



Monetary Policy Report

February 2012

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 15 February 2012. 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 STRATEGY²

- 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.

Contents

■	CHAPTER 1 – The economic outlook and inflation prospects	7
–	Weaker growth abroad and in Sweden	7
–	Fiscal consolidation restricting growth abroad	9
–	Lower growth abroad is slowing down development in Sweden	13
–	Monetary policy considerations	18
■	CHAPTER 2 – Alternative scenarios and risks	21
–	Effects of alternative exchange rate movements	22
–	Effects of alternative exchange rate movements combined with alternative international scenarios	24
–	Alternative scenarios for the repo rate	26
■	CHAPTER 3 – Current state of the economy	29
–	Slight slowdown abroad	29
–	Higher asset prices after central bank measures	33
–	The Swedish economy has also weakened	37
■	ARTICLES	
–	The EMU and the debt crisis	43
–	The emerging economies and Sweden's exports	49
–	The relationship between the repo rate and interest rates for households and companies	52
■	Appendix	57
–	Tables	58
–	Outline of articles published 2009-2011	62
–	Earlier interest rate decisions	63
–	Glossary	64

■ Monetary policy considerations

– a summary

■ Repo rate cut by 0.25 percentage points to 1.50 per cent

Inflationary pressures in the Swedish economy are low. The economic outlook in Sweden has weakened as a result of developments abroad. In order to stabilise inflation around 2 per cent and resource utilisation in the economy around a normal level, the Executive Board of the Riksbank has decided to cut the repo rate by 0.25 percentage points to 1.50 per cent. The repo rate is expected to remain at this level until some time in 2013.

The global economy as a whole is growing at a relatively good rate and the US economy has performed better than expected. The financial markets have also stabilised somewhat and share prices have risen. However, growth prospects have deteriorated in large parts of the euro area, partly as a result of new consolidation measures and signs of a tighter credit situation.

■ Low growth in Sweden

Sluggish growth in the euro area has subdued the demand for Swedish exports, which slowed down significantly in late 2011. The weaker economic outlook has led the households to begin saving more and to postpone their consumption, while the companies are postponing their investment. GDP growth in Sweden will therefore be low in the period immediately ahead. Slower economic growth reduces the demand for labour, and unemployment will therefore increase somewhat during the year. The confidence of the Swedish households and companies will gradually recover when concern about the public-finance problems in the euro area declines. The Swedish economy is expected to grow at a more normal rate next year.

■ Low inflationary pressures

Inflation measured in terms of the CPIF, that is the CPI with a fixed mortgage rate, is low. The main reasons for this are that cost pressures have been low and the krona has strengthened in recent years. The weak demand in the Swedish economy and abroad will help to keep inflationary pressures low in the years ahead.

■ Low repo rate

Inflationary pressures in the Swedish economy are now low and growth is slow. It has been clear for some time that there would be a slowdown, but the slowdown has been more severe than expected. In order to stabilise inflation around 2 per cent and resource utilisation in the economy around a normal level, the Executive Board of the Riksbank has therefore decided to cut the repo rate by 0.25 percentage points to 1.50 per cent. The repo rate is expected to remain at this level until some time in 2013. Later on, when inflationary pressures increase, the repo rate will need to be gradually raised.

■ Economic development is uncertain

There is considerable uncertainty about economic development abroad. The public-finance problems in the euro area in particular may 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 possible that confidence in the public finances of the euro countries will recover more quickly than expected. This would call for a higher repo-rate path.

■ CHAPTER 1 – The economic outlook and inflation prospects

The economic outlook for the world as a whole is relatively good. However, the situation varies in different parts of the world. Growth prospects are weak in the euro area and development in the period ahead is expected to be somewhat weaker than forecast in December. However, the situation looks a little better in the United States. There has been some progress recently in the management of the European debt crisis. It is expected that progress will continue to be made so that the most acute phase of the crisis will diminish during 2012. This will contribute to a gradual recovery of growth.

Developments abroad also affect the Swedish economy. There has been an unexpectedly severe slowdown in Swedish exports and consumption and investment are declining. GDP growth is therefore expected to be weak in 2012. The weak economic outlook will also have an impact on the labour market, and resource utilisation is expected to be lower. Underlying inflation is currently low but is expected to increase during the forecast period as the situation abroad improves and the Swedish economy grows more rapidly once again.

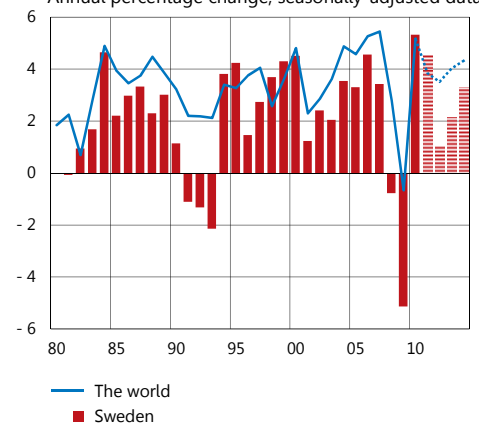
Inflationary pressures in the Swedish economy are now low and the rate of growth is slow. It has been clear for some time that there would be a slowdown, but the slowdown has been more severe than expected. The Executive Board of the Riksbank has therefore decided to cut the repo rate by 0.25 of a percentage point to 1.50 per cent. The repo rate is expected to remain at this level for just over a year. A more expansionary monetary policy will contribute to CPI inflation stabilising around 2 per cent and to resource utilisation stabilising around a normal level towards the end of the forecast period.

Weaker growth abroad and in Sweden

■ Slowdown in global growth in 2012

During the forecast period, the global economy will grow by an average of almost 4 per cent per year, which is roughly the normal rate historically (see Figure 1:1). On the other hand, GDP growth in the world as a whole will decline from around 3.8 per cent in 2011 to 3.5 per cent this year. This decline is mainly due to the weak development in the euro area. As previously, the Riksbank's assessment is that economic prospects in the euro area will be weakened by underlying structural problems, concern about the refinancing of some countries' public debts and fiscal-policy consolidation measures at a time when monetary policy's room for manoeuvre is limited. Since the monetary policy meeting in December, new consolidation measures have been announced in Spain and France and signs have emerged that credit is becoming tighter in parts of the euro area. The current assessment is thus that development in the euro area will be somewhat weaker than forecast in the Monetary Policy Update in December. Now, as previously, the Riksbank assumes that the European debt crisis will be managed so that the acute phase diminishes. Confidence on the part of companies and households can then return and growth begin to recover during the course of 2012. There have been positive signs in the United States recently and growth is expected to be somewhat stronger than forecast in December. Growth is also expected to be lower in the emerging economies in 2012, partly due to somewhat lower domestic demand.

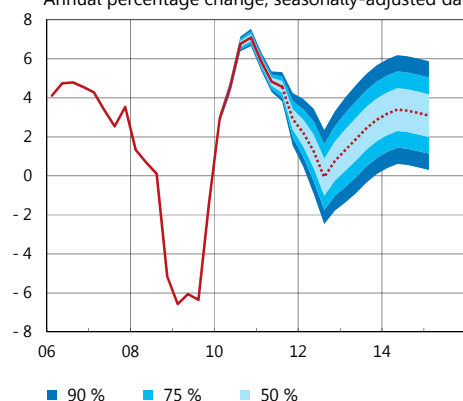
Figure 1:1. GDP growth in Sweden and the world
Annual percentage change, seasonally-adjusted data



Sources: The IMF, Statistics Sweden and the Riksbank

Figure 1:2. GDP with uncertainty bands

Annual percentage change, seasonally-adjusted data

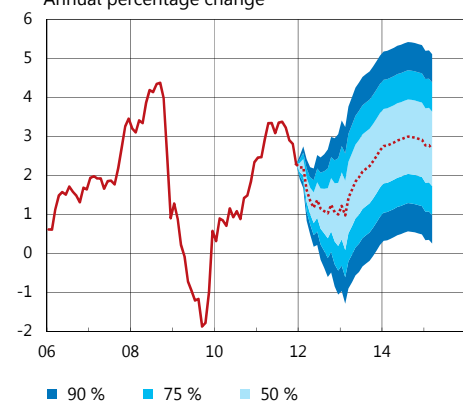


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. There is also uncertainty for the outcomes for GDP, as the figures in the National Accounts are revised several years after the preliminary publication.

Sources: Statistics Sweden and the Riksbank

Figure 1:3. CPI with uncertainty bands

Annual percentage change

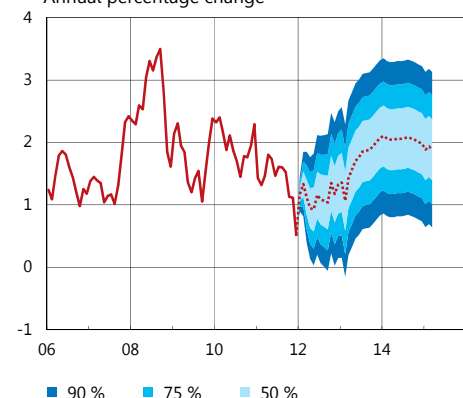


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors.

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

■ Swedish economy slowing down

New information received since the monetary policy meeting in December indicates that the slowdown in Sweden will be more severe than previously assumed. This relates primarily to a fall in demand for Swedish exports from the euro area. A weaker housing market and uncertainty about the future course of economic development have also led to an increase in household saving, which is expected to remain at a high level going forward. When the households increase their saving they consume less than they would otherwise have done. Consumption is therefore expected to grow more slowly than previously assessed, which will also contribute to a slowdown in growth in Sweden this year.

Compared to the Monetary Policy Update in December, it is assessed that GDP will grow more slowly during the first half of the forecast period but somewhat more rapidly towards the end of the period (see Figure 1:2).

The recovery of the labour market came to a halt towards the end of 2011, but as yet there are no clear signs of a deterioration in terms of a fall in employment or the number of hours worked. However, the poorer economic outlook is expected to have a more negative impact on the labour market in the period ahead. The Riksbank's overall assessment is that resource utilisation will be lower than normal in 2012 and 2013. However, an expansionary monetary policy will contribute to a more rapid increase in GDP and in the number of hours worked from the end of 2012, and to the normalisation of resource utilisation at the end of the forecast period.

Underlying inflationary pressures are low in the Swedish economy. The strengthening of the exchange rate and low rate of increase in unit labour costs in recent years have helped to hold back CPIF inflation. On the other hand, CPI inflation is higher (see Figures 1:3 and 1:4). The low level of demand will help to keep both CPI and CPIF inflation low this year. Subsequently, a more expansionary monetary policy and higher resource utilisation will contribute to rising inflation.

■ Lower repo rate will stimulate the economy

It has been clear for some time that a slowdown would take place but it has been more severe than expected. The Executive Board of the Riksbank has therefore decided to cut the repo rate by 0.25 percentage points to 1.50 per cent. It is estimated that the repo rate will remain at this level for just over a year (see Figure 1:5). One condition for resource utilisation and cost pressures normalising in the coming period is that monetary policy remains expansionary in the years immediately ahead.

There is still considerable uncertainty regarding economic development in the euro area going forward. Both the economic outlook abroad and the exchange rate for the krona may develop differently than in the main scenario and thus lead to a different development of growth and inflation in Sweden. This would then affect the form of monetary policy, as is discussed in more detail in Chapter 2.

Fiscal consolidation restricting growth abroad

■ Financial markets somewhat more stable

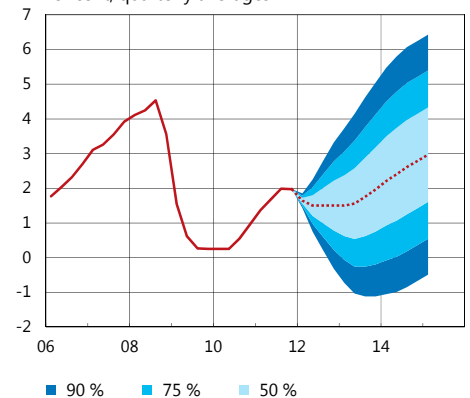
In the autumn of 2011, the financial markets were marked by great uncertainty about the ability of governments and banks to fund their activities. Several euro countries with substantial public debts have had to pay high interest rates when they have renewed their loans and financed their budget deficits. However, the ECB's decision in December to grant the banks in the euro area three-year loans against collateral has helped to stabilise the situation and, to a certain extent, to squeeze interest rates on government bonds. This has also made it easier for governments to refinance their operations. In order to stimulate lending, the ECB has also increased the range of eligible collateral that the banks can use when they borrow from the ECB. The increase in the appetite for risk has contributed to higher prices for shares and other high-risk financial assets. Stock markets in Europe, the United States and Sweden have performed well since December.

Despite this stabilisation, however, there is still unease on the international financial markets. There are, for example, signs that lending is now being tightened in the euro area. The international financial markets are highly integrated, which means that financial conditions in Sweden are also affected by the unease abroad. This has, for example, led to increased funding costs for Swedish banks and thus increased interest rates for households and companies. Nevertheless, it is the Riksbank's assessment that the Swedish banks are well-capitalised in an international perspective and that they have good access to funding. It is expected that lending to households and companies in Sweden will work more or less as it usually does in a normal slowdown in the period ahead.

Some progress has been made in the management of the European debt crisis recently. The Greek parliament, for example, has approved the saving requirements that were a precondition for the granting of further emergency loans by the EU and IMF. The Riksbank's main scenario is based on the assumption that the most acute problems in the euro area will be resolved in 2012. This means that the problems will not escalate in large, debt-ridden countries such as Italy and Spain.

Alongside the acute measures required to manage liquidity problems and restore confidence on the part of the financial markets and the public, long-term measures will also be required. In order to come to terms with several fundamental problems, many of the countries in the monetary union need to improve their competitiveness, achieve sustainable growth and, not least, strengthen their budgets. Adopted and planned reforms of the EU's economic governance, including stricter budget rules, may help to improve the management of imbalances and systemic risks (see the article "The EMU and the debt crisis").

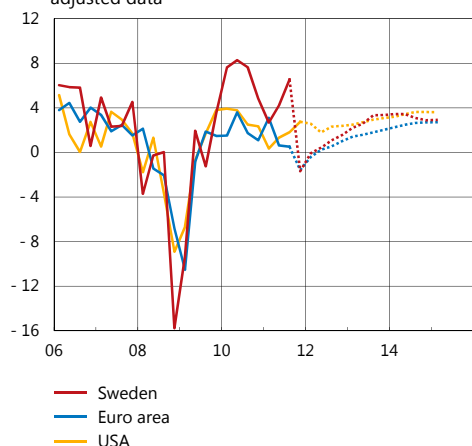
Figure 1:5. Repo rate with uncertainty bands
Per cent, quarterly averages



Note. The uncertainty bands for the repo rate are based on the ability of risk-adjusted market rates to forecast the future repo rate for the period 1999 up to the point when the Riksbank started to publish forecasts for the repo rate during 2007. The uncertainty bands do not take into account the fact that there may be a lower bound for the repo rate.

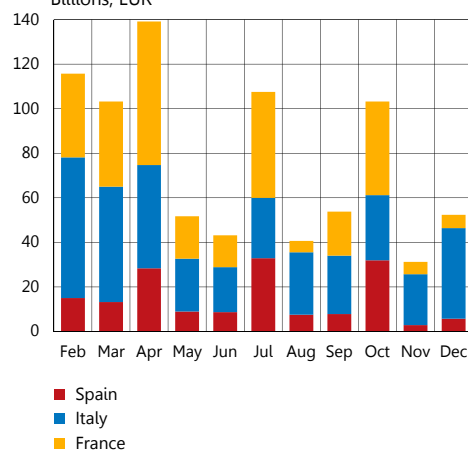
Source: The Riksbank

Figure 1:6. 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

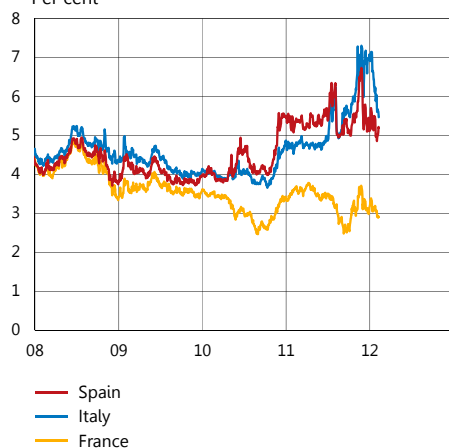
Figure 1:7. Gross maturities, government bonds 2012
Billions, EUR



Note: Maturities including interest. Total maturities in 2012 as a percentage of the total gross public debt are 16.3 per cent for France, 19.3 per cent for Italy and 20.9 per cent for Spain.

Sources: Bloomberg and the IMF

Figure 1:8. Government bonds with 10 years to maturity
Per cent



Source: Reuters EcoWin

■ Low GDP growth in the euro area

For some time now, the Riksbank's assessment has been that growth in the euro area will be weak in 2012. The prospects are weakened by underlying structural problems, public-finance difficulties and budget consolidation measures. It is difficult to assess the effects of consolidation measures, but it is reasonable to expect that the impact on growth will be greater when several countries tighten their fiscal policies at the same time and this takes place in a situation where there is limited scope for monetary policy. Development in the euro area is now expected to be weaker than predicted in the forecast in December. GDP will fall by 0.1 per cent in 2012 compared to 2011 (see Table 4 and Figure 1:6).

Since the publication of the Monetary Policy Update in December, Spain and France have announced plans to further tighten their public finances. According to the ECB's latest survey of banks in the euro area, there are also signs of credit tightening at the same time as the demand for loans on the part of households and companies remains low.³ The main reasons for tighter lending are said to be the poorer economic outlook, the fact that it is more difficult to obtain market funding and costs relating to stricter capital adequacy requirements. This pattern is similar to that in previous periods of tighter credit. All-in-all, new consolidation measures and the tighter credit situation mean that the Riksbank, like many other analysts, now expects that growth in the euro area will weaken further.

It is assumed that unease about public finances in the euro area will remain in the period immediately ahead, and that credit will be tighter than normal. During the first six months of 2012, several euro countries (for example Italy, France and Spain) will have to finance substantial bond maturities (see Figure 1:7). Substantial maturities are not unusual, but in crisis situations, when the ability of countries to repay their debts begins to be questioned, government interest rates can be pushed up to unsustainably high levels. During the autumn, some rates increased to worryingly high levels, but have fallen again recently (see Figure 1:8).

The situation varies in the European countries that are receiving economic support from the IMF and the EU. In Ireland's case, the provisions of the economic support programme are largely being met according to plan. Portugal is not achieving the targets quite as well, but is more or less on track. The Greek programme, however, is struggling with major problems and the Greek authorities have had difficulties in meeting the targets set within the framework of the support package from the IMF and the EU. Economic activity is continuing to decline and the country needs further support to manage its funding in the years ahead. The Greek parliament has approved the savings requirements that were a precondition for additional emergency loans. However, at the time this report was printed, the lenders had not yet given their approval.

The Riksbank's assessment is, as mentioned above, that adequate measures are being taken and that the most acute phase of the crisis in

³ The German banks are an exception, however; they report that even if credit is still tight, it is less tight than before, and that there has been a slight increase in the demand for loans.

the euro area will subside in 2012. There have been some positive signals concerning the economic outlook recently. Early indicators, such as surveys of household and corporate confidence, have improved somewhat, although from low levels. The aggregate purchasing managers' index for the euro area indicates increasing activity in the economy as a whole. The European Commission's barometer has also improved somewhat. However, the assessment is that the consolidation measures and the tighter credit situation will still continue to restrict growth in the period ahead. The Riksbank's assessment is that unemployment in the euro area as whole will remain high and household consumption subdued. On the other hand the recent weakening of the euro will benefit the export sector by improving the competitiveness of the euro countries. In this way the weakening of the euro counteracts the negative impact of consolidation on GDP to some extent. The assessment is that GDP growth will be moderate in 2013 and increase in 2014.

At the same time, a weaker euro will keep up the rate of inflation as it will lead to higher import prices (see Figure 1:9). Another reason why inflation will be relatively high in relation to the weak economic situation, particularly in 2012, is that several euro countries are expected to raise their VAT rates and certain administrative prices in order to improve their public finances, and these increases will partly spill over into higher consumer prices.

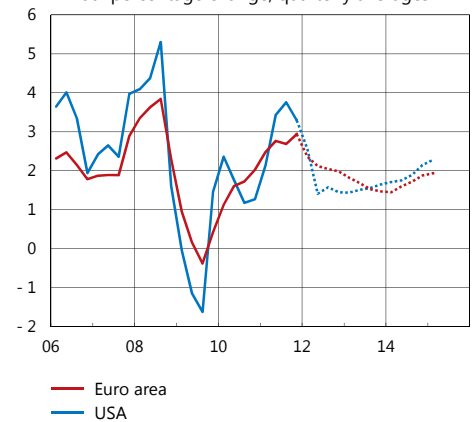
The assessment is that there will continue to be significant spare capacity in the economy in the years immediately ahead. Monetary policy is therefore expected to remain highly expansionary throughout the forecast period. It is also expected that the three-year loans that the ECB issued in December 2011 and plans to issue in February 2012 will help to keep down interest rates more or less throughout the forecast period.

■ Bright spots in the US economy

The recent development of the US economy has been better than expected. The labour market, for example, has performed unexpectedly well. The Riksbank's assessment is that the prospects for the next few years now look somewhat brighter and the GDP forecast has therefore been revised upwards compared to the forecast in the December Monetary Policy Update. However, GDP growth will be restrained by a tighter fiscal policy and weaker growth in demand abroad. In the forecast it is assumed that there will be no further extension of certain fiscal-policy stimulation measures, which will have negative consequences for demand this year. However, there is considerable uncertainty concerning the preconditions for fiscal policy. Ahead of the presidential election in the autumn of 2012, it cannot be ruled out that the parties in Congress will agree to extend some components of the expansionary policy in order to reduce unemployment.

The US dollar has strengthened which has led to poorer prospects for exports. In the forecast, however, this is expected to be counteracted by an ongoing improvement in confidence and further improvements in the situation on the housing and labour markets. The companies are making good profits, which means that the financial conditions for

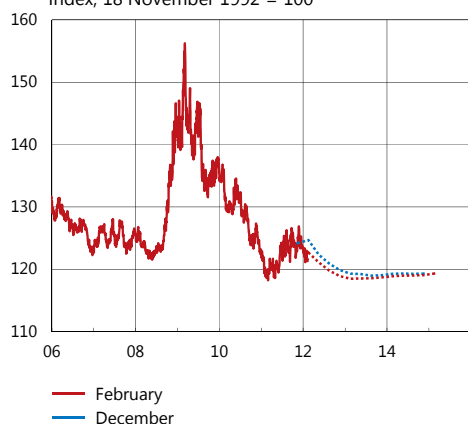
Figure 1:9. Inflation in the euro area and the USA
Annual percentage change, quarterly averages



Note. This refers to HICP for the euro area and CPI for the United States.

Sources: Bureau of Labor Statistics, Eurostat and the Riksbank

Figure 1:10. TCW-weighted nominal exchange rate
Index, 18 November 1992 = 100



Note. Outcome data are daily rates and forecasts are quarterly averages. TCW refers to a weighting of Sweden's most important trading partners.

Source: The Riksbank

increased investment and higher employment in the period ahead are also good.

Inflation in the United States has fallen and is expected to continue to do so until the second half of 2013 (see Figure 1:9). Unit labour costs have fallen and the companies' purchasing managers report that cost pressures are low. In addition, there will be a relatively substantial amount of spare capacity in the economy in the years ahead. The assessment is that monetary policy in the United States will be highly expansionary throughout the forecast period. The first policy rate increases are not expected to be made before the end of 2014, which is approximately six months later than forecast in December. The forecast is in line with the Federal Reserve's communication in connection with its latest monetary policy meeting at the end of January 2012.

■ Weak growth and low inflation in the United Kingdom

Growth in the United Kingdom is expected to continue to be weak over the next few years. This is mainly due to the consolidation measures that the government has announced for the years ahead. The assessment is that developments on the labour and housing markets will continue to dampen domestic demand, although to a gradually decreasing extent. On the other hand, exports are expected to benefit from a continued weak exchange rate and the fact that the United Kingdom's trade with those countries in the euro area that have the most serious problems is relatively limited.

It is assessed that there will be a clear fall in inflation over the next 12 months when the effects of rising commodity prices and higher VAT no longer affect the figures. Inflation is expected to begin increasing again in late 2013. Inflation is however expected to be around the inflation target at the end of the forecast period, as the Bank of England is assumed to raise its policy rate gradually.

■ Weaker global growth

The economic prospects for the world as a whole are relatively good, although a certain slowdown is expected in 2012. This will partly be due to the consolidation measures taken in the euro area and the United States, but to a certain extent is also due to somewhat weaker domestic demand in the emerging economies. In China, activity on the property market has declined partly as a result of a tight monetary policy that aims to slow down the rate of price increases for property. The Riksbank's assessment is that the growth of GDP in China will be weaker in the period ahead.

■ Swedish krona stronger than in previous periods of financial unease

During 2011, the krona weakened in trade weighted terms. Compared with previous period of international financial unease, the krona has nevertheless been relatively resilient and has strengthened since the monetary policy meeting in December (see Figure 1:10). Above all, the

krona has strengthened against the euro, which may partly be due to investments in Swedish krona being regarded as fairly safe as a result of Sweden's relatively favourable economic development. As financial unease subsides in the period ahead, the krona is expected to continue to strengthen somewhat, which will contribute to low inflationary pressures. Scenarios that illustrate a possible course of development with a stronger and weaker krona are discussed in Chapter 2.

Lower growth abroad is slowing down development in Sweden

■ Swedish growth has slowed down

The Swedish economy grew rapidly during the major part of last year, but there are many indications that growth slowed down significantly towards the end of the year. Weaker development abroad, particularly in the euro area, is entailing a significant decline in the demand for Swedish exports.

Declining wealth and a low level of confidence among households and companies have led to an increase in household saving and saving is expected to remain high, while companies are expected to postpone their investments. The Riksbank's assessment is therefore that the growth of Swedish GDP slowed down considerably in the fourth quarter of 2011 and that it will subsequently increase at a somewhat slower rate than was forecast in December (see Figure 1:11).

Even if growth abroad is weak over the next 12 months, it is assumed that the measures taken to consolidate debt-ridden economies, in the euro area and elsewhere, will gradually have results. Uncertainty on the part of companies and households, in Sweden and abroad, will thus decline. The foundations for a gradual recovery will be laid during the second half of 2012.

There is much more room for manoeuvre for fiscal policy in Sweden than in many other parts of the world. Fiscal policy in Sweden, together with an expansionary monetary policy, is therefore expected to mitigate the weakening in economic activity in Sweden over the coming years. The figure for GDP growth in the latter part of the forecast period has been adjusted upwards compared to the assessment in December. This relates to the recovery of exports and to the households reducing their precautionary saving at the same time as investment picks up.

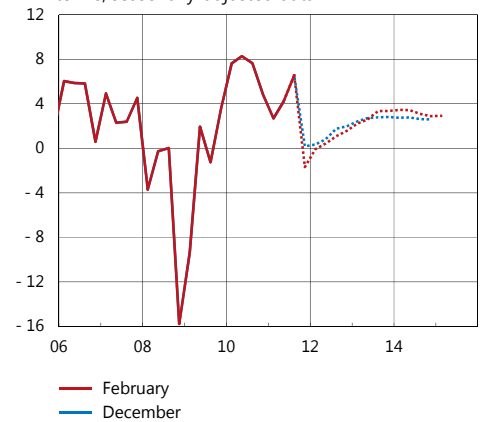
It is estimated that Sweden's GDP increased by 4.5 per cent last year, while this year it is expected to grow by only 0.7 per cent. GDP will grow relatively quickly in the latter part of the forecast period.

■ Lower consumption

The development of household consumption has been weak for some time and is expected to be weak this year as well. This relates to the uncertainty about the course of economic development and to the weakening of the labour market. Higher mortgage rate and a weaker labour market will contribute to keeping down the households'

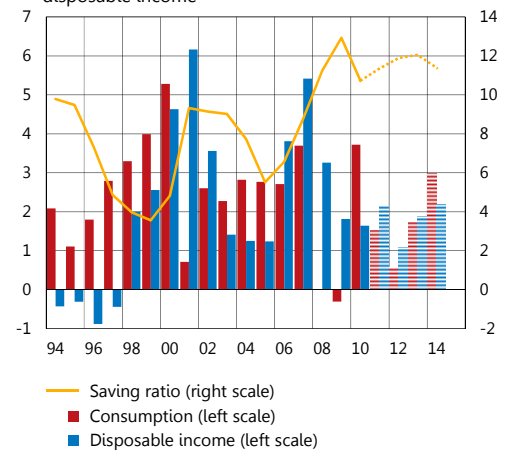
Figure 1:11. GDP

Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

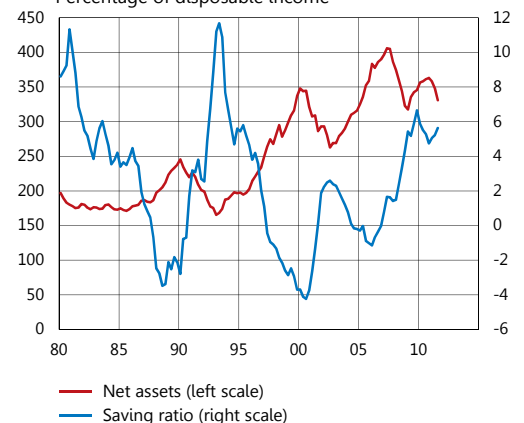
Figure 1:12. Households' disposable incomes, consumption and saving ratio
Annual percentage change and percentage of disposable income



Note. Saving ratio including saving in collective insurance schemes

Sources: Statistics Sweden and the Riksbank

Figure 1:13. Household net assets and savings
Percentage of disposable income

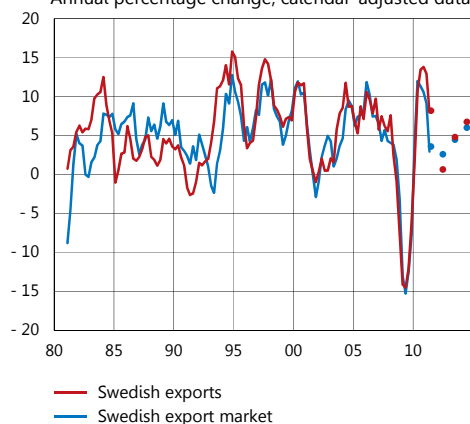


Note: Assets and saving excluding saving in collective insurance schemes. Data for the savings ratio is totalled over four quarters.

Sources: Statistics Sweden and the Riksbank

Figure 1:14. Swedish exports and the world market for Swedish exports

Annual percentage change, calendar-adjusted data

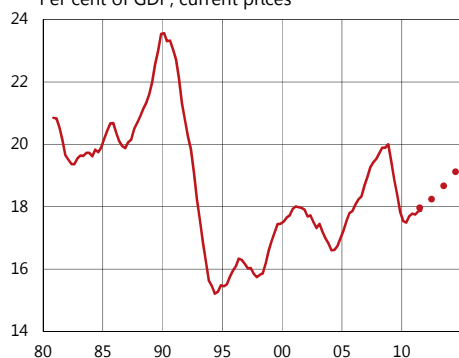


Note. The export market aims to measure import demand in the countries to which Sweden exports. This is calculated by aggregating the imports of the 15 countries receiving the most Swedish exports.

Sources: Statistics Sweden and the Riksbank

Figure 1:15. Investment ratio

Per cent of GDP, current prices



Note. Four-quarter moving average.

Sources: Statistics Sweden and the Riksbank

disposable incomes this year compared to last year (see Figure 1:12). The fall on the stock exchange last year has led to a fall in the financial wealth of the households, despite the rise on the stock exchange so far this year. The housing market has also weakened, thus leading to a fall in the real wealth of the households too. In periods of declining household wealth it is usual that the households increase their saving in order to compensate for the reduction in wealth (see Figure 13). This reduces consumption. The households are not expected to increase their debts to the same extent as previously. Mortgage restrictions such as stricter amortisation requirements and mortgage ceilings, and rising mortgage rates, will slow down the increase in indebtedness in the period ahead.

Going forward, as the economic situation improves and household wealth recovers somewhat, households will reduce their saving and consumption will increase at a faster rate (see Figure 1:12). All in all, consumption is expected to increase by only 0.6 per cent in 2012. However, growth will then increase and reach approximately 3 per cent towards the end of the forecast period.

■ Weaker Swedish exports

There was a sharp slowdown in Swedish exports at the end of 2011. This weak development is expected to continue over the next few quarters. This year, Swedish exports are now expected to remain practically unchanged, compared with the increase of 1.9 per cent predicted in December. This is mainly due to the decline in the demand for Swedish exports from abroad, not least from the euro area. The severe slowdown is also a result of the composition of Swedish exports. The demand for engineering goods such as machines and lorries, which lifted exports of Swedish goods last year, is expected to become increasingly weak as international economic activity slackens off. However, international demand will begin to increase again during the second half of this year and there will be a gradual increase in growth in exports (see Figure 1:14). Swedish exports will increase by 4.8 per cent in 2013 and by 6.5 per cent in 2014.

In contrast to exports, imports dampened significantly already in the early part of 2011. This means that net exports made a substantial positive contribution to GDP growth last year. Imports will be lower this year than in 2011 as a result of weak domestic demand and weak exports.

■ Slower investment

Investment growth is slowing down in the wake of the weaker demand for Swedish exports in combination with uncertainty about the future course of economic development. Investment has indeed partly recovered from the fall that occurred in connection with the financial crisis of 2008-2009. But the level of industrial investment is still low in relation to the level of value added. The investment share in the service sector has also increased only marginally since the crisis of 2008-2009. All in all, this is expected to mean that the decline in total investment will

be limited and that there is good potential for an increase in investment once demand picks up on the domestic and export markets (see Figure 1:15). The Swedish export companies, above all, will need to expand their capacity as international demand picks up in 2013.

Housing investment will be weak in the period immediately ahead following a period of strong growth. The demand for housing is expected to be lower, partly as a result of increased uncertainty on the part of the households. This will lead to the postponement of planned housing construction projects. Something of an upward rebound in the construction of housing is therefore expected towards the end of the forecast period.

■ Somewhat weaker public sector net lending

The Riksbank's fiscal policy forecasts are based on what can be regarded as a normal historical development in fiscal policy over an economic cycle.

Public sector net lending was in surplus in 2011 but is expected to weaken throughout the forecast period compared to the assessment in December. Public sector net lending is expected to show a deficit of -0.2 per cent of GDP in 2012 and 2013. The weaker macroeconomic situation affects public finances in that it undermines the most important tax bases, household consumption and wages. Unemployment will also increase and this in turn will increase public expenditure, for example due to increased payments of unemployment benefits. However, tax revenues will increase and expenditure will fall as economic activity improves.

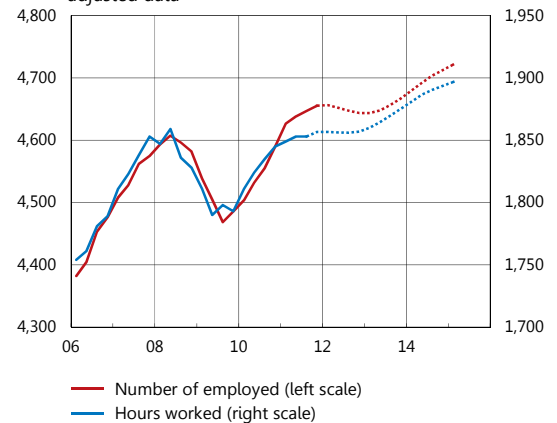
The government is expected to propose expenditure and income changes, in the form of tax cuts for households and increased public investment, corresponding to a total of SEK 50 billion for the years 2013 and 2014. This assumption is the same as in the December Monetary Policy Update.

■ Weaker labour market in 2012

The recovery on the Swedish labour market slowed down in 2011. However, both the number of hours worked and the number of those employed still increased in the fourth quarter (see Figure 1:16). However, the number of individuals in the labour force increased more than the number of those employed, which means that unemployment increased somewhat. In the short term, the indicators for the situation on the labour market still look relatively bright. Even though there has been a slowdown in the demand for labour, the number of new job vacancies is, for example, still at a high level. But Swedish companies are also affected by the uncertainty stemming from developments abroad. In the Business Tendency Survey of the National Institute of Economic Research, the companies report that they have cut back their recruitment plans, particularly in the manufacturing and retail sectors where in fact job cuts are to be expected. Similar tendencies are revealed by the company interviews conducted by the Riksbank in January.⁴ For the business sector

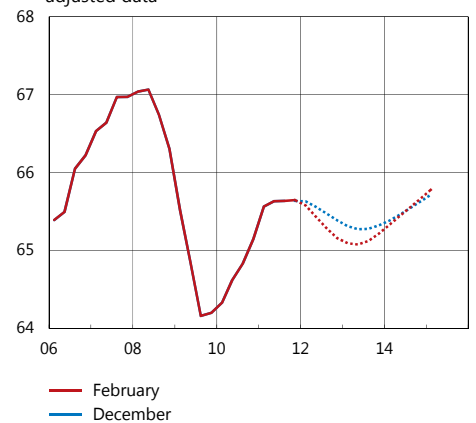
Figure 1:16. Number of employed and hours worked

Thousands and millions, aged 15-74, seasonally-adjusted data



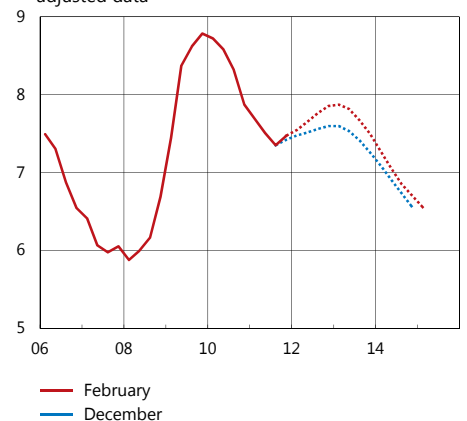
Sources: Statistics Sweden and the Riksbank

Figure 1:17. Employment participation rate
Percentage of the population, aged 15-74, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 1:18. Unemployment
Percentage of the labour force, aged 15-74, seasonally-adjusted data

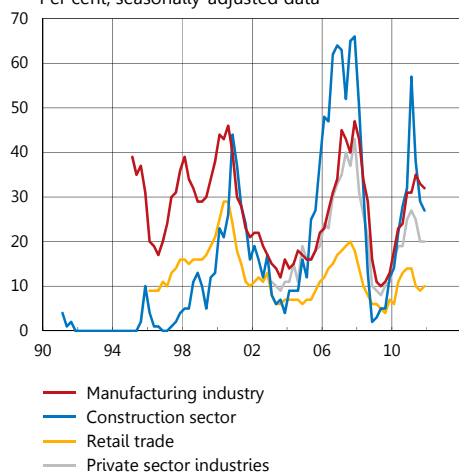


Sources: Statistics Sweden and the Riksbank

⁴ See the document "The Riksbank's company interviews in January 2012", on the Riksbank's website www.riksbank.se under the heading Press & published/Reports.

Figure 1:19. Proportion of companies reporting a shortage of labour

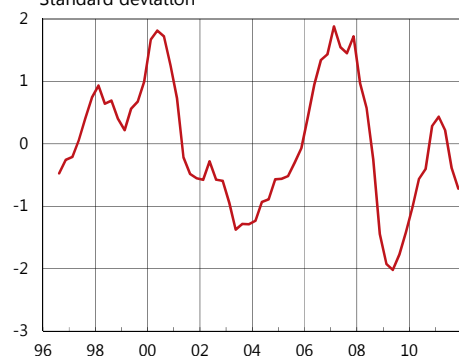
Per cent, seasonally-adjusted data



Source: National Institute of Economic Research

Figure 1:20. RU indicator

Standard deviation

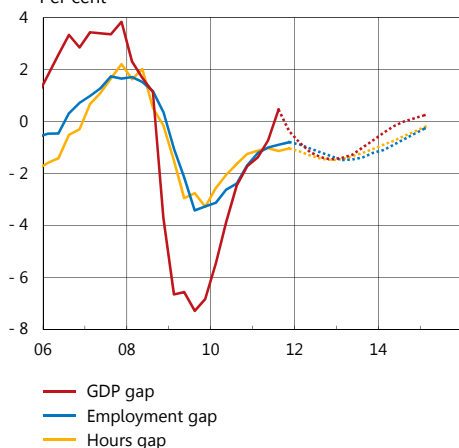


Note. The RU indicator is normalised so that the mean value is 0 and the standard deviation is 1.

Source: The Riksbank

Figure 1:21. GDP and the labour market gap

Per cent



Note. The GDP gap refers to the GDP deviation from trend, calculated using a production function. The hours gap and employment gap refer to the deviation of hours worked and employment from the Riksbank's assessed trends for these variables.

Sources: Statistics Sweden and the Riksbank

as a whole, however, employment is expected to remain unchanged in the period immediately ahead.

The poorer economic outlook during the forecast period will gradually have an increasingly negative impact on the labour market. It is expected that employment will begin to fall somewhat during the spring and that the employment rate will fall back to 65 per cent (see Figure 1:17). Historical links between changes in GDP and unemployment in relation to their long-term trends indicate that unemployment will increase somewhat in 2012 as a result of weaker growth. Unemployment is expected to peak at 7.9 per cent in early 2013 (see Figure 1:18). Thereafter the labour market will recover as economic activity improves.

■ Expansionary monetary policy will contribute to normal resource utilisation

As there is no simple way of measuring resource utilisation, the Riksbank uses a number of different indicators and statistical methods to make its assessment.

Indicators based on surveys indicate that resource utilisation at the companies has fallen somewhat recently. Capacity utilisation in the manufacturing industry has fallen and is somewhat lower than the historical average. Labour shortages declined during 2011, but were, if anything, unchanged in most sectors in the fourth quarter (see Figure 1:19). The Riksbank's indicator for resource utilisation, which uses a statistical method to compile information from surveys and labour market data, indicates that resource utilisation has declined further and was below a normal level in the fourth quarter of 2011 (see Figure 1:20). Other indicators, such as unemployment, the employment rate and the hours worked gap, also point to more spare capacity than normal in the economy.

The Riksbank's overall assessment is that resource utilisation will be lower than normal in 2012 and 2013. However, an expansionary monetary policy will contribute to a more rapid rise in GDP and hours worked from the end of 2012. This means that resource utilisation will normalise and that most gaps, which show the difference between actual and sustainable levels, will close towards the end of the forecast period (see Figure 1:21).

■ Wage agreements follow the norm set by the manufacturing industry

Following the signing of wage agreement in many of the contractual areas of the manufacturing industry in December, wage agreements have now also been signed for white-collar workers in the construction industry and the contractual areas in the pulp and paper industry.⁵ The wage agreements in the pulp and paper industry follow the norm set by the other industrial sectors of 2.6 per cent as an annual percentage change. Following the signing of agreements by the social partners in the

⁵ The Swedish Paper Workers' Union opted not to sign the new Industrial Agreement that applies from 1 July 2011. Wages in this contractual area were thus negotiated outside the provisions and regulations of the Industrial Agreement. The agreements signed in the manufacturing industry are mainly at 3 per cent and cover a period of 14 months.

manufacturing industry, over 500 agreements remain to be negotiated this year. These negotiations will cover at least 2.2 million employees.

The Riksbank's assessment is that the new wage agreements in other sectors will on average also follow the industry's norm. All in all, wages in accordance with the short-term wage statistics, which also include wage drift, are expected to increase by 3.3 per cent this year. This assessment is supported by the results of the company interviews conducted by the Riksbank in January, in which the companies reported that they expect the rate of wage increases to average 3.1 per cent in 2012. It is expected that short-term wages will increase somewhat more slowly in 2013 but then increase faster again in 2014. The assessment is that short-term wages will increase by an average of almost 3.3 per cent per year during the forecast period, which is slightly less than the historical average of 3.5 per cent.⁶

According to the National Accounts, hourly wages increased more slowly in 2010 than is reflected in the short-term wage statistics.⁷ The picture was reversed in 2011. Wages as defined in the National Accounts are expected to continue to increase more rapidly also during the first six months of this year (see Figure 1:22). Thereafter, the differences between the measures are expected to largely follow historical patterns. Wages in accordance with the National Accounts are expected to increase by an average of 3.6 per cent per year during the forecast period.

■ Higher cost pressures this year but lower thereafter

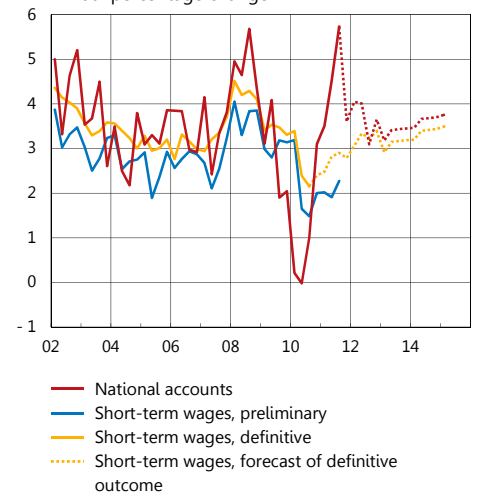
Domestic cost pressures, that is unit labour costs, are determined by the rate of increase in labour costs per hour and in labour productivity. Labour costs will increase at approximately the same rate as hourly wages according to the National Accounts during the forecast period as employers' contributions are expected to remain practically unchanged. Labour productivity is expected to increase much more slowly this year compared to last year (see Figure 1:23). This is normal considering that economic activity is now declining.

The lower growth in labour productivity means that unit labour costs will increase more rapidly this year than last year. For the remainder of the forecast period, the growth of unit labour costs is expected to be around the historical average.

■ Low demand will subdue inflation

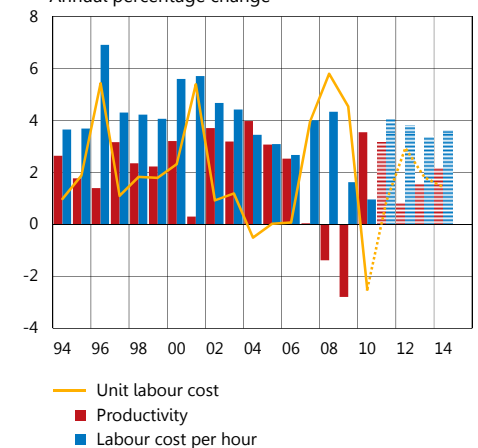
Underlying inflation is presently low, while CPI inflation is higher. In December, the annual rate of increase in the CPI was 2.3 per cent. The corresponding rate of increase in the CPIF, that is the CPI with a fixed mortgage rate, was only 0.5 per cent. The stronger exchange rate and low rate of increase in unit labour costs in recent years have helped to

Figure 1:22. 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 yellow dotted line shows the Riksbank's assessment of the final outcome.
Sources: National Mediation Office, Statistics Sweden and the Riksbank

Figure 1:23. Cost pressures in the economy as a whole
Annual percentage change

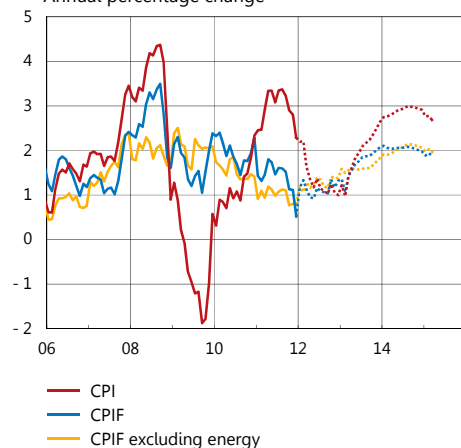


Sources: Statistics Sweden and the Riksbank

⁶ An average since January 1998, that is since the inception of the Industrial Agreement and thus coordinated wage negotiations at the sector level.

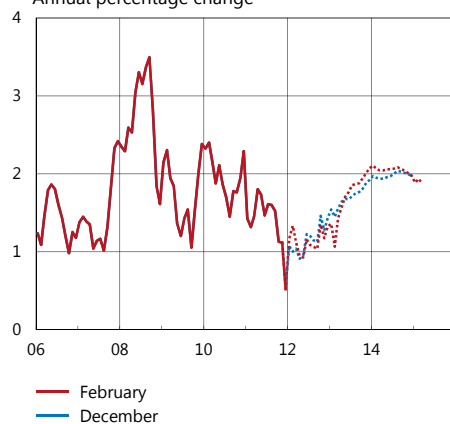
⁷ The differences are partly due to the fact that the different statistical sources measure wages in different ways. The National Accounts, for example, include bonuses, redundancy payments and variable payments, as well as the sick pay paid by the employer. The different sources also allocate wage increases in different ways. However, the differences have been unusually large since the middle of 2009, which is discussed, for example, in the annual report of the National Mediation Office "Collective bargaining and wage formation 2010", section 3.7.

Figure 1:24. CPI, CPIF and CPIF excluding energy
Annual percentage change



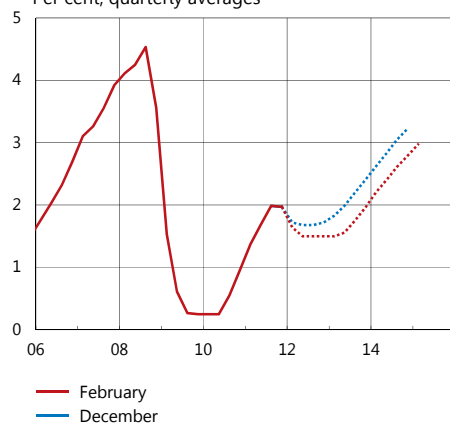
Note. The CPIF is the CPI with a fixed mortgage rate.
Sources: Statistics Sweden and the Riksbank

Figure 1:25. CPIF
Annual percentage change



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

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



Source: The Riksbank

hold back CPIF inflation. This indicates that underlying inflationary pressures in the Swedish economy are low.

During the forecast period, CPIF inflation will rise gradually and amount to around 2 per cent from and including the latter part of 2013. This will occur as resource utilisation strengthens and the rate of wage increase rises somewhat. CPI inflation, on the other hand, will fall rapidly over the coming year, mainly as a result of the lowering of the repo-rate. CPI inflation will be just under 1.0 per cent at its lowest point in 2012. CPI inflation will thereafter rise gradually to just over 3 per cent in 2014 (see Figure 1:24). Compared with the forecast in December, CPIF inflation is now expected to be approximately the same in 2012. In 2013 and 2014, CPIF inflation is expected to be somewhat higher than expected in December (see Figure 1:25). This is due to a higher rate of increase in electricity prices.

The forecast for CPI inflation over the coming year has been adjusted downwards more than that for CPIF inflation due to the direct impact that the reduced repo rate will have on the mortgage cost component in the CPI. Towards the end of the forecast period, the CPI inflation forecast has been adjusted upwards somewhat more than the CPIF inflation forecast. This is because the banks' mortgage rates for above all variable-rate mortgages are now expected to be somewhat higher in relation to the repo rate compared to the forecast in December. In 2011, mortgage rates increased more than was justified by earlier repo-rate increases; this is partly a consequence of the banks' funding costs having increased, but also a consequence of the banks having increased their margins on household mortgages (see the article "The relationship between the repo rate and interest rates for households and companies" in this report). It is assumed that there will still be a significant difference between mortgage rates and the repo rate but that this difference will shrink somewhat during the forecast period.

Monetary policy considerations

■ Lower repo-rate will counteract slowdown in economic activity

Inflationary pressures in the Swedish economy are low and the economic outlook in Sweden is weak as a result of developments abroad. New information received since the monetary policy meeting in December indicates that the slowdown at the end of 2011 was more severe than previously assumed. The outlook for the coming year also appears to be weaker. The Executive Board of the Riksbank has therefore decided to cut the repo rate by 0.25 percentage points to 1.50 per cent. The assessment is that the repo rate will remain at this level for just over a year (see Figure 1:26).

Developments abroad are affecting the Swedish economy in several ways, partly through weaker demand for exports and partly because lower confidence on the part of households and companies is reducing consumption and investment. Swedish financial conditions are also being affected by the unease abroad. This has, for example, increased the

funding costs of Swedish banks and thus the interest rates offered to households and companies. However, despite the credit tightening in the euro area, the Riksbank's assessment is that Swedish banks are well capitalised in an international perspective and that lending to households and companies in Sweden will work more or less as it does in a normal slowdown.

There have been some positive economic signals recently. These indicate among other things that the situation in the United States will be better than expected. Growth prospects in the euro area are, however, still very weak. Weak economic development in, above all, the euro area has led to a decline in demand in the Swedish economy on a broad front, with lower growth in exports, consumption and investment. This is also having an effect on the labour market and unemployment is expected to increase this year. All in all, resource utilisation is therefore expected to be lower than normal during most of the forecast period. Cautious households and companies and weak development abroad will also contribute to inflationary pressures in the Swedish economy being low in the period ahead.

The Riksbank's assessment is that adequate measures are being taken in the euro area so that the most acute phase of the crisis will subside in 2012. There will thus be a gradual increase in the confidence of the households and companies. Low interest rates in Sweden and abroad will also contribute to a gradual increase in growth.

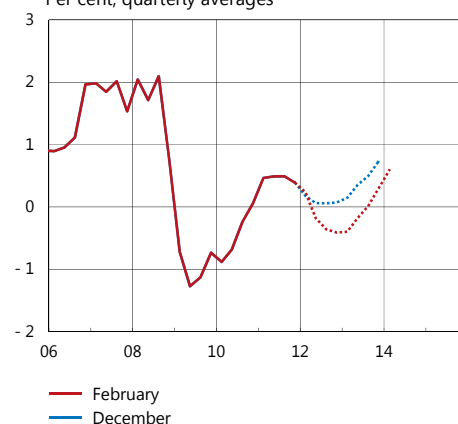
Monetary policy will continue to be expansionary in the years immediately ahead. As a result of the low repo rate, the real repo rate is expected to be negative in 2012-2013 (see Figure 1:27). There will be a need to gradually tighten monetary policy in Sweden as resource utilisation and inflationary pressures increase. The repo rate will therefore be gradually increased from mid-2013 to approximately 3 per cent at the beginning of 2015 (see Figure 1:26). This will contribute to CPIF inflation stabilising around 2 per cent and to resource utilisation stabilising around a normal level towards the end of the forecast period.

■ Economic development is uncertain

Is it still very difficult to see what course economic development in the euro area will take in the years immediately ahead. The measures taken to manage the public-finance crisis may lead to a more rapid return of confidence than assumed in the main scenario. This would lead to higher growth abroad and thus in Sweden too. On the other hand, a more prolonged public-finance crisis could cause the Swedish households and companies to be even more cautious and demand to be even weaker than assumed in the main scenario.

In the main scenario, the Riksbank assumes that the krona will strengthen somewhat in the period ahead. Normally, however, the krona weakens in periods of uncertainty, and this could also happen over the next few years, particularly if financial unease increases. However, the krona may also be stronger than is assumed in the main scenario. This could happen if Sweden's relatively speaking stronger economy leads to

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

a greater demand for Swedish assets, that is if the krona is perceived to be a relatively safe investment.

Both the economic outlook abroad and the exchange rate may thus develop differently than in the main scenario and thereby have different effects on growth and inflation in Sweden. This would also lead to a different monetary policy, as is discussed in more detail in Chapter 2.

Main revisions since the Monetary Policy Update in December

- The forecast for the euro area has been revised downwards, above all for this year, as more extensive consolidation measures are expected, while the forecast for growth in the United States has been revised upwards.
- The forecasts for GDP growth in Sweden this year and next year have been revised downwards. The growth of Swedish exports will be weaker than previously forecast. The forecast for household consumption has also been revised downwards. The forecast for GDP growth in 2014 has been revised upwards.
- The forecasts for unemployment this year and next year have been revised upwards somewhat given the weaker growth of GDP.
- The figure for CPI inflation this year has been revised downwards. This is a consequence of a lower repo-rate path. The forecast for CPIF inflation has been changed only marginally. At the end of the forecast period, the forecasts for CPI inflation and CPIF inflation are now higher than previously.
- The repo-rate path has been revised downwards throughout the forecast period. The forecasts for policy rates abroad have also been revised downwards.

■ CHAPTER 2 – Alternative scenarios and risks

The main scenario assumes that the most acute public finance problems in the euro area will be solved and that long-term sustainable solutions will gradually be put into place. However, there is considerable uncertainty over developments and the situation could be better or worse than assumed in the main scenario. In times of financial unease, it is particularly difficult to make forecasts for the exchange rate.

The alternative scenarios in this Chapter illustrate the effects on the Swedish economy of both a stronger and a weaker exchange rate in combination with both stronger and weaker development abroad. If any of these scenarios were to occur, monetary policy may need to react to stabilise inflation and resource utilisation.

The development of the economy in the period ahead is uncertain. There are a number of circumstances that could give a different course of economic development than the one anticipated 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 alternative scenarios for the development of the economy that differ from the main scenario.⁸

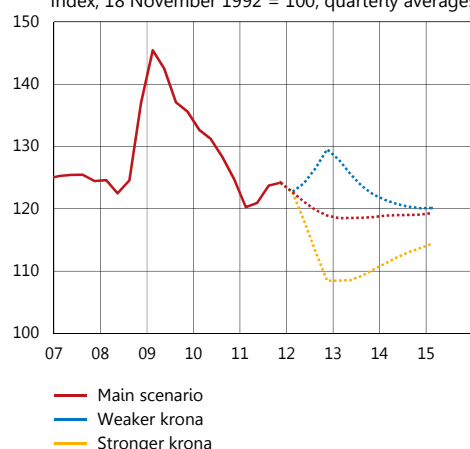
Exchange rate forecasts are highly uncertain. The Swedish krona has often depreciated in times of great economic unease. In conjunction with the financial crisis in the autumn of 2008, the Swedish krona depreciated sharply before rapidly appreciating in 2009–2010. During the start of the fiscal crisis in 2011, the krona only depreciated marginally and the main scenario assumes that the krona will appreciate slightly in the coming years. But of course a future depreciation of the krona, as in previous crisis episodes, cannot be ruled out. At the same time, it is also possible that the krona may appreciate more than in the main scenario, as Sweden has relatively strong public finances and a well-capitalised banking sector from an international perspective. This may be seen by investors as a sign that credit risk is low and that Sweden could thus be a safe haven for financial investors. This could lead to increased demand for Swedish assets and a stronger krona exchange rate.

The forecasts in the main scenario are largely characterised by developments abroad, particularly in the euro area. The main scenario assumes that the most acute public-finance problems will be solved and that long-term sustainable solutions will eventually be implemented. However, there is considerable uncertainty over the development of the euro countries, which could be better or worse than the main scenario assumes.

The two first alternative scenarios in this Chapter illustrate the effects of both a stronger and weaker exchange rate than in the main scenario, but leaving assumptions of developments abroad unchanged. In the subsequent scenarios, these exchange rate scenarios are combined with varying assumptions of developments abroad. The ways in which alternative assumptions of exchange rate forecasts and international forecasts could influence the Swedish economy and monetary policy over the years ahead are described with the aid of quantified examples.

⁸ The scenarios in this chapter are based on the Riksbank's general equilibrium model, Ramses. For a description of the model see L. Christiano, M. Trabandt and K. Walentin, "Introducing financial frictions and unemployment into a small open economy model", Working Paper no. 214, Sveriges Riksbank, 2007.

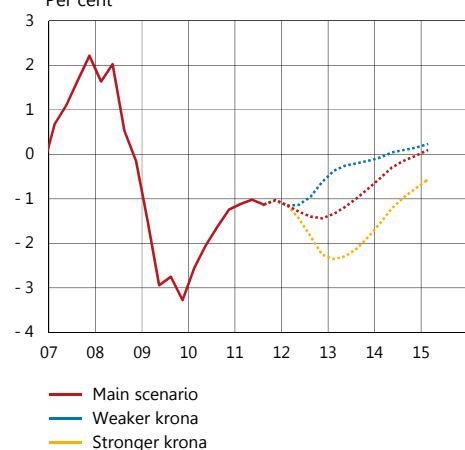
Figure 2.1. TCW-weighted nominal exchange rate
Index, 18 November 1992 = 100, quarterly averages



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

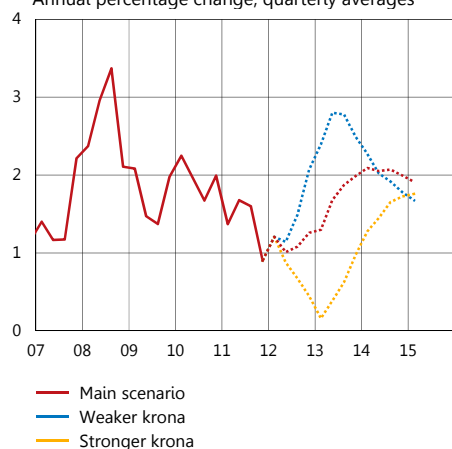
Source: The Riksbank

Figure 2.2. Hours gap
Per cent



Sources: Statistics Sweden and the Riksbank

Figure 2.3. CPIF
Annual percentage change, quarterly averages



Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Finally, the effects of two alternative courses of action for monetary policy are described. On the basis of the forecast in the main scenario, we describe a scenario in which the Riksbank chooses a slightly higher interest rate path than in the main scenario, and a scenario with a lower interest rate path.

Effects of alternative exchange rate movements

The main scenario is based on a gradual strengthening of the trade-weighted nominal exchange rate by about two per cent over the forecast period. The first scenario illustrates the effects of both a weaker and stronger exchange rate than assumed by the main scenario.

■ A weaker exchange rate stimulates the economy

During previous periods of crisis, the krona has usually depreciated. During the financial crisis of 2008–2009, the krona depreciated steeply. This probably contributed to keeping inflation up at the same time as the weaker exchange rate dampened the fall in resource utilisation.

The scenario assumes that the exchange rate is weakened due to decreased interest among investors in maintaining assets in Swedish kronor and that the exchange rate risk premiums increase. This can be interpreted as the market demanding additional compensation for investing in Swedish assets. In this scenario, the exchange rate first weakens by approximately 10 per cent compared to the main scenario, before then strengthening towards the level in the main scenario (see the blue line in Figure 2.1).

The depreciation of the krona makes Swedish export goods relatively cheaper and this stimulates net exports, leading to increased resource utilisation (here illustrated by the hours gap, that is to say the difference between the actual number of hours worked and the long-term trend – see Figure 2.2). As the krona depreciates, import prices increase, as do prices for Swedish goods produced with imported intermediate goods. As a consequence of the weaker exchange rate, CPIF inflation increases to above 2.5 per cent in 2013 (see Figure 2.3). To counteract excessively high inflation, monetary policy must be tighter than in the main scenario, and the repo rate path is raised in 2012–2013 (see Figure 2.4). The blue line in the figure illustrates the effects on monetary policy when the repo rate follows a historically-normal pattern, in the form of a simple rule of action where the interest rate depends on CPIF inflation and resource utilisation. In the scenario, the repo rate is raised fairly rapidly to three per cent and is then held on this level until the end of the forecast period.

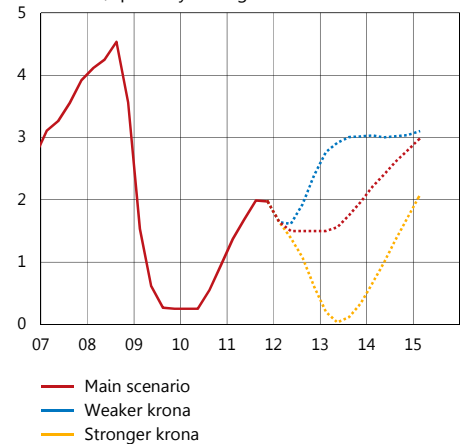
■ A stronger exchange rate dampens demand and inflation

The exchange rate could also be stronger than in the main scenario, for example because the market deems that the risk of investing in assets in Swedish kronor is relatively low. A lower risk premium for Swedish assets leads to the krona exchange rate strengthening more than in the main scenario. In this scenario, the trade-weighted exchange rate strengthens by 10 per cent in 2012. Following this, the krona exchange rate slowly weakens (see the yellow line in Figure 2:1). As the krona is assumed to be a safe haven, the krona remains significantly stronger than in the main scenario over the entire forecast period.⁹

When the krona appreciates more rapidly than in the main scenario, demand for Swedish export goods falls. In addition, both import prices and the pricing of Swedish goods are affected. When prices for imported goods fall, some Swedish companies will choose to cut their prices to defend their market shares. When the rate of price increase is lower, companies' costs also fall. Intermediate goods and commodities will become cheaper than in the main scenario, and in the long run the stronger exchange rate will also lead to some restraint in wage formation. All in all, the effect will be that inflation is lower than assumed in the main scenario.

This appreciation of the krona in the scenario has relatively strong effects on inflation and resource utilisation. When the krona appreciates by 10 per cent, CPIF inflation becomes 1 percentage point lower than in the main scenario by the end of 2012 (see Figure 2:3). The stronger exchange rate also has effects on resource utilisation through the reduction of net exports (see Figure 2:2). Reduced exports lead to a lower level of resource utilisation and a more negative hours gap. To counteract an excessively large fall in inflation and resource utilisation, the repo rate is lowered to almost zero per cent, before then gradually rising (see Figure 2:4).

Figure 2:4. Repo rate
Per cent, quarterly averages

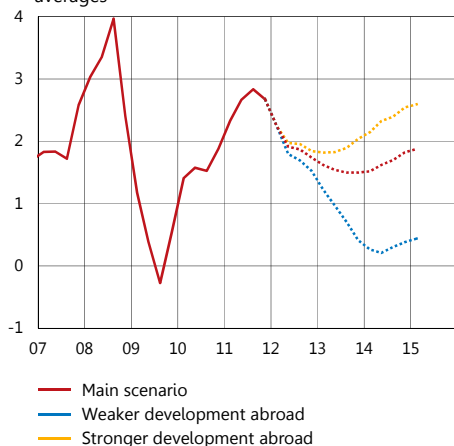


Source: The Riksbank

⁹ The scenario does not address changes in the long-term level of Sweden's real exchange rate. If such an adjustment is one of the reasons behind changes in the exchange rate, the effects on inflation and resource utilisation can be expected to be different than is assumed in the scenario.

Figure 2.5. Inflation abroad

TCW-weighted, annual percentage change, quarterly averages

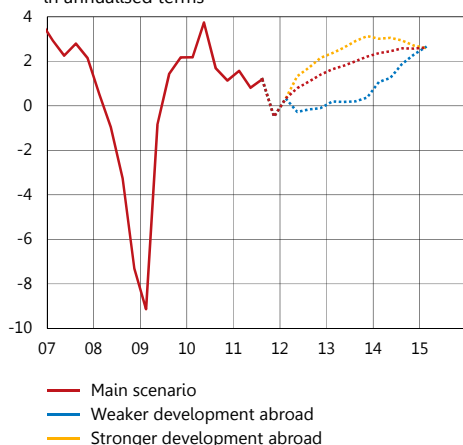


Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: National sources and the Riksbank

Figure 2.6. GDP abroad

TCW-weighted, quarterly changes in per cent calculated in annualised terms

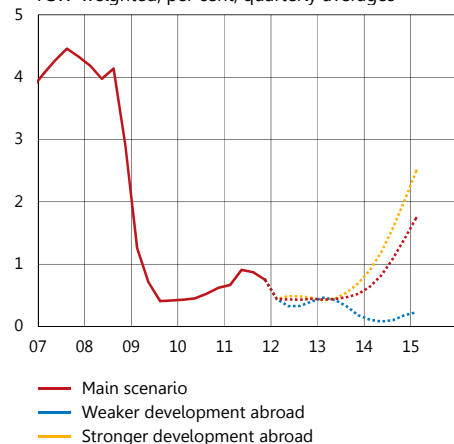


Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: National sources and the Riksbank

Figure 2.7. 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

Effects of alternative exchange rate movements combined with alternative international scenarios

■ The international forecast is a great uncertainty factor

There is considerable uncertainty over economic developments abroad. The Monetary Policy Report published in October 2011 presented a scenario with a more prolonged fiscal crisis in the euro area. This assumed that the problems would not be solved in an orderly manner, resulting in a prolonged economic slowdown.

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 global economic activity could improve faster than expected.

To better illustrate the effects of alternative assumptions of international developments, scenarios are presented in which both weaker and stronger developments abroad (see Figures 2:5–2:7) are combined with various scenarios for the exchange rate in the manner illustrated in Figure 2:1.¹⁰

■ A weaker krona dampens the effects of weak international economic activity

In this scenario, the krona depreciates at the same time as international developments are less favourable than assumed in the main scenario. As in the scenario presented in the Monetary Policy Report in October 2011, this scenario assumes that the fiscal crisis cannot be solved in an orderly manner. Euro area banks that are directly exposed to the problem countries in southern Europe could then suffer extensive loan losses. Uncertainty about which banks have such exposures will make it even more difficult for certain banks to obtain funding on the financial markets. A number of banks may then end up in an acute crisis situation and need government support in order to survive. This will apply further pressure on public finances even in the large euro countries, and this may lead to expectations that more countries may experience acute problems. This would lead to a substantial increase in risk premiums and increased interest rate spreads.

The decreased level of credit granting, combined with weaker confidence among households and companies, leads to a slowdown in GDP growth and the reduction of inflationary pressures. The fiscal crisis will be prolonged and it will take longer for international growth and economic activity to return to normal levels.

Demand for Swedish goods decreases when international development is less favourable. But if the Swedish krona depreciates at the same time, Swedish-made goods become relatively cheaper, dampening the effects of the weaker international development. The

¹⁰ The scenario for the developments abroad is the same as the scenario "Prolonged crisis in public finances" (with a more expansionary monetary policy) in the Monetary Policy Report of October 2011, with the exception of the development of the exchange rate. The isolated effects of weaker or stronger development abroad on the exchange rate are limited in this example. The exchange rate therefore develops approximately as in Figure 2:1 in these combined scenarios too.

weaker exchange rate also makes imported goods more expensive, leading to increased inflationary pressures. Inflation, measured in terms of the CPIF, increases to over three per cent in 2013 (see Figure 2:8). All in all, resource utilisation decreases and the hours gap becomes increasingly negative (see Figure 2:9).

A scenario with rising inflation at the same time as resource utilisation decreases places the Riksbank in a monetary policy dilemma.¹¹ The exact form that monetary policy should take in such a situation is not obvious. In this example, the repo rate is lowered to stimulate resource utilisation against the background of declining international demand (see Figure 2:10). But another monetary policy reaction is, of course, also imaginable.

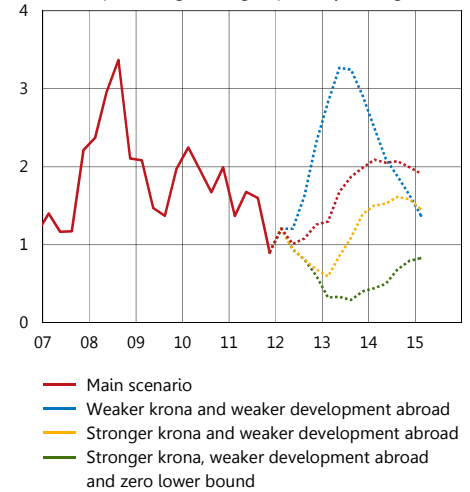
■ A strong krona amplifies the effects of weak international economic activity

Sweden is in a relatively strong initial position to manage the financial crisis. Central government finances are strong, which provides scope for fiscal policy measures if the situation should deteriorate. Swedish banks have limited direct exposures to the problem countries in southern Europe. With strong public finances, well-capitalised banks from an international perspective and a competitive economy (with large public account surpluses and other advantages), Swedish assets may be seen as a safe haven and the krona could thus appreciate even if international developments deteriorate further.

The stronger exchange rate makes Swedish-manufactured goods more expensive at the same time as international demand declines. This has negative effects on resource utilisation, as illustrated here by the hours gap, and leads to lower inflationary pressures (see Figures 2:8 and 2:9). To counteract the effects of a stronger krona and a weaker international climate, the Riksbank must lower the repo rate. The effects on inflation and resource utilisation in this example are so great that the repo rate would have to be lowered below zero per cent to stabilise the economy. However, a negative repo rate would be difficult to apply in practice.¹² In such a situation, central banks can therefore use other instruments, for example various types of quantitative easing. The yellow lines in Figures 2:8, 2:9 and 2:10 show a development in which the Riksbank, despite everything, is able to use various measures to stimulate the economy with the same effect as if a negative repo rate had been applied. If such extraordinary measures are not adopted, then resource utilisation will fall even further and CPIF inflation becomes very low (see the green lines in Figures 2:8–2:9).

Figure 2:8. CPIF

Annual percentage change, quarterly averages

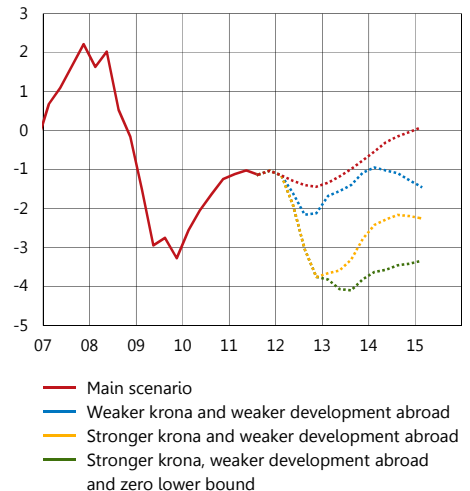


Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 2:9. Hours gap

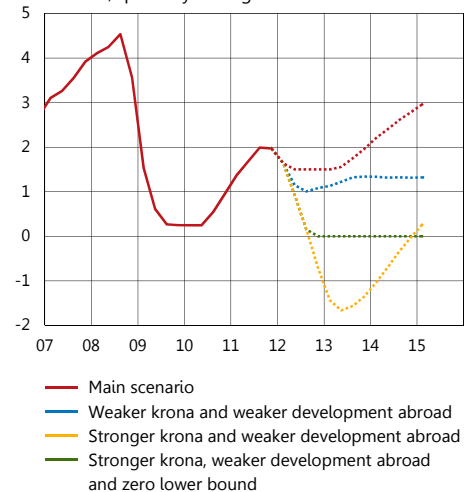
Per cent



Sources: Statistics Sweden and the Riksbank

Figure 2:10. Repo rate

Per cent, quarterly averages

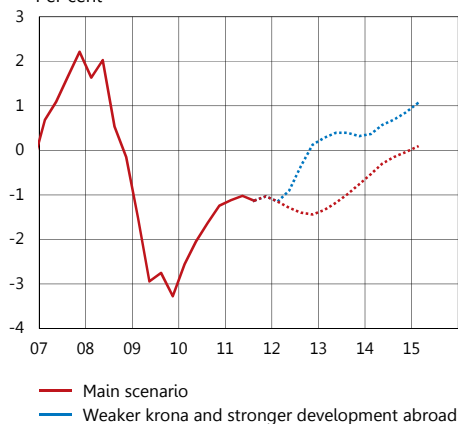


Source: The Riksbank

¹¹ A stagflation scenario is illustrated in the Monetary Policy Report of October 2011.

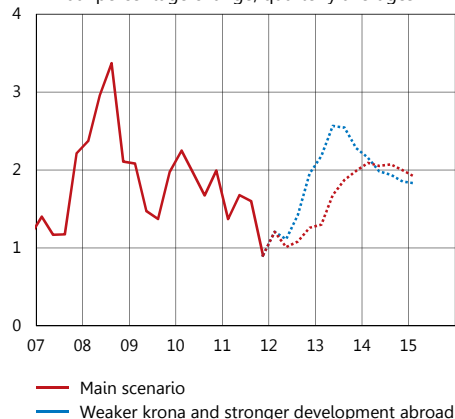
¹² See M. Beechey and H. Elmer "The lower limit of the Riksbank's repo rate", Economic Commentary no. 11 2009, Sveriges Riksbank and U. Söderström and A. Westermark, "Monetary Policy with a Zero Interest Rate", Sveriges Riksbank Economic Review 2/2009.

Figure 2:11. Hours gap
Per cent



Sources: Statistics Sweden and the Riksbank

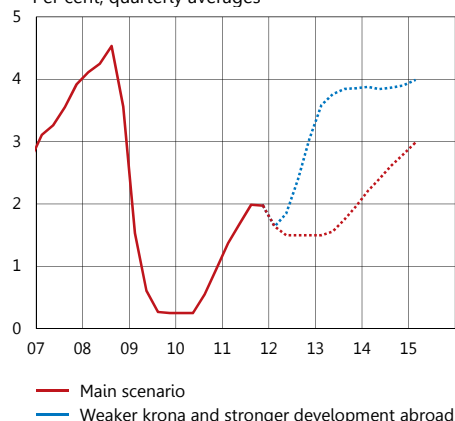
Figure 2:12. CPIF
Annual percentage change, quarterly averages



Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 2:13. Repo rate
Per cent, quarterly averages



Source: The Riksbank

■ Weaker krona and stronger development abroad

It is also possible that the international financial crisis will be solved faster than the main scenario expects. Such an eventuality would increase demand for Swedish-manufactured goods, thereby leading to higher resource utilisation. However, even in such a scenario, the krona could develop differently than in the main scenario.

The effects of a weaker krona at the same time as there is more rapid international growth than expected are illustrated here. If the krona depreciates, Swedish-manufactured goods will become relatively cheaper. The stronger demand leads to rising resource utilisation, higher GDP-growth and a more rapid recovery on the labour market (see Figure 2:11). At the same time, a weaker krona leads to increasing import prices and rising inflation. The higher resource utilisation also contributes towards gradually increasing inflation (see Figure 2:12). To dampen the higher inflationary pressures from the weaker exchange rate and higher resource utilisation, the Riksbank has to tighten monetary policy (see Figure 2:13). In this example, the repo rate is raised rapidly during 2012–2013 towards a level of about 4 per cent.

Alternative scenarios for the repo rate

This section describes two alternative scenarios for the repo rate and the effects these would have on the development of inflation and various measures 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 2:14).

■ A higher repo rate will dampen inflation and resource utilisation

A higher repo rate than in the main scenario will lead the banks and other financial institutions to raise their savings and lending interest rates. When households face higher interest rates, they choose to increase their saving and reduce their consumption. The consequence of this is that Swedish companies will face 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 become 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 2:17–2:19). Lower demand will also lead companies to slow down their rate of price increase, which together with a lower rate of inflation for imported goods will mean that CPIF inflation falls in relation to the main scenario (see Figure 2:15). The

effect on CPI inflation will be less initially, as the households' mortgage costs increase when the repo rate is raised (see Figure 2:16).

■ A lower repo rate increases inflation and resource utilisation

In the second scenario the Riksbank instead reduces the repo rate more than in the main scenario. The effects on household saving and consumption will thus be the opposite of the scenario in which the repo rate is raised. The lower return on saving will lead households to increase their consumption, which will give 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 2:17–2:19), while inflation will also be higher (see Figures 2:15–2:16). Here too, the effects on CPI inflation will initially be lessened by decreased mortgage costs.

■ Well-balanced monetary policy in the main scenario

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

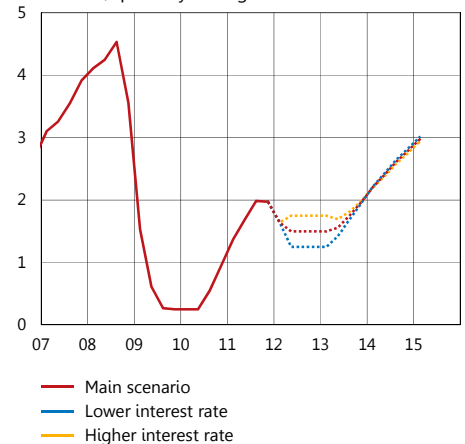
A lower repo-rate path means that inflation measured in terms of the CPI will be further away from the inflation target during large parts of the forecast period than in the main scenario. It also means that CPIF inflation will reach two per cent sooner than in the main scenario and will subsequently be just over two per cent in 2014. A higher interest rate path will instead mean that CPI inflation will be closer to target, while it will take slightly longer for CPIF inflation to stabilise around two per cent.

The Riksbank's overall assessment in the main scenario is that resource utilisation, which is presently slightly lower than normal, will normalise towards the end of the forecast period. With a lower interest rate path, resource utilisation will be higher during the forecast period and will normalise slightly earlier than in the main scenario. 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, at the same time as resource utilisation would be higher and unemployment lower. At the same time, CPIF inflation would be over two per cent towards the end of the forecast period. In addition, the lower interest rate path would give higher CPI inflation. Arguments in favour of the higher repo-rate path are instead that CPI inflation would be closer to the inflation target over larger parts of the forecast period and that CPIF inflation would be slightly closer to two per cent towards the end of the forecast period.

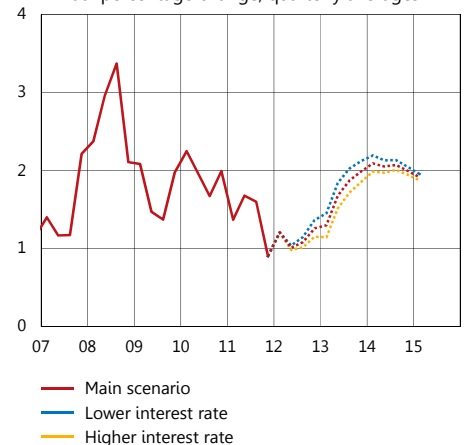
The lines presented in Figures 2:15–2:19 are based on historically-estimated links between changes in the repo rate and their effects on the real economy and inflation. According to these estimates, changes in the

Figure 2:14. Alternative repo-rate paths
Per cent, quarterly averages



Source: The Riksbank

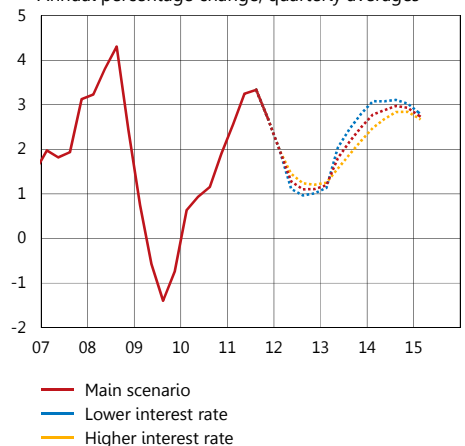
Figure 2:15. CPIF
Annual percentage change, quarterly averages



Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

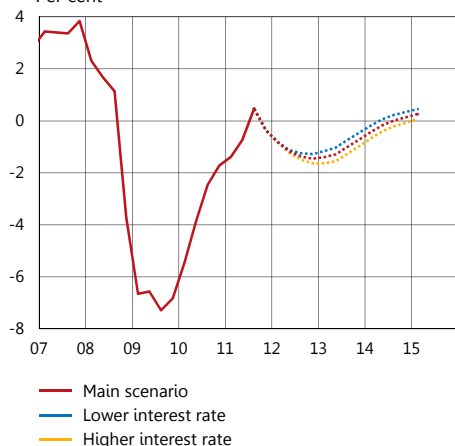
Figure 2:16. CPI
Annual percentage change, quarterly averages



Sources: Statistics Sweden and the Riksbank

Figure 2:17. GDP gap

Per cent



Sources: Statistics Sweden and the Riksbank

Figure 2:18. Hours gap

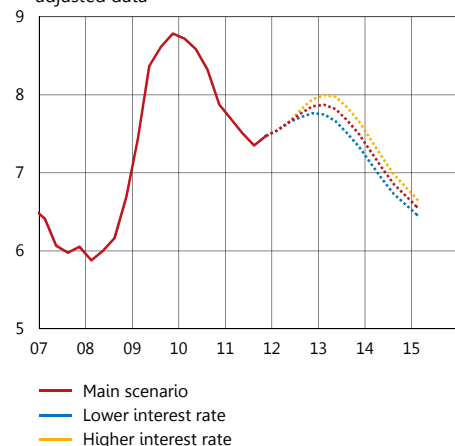
Per cent



Sources: Statistics Sweden and the Riksbank

Figure 2:19. Unemployment

Per cent of the labour force, aged 15-74, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

repo rate have a relatively rapid effect on economic development.

Despite the fact that international demand will be weak over the entire forecast period, 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, particularly abroad. In such a situation, it is doubtful whether monetary policy will have the same rapid effect as suggested 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 eventually stimulate 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, CPIF inflation will be around 2 per cent and CPI inflation will be considerably above the inflation target. 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 uneven.

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.

■ CHAPTER 3 – Current state of the economy

This chapter presents new information received since the Monetary Policy Update was published in December and an assessment of economic prospects in the coming quarters.

GDP growth in the euro area has developed weakly in recent quarters, at the same time as unemployment has risen to new levels. Despite a certain degree of stabilisation in a number of indicators, GDP is deemed to have fallen in the fourth quarter of last year and also at the start of 2012. The weak demand from Europe has also negatively affected the emerging markets, even if growth is still high in these countries. In contrast, the situation is somewhat brighter in the United States, with many indicators showing improvement recently.

Developments abroad also affect the Swedish economy, for example through falling demand for Swedish export goods. Growth in the Swedish economy is deemed to have slowed down more markedly in the fourth quarter of last year than was assumed in the Monetary Policy Update from December. Growth is also expected to be weak in the first quarter of this year. The development of the labour market has slowed down more or less as expected. Underlying inflation is still low.

Slight slowdown abroad

■ Growth is falling in the euro area

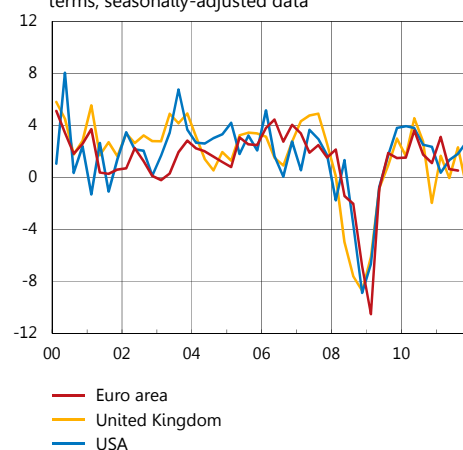
Development in the euro area was very weak at the end of last year. However, there are signs of stabilisation in some indicators. GDP only increased by 0.5 per cent on an annual rate in the third quarter of last year, compared with the previous quarter (see Figure 3:1). This was slightly lower than the preliminary outcome published earlier, and indicators now also suggest a somewhat weaker view of developments in the fourth quarter.

After the weak growth in consumption in the third quarter of 2011, retail trade sales continued to develop weakly in the fourth quarter, at the same time as consumer confidence has remained at a low level (see Figure 3:2). Industrial output in the euro area fell in November for the third month in a row. At the same time, orders also fell. Industrial output also declined noticeably in Germany in December. According to the ECB's Bank Lending Survey, credit terms in the euro area have clearly deteriorated recently, which is expected to restrain consumption and investments.

Employment growth has levelled off and unemployment has risen to over 10 per cent (see Figure 3:3). Surveys do not indicate any improvement of the labour market situation soon. However, there are wide differences between the various euro area countries: for example, unemployment has continued to decrease in Germany, while it is increasing in Spain and Italy.

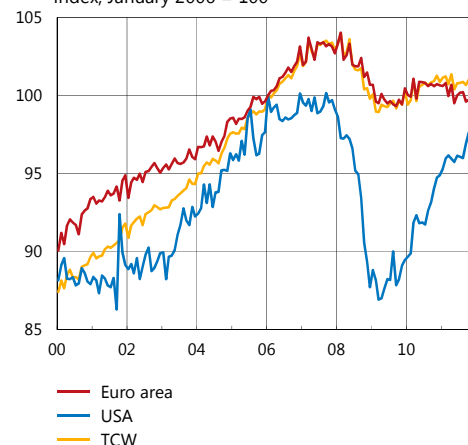
But there are also signs that certain indicators have stabilised. For example, according to the purchasing managers' index, corporate confidence increased in December and January, even if it remains on levels indicating that industrial output is falling, except in Germany and France. The sub-index for export orders also indicates that the fall in new export orders is slackening off.

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



Sources: Bureau of Economic Analysis, Eurostat and Office for National Statistics

Figure 3:2. Retail sales abroad
Index, January 2006 = 100

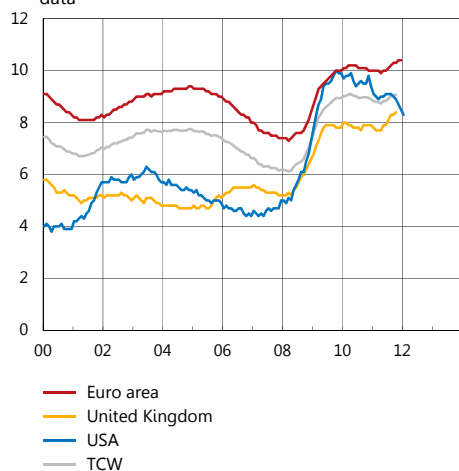


Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: Eurostat, Federal Reserve Bank of St. Louis, national sources and the Riksbank

Figure 3.3. Unemployment abroad

Percentage of the labour force, seasonally-adjusted data

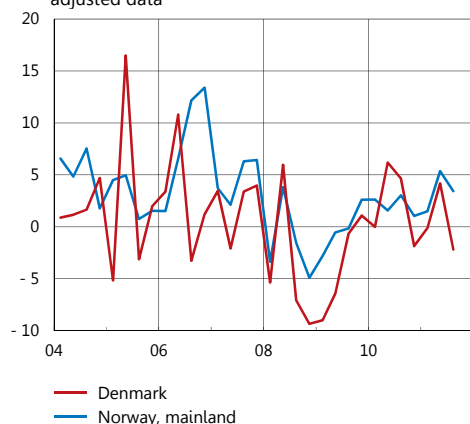


Note. TCW refers to a weighting of Sweden's most important trading partners.

Sources: Bureau of Labor Statistics, Eurostat, Office for National Statistics, national sources and the Riksbank

Figure 3.4. GDP in Denmark and Norway

Quarterly changes in per cent, annual rate, seasonally-adjusted data



Sources: Statistics Denmark and Statistics Norway

Despite some bright spots, this new information as a whole indicates that growth in the euro area is deemed to have been slightly weaker at the end of last year when compared with the assessment in the Monetary Policy Update from December. GDP in the euro area is assumed to have fallen during the fourth quarter last year, and this development is deemed to have continued in the first quarter of this year.

■ Weak domestic demand in the United Kingdom

In the United Kingdom, GDP fell by 0.8 per cent on an annual rate in the fourth quarter of last year, compared with the third quarter (see Figure 3:1). The indicators give a divided view of the situation for companies. The purchasing managers' index indicates that companies in both the manufacturing industry and the service sector became more optimistic in December. However, other surveys indicate increased pessimism, which may be connected with the continued weak level of industrial output. Households have also become more pessimistic. Unemployment has continued to rise, primarily because employment in the public sector is falling (see Figure 3:3). Credit growth is weak and credit terms were also tightened in the fourth quarter of last year. This is probably a contributing reason for the continued fall in house prices. Household consumption has shown a trend decrease since the end of 2007.

■ Weaker growth in Denmark and Norway

In Norway, GDP increased by 3.4 per cent calculated as annual rate in the third quarter compared with the second quarter (see Figure 3:4). After a period of high growth, there are now signs that growth in Norway has dampened. These signs include the weak development of consumption and the falling expectations of households and companies. Norges Bank's company survey shows a clear dampening of output. At the same time, activity within the construction sector is high, as is growth in oil investments and oil-related industries.

In Denmark, GDP fell by slightly more than 2 per cent on an annual rate in the third quarter, compared with the second quarter (see Figure 3:4). This decrease was largely the result of falling public consumption, but household consumption fell too. Industrial output has developed weakly in recent months and is still significantly lower than before the financial crisis. Households in Denmark have become increasingly pessimistic. The continued weak condition of the housing and labour markets has contributed to this. Problems in the banking sector are one of the reasons for the dampened growth of credit. Turnover in retail sales has shown a trend decrease since the start of 2008.

■ Improved situation in the United States

In the United States, GDP increased in the fourth quarter of 2011 by 2.8 per cent compared with the third quarter, on an annual rate (see Figure 3:1). A number of macroeconomic indicators continued to strengthen at the end of last year and the start of this year. Even though growth is not

particularly strong, this improvement is somewhat larger than the Monetary Policy Update in December anticipated. Employment rose rapidly in January and unemployment fell to 8.3 per cent (see Figure 3:3). At the same time, financial conditions have also improved, primarily because the stock markets have risen. Growth is also expected to be higher at the start of 2012 than we estimated in December, as Congress has decided to lower payroll taxes and that the extended benefit period for unemployment will also be applied in January and February of this year. However, this forecast assumes that there will not be any further extension for the rest of the year, meaning that growth is expected to dampen in the second quarter of the year.

The situation on the housing market is improving, albeit from a very low level. Confidence among companies in the construction sector has improved, sales have increased in number and housing construction is rising. It is also going faster than previously to sell housing.

Corporate profits continued to increase in the third quarter of last year and, as a percentage of GDP, were at the highest level since the early 1950s. This means that the conditions for new recruitment and increased investments by companies are good.

■ Weak demand in Europe is burdening the emerging economies

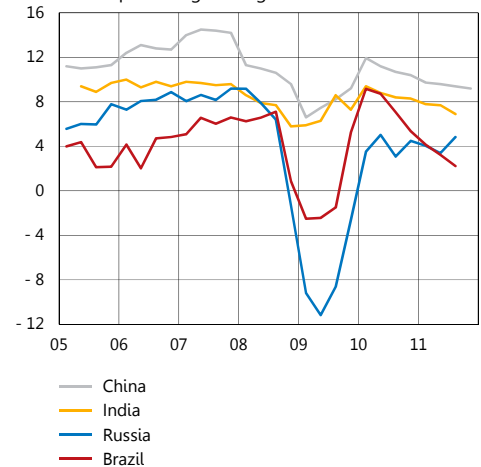
Growth has slackened slightly for the emerging economies (see Figure 3:5). This is because both domestic demand and demand from Europe have dampened.

China's GDP increased by 8.9 per cent in the fourth quarter of 2011 as an annual percentage change, which is lower than growth in the third quarter. Activity has diminished on the Chinese property market and there are many indications that, in line with the government's objectives, prices will continue to be dampened in the period ahead. The weaker development in Europe suggests that China's exports will be lower than was previously assumed. Exports were also slightly lower in December, compared with the same month of the previous year.

Economic activity has also been dampened in India. Inflation is high, meaning that households' purchasing power has increased more slowly than previously. Household consumption is thus developing weakly, which will contribute to slightly lower GDP growth in the near future. Growth in Brazil continued to slacken in the third quarter of 2011. The manufacturing industry has been hampered by the strong currency, in addition to which domestic demand has increased at a slower pace over the year. This is a consequence of the tightening of monetary policy at the start of 2011.

The growth of the Russian economy is also relatively weak. However, Russia's high level of oil production and the continued high oil price are supporting growth at present.

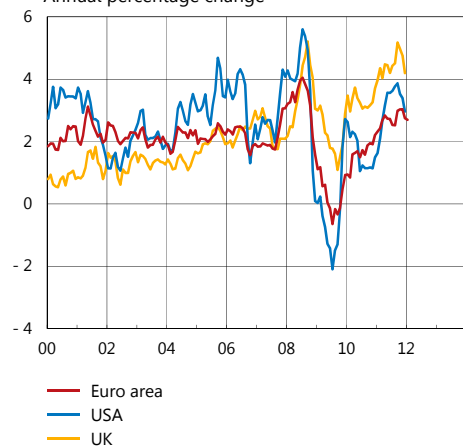
Figure 3:5. GDP in the BRIC countries
Annual percentage change



Note. The BRIC countries consist of Brazil, Russia, India and China.

Sources: Central Statistical Organisation, India, Federal State Statistics Service, Russia, Instituto Brasileiro de Geografia e Estatística and National Bureau of Statistics of China

Figure 3:6. Consumer prices abroad
Annual percentage change



Note: This refers to HICP for the euro area and CPI for the USA and the UK.

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

■ Weaker industrial output in Japan

Growth in Japan was unexpectedly low towards the end of last year. Japanese industrial output has fallen. Among other reasons, this is due to the flooding in Thailand which led to a shortage of input goods, as many Japanese companies have moved parts of their production there. Industrial output has also been impacted by the appreciation of the yen and the decreased demand for Japanese export goods in Europe. Developments in Europe suggest that exports will fall below what was previously assumed. In addition, fiscal policy stimulation measures are deemed to be small in Japan in the period ahead.

■ Lower inflation in certain areas

In the euro area, inflation has been well above the ECB's target for large parts of 2011, very much because of high energy prices. The rate of inflation fell to 2.7 per cent in December (see Figure 3:6). Inflation also amounted to 2.7 per cent in January, according to preliminary statistics. The decrease in December was partly because the rising energy prices at the start of last year fell out of the 12-month figures.

Apart from high energy prices, higher taxes and administrative fees have also contributed towards high inflation in the euro area. At the start of 2012, a number of other countries will be raising their VAT rates, and Italy has raised the duty on petrol. However, if energy and food prices are disregarded, inflation is lower. Underlying inflation (excluding energy, food, alcohol and tobacco) amounted to 1.6 per cent in December. At the same time, indicators of inflation expectations among households and companies have increased slightly.

In the United Kingdom, inflation has fallen over recent months, from just over 5 per cent in September to 4.2 per cent in December (see Figure 3:6). This decrease was partly because rising energy prices and increased taxes at the start of last year fell out of the 12-month figures, but even lower underlying inflation is also contributing. However, indicators of long-term inflation expectations, both from household surveys and from measures based on pricing on the financial markets, do not seem to have been affected by the high inflation outcome.

In the United States, inflation has slackened off, above all because energy prices have fallen (see Figure 3:6). CPI inflation was 3.0 per cent in December. Underlying inflation was 2.2 per cent.

In China, inflation was 4.1 per cent in December, a marginal decrease from 4.2 per cent in November. Food prices are increasing more slowly and are expected to contribute to inflation being lower at the start of 2012. India's rate of inflation fell to 7.5 per cent in December, but its currency has weakened, increasing the risk that the rate of inflation will remain at a high level. The Japanese economy continues to be marked by falling prices.

Higher asset prices after central bank measures

■ Government bond rates at record low levels

Government bond rates in the United States, Germany and Sweden have remained on low levels since the monetary policy meeting in December (see Figure 3:7). The strong demand for government securities from these countries can be seen in the strong interest in issues of the countries' government bonds, the issue of certain treasury bills for a price actually equivalent to a negative interest rate and other effects. In Sweden, the Swedish National Debt Office has decided to issue a new 20-year government bond.

Government bond rates are also affected by the continued signalling of low policy rates by the central banks, which, together with other measures from the central banks, will keep interest rates in general down. In addition, market participants' expectations of inflation and growth in the United States and Europe are low.

■ Southern European interest rates remain high

Government bond rates for countries with high levels of sovereign debt remain on relatively high levels (see Figure 3:8). However, the credit rating firm Standard and Poor's downgrade of nine countries' credit ratings in mid-January did not contribute to further interest rate increases, as the downgrading of France (for example) was very much expected (see Figure 3:7).

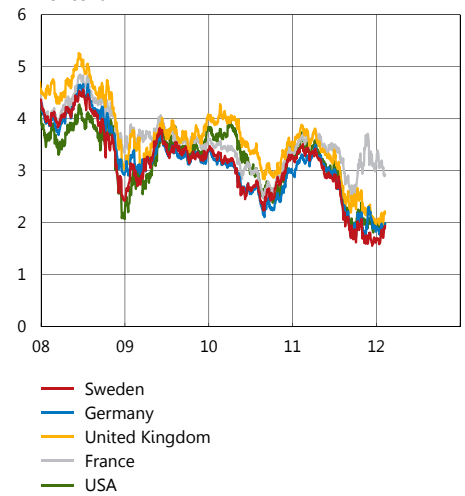
For participants on the fixed-income markets, governments' ability to reduce public expenditure and the euro member states' ability to hold the single currency together have been in focus. The approaching EU summit meetings may be decisive for restoring confidence in the stabilisation of the debt crisis and the improvement of economic development. For Italy, it is important that confidence increases among financial participants, as the country will shortly be refinancing extensive bond maturities.

The ECB has made clear that it will not be buying large quantities of government bonds in the period ahead. On the other hand, in December, the ECB offered the euro area banks unlimited access to three-year loans against collateral. A total of EUR 489 billion was lent. At the end of February, the ECB will offer the banks of the euro area further loans on the same terms.

■ Higher asset prices after the central banks' measures

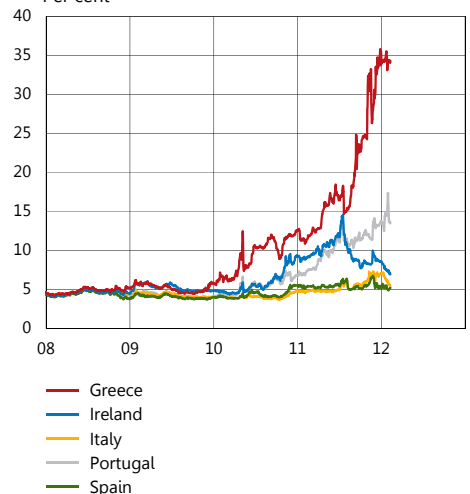
Both the European and the US stock markets have shown positive development since the monetary policy meeting in December (see Figure 3:9). Share prices have increased even though the market participants have revised their long-term profit forecasts downwards. The ECB's major loans with maturities of three years to the euro area's banks have probably contributed to the higher share prices, and also to higher prices for other assets. The central banks' dollar loans under more favourable terms than previously have probably also contributed to the higher asset

Figure 3:7. Government bonds with 10 years left to maturity
Per cent



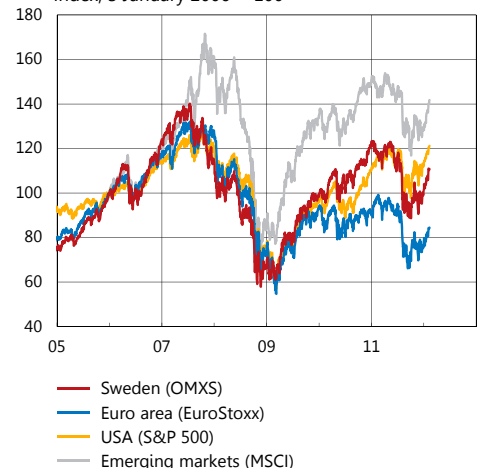
Source: Reuters EcoWin

Figure 3:8. Government bonds with 10 years left to maturity
Per cent



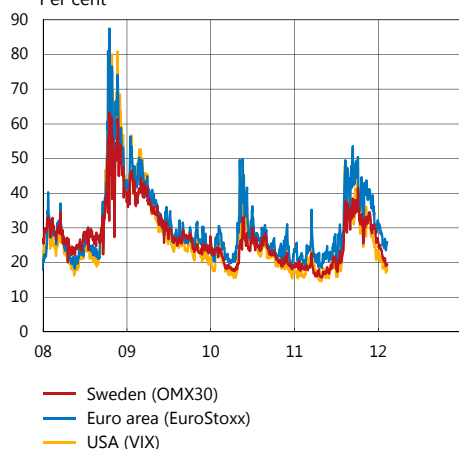
Source: Reuters EcoWin

Figure 3:9. Stock market movements
Index, 3 January 2006 = 100



Sources: Morgan Stanley Capital International, Reuters EcoWin, Standard & Poor's and STOXX Limited

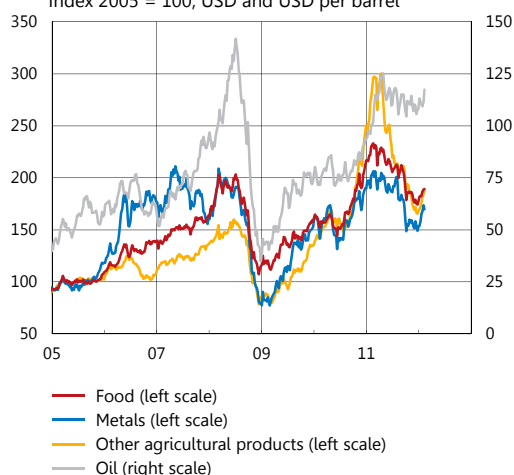
Figure 3:10. Stock market volatility
Per cent



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

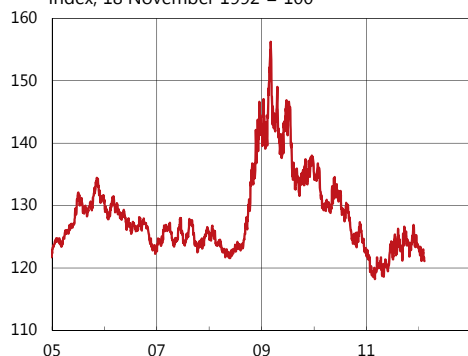
Sources: Chicago Board Option Exchange, Reuters EcoWin and STOXX Limited

Figure 3:11. Commodity prices
Index 2005 = 100, USD and USD per barrel



Sources: The Economist and Intercontinental Exchange

Figure 3:12. TCW-weighted nominal exchange rate
Index, 18 November 1992 = 100



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

Source: The Riksbank

prices. The decreased uncertainty over access to funding has also led to lower volatility on the stock markets (see Figure 3:10).

Commodity prices have gone up recently (see Figure 3:11). The slight increase in the price of oil since December is probably also due to an unease that the dispute with Iran will lead to disruptions in the supply of oil.

■ The Swedish krona is stronger than in previous periods of financial unease

The Swedish krona has strengthened in trade-weighted terms since the monetary policy meeting in December (see Figure 3:12).

The euro has weakened against all major currencies since December. The krona has strengthened somewhat against the euro recently, which may be an effect of a certain stabilisation on the financial markets.

■ Central bank interest rates are expected to be low in the period ahead

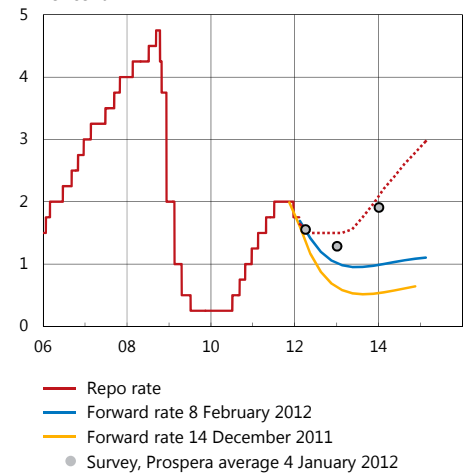
After the monetary policy meeting in December and the publication of the minutes of the monetary policy meeting in January, monetary policy expectations measured by implied forward rates rose slightly. Despite this, the Riksbank is expected to lower the repo rate by one further percentage point in 2012, according to forward pricing. Various surveys also show that the market expects a lower interest rate, even if not as low as forward pricing suggests. According to Prospera's latest investigation, the Riksbank is expected to lower the repo rate by almost 0.5 percentage points to 1.3 per cent over the coming year, before then raising it to 1.9 per cent in 2013. The Riksbank's forecast for the repo rate implies that the repo rate will remain still at 1.5 per cent some way into 2013 (see Figure 3:13).

Monetary policy expectations abroad have decreased marginally since the monetary policy meeting in December (see Figure 3.14). According to forward pricing, the ECB's policy rate is expected to be lowered from 1.0 to 0.75 per cent in 2012. The US central bank (the Federal Reserve) is expected to hold its policy rate unchanged for a very long time to come. The most recent interest rate decision saw the publication for the first time of the views of the individual members of the Executive Board regarding appropriate future interest rate levels. There is a large range of opinions, but the median value of the forecasts and the Federal Reserve's overall message would indicate a continued low interest rate until the end of 2014. At the same time, there are certain expectations of further bond purchases by the Federal Reserve. The UK central bank, the Bank of England, is expected to hold its policy rate unchanged for the whole of 2012. At its latest meeting in February, the Bank of England decided to increase its purchases of financial assets, mainly government bonds, by GBP 50 billion to GBP 325 billion.

■ High spreads on the interbank market

The difference between the interest rate charged by the Swedish banks for loans from each other and the Riksbank's expected policy rate remains wider than it did in the autumn. However, the Swedish interbank market is functioning relatively well. Unlike many European banks, the Swedish banks are not faced with any major problems when borrowing without collateral from other banks. The Swedish banks also still have significantly better possibilities than many other European banks when it comes to obtaining funding for longer maturities in Swedish kronor and other currencies.

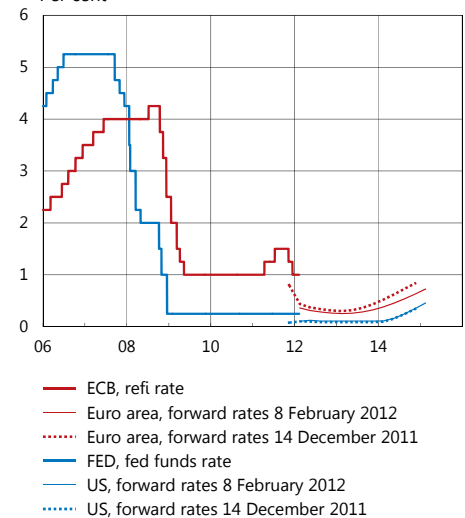
Figure 3:13. Repo rate expectations in Sweden measured as market prices and survey
Per cent



Note. Forward rates have been adjusted for risk premiums and describe the expected overnight rate. Prospera's survey refers to money market players.

Sources: Reuters EcoWin, TNS SIFO Prospera and the Riksbank

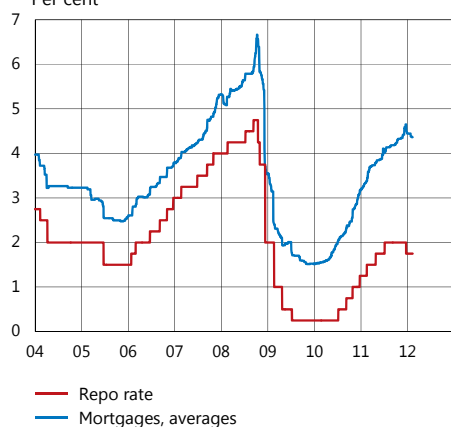
Figure 3:14. Policy rate expectations measured in terms of market prices in the euro area and the USA
Per cent



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

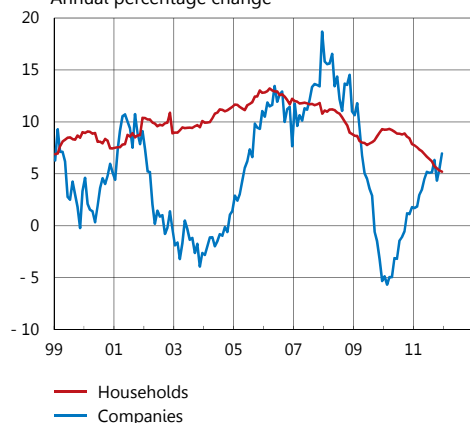
Figure 3.15. Interest rates in Sweden
Per cent



Note. Refers to average of three-month listed mortgage rates from banks and mortgage institutions. Listed mortgage rates are the rates published by Nordea, SBAB, SEB, Swedbank Hypotek and Stadshypotek, for example in the daily press.

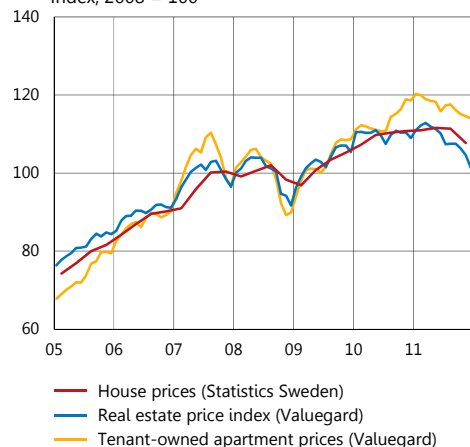
Sources: Reuters EcoWin and the Riksbank

Figure 3.16. Bank lending to companies and households
Annual percentage change



Source: Statistics Sweden

Figure 3.17. Housing prices
Index, 2008 = 100



Note. The data from Valueguard is on a monthly rate and the data from Statistics Sweden is on a quarterly rate. Statistics Sweden's real estate price index is based on land registration data, while Valueguard's index is based on purchasing contracts. Purchasing contracts are normally registered about two months before land registration, which means that SCB's statistics lag behind the statistics from Valueguard.

Sources: Statistics Sweden and Valueguard

■ Variable mortgage rates are deviating more from the repo rate

The average mortgage rate for households increased in December, primarily because mortgage rates with maturities of up to one year increased. However, since the monetary policy meeting in December, mortgage rates have decreased regardless of maturity. However, the gap between short-term mortgage rates and the Riksbank's repo rate remains wide (see Figure 3.15). This is probably due to a combination of different factors. The higher funding costs being faced by mortgage institutions are probably one of the explanations. But the mortgage institutions have also increased their margins on the interest rate to mortgage customers (see also the article "The relationship between the repo rate and interest rates for households and companies" in this report).

The average interest rates met by companies have risen in recent months, above all those with fixed terms of between three months and one year.

■ The rate of lending to households is decreasing

The last eighteen months' rising mortgage rates and the recent decreasing prices for houses and tenant-owner apartments have probably contributed to the slower increase of lending to households (see Figure 3.16). Prices of single-family dwellings and apartments fell at the end of last year (see Figure 3.17).

In contrast, corporate borrowing increased by 7.0 per cent in December, measured as an annual percentage change. This means that companies increased their borrowing at a strong pace in the autumn. However, according to the National Institute of Economic Research's Economic Tendency Survey from January, slightly more companies than in the autumn feel that it is harder than normal to obtain funding, even though most companies say that funding is working normally. At the same time, increasing numbers of bank managers are reporting that the rate of lending to companies is decreasing, according to Almi Företagspartner's lending indicator. In addition, almost fifty per cent of bank managers expect lending to increase more slowly over the coming year. This is an increase compared with last summer. According to Almi, these expectations of a lower rate of lending are due to lower demand for credit and more restrictive credit granting. Companies also report in the Riksbank's company interviews that possibilities for funding have deteriorated somewhat.

The Swedish economy has also weakened

■ GDP growth was weak at the end of last year

There was a clear slowdown in the Swedish economy towards the end of last year, following very strong growth in the third quarter. Calculated at an annual rate, GDP growth amounted to 6.6 per cent, compared with the previous quarter (see Figure 3:18). However, there are clear signs that growth slowed down in the fourth quarter. The curtailed demand for Swedish export goods and the financial unease that dampened the mood of companies and households contributed to this.

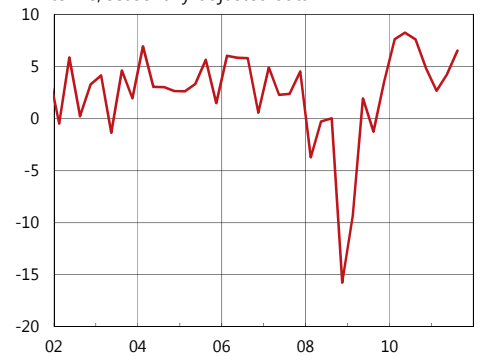
Goods exports, which contributed to the strong GDP growth in the third quarter, developed very weakly in the final months of last year and declined by about four per cent between the third and fourth quarters of last year (see Figure 3:19). At the same time, industrial output and export orders have also fallen. However, the situation appears better in trade and the services-producing sectors, and the turnover of retail sales and the services production sector increased between the third and fourth quarters (see Figure 3:19).

By the end of January, the Business Tendency Survey of the National Institute of Economic Research had fallen for several months in a row and is now well below its historical average. It indicates that growth in the Swedish economy is weaker than normal (see Figure 3:20). On the other hand, the purchasing managers' index rose in January, both in the manufacturing sector and the service sector, and now indicates that output is increasing.

All in all, GDP is expected to have fallen by 1.7 per cent on an annual rate in the fourth quarter. For the first quarter of this year, GDP is expected to be more or less unchanged compared with the fourth quarter. The forecast for GDP growth, particularly as regards the fourth quarter of 2011, has been revised downwards since the Monetary Policy Update in December. Primarily exports are expected to have shown weaker development.

Figure 3:18. GDP

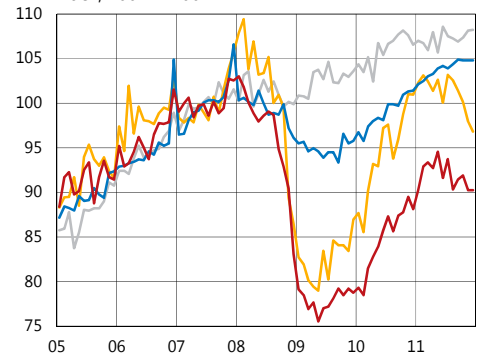
Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



Source: Statistics Sweden

Figure 3:19. Production, export of goods and the retail sector

Index, 2007 = 100

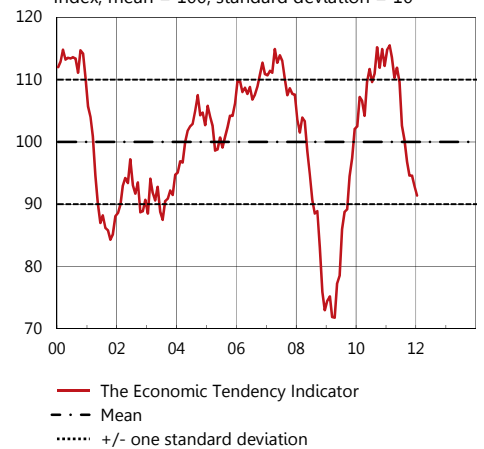


— Industrial production
— Services production
— Export of goods
— Retail sales

Sources: Statistics Sweden

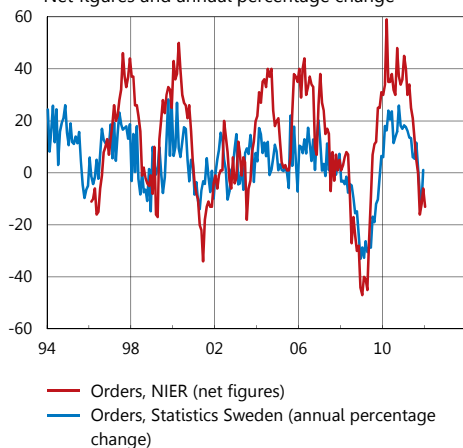
Figure 3:20. The Economic Tendency Indicator

Index, mean = 100, standard deviation = 10



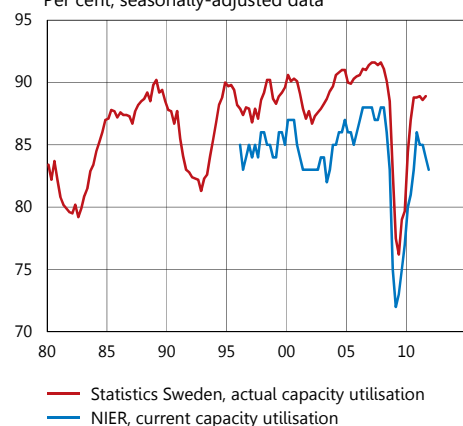
Source: National Institute of Economic Research

Figure 3.21. New export orders
Net figures and annual percentage change



Sources: National Institute of Economic Research and Statistics Sweden

Figure 3.22. Capacity utilisation in industry
Per cent, seasonally-adjusted data



Sources: National Institute of Economic Research and Statistics Sweden

■ The slowdown in economic activity is seriously impacting Swedish exports

The growth of Swedish exports has been high since the end of 2009. This is primarily due to the high level of growth in world trade during the recovery following the financial crisis of 2008–2009. Swedish exports also continued to develop strongly in the third quarter of 2011, despite the dampening of growth in the global economy. However, now the slowdown in economic activity abroad has markedly impacted Sweden's exports of goods which, according to foreign trade statistics, fell after the summer and continued to decline until the end of December (see Figure 3:19). As exports of goods constitute about 70 per cent of Swedish exports, this indicates that total exports too fell in the fourth quarter.

Most indications are that exports will continue to develop weakly in early 2012. Economic growth abroad looks likely to continue to be weak in the period ahead. Orders have developed weakly (see Figure 3.21). This view is also confirmed by the Riksbank's company interviews, in which companies within the manufacturing sector describe a clear deterioration in economic activity, particularly on the export market, at the same time as orders are expected to decrease further. The weak level of European demand, together with a strong krona, has had a significant impact on the export companies, according to the company interviews. At present, other export markets are not compensating for the low level of demand in Europe either.

■ Imports falling as demand slackens

The weak development of domestic demand is dampening imports of consumer and investment goods, at the same time as the weak level of exports is dampening imports of intermediate goods to the Swedish manufacturing sector. All in all, this means that imports will fall in the coming quarters. Like exports of goods, imports of goods fell from the end of the summer until the end of December.

■ Investments dampened by weak demand

Demand on both the export and domestic markets is dampened and corporate investment requirements are expected to be relatively low in the period ahead. This is also indicated by the fall in capacity utilisation in the manufacturing industry in the fourth quarter of last year, according to the National Institute of Economic Research's Business Tendency Survey (see Figure 3:22). However, capacity utilisation is only marginally lower than the average level in the years before the financial crisis. The manufacturing sector was relatively optimistic about 2012 in the latest investment survey from October according to Statistics Sweden. One explanation of this may be that investments declined significantly more than GDP during the financial crisis. Investment as a share of GDP thus continues to be low compared with 2008. However, even though there is an underlying investment need, the slowdown in economic activity and the uncertain economic situation are thus expected to lead to the weak development of investments in the coming quarters.

The development of the housing market and the dampened mood among households also mean that demand for housing will be lower. This means that housing investments will also develop weakly in the period ahead.

The contribution made from stock investment to GDP growth is expected to be very negative in the coming quarters. This is primarily because company's stocks are now deemed to have returned to normal following a period in which there was an extensive build-up of stocks. Restocking is slowing down, thus dampening GDP growth. In addition, the need for stock investment is being further dampened by the slowdown in economic activity.

■ Decreased wealth is leading to a high level of saving among households

The stock market fall during the summer and autumn together with falling house prices have reduced household wealth. At the same time, the growth in lending to households has declined over the year and household savings have increased markedly (see Figure 1:13).

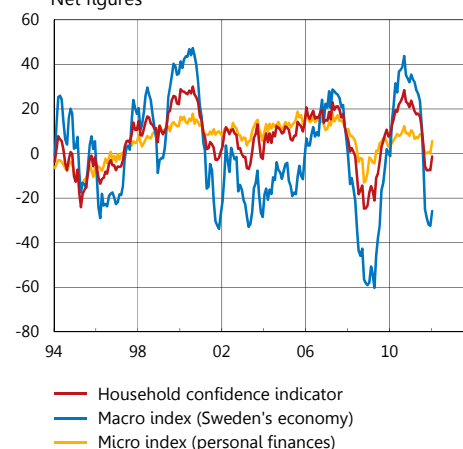
Household consumption was very weak as early as the third quarter of last year. However, during the fourth quarter, turnover within retail sales increased at the same time as household purchases of new cars continued to decrease. All in all, this indicates comparatively weak development for household consumption in the fourth quarter too.

The great uncertainty among households can also be seen clearly in the National Institute of Economic Research's Economic Tendency Survey. While household confidence indicators certainly increased in January, they still indicate low confidence in the development of the economy among households. It is primarily their view of the Swedish economy that is pessimistic, while their view of their own economies is in line with the historical average (see Figure 3:23). The stock market has increased in the last month. Whether this will affect households' behaviour remains to be seen. One important factor is how stable the stock market upturn will be. All in all, uncertainty among households, combined with decreased wealth, is expected to lead to the slow increase of consumption and a continued high level of savings in the period ahead.

■ The economic outlook is leading to a decrease in net lending

Preliminary figures indicate a slightly lower level of general government net lending than was forecast in the Monetary Policy Update in December. It is the deteriorated economic situation that negatively affected general government net lending at the end of the year. The forecast for 2011 has thus been revised downwards from 0.5 per cent to 0.3 per cent of GDP.

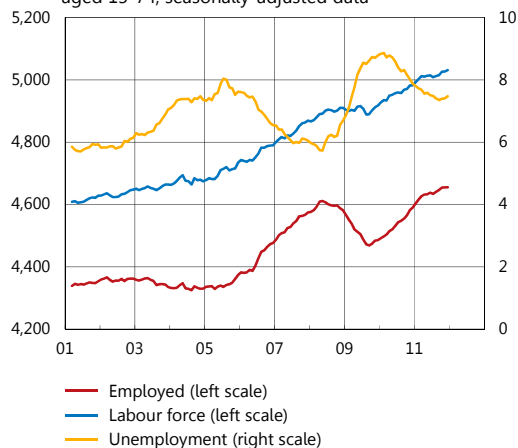
Figure 3:23. Confidence indicators for households
Net figures



Source: National Institute of Economic Research

Figure 3:24. Employment, labour force and unemployment

Thousands and percentage of the labour force, aged 15-74, seasonally-adjusted data

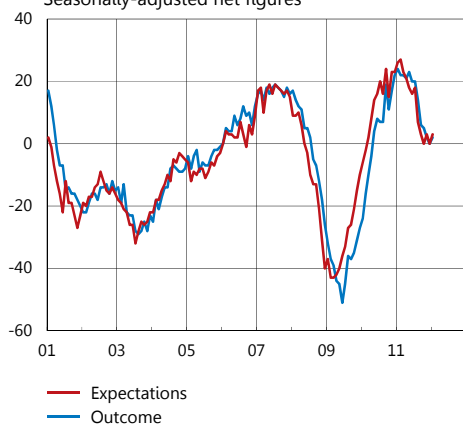


Note. Three-month moving averages.

Sources: Statistics Sweden and the Riksbank

Figure 3:25. Employees in the business sector, expectations and outcome

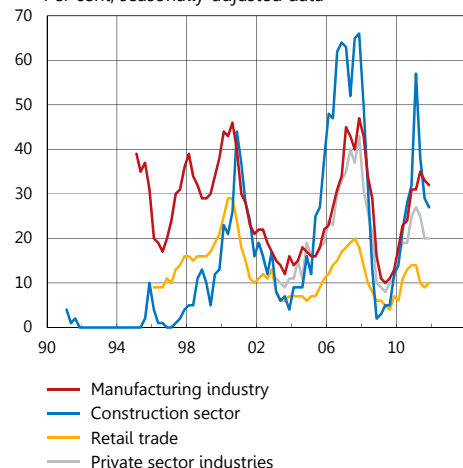
Seasonally-adjusted net figures



Source: National Institute of Economic Research

Figure 3:26. Proportion of companies reporting a shortage of labour

Per cent, seasonally-adjusted data



Source: National Institute of Economic Research

■ 2011 ended with a slowdown on the labour market

During 2011, the development of the Swedish labour market entered a calmer phase (see Figure 3:24). The number of hours worked was approximately unchanged in the third quarter, compared with the second. However, monthly data indicates that hours increased slightly in the fourth quarter, in line with the forecast of the Monetary Policy Update in December. The number of people in employment increased at an ever slower pace towards the end of the year and the decline in unemployment stagnated. In December, seasonally-adjusted unemployment was 7.5 per cent, which was also in line with the forecast from December.

The Swedish economy's worsened prospects are also affecting the labour market. However, outcome and indicators do not suggest any rapid deterioration in the immediate future. The number of new job vacancies is still at a relatively high level. Unemployment is expected to increase slightly and employment is expected to remain unchanged in the first quarter of the year. Demand for labour dampened in 2011 and the National Institute of Economic Research's Business Tendency Survey shows that companies' recruitment plans have become more restrained since the summer. In the business sector as a whole, companies expect that employment will be unchanged in the months ahead (see Figure 3:25). Labour shortages declined during 2011, but were, if anything, unchanged in most sectors in the fourth quarter (see Figure 3:26). The Riksbank's company interviews, conducted in January, also confirmed that the situation on the Swedish labour market was becoming dampened.

■ Large differences in hourly wages according to different statistical sources

According to preliminary statistics from the National Mediation Office, wages in the economy as a whole increased in 2011 by an average of 2.4 per cent as an annual percentage change. After further retroactive wage payments have been included in the statistics, the rate of wage increase is deemed to be 2.7 per cent in 2011.

According to the National Accounts, hourly wages in the economy as a whole are deemed to have increased by about 3.6 per cent in the fourth quarter of last year. This is about 0.8 percentage points higher than the expected outcome according to short-term wage statistics (see Figure 1:22).¹³

The difference in the rate of increase between the two wage measures is currently unusually large and is expected to narrow in the period ahead. There are many indications that the increase in the wage statistics from the National Accounts is a rebound from temporarily depressed levels in 2010. It is therefore assessed that the short-term

¹³ Hourly wages are calculated as the actual payroll expense divided by the calendar-adjusted total number of hours worked. Statistics Sweden's statistics for LAPS (payroll expenses, employers' contributions and preliminary tax deducted from income at source) until the end of November 2011 have been used to estimate the future outcome of payroll expenses according to the National Accounts for the fourth quarter last year. Model estimates can now be made, as LAPS statistics are available from January 2006. The estimated results for definitive outcomes according to short-term wage statistics are presented on the Riksbank's website www.riksbank.se under the heading Statistics, Macro indicators.

wage statistics currently provide a better picture of the underlying development of wages.

■ Underlying inflation still low

Underlying inflation is still low. The annual rate of increase in the CPIF, that is, the CPI with a fixed mortgage rate, amounted to only 0.5 per cent in December (see Figure 3:27). Energy prices were lower in December 2011 than in the same month of the previous year, and this contributed towards the fall in CPIF inflation in December. When adjusted for energy prices, CPIF inflation amounted to 0.8 per cent. CPI inflation increased more rapidly and rose by 2.3 per cent in December compared with the same month in the previous year (see Figure 3:27). The outcome for all measures in December was completely in line with the forecast in the last Monetary Policy Update.

The gap between the various measures of inflation remains wide as the rising mortgage rates have led the CPI to increase more rapidly than the CPIF. Mortgage rates have increased more than the repo rate and the difference between the variable mortgage rate and the repo rate is now significantly greater than it was one year ago. This difference now amounts to slightly more than 2.5 percentage points, which can be compared with an average difference of approximately 1.5 percentage points for the period 2004–2011.

CPIF inflation was temporarily low in December last year and is expected to increase again in January. In January, CPIF inflation is expected to amount to 1.2 per cent. The rate of increase of the CPI falls marginally to 2.2 per cent.

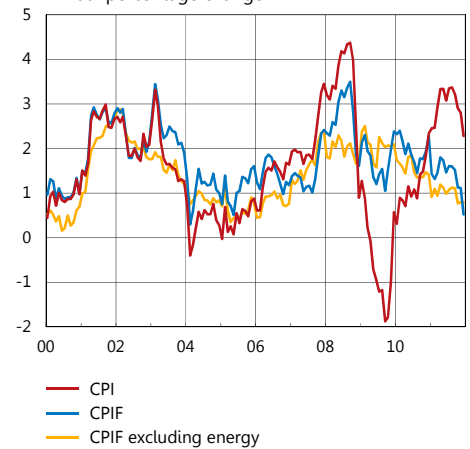
However, inflation for January is particularly difficult to forecast as that is when Statistics Sweden updates the weights for the various sub-indices in the CPI. The effect of this updating normally brings the overall price level down as households tend to replace more expensive goods with cheaper ones, which thus receive a higher weight in the CPI. However, the magnitude of this effect varies. For example, a large change of the weights for various mortgage rates contributed to an unexpectedly large increase in the CPI in January last year. The effect of the weighting changes is expected to be more normal this year. Furthermore, it is uncertain how great an effect the lowered restaurant VAT and changes to other indirect taxes will have on inflation.

■ Inflation expectations near to the inflation target

One indicator of the inflation target's credibility is how inflation expectations slightly further ahead relate to the inflation target. Prospera's monthly survey from January shows that money market participants' inflation expectations five years ahead amounted to 2.1 per cent, which is more or less unchanged compared with December. At the same time, inflation expectations decreased to 1.5 per cent one year ahead and to 1.9 per cent two years ahead.

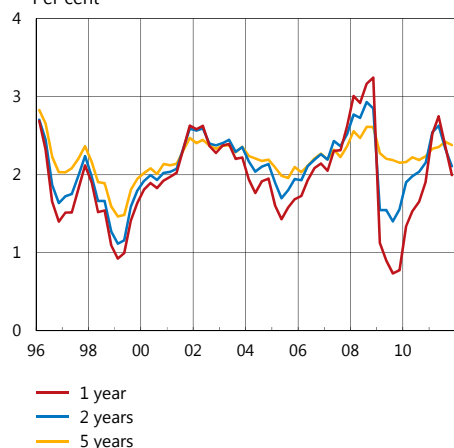
Prospera's quarterly survey of all the participants, published in December, shows that inflation expectations have fallen over the short

Figure 3:27. CPI, CPIF and CPIF excluding energy
Annual percentage change



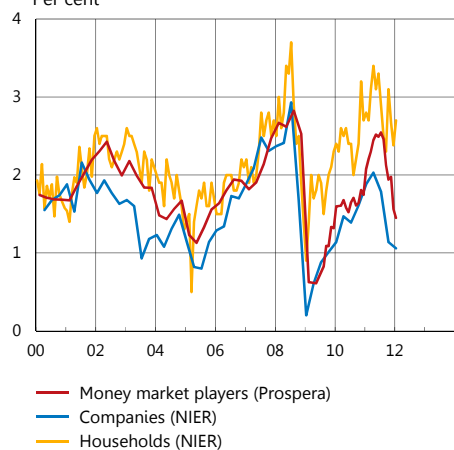
Note. CPIF is CPI with fixed interest rate.
Source: Statistics Sweden

Figure 3:28. All respondents' expectations of inflation, one, two and five years ahead
Per cent



Source: TNS SIFO Prospera

Figure 3:29. Expectations of inflation one year ahead
Per cent



Note. Company figures are quarterly, others monthly.

Sources: National Institute of Economic Research and TNS SIFO Prospera

term, from 2.4 to 2.0 per cent one year ahead and from 2.3 to 2.1 two years ahead (see Figure 3:28). Expectations five years ahead were unchanged, amounting to 2.4 per cent.

Corporate inflation expectations one year ahead, published in the National Institute of Economic Research's Economic Tendency Survey, are also low, amounting in the last quarter of 2011 to 1.1 per cent. Household inflation expectations one year ahead, published in the National Institute of Economic Research's Consumer Tendency Survey, rose from 2.4 per cent in December to 2.7 per cent in January (see Figure 3:29). As a rule, inflation expectations rise when households regard inflation as being high, as they did in January. One explanation for why households felt that inflation was high in January may have been that petrol prices increased relatively steeply.

■ The EMU and the debt crisis

The debt crisis in Europe is not only of concern to the individual debt-ridden countries; it has also developed into a crisis for the monetary union as a whole – a euro crisis. The causes of the present crisis are many and measures are required in several areas in order to resolve it. Intensive work is now underway to address the problems, both in individual countries and at a supranational level. This article aims to describe the challenges now facing the monetary union against the background of the crisis. In addition, there is a brief description of some current events regarding crisis management.

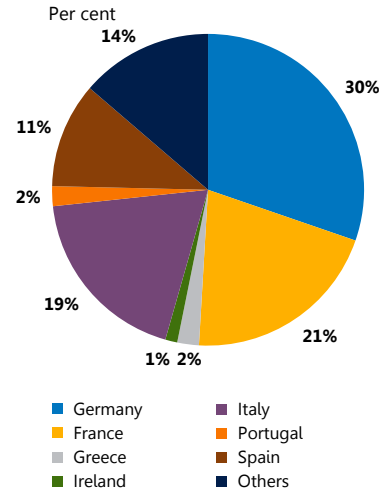
Background – the causes of the crisis

The structure of the EMU is such that it is a monetary union but not a fiscal policy union. The task of monetary policy in the euro area is to promote price stability in the area as a *whole*, where Germany, France and Italy are of decisive importance due to the size of their economies (see Figure A1). When the single monetary policy was introduced, it thus entailed new demands on the individual countries' economic policies. Many countries proved to have difficulties in adjusting their policies to these demands.

In countries like Greece, Spain and Ireland these difficulties led to their economies heading towards overheating in the years prior to the financial crisis (see Figure A2). Government bond yields also exhibited a marked correspondence throughout the period from 2002 until the beginning of the financial crisis in 2008, which contributed to the long-term rates being too low in several countries (see Figure A3). A number of *imbalances* were built up between the countries in terms of current accounts, public finances, competitiveness and the development of property prices (see Figure A4).¹⁴

The regulations that had been introduced to promote macroeconomic stability and to counteract imbalances proved to be inadequate. The Stability and Growth Pact stipulated that budget deficits should be no higher than 3 per cent and national debts (gross public debts) no higher than 60 per cent as a percentage of GDP. However, the motivation to maintain *fiscal-policy discipline* was undermined by the fact that repeated contraventions of the Stability and Growth Pact did not result in sanctions (see Figure A5).¹⁵ The housing and credit bubbles in Ireland and Spain were also a result of *inadequate supervision* of the financial markets, not only at the national level but also at the euro level.

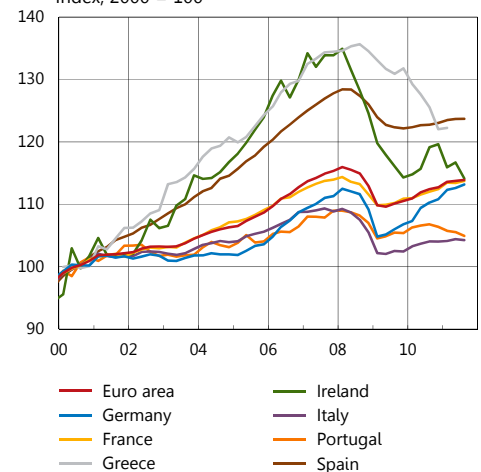
Figure A1. Weighting for various countries in HICP for the euro area



Note. Average for 1999-2008 apart from Greece, where the average is for 2001-2008.

Source: Eurostat

Figure A2. Development of GDP Index, 2000 = 100

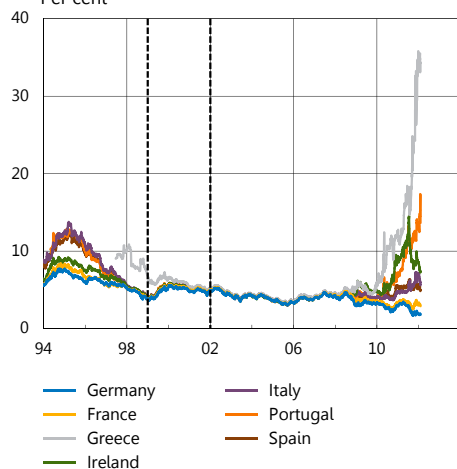


Sources: Eurostat and national statistics agencies

¹⁴ See also the article "The debt crisis in Europe" in the Monetary Policy Report of October 2011.

¹⁵ A factor that contributed to this was that those countries that were initially the main advocates of the Stability and Growth Pact, Germany and France, failed to meet the demands and also avoided sanctions.

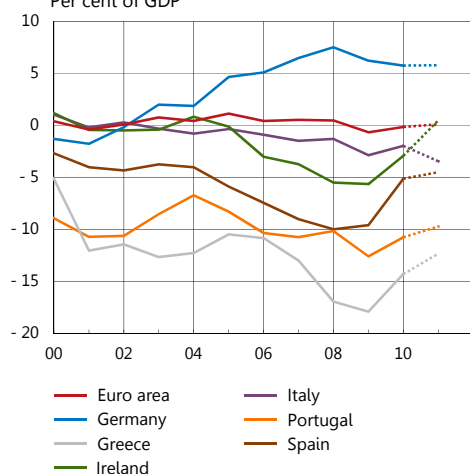
Figure A3. Government bonds with 10 years to maturity
Per cent



Note. The vertical broken lines illustrate the point in time, January 1, 1999, when the euro was introduced as an electronic currency and January 1, 2002, when the euro was introduced as bills and coins.

Source: Reuters EcoWin

Figure A4. Current account balance
Per cent of GDP



Note. Broken lines represents the European Commission's forecast.

Source: European Commission

The financial crisis became a debt crisis – and a euro crisis

As long as global economy activity developed well, several of the underlying problems in the euro area remained hidden. At the same time, the pricing of government bonds in the different countries reflected an underestimation of the risks associated with weak public finances and a decline in competitiveness.

When the global financial crisis began in 2008, the European countries were hit by a dramatic fall in demand. Countries such as Ireland and Spain were also burdened by substantial costs for rescuing domestic banks in the wake of crashing housing markets. This led to a rapid weakening of public finances, despite a relatively good initial position. In Greece, public finances were already weak in the initial position, but quickly became even weaker. The overall result was that gross public debt in several countries increased to worrying levels – the debt crisis was upon us (see Figure A6).

One of the reasons why the public debt problems in certain countries became a crisis for the monetary union as whole was that uncertainty about the ability of some countries to service their debts in the future led to a negative spiral between banks and states. The banks' cross-border investments and the financial integration in the euro area meant that the problems quickly spread from one country to another (see Figure A7). There are also historical examples in which countries with a fixed exchange rate that experience public debt problems become subject to speculation about devaluation or a transition to a floating exchange rate. This increased concern on the financial markets that Greece, for example, would be forced to leave the monetary union.

Acute crisis management and long-term problems

In early 2010, the situation became critical for above all Greece, but also for Ireland and Portugal. The yields on these countries' government bonds rose to very high levels (see Figure A3). This led to a range of support measures from the International Monetary Fund (IMF) the euro countries and the EU. It has been necessary to gradually expand these measures.¹⁶ At the European Council's summit meeting in December 2011, the heads of state and heads of government of the euro area countries agreed that the aim should be to bring forward the introduction of the European Stability Mechanism (ESM), a permanent support fund, to July 2012. They also expressed an intention for both the euro area countries and the other EU countries to make EUR 200 billion available for bilateral lending to the IMF.¹⁷ One advantage of using IMF loans in crisis management is that these often entail binding demands for corrective measures in the countries concerned.

¹⁶ See also the article "The debt crisis in Europe" in the Monetary Policy Report of October 2011.

¹⁷ The euro countries have decided to make EUR 150 billion available.

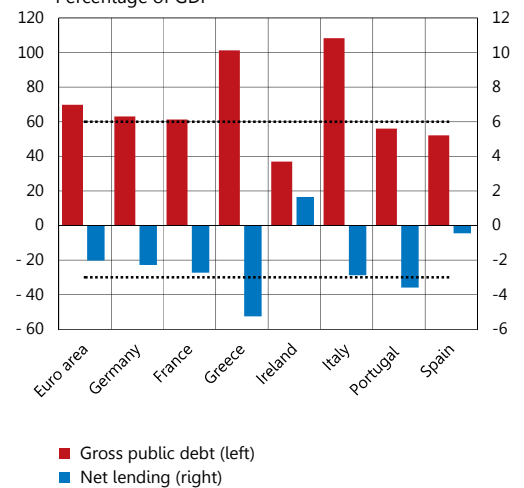
Another acute crisis management measure is that the European Central Bank (ECB), in addition to cutting the interest rate, recently issued loans at a maturity of three years to banks in the euro area in order to improve access to liquidity.¹⁸ The aim is to improve funding for, primarily, small and medium-sized companies, as these account for a large proportion of turnover and employment among the companies in the euro area. It is also probable that this measure has contributed to an increase in the demand for government bonds from countries with weak public finances. Lower bond yields generally increase the scope to manage sovereign debt problems. This could be particularly significant at present, as substantial amounts of government bonds from countries with sovereign debt problems will mature in the period ahead (see Figure 1:7).

It is important to point out the difference between acute measures and long-term measures. Each is needed in its own way, but only a combination of them can resolve the crisis. The short-term measures are entirely necessary to resolve the liquidity problems and maintain the confidence of the financial markets and the public. In addition to this there are more long-term challenges: improving competitiveness, achieving sustainable growth and, not least, strengthening budgets. This is necessary in order to come to terms with several of the fundamental causes of the crisis that were mentioned above. The challenges must be managed both by the individual countries and within the monetary union itself.

Reforms in the individual countries help to reduce imbalances in the euro area

The main responsibility for coming to terms with the long-term problems lies with the countries themselves. Several of them have a very high level of public debt to manage. The future development of these debts is highly sensitive to interest rate levels and the rate of growth in the period ahead. Fiscal policy tightening (which leads to a positive primary balance), higher growth and lower interest rates contributes to reducing the debt as a share of GDP.¹⁹ A combination of all three factors is the most effective, but there may be contradictions between them, as fiscal policy tightening tends to dampen growth. The important thing is to launch credible plans for sustainable public finances. Credible action programmes are also an element of more short-term crisis management as they can help to improve market confidence so that bond rates do not increase.

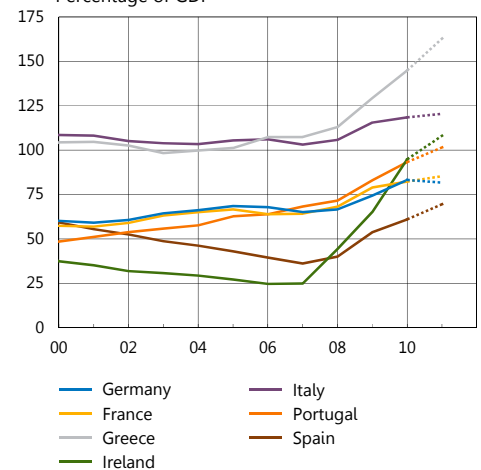
Figure A5. Average gross public debt and net lending 1997-2007
Percentage of GDP



Note. The broken lines indicate 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 deficit to a maximum of 3 per cent of GDP.

Source: European Commission

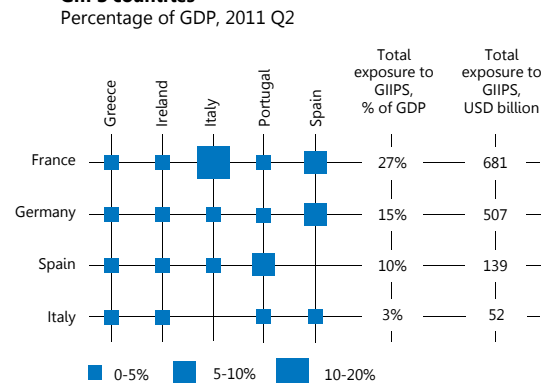
Figure A6. Public debt
Percentage of GDP



Note. Broken lines represents the European Commission's forecast.

Source: European Commission

Figure A7. Large euro countries' bank exposure to GIIPS countries
Percentage of GDP, 2011 Q2



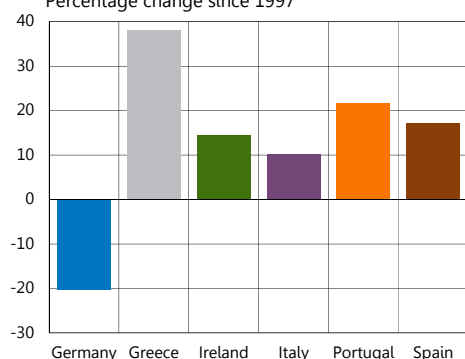
Note. The GIIPS countries consist of Greece, Ireland, Italy, Portugal and Spain. The data relates to the exposures of banks with international operations to counterparties outside their own countries, according to reporting to the Bank for International Settlements (BIS). The figure shows, for example, that the exposures of French banks to Italy correspond to 10-20 per cent of GDP, and that the exposures of German banks to Spain correspond to 5-10 per cent of GDP.

Source: BIS

¹⁸ A new three-year loan is also planned for 29 February 2012.

¹⁹ See the article "The sustainable development of public debt" in the Monetary Policy Report of July 2011.

Figure A8. Development of unit labour costs in relation to the euro average
Percentage change since 1997



Source: OECD

There are a number of other challenges in addition to the need to improve public finances, for example the need to improve competitiveness (see Figure A8). Improved competitiveness can be achieved by means of a so-called internal devaluation in which wages and prices increase at a slower rate than in the other euro countries. Improving the development of productivity is also of central importance to both long-term growth and competitiveness.²⁰

Both fiscal-policy consolidation and internal devaluation will help to reduce imbalances in the euro area by reducing current account deficits: saving will increase at the same time as an improvement in competitiveness will reduce the deficit in foreign trade.

Lessons for the monetary union – increased coordination of fiscal policy and better management of imbalances and systemic risks

During 2011, the EU decided on several reforms of the processes for economic control within the monetary union. These changes should be seen as a response to the fact that previous frameworks have not managed to prevent the underlying causes of the debt crisis: growing economic imbalances in the euro area and a high level of debt in several countries.

To a great extent the new framework covers all of the EU countries, including Sweden, but the sanctions regarding transgressions only apply to the euro area countries.²¹

“The Six-Pack”

The reforms include the so-called Six-Pack, which came into force in December 2011. This consists of five regulations and one directive that together aim to strengthen the fiscal-policy framework, both in the EU as a whole and among the individual member states, as well as to create an EU process to prevent macroeconomic imbalances from arising in individual member states.

One of the changes decided upon is that, within the framework of the Stability and Growth Pact, the impact of public expenditures in relation to GDP (the expenditure quota) on the development of public sector net lending will now be monitored as an important factor. The aim is to prevent countries using temporarily high tax revenues for permanent increases in expenditure. If a country wishes to increase its expenditure quota then this must be matched by permanent increases in revenues. The focus on the level of public debt has also sharpened by clarifying the demands that apply to countries that have a debt ratio that exceeds the reference value of 60 per cent of GDP. In this case, the part of the debt ratio that exceeds 60 per cent must decline by at least one twentieth per year.²²

²⁰ The development of unit labour costs reflects the difference between the development of wages and the growth of productivity.

²¹ The so-called fiscal compact, which is discussed below, is an international agreement. All of the EU countries except the UK and the Czech Republic have announced their intention to join the pact. However, the regulations of the pact will only be binding for the euro countries.

²² The requirement applies in the form of an average over 3 years.

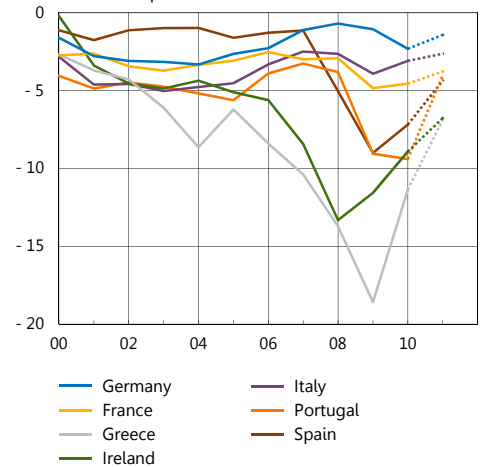
It must also become easier to impose sanctions against euro area countries, partly by using them at an earlier stage than previously (before the country becomes subject to a so-called Excessive Deficit Procedure) and partly by making it possible to make decisions on sanctions by a reverse qualified majority²³. This will make it much more difficult to disregard the European Commission if it says that a euro country has contravened the regulations.

Other parts of the Six-Pack aim, among other things, to broaden supervision so that it also takes macroeconomic imbalances into account. The aim is to curb imbalances in *individual countries*, like those that have occurred in Ireland and Spain. As an aid to identifying potential imbalances there are so-called scoreboards that describe how individual member states relate to the reference values for important imbalance indicators, such as the current account as a percentage of GDP, credit growth and the development of unit labour costs. In this case too it will be possible to impose sanctions on euro countries if they fail to take adequate measures to correct the imbalances. As a first step, a so-called Alert Mechanism Report was published on 14 February by the European Commission, the assessment of which was that 12 EU member states, including Sweden, needed to be examined more closely due to signs of macroeconomic imbalances.²⁴

The fiscal compact

In addition to these adopted changes, intensive work is now under way to further strengthen the coordination of the euro countries' fiscal policy. The most important element is the so-called fiscal compact, which was launched by the heads of state and heads of government of the euro countries in December 2011. The contents of this were then established at the European Council's meeting on 30 January. One of the points of the fiscal compact is to introduce a minimum limit of -0.5 per cent for public net lending over an economic cycle (what is known as cyclically-adjusted public net lending) in the national constitution or similar.²⁵ Most of the euro countries need to improve their cyclically-adjusted public net lending to attain this requirement (see Figure A9). A further element of the fiscal compact is to make sanctions for the euro area countries more difficult to avoid when they have contravened regulations.²⁶

Figure A9. Public net lending (cyclically adjusted)
Per cent of potential GDP



Note. Figures for 2011 are forecasts from the IMF.
Source: IMF

²³ This means that a qualified majority need to vote *against* sanctions for sanctions *not* to be imposed.

²⁴ For Sweden, strongly increasing indebtedness among households was indicated as the primary factor justifying further examination. In addition, Sweden exhibits a current account surplus exceeding the set reference value.

²⁵ If the debt as a percentage of GDP is significantly less than 60 per cent the limit can be lowered to -1 per cent. The European Court will play an important role in assessing the legislation of the different countries. In the case of inadequate implementation in national law, fines amounting to a maximum of 0.1 of GDP may be imposed.

²⁶ This means, among other things, that it is enough for the European Commission to register a contravention of the Stability Pact for a vote on sanctions to be held. In the Six-Pack, a vote in line with the standard majority procedure is required to register a contravention of the regulations before a vote on sanctions can be held.

Part of the compact relates to two regulations proposed by the European Commission that concern strengthening and bringing forward the supervision of the countries' budget processes. The budgets of individual countries should be presented to the European Commission even before the budget is presented to the national parliament concerned. The plan is for the fiscal compact to be signed at the European Council's meeting on 1-2 March.

ESRB

The realisation that it is important to adopt a wider perspective in the supervision of economic policy also led to the European Systemic Risk Board (ESRB) being established in early 2011. The aim is to identify and clarify *financial systemic risks* at the EU level. The ESRB does not have any binding instruments at its disposal with which to exercise macroprudential supervision, but acts by issuing warnings and recommendations to the various parties concerned. Since its inception, the Board has issued three public recommendations. These have, among other things, related to guidelines for how the member states should develop their own institutions for macroprudential supervision.²⁷

Conclusions

The debt crisis has posed serious challenges not only to individual countries in the euro area but also to the monetary union itself. The single monetary policy requires a better coordination of the other elements of economic policy than previously to prevent the creation of excessive imbalances between the countries. In addition to the reforms that the individual countries have now begun to implement – which in themselves will help to reduce imbalances – important steps have now been taken to reform the monetary union in the wake of the debt crisis. This can be seen as a reflection of the fact that there is a strong political will to ensure that the monetary union continues to work and to encompass all the current member states. Parallel to this, measures are needed to support the acute crisis management. Resolving the debt crisis and reforming the monetary union must be seen as long-term projects.

²⁷ See for example "The ESRB issues recommendations on the macro-prudential mandate of national authorities and on US dollar denominated funding and liquidity risk" on the Riksbank's website, www.riksbank.se/en/Press-and-published/Press/Notices, 17 January 2012.

■ The emerging economies and Sweden's exports

The emerging economies form a growing share of the world economy and have become increasingly important trading partners for Sweden. Since 2007, increasing exports of goods to these economies have compensated for reduced Swedish goods exports to the European Union and United States. However, exports to the emerging economies are expected to increase more slowly over the coming years as growth in these economies is expected to fall off.

The emerging economies are increasingly important to the world economy

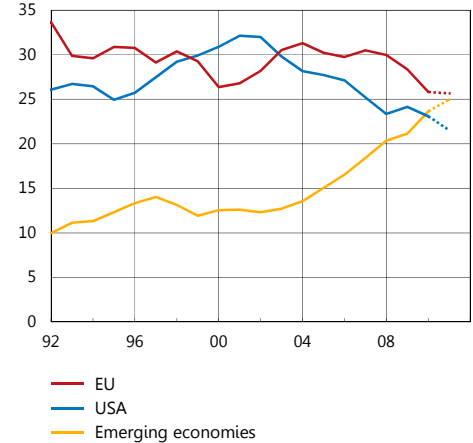
The emerging economies, that is countries with high growth rates in Africa, Asia, eastern Europe and South America, form a growing part of the world economy. In 2011, this group of countries was responsible for more than 25 per cent of the world's GDP, a strong increase from 12 per cent in 2002 (see Figure A10). 80 per cent of this increase can be explained by the strong growth in Brazil, Russia, India and China, the so-called BRIC countries. The picture is the same when international trade is examined. The OECD countries' share of the world's imports and exports has declined steeply in the last 10 years (see Figure A11). China alone now stands for an equally large share of the world's exports as the United States.

Increased exports, particularly to developed economies, have been the driving force behind the development of the emerging economies. Recently, however, trade between the emerging economies has become increasingly important. Figure A12 shows how an ever larger proportion of Chinese and Indian exports is now going to other Asian countries, while exports to the European Union and, above all, the United States have decreased in importance.

The emerging economies are increasingly important export markets for Sweden

Following the financial crisis that started during 2008, export growth to several of Sweden's traditional trading partners has been weak. The value of exports of goods to the euro area, the United States, Denmark and other areas has decreased. On the other hand, exports to emerging economies have increased strongly, more than compensating for the overall fall in exports to the European Union and United States (see Table A1). These increased exports to the emerging economies mirror the strong increase in the emerging economies' overall imports (see Figure A13).²⁸

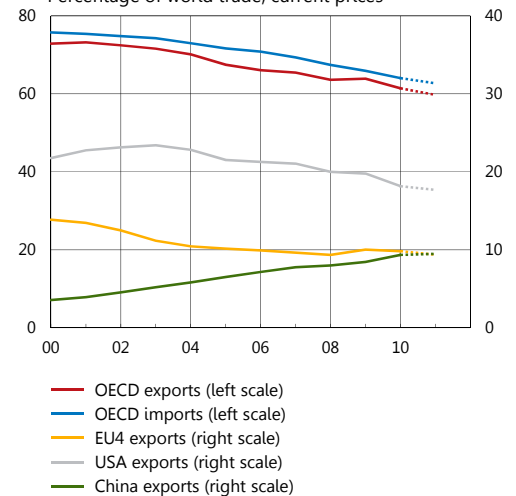
Figure A10. GDP
Percentage of world GDP, USD, current prices



Note: The sample of emerging economies comprises Argentina, Brazil, Chile, Philippines, India, Indonesia, China, Malaysia, Peru, Poland, Russia, South Africa, Thailand, Turkey and Uruguay. The broken line represents the IMF's forecast.

Source: The IMF

Figure A11. Percentage of international trade
Percentage of world trade, current prices



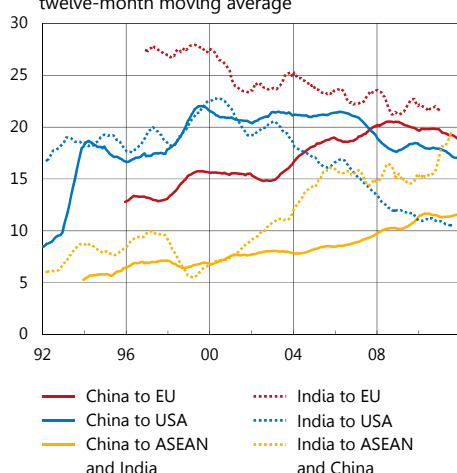
Note: EU4 is France, Germany, Italy and the United Kingdom. The broken line represents the OECD's forecast.

Source: OECD

²⁸ A number of OECD countries, including Germany, the USA and the UK, have like Sweden increased their exports to the emerging economies substantially since 2007.

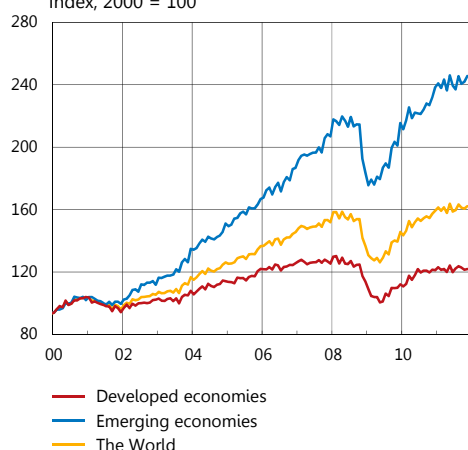
Figure A12. India's and China's exports per recipient countries

Percentage of the country's total exports, current prices, twelve-month moving average



Note. ASEAN stands for the Association of Southeast Asian Nations.

Sources: Ministry of Commerce and Industry, India, National Bureau of Statistics, China och Reserve Bank of India

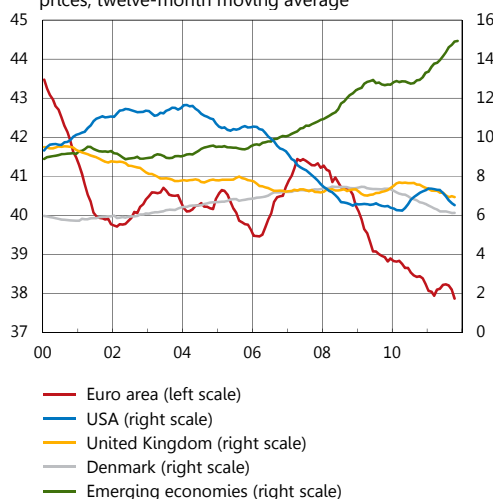
Figure A13. Imports
Index, 2000 = 100

Note. Emerging economies defined by the Netherlands Bureau for Economic Policy Analysis.

Source: Netherlands Bureau for Economic Policy Analysis

Figure A14. Sweden's goods exports per a sample of recipient countries

Percentage of Sweden's total exports of goods, current prices, twelve-month moving average



Note. The sample of emerging economies comprises Argentina, Brazil, Chile, Philippines, India, Indonesia, China, Malaysia, Peru, Poland, Russia, South Africa, Thailand and Turkey.

Source: Statistics Sweden

Table A1. Sweden's goods exports to the European Union, United States and a selection of emerging economies

Current prices, average of monthly exports, January to November, SEK billions

	2007	2011	Change, SEK billion, 2007-2011
EU	57.9	56.7	-1.2
USA	7.3	6.4	-0.9
Emerging economies*	10.4	15.1	4.7

* Argentina, Brazil, Chile, China, India, Indonesia, Malaysia, Peru, Philippines, Poland, Russia, South Africa, Thailand and Turkey.

Source: Statistics Sweden

Measured as a percentage of Sweden's total exports of goods, exports to the emerging economies are now twice the size of exports to traditionally important trading partners such as the United States, United Kingdom and Denmark (see Figure A14). The percentage of exports of goods going to the euro area has decreased, but the area remains very important for Swedish exports (see Figure A14).²⁹

The weakening of Swedish exports is due, to a certain extent, on lower growth in the emerging economies

According to the main scenario in this report, GDP in the euro area is expected to develop weakly in 2012, and growth is also expected to be slow in 2013. The euro crisis is expected to influence developments in other neighbouring countries and, in the main scenario, the overall GDP growth among Sweden's traditional trading partners (TCW-weighted GDP) is predicted to be very weak in 2012 and 2013 (see Figure A15). In the main scenario, the GDP growth of the emerging economies is also expected to slacken off. This is because the growth in exports to developed economies is expected to be weak, while domestic demand will be somewhat dampened due to the high level of interest rates. Additionally, in a number of the emerging economies, investment demand is being negatively affected by falling property prices. However, the overall growth in these countries is expected to remain relatively strong at over 4 per cent per year over the forecast period (see Figure A15).

Exports of goods, which make up about 70 per cent of Sweden's overall exports, decreased during the fourth quarter of 2011. Furthermore, the development of export orders indicates that the growth of exports will also be weak in the first six months of 2012. However, growth is expected to increase slightly during the second six months of 2012. When growth is slower in the emerging economies, the growth in exports to these economies will slacken off. At the same time, the weak development of exports to Sweden's traditional trading partners will have a dampening effect on Sweden's exports. Growth in overall Swedish exports is thus expected to be relatively weak in 2013–2014 compared with 2010–2011 (see Figure A15).

²⁹ The most important countries in the euro area for exports of Swedish goods are Germany (10 per cent of Sweden's total goods exports), Finland (6 per cent), France (5 per cent), Belgium (5 per cent), The Netherlands (5 per cent) and Italy (2 per cent).

Development is uncertain also for the emerging economies

The forecast for the development of the economies of the European Union and United States is uncertain (see Chapter 2), but there is also uncertainty on the development of the emerging economies. China has experienced very high growth in property prices and credit in recent years. Among other causes, this is due to temporary stimulation measures such as increased government lending and favourable loans for construction. The withdrawal of these stimulation measures and the weaker development of exports and GDP may dampen confidence and lead to larger decreases of property prices, thereby further dampening investments and domestic consumption. Furthermore, the emerging economies are dependent on good access to commodities and fossil fuels. If energy and/or commodity prices were to increase strongly, for example due to supply shocks, growth would be dampened in these countries.

At the same time, there are factors that suggest that developments may be more positive than in the forecast. Among these, a more expansionary monetary and fiscal policy may lead to higher growth. Inflation is on the way down (see Figure A16) and, in several of the largest emerging economies, there is scope to deflect weaker demand with more expansionary monetary and fiscal policies (see Table A2).

Table A2. Interest rates, inflation, budget balances and sovereign debt in the BRIC countries, 2011

Current prices, average monthly exports, SEK billions

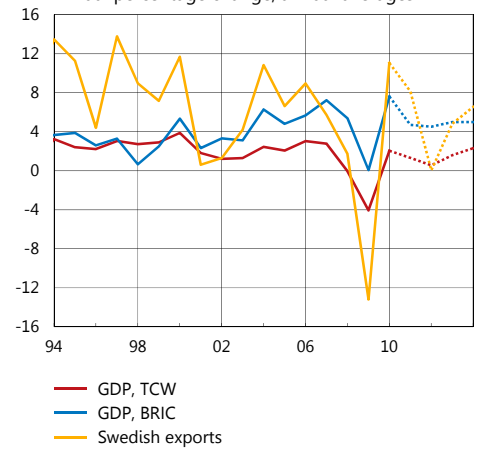
	Policy rate	Inflation	Budget balance/GDP	Sovereign debt/GDP
Brazil	10.5	6.5	-2.5	65
Russia	8.0	6.1	-1.1	12
India	8.5	7.5	-7.7	62
China	6.6	4.1	-1.6	27

Note. Policy rate and inflation in December 2011. IMF forecast for budget balance and sovereign debt.

Sources: National sources and the IMF

Figure A15. GDP growth TCW and BRIC, and growth in Swedish exports

Annual percentage change, annual averages

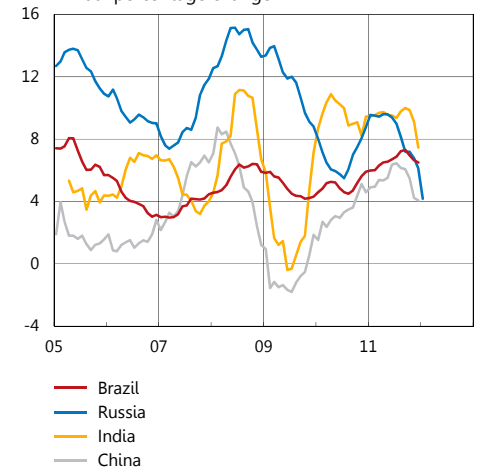


Note. The BRIC countries consist of Brazil, Russia, India and China. The IMF's forecast for Brazil, India and Russia. The BRIC countries are weighted with purchasing-power adjusted GDP weights.

Sources: The IMF and the Riksbank

Figure A16. Inflation in the BRIC countries

Annual percentage change

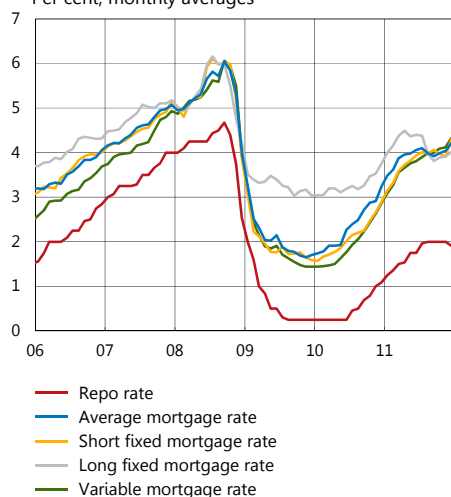


Note. The BRIC countries consist of Brazil, Russia, India and China.

Sources: Federal State Statistics Service, Russia, National Bureau of Statistics of China, OECD and Office of the Economic Adviser to the Government of India

■ The relationship between the repo rate and interest rates for households and companies

Figure A17. Rates for new mortgage agreements for households and the repo rate
Per cent, monthly averages



Note. Variable mortgage rate refers to fixed terms of up to and including three months, short fixed mortgage rate refers to fixed terms longer than three months and up to and including one year and long fixed mortgage rate refers to fixed terms longer than one year and up to and including five years. The final observation refers to December 2011.

Sources: Statistics Sweden and the Riksbank

The gap between households' variable mortgage rate and the repo rate has increased over the last year. This is partly because the banks' funding costs have increased, and partly because the banks have increased their margins on mortgages. But there are many more interest rates than the variable mortgage rate that are significant to the economy, for example mortgage rates with longer maturities and lending rates to companies. These interest rates have not increased as much as the variable mortgage rate. The attitude monetary policy should take towards increases in various lending rates depends on how these, together with other relevant factors, influence inflation and resource utilisation.

When the Riksbank adjusts the repo rate, this change spreads to other interest rates. The repo rate has a direct effect on the interest rate with the shortest maturity, the so-called overnight rate on the interbank market. This is the interest rate the banks apply when they lend to and borrow from each other from one day to the next. Changes in the overnight rate then spread to interest rates with higher credit risks and longer maturities. In the end, the adjustment has spread to the interest rates at which households and companies borrow from financial institutions. How much of the original adjustment of the repo rate impacts households' and companies' interest rates varies over time.

Since 2008, various risk premiums for financial assets have increased and, in general, they are now at higher levels than they were before the financial crisis broke out. This has led to an expansion of the gaps between interest rates including credit and liquidity risks – such as interest rates applying to companies and households – and what are known as risk-free interest rates – such as the repo rate. For the banks, this has meant that their funding costs have increased. But the increase in variable interest rates cannot just be explained by rising risk premiums – the banks have also increased their margins. For households, this has contributed to variable mortgage rates increasing by just over 1.4 percentage points in 2011, which is more than the repo rate has been raised during the same period.³⁰ At the same time, mortgage rates with long fixed-interest periods have only risen by just over 0.2 percentage points. The average mortgage rate faced by households has thus not increased to the same extent as the interest rate for the shortest variable-rate mortgages (see Figure A17).

Average mortgage rates are increasing

Households can choose to take mortgages with various fixed-interest periods. In 2008–2010, about 70 per cent of new mortgages were at variable interest rates. This proportion has decreased over the last year. At present, the proportion of new mortgages at variable interest rates is about 50 per cent. Of the new loans with fixed interest rates, just over

³⁰ The repo rate was raised by 0.75 percentage points in the first six months of 2011 and remained unchanged until the end of the year, when it was lowered by 0.25 percentage points.

half have fixed-rate terms of up to three years, while the others have longer fixed-rate terms. At present, the proportions of new mortgages with variable and fixed interest rates correspond with the historical averages (see Figure A18).

To measure how the average interest rate paid by households has changed, two different measures can be used: the average interest rate on new loans or the average interest rate for the entire mortgage stock. The first alternative is the interest rate that households pay on average for new or renegotiated mortgage loans.³¹ The second alternative is the average interest rate on all loans for housing purposes. Interest rates for new agreements influence the extent to which households choose to sign new mortgages and at which fixed-interest periods, while the average interest rate for the entire mortgage stock influences households' overall scope for consumption. At present, the average interest rate for new agreements and the average interest rate for the entire mortgage stock are on approximately the same level. Over the last year, these average interest rates have increased by almost one percentage point, which is to say by slightly more than the repo rate (see Figure A19).

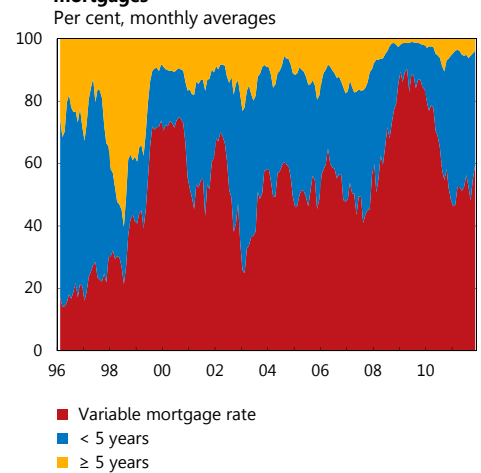
The interest rates paid by households can be divided roughly up into three parts: a risk-free part linked to the repo rate's current level and expected development; a supplement related to further funding costs for the banks; and, finally, a margin. After a short description of the Swedish mortgage stock's funding, the background of this addition is illustrated in the next section with a short mortgage rate as an example.

Swedish mortgages – the banks' funding

When a bank issues a mortgage, it needs to fund this loan. Normally, mortgage loans to Swedish households have a maturity of around 40 years, while households' interest rates are fixed for much shorter periods.³² Although around half of the banks' lending volume has a short fixed-interest period, their funding must have much longer maturities than this. Otherwise the banks would have to turn to the capital markets to renew their funding, which could create risks in periods of financial stress. The Swedish banks primarily use what are known as covered bonds to fund mortgage loans.³³ On average, the maturity of these bonds is around 3 years.

How does the funding of mortgage lending look in practice? In November 2011, the banks' mortgage lending to Swedish households amounted to about 2 100 billion kronor. At the same time, the outstanding stock of secured bonds was about 1 900 billion kronor, meaning that these are thereby funding the larger part of the banks' mortgage lending. About 75 per cent of the secured bonds are issued in Swedish kronor, while 25 per cent are issued in other currencies, primarily euro. Issues in foreign currency are converted to kronor via swaps to fund Swedish mortgages. The remaining part of the mortgage stock, about

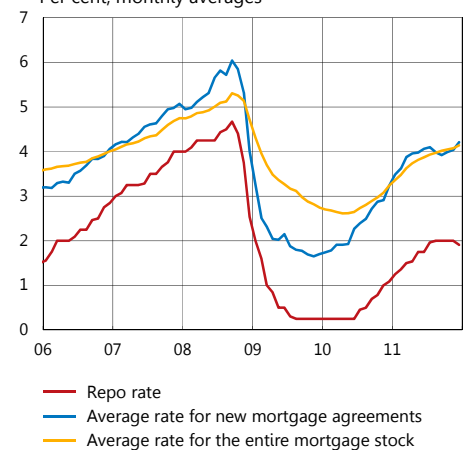
Figure A18. Breakdown of households' new mortgages



Note. Mortgage institutions' new loans to households per fixed-rate term. The final observation refers to December 2011.

Source: Statistics Sweden

Figure A19. Average mortgage rates for households



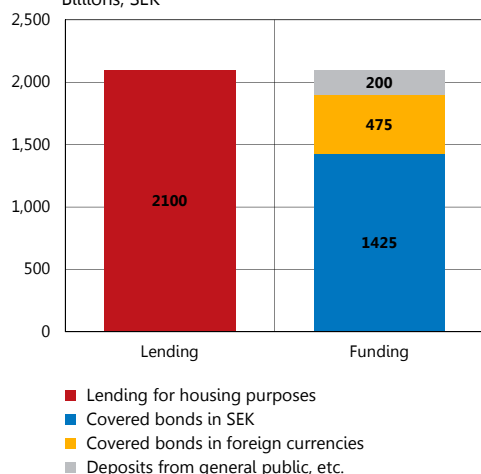
Note. The final observation refers to December 2011.

Sources: Statistics Sweden and the Riksbank

³¹ The average fixed-interest period for households' new mortgage loans since 2005 has been 1.4 years.

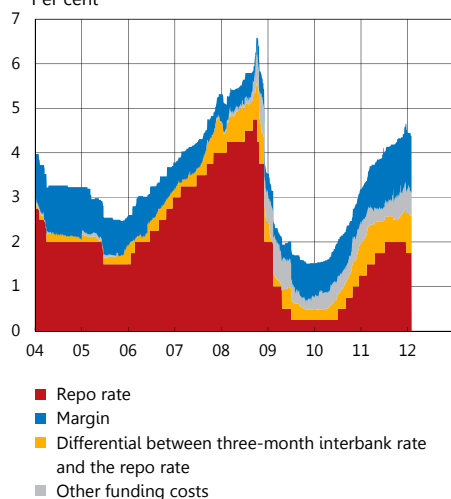
³² The repayment period, however, can be significantly longer, up to 100 years. For more information, see "The Swedish mortgage market and bank lending", Finansinspektionen, 2010.

³³ A secured bond is guaranteed by the bank that issues it. In addition, the bond is guaranteed by specific assets (usually mortgage loans) that pass to the holder of the bond in the event that the bank fails.

Figure A20. Funding of Sweden's mortgage stock
Billions, SEK

Note. November 2011.

Sources: Statistics Sweden and the Riksbank

Figure A21. Division of three-month mortgage rate
Per cent

Note. Refers to average of three-month listed mortgage rates from banks and mortgage institutions. Listed mortgage rates are the rates published by Nordea, SBAB, SEB, Swedbank Hypotek and Stadshypotek, for example in the daily press. In this example, the margin consists of other costs associated with mortgages and a profit margin.

Sources: Reuters EcoWin and the Riksbank

200 billion kronor, is funded through deposits with the banks and other means (see Figure A20).³⁴

So what costs arise when a bank funds a variable-interest rate mortgage? Basically, this means that the bank issues long-term bond loans at a fixed interest rate, but wants to convert these so that it is paying a short-term variable market rate that better matches the interest rate its customers pay for the variable-interest rate loan. To do this, it carries out a series of financial transactions with the aid of a so-called swap contracts, in which the bank finally pays a three-month interbank rate plus a supplement.³⁵ The interbank rate thus forms an important reference rate when the banks are deciding the interest rate for a variable-interest rate mortgage, but it does not reflect the bank's total funding cost.

Figure A21 shows as an example how a three-month listed mortgage rate can be divided up into funding costs, that is, the repo rate (red), the bank's additional funding costs (yellow and grey) and its margin (blue).³⁶ The total of the red and yellow fields is a three-month interbank rate. The grey field corresponds to the cost over and above the interbank rate that the banks pay to issue long-term bond loans with fixed interest rate flows and to convert these to short fixed-interest periods.

The blue field in the figure illustrates the banks' margin. This margin must also cover other costs that arise for the bank in conjunction with the mortgage, such as administrative costs and the cost of maintaining a reserve of liquid assets, for example. Somewhat simplified, it could be said that the margin remaining after deductions for these costs forms the bank's profit.

Several factors are influencing mortgage rates

The increased gap arising between the repo rate and the short-term lending rate over the last year is due partly to the higher funding costs faced by the banks and partly to the banks' increased margins. A comparison with the period before 2008 shows that the banks' funding costs, above and beyond the repo rate, are now higher. This increase in funding costs is due to several factors. The increased unease over the monetary union over the last year has led to higher risk premiums, which has contributed to rising interbank rates in Sweden too. Part of this increase is thus due to the financial crisis and will probably not remain after the market situation stabilises in the future. At the same time, it is not likely that the risk premiums will return to the low levels we saw before the financial crisis broke out. There is a lot to suggest that the pricing of credit and liquidity risks was too low back then. One example

³⁴ The banks can also fund the remaining part of the mortgage stock by issuing certificates and debenture loans, and by borrowing on the interbank market.

³⁵ To safeguard long-term funding, the bank can issue bonds with long-term maturities (about two to five years) that it then converts to short fixed-rate terms with the aid of swap contracts. This allows the bank to secure its own borrowing over a longer period, at the same time as the fixed-rate term for the bank's funding cost becomes the same as that for the banking customer's mortgage. The banks convert their fixed interest rate flow to a variable interest rate flow by entering into a so-called interest-rate swap. This is a bilateral agreement to exchange a specific interest rate in return for another interest rate for a predetermined period according to specific conditions.

³⁶ A listed mortgage rate is the banks' official lending rate. As a rule, this listed rate is slightly higher than the actual interest rate that the households get for their new agreements. At present, the difference averages about 0.2 percentage points.

is that prior to 2008 it hardly cost the banks anything extra above the interbank rate to convert long-term loans into short-term maturities. This probably reflected, for instance, the fact that the risk of a bank going bankrupt was seen to be negligible. Today there is greater risk awareness. This thus implies that risk premiums will not return to the low levels that prevailed before the financial crisis broke out.

According to the division in Figure A21, margins have increased recently, which should be seen in the light of the fact that the conditions governing competition on the mortgage market have changed. Competition increased in the years prior to the crisis, which squeezed the margins on the mortgage market. However, competition weakened in connection with the turbulence that arose on the financial markets in 2008 and the margins increased again and have remained at high levels since then. When the Basel III Accord comes into force, the banks will have to hold more capital and liquid funds. In the short term, this may have contributed to higher funding costs. But in the long term, stricter regulations should benefit the economy by providing more stable financial markets and this should be reflected in a gradual fall in risk premiums and lower return requirements for the banking sector as a whole.

All in all, the current differential between variable mortgage rates and the repo rate will probably remain at an elevated level for a while but then begin to fall somewhat.

Corporate rates rising less than mortgage rates

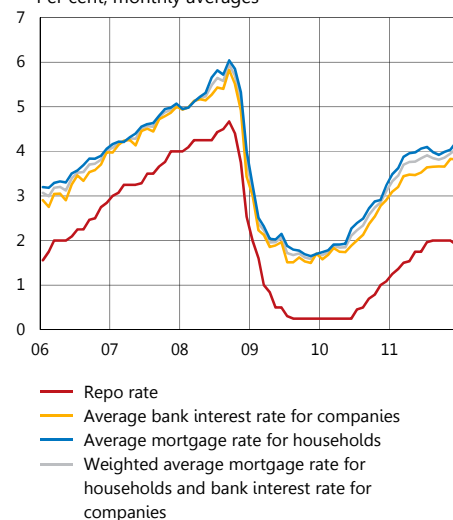
The interest rates that households have to pay play an important role for saving and consumption, but the interest rates paid by companies are also significant to the development of the economy as a whole.

The companies meet a range of interest rates as they can choose to fund their operations on the bond market and with bank loans. However, it is mainly the large companies that can turn to the bond market for funding. For small and medium-sized companies, bank loans are the most important source of funding. The companies can also get funding by using inter-company loans or, for example, from the Swedish Export Credit Corporation. The average interest rate that companies pay on bank loans has increased by 0.9 percentage points over the last 12 months, which is slightly more than the repo rate (see Figure A22). However, the average interest rates that companies pay for new loans have not increased as much as the corresponding rates for household mortgages.

Figure A22 also shows the combined average interest rate that the households and companies together pay for new bank loans. These measures capture a number of the interest rates that affect the economy.

Figure A22. Average mortgage rates for households and bank interest rates for companies on new agreements, and the repo rate

Per cent, monthly averages



Note. In the grey line, the households' average interest rate is weighted by the percentage of loans to households, and the companies' average interest rate is weighted by the percentage of loans to companies. In December, the percentage of loans to households and companies amounted to 60 and 40 per cent, respectively. The final observation refers to December 2011.

Sources: Statistics Sweden and the Riksbank

Higher lending rates reduce demand in the economy and are taken into account in the forecasts

Lending rates to households and companies are an important part of the monetary policy transmission mechanism from the repo rate to the economy at large. In recent years, the differences between these lending rates and the repo rate have increased, and this affects the forecasts. Lending to households and companies usually declines when lending rates are increased, thus reducing the general level of demand in the economy. The Riksbank, for example, continually calculates how the disposable incomes of the households are affected by different lending rates. A rising mortgage rate, all else being equal, gives households less scope for consumption, lower GDP growth, a weaker development of the labour market and lower cost pressures. Housing investment and corporate investment are also affected. All of this is taken into account in the forecasts of developments in the Swedish economy.

It is not possible, however, to give a general rule of thumb for how the repo rate should be adapted to higher lending rates. The primary aims of monetary policy are to stabilise inflation around the inflation target and to stabilise resource utilisation around its normal level. An overall assessment of the outlook for inflation and resource utilisation, which are affected by a number of factors, including movements in lending rates, is made in connection with every monetary policy decision. It is therefore not possible to say how monetary policy should react solely on the basis of the fact that mortgage rates are relatively high in relation to the repo rate.

■ Appendix

- Tables
- Outline of articles published 2009-2011
- Earlier interest rate decisions
- Glossary

Tables

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

Table 1. Repo rate forecast

Per cent, quarterly average values

	Q4 2011	Q1 2012	Q2 2012	Q1 2013	Q1 2014	Q1 2015
Repo rate	2.0	1.6 (1.7)	1.5 (1.7)	1.5 (1.8)	2.2 (2.6)	3.0

Source: The Riksbank

Table 2. Inflation

Annual percentage change, annual average

	2010	2011	2012	2013	2014
CPI	1.2	3.0 (3.0)	1.4 (1.5)	1.9 (2.0)	2.9 (2.7)
CPIF	2.0	1.4 (1.4)	1.1 (1.2)	1.7 (1.7)	2.1 (2.0)
CPIF excl. energy	1.5	1.0 (1.0)	1.3 (1.3)	1.6 (1.7)	2.0 (2.0)
HICP	1.9	1.4 (1.4)	1.1 (1.1)	1.7 (1.7)	2.1 (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 mortgage rate. HICP is an EU harmonised index of consumer prices.

Sources: Statistics Sweden and the Riksbank

Table 3. Summary of financial forecasts

Per cent, unless otherwise stated, annual average

	2010	2011	2012	2013	2014
Repo rate	0.5	1.8 (1.8)	1.5 (1.7)	1.7 (2.1)	2.5 (2.9)
10-year rate	2.9	2.6 (2.6)	2.0 (1.9)	2.9 (2.9)	3.7 (3.7)
Exchange rate, TCW-index, 18 Nov. 1992=100	129.2	122.3 (122.3)	120.6 (122.0)	118.6 (119.1)	119.0 (119.3)
General government net lending*	-0.1	0.3 (0.5)	-0.2 (0.4)	-0.2 (0.4)	0.3 (0.8)

* 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	1.5 (1.6)	-0.1 (0.2)	1.3 (1.4)	2.2 (2.3)
USA (0,20)	3.0	1.7 (1.7)	2.2 (1.9)	2.5 (2.4)	3.2 (3.2)
Japan (0,06)	4.5	-1.0 (-0.2)	1.5 (2.1)	1.5 (1.5)	0.8 (0.8)
OECD (0,55)	3.1	1.8 (1.8)	1.5 (1.6)	2.1 (2.2)	2.7 (2.7)
TCW-weighted (0,47)	2.1	1.3 (1.4)	0.6 (0.8)	1.6 (1.7)	2.3 (2.4)
World (1,00)	5.1	3.8 (3.9)	3.5 (3.7)	4.0 (4.0)	4.3 (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	2.7 (2.7)	2.1 (1.8)	1.6 (1.4)	1.7 (1.6)
USA	1.6	3.2 (3.2)	1.7 (2.0)	1.5 (1.2)	1.9 (1.4)
Japan	-0.7	-0.3 (-0.3)	-0.5 (-0.5)	-0.3 (-0.3)	-0.2 (-0.2)
TCW-weighted	1.6	2.6 (2.7)	1.9 (1.8)	1.5 (1.4)	1.7 (1.6)

	2010	2011	2012	2013	2014
Policy rates in the rest of the world, TCW-weighted, per cent	0.5	0.8 (0.8)	0.4 (0.5)	0.5 (0.7)	1.0 (1.6)
Crude oil price, USD/barrel Brent	80	111 (111)	111 (107)	107 (102)	101 (98)
Swedish export market	9.5	3.6 (3.9)	2.6 (2.8)	4.5 (4.6)	6.0 (6.0)

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 stated

	2010	2011	2012	2013	2014
Private consumption	3.7	1.5 (1.5)	0.6 (0.6)	1.7 (2.5)	3.0 (2.7)
Public consumption	2.1	1.8 (1.8)	0.8 (0.8)	0.7 (0.7)	0.5 (0.5)
Gross fixed capital formation	6.6	5.9 (5.9)	1.8 (2.1)	4.2 (3.8)	5.4 (4.8)
Inventory investment*	2.0	0.6 (0.6)	-0.9 (-1.1)	0.0 (0.0)	0.0 (0.1)
Exports	11.1	8.1 (8.5)	0.0 (1.9)	4.8 (4.5)	6.5 (5.5)
Imports	12.7	5.6 (5.7)	-1.8 (-1.3)	4.8 (4.9)	6.5 (5.9)
GDP	5.6	4.5 (4.6)	0.7 (1.3)	2.1 (2.3)	3.2 (2.6)
GDP, calendar-adjusted	5.3	4.5 (4.6)	1.0 (1.7)	2.1 (2.3)	3.3 (2.7)
Final figure for domestic demand*	3.6	2.3 (2.3)	0.8 (0.8)	1.8 (2.1)	2.5 (2.3)
Net exports*	0.0	1.6 (1.8)	0.8 (1.5)	0.4 (0.2)	0.6 (0.3)
Current account (NA), per cent of GDP	6.3	7.0 (7.2)	7.6 (8.4)	7.7 (8.3)	7.9 (8.3)

*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	0.3 (0.3)	0.1 (0.1)	0.0 (0.0)	0.0 (0.0)
Potential hours worked	0.9	0.5 (0.5)	0.4 (0.4)	0.3 (0.3)	0.3 (0.3)
GDP, calendar-adjusted	5.3	4.5 (4.6)	1.0 (1.7)	2.1 (2.3)	3.3 (2.7)
Number of hours worked, calendar-adjusted	1.7	1.3 (1.3)	0.2 (0.4)	0.6 (0.6)	1.1 (1.0)
Employed, aged 15-74	1.0	2.1 (2.1)	0.2 (0.3)	0.1 (0.3)	0.9 (0.8)
Labour force, aged 15-74	1.1	1.2 (1.1)	0.4 (0.3)	0.1 (0.2)	0.1 (0.1)
Unemployment, aged 15-74 *	8.4	7.5 (7.5)	7.7 (7.5)	7.7 (7.5)	7.0 (6.8)

* Per cent of labour force

Note. Potential hours refers to the long-term sustainable level for the number of hours worked according to the Riksbank's assessment.

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	2.7 (2.7)	3.3 (3.2)	3.1 (3.2)	3.4 (3.4)
Hourly wage, NA	1.3	4.3 (4.6)	3.8 (3.8)	3.4 (3.5)	3.6 (3.7)
Employer's contribution*	-0.3	-0.2 (-0.2)	0.1 (0.1)	0.0 (0.0)	0.0 (0.0)
Hourly labour cost, NA	1.0	4.1 (4.4)	3.8 (3.8)	3.4 (3.5)	3.6 (3.7)
Productivity	3.6	3.2 (3.3)	0.8 (1.3)	1.5 (1.7)	2.2 (1.8)
Unit labour cost	-2.5	0.9 (1.1)	2.9 (2.5)	1.8 (1.8)	1.4 (1.9)

* 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: weaker krona and weaker development abroad

Annual percentage change, unless otherwise stated, annual average

	2011	2012	2013	2014
GDP abroad	1.3 (1.3)	0.1 (0.6)	0.1 (1.6)	1.0 (2.3)
Inflation abroad	2.6 (2.6)	1.8 (1.9)	0.8 (1.5)	0.3 (1.7)
Interest rate abroad, per cent	0.8 (0.8)	0.4 (0.4)	0.3 (0.5)	0.1 (1.0)
CPIF	1.4 (1.4)	1.6 (1.1)	3.1 (1.7)	2.0 (2.1)
Hours gap, per cent	-1.1 (-1.1)	-1.8 (-1.3)	-1.4 (-1.1)	-1.1 (-0.3)
Repo rate, per cent	1.8 (1.8)	1.2 (1.5)	1.3 (1.7)	1.3 (2.5)

Note. The figures in parentheses show the forecast in the main scenario. TCW-weighted foreign variables. CPIF is the CPI with fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Table 9. Alternative scenario: stronger krona and weaker development abroad

Annual percentage change, unless otherwise stated, annual average

	2011	2012	2013	2014
CPIF	1.4 (1.4)	0.9 (1.1)	1.0 (1.7)	1.6 (2.1)
Hours gap, per cent	-1.1 (-1.1)	-2.5 (-1.3)	-3.3 (-1.1)	-2.3 (-0.3)
Repo rate, per cent	1.8 (1.8)	0.5 (1.5)	-1.5 (1.7)	-0.5 (2.5)

Note. The figures in parentheses show the forecast in the main scenario. CPIF is the CPI with fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Table 10. Alternative scenario: stronger krona, weaker development abroad and binding zero restriction

Annual percentage change, unless otherwise stated, annual average

	2011	2012	2013	2014
CPIF	1.4 (1.4)	0.9 (1.1)	0.3 (1.7)	0.6 (2.1)
Hours gap, per cent	-1.1 (-1.1)	-2.5 (-1.3)	-3.9 (-1.1)	-3.5 (-0.3)
Repo rate, per cent	1.8 (1.8)	0.7 (1.5)	0.0 (1.7)	0.0 (2.5)

Note. The figures in parentheses show the forecast in the main scenario. CPIF is the CPI with fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Table 11. Alternative scenario: weaker krona and stronger development abroad

Annual percentage change, unless otherwise stated, annual average

	2011	2012	2013	2014
GDP abroad	1.3 (1.3)	0.8 (0.6)	2.3 (1.6)	3.0 (2.3)
Inflation abroad	2.6 (2.6)	2.0 (1.9)	1.9 (1.5)	2.4 (1.7)
Interest rate abroad, per cent	0.8 (0.8)	0.5 (0.4)	0.5 (0.5)	1.4 (1.0)
CPIF	1.4 (1.4)	1.4 (1.1)	2.4 (1.7)	2.0 (2.1)
Hours gap, per cent	-1.1 (-1.1)	-0.6 (-1.3)	0.3 (-1.1)	0.6 (-0.3)
Repo rate, per cent	1.8 (1.8)	2.2 (1.5)	3.8 (1.7)	3.9 (2.5)

Note. The figures in parentheses show the forecast in the main scenario. TCW-weighted foreign variables. CPIF is the CPI with fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Table 12. Alternative scenario: higher repo rate

Annual percentage change, unless otherwise stated, annual average

	2011	2012	2013	2014
Repo rate, per cent	1.8 (1.8)	1.7 (1.5)	1.8 (1.7)	2.5 (2.5)
CPIF	1.4 (1.4)	1.1 (1.1)	1.6 (1.7)	2.0 (2.1)
CPI	3.0 (3.0)	1.5 (1.4)	1.7 (1.9)	2.7 (2.9)
Hours gap, per cent	-1.1 (-1.1)	-1.4 (-1.3)	-1.2 (-1.1)	-0.4 (-0.3)
Unemployment, aged 15-74*	7.5 (7.5)	7.7 (7.7)	7.9 (7.7)	7.1 (7.0)
GDP gap, per cent	-0.5 (-0.5)	-1.3 (-1.2)	-1.4 (-1.1)	-0.3 (-0.1)

* Per cent of labour force

Note. The figures in parentheses show the forecast in the main scenario. CPIF is the CPI with fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Table 13. Alternative scenario: lower repo rate

Annual percentage change, unless otherwise stated, annual average

	2011	2012	2013	2014
Repo rate, per cent	1.8 (1.8)	1.3 (1.5)	1.6 (1.7)	2.5 (2.5)
CPIF	1.4 (1.4)	1.2 (1.1)	1.9 (1.7)	2.1 (2.1)
CPI	3.0 (3.0)	1.3 (1.4)	2.1 (1.9)	3.1 (2.9)
Hours gap, per cent	-1.1 (-1.1)	-1.3 (-1.3)	-0.9 (-1.1)	-0.1 (-0.3)
Unemployment, aged 15-74*	7.5 (7.5)	7.7 (7.7)	7.6 (7.7)	6.8 (7.0)
GDP gap, per cent	-0.5 (-0.5)	-1.1 (-1.2)	-0.8 (-1.1)	0.1 (-0.1)

* Per cent of labour force

Note. The figures in parentheses show the forecast in the main scenario. CPIF is the CPI with fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Outline of articles published 2009-2011³⁷

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

2011 October Similarities and differences between the current situation and 2008-2009

2011 October The debt crisis in Europe

2011 October New round of collective bargaining in an uncertain economic climate

³⁷ A list of the articles published since 1993 can be found on the Riksbank's website www.riksbank.se.

Earlier interest rate decisions³⁸

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	<i>No report</i>
3 May	3.25	0	<i>No report</i>
19 June	3.50	+0.25	2007:2
6 September	3.75	+0.25	<i>No report</i>
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	<i>Extra meeting, no report</i>
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
26 October	2.00	0	October 2011
19 December	1.75	-0.25	Monetary Policy Update

³⁸ 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.

Overnight rate: The interest rate for interbank loans overnight.

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 Executive Board of the Riksbank decides on the repo rate as the level that the Riksbank wants to steer the overnight rate towards.

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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