

Monetary Policy Report

September 2015

Monetary Policy Report

The Riksbank's Monetary Policy Report is published six times per year. The report describes the deliberations made by the Riksbank when deciding what would be an appropriate monetary policy. 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.

The purpose of the Monetary Policy Report is to summarise the background material for monetary policy decisions, and 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 "Account of 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 2 September 2015. 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 next page for a description of the monetary policy strategy and what can be regarded as an appropriate monetary policy.

Monetary Policy in Sweden

MONETARY POLICY STRATEGY

- 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 for the purpose of attaining sustainable growth and a high level of employment. This is achieved through the Riksbank, in addition to stabilising inflation around the inflation target, endeavouring to stabilise production and employment around paths that are sustainable in the long term. 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 its own assessment of the future path for the repo rate. This repo-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, and any potential supplementary measures necessary, for monetary policy to be well-balanced. It thus 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 monetary policy 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 monetary policy 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 reporate and the reporate 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 per year at which it decides on monetary policy. In connection with these meetings, a Monetary Policy Report 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 current decision and to see the arguments put forward by the different Executive Board members.

PRESENTATION OF THE MONETYARY POLICY DECISION

The monetary policy 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 voted and provides the main motivation for any reservations entered. A press conference is held on the day following the monetary policy meeting.

Contents

| • | СН | APTER 1 – Monetary policy deliberations 5 |
|---|-----|---|
| | _ | Monetary policy is supporting the economic upturn and the rise in inflation 5 |
| | _ | Current monetary policy 7 |
| | _ | Uncertainty and risks 9 |
| | _ | Article: Conditions for the 2016 wage bargaining round 13 |
| | СН | APTER 2 – Financial conditions 15 |
| | _ | Monetary policy and government bond yields 15 |
| | _ | The foreign exchange market 16 |
| | _ | Global asset markets 17 |
| | _ | The financial situation for banks and companies 18 |
| | CH | APTER 3 – The current economic situation 20 |
| | _ | Inflation 20 |
| | _ | Global and Swedish economic activity 22 |
| | CH | APTER 4 – The economic outlook and inflation prospects 25 |
| | _ | International outlook 25 |
| | _ | Sweden 27 |
| | Tab | oles 32 |

CHAPTER 1 – Monetary policy deliberations

Economic activity in Sweden is getting stronger and inflation is showing a clear upward trend. Even though great uncertainty still prevails concerning developments abroad, the overall view of economic outlook and inflation prospects remains largely unchanged since the Monetary Policy Report was published in July. The Executive Board of the Riksbank has therefore decided to hold the repo rate unchanged at -0.35 per cent. The expansionary monetary policy will therefore be maintained, including the further purchase of government bonds until the end of the year in accordance with the plan announced in July. Just as in July, it is considered appropriate not to start slowly raising the repo rate until the second half of 2016. There is still a high level of preparedness to make monetary policy even more expansionary if inflation prospects should deteriorate. The repo-rate path also reflects the possibility that the repo rate may be cut further. The expansionary monetary policy supports the continued positive development of the Swedish economy so that CPIF inflation is expected to be close to 2 per cent in 2016. The monetary policy being conducted underlines the Riksbank's aim to safeguard the role of the inflation target as nominal anchor for price setting and wage formation.

Monetary policy is supporting the economic upturn and the rise in inflation

The overall view of the economic situation both abroad and in Sweden remains unchanged in principle since July. Growth in the global economy is primarily being driven by developed countries while several emerging economies are expected to grow more slowly in the years ahead. Even if the recovery in some areas has been weak in recent years, the prospects for higher growth in the period ahead are good. The price of oil is low and fiscal policies are less tight than previously. At the same time, monetary policy is expansionary. The European Central Bank, ECB, is continuing to buy financial assets in accordance with the plans presented in January. In the United States, the Federal Reserve has communicated that its policy rate will be slowly raised. These continued monetary policy stimulation measures are supporting credit granting, which is boosting consumption and investment. All in all, global growth and inflation are therefore expected to rise in the coming years.

However, international uncertainty continues to be high. The international financial markets have occasionally seen large fluctuations which have been influenced by expectations of when the US central bank will raise its policy rate, developments in Greece and concern that the Chinese economy may be weaker than has previously been assessed. Several emerging market currencies have weakened, with the greatest decline being for commodity-producing countries. Despite a slight rise in the last week of August, the price of crude oil (Brent) has fallen by about 20 per cent since the beginning of July. However, the acute risks

Table 1:1

Important factors for monetary policy

Even though uncertainty remains high, international economic activity is strengthening more or less as expected.

Stable GDP growth in Sweden.

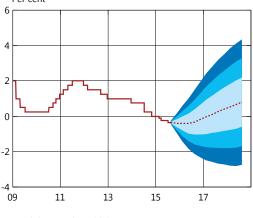
Clear upward trend in inflation.

Trade-weighted exchange rate, KIX, has developed more or less as expected.

Expansionary monetary policy also entails risks, but these must be managed by other policy areas.

Conclusion: Continued expansionary monetary policy to provide necessary support to inflation.

Figure 1:1. Repo rate with uncertainty bandsPer cent



■ 50 % ■ 75 % ■ 90 %

Note. The uncertainty bands for the repo rate are based on the Riksbank's historical forecasting errors and the ability of risk-premium adjusted forward 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. Outcomes are daily rates and forecasts refer to quarterly averages.

surrounding the situation in Greece have diminished and, as in July, events in Greece are not expected to hinder the recovery of the euro area. The Greek economy, however, continues to face major challenges.

Stable development of the Swedish economy

The financial conditions in Sweden are still very expansionary. Interest rates are low and it is easy to obtain credits, both for companies and for households. Interest rates for government bonds with long maturities have fallen since July. In competitiveness-weighted terms, the krona is more or less in line with the Riksbank's forecast in July, despite large fluctuations.

Despite weak demand from abroad, growth has been relatively good in the Swedish economy in recent years. It has thus largely been driven by domestic demand, with strong consumption and strong housing investment.

Demand is expected to broaden in the period ahead. Higher international growth will lead to faster Swedish export growth, which will eventually also increase the need for new investments. Supported by the expansionary monetary policy, GDP is expected to grow by about 3 per cent per year over the forecast period, which is faster than the historical average (see Figures 1:1 and 1:2). However, when the strong population increase is taken into account, GDP growth is more moderate.

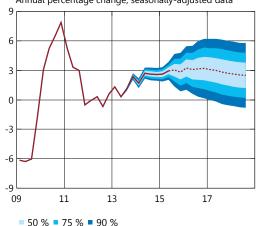
This higher level of growth is contributing towards the situation on the labour market also improving. Employment is continuing to rise and unemployment is gradually falling.

Rising trend in inflation

Several different measures of underlying inflation have risen since last autumn. This trend of rising inflation is expected to continue, as the expansionary monetary policy is contributing towards higher resource utilisation and a rising wage rate. It is also expected to become increasingly easy for companies to raise prices as economic activity improves. Inflation, measured in terms of the CPIF excluding energy, is expected to continue to gradually increase in the period ahead.

Falling energy prices have subdued inflation over the last year. Since the forecast in July, oil and electricity prices have continued to fall in Sweden. This will hold back inflation in the near future. Energy prices are however expected to rise going forward and hence make a slightly positive contribution to inflation in the long term. The volatile development of energy prices means that CPIF inflation, which is presently lower than CPIF inflation

Figure 1:2. GDP with uncertainty bandsAnnual 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. CPIF with uncertainty bands

Annual percentage change

4

3

2

1

09

11

13

15

17

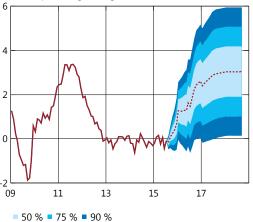
Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 1:4. CPI with uncertainty bands

Annual percentage change

■ 50 % **■** 75 % **■** 90 %



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

Sources: Statistics Sweden and the Riksbank

excluding energy, will rise very rapidly in early 2016 (see Figure 1:3).

At present, CPI inflation is also being restrained by the previous repo rate cuts, as households' mortgage rates are included in the CPI. CPI inflation will also rise in 2016. The successive increases of the repo rate will then lead to CPI inflation being over 2 per cent for a couple of years (see Figure 1:4). Overall, CPIF inflation excluding energy is basically unchanged compared with the forecast in the July Monetary Policy Report (see Figure 1:5). Inflation measured in terms of CPI and CPIF has been revised down however as a result of lower energy prices (see Figure 1:6 and 1:7).

Current monetary policy

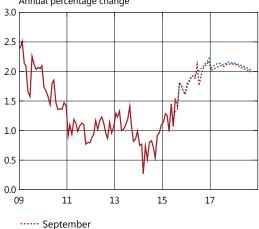
For a longer period, the Riksbank has gradually made monetary policy increasingly expansionary. Powerful measures have been deployed to ensure that inflation rises towards the target of 2 per cent. The repo rate has been cut and is now negative. In addition, during the year, the Executive Board decided to purchase government bonds to a total value of SEK 135 billion, which corresponds to approximately 4 per cent of GDP and 20 per cent of the outstanding stock of Swedish government bonds.² The forecast for the repo rate has also gradually been revised down. Taken together, these measures have contributed towards lowering the general level of interest rates in the Swedish economy and weakening the krona exchange rate (see the article "The Riksbank's measures in 2015 have had an effect", Monetary Policy Report, July 2015). The expansionary monetary policy has contributed towards a clear rise in inflation, e.g. measured in terms of CPIF excluding energy over the last year, from just over 0.5 per cent to 1.5 per cent in July (see Figure 1:5).

It is thus the Riksbank's assessment that the highly expansionary monetary policy is supporting a continued positive development of the Swedish economy so that CPIF inflation is expected to be close to 2 per cent in 2016.

The low interest rate is providing much-needed support to inflation

The upward trend in inflation has continued and the latest outcome for July was slightly higher than expected. Lower energy prices due to the fall in oil prices will certainly restrain CPIF inflation in the period ahead but, nevertheless, inflation is expected to rise clearly and the forecast for the CPIF excluding energy remains unchanged in principle. In

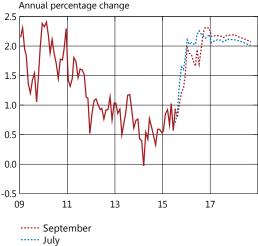
Figure 1:5. CPIF excluding energy Annual percentage change



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

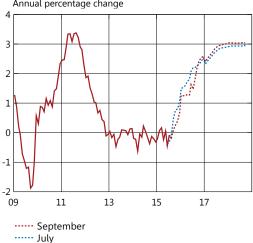
Figure 1:6. CPIF

····· July



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

Figure 1:7. CPIAnnual percentage change



Sources: Statistics Sweden and the Riksbank

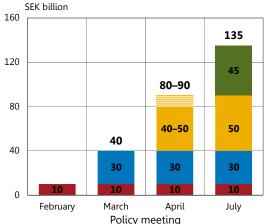
 $^{^2}$ As the market value of bonds presently exceeds its nominal amount, the total purchases in a nominal amount of SEK 135 billion correspond to an actual purchase price of about SEK 160 billion, which corresponds to about 4 per cent of GDP.

addition, the Swedish economy has continued to develop relatively well and revisions to the forecast are small overall. This development suggests an unchanged monetary policy compared with the decision in July. However, there are also factors suggesting that monetary policy should be more expansionary. For example, there is a risk that the fall in the oil price may affect long-term inflation expectations in a more substantial way. However, the risk of this is deemed to be smaller than earlier this year, when inflation was significantly lower and inflation expectations had been falling clearly for a time. One further factor that could argue for a more expansionary monetary policy is the uncertain development internationally, which continues to pose risks to the development of inflation. Very recently, there has been turbulence on the financial markets due to unease over a weaker development in China.

There are hence arguments both for maintaining the monetary policy decided in July and for making it more expansionary. The Executive Board's assessment is that it is now appropriate to leave the repo rate unchanged at -0.35 per cent and to continue purchasing government bonds as earlier planned (see Figure 1:8). The Riksbank remains prepared, however, to rapidly make monetary policy more expansionary, even between ordinary monetary policy meetings, should the need arise. The repo rate path, which has largely remained unchanged since July, reflects the possibility of further cuts to the repo rate. Not until towards the end of next year will it be considered appropriate to slowly begin raising the repo rate (see Figure 1:9). This means that the real interest rate will be very low over the entire forecast period (see Figure 1:10). The interest rate will therefore be very low at a time when economic activity is relatively good, resource utilisation is close to a normal level and inflation is above the target of 2 per cent.

It is important that inflation continues to rise and that CPIF inflation comes closer to 2 per cent. Such a development helps to create long-term inflation expectations that are compatible with the inflation target of 2 per cent. A continuing high level of confidence in the inflation target creates stability and predictability (see the article "Why is it important that inflation rises towards the target?", Monetary Policy Report, July 2015). As inflation has been below the target for a longer period and long-term inflation expectations have fallen below 2 per cent, it is not expected to be a problem if inflation should temporarily rise further above target than forecast. Such a development would therefore not have to lead to a less expansionary monetary policy.

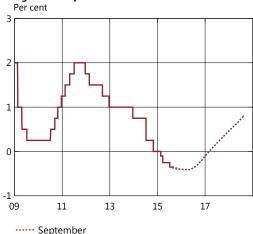
Figure 1:8. Purchases of government bonds decided by the Riksbank



Note. Purchases of government bonds will be implemented until the end of the year.

Source: The Riksbank

Figure 1:9. Repo rate



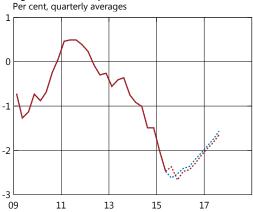
Note. Outcomes are daily data and the forecasts refer to quarterly averages.

Source: The Riksbank

····· September July

····· July

Figure 1:10. Real repo rate



Note. The real repo rate is a mean value of the Riksbank's repo rate forecast for the year ahead minus the inflation forecast (CPIF) for the

corresponding period.
Sources: Statistics Sweden and the Riksbank

The Riksbank is prepared to do more

As it is important that the trend of rising inflation continues so that inflation expectations are compatible with the inflation target, the Riksbank remains highly prepared to make monetary policy even more expansionary if the conditions for inflation to rise in line with the forecast should deteriorate. This may also be carried out between ordinary monetary policy meetings. Further cuts may also be made to the repo rate and the Riksbank's assessment is that purchases of government bonds may be extended without this creating major problems for the functioning of the markets. The Riksbank also stands ready to intervene on the foreign exchange market if the upturn in inflation should be threatened as the result, for instance, of a very problematic development in the markets. Purchases of other types of security are also a possibility, as is launching a programme for lending to companies via the banks. The measures taken and the readiness to do more underline the Riksbank's aim to safeguard the role of the inflation target as a nominal anchor for price setting and wage formation.

Uncertainty and risks

Forecasts of future economic developments are always uncertain. The Riksbank's forecasts are formulated so that the risks of a worsened outcome are, in principle, as large as the risks of a more favourable outcome. However, it is difficult to put a figure on uncertainty and risks. Consequently, there may be a need for the monetary policy considerations to further take into account certain risks considered to have particularly severe possible consequences for economic development.

Uncertainty surrounding the inflation forecast

Even though there has been an upward trend in inflation for some time and there are many indications that this will continue, there are several sources of uncertainty in the forecast. Costs and prices depend on a number of factors, both in Sweden and abroad. The recent period has been characterised by volatility on the foreign exchange markets and falling oil prices. Most emerging market currencies have depreciated, with the fall being greatest among currencies strongly linked to the commodity markets. If the international economic outlook deteriorates, growth in Sweden will also be affected. This may mean lower resource utilisation and that companies will continue to find it difficult to pass along cost increases in the form of higher prices for consumers for a longer time than assumed by the forecast.

Neither can it be ruled out that changes of a more long-term nature, such as increased competition, may lead to lower mark-ups over a transitional period and thus affect how quickly inflation rises.

Over the summer, the price of oil has fallen by about 20 per cent. A continued fall in oil prices will probably lead to lower inflation. Normally, under such circumstances, most central banks usually focus more on various underlying measures of inflation and do not adjust monetary policy because the effect can be expected to be temporary. However, long-term inflation expectations have fallen in recent years. If prices were to continue to rise too slowly, inflation expectations may fall further. In such a scenario, there is a risk that the lower inflation expectations themselves may have an increasing influence on actual inflation. In this case, the Riksbank may find it more difficult to stabilise inflation around the target.

A similar risk would arise if the krona exchange rate were to appreciate earlier and at a faster rate than forecast. In trade-weighted terms, the krona is expected to remain at roughly its current level for a further period before it begins to slowly strengthen (see Figure 4:14). However, there is considerable uncertainty about the development of the krona. For instance, it is uncertain how the expansionary monetary policy conducted by the Riksbank and the ECB will affect the relationship between the krona and the euro. To this can be added uncertainty over when the Federal Reserve will start to raise its policy rate and the recent turbulence on the foreign exchange markets. A more rapid appreciation of the krona exchange rate than forecast would dampen inflation, posing a serious risk to the upturn in inflation.

Risks of low interest rates and rapidly rising housing prices

The aim of the low repo rate and the purchase of government bonds is to make inflation rise towards the target of 2 per cent. The measures reduce the risk that inflation will remain too low and that long-run inflation expectations will fall to levels which will make it more difficult to attain the target. At the same time, the more expansionary monetary policy, both in Sweden and in other countries, has contributed towards increased risk-taking on the financial markets in recent years.³ Even if this increased risk-taking is an intended effect of the monetary policy being conducted with the aim of promoting real investments, household consumption and economic growth,

³ For more discussion, see for example 85th Annual Report, Bank for International Settlements

it may also bring about greater vulnerability in the financial system if it leads to assets being overvalued and various types of risk not being fully priced. This will increase the risk of rapid and substantial price movements on the asset markets if investors wish to reduce their risk-taking and redistribute their asset portfolios, with increased stress on the financial markets as a result. The recent relatively dramatic price movements on the equity market may partly be a result of this. Increased financial stress may result in difficulties for Swedish financial participants, including difficulties in obtaining funding on the international financial markets.⁴ However, it is difficult to determine whether asset prices reflect fundamental factors. This also applies to assessing whether risks are correctly priced.

The low level of interest rates may also lead to difficulties for Swedish insurance companies, for example, as they will have to invest in bonds with lower yields than previously. In the long run, this may mean that they will find it difficult to meet their commitments to their policyholders. The insurance companies' relatively large holdings of shares, together with the low interest rates, also make them vulnerable to falling share prices.

The fact that the repo rate has been lowered to below zero and that certain market rates have become negative may, itself, form a risk on certain financial markets. However, the Riksbank deems that the negative interest rate has not, as yet, led to any impaired functionality in the financial system.6

The low level of interest rates is also contributing to the continuation of the trends of rising housing prices and households' increasing indebtedness (see Figures 1:11 and 1:12). If the economic outlook deteriorates, highly-indebted households may choose to increase their saving rapidly, thus reducing their consumption. In such a scenario, an economic slowdown could be heavily exacerbated, particularly if housing prices also start to fall.

The build-up in household debt therefore needs to be suppressed. The responsibility for implementing measures to attain this lies with parliament, the Government and other public authorities. One important step is that Finansinspektionen's mandate and tools for macroprudential policy are quickly clarified in law and that an amortisation requirement corresponding to at least that proposed by Finansinspektionen is introduced as soon as

Figure 1:11. Housing prices Annual percentage change 25 20 15 10 5 0 -5

12

14

Total Tenant-owned apartments Single-family dwellings

10

08

Source: Valueguard

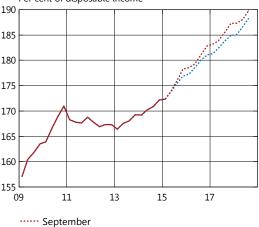
-10

-15

06

Figure 1:12. Household debt ratio

Per cent of disposable income



Note. Households' total debts as a share of their disposable incomes totalled over the past four quarters.

Sources: Statistics Sweden and the Riksbank

····· July

 $^{^4}$ See Financial Stability Report 2015:1, Sveriges Riksbank. 5 The problems that may be encountered by Swedish insurance companies in a prolonged period of low interest rates have been pointed out, among others by the International

Monetary Fund (IMF) in its Global Financial Stability Report, 2015:1, pp. 22–24. ⁶ See Financial Stability Report 2015:1, Sveriges Riksbank, for a discussion of how insurance companies are affected by a low interest rate and on the various problems on the financial markets that are associated with negative interest rates.

possible. The Riksbank also deems that further measures are needed to reduce households' willingness to take on debt. Feasible measures include a reduction in the tax deduction allowed on interest payments, the introduction of a debt-to-value limit and stricter requirements for the banks' credit assessments of individual households.

In addition, measures that increase the supply of housing and lead to a more effective housing market are necessary. As current debt levels already entail significant risks for the Swedish economy, it is essential that the reform work is hastened. If no measures are taken, this, in combination with the low level of interest rates, will further increase the risks, which may ultimately be very costly for the economy.

Article: Conditions for the 2016 wage bargaining round

At the end of the year, a major wage bargaining round will be initiated and the Riksbank assumes that the inflation target will form a shared starting point in these negotiations. In the Riksbank's forecast of the total wage increases, the centrally-agreed wage increases are important, but wage increases over and above these also play a part. Seen over time, wages have co-varied with the situation on the labour market and inflation, among other things.

According to the Riksbank's forecast, the rate of wage increases will rise in the next few years as the labour market strengthens and inflation rises, and real wages will increase slightly more slowly than productivity.

Major wage round in 2016

New wage agreements are to be concluded for around 3 million employees in 2016. The industrial sector is expected to be the first to reach a new collective agreement. Their present agreement will expire at the end of March 2016. One reason why the industrial sector negotiates first is because it is exposed to international competition. Subsequently, the parties in other sectors normally conclude agreements that are in line with those negotiated in the industrial sector. In recent years, however, this "leading role" played by the industrial sector in wage bargaining has been brought into question. Greater globalisation and recent technological developments mean that several parts of the service sector are also exposed to international competition. Labour market trends also differ from one agreement area to another. For example, employment in the industrial sector has fallen while it has increased in the service sector. This may create challenges as regards coordination.

Important to have a common view of future developments in inflation

The aim of monetary policy is for inflation to be close to the inflation target of 2 per cent. However, inflation will periodically vary around the target, as it is not possible to exactly govern inflation. Although inflation has, at times, deviated from 2 per cent, the inflation target has functioned as a joint starting point for the social partners in their negotiations since the end of the 1990s. It is clear that this has benefited general economic development in Sweden. Major fluctuations in prices and wages make it more difficult for all participants and create economic costs. A level playing field and predictability instead reduce uncertainty and create stability in the economy.

In recent years, inflation has been too low. However, the Riksbank has adopted forceful measures to bring inflation closer to target. The repo rate has been significantly cut and is now negative. Comprehensive purchases of Swedish government bonds have also been carried out. This has contributed towards underlying inflation now rising. CPIF inflation is expected to be close to 2 per cent during 2016. The inflation target is defined in

terms of the CPI, not the CPIF. But in periods with major interest rate changes, there are substantial variations in the CPI as this measure includes the direct effects of changed rates. Under such circumstances, the CPIF paints a better picture of inflationary pressures than the CPI does. It is important that inflation continues to rise and becomes established at a level around 2 per cent. A development of this kind contributes towards inflation expectations that are compatible with the inflation target and the stable development of the Swedish labour market.

Many factors influence the negotiations

In an economy with a floating exchange rate, *economic developments*, *anticipated growth in productivity* and *expected inflation* are important factors in wage formation. In practice, *international competitiveness* is also part of the wage-setting equation. The *current profit situation* can also be an important factor for consideration. If current profits deviate from the normal level, wages may need to increase more rapidly or more slowly than productivity trends and inflation indicate. The nominal wages that should apply over the period covered by the agreement are agreed on the basis of the parties' perceptions of these conditions.

Reasonable to expect higher wage increases

As wage increases largely determine the development of companies' costs and thus inflation, it is important that the Riksbank monitors the wage bargaining round. The Riksbank makes forecasts for total wage increases, i.e. including wage increases in addition to those agreed centrally. Between 1998 and 2014, the average agreed rate of wage increase has amounted to 2.5 per cent per year (see Figure 1:13). The total wage increases has on average been 3.3 per cent per year during the same period. Normally, therefore, total wage increases are higher than those agreed.⁷

The Riksbank's wage forecasts are based on how wages have co-varied historically with e.g. the situation on the labour market and inflation. The Riksbank has adopted

⁷ The parties negotiate about the level of the agreed wage increases within the area in question. In addition, there is local wage formation and traditional wage drift. In recent years, the number of so-called figureless agreements has increased. These agreements do not specify a percentage figure for wage increases. Instead, wages are set locally and individually. This year, a total of about 800 000 employees will be affected by figureless agreements.

powerful monetary policy measures aimed at pushing inflation closer to the target and stemming a downward trend in inflation expectations. Inflation and economic activity are now rising and the situation on the labour market is thus improving, a development that is expected to be reinforced in the years ahead.

The Riksbank expects productivity in 2016 and 2017 to increase approximately in line with the average development over the period 1998–2014. At the same time, the Riksbank assumes that the inflation target will as previously continue to constitute an important point of departure for negotiations in this wage round and inflation is expected to be slightly higher than the average for the period 1998–2014 over the next few years.

Competitiveness can also play a role in wage formation. A measure of international competitiveness is the development of unit labour costs in a common currency for different countries. To maintain competitiveness in sectors exposed to competition, wage development cannot normally deviate too far from that in key competitor countries. The exchange rate also has considerable significance in this context. If we take the development of the exchange rate into account, labour unit costs increased in Sweden over the period 2011–2014 in line with the United States and Germany, for example. Following this, costs in Sweden have increased more slowly (see Figure 1:14). The overseas competitive situation is therefore relatively favourable at the moment.

The current profit situation can also be considered in the wage bargaining rounds, and here the picture is not clear-cut. There are indicators of the profit situation (e.g. profit expectations in various questionnaire surveys) pointing to a normal or higher-than-normal profit situation. However, real earnings have increased more rapidly in recent years than productivity (see Figure 1:15). The profit share in the business sector is thereby depressed ahead of this wage bargaining round (see Figure 4:12), which may have a restraining effect on wage increases.

The Riksbank's assessment of the prospects for economic activity, productivity and inflation (together with international competitiveness) suggest that the agreed wage increases and wage increases over and above central agreements will be in line with the historical average over the next few years (see Figure 1:13). As demand rises, companies have more opportunities to increase their prices and their margins increase. According to the Riksbank's forecast, the profit share will increase as real wages are increasing more slowly than productivity (see Figure 1:15 and 4:12).

Figure 1:13. Total and negotiated nominal wages



Note. Broken horizontal lines refer to the average between 1998 and 2014.

Sources: Swedish National Mediation Office and the Riksbank

Figure 1:14. Unit labour cost

Negotiated wages



Sources: Bureau of Labor Statistics, OECD and Statistics Sweden

Figure 1:15. Real wages and productivity



Note. Real wages are deflated with CPIF. Productivity is a four quarter moving average. Broken horizontal lines refer to the average between 1998 and 2014.

Sources: Swedish National Mediation Office, Statistics Sweden and the Rikshank

CHAPTER 2 – Financial conditions

The financial conditions in Sweden remain favourable for growth. While the stock exchange has indeed fallen since the start of July, market rates are lower. The acute uncertainty linked to Greece has decreased but unease over developments in China has, at times, created large fluctuations on the equity and foreign exchange markets. Swedish interest rates fell in conjunction with the monetary policy decision in July and have subsequently followed international developments. In competitiveness-weighted terms, the krona is in line with the forecast from July, despite large fluctuations. The banks are incurring low funding costs, making it possible for them to offer low interest rates to households and companies.

Monetary policy and government bond yields

Differences in economic activity are reflected by monetary policy

Since the Monetary Policy Report was published at the start of July, movements on the financial markets have been affected by developments in China as well as by expectations of when the US central bank will raise its policy rate. Developments on the equity and foreign exchange markets have been turbulent at times.

The Riksbank's decision in July to cut the repo rate and extend the purchase of government bonds has contributed to lower interest rates in Sweden. Monetary policy expectations have been adjusted downwards in line with the repo rate path and, according to the forward rates, the market sees some likelihood of an even lower repo rate in the near future (see Figure 2:1). Expectations in the longer-term are also lower than previously and, according to the forward rates, an initial increase of the repo rate is expected in late 2016. According to Prospera's survey from August, an increase can be expected slightly earlier.

Table 2:1.

| Developments on financial markets since the July Monetary Policy Report | | | | |
|---|--|--|--|--|
| Government bond yields | Lower government bond yields in Sweden and abroad. Swedish yields have fallen more than German yields. | | | |
| The foreign exchange market | In competitiveness-weighted terms, the krona is largely unchanged. | | | |
| The equity market | Occasional large negative movements, weaker stock exchanges both in Sweden and abroad. | | | |
| Interest rates for households and companies | Financial market statistics for June and July indicate lower interest rates for households and companies. | | | |
| Credit growth | Credit growth (annual rate) still rising for households but slightly weaker for companies. | | | |

The transmission mechanism – from the repo rate to interest rates for households and companies

The repo rate has a direct effect on short-term interbank rates and government bond yields via the overnight rate. Expectations regarding the future repo rate and government bond purchases affect the development of long-term government bond yields. These are also affected by foreign yields. Government bond yields act as an anchor for other types of bond yields, which in turn affect the banks' funding costs. This ultimately affects the interest rates offered to households and companies.



In the United States, the Federal Reserve's communication indicates that the interest rate will be raised this year. Forward pricing has shifted somewhat, but suggests about a 40 per cent chance that the policy rate will be raised in September (see Figure 2:1).

In the euro area, the ECB has continued its asset purchases and the ECB's monetary policy meeting in July assessed that the economy was developing approximately in line with expectations. The ECB also made clear that it stands prepared to do more if the situation in the euro area should deteriorate, which is primarily linked to the situation in Greece. According to forward rates, the policy rate is expected to be held unchanged for a long time (see Figure 2:1).

Lower government bond yields in Sweden and abroad

The repo rate and monetary policy expectations have a major effect on the development of market rates in Sweden. But since Sweden is a small open economy, rates with longer maturities are also affected by global developments, especially in the euro area and the United States.

Since the Monetary Policy Report in July, government bond yields have fallen both in Sweden and abroad. This international decrease is primarily linked to the low oil price, which has contributed to falling inflation expectations. The uncertainty in China and Greece has, at times, reduced demand for higher-risk assets. Among other effects, this has been reflected by lower government bond yields in Germany and the United States (see Figure 2:2), at the same time as yields for higher-risk assets have risen.

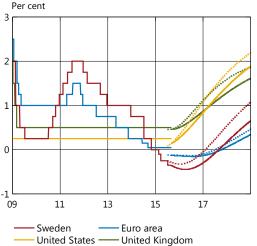
In Sweden, government bond yields fell in conjunction with the Riksbank's repo rate decision in July, which lead to a decrease in the interest rate differential in relation to German and US yields. Thereafter, Swedish government bond yields have largely followed international developments but have fallen slightly more than German and US yields (see Figures 2:2 and 2:3).

The foreign exchange market

Krona close to forecast from July despite large fluctuations

Developments on the international foreign exchange market have been strongly influenced by expectations regarding the Federal Reserve's monetary policy. There have also been large fluctuations that can be linked to falling commodity prices, a depreciation of the Chinese Renminbi and unease over Chinese growth. Several emerging market currencies

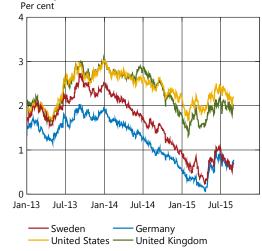
Figure 2:1. Policy rates and rate expectations according to forward rates



Note. Forward rates describe the expected overnight rate, which does not always correspond to the official policy rate. Unbroken lines are estimated 31 August 2015, broken lines 1 July 2015.

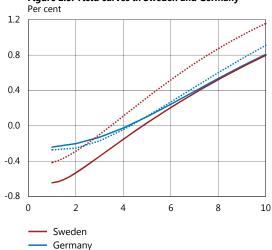
Sources: Macrobond and the Riksbank

Figure 2:2. Government bond rates with 10 years left to maturity



Source: Macrobond

Figure 2:3. Yield curves in Sweden and Germany



Note: Horizontal axis show maturities in years. The yield curve is zero coupon yields interpolated from bond prices in accordance with the Nelson-Siegel method. Unbroken lines are estimated 31 august 2015, broken lines 1 July 2015.

Sources: Deutsche Bundesbank, Thomson Reuters and the Riksbank

have weakened, with the greatest decline being in commodity-producing countries. Among these, the Russian rouble and the Brazilian real have fallen substantially due to the decline of the oil price. The growing uncertainty has also affected the US dollar, which depreciated rapidly in a short space of time against the euro in particular, due to decreased expectations of an initial policy rate rise from the Federal Reserve in September. The dollar has since recovered but is still somewhat weaker against the euro compared to early July.

There have also been major movements in the krona since the beginning of July. An initial depreciation took place in conjunction with the monetary policy decision in July, which can largely be linked to the fall in Swedish market rates and the narrower differential in relation to German and US rates. Following this, the krona continued to depreciate until it finally appreciated slightly in conjunction with the inflation outcome for July, which led to lowered expectations for measures from the Riksbank in September. Since then, the development of the krona has largely been governed by international fluctuations. The krona has appreciated against the currencies of most emerging markets and commodity-producing countries as well as against the US dollar, but has depreciated against the euro. All in all, however, the krona is weaker against the euro and approximately unchanged against the dollar compared with the start of July (see Figure 2:4). In competitivenessweighted terms, the krona is approximately in line with the Riksbank's forecast in July, despite major fluctuations (see Figure 4:14).

Global asset markets

Occasional large movements on the world's stock exchanges

Since July, the situation has been turbulent on the world's stock exchanges, with occasionally large negative movements. This development is primarily connected to unease about China, which has led stock exchanges in the euro area, the United States and Sweden to develop weakly (see Figure 2:5). Among emerging economies, stock market falls have been even more substantial.

The unease about China has also contributed to falling commodity prices. The downturn has been broad but the largest fall concerns oil prices. Despite a slight rise in the last week of August, the price of Brent crude oil has fallen by about 20 per cent since the beginning of July. The decline

What is happening on China's financial markets?

Developments in China have been in focus recently. The downturn on the stock exchange and foreign exchange market has led investors to question the strength of the Chinese economy, which has spread to other financial markets.

Stock market developments in China have been dramatic over the last year. From having more than doubled in value since last November, the domestic stock exchanges have declined by almost 40 per cent since peaking in June. The Chinese authorities have implemented measures to stabilise the market, including direct rescue purchases of equities, policy rate cuts and lowered reserve requirements for banks.

On the foreign exchange market, the Chinese central bank has surprised the market by allowing the Renminbi to depreciate. The justification for this decision is that the Renminbi has appreciated strongly in recent years and that the authorities have wanted the exchange rate to become more adapted to the market. The IMF has long requested this second measure. The depreciation of the Renminbi has so far been restricted in relation to the appreciation that has taken place against most currencies in recent years.

Unease over the strength of the Chinese economy

Developments in China have created an uncertainty that is reflected in falling stock exchanges, large fluctuations on the currency market, lower commodity prices and other effects. The main concern is that the downturn on the equity market and the depreciation of the currency are signs that the Chinese economy is weaker than previously assessed. Among other issues, many participants mention the risk of contagion to China's property market, considered by many to be overheated.

Limited effects on the real economy

The Riksbank assesses that the movements on the equity and foreign exchange markets will have relatively minor direct effects on growth. Only 9 per cent of Chinese households own equities and their equity assets comprise just under 1 per cent of their total assets. Furthermore, studies show that the link between the equity market and the real economy is weak. However, there are signs of weaker growth in China in the period ahead, which is also taken into account in the Riksbank's forecast. A clearer slowdown than expected in China would pose a risk to the global recovery.

can also be explained by a continued strong supply from the Middle East and the United States.

Yields on higher-risk bonds, such as corporate bonds, have been low for a long period. However, the gap between these yields and less high-risk yields has shown a slightly increasing trend over the last year and fluctuations have continued over the summer. Recent developments can partly be linked to companies within the oil industry being pressed by a lower oil price, but is primarily deemed to be due to increased uncertainty over the development of global interest rates and the Federal Reserve's future monetary policy.

The financial situation for banks and companies

Good funding conditions for banks and companies

The Swedish banks are continuing to have low funding costs, which is creating good conditions for lending to households and companies. The banks' credit ratings and financing costs indicate that the major Swedish banks are seen as issuers with a strong debt-servicing ability. The interest rate differential between the banks' funding in the form of covered bonds and risk-free interest rates has fallen since the start of July. However, the banks' deposit margins are continuing to decrease slightly since deposit rates have remained, in principle, unchanged at the same time as the repo rate has been cut. Despite this, the banks' net interest income has been relatively stable and earnings remain good, as the banks have increased their lending margins and continued to increase their lending (see Figure 2:6).

Swedish companies are expected to continue to have good funding opportunities. Yields on Swedish corporate bonds fell in conjunction with the monetary policy decision in July and have subsequently followed the development of the international credit market. The lending rate to companies, for new loan agreements, fell in the spring but rose slightly in July to 1.6 per cent. The rate of growth in the banks' lending to companies, which accounts for the largest component of the companies' indebtedness, has slowed down in recent months. This development is, to a certain degree, compensated by a higher growth rate in securities borrowing.

Rapidly rising housing prices

Households are continuing to be charged low interest rates and, in July, the average mortgage rate was unchanged at 1.6 per cent. At the same time, the banks' lending to

Figure 2:4. Development of the krona against the euro and the dollar



Source: Macrobond

SEK per EUR SEK per USD

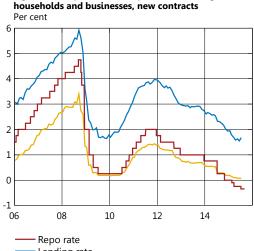
Figure 2:5. Stock market movements



Sweden (OMXS)Euro area (EuroStoxx)USA (S&P 500)Emerging markets (MSCI)

Sources: Macrobond and Thomson Reuters

Figure 2:6. Repo rate and deposit and lending rates to households and businesses, new contracts



Lending rateDeposit rate

Soures: Statistics Sweden and the Riksbank

households continued to be high and, in July, the growth rate increased to 7.1 per cent. This implies an increase of 1 percentage point since the start of the year, with more or less the entire rate of increase being due to mortgages. This development can largely be explained by the rapidly rising housing prices. Expressed in terms of the annual percentage change, prices for tenant-owned apartments rose by just over 18 per cent in July, while prices for detached houses rose by almost 14 per cent according to statistics from Valueguard. At the same time, households expect prices to continue to rise, according to SEB's housing price indicator, which remained on a high level in August.

CHAPTER 3 – The current economic situation

The assessment of the current economic situation and of recent developments forms the basis for forecasts of economic developments in the slightly longer term. Inflation is rising from a low level and indicators suggest it will continue to increase during the autumn, albeit at an uneven rate. All in all, confidence among companies and households is close to historically average levels and GDP growth is expected to be slightly stronger than normal in the second half of the year. Unemployment is falling, albeit slowly. The recovery abroad is expected to continue, benefiting Swedish exports.

Inflation

Rising inflation

Various measures of underlying inflation, including the annual rate of increase in the CPIF excluding energy, are continuing to rise, although at an uneven rate. Low energy prices have subdued CPI and CPIF inflation in recent years and are expected to do so until the turn of the year. Another explanation for why CPI inflation is still close to zero is that previous cuts in the repo rate have helped to reduce households' interest costs (see Figure 3:1). In July, the weak development of energy prices and falling interest costs contributed –0.5 and –0.8 percentage points respectively to CPI inflation. At the same time, the CPIF excluding energy increased by 1.5 per cent and, together with the CPI and CPIF, developed somewhat stronger than forecasted in the Monetary Policy Report in July.

Indicators point to higher inflation in the autumn

Since last autumn, different measures of underlying inflation have started to increase (see Figure 3:2). The upturn has been relatively broad, with ever-higher rates of price increases for goods, food and services alike (see Figure 3:3). However, so far, it seems that the upturn in the underlying measures can mainly be explained by rising prices for imported goods and services.

Several indicators point to inflation continuing to rise going forward. Producer prices for consumer goods are rising compared with the same period last year (see Figure 3:4). According to the Economic Tendency Survey, a greater-than-normal share of retail companies anticipates raising their prices in the coming months. Many companies also say that they have recently implemented price rises. Model forecasts can be used to summarise the information from different indicators. Figure 3:5 shows such a forecast for the CPIF excluding energy.⁸ Recent developments, including

Table 3:1. Outcome compared with previous forecast

| Expected development in July MPR | Actual development |
|---|---|
| Continued low inflation, CPIF inflation 0.7 per cent in July. | Slightly higher than expected, CPIF inflation 0.9 per cent in July. |
| GDP growth 2.8 per cent in second quarter. | Slightly stronger than expected, GDP growth 4.0 per cent in second quarter. |
| Unemployment is declining slowly. | Roughly as expected. |
| GDP growth in the euro area 1.5 per cent in second quarter. | Roughly as expected, 1.3 per cent in second quarter. |
| GDP growth in the United States 2.3 per cent in second quarter. | Roughly as expected, 2.5 per cent in second quarter. |

Note. Monetary Policy Report (MPR). CPIF and CPI with a fixed mortgage rate. The CPIF refers to the annual percentage change. GDP growth refers to the quarterly change in per cent, calculated as an annual rate.

Figure 3:1. CPI, CPIF and CPIF excluding energy

Annual percentage change

4
3
2
1
0
-1
-2
09 10 11 12 13 14 15

Note. The CPIF is the CPI with a fixed mortgage rate. Source: Statistics Sweden

CPIF excluding energy

CPIF

⁸ The model uses monthly data for producer prices, the exchange rate and commodity prices to generate forecasts for the CPIF excluding energy that, in addition to recent indicator information, also take into account the historical seasonal patterns for inflation.

rising producer prices and a slightly weaker krona exchange rate, have led the model to predict a rise in inflation during the autumn. The Riksbank's forecast for the CPIF excluding energy suggests a slightly weaker increase than the model forecast, primarily because price developments over the summer are deemed to include certain temporary effects, regarding for example prices for foreign travel, clothes and shoes. The prices of these particular products also vary greatly and contribute towards the rise in inflation in the second half of the year being expected to take place at an uneven rate.

Further impact of the depreciation in the krona to be expected

One likely reason behind retail companies' planned price increases in the autumn is that the Swedish krona has depreciated since 2014. This has brought about higher prices for imported goods and services, and thus higher costs for companies. When companies incur higher costs, they normally increase the prices of their products. However, cost increases since 2014 are not yet deemed to have had a full impact on companies' prices. This is partly due to the fact that companies don't normally adjust their prices continuously but instead do it once or twice a year in conjunction with the introduction of new models onto the market.

Even if the depreciation of the krona is deemed to be contributing to rising inflation, other factors are contributing to the expectation that the monthly change in the CPIF excluding energy will develop more or less in line with its average since 2000 over the coming months (see Figure 3:6).

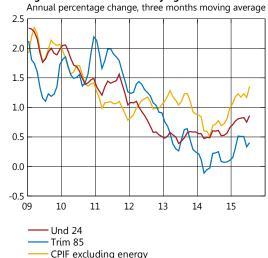
Weak development of fuel prices

The forecast for CPI and CPIF inflation in the second half of the year has been adjusted downwards compared with the last Monetary Policy Report. This is mainly due to the expectation of a weaker development in fuel prices, as the price of crude oil has dropped during the summer. The forecast for the CPIF excluding energy remains largely unchanged, however.

Stabilised inflation expectations

Actual inflation is important for how expectations of future inflation develop. This is particularly true regarding expectations in the shorter term. Similar to inflation, these have been low in recent years but have risen this year. Longterm inflation expectations have also been subdued and are

Figure 3:2. Measures of underlying inflation



Note. Und 24 and Trim 85 are statistical measures calculated on the basis of the CPI divided into approximately 70 subgroups. Und 24 is weighted and adjusted for the historical standard deviation. In Trim 85 the 7.5 per cent highest and the 7.5 lowest yearly price changes have been

Sources: Statistics Sweden and the Riksbank

Figure 3:3. Food, goods and service prices

Annual percentage change 3 0 -1 -2 -3 10 11 12 15 09 13 14 Food

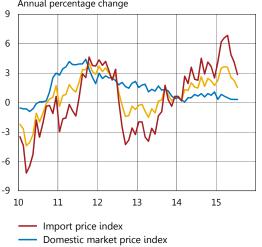
Note. The broken lines refer to the average for the period 2000 to the latest outcome. The line showing the average for food overlaps the line showing the average for services.

Sources: Statistics Sweden and the Riksbank

Goods

Services

Figure 3:4. Consumer goods prices in the producer sector Annual percentage change



Price index for domestic supply

Note. The price index for domestic supply is an aggregate of the import price and domestic market price indices

Source: Statistics Sweden

The model's point forecast for the CPIF excluding energy is reported with a 50 per cent and a 90 per cent uncertainty band.

lower than the inflation target. According to Prospera's August survey, inflation expectations one and two years ahead fell slightly among money market participants. Expectations five years ahead were unchanged, amounting to 1.8 per cent (see Figure 3:7). According to the National Institute of Economic Research's Business Tendency Survey for August, the one-year inflation expectations of households fell slightly to 1.8 per cent.

Global and Swedish economic activity

Mixed picture of global developments

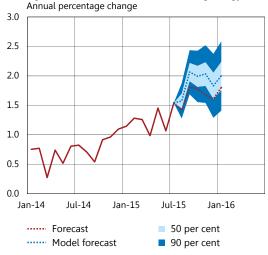
The recovery in the global economy is expected to continue and demand for Swedish exports is therefore expected to rise. The recovery is primarily being driven by developed countries. Economic activity in both the United States and the United Kingdom improved during the second quarter after temporary factors had subdued growth in the first quarter. The US labour market has continued to improve, household consumption is strong and confidence among households and companies is on a high level, all of which points to stable growth in the second half of 2015. This is in contrast with emerging markets such as Russia and Brazil, where weak development is expected to continue in the near term.

In the euro area, moderate growth is expected to continue at approximately the same rate as during the first half of the year. Households and companies have indeed become slightly less optimistic over the summer, but other indicators, such as retail trade sales and credit growth, have continued to improve.

Inflation has risen slightly in the second quarter for many of the developed economies among Sweden's most important trading partners. However, this increase is largely due to the oil price rising between January and April. Underlying inflation is still low in most countries and there are no clear signs that it has started to rise. The renewed fall in the oil price since May means that inflation will continue to be restrained by falling energy prices in the period ahead. On the other hand, inflation is high in many emerging markets and risks increasing further due to weaker exchange rates (see Chapter 2).

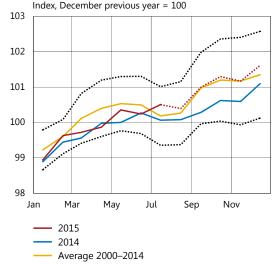
World trade has developed weakly since the start of the year, but recovered slightly in June (see Figure 3:8). The weak growth in trade is primarily due to developments in the emerging markets, but also, to a certain extent, on developments in more developed markets. At the beginning of the year, dock strikes in the United States and other

Figure 3:5. Model forecast CPIF excluding energy



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

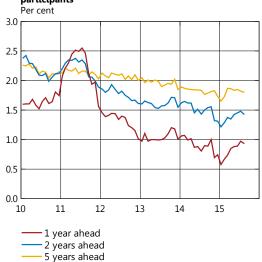
Figure 3:6. Monthly development in CPIF excluding energy



Note. Black dotted lines refers to 95 per cent confidence interval around the average.

Sources: Statistics Sweden and the Riksbank

Figure 3:7. Inflation expectations among money market participants



Source: TNS Sifo Prospera

temporary factors may have contributed to this development. Weak demand from China and Japan during the second six months has led to lower growth in exports, particularly for several Asian countries, but growth in trade is also being restrained by structural factors. For example, the United States has considerably cut down its imports of crude oil as its own production has increased.

The downturn in global trade growth is largely expected to be temporary. According to the National Institute of Economic Research's Business Tendency Survey, Swedish export orders improved in July and August, and the purchasing managers' index for the manufacturing industry indicates continuing growth in exports in the third quarter (see Figure 3:9).

Stable Swedish GDP development

According to the preliminary version of the National Accounts, Swedish GDP increased by 4 per cent in the second quarter of 2015 compared with the first quarter and calculated as an annual rate. Overall, growth in the second quarter was slightly stronger than the July forecast.

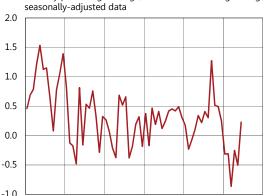
In July and August, confidence among companies was slightly higher than the historical average according to the National Institute of Economic Research's indicator for the business sector and the purchasing managers' index. The very weak growth in investments in the second quarter is therefore considered to be temporary and corporate investments are expected to grow more rapidly in the third quarter. Confidence among households increased in August and is close to the historical average (see Figure 3:10). Growth in the retail trade recovered slightly in July after a weak development in the preceding months. Consumption is expected to increase in line with the average historical rate of increase in the quarters ahead.

All in all, GDP is expected to grow by an average of almost 3 per cent in the third and fourth quarters, compared with the immediately preceding quarter and calculated as an annual rate. A slightly lower contribution to growth from foreign trade is contributing towards growth being slightly lower in the second half of 2015 than was forecasted in the Monetary Policy Report published in July.

Continuing downturn in unemployment

According to the labour force surveys (LFS), both the labour force and employment developed weakly in June and July. However, it is often difficult to interpret the labour market in the summer months when the statistics are particularly uncertain. The weak development of the labour force implied that unemployment decreased in July in seasonally-

Figure 3:8. Global goods trade volumeMonthly percentage change, three-month moving average,



Source: CPB Netherlands Bureau for Economic Policy Analysis

13

14

15

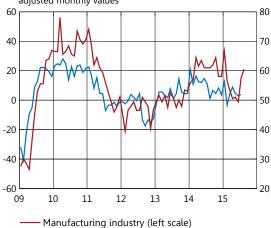
Figure 3:9. New export orders

12

11

10

Net figures and diffusion index respectively, seasonallyadjusted monthly values



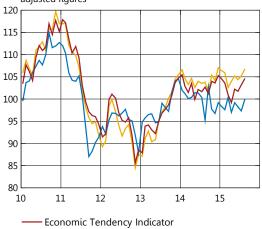
Note. Diffusion index above 50 indicates growth.

Sources: National Institute of Economic Research and Swedbank/Silf

· Purchasing managers' index (right scale)

Figure 3:10. Confidence indicators

 $In\bar{d}ex$, average = 100, standard deviation = 10, seasonally-adjusted figures



Consumer Confidence Indicator (CCI)
 Confidence Indicator, Total Business Sector

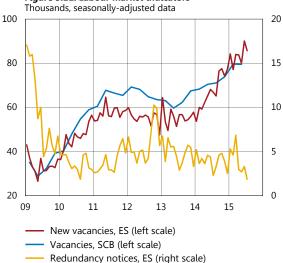
Source: National Institute of Economic Research

adjusted terms. At the same time, redundancy notices fell substantially in July and the number of new vacancies remains on a high level (see Figure 3:11). Other leading indicators of labour market trends, such as employment plans according to the Economic Tendency Survey for example, also suggest that employment will continue to grow in the immediate future (see Figure 3:12). Overall, employment is expected to grow by half a per cent in the second half of 2015 and unemployment will reach 7.4 per cent in the fourth quarter.

Resource utilisation lower than normal

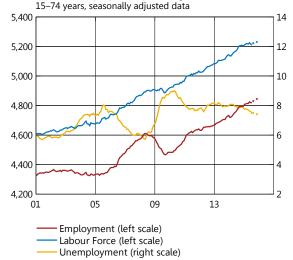
The Riksbank's RU indicator, which is a generic measure of a number of indicators of resource utilisation, has indeed continued to increase in 2015, although it is still slightly lower than a historical average (see Figure 3:13). Among other factors, the increase since mid-2013 is due to companies reporting that labour shortages are slightly greater than previously. Overall, resource utilisation in the Swedish economy is expected to increase slightly in the second half of 2015. The continuing increase in resource utilisation will contribute to the rise in inflation in the period ahead.

Figure 3:11. Labour market indicators



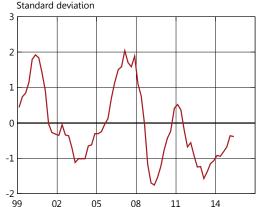
Note. Vacancies on quarterly frequency, others on monthly.
Sources: Employment Service (ES) and Statistics Sweden (SCB)

Figure 3:12. Employment, labour force and unemployment Thousands of people and percentage of labour force,



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

Figure 3:13. RU indicator



Note. The RU indicator is a measure of resource utilisation. It is normalised so that the mean value is 0 and the standard deviation is 1. Source: The Riksbank

CHAPTER 4 – The economic outlook and inflation prospects

After somewhat subdued growth in the first sixth months of the year, the global economy continues to strengthen and global inflation is rising, in line with the previous assessment. Great uncertainty continues to prevail regarding developments abroad but the focus has shifted from Greece to the emerging markets. Together with stronger international demand, the very low repo rate and the Riksbank's purchases of government bonds are contributing to the continuing strengthening of economic activity and rising inflation in Sweden. The situation on the labour market is continuing to improve, albeit at a slow rate. CPIF inflation is expected to be close to 2 per cent during 2016.

International outlook

The global economy continues to improve

Global production growth and world trade weakened in the second quarter of the year. The slowdown is, however, thought to depend mainly on temporary factors (see Chapter 3). GDP growth is rising in the majority of developed countries while it is still falling in several emerging markets. Going forward, the global economy will be boosted by a strong American economy and an increasingly stable recovery in the euro area. This recovery is benefiting from expansionary monetary policy, less strict fiscal policy, less stringent credit terms and a low oil price.

Since the last monetary policy report, the oil price has fallen (see Figure 4:1). Alongside increased supply from the United States and Middle East, the decline in prices is deemed to be due to lower demand for oil resulting from the ongoing readjustment of the Chinese economy. The lower oil price is expected to restrain oil-related investments at the same time as households gain increased scope for consumption and companies encounter lower costs. Inflation will also be lower due to lower energy prices.

Expansionary monetary policy supporting the recovery

In many developed countries, inflationary pressures are still low leading to many central banks around the world continuing to pursue an expansionary monetary policy. The KIX-weighted policy rate (which includes the policy rates in the euro area, Norway, United Kingdom and United States) is expected to remain on a low level in the years ahead.

Rising growth in developed countries, weaker in emerging markets

Developed countries are expected to continue to experience healthy growth over the next few years. In the United States, the trend on both the labour market and the housing market is still positive. The low oil price continues to boost GDP growth via lower petrol prices that, in turn, provide

Table 4:1.

Outcome compared with previous forecast

Following a temporary weakening, international growth and inflation are expected to rise.

Expansionary monetary policy will support the recovery

Domestic demand in Sweden will continue to grow strongly in the period ahead, driven by a strong household sector and housing investments.

Stronger international demand will benefit Swedish exports and broaden the improvement in Swedish economic activity.

The situation on the labour market continues to improve and employment is rising. High population growth means high growth in the labour force. Overall, this signifies a slow decline in unemployment.

Higher inflation abroad, the strengthening of economic activity in Sweden and a weak krona over the past 12 months are contributing to the continued rise in inflation. CPIF inflation is expected to be close to 2 per cent from the end of 2015.

Figure 4:1. Oil price and futures price



····· September July

Note. Brent oil, futures are calculated as a 15-day average. Outcomes represent monthly averages of spot prices.

Sources: Macrobond and the Riksbank

greater scope for consumption. GDP growth in the United States is expected to climb gradually before falling back to more normal levels in 2017. The recovery in the euro area continues, albeit from a low level and at a slow pace. Lower lending rates to households and companies, less strict fiscal policies, continued low oil price and the weaker euro are contributory causes. Overall, GDP growth in the euro area is expected to rise gradually to 2 per cent at the end of the forecast period (see Figure 4:2).

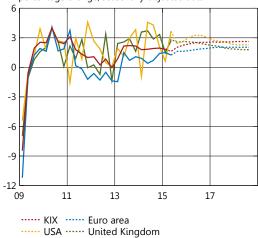
The trend for several emerging markets is more troublesome. Commodity-producing countries such as Russia and Brazil are being negatively affected by the low commodity prices. Russia is further burdened by EU and US sanctions, high interest rates and high inflation. GDP growth in Brazil is being further held back by tight fiscal policy. In China, weaker purchasing managers' indices for the industrial sector and major falls on the stock market have created unease about the strength of the economy (see Chapter 2). The forecast assumes that the falling stock exchanges will have relatively minor effects on GDP growth, which is expected to be just under 7 per cent this year and then fall back to around 6 per cent at the end of the forecast period. The slowdown in GDP growth is linked to China's ongoing readjustment from an export and investmentdriven economy to one driven more by domestic demand, in particular by household consumption. This readjustment is contributing towards the uncertainty surrounding economic developments going forward and a more serious slowdown than expected cannot be ruled out.

The state of the economy described in July remains largely unchanged

KIX-weighted GDP, which covers the countries of most importance to the Swedish economy, is expected to grow by 1.9 per cent this year and then gradually increase to 2.6 per cent in 2017. This is basically the same economic picture as given in the July forecast, even if the various countries' contributions to KIX-weighted GDP are slightly different.

The risk that Greece will suspend its payments or leave the monetary union has decreased, at least over the short term, since a new support programme has been introduced. But even if the most acute uncertainty has dissipated, Greece still faces major challenges going forward. The capital controls introduced when the second support programme expired are believed to have led to a deterioration of the economic situation. At the same time, there is political uncertainty since approval of the new support programme, with its demands for additional

Figure 4:2. Growth in various countries and regions Quarterly change in per cent, calculated as an annual percentage change, seasonally-adjusted data



Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.

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

New support package for Greece

After the referendum at the beginning of July, in which a majority voted no to the bailout conditions, the Greek Government applied for a new support programme via the European Stability Mechanism (ESM). Intensive negotiations led to an agreement of principle in mid-July and Greece received a temporary loan to cover its repayments to the IMF and ECB. In mid-August, an agreement on a new, third support programme was reached.

This new programme includes funding support of up to an additional EUR 86 billion spread over three years. According to the same principle as in previous support programmes, payments take place in stages and on condition that Greece implements agreed reforms.

The support programme includes demands for measures to ensure the long-term sustainability of public finances, including harmonisation of VAT rates, reforming the pension system and better fiscal discipline. In addition, reforms of the labour and commodity markets are to be implemented, aimed at promoting growth and competitiveness. Financial stability shall be ensured by recapitalising the Greek banks which are being weighed down by an increase in the proportion of impaired loans.

reforms, has divided the government. A new election has been called for mid-September. Nevertheless, as before, the chain of events in Greece is not expected to hamper the recovery in the euro area.

Global inflation on the rise

There has been a downturn in global inflation over the last 12 months. This trend was strengthened by the sharp fall in the oil price which began last summer. For some developed countries, this has occasionally led to negative inflation.

The underlying inflation rate is still low and so far the cost pressures from the labour market have remained weak in most developed countries. But as the economy and the situation on the labour market improves, salaries are expected to increase more rapidly. Rising demand is expected to give companies more scope to raise their prices.

The KIX-weighted inflation rate is expected to rise from 1.1 per cent this year to 2.4 per cent in 2017 (see Figure 4:3). This is a slightly lower increase for 2015 and 2016 than was assessed in July. This is primarily due to the lower oil prices, but is also due to the downward revision of the inflation forecast for Russia.

Sweden

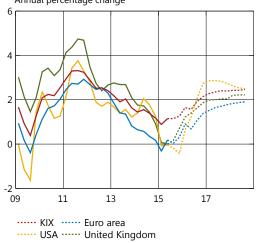
Improvement in economic activity with ever-greater foreign demand

Swedish exports make up just under half of Swedish GDP. Weak development in foreign demand in recent years has hence held back the recovery in the Swedish economy. Growth has instead been driven by a strong development in domestic demand and in particular from a strong household sector and increased housing investment.

The recovery on many Swedish export markets is expected to continue, even though the recovery in Europe is expected to be slow. As foreign industrial production accelerates, the demand for Swedish exports will also increase (see Figure 4:4). As Swedish-manufactured export goods largely include imported parts, the growth of imports will also increase. Imports are also benefiting from the rising domestic demand.

The financial conditions in Sweden are still very expansionary. Interest rates are low and it is easy to obtain credits, both for companies and for households. The growth rate in bank lending to households and businesses is continuing to rise (see Figure 4:5). A stable development in households' disposable income, a high initial saving ratio and greater wealth in the household sector are contributing

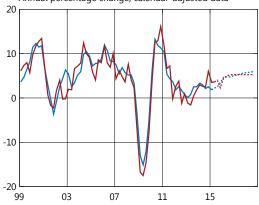
Figure 4:3. Inflation in various countries and regions Annual percentage change



Note. KIX is an aggregate of the countries that are important to Sweden's international transactions. When calculating KIX-weighted inflation, the HICP is used for the euro area and the CPI for other countries. Inflation for the euro area is shown measured using the HICP and for the United States and the United Kingdom measured using the CPI.

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

Figure 4:4. Exports and the Swedish export market Annual percentage change, calendar-adjusted data

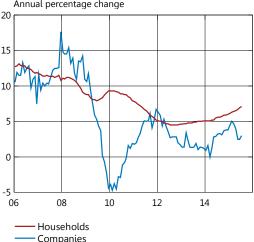


····· Swedish export ····· Swedish export market

Note. The Swedish export market index aims to measure import demand in the countries to which Sweden exports. This is calculated by aggregating 32 countries and covers around 85 per cent of the total Swedish export market.

Sources: Statistics Sweden and the Riksbank

Figure 4:5. Bank lending to households and companies Annual percentage change



Note. MFIs' lending to households and non-financial companies according to financial market statistics adjusted for reclassifications and traded loans since 2006.

Source: Statistics Sweden

to a rise in consumption in recent years that corresponds approximately to historically average growth (see Figure 4:6). The recovery in global industrial output also increases the need for investment in the business sector and thereby contributes to stronger investment growth. The number of new-build homes continues to be large and this is contributing to an increase in housing investment to almost 5 per cent of GDP during 2018. This is high in a historical perspective but not by international standards.

All in all, the stronger development of domestic and foreign demand means that Swedish GDP will grow slightly faster than the historical average in 2015 and 2016, when growth is expected to exceed 3 per cent (see Figure 4:7). Growth will be slightly restrained in 2017. The high growth during the second quarter will contribute towards development in 2015 being slightly stronger than forecast in July, while a slightly weaker demand will contribute towards a corresponding downward adjustment of growth in 2016. The sharp increase in the population expected over the coming years means that average GDP per capita will grow by just over 1.5 per cent per year in 2015–2017 (see Figure 4:8).

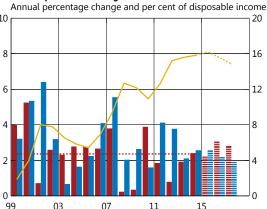
Higher housing prices are contributing to increasing household indebtedness

Higher housing prices entail a continued increase in household wealth, but as housing purchases are largely financed by loans, households' debts also increase. Both supply and demand factors contribute to a continuation of this trend during the forecast period. Household income is increasing and mortgage rates are expected to be low in the coming years, which underpins the demand for housing. At the same time, the supply of housing is still too low even though it is now rising rapidly. Housing prices are therefore expected to continue to rise albeit as a slightly slower pace than previously. This development will lead to an increase in the debt-to-income ratio (i.e. household debt as a proportion of disposable income) to about 190 per cent in 2018, which is a slightly higher level than in the July forecast (see Figure 1:12).

The labour market situation is improving

As the economy becomes stronger, the situation on the Swedish labour market will also improve. According to statistics from the Swedish Public Employment Service, many new job vacancies and few redundancies are a sign that more jobs are being created. The number of people in employment as a proportion of the population of 15–74 year-olds, the employment rate, has increased gradually

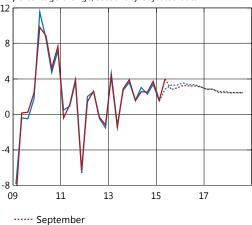
Figure 4:6. Households' real disposable incomes, consumption and savings ratio



- ----- Savings ratio (right scale)
- Consumption (left scale)
- Real disposable income (left scale)

Note. The savings ratio includes collective insurance schemes. Disposable income has been deflated using the household consumption deflator Broken line is the average of consumption between 1994 and 2014. Sources: Statistics Sweden and the Riksbank

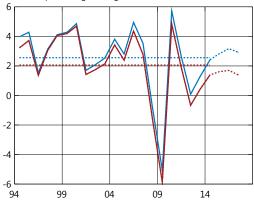
Figure 4:7. GDP Quarterly change in per cent, calculated as an annual percentage change, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

····· July

Figure 4:8. GDP and GDP per capita Annual percentage change



····· GDP per capita ····· GDP, calendar adjusted

Note. Broken lines refer to averages between 1994 and 2014. Sources: Statistics Sweden and the Riksbank

since 2010. At the same time, labour market participation has increased to the same extent and unemployment has therefore remained relatively stable around 8 per cent in recent years.

The population will grow rapidly over the next few years. At the same time, the proportion of the population belonging to groups with low labour force participation rates is increasing, which is restraining the growth of the labour force. The strong development of demand is leading to continued growth in employment at approximately the same rate as in recent years, resulting in a correspondingly gradual decrease in unemployment (see Figure 4:9). This demographic development also means that the employment rate (the number of people in employment) will only increase marginally in the coming years (see Figure 4:10).

It is the Riksbank's assessment that there is currently spare capacity on the Swedish labour market (see Figure 4:11). Employment may therefore continue to grow without companies having significant problems finding the right skills when recruiting. This development means that unemployment will reach 6.8 per cent in 2018. The anticipated weaker development of the labour force means that the forecast for unemployment is slightly lower than the assessment from July.

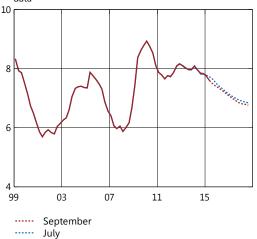
Higher resource utilisation contributing to rising cost pressures

According to the National Mediation Office, agreed wage increases for 2015 amount to 2.3 per cent. Next year, almost 500 wage agreements for around 3 million employees are to be renegotiated and it is the Riksbank's assessment that increasing high resource utilisation and rising inflation will contribute to a higher nominal rate of wage increase in the years to come (see the article "Conditions for the 2016 wage bargaining round"). As demand rises, companies are expected to increase their prices. As real wages are not expected to develop as strongly as productivity, this means that the profit share of the business sector will increase overall (see Figure 4:12).

Labour costs will grow faster in the period ahead, in line with wage development. Increased social security contributions for young people and higher payroll tax for older people are expected to lead to a particularly high rate of increase in 2016. The development of labour costs and productivity will entail an increase in unit labour costs in 2015 and further increases of nearly 2 per cent per year in 2016 and 2017 (see Figure 4:13). Cost pressures are thereby deemed to be largely the same as in the assessment made in July.

Figure 4:9. Unemployment

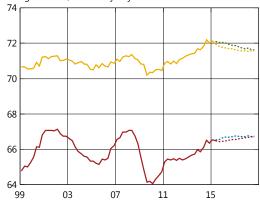
Per cent of the labour force, 15–74 years, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 4:10. Employment rate and labour force participation

Employment and labour force as percentage of the population, aged 15–74, seasonally-adjusted data



····· Employment rate, September

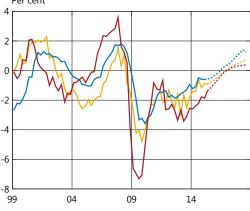
····· Employment rate, July

····· Labour force participation, September

---- Labour force participation, July

Sources: Statistics Sweden and the Riksbank

Figure 4:11. GDP gap, employment gap and hours gap Per cent



····· GDP gap ···· Employment gap ···· Hours gap

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

Sources: Statistics Sweden and the Riksbank

The development of the krona is important for inflation

The krona has depreciated since 2014 and this is judged to have contributed towards higher prices for imported goods and services and thereby also to the recent rise in inflation. Although the krona, in competitiveness-weighted terms, has varied substantially in recent months, it is, at present, close to the assessment made in July. The krona is expected to remain basically unchanged during the second half of 2015, followed by a slow appreciation in a situation where CPIF inflation is close to 2 per cent and economic activity is stronger (see Figure 4:14).

Increasing inflation in 2015 and 2016

Inflation in Sweden is rising from a low level. Several factors are interacting leading to the assessment that underlying inflation, measured as the rate of increase in the CPIF excluding energy, will continue to rise in the autumn and in 2016.

A stronger global economy will mean both higher international prices and a higher demand for Swedish goods and services. Together with gradually stronger domestic demand, this will make it easier for companies to raise their prices as resource utilisation and companies' costs increase.

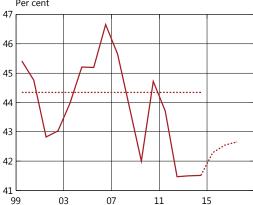
The weakening of the exchange rate over the last year has contributed to an increasingly rapid rise in the import prices of a number of consumer products. To a certain extent, the high import prices have already affected consumer prices, for example of food. However, the impact on inflation of other consumer products takes place following a certain delay. As the krona appreciates in the period ahead, the positive contribution of the exchange rate to inflation will diminish.

Inflation, measured as the CPIF excluding energy, is expected to rise over the autumn and next year before stabilising on a level close to 2 per cent. The forecast is thus unchanged compared with the assessment made in July (see Figure 1:5).

CPIF inflation close to 2 per cent in 2016

CPIF inflation has been subdued for a long time by falling energy prices and has, with the odd exception, been lower than the rate of increase in the CPIF excluding energy every month since the end of 2011. In the coming months, fuel prices are expected to fall again after having increased over the last six months. During the summer, the price of electricity has fallen to its lowest level in 15 years. As in the

Figure 4:12. Profit share in the business sector



Note. Broken horizontal line refer to the average between 1980 and 2014. Sources: Statistics Sweden and the Riksbank

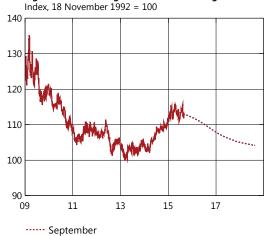
Figure 4:13. Cost pressures in the economy as a whole Annual percentage change



Unit labour costProductivityLabour cost per hour

Sources: Statistics Sweden and the Riksbank

Figure 4:14. KIX-weighted nominal exchange rate



Note. Outcomes are daily rates and forecasts refer to quarterly averages KIX is an aggregate of the countries that are important to Sweden's international transactions.

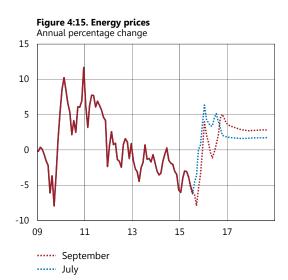
Source: The Riksbank

····· July

 $^{^9}$ The Riksbank's long-term forecast for the trade-weighted exchange rate is based on an assessment of the long-term level of the real exchange rate. At present, the real exchange rate is weaker than this level, which means that the exchange rate should strengthen in real terms in the years ahead. But it is uncertain how quickly this will happen.

previous forecast, the development of fuel and electricity prices is nevertheless expected to strengthen gradually during the autumn and, at the turn of the year, energy prices will make a positive contribution to inflation (see Figure 4:15). In contrast to the development in recent years, the CPIF will increase at approximately the same rate as the CPIF excluding energy during much of 2016 (see Figure 4:16).

All in all, this development means that CPIF inflation is expected to be close to 2 per cent in 2016. Compared with the assessment made in July, energy prices and household interest expenditure are expected to develop slightly less strongly, meaning that the forecast for inflation, measured in terms of the CPIF and CPI, has been adjusted downwards somewhat (see Figures 1:6 and 1:7).



Sources: Statistics Sweden and the Riksbank

Figure 4:16. CPI, CPIF and CPIF excluding energy
Annual percentage change

4
3
2
1
0
-1
-2
09
11
13
15
17

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

····· CPI ····· CPIF

····· CPIF excl. energy

Tables

The forecast in the previous Monetary Policy Report is shown in brackets unless otherwise stated.

Table 1. Repo rate forecast

Per cent, quarterly averages

| | 2015 Q2 | 2015 Q3 | 2015 Q4 | 2016 Q3 | 2017 Q3 | 2018 Q3 |
|-----------|---------|-------------|-------------|-------------|-----------|-----------|
| Repo rate | -0.3 | -0.3 (-0.4) | -0.4 (-0.4) | -0.3 (-0.3) | 0.3 (0.3) | 0.8 (0.8) |

Source: The Riksbank

Table 2. Inflation

Annual percentage change, annual average

| | 2014 | 2015 | 2016 | 2017 |
|-------------------|------|-----------|-----------|-----------|
| CPI | -0.2 | 0.0 (0.2) | 1.8 (2.0) | 2.8 (2.7) |
| CPIF | 0.5 | 0.9 (1.1) | 2.0 (2.1) | 2.2 (2.1) |
| CPIF excl. energy | 0.7 | 1.4 (1.4) | 2.0 (2.0) | 2.1 (2.1) |
| HICP | 0.2 | 0.8 (0.9) | 1.8 (2.0) | 2.1 (2.1) |

Note. The CPIF is the CPI with a 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

| | 2014 | 2015 | 2016 | 2017 |
|--|-------|---------------|---------------|---------------|
| Repo rate | 0.5 | -0.3 (-0.3) | -0.3 (-0.3) | 0.2 (0.2) |
| 10-year rate | 1.8 | 0.8 (0.9) | 1.5 (1.8) | 2.5 (2.7) |
| Exchange rate, KIX, 18 November 1992 = 100 | 106.7 | 113.0 (113.0) | 110.1 (110.1) | 106.3 (106.3) |
| General government net lending* | -1.9 | -1.4 (-1.4) | -0.8 (-0.7) | -0.4 (-0.4) |

^{*} Per cent of GDP

Sources: Statistics Sweden and the Riksbank

Table 4. International conditions

Annual percentage change, unless otherwise stated

| GDP | PPP-weights | KIX-weights | 2014 | 2015 | 2016 | 2017 |
|----------------------|-------------|-------------|------|-----------|-----------|-----------|
| Euro area | 0.14 | 0.46 | 0.9 | 1.3 (1.4) | 1.7 (1.8) | 2.0 (2.0) |
| USA | 0.16 | 0.09 | 2.4 | 2.5 (2.3) | 3.0 (3.0) | 2.8 (2.8) |
| Japan | 0.05 | 0.03 | -0.1 | 0.6 (0.8) | 0.7 (0.8) | 0.4 (0.4) |
| China | 0.15 | 0.08 | 7.5 | 6.6 (6.5) | 6.3 (6.6) | 6.1 (6.3) |
| KIX-weighted | 0.75 | 1.00 | 2.0 | 1.9 (1.9) | 2.3 (2.4) | 2.6 (2.6) |
| World (PPP-weighted) | 1.00 | _ | 3.4 | 3.2 (3.2) | 3.7 (3.8) | 3.8 (3.9) |

Note. Calendar-adjusted growth rates. The PPP-weights refer to the global purchasing-power adjusted GDP-weights, according to the IMF. The National Institute of Economic Research updates the weights for the KIX krona index at the start of every year with a time lag of three years. The figures in the table are based on the new KIX weights for 2012 that are used for 2015, and on an assumption that the weights will develop according to the trend of the past five years in the coming forecast years.

| СРІ | 2014 | 2015 | 2016 | 2017 |
|------------------|------|------------|-----------|-----------|
| Euro area (HICP) | 0.4 | 0.1 (0.3) | 1.0 (1.4) | 1.7 (1.7) |
| USA | 1.6 | -0.2 (0.2) | 1.7 (2.2) | 2.8 (2.6) |
| Japan | 2.7 | 0.9 (1.0) | 1.4 (1.5) | 2.1 (2.1) |
| KIX-weighted | 1.4 | 1.1 (1.3) | 1.8 (2.2) | 2.4 (2.4) |

| | 2014 | 2015 | 2016 | 2017 |
|---|------|-------------|-------------|-------------|
| Policy rates in the rest of the world, per cent | 0.2 | 0.1 (0.1) | 0.1 (0.1) | 0.4 (0.4) |
| Crude oil price, USD/barrel Brent | 99.6 | 54.4 (62.3) | 53.4 (68.4) | 58.6 (70.8) |
| Swedish export market | 2.7 | 2.5 (2.6) | 4.8 (5.0) | 5.3 (5.4) |

Note. Policy rates in the rest of the world refer to a weighted average of USA, the euro area, Norway and the United Kingdom. Sources: Eurostat, IMF, Intercontinental Exchange, national sources, OECD and the Riksbank

Table 5. GDP by expenditure

Annual percentage change, unless otherwise stated

| | 2014 | 2015 | 2016 | 2017 | |
|---------------------------------------|------|------------|-------------|-------------|--|
| Private consumption | 2.4 | 2.2 (2.5) | 3.0 (3.3) | 2.8 (2.8) | |
| Public consumption | 1.9 | 2.3 (2.0) | 2.8 (2.7) | 1.9 (1.9) | |
| Gross fixed capital formation | 7.4 | 4.3 (6.1) | 5.9 (6.3) | 4.5 (4.4) | |
| Inventory investment* | 0.2 | 0.0 (0.0) | 0.0 (0.0) | 0.0 (0.0) | |
| Exports | 3.3 | 3.8 (4.2) | 5.4 (5.7) | 4.9 (4.9) | |
| Imports | 6.6 | 2.9 (5.1) | 6.2 (6.5) | 5.8 (5.7) | |
| GDP | 2.3 | 3.1 (2.9) | 3.4 (3.6) | 2.6 (2.6) | |
| GDP, calendar-adjusted | 2.4 | 2.8 (2.6) | 3.2 (3.3) | 2.9 (2.9) | |
| Final figure for domestic demand* | 3.3 | 2.6 (3.1) | 3.5 (3.7) | 2.9 (2.9) | |
| Net exports* | -1.1 | 0.5 (-0.2) | -0.1 (-0.2) | -0.2 (-0.2) | |
| Current account (NA), per cent of GDP | 6.2 | 6.7 (6.2) | 6.2 (5.7) | 5.6 (5.2) | |

^{*}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

| | 2014 | 2015 | 2016 | 2017 |
|---|------|-----------|-----------|-----------|
| Population, aged 15–74 | 0.7 | 0.8 (0.9) | 1.1 (1.2) | 1.2 (1.2) |
| Potential hours worked | 0.7 | 0.7 (0.8) | 0.8 (0.8) | 0.8 (0.9) |
| GDP, calendar-adjusted | 2.4 | 2.8 (2.6) | 3.2 (3.3) | 2.9 (2.9) |
| Number of hours worked, calendar-adjusted | 1.8 | 1.0 (1.1) | 1.3 (1.5) | 1.3 (1.3) |
| Employed, aged 15–74 | 1.4 | 1.2 (1.4) | 1.2 (1.4) | 1.3 (1.2) |
| Labour force, aged 15–74 | 1.3 | 0.8 (1.1) | 0.8 (1.0) | 1.0 (0.9) |
| Unemployment, aged 15–74 * | 7.9 | 7.6 (7.7) | 7.2 (7.3) | 6.9 (7.0) |
| | | | | |

^{*} Per cent of the labour force

Note. Potential hours refer 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 labour costs for the economy as a whole

Annual percentage change, calendar-adjusted data unless otherwise stated

| | 2014 | 2015 | 2016 | 2017 |
|--------------------------|------|-----------|-----------|-----------|
| Hourly wage, NMO | 2.8 | 2.6 (2.6) | 3.2 (3.2) | 3.4 (3.4) |
| Hourly wage, NA | 1.8 | 3.0 (2.8) | 3.3 (3.3) | 3.6 (3.6) |
| Employers' contribution* | 0.1 | 0.3 (0.3) | 0.5 (0.5) | 0.0 (0.0) |
| Hourly labour cost, NA | 1.9 | 3.2 (3.2) | 3.8 (3.8) | 3.6 (3.6) |
| Productivity | 0.6 | 1.8 (1.5) | 1.8 (1.8) | 1.5 (1.6) |
| Unit labour cost | 1.3 | 1.4 (1.6) | 2.0 (2.0) | 2.0 (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, social-security 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

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