unease

■ Weaker GDP growth over the rest of the year

GDP in Sweden increased by 4.9 per cent during the second quarter compared with the corresponding quarter last year calendar adjusted. Compared with the first quarter, the increase was 3.6 per cent calculated at an annual rate (see Figure 3:20). GDP increased strongly even though outcome was lower than specified in Statistics Sweden's preliminary National Accounts figures. Both household consumption and investments contributed to the strong outcome of GDP. However, the growth of GDP in the first six months of this year was weaker than during the strong recovery of 2010.

Growth is expected to slacken further during the second six months of this year. Among other reasons, this is because the recent unease on the financial markets is expected to persist over the autumn. This financial unease, with falling stock market prices, is contributing towards dampening the mood of households and companies. In September, the results of the National Institute of Economic Research's Economic Tendency Survey fell from high levels and are now slightly below the historical average. This indicates that Swedish growth has slowed down from a very high to a more normal level of growth. At the same time, the purchasing managers' index has fallen steeply to the current level indicating zero growth in industrial production. However, monthly outcomes for exports of goods have continued to be relatively favourable (see Figure 3:21). The weaker developments abroad are also expected to lead to slower growth in the Swedish economy. Growth during the second six months of the year is expected to be significantly lower than in the first six months of the year and approximately in line with the assessment made in September.

■ The stock market fall has made households more cautious

Recent stock market falls have had a negative effect on households. The development of household wealth is slowing down due to both stock exchange falls and the weakening of the housing market. Household borrowing has also dampened as the housing market has cooled down. Household indebtedness is now increasing at a significantly slower rate than before. The mortgage ceiling and rising interest rates have probably also contributed to this development.

Nevertheless, consumption increased at a relatively strong pace in the first six months of the year. The consumption of services, cars and durable goods has increased in particular. One reason for this is that household incomes have developed strongly. However, households have not fully used this increased scope for consumption, but have chosen to also increase their saving.

The increasing uncertainty among households is also clearly visible in the National Institute of Economic Research's Economic Tendency Survey, in which the consumer confidence indicator has fallen to a low level (see Figure 3:22). Households now have a significantly more

negative view of both their personal finances and Sweden's economy. The registration of new cars has also been dampened significantly in recent months. Together with the relatively weak development of turnover in the retail sector, this indicates that households are showing more restraint (see Figure 3:23).

Even if it is difficult to interpret the statistics, prices on the housing market have developed weakly recently. As housing stands for about half of household wealth, this will impair the conditions for consumption in the period ahead. Household saving is thus expected to remain on a high level and consumption will continue to develop relatively weakly for the rest of the year.

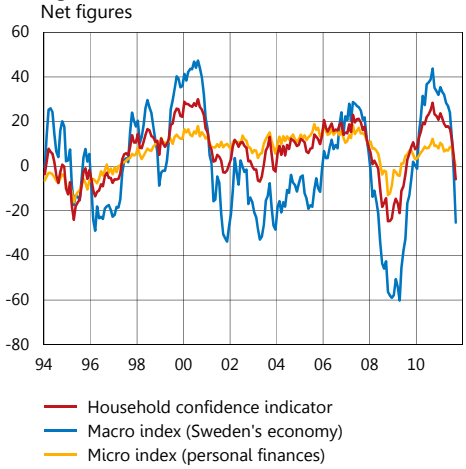
■ Investment growth is slowing down

Investments continued to grow strongly in the first half of the year (see Figure 3:24). Above all, housing investments have increased significantly. However, even public sector investment has developed strongly, primarily because of large but temporary projects such as Karolinska University Hospital, in Stockholm. During the first six months, there has also been a need for investment in the business sector, excluding housing. Investments by the industrial sector in particular picked up during the first six months of 2011, at the same time as investment growth in the service industries slowed down.

Growth in housing investments is expected to slacken over the coming quarters. Among other reasons, this is because the previous strong growth partly reflects a recovery from low levels. In addition, demand for renovation and new construction is being affected by household unease over economic developments and the possibility that house prices may fall.

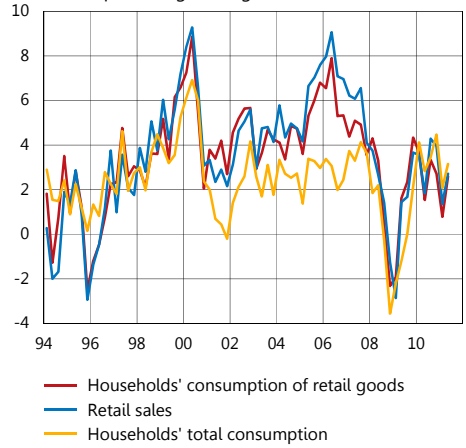
According to the National Institute of Economic Research's Business Tendency Survey, companies' expectations of the total level of demand in the economy have successively dampened since the spring. This may be contributing to companies postponing their investment decisions.[3] At the same time, the industrial sector's investments are still low when compared with before the crisis. Capacity utilisation has also returned to normal levels, which suggests that companies in the manufacturing sector have a need to invest to increase production capacity. All in all, the manufacturing sector's investments, excluding housing, are expected to continue growing at about the same rate as in the first six months of this year. The slower development of public sector investment and housing investment implies a dampening in the growth of gross fixed capital formation in the second six months of this year.

Figure 3:22. Confidence indicators for households
Net figures



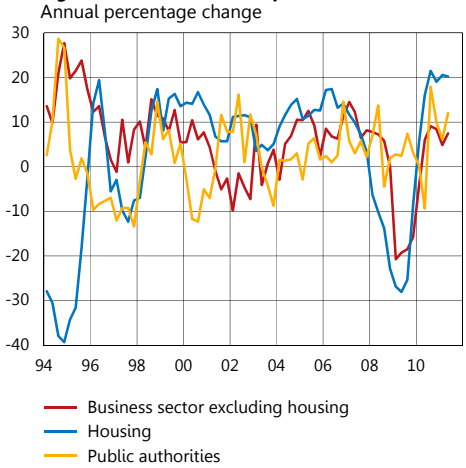
Source: National Institute of Economic Research

Figure 3:23. Retail sales and household consumption
Annual percentage change



Note. Non-calendar-adjusted data.
Source: Statistics Sweden

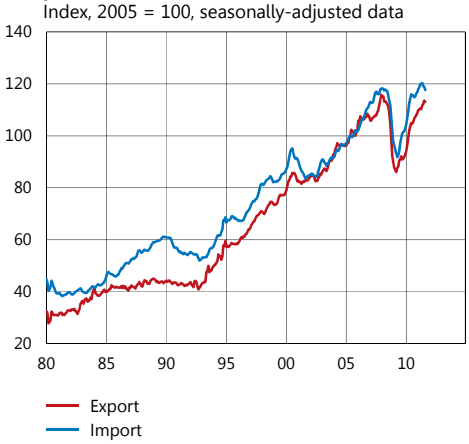
Figure 3:24. Gross fixed capital formation
Annual percentage change



Source: Statistics Sweden

[3] The Riksbank's company interviews indicate that companies are postponing investment decisions on expanded production capacity. The investment decisions being taken at present primarily apply to the streamlining of operations and the replacement of worn-out capital. See the document "The Riksbank's company interviews in September 2011", on the Riksbank's website www.riksbank.se under the heading Press & published/Reports.

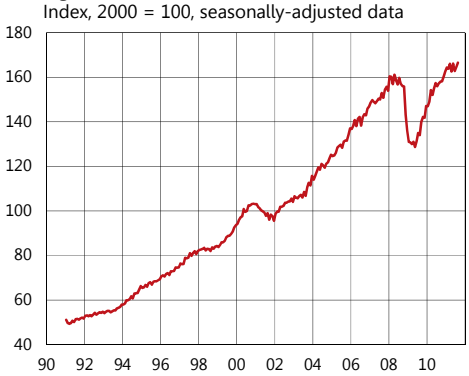
Figure 3:25. Foreign trade with goods in fixed prices
Index, 2005 = 100, seasonally-adjusted data



Note. Three-month moving average. Fixed prices calculated by the Riksbank.

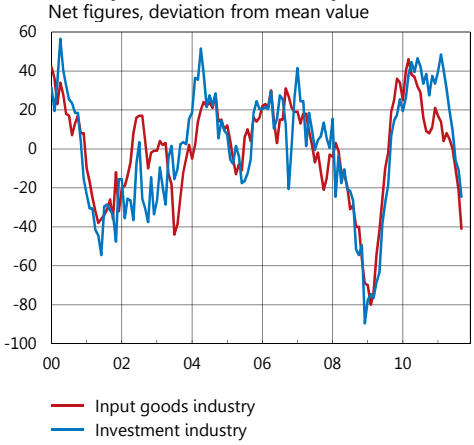
Sources: Statistics Sweden and the Riksbank

Figure 3:26. World Trade Monitor Index
Index, 2000 = 100, seasonally-adjusted data



Source: Netherlands Bureau for Economic Policy Analysis

Figure 3:27. New export orders in input goods industry and investment industry
Net figures, deviation from mean value



Sources: National Institute of Economic Research and the Riksbank

After several quarters in which the build-up of stocks increased, this declined during the second quarter. This made a negative contribution to GDP growth. Fewer and fewer companies also express a need to build up their stocks, meaning that further negative contributions to growth can be expected from stocks in the second six months of this year.

■ Foreign trade has started to slow down

Exports have recovered strongly since the crisis, but the rate of increase slowed down slightly in the second quarter of this year. As in the last quarter, exports of goods, measured as an annual percentage change, increased the fastest. Primarily exports of motor vehicles and telecommunication products have increased, while exports of services have not grown as strongly. Even though growth prospects abroad have deteriorated, monthly statistics on foreign trade indicate that export growth will also be relatively rapid in the third quarter (see Figure 3:25). However, weaker international demand is expected to have a more tangible impact in the period ahead. Indicators of world trade suggest that the growth of international trade has stagnated (see Figure 3:26). Data on export orders indicates a decline for the intermediate and investment goods industry in particular (see Figure 3:27). During the economic downturn of 2008–2009, these sectors in particular were badly impacted. Taken together, export growth is expected to be slower towards the end of the year.

Imports also slowed down slightly during the second quarter. As with exports, goods formed the main contribution to growth measured as an annual percentage change. Monthly statistics for July and August indicate that imports are not increasing as tangibly as previously (see Figure 3:25).

■ Surplus in net lending and neutral fiscal policy

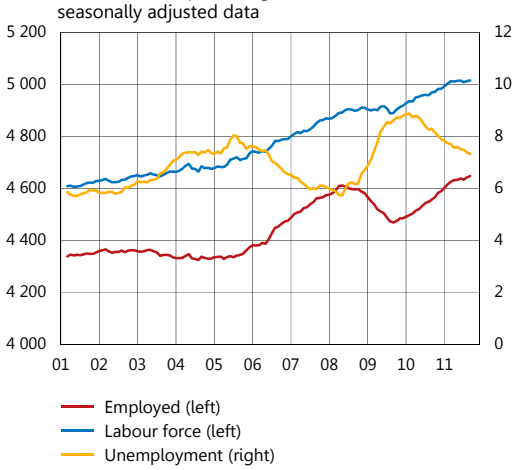
Public sector net lending amounted to SEK 51 billion in the first six months of this year. In the second quarter, there was a strong outcome for tax revenues on wages and consumption. Net lending is usually also high in the second quarter due to dividends from government companies and businesses. Net lending is expected to be 0.5 per cent of GDP in 2011. As a whole, the discretionary fiscal policy will be neutral in 2011 and 2012, which is to say that net lending will not deteriorate due to reforms during this period. This is a consequence of the measures proposed in the Budget Bill for 2012 and the removal of previously-agreed temporary support to municipalities and county councils.

■ The improvement of the labour market is slowing down

Since the spring of 2011, the strong development of the labour market has gradually slowed down. The number of employees has increased more slowly and the decline of unemployment has come to a halt (see Figure 3:28). In September, employment developed in line with the assessment of the most recent Monetary Policy Update, while unemployment and the number of persons in the labour force decreased slightly.

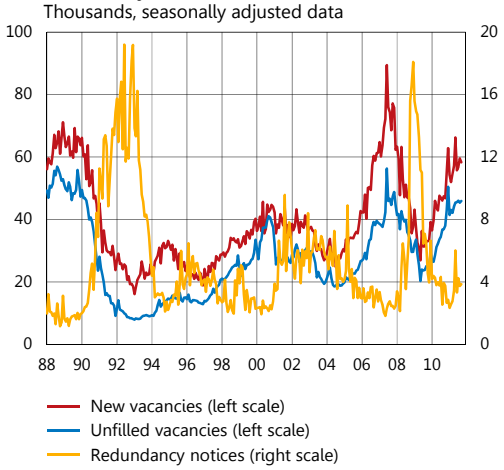
As in September, the indicators now point to the continued, if slow, improvement of the labour market in 2011. Demand for labour is slackening; new job vacancies are increasing at a slightly slower rate and the number of redundancy notices are at a slightly higher level than at the start of the year (see Figure 3:29). Fewer companies than before are planning to increase their workforces (see Figure 3:30). The slightly weaker situation on the Swedish labour market is also confirmed by the Riksbank's company interviews, conducted in September.

Figure 3:28. Employment, labour force and unemployment
Thousands and percentage of the labour force, seasonally adjusted data



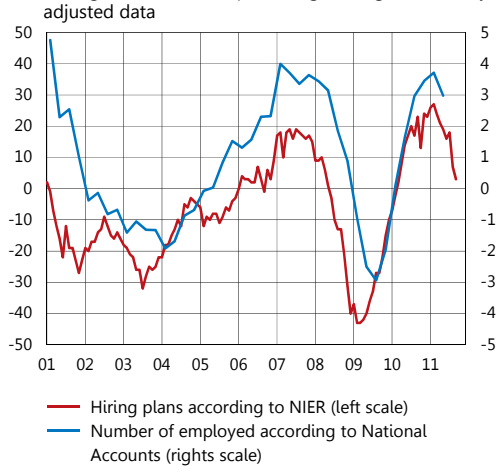
Note. Three-month moving averages.
Sources: Statistics Sweden and the Riksbank

Figure 3:29. New and unfilled vacant jobs and redundancy notices
Thousands, seasonally adjusted data



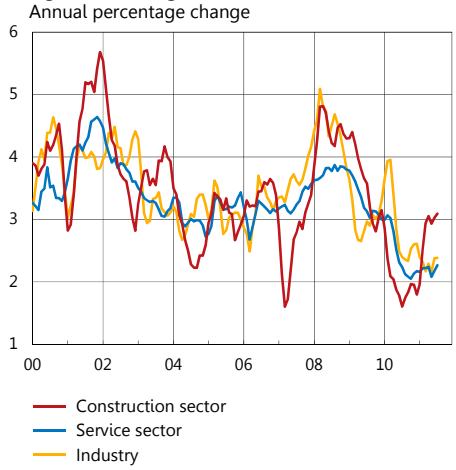
Sources: Employment Service and the Riksbank

Figure 3:30. Hiring plans and number of employed in the business sector
Net figures and annual percentage change, seasonally-adjusted data



Note. The net figures are defined as the difference between the proportion of firms reporting a wish to increase the number of employees and the proportion of firms reporting a wish to reduce numbers.
Sources: National Institute of Economics Research and Statistics Sweden

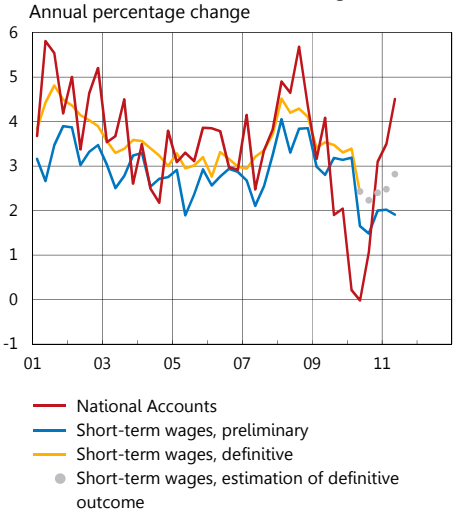
Figure 3:31. Wages in the business sector
Annual percentage change



Note. Three-month moving average. Refers to wages according to short-term wage statistics. Preliminary outcomes for the last 12 months, which are usually revised upwards.

Sources: National Mediation Office and the Riksbank

Figure 3:32. Wages according to the National Accounts and to the short-term wage statistics
Annual percentage change



Note. The short-term wage statistics for the last 12 months are preliminary and are usually revised upwards. The grey dots in the figure show the Riksbank's assessment of the final outcome according to the statistics.

Sources: National Mediation Office, Statistics Sweden and the Riksbank

■ Slightly higher wage increases in 2011

According to short-term wage statistics from the National Mediation Office, wages throughout the economy increased by a preliminary figure of 2.3 per cent as an annual percentage change. So far this year (January–July), wages have risen by an average of 2.2 per cent, but this outcome will be revised upwards when further retroactive payments are included in the statistics. Wages in the construction sector have increased more than in the manufacturing sector and the service sector (see Figure 3:31). According to the short-term wage statistics, wages throughout the economy are expected to increase by 2.8 per cent in 2011, which is slightly greater than was predicted in September.

According to the National Accounts, hourly wages increased throughout the economy by 4.5 per cent as an annual percentage change in the second quarter of this year. This figure can be compared to 2.8 per cent according to estimations of definitive outcomes in short-term wage statistics (see Figure 3:32). The differences between these measures are normally small. However, this year, various temporary factors (including changes in bonus payments, changes in working hours between different years, and allocations of retroactive wage payments) are contributing to the significantly stronger development of hourly wages according to the National Accounts. Our assessment is that the underlying development of wages in the Swedish economy has been more successfully captured in short-term wage statistics this year and last year.

■ Changes in productivity are affecting cost pressures

According to statistics from the Confederation of Swedish Industry, certain premium rates in collective insurance schemes in the business sector were decreased this year, compared with last year's levels. This is contributing to dampening the growth rate of labour costs per hour this year in the economy as a whole. The growth rate of labour productivity, as an annual percentage change, slackened during the second quarter after three quarters of relatively strong growth. This contributed towards unit labour costs showing positive growth figures, as an annual percentage change, for the first time in eighteen months.

■ Continued low underlying inflation but high CPI inflation

Underlying inflationary pressures are still low. The annual rate of increase in the CPIF (the CPI with a fixed mortgage rate) amounted to 1.5 per cent in September, in line with the forecast in the last Monetary Policy Update (see Figure 3:33). This moderate outcome is largely due to the fairly weak development of prices for goods and food. On the other hand, energy prices are continuing to increase (as an annual percentage change), even if electricity prices have in recent months. CPIF inflation adjusted for energy prices amounted to 1.1 per cent in September. The low growth in unit labour costs and the appreciation of the krona over the last year have contributed to the presently low inflationary pressures.

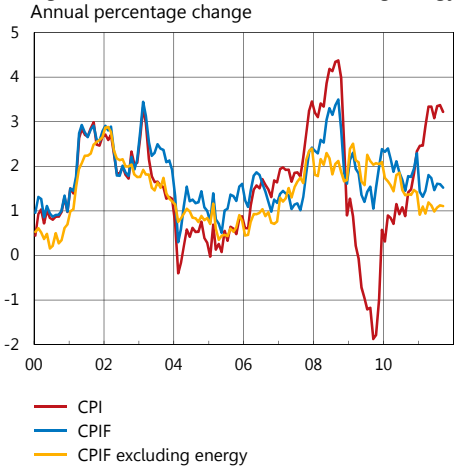
The difference between the different measures of inflation is still large. CPIF inflation is a bit below 2 per cent and, adjusted for the rising energy prices, inflation is even lower. At the same time, CPI inflation is high due to steeply rising mortgage rates. The rate of increase of CPI inflation is now expected to slacken, falling back to below 2.5 per cent towards the end of 2011.

■ Slightly lower inflation expectations

Recently, all measures of inflation expectations have fallen slightly. The National Institute of Economic Research's survey shows that household inflation expectations one year ahead fell from 2.5 per cent in August to 2.3 per cent in September (see Figure 3.34). This is the third month in a row that they have fallen. Companies' inflation expectations have also fallen from 2.0 per cent in the first quarter to 1.8 per cent in the second quarter.

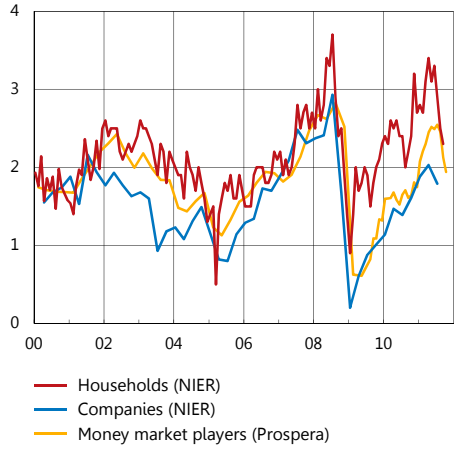
Prospera's quarterly survey of all the participants (which is to say money market agents, social partners and purchasing managers), published in September, shows that inflation expectations have fallen from 2.7 to 2.4 per cent one year ahead and from 2.6 to 2.3 two years ahead (see Figure 3:35). However, expectations five years ahead amounted to 2.4 per cent, which is a marginal increase since the last investigation. Inflation expectations among money market participants, published on a monthly basis, fell between August and September over all time horizons. In October, expectations one year ahead continued to fall from 2.1 to 1.9 per cent, while those two and three years ahead remained unchanged at 2.1 per cent.

Figure 3:33. CPI, CPIF and CPIF excluding energy
Annual percentage change



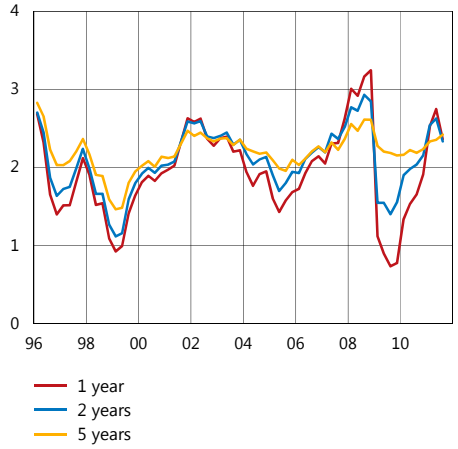
Note. CPIF is CPI with fixed interest rate.
Source: Statistics Sweden

Figure 3:34. Expectations of inflation one year ahead
Per cent



Note. Household figures are monthly, others quarterly.
Sources: National Institute of Economic Research and TNS SIFO Prospera

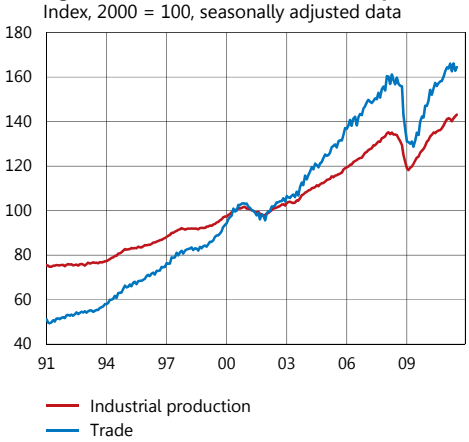
Figure 3:35. All respondents' expectations of inflation one, two and five years ahead
Per cent



Source: TNS SIFO Prospera

Similarities and differences between the current situation and 2008-2009

Figure A1. Global trade and industrial production
Index, 2000 = 100, seasonally adjusted data



Source: Netherlands Bureau for Economic Policy Analysis

Turmoil on financial markets has intensified over the past few months due to several countries' problems in managing their large sovereign debts. The consequences for the real economy of inefficient credit markets became clear during the financial crisis of 2008–2009, when financial institutions stopped lending to each other, with dramatic consequences for the world economy. The Riksbank deems that, for a number of reasons, the recent turmoil will not lead to similarly serious consequences for the world as a whole. The financial markets are familiar with the current problems, which was not at all the case in 2008–2009. The central banks now have tried and tested channels to meet an increased liquidity requirement in the banking system. In this respect the financial system is better equipped. At the same time, major challenges remain before long-term sustainable solutions are in place. The situation gives cause for concern and new unexpected events may have serious consequences.

From unpaid mortgages worries over sovereign debt problems

The global financial markets have been marked by turmoil for slightly longer than four years. The crisis originated in unease over losses caused by structural products linked to US subprime loans. These losses spread rapidly through the highly-indebted financial sector by way of complex financial instruments linked to US mortgages. The Federal Reserve responded with interest rate cuts and measures to safeguard the supply of liquidity on the credit market. However, the problems on the financial market continued and, on 15 September 2008, Lehman Brothers filed for bankruptcy. This watershed had a very strong negative impact on the global financial markets. The fact that a major financial institution was allowed to fail, combined with uncertainty over how large the losses were and which institutions were affected, led financial institutions across the world to largely stop lending money to each other.

The slowdown of global economic activity over the first three quarters of 2008 was comparable to a normal economic downturn. When Lehman Brothers collapsed and the financial crisis escalated, the situation changed dramatically. The financial turbulence had an impact on the real economy through several different channels. The lack of liquidity in the global financial system contributed to a severe tightening of credit conditions for households and companies. The turbulence also caused share prices to fall and contributed to the worsening of the sentiment of companies and households across the entire world. In parallel with the escalating financial crisis, house prices across large areas of the OECD area started to fall. Global demand, household consumption as well as corporate investments, declined steeply. Industrial production fell on a broad front across the entire world, and world trade collapsed (see Figure A1). This second development had a severe impact on export-dependent economies such as Sweden's.

Due to powerful and coordinated fiscal and monetary policy stimulation from governments and central banks across the world, this financial turbulence decreased successively during 2009 and the real economy started to recover. However, by as early as the start of 2010, unease over the fiscal problems in Europe started to be reflected on the bond market. This unease increased during the summer of 2011 when the political capacity of both the euro area and the United States to deal with their debt problems was questioned. Recently, the sovereign debt problems in the euro area have been the main driving factor behind the continued turbulence.

How do conditions differ from 2008?

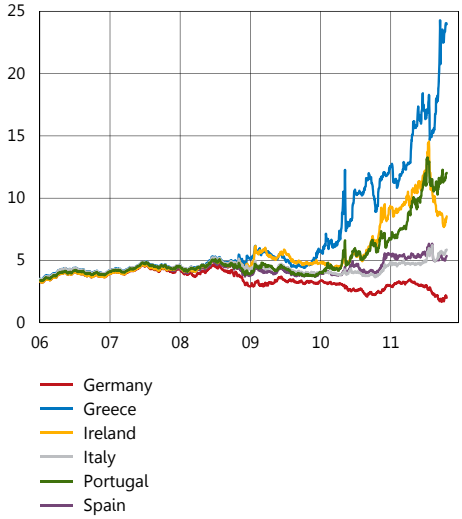
Lehman Brothers' filing for bankruptcy was a sudden event and the market found it difficult to take in its consequences. Just as Lehman Brothers' case was not foreseen, it naturally cannot be ruled out that an event with similarly dramatic consequences will not happen in the future. New information could rapidly change the growth prospects. On the other hand, it can be noted that the financial turbulence we see today has not led to such dramatic consequences so far. Unease over the fiscal situation, above all in the euro area, has increased gradually, rather than suddenly. Furthermore, certain countries seem to be able to manage their deficit problems. For example, Ireland, which still has one of the largest deficits in Europe, has followed the agreed plan to improve its fiscal situation. Government bond yields have thus fallen over the autumn, and Ireland is now planning the issue of bonds next year. In contrast, the high levels of Greek government bond yields indicate that financial market agents now see a very high probability that Greece will need to renegotiate its sovereign debt. However, this development has taken place gradually and Greek national bond yields have increased gradually since the start of 2010 (see Figure A2).

Another difference compared with 2008 is that the losses incurred during the financial crisis were spread via a number of complex financial instruments. This increased uncertainty on the market regarding the size of the losses and which instruments had been affected. When it comes to sovereign debt problems, it is easier to identify where losses may arise. There is still uncertainty about the size of the losses that holdings of government securities may involve, but the situation is significantly easier to survey than it was in 2008.

Interventions arising from stress tests of the European Banking Authority (EBA) have also led to a certain improvement in transparency as regards the banks' balance sheets and the vulnerability of the financial system. This reduces uncertainty and the risk that any losses that may arise will strike randomly against the entire financial market.

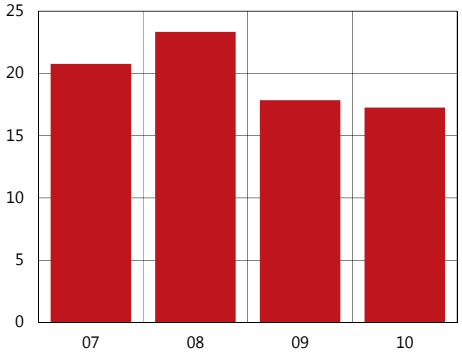
Central banks' preparedness to manage temporary liquidity problems and thus avoid an escalation has thereby improved. The experiences of 2008–2009 have meant that central banks now have more tried and tested channels to support liquidity in the financial system, but also directly to households and companies. During the financial crisis of 2008-2009 it was a case, for example, of measures that directly support

Figure A2. Government bonds with 10 years left to maturity
Per cent



Source: Reuters EcoWin

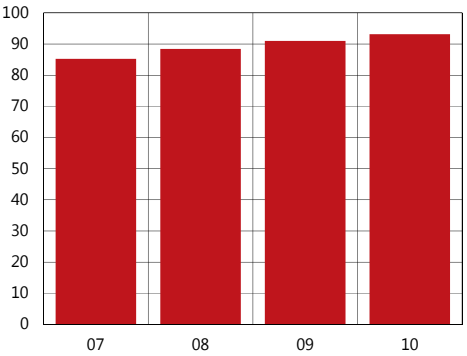
Figure A3. European banks' debt ratios
Per cent



Note. Debt/equity ratio calculated as ratio of adjusted total assets to equity. Adjustment means that repo transactions, derivatives and insurance are not included in the measure.

Sources: Liquidatum and the Riksbank

Figure A4. The Riksbank's structural liquidity measurement: Europe
Per cent



Note: A value close to 100 means that the assets and their funding are well-matched in terms of liquidity. The selection consists of 20 major European banks, including the four major Swedish banks.

Sources: Liquidatum and the Riksbank

the liquidity supply in the banking system by extending the amount of collateral that could be used for credit in the central banks, changes in deposit and lending facilities and also direct emergency liquidity assistance. Measures aimed directly at households and companies to facilitate the supply of liquidity have included, for instance, direct purchases of corporate and mortgage bonds on the secondary market.[4]

All in all, the Riksbank assesses that it should be possible to avoid a global tightening of credit conditions for companies and households similar to the situation in 2008-2009. The main scenario is based on the assumption that the most acute sovereign debt problems will be dealt with in an orderly way and that sustainable solution will eventually be implemented. This in turn means that the real economic consequences for the world economy, and thus a small, export-dependent country such as Sweden, can be limited.

At the same time, it assumes that the underlying problems can be managed in a credible manner. Several European banks with exposures to Greece and other fiscally-weak countries are currently dependent on liquidity assistance from the ECB for funding. This is of course not sustainable in a longer perspective. Many European banks have reduced their indebtedness (see Figure A3) and their structural liquidity risks to some extent in recent years (see Figure A4)[5]. The lower levels of the banks' indebtedness are due to the fact that many banks have increased their capital through new issues and through capital injections by governments. However, further efforts are required to reduce the vulnerability of the financial system and there is still uncertainty about how much more capital the banks need. The banks' capital deficits are in turn largely due to their exposures to countries with sovereign debt problems. In addition, countries with sovereign debt problems must undertake measures to safeguard the long-term sustainability of their public finances (see the article "The debt crisis in Europe").

The Swedish banks have taken significant steps to improve their resilience compared with 2008, for instance by reducing the risks linked to their Baltic operations and through a much higher degree of capitalisation. Moreover, the Swedish banks have only small direct exposures to countries with sovereign debt problems. [6]

One important factor in the escalation of events in 2008 and 2009 was the developments in housing markets in the OECD area. In this area, the situation is much less worrying today. While the problems are not over, prices in several countries have levelled off and the risk of further large price falls has declined substantially. This means that there is less risk of a negative spiral of increased wealth losses arising for households, weak consumption, continued loan losses resulting from unpaid mortgages and continued financial turbulence. This also implies a calmer sequence of events than at the end of 2008 and in early 2009.

[4] One example of this is the Bank of England's Asset Purchase Facility (APF). For an account of the central banks' actions during the financial crisis, see P. Sellin, "The central banks' extraordinary measures during the financial crisis", Economic Commentary no. 9, 2009, Sveriges Riksbank.
[5] Somewhat simplified, the measure specifies a bank's liquidity risk by measuring the proportion of the banks' illiquid assets (such as mortgages) that are also covered by long-term (stable) funding. For a more detailed description of how this measure is constructed, see Financial Stability Report 2010:2, page 77.
[6] See the Financial Stability Report 2011:1, page 42.

On the other hand, the public finance problems in the OECD countries are much more troublesome now. It will be a difficult challenge to find a good balance where the deficit problems can be managed without suffocating the global recovery. Low growth and high debts risk leading to a negative spiral with continued financial unease if the underlying problems are not dealt with. This is in sharp contrast to the developments in 2009, when fiscal policy was very expansionary and gave positive growth effects.

A snapshot of the economic situation now compared with 2008-2009

Lehman Brothers' filing for bankruptcy had immediate effects on money markets around the world. The risk premium on the money market, defined here as the difference between a three-month interbank rate and the expected overnight rate for the same maturity, rose sharply (see Figure A5). Although the risk premium has risen in the wake of the recent unease, it is far from the levels noted at the end of 2008 and has not risen as suddenly as at the beginning of the financial crisis in August 2007. In the euro area and Sweden, the risk premium on the money market is currently at the same level as in the period between August 2007 and the fall of Lehman Brothers.

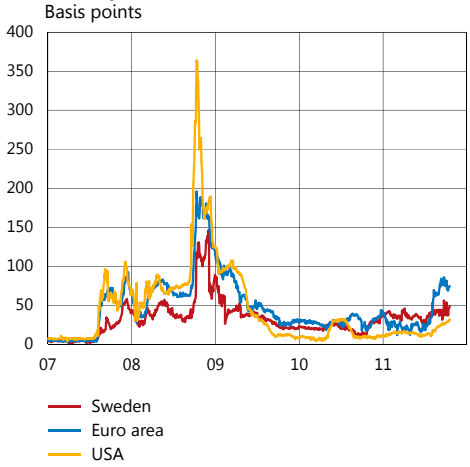
However, the current unease is reflected more clearly in rising CDS premiums for banks (see Figure A6). The CDS premiums are linked to a bank's expected default frequency. The recent upswing is a serious signal of a decline in confidence in the banks' debt-servicing ability. In Europe, the CDS premiums for the banks are now significantly higher than they were in the winter of 2008–2009, and they have also risen to high levels in the United States and Sweden.

By using the information in the CDS premiums, the risk premium on the money market can be divided up into a credit risk and a liquidity risk premium.[7] Dividing up the euro area's risk premium in this way indicates that it is the credit risk that has recently pushed up the premium (see Figure A7). The liquidity premium is low. This is in sharp contrast to developments in 2008–2009 when the liquidity risk was the driving factor. The division into credit and liquidity risk premiums in the United States and in Sweden follows a similar pattern to the euro area. This supports the view that central banks are currently meeting the money market's liquidity needs better than they did in 2008–2009. At the same time, the high credit risk premiums emphasise the importance of managing the problems behind the substantial uncertainty over the banks' debt-servicing ability.

Nor have risk premiums for corporate loans increased in the same dramatic way as at the end of 2008. The risk premium for corporate bond rates with a high credit risk have actually increased significantly, but the level is significantly lower than in late 2008 and early 2009 (see Figure A8). It is also normal for credit terms to be tightened in a recession and current risk premiums are comparable with those existing in 2001–2002.

[7] See M. Strömqvist, "Which factor exerted the greatest influence upon the Swedish risk premium during the crisis?" Economic Commentary no. 14, 2009, Sveriges Riksbank.

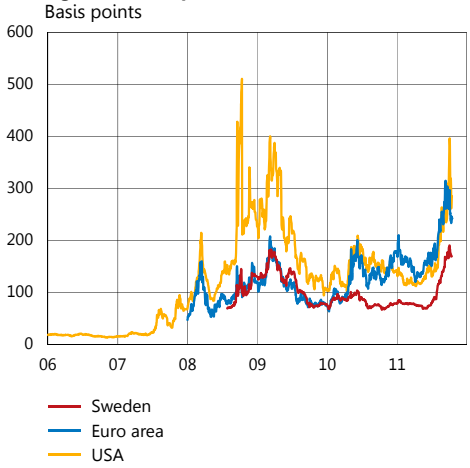
Figure A5. Risk premiums on the money market (basis spread)
Basis points



Note. The difference between the three-month interbank rate and expected policy rates.

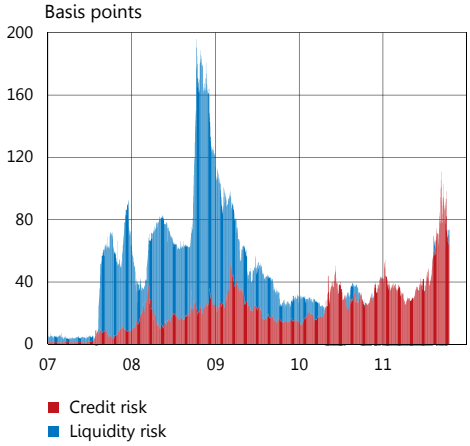
Sources: Reuters EcoWin and the Riksbank

Figure A6. CDS premiums, banks
Basis points



Sources: Reuters EcoWin and the Riksbank

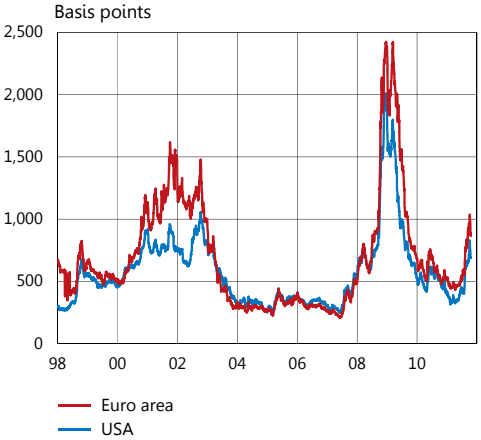
Figure A7. Estimated breakdown of risk premium between credit premium and liquidity premium in the euro area
Basis points



Note. The figure shows an estimated decomposition of the risk premium on the money market into a credit premium and a liquidity premium. The credit premium is estimated on the basis of the CDS premium, among others. The liquidity premium is then residually calculated as the difference between the total risk premium (see Figure A5) and the estimated credit premium.

Sources: Reuters EcoWin and the Riksbank

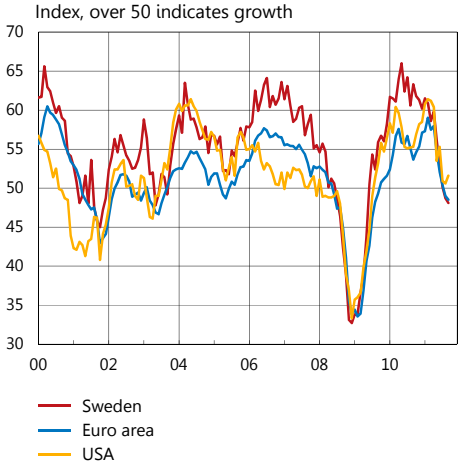
Figure A8. Credit spreads for corporate bonds in the euro area and United States
Basis points



Note. Difference between corporate yields with low credit worthiness and 10-year government yields.

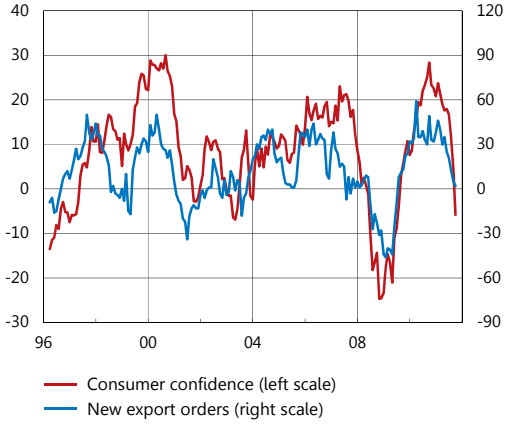
Sources: Reuters EcoWin and the Riksbank

Figure A9. Purchasing managers' index, manufacturing sector, US, the euro area and Sweden
Index, over 50 indicates growth



Sources: Institute for Supply Management, Markit Economics and Swedbank

Figure A10. New export orders and consumer confidence
Net balance



Source: National Institute of Economic Research

The survey of credit terms conducted by the ECB in September supports the picture of a relatively limited tightening of credit.[8]

Share prices fell when financial unease increased once again and growth prospects weakened in the summer of 2011. However, the recent downturn in share prices is much more limited than the fall that took place between August 2007 and the end of February 2009. At the same time, stock market indexes in Sweden, the United States and Germany are approximately 20 per cent below the level in August 2007, and for Europe as a whole the index is almost 50 per cent lower.

Various confidence indicators around the world fell dramatically to historically-low levels at the end of 2008 (see Figure A9). Even if these have also fallen recently, sentiment so far has been significantly better than in the winter of 2008-2009. So far, then, confidence indicators suggest that the slowdown in the global economy has been relatively limited. The prospects for global growth, measured as an average of the most recently available forecasts, have indeed been revised downwards somewhat in recent months, but not at all to the same extent as after September 2008.

Exports of Swedish goods have also continued to increase recently, which is in sharp contrast to the situation in the second half of 2008. The indicators that could conceivably reflect the channels from global financial unease to macroeconomic development in Sweden, such as consumer confidence and export orders for the manufacturing sector, so far also paint a picture of a more normal slowdown resembling the period that preceded the collapse of Lehman Brothers rather than the period that followed it (see Figure A10).

Better conditions to limit the real economic effects of the financial turbulence

Both financial and real indicators show that the current economic situation differs significantly from the situation at the end of 2008. There are, on the other hand, many similarities with the period that preceded the collapse of Lehman Brothers. One difference compared to 2008–2009 is that there are less serious liquidity problems today. Even if the banking system continues to be vulnerable, the central banks are deemed to be able to handle temporary liquidity problems until more long-term sustainable solutions can be put in place. This is one of the reasons why the Riksbank currently believes that any further contagion effects from the sovereign debt problems in the euro area to the global economy as a whole will be relatively limited. Our assessment is that global GDP growth will be about 4 per cent per year in the years immediately ahead, compared to 2009 when global GDP fell. The continued growth of the global economy is important to a small, export-dependent country like Sweden.

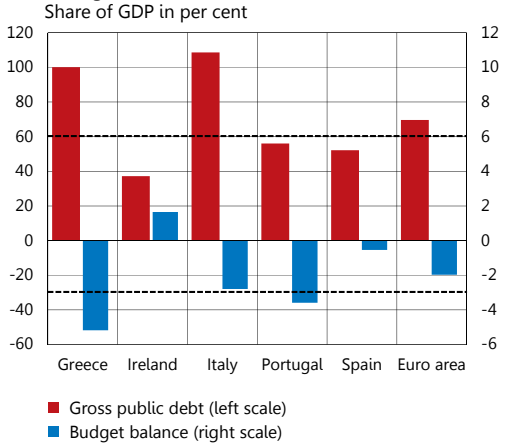
However, uncertainty about future developments is significant. This is illustrated in Chapter 2, which, among other material, presents an alternative scenario in which the fiscal problems deepen and the negative consequences for the Swedish economy become more serious.

[8] See "The Euro Area Bank Lending Survey" for October 2011.

The debt crisis in Europe

The debt crisis in the euro area is creating considerable unease on the financial markets. The central issue is the risk that Greece and other countries with weak public finances will experience difficulties in paying off their loans. Potential debt write-offs would rebound on the lenders, who are mainly the banks in the crisis countries but also banks in, for instance, Germany and France. The link between heavily-indebted states and the international financial system has meant that concern has also spread to other countries than those that are most under pressure. Greece, Ireland and Portugal have received extensive aid, but these measures are mainly useful in managing the acute situation. Resolving the more long-term problems requires that the crisis countries implement fiscal policy tightening to reduce public sector deficits, as well as structural and institutional reforms to regain lost competitiveness and improve the functioning of the economy. This article aims to provide a more detailed description of the conditions for managing the debt crisis in the euro area.

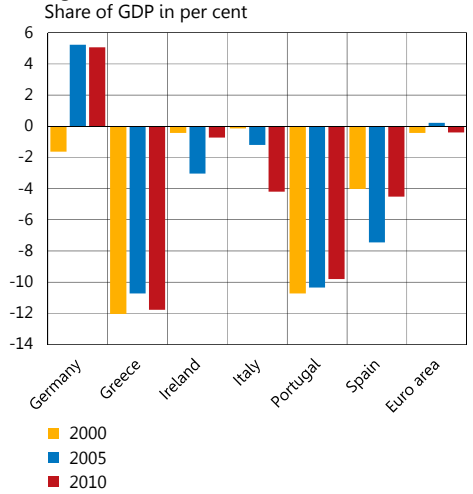
Figure A11. Gross public debt and budget balance, average 1997–2007
Share of GDP in per cent



Note. The broken line indicates the criteria of the Stability and Growth Pact, according to which public debt may amount to a maximum of 60 per cent of GDP and the budget deficit to a maximum of 3 per cent of GDP.

Source: European Commission

Figure A12. Current account balance
Share of GDP in per cent



Source: European Commission

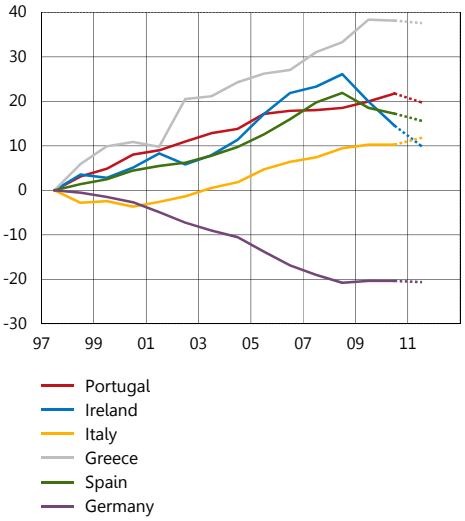
Various reasons for weak public finances

Since spring 2010 Greece, and later on Ireland and Portugal, have experienced difficulty in obtaining funding on the international bond market. Both Greece and Portugal have long had problems in their public finances, which has also led to a confidence crisis for their domestic banking sectors. Ireland, which on the other hand had a relatively low sovereign debt to start with, (see Figure A11), instead had high credit growth in the private sector in the wake of soaring property prices. The financial problems in the Irish public sector arose more as the result of the state taking on the costs of guarantees for banks affected by falling asset prices during the financial crisis. What the countries now suffering problems have in common is that they had relatively low total domestic savings. This was reflected in the current account deficit, which was funded through an inflow of capital from abroad, something that became more difficult to obtain during the financial crisis 2008-2009 (see Figure A12). Another common factor is that these countries have for a long time been losing competitiveness in relation to the average for the euro area (see Figure A13).

Greece, Ireland and Portugal are now receiving assistance from the International Monetary Fund (IMF), the EU and the euro area collaboration through three year aid packages corresponding to around 45 per cent of GDP in each respective country.[9] In return, they must implement measures to reduce their public deficits and debt levels in order to regain market funding. Regardless of the cause of the current weak public finances, the crisis countries are thus facing the same challenges: tightening to reduce budget deficits and public debt, as well as reforms to regain their international competitiveness and to improve their growth prospects.

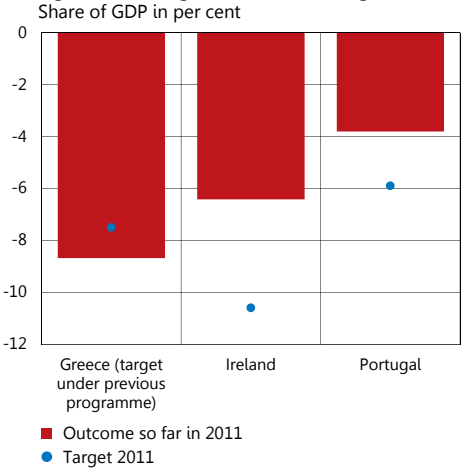
[9] Greece's package corresponds to around 48 per cent of GDP, Ireland's to 43 per cent (excluding its own funds) and Portugal's to 45 per cent.

Figure A13. Unit labour cost compared with the average for the euro area
Difference between index where 1997 = 100



Note. The broken line represents the OECD's forecast.
Source: OECD

Figure A14. Budget outcome and target
Share of GDP in per cent



Note. Budget outcome until the end of September. For Ireland, target and outcome are specified excluding capital injections to the banks. In Greece's case, it has already been established that the targets for 2011 will not be achieved.
Sources: National sources, Eurostat and IMF

Over the past year the reforms in Ireland have continued and the country looks set to meet the fiscal policy goals in the support programme (see Figure A14). All in all, developments have resulted in much lower, albeit still relatively high, bond rates. Portugal has recently needed to announce new measures to attain its fiscal policy goals. Greece has implemented substantial tightening. However, the situation has deteriorated lately, with a heavy fall in growth and problems in implementing further measures. As a result, Greek bond yields remain at a high level (see Figure A15). As Greece, Ireland and Portugal are being funded through the support programmes and not at these rates, the levels are not a direct measure of the difficulties in obtaining market funding, but they nevertheless comprise an indicator of confidence in the countries' fiscal policy prospects.

What help is available?

Prolonged negotiations regarding a second support package for Greece, combined with questions regarding the euro area's management of debt crises within the monetary union have contributed to the unease spreading to more countries than those hardest hit. For example, the interest rate differential for government bonds with regard to Germany rose in Spain, Italy, Belgium and Cyprus and even France during summer 2011. Part of the unease appears to revolve around if and when the current support facilities can be extended to offer further guarantees to individual countries and to possible capital injections to European banks.

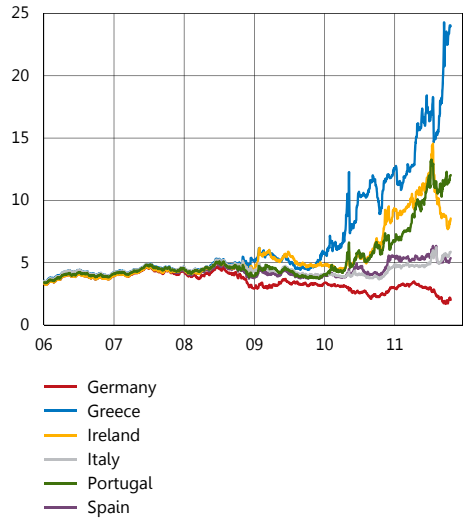
The facilities currently available consist of three parts. The largest, the EFSF (European Financial Stability Facility), was established in spring 2010 and has been built using guarantees from the euro area countries themselves. With the support of these guarantees the EFSF will take loans on the international capital markets and in turn grant loans to euro countries in financial distress. The second part is the EFSM (European Financial Stability Mechanism) which is based on a guarantee from the EU. With effect from 2013 these two will be replaced by the European Stability Mechanism, ESM. The third part, which was also announced in spring 2010, was that the IMF could provide loans of up to EUR 250 billion. Ireland's and Portugal's support packages are funded with the aid of these mechanisms, while the first support package for Greece was funded through bilateral loans from the IMF and several EU countries.

In addition to the assistance provided through the above facilities, the ECB has made support purchases of government securities as part of its extraordinary measures.

As the debt crisis in the euro area has intensified, decisions have been taken on gradual extensions to the EFSF and its mandate. For one thing the guarantee framework has been raised to retain a lending capacity of EUR 440 billion. Moreover, the EFSF should be able to provide support through direct purchases of government bonds. It has also been decided that the EFSF should be able to offer credit facilities to countries that do not have acute funding needs, and provide loans to fund the recapitalisation of banks even in euro countries not covered by the existing support programmes.

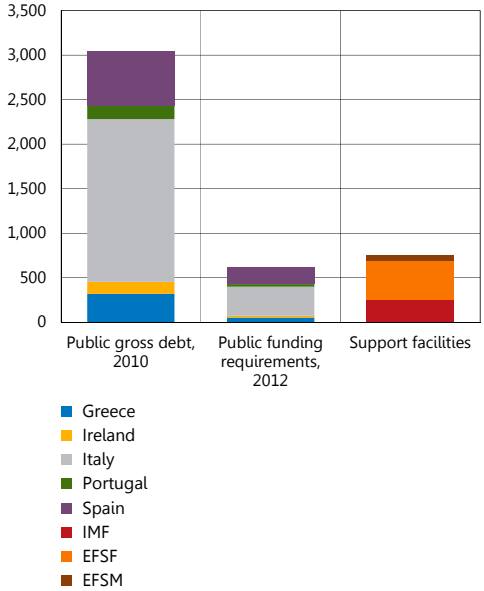
The current facilities do include some scope to help further countries in addition to those already receiving assistance. Figure A16 shows the support facilities (including the 140 billion or so promised in the existing programmes) in relation to the funding needs of Greece, Ireland, Italy, Portugal and Spain over the coming year. But if several large countries, such as Spain and Italy, were to experience problems obtaining funding on the capital markets at the same time, the money would not be enough. One can add a need for capital injections to several European banks. One difficulty in this context is that many euro area countries cannot significantly increase their guarantees to the EFSF without the risk of losing credibility for their own public finances. Discussions about this were still underway at the EU-level at the time of the monetary policy meeting.

Figure A15. Government bonds with 10 years left to maturity
Per cent



Source: Reuters EcoWin

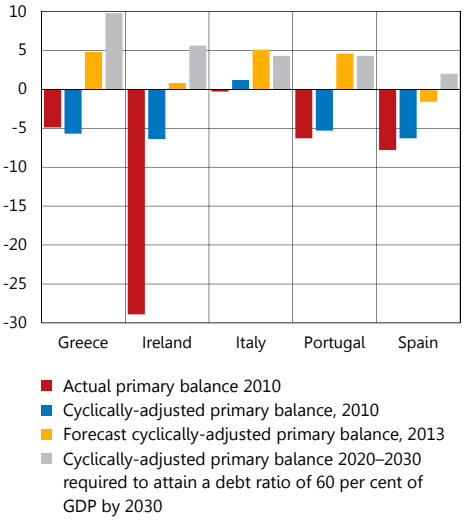
Figure A16. Support facilities and possible needs
Billions, EUR



Note. Public funding requirements are forecast budget deficit plus maturity.

Sources: Bloomberg, European Commission, Eurostat, IMF and the Riksbank

Figure A17. Austerity requirements
Per cent of GDP



Note. Primary balance refers to budget balance minus net interest income. Cyclically-adjusted primary balance when adjusted for level of economic activity.

Source: IMF Fiscal Monitor September 2011

Sustained challenge

However, the above programmes aim to manage the more acute problems of liquidity shortages – not to provide long-term support for the crisis countries. As the countries must show that they can gradually manage their own funding, the willingness of the guarantee countries to inject more money will depend on the willingness of the countries receiving assistance to make reforms.

Regardless of how the problems are managed in the short term, the countries must thus implement fiscal policy reforms over a long period of time. The Riksbank has shown in an earlier article that today's crisis countries must make the transition from deficit to a surplus that must be maintained for many years to attain a sustainable debt development.[10] Despite a considerable improvement in the budget balance in Greece and Ireland, there is a long way to go before they reach a level that can stabilise their debt, and even further to go before they can reach a debt level of 60 per cent of GDP in accordance with the requirements of the Stability and Growth Pact (see Figure A17). In comparison, it can be mentioned that it took Sweden around four years to stabilise a relatively lower public debt ratio during the 1990s.

But it is not only tax increases and savings that are necessary. Many of the countries now experiencing problems as a result of weak public finances also have weak economic policy institutions and have a relatively low rating according to indicators that can be used as measures of institutional weakness.[11] This may make it difficult to recover taxes, but also to make savings in the public sector. Structural reforms are thus important, to raise the long-term growth rate and tax revenue in the economy, and also to improve the institutions so that it is possible to actually recover these taxes.

It is a difficult challenge to attain a credible reduction in debt without at the same time slowing down demand too much. The Riksbank's growth forecast for the euro area is therefore moderate, despite a large amount of spare capacity in the economy. The challenge is particularly great for the countries that are forced at the same time to restore their competitiveness by holding back prices and wages. But although tighter fiscal policy can be expected to hold back growth in several euro countries over the coming years, it is necessary to maintain increased fiscal policy discipline in heavily-indebted countries. This is required to create stability and reduce vulnerability in the future.

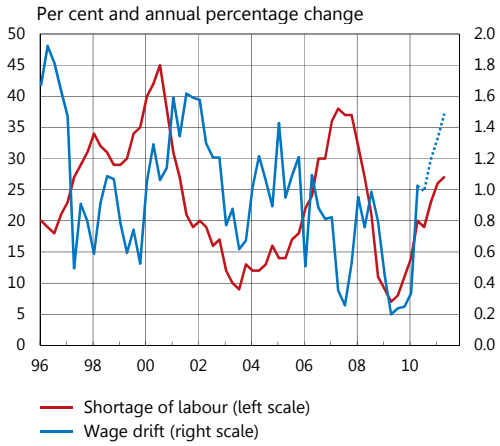
[10] See the article "The sustainable development of public debt?" in the Monetary Policy Report, July 2011.
[11] See, for instance, Transparency International's Corruption Perception Index, the European Commission's measure of the illegal sector as a percentage of GDP (European Economy, nr 5, 2011) or the World Bank's Worldwide Governance Indicators.

New round of collective bargaining in an uncertain economic climate

A new, large-scale round of collective bargaining began in the autumn of 2011 and will continue in 2012. New wage agreements affecting at least 2.7 million workers will be signed in a situation where the labour market has been improving rapidly for some time now. However, uncertainty regarding the prospects for global growth has increased, which also affects Sweden. Several indicators for the development of the Swedish economy now point to a slowdown. The social partners in the manufacturing industry will need to take a stance on these issues and on a number of other factors when they negotiate new collective agreements during the autumn of 2011.

As in previous years, it is expected that the levels set in the agreements for the manufacturing industry will act as a norm for other contractual areas on the Swedish labour market. The Riksbank's assessment is that wage formation, as it has done over the past 15 years, will give rise to wage increases that are compatible with the inflation target.

Figure A18. Shortage of labour and wage drift in the business sector
Per cent and annual percentage change



Sources: National Mediation Office, NIER, Statistics Sweden and the Riksbank

Partly as a result of the financial crisis, wage increase in the agreements signed for 2010-2011 were low.

Approximately 140 000 jobs were lost in Sweden as a consequence of the financial crisis that began in 2008. The lower level of economic activity and the weaker labour market resulting from the crisis were also reflected in the level of the wage agreements signed during the round of collective bargaining in 2010. The manufacturing industry was hit hard by the crisis and industrial production fell dramatically. This also affected the levels in the wage agreements in the sector, which averaged 1.75 per cent as an annual percentage change. This average level then acted as a norm for the rest of the labour market.

According to statistics from the National Mediation Office, collective bargaining in 2010 resulted in centrally-agreed wage increases in the Swedish economy that averaged 1.7 per cent per year in 2010 and 2011. This can be compared, for example, with collective bargaining in 2007, which resulted in centrally-agreed increases averaging 2.9 per cent per year for the period 2007-2009.

Improved labour market has entailed a higher rate of wage drift

The labour market has recovered rapidly since the financial crisis of 2008-2009. The improvement on the labour market has also begun to show in wage statistics. This does not relate to the centrally-agreed wages increases determined in the round of collective bargaining in 2010. The improvement on the labour market is instead reflected in wage increases over and above the levels in the central agreements (often referred to as wage drift or the residual term), mainly in the business sector. Wage drift in the business sector has increased from an historically low level of below 0.3 percentage points in 2009 to a preliminary figure of almost 0.9

percentage points in 2010 (see Figure A18). The assessment is that the rate of wage drift in the business sector will increase further in 2011 to approximately 1.1 per cent. According to the short-term wage statistics, the total rate of wage increases (that is centrally-agreed increases plus wage drift) in the Swedish economy was, preliminarily, 2.6 per cent in 2010, and it is estimated to be 2.8 per cent in 2011.[12]

Many wage agreements are to be renegotiated in the autumn of 2011 and throughout 2012

A new, large-scale round of collective bargaining began in the autumn of 2011 and will continue in 2012. During the autumn of this year and throughout next year, over 500 wage agreements will be renegotiated between the social partners on the Swedish labour market (see Table A1). The negotiations will cover over 2.7 million employees. In addition, there will be a large number of application agreements that will cover an estimated 200 000 employees.[13] In total, approximately two thirds of the employees in Sweden will be affected by this round of collective bargaining. Most of the agreements expire on 31 March and on 30 April next year.[14]

[12] If the rate of wage increases is instead measured using the figures on wage sums and hours worked in the National Accounts, then the rate of increase in hourly wages was significantly lower in 2010. Various statistical effects, for example changes in levels of absence as a result of holidays, the scheduling of working hours and changes in bonus payments and other taxable fringe benefits, are behind this. The phase-out of crisis agreements in the manufacturing industry may also be a possible explanation of why the figures for hourly wages in the National Accounts increased much more slowly in 2010. For more information on this see Statistics Sweden, *Sveriges ekonomi – Statistiskt perspektiv (Sweden's economy – Statistical perspectives)*, 2010:4.

[13] An application agreement is an agreement signed between an employees' organisation and a single company that is not a member of an employers' confederation.

[14] This means that this round of collective bargaining will be somewhat less extensive than the round conducted in 2010, when more than 550 agreements were signed for over 3.3 million employees.

Table A1. Major wage agreements that expire in autumn 2010 and in 2012 – An overview

Expiry date	Sector/branch/group/agreement	No. of employees (1 000s)	No. of agreements
30 Sep. 2011	White-collar workers in the manufacturing industry	170	18
31 Oct. 2011–31 Dec. 2011	White-collar workers (TEKO), academics in banking and insurance, accounting and consulting firms	23	22
Autumn 2011		*193*	*40*
31 Jan. 2012	Mainly blue-collar workers in the manufacturing industry	380	39
29 Feb. 2012	E.g. the auto industry	90	39
31 Mar. 2012	E.g. the retail trade, IT and telecom	470	217
30 Apr. 2012	E.g. municipalities, employment agencies	1 180	107
31 May 2012	E.g. hotels and restaurants, communications and service contractors	140	51
30 Jun. 2012–31 Aug. 2012	E.g. blue collar unions within Samhall, free schools (KFO)	75	21
30 Sep. 2012	E.g. the State sector	160	15
31 Oct. 2012–31 Dec. 2012	E.g. call centres, newspaper distributors, seagoing personnel	23	8
2012		*2 518*	*507*

Note. TEKO = The Swedish Textile and Clothing Industries' Association and KFO = The Co-operative Employers'.

Source: National Mediation Office

The agreement in the manufacturing industry is expected to set the norm for wage increases in this round too

The so-called Industrial Agreement has been of major importance to wage formation in Sweden since the second half of the 1990s.[15] In 2010, Teknikföretagen, an employers' association for engineering companies, terminated the Industrial Agreement which, among others, regulated collective bargaining procedures in the manufacturing industry's contractual area.[16] Negotiations on a new Industrial Agreement were completed in June this year and this agreement came into force on 1 July. The new Industrial Agreement more clearly outlines the normative and leading role of the manufacturing industry in wage formation and includes regulations for the co-ordination of the scheduling of collective bargaining for blue-collar and white-collar workers in the sector. It also strengthens the role of the impartial mediators.[17] Despite the fact that not all the parties to the old Industrial Agreement have signed the new Industrial Agreement, the factors mentioned above can help to give the manufacturing industry a strong normative role with regard to wages in

[15] The Industrial Agreement has been in force since 1997 and has become an important institution in Swedish wage formation. The Industrial Agreement came into being after the round of collective bargaining in 1995 when the social partners failed to co-ordinate their negotiations. Co-ordination has improved since the Industrial Agreement was signed and collective agreements in the manufacturing industry have become the norm for other contractual areas.

[16] Termination came into force on 31 October 2010.

[17] Under the Industrial Agreement, an impartial mediator should be appointed three months before, and assist the parties to the agreements one month before, the old agreement expires. Impartial mediators are able to act on their own initiative and may, for example refer matters to the Economic Council for the Manufacturing Industry for comment, propose their own solutions and postpone industrial action.

the 2011-2012 round of collective bargaining too.[18] In January this year, the blue-collar and white-collar trade unions in the manufacturing industry also agreed to co-ordinate collective bargaining during the autumn. The trade unions in the sector presented their demands on 30 September this year in accordance with this agreement. The intention is that the new wage agreements should be finalised no later than 30 November this year.

The Swedish Trade Union Confederation recommends wage demands of 3.5 per cent

In September this year, the Swedish Trade Union Confederation (LO) recommended its members to demand 3.5 per cent, or at least SEK 860 per month, in a one-year agreement in the negotiations with the employer organisations.[19] The Confederation's recommended demands also include a gender equality kitty for contractual areas with low average wages and a number of other changes in terms and conditions of employment and collective insurance schemes (see Table A2). The changes in the collective insurance schemes comprise an extended readjustment insurance scheme, higher sickness benefits and increased levels in occupational pension schemes.

Three of the trade unions in the manufacturing sector that are affiliated to LO, that is IF Metall (The Swedish Metalworkers' Union), GS (the trade union for workers in the forestry, woodworking and graphic industries) and Livs (The Swedish Food Workers' Union), entered a reservation against the demands adopted by the LO board. These trade unions have chosen not to support the demand for a gender equality kitty. They have also demanded wage increases of 3.7 per cent, or at least SEK 910 per month. The white-collar trade unions in the sector have also supported these higher wage demands.

Higher demands now compared with the previous round of collective bargaining

Table A2 presents a comparison of LO's recommended demands with the corresponding demands in the last three rounds of collective bargaining.[20] The table shows that the demands now, as in previous years, apply for a contractual period of one year. If the employer organisations want a longer contractual period, then this will be part of a negotiated solution. The demands relating to wage increases are now almost one per cent higher than they were during the previous round. It is worth pointing out that the outcomes in the short-term wage statistics for the rate of wage increases per year have been close to the levels in the wage demands. The table also shows that the outcomes for the centrally-agreed wage increases have on average constituted approximately two-thirds of the levels demanded.

[18] Five trade unions and 12 employer organisations have signed the new Industrial Agreement. The Swedish Paper Workers' Union, which signed the old agreement, chose not to sign the new agreement for various reasons.

[19] LO (The Swedish Trade Union Confederation) is one of three central trade union organisations on the Swedish labour market. The other two are SACO (The Swedish Confederation of Professional Associations) and TCO (The Swedish Confederation of Professional Employees). LO organises trade unions for blue collar workers while SACO and TCO organise white-collar unions.

[20] The reason why only LO's demands are analysed is that the other central organisations have not now or in previous rounds presented any joint demands that set out desired levels for wage increases.

Table A2. LO's recommended demands and wage outcomes in the short-term wage statistics

Annual percentage change unless otherwise specified

Agreement	2004	2007	2010	2012
		LO's recommended demands		
Contractual period (years)	1	1	1	1
Demand for wage increases	3.2	3.9	2.6	3.5
Demand for lowest wage increase (SEK per month)	650	825	620	860
Low wage/gender equality kitty (SEK per month)*	250 (<17 500)	205 (<20 000)	125 (<21 300)	100 (<22 400)
Examples of other demands	Guaranteed lowest increase in holiday pay, new readjustment insurance scheme	Agreements lowest wages to be increased by at least SEK 910 per month	Right to full time, restriction of fixed-period employment, regulations for use of employment agencies	Extended parental payments, restriction of fixed-period employment, improvements in contractual insurance schemes
		*Result/outcome for the economy as a whole***		
Contractual period (years)	3	3	2	?
Wage outcome (short-term wage statistics)	3.2	3.7	2.7	?
Agreed wage increase according to MI	2.0	2.9	1.7	?
Impact (agreed wage increase as % of demands)	63	74	65	?

* The demands ahead of the agreements reached in 2004 included, for example, that wages should be increased by a further SEK 250 per month in those contractual areas where the average wage was below SEK 17 500 per month.

** The calculations relate to the average during the contractual period. Contractual periods are measured in calendar years (that is not contractual years). The calculations for 2010 and 2011 have been made using preliminary outcomes and the Riksbank's forecasts.

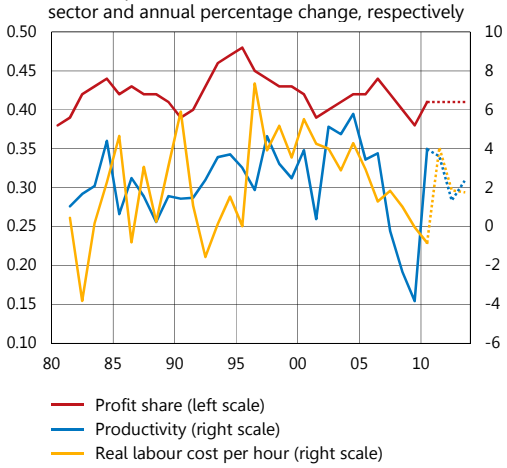
Sources: LO, National Mediation Office (MI), Statistics Sweden and the Riksbank.

The Confederation of Swedish Enterprise (SN) has calculated the effects of LO's recommended demands. According to SN, the cost for the demand for wage increases in terms of an annual percentage change, including the demand for a lowest increase in kronor per month, is 3.9 per cent, which is 0.7 percentage points higher than the calculated cost of the corresponding demands in the previous round of collective bargaining. To this can be added costs for proposed changes to employment conditions and collective insurance schemes, as well as wage increases above negotiated levels.

Collective bargaining will take place in an uncertain economic climate, although the situation on the labour market has improved

Collective bargaining will now take place following a period in which the labour market has improved relatively rapidly. Corporate profits have recovered and the growth of productivity in the Swedish economy has been fairly high. However, the profit share in the business sector is still relatively low and is expected to remain below its historical average throughout this year (see Figure A19). The rate of growth in labour productivity was very low or negative in the period 2007 to 2009, which led to a fall in the profit share. Growth has been significantly stronger since then, but nevertheless the average rate of growth in productivity

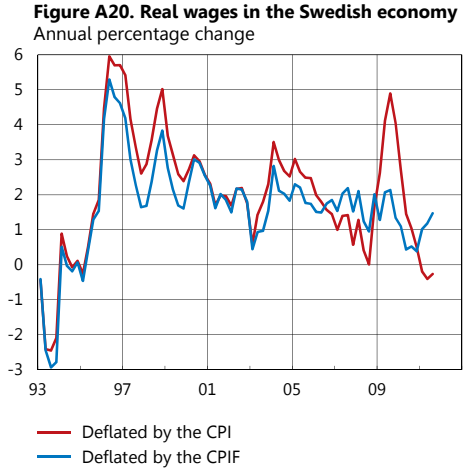
Figure A19. Profit share in the business sector
Gross surplus as share of value added in the business sector and annual percentage change, respectively



Note. Labour cost deflated by business sector's value-added price.

Sources: Statistics Sweden and the Riksbank

Figure A20. Real wages in the Swedish economy
Annual percentage change



Sources: National Mediation Office, Statistics Sweden and the Riksbank

has been more or less zero since 2007. The real labour cost per hour has increased slightly more than productivity since 2007.

On the other hand, real wages in the economy as a whole (deflated by the CPI) increased substantially in 2009 but will fall somewhat this year. However, the figures for the development of real wages in recent years vary depending on what measure of inflation is used when deflating. If, for example, the CPIF is used as a measure of inflation then real wages fluctuate less (see Figure A20).

Collective bargaining will also be conducted in a situation in which there is great uncertainty about the prospects for development abroad, and thus for Sweden too. Several indicators for the development of the Swedish economy now point to a slowdown. According to the Swedish Employment Service, the number of new vacancies is now not increasing as rapidly as previously at the same time as the number of redundancy notices has increased somewhat. According to the business tendency survey, employment plans also indicate that new recruitment will decline in the months ahead. The shortage of labour has declined or stabilised in several sectors according to data in the survey.

According to the Prospera survey, expectations of future wage increases and inflation have shown an increasing trend since approximately the middle of 2009. However, the latest survey in October shows that expectations regarding both future wage increases and inflation have fallen. Historical links between wages, inflation and inflation expectations indicate that wage expectations one, two and five years ahead will increase in the months immediately ahead but will fall back thereafter (see Figure A21).

Several conceivable reasons for tensions in collective bargaining

There are several conceivable reasons why tensions may arise between the parties in the approaching round of collective bargaining. Different parts of the economy have recovered to varying degrees since the crisis. For instance, there is a substantial difference between how the labour market in the manufacturing industry has recovered compared with the service sector.[21] The levels in the central agreements will, as always, be a question for central negotiations. During the last three rounds of collective bargaining, the LO trade unions have, for example, on average succeeded in getting approximately two-thirds of their demands accepted in the central agreements according to statistics from the National Mediation Office. Depending, in part, on the social partners' assessments of the development of the Swedish economy in the period ahead, they may succeed in getting acceptance for more or fewer of their demands in relation to this historical average.

The employer organisations have expressed a desire for the new collective agreements to comprise a higher degree of local wage

[21] The weak recovery in the manufacturing industry can partly be explained by the fact that a certain proportion of the increase in employment has instead taken place in the corporate services segment (which forms part of the service sector). This increase in employment is directly related to the manufacturing industry through, for example, employment agencies, computer companies and other consulting services. The assessment of the Economic Council for the Manufacturing industry is that the recovery of employment in the sector will be weak in the years immediately ahead. See the report of the Economic Council for the Manufacturing Industry, *Inför 2011 års avtalsrörelse (Ahead of the round of collective bargaining in 2011)*, June 2011.

formation in relation to wage formation at the central trade union level. The structure of the agreements has a major impact on the flexibility of wage formation. A higher degree of local wage formation in the wage agreements may be justified by the fact that different sectors, branches or individual companies will develop differently in the period ahead. The length of the contractual periods will also be an important issue for negotiation in this context. Long contractual periods with high levels in the central agreements reduce the flexibility of wage formation, which could be clearly seen in, above all, 2009, when several temporary crisis agreements were signed in the manufacturing industry in order to depart from the collective agreements in the sector that were already in force. The lowest wage levels within the respective contractual areas will also be an important issue in the negotiations. The employer organisations have said that they want these levels to remain unchanged during this and several future contractual periods.

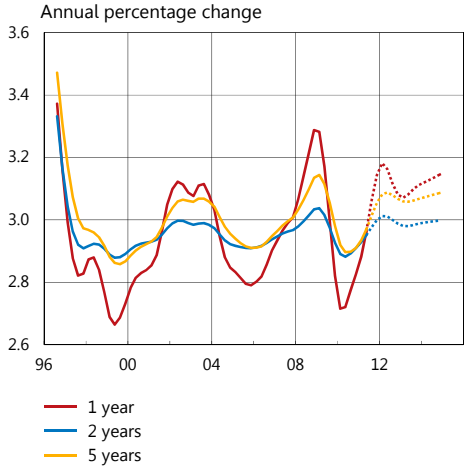
Slightly higher rate of wage increases in the years ahead

During the period 2012-2014, wages in the Swedish economy are expected to increase by an average of approximately 3.3 per cent per year (see Figure A22). This assessment is based on a number of different factors, such as developments on the labour market, corporate profits and current inflation expectations. Since 1998, wage increases agreed at the union level have constituted between 50 and 80 per cent of total wage increases in Sweden. If we assume that this will continue to be the case during the period 2012-2014, then the Riksbank's forecast for total wage increases of 3.3 per cent per year means that level in the union-wide agreements will, according to the statistics of the National Mediation office, be between 1.7 and 2.7 per cent per year.

Wage forecast important for the employment and inflation forecasts

The wage forecast forms an important component in the Riksbank's assessment of the future development of inflation and employment. The future development of wages will have a major impact on the development of employment and unemployment in Sweden. High increases in real wages tend to have a negative impact on employment.[22] Although the wage forecast is mainly based on the development of the economy, the levels adopted in the agreements often provide a guide to the development of total wages in the period ahead. If the current round of collective bargaining leads to wage increases that clearly deviate, upwards or downwards, from the Riksbank's forecast, this may have consequences for monetary policy.

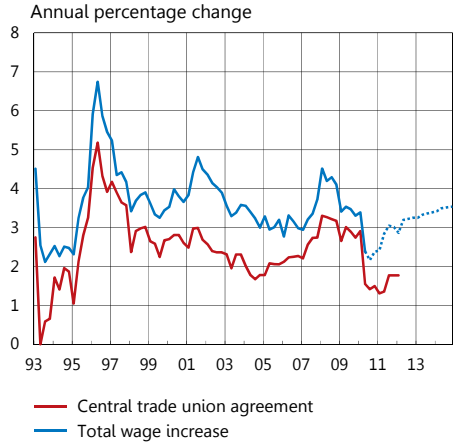
Figure A21. Wage expectations one, two and five years ahead according to all participants. Outcome and model forecasts
Annual percentage change



Note. The model forecasts have been produced as follows: In the first regression, the Riksbank's forecast of CPI inflation has been used to forecast future inflation expectations. In the second regression, wage expectations are then forecast with the aid of these estimated forecasts of inflation expectations.

Sources: TNS SIFO Prospera and the Riksbank

Figure A22. Total wage increases and wage increases agreed at the central trade union level in Sweden
Annual percentage change



Sources: National Mediation Office and the Riksbank

[22] Economic research has demonstrated a strong link between real wages, employment and unemployment. For compilations of theoretical and empirical research in this field see for example the *Wage Formation Report 2011* of the National Institute of Economic Research and Nils Gottfries, *Swedish wage formation – does it work?*, Appendix 5 of the Long-term Planning Commission Report 2011.

Appendix

Tables

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

Table 1. Repo rate forecast
Per cent, quarterly average values

	Q2 2011	Q3 2011	Q4 2011	Q4 2012	Q4 2013	Q4 2014
Repo rate	1.7	2.0 (2.0)	2.0 (2.1)	2.3 (2.6)	2.9 (3.2)	3.5

Source: The Riksbank

Table 2. Inflation, annual average
Annual percentage change

	2010	2011	2012	2013	2014
CPI	1.2 (1.2)	3.0 (3.0)	1.9 (2.1)	2.4 (2.6)	2.6
CPIF	2.0 (2.0)	1.5 (1.5)	1.3 (1.5)	1.8 (2.0)	2.0
CPIF excl. energy	1.5 (1.5)	1.1 (1.0)	1.6 (1.6)	1.8 (2.0)	2.0
HICP	1.9 (1.9)	1.4 (1.4)	1.3 (1.4)	1.8 (1.9)	2.0

Note. The rate of change in the CPI is based on revised index figures, which may differ from the established index figures. CPIF is the CPI with fixed interest rate. HICP is an EU harmonised index of consumer prices.

Sources: Statistics Sweden and the Riksbank

Table 3. Summary of financial forecasts
Annual average, per cent, unless otherwise specified

	2010	2011	2012	2013	2014
Repo rate	0.5 (0.5)	1.8 (1.8)	2.2 (2.4)	2.7 (2.9)	3.3
10-year rate	2.9 (2.8)	2.6 (2.8)	2.4 (2.9)	3.4 (3.7)	4.0
Exchange rate, TCW-index, 18 Nov. 1992=100	129.2 (129.3)	122.6 (121.8)	122.3 (120.4)	119.7 (119.4)	119.9
General government net lending*	-0.1 (-0.2)	0.5 (0.5)	0.7 (0.8)	0.8 (1.0)	1.1

* Per cent of GDP

Sources: Statistics Sweden and the Riksbank

Table 4. International conditions
Annual percentage change, unless otherwise stated

GDP	2010	2011	2012	2013	2014
Euro area (0,14)	1.8 (1.7)	1.6 (1.7)	0.7 (1.1)	1.8 (2.0)	2.4
USA (0,20)	3.0 (3.0)	1.7 (1.6)	1.8 (2.0)	2.6 (2.8)	3.1
Japan (0,06)	4.0 (4.0)	-0.7 (-0.8)	2.5 (2.5)	1.9 (1.9)	0.8
OECD (0,55)	3.1 (3.0)	1.8 (1.8)	1.8 (2.1)	2.4 (2.6)	2.7
TCW-weighted (0,47)	2.0 (1.9)	1.4 (1.5)	1.3 (1.6)	2.0 (2.1)	2.4
World (1,00)	5.0 (4.9)	3.9 (3.9)	3.8 (3.9)	4.1 (4.2)	4.2

Note. The figures in parentheses indicate the global purchasing-power adjusted GDP-weights, according to the IMF, 2010.

CPI	2010	2011	2012	2013	2014
Euro area (HICP)	1.6 (1.6)	2.7 (2.4)	1.6 (1.5)	1.4 (1.6)	1.7
USA	1.6 (1.6)	3.2 (3.2)	2.2 (2.2)	1.3 (1.4)	1.4
Japan	-0.7 (-0.7)	-0.3 (0.4)	-0.2 (0.4)	0.3 (0.3)	0.3
TCW-weighted	1.6 (1.6)	2.6 (2.5)	1.7 (1.7)	1.5 (1.6)	1.7

	2010	2011	2012	2013	2014
Policy rates in the rest of the world, TCW-weighted, per cent	0.5 (0.5)	0.8 (0.8)	0.7 (1.0)	1.2 (1.7)	2.2
Crude oil price, USD/barrel Brent	80 (80)	111 (111)	102 (109)	99 (106)	95
Swedish export market	9.3 (8.8)	5.5 (7.0)	4.7 (5.3)	4.8 (5.2)	5.4

Note. The Swedish export market index is calculated as a weighted average of the imports of the 15 countries which are the largest recipients of Swedish exports. They receive approximately 70 per cent of Swedish exports. The weight assigned to a country is its share of Swedish exports of goods.

Sources: Eurostat, IMF, Intercontinental Exchange, OECD and the Riksbank

Table 5. GDP by expenditure
Annual percentage change, unless otherwise specified

	2010	2011	2012	2013	2014
Private consumption	3.7 (3.4)	2.4 (2.0)	1.4 (1.9)	2.1 (2.3)	2.2
Public consumption	2.2 (2.5)	1.3 (1.0)	0.6 (0.6)	0.7 (0.7)	0.5
Gross fixed capital formation	6.6 (7.1)	8.3 (7.9)	4.8 (6.0)	5.8 (5.8)	4.6
Inventory investment*	2.0 (2.1)	0.2 (0.6)	-0.6 (-1.0)	0.0 (-0.1)	0.0
Exports	11.1 (11.0)	7.9 (8.4)	3.9 (4.4)	5.2 (5.6)	5.5
Imports	12.7 (12.8)	6.7 (6.7)	3.6 (3.8)	5.8 (6.2)	5.3
GDP	5.6 (5.7)	4.2 (4.5)	1.5 (1.7)	2.4 (2.4)	2.5
GDP, calendar-adjusted	5.4 (5.4)	4.2 (4.5)	1.9 (2.1)	2.4 (2.4)	2.7
Final figure for domestic demand*	3.6 (3.7)	3.0 (2.7)	1.7 (2.1)	2.3 (2.4)	2.1
Net exports*	0.0 (0.0)	1.0 (1.2)	0.4 (0.6)	0.1 (0.1)	0.5
Current account (NA), per cent of GDP	6.3 (6.2)	6.4 (6.4)	6.6 (6.7)	6.5 (6.4)	6.6

*Contribution to GDP growth, percentage points

Note. The figures show actual growth rates that have not been calendar-adjusted, unless otherwise stated. NA is the National Accounts.

Sources: Statistics Sweden and the Riksbank

Table 6. Production and employment
Annual percentage change, unless otherwise stated

	2010	2011	2012	2013	2014
Population, aged 16-64	0.5 (0.5)	0.2 (0.2)	0.1 (0.1)	0.0 (0.0)	0.0
Potential hours worked	0.9 (0.9)	0.5 (0.5)	0.4 (0.4)	0.3 (0.3)	0.3
GDP, calendar-adjusted	5.4 (5.4)	4.2 (4.5)	1.9 (2.1)	2.4 (2.4)	2.7
Number of hours worked, calendar-adjusted	1.7 (1.7)	1.6 (1.7)	0.7 (0.9)	0.6 (0.6)	0.7
Employed, aged 15-74	1.0 (1.0)	2.1 (2.1)	0.5 (0.6)	0.4 (0.5)	0.6
Labour force, aged 15-74	1.1 (1.1)	1.1 (1.2)	0.2 (0.2)	0.2 (0.1)	0.2
Unemployment, aged 15-74 *	8.4 (8.4)	7.5 (7.5)	7.2 (7.2)	7.0 (6.9)	6.6

* Per cent of labour force

Note. Potential hours refers to the long-term sustainable level for the number of hours worked.

Sources: Statistics Sweden and the Riksbank

Table 7. Wages and unit labour cost for the economy as a whole
Annual percentage change, calendar-adjusted data

	2010	2011	2012	2013	2014
Hourly wage, NMO	2.6 (2.6)	2.8 (2.7)	3.1 (3.1)	3.3 (3.4)	3.5
Hourly wage, NA	1.3 (1.3)	3.9 (3.8)	3.3 (3.3)	3.6 (3.6)	3.8
Employer's contribution*	-0.3 (-0.3)	-0.2 (-0.4)	0.1 (0.1)	0.0 (0.0)	0.0
Hourly labour cost, NA	1.0 (1.0)	3.7 (3.4)	3.3 (3.3)	3.6 (3.6)	3.8
Productivity	3.6 (3.6)	2.5 (2.8)	1.2 (1.2)	1.9 (1.7)	2.0
Unit labour cost	-2.5 (-2.5)	1.1 (0.7)	2.1 (2.1)	1.7 (1.9)	1.7

* Contribution to the increase in labour costs, percentage points.

Note. NMO is the National Mediation Office's short-term wage statistics and NA is 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 seasonally adjusted value added at constant prices.

Sources: National Mediation Office, Statistics Sweden and the Riksbank

Table 8. Alternative scenario: Prolonged crisis in public finances
Annual percentage change, unless otherwise specified, annual average

	2011	2012	2013	2014
GDP abroad	1.3 (1.4)	0.2 (1.3)	0.4 (2.0)	1.6 (2.4)
Inflation abroad	2.6 (2.6)	1.4 (1.7)	0.3 (1.5)	0.3 (1.7)
Interest rate abroad, per cent	0.8 (0.8)	0.6 (0.7)	0.8 (1.2)	0.9 (2.2)
CPIF	1.5 (1.5)	1.8 (1.3)	1.3 (1.8)	1.1 (2.0)
CPI	3.0 (3.0)	2.3 (1.9)	1.3 (2.4)	0.9 (2.6)
GDP, calendar-adjusted	4.0 (4.2)	-0.4 (1.9)	0.6 (2.4)	2.1 (2.7)
Unemployment, per cent	7.5 (7.5)	7.6 (7.2)	7.8 (7.0)	7.8 (6.6)
Repo rate, per cent	1.7 (1.8)	2.1 (2.2)	2.0 (2.7)	1.7 (3.3)
TCW-weighted exchange rate, 18 Nov. 1992=100	123.2 (122.6)	126.0 (122.3)	119.4 (119.7)	119.5 (119.9)

Note. The figures in parentheses show the forecast in the main scenario. TCW-weighted foreign variables.
Sources: Statistics Sweden and the Riksbank

Table 9. Alternative scenario: Prolonged crisis in public finances with more expansionary monetary policy
Annual percentage change, unless otherwise specified, annual average

	2011	2012	2013	2014
GDP abroad	1.3 (1.4)	0.2 (1.3)	0.4 (2.0)	1.6 (2.4)
Inflation abroad	2.6 (2.6)	1.4 (1.7)	0.3 (1.5)	0.3 (1.7)
Interest rate abroad, per cent	0.8 (0.8)	0.6 (0.7)	0.8 (1.2)	0.9 (2.2)
CPIF	1.5 (1.5)	2.1 (1.3)	2.1 (1.8)	1.9 (2.0)
CPI	3.0 (3.0)	2.0 (1.9)	2.0 (2.4)	1.7 (2.6)
GDP, calendar-adjusted	4.0 (4.2)	0.1 (1.9)	1.5 (2.4)	2.7 (2.7)
Unemployment, per cent	7.5 (7.5)	7.4 (7.2)	7.1 (7.0)	6.8 (6.6)
Repo rate, per cent	1.7 (1.8)	1.3 (2.2)	1.1 (2.7)	1.0 (3.3)
TCW-weighted exchange rate, 18 Nov. 1992=100	123.3 (122.6)	127.8 (122.3)	122.9 (119.7)	124.1 (119.9)

Note. The figures in parentheses show the forecast in the main scenario. TCW-weighted foreign variables.
Sources: Statistics Sweden and the Riksbank

Table 10. Alternative scenario: stagflation
Annual percentage change, unless otherwise specified, annual average

	2011	2012	2013	2014
GDP abroad	1.4 (1.4)	0.8 (1.3)	0.8 (2.0)	1.8 (2.4)
Inflation abroad	2.7 (2.6)	2.6 (1.7)	2.6 (1.5)	2.8 (1.7)
Interest rate abroad, per cent	0.8 (0.8)	0.7 (0.7)	1.9 (1.2)	2.9 (2.2)
CPIF	1.5 (1.5)	1.9 (1.3)	2.6 (1.8)	2.5 (2.0)
CPI	3.1 (3.0)	2.9 (1.9)	3.5 (2.4)	3.0 (2.6)
GDP, calendar-adjusted	4.2 (4.2)	1.2 (1.9)	1.6 (2.4)	2.2 (2.7)
Unemployment, per cent	7.5 (7.5)	7.3 (7.2)	7.2 (7.0)	6.9 (6.6)
Repo rate, per cent	1.8 (1.8)	2.7 (2.2)	3.6 (2.7)	4.1 (3.3)
TCW-weighted exchange rate, 18 Nov. 1992=100	122.5 (122.6)	121.3 (122.3)	118.0 (119.7)	117.0 (119.9)

Note. The figures in parentheses show the forecast in the main scenario. TCW-weighted foreign variables.
Sources: Statistics Sweden and the Riksbank

Table 11. Alternative scenario: Higher repo rate
Annual percentage change, unless otherwise specified, annual average

	2011	2012	2013	2014
Repo rate, per cent	1.8 (1.8)	2.4 (2.2)	2.7 (2.7)	3.3 (3.3)
GDP, calendar-adjusted	4.2 (4.2)	1.7 (1.9)	2.4 (2.4)	2.7 (2.7)
Hours gap, per cent	-0.9 (-0.9)	-0.8 (-0.6)	-0.6 (-0.4)	-0.1 (0.0)
Unemployment, per cent	7.5 (7.5)	7.3 (7.2)	7.2 (7.0)	6.7 (6.6)
GDP gap, per cent	-0.7 (-0.7)	-0.7 (-0.5)	-0.4 (-0.1)	0.1 (0.3)
CPIF	1.5 (1.5)	1.2 (1.3)	1.7 (1.8)	1.9 (2.0)
CPI	3.0 (3.0)	1.9 (1.9)	2.2 (2.4)	2.5 (2.6)

Note. The figures in parentheses show the forecast in the main scenario.
Sources: Statistics Sweden and the Riksbank

Table 12. Alternative scenario: Lower repo rate
Annual percentage change, unless otherwise specified, annual average

	2011	2012	2013	2014
Repo rate, per cent	1.7 (1.8)	1.9 (2.2)	2.7 (2.7)	3.3 (3.3)
GDP, calendar-adjusted	4.2 (4.2)	2.1 (1.9)	2.5 (2.4)	2.6 (2.7)
Hours gap, per cent	-0.9 (-0.9)	-0.5 (-0.6)	-0.2 (-0.4)	0.1 (0.0)
Unemployment, per cent	7.5 (7.5)	7.1 (7.2)	6.8 (7.0)	6.5 (6.6)
GDP gap, per cent	-0.7 (-0.7)	-0.3 (-0.5)	0.1 (-0.1)	0.5 (0.3)
CPIF	1.5 (1.5)	1.5 (1.3)	2.0 (1.8)	2.0 (2.0)
CPI	3.0 (3.0)	2.0 (1.9)	2.6 (2.4)	2.6 (2.6)

Note. The figures in parentheses show the forecast in the main scenario.
Sources: Statistics Sweden and the Riksbank

Outline of articles published 2009-2011[23]

2009

2009 February Monetary policy alternatives in times of financial crisis and concern over deflation
2009 February The financial crisis and the effects of monetary policy
2009 February The recent weakening of the krona
2009 February The Riksbank's company interviews in December 2008 – January 2009
2009 July Monetary policy when the interest rate is close to zero
2009 July Differences in financial structure and crisis measures in various countries
2009 July Global imbalances, saving and demand in the wake of the crisis
2009 July The Riksbank's company interviews in May 2009
2009 October Evaluating different monetary policy alternatives
2009 October Unconventional measures and the risk of inflation
2009 October Exit strategies for unconventional measures
2009 October House prices in Sweden

2010

2010 February What is a normal level for the repo rate?
2010 February This year's wage bargaining is expected to result in low wage rises
2010 July Great need to strengthen public finances
2010 July Effects of a fall in housing prices
2010 July What form does the recovery of productivity usually take?
2010 July The CPI and measures of underlying inflation
2010 October Why higher growth in Sweden than in the eurozone and the United States?
2010 October Basel III – tougher rules for banks
2010 October The repo rate path and monetary policy expectations according to implied forward rates
2010 October The driving forces behind trends in the economy can be analysed using a production function

2011

2011 February The effects of the financial crisis on the labour market – a comparison of Sweden, the euro area and the United States
2011 February Lower policy rates in Sweden and abroad
2011 February How does the Riksbank make forecasts for long-term market rates?
2011 February The effects of Basel III on macroeconomic development
2011 July The sustainable development of public debt?
2011 July Low unemployment – a challenge
2011 July Recent developments in inflation expectations

[23] A list of the articles published since 1993 can be found on the Riksbank's website www.riksbank.se.

Earlier interest rate decisions [24]

Date of meeting	Repo rate (per cent)	Decision (percentage points)	Monetary Policy Report
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
2008			
12 February	4.25	+0.25	2008:1
22 April	4.25	0	Monetary Policy Update
2 July	4.5	+0.25	2008:2
3 September	4.75	+0.25	Monetary Policy Update
8 October	4.25	-0.50	No report
22 October	3.75	-0.50	2008:3
3 December	2.00	-1.75	Monetary Policy Update
2009			
10 February	1.00	-1.00	February 2009
20 April	0.50	-0.50	Monetary Policy Update
1 July	0.25	-0.25	April 2009
2 September	0.25	0	Monetary Policy Update
21 October	0.25	0	October 2009
15 December	0.25	0	Monetary Policy Update
2010			
10 February	0.25	0	February 2010
19 April	0.25	0	Monetary Policy Update
30 June	0.50	+0.25	July 2010
1 September	0.75	+0.25	Monetary Policy Update
25 October	1.00	+0.25	October 2010
14 December	1.25	+0.25	Monetary Policy Update
2011			
14 February	1.5	+0.25	February 2011
19 April	1.75	+0.25	Monetary Policy Update
4 July	2.00	+0.25	July 2011
6 September	2.00	0	Monetary Policy Update

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

Glossary

Annual rate: The annual rate means that the change between two periods following on from one another is converted into the same unit, the corresponding annual change. Recalculation to annual rate makes it easier to compare changes with different frequencies. Assume, for example, that GDP increases by 0.5 per cent between the first and second quarters, when calculated as an annual rate this is around 2 per cent and provides an indication of what the quarterly change may entail in terms of a full year change.

Asset prices: Refers mainly to prices of shares and properties.

Basis spread: Shows the difference between the interbank rate and the expected policy rate with the same maturity.

Bond market: See Fixed-income market.

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

Calendar adjustment: Adjustment for variations in the number of working days from one year to the next. Calendar adjustment is usually used to compare developments in production, turnover and employment (number of hours worked) between quarters or months.

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.

Confidence indicators: Total measure of the situation within a sector or among households. Confidence indicators are based on an average of the responses to several different questions in a survey.

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.

CPIF: The CPI with a fixed mortgage interest rate. The CPIF is not directly affected by a change in mortgage interest rates. The entire change in the sub-index for interest expenditure comes from the change in the value of the housing stock.

Credit spread: Refers to the difference between a security with credit risk and a risk-free security with the same maturity.

Current prices: The current price expresses the nominal value and is not adjusted for changes in value caused by inflation. See also Fixed prices.

ECB: The European Central Bank.

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

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

Export market: Intended as a measure of the demand for imports in the countries to which Sweden exports. Calculated by weighing together imports in the 15 countries which receive the major part of Swedish exports. Approximately 70% of Swedish exports are to these countries. The weights are determined by the respective country's share of Swedish exports of goods.

FED: The Federal Reserve, the central bank of the United States.

Fed funds rate: The US Federal Reserve's policy rate.

Financial markets: A generic term for the markets in which financial instruments are traded. The four main financial markets are the foreign exchange market, the fixed-income or bond market, the share or equity market and the derivatives market.

Fixed-income market: The fixed income market is used for trading instruments that yields a specific predetermined return, an interest rate. The fixed income market is often divided into a bond market and a money market. The bond market comprises trade in securities – bonds – generally with maturities of one year and longer. Trading in the money market comprises treasury bills and certificates, usually with maturities of up to one year.

Fixed prices: Valuation at fixed prices means that the flows and stocks during an accounting period are valued at prices from an earlier period. The purpose of valuation at fixed prices is to break down changes in value into both changes in price and changes in volume.

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. The forward rate in a contract reflects the market participants' expected interest rates during the time until the contract matures.

FRA: A Forward Rate Agreement, where two parties agree to borrow and lend money respectively within the scope of a three-month interbank loan with effect from a particular date in the future at an interest rate agreed by the parties now. The market rates for these FRAs thus give an indication of market participants' expectations of future interest rates. See also the explanations of Forward rate and Interbank rate.

HICP: Harmonised index for consumer prices developed as a comparable measure of inflation within the EU. The HICP differs from the CPI both with regard to the measure of calculation and what it covers, for instance mortgage rates are not included in HICP.

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 ahead.

Implied forward rates: For instance, the rate on two bonds with different maturities can be used to calculate future rates, that is, implied forward rates, during the time to maturity of the bonds. This method is used when there are no market-listed forward rates. See also Forward rate.

Interbank rate: The interest rate that applies when banks and large financial institutions borrow from one another on the interbank market for terms of up to one year.

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 according to the National Accounts, i.e. the sum of wages, including for instance 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 base: Defined in Sweden as banknotes and coins in circulation, monetary policy counterparties' deposits in the Riksbank and claims on the Riksbank as a result of Riksbank Certificates that have been issued.

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

Money market: See Fixed-income market.

Money supply: The general public's holdings of banknotes, coins and their demand deposit. There are different measures of the money supply which include different definitions of the demand deposit.

Money market instruments: See Fixed-income market.

MPR: Monetary Policy Report.

MPU: Monetary Policy Update.

Net figures: The percentage of companies or households in a survey that state a positive development minus the percentage stating a negative development.

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

Policy rates: The interest rates set by central banks for conducting monetary policy. In Sweden these are the repo rate and the deposit and lending rates.

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 hours worked.

Purchase price coefficient: The purchase price of a property divided by its rateable value.

Real interest rate: In reality the risk free real (i.e. expressed in purchasing power units) return on a real bond. As liquid real bonds are often not available for relevant maturities, the real interest rate is in practice usually calculated according to the Fisher equation as the nominal interest rate minus expected inflation.

Refi rate: The European Central Bank's policy rate.

Repo rate: The Riksbank's most important 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 that an investor requires as a compensation for the risk.

Seasonal adjustment: Adjustment of data to even out regularly occurring variations over the year.

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

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

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

STINA: Stockholm Tomorrow/next Interbank Average is an interest rate derivative contract where two parties exchange a fixed interest rate flow and a variable interest rate flow respectively with one another. The interest-rate flows are based on the STIBOR rate for the term tomorrow-to-next which is closely-related to the Riksbank's repo rate. The market-listed fixed interest rate in the STINA contracts reflects the average expected overnight rate during the term of the contract.

Sub-prime loan: Mortgages granted to households with low or non-verifiable incomes.

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

TCW index: An index for the Swedish krona's exchange rate.

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

TED spread (originally the treasury/euro-dollar spread): Shows the difference between the interbank rate and the rate on a treasury bill with the same maturity.

Underlying inflation: Measures of inflation that in different ways exclude or attribute 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 (see definition) per unit produced.

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

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