SVERIGES RIKSBANK

Monetary Policy Report

April 2019

Monetary Policy Report

The Riksbank's Monetary Policy Report is published six times a year. The report describes the deliberations made by the Riksbank when deciding what is an appropriate monetary policy.[1] The report includes a description of the future prospects for inflation and economic activity based on the monetary policy that the Riksbank currently considers to be well-balanced.

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

The Riksbank must submit a written report on monetary policy to the Riksdag (Swedish Parliament) Committee on Finance at least twice a year (see Chapter 6, Article 4 of the Sveriges Riksbank Act (1988:1385). During the spring, special material is submitted as a basis for the evaluation of monetary policy. During the autumn, the Monetary Policy Report is submitted as an account of monetary policy.

The Executive Board made a decision on the Monetary Policy Report on 24 April 2019. The report may be downloaded in PDF format from the Riksbank's website www.riksbank.se, where more information about the Riksbank can also be found.

[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 defined this as a 2 per cent annual increase in the consumer price index with a fixed interest rate (CPIF).
- At the same time as monetary policy is aimed at attaining the inflation target, it shall 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. The trade-off is normally a question of finding an appropriate balance between stabilising inflation around the inflation target and stabilising the real economy.
- There is no general answer to the question of how quickly the Riksbank aims to bring the inflation rate back to 2 per cent if it deviates from the target. A rapid return may in some situations have undesirable effects on production and employment, while a slow return may weaken confidence in the inflation target. The Riksbank's general ambition has been to adjust monetary policy so that inflation is expected to be fairly close to the target in two years' time.
- To illustrate the fact that inflation will not always be exactly 2 per cent each month, a variation band is used that spans 1 to 3 per cent, which captures around three quarters of the historical monthly outcomes of CPIF inflation. The Riksbank always strives for 2 per cent inflation, regardless of whether inflation is initially inside or outside the variation band.
- 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 unbalanced development of asset prices and indebtedness however, well-functioning regulation and effective supervision play a central role. Monetary policy only acts as a complement to these.
- In some situations, as in the financial crisis 2008–2009, the repo rate and the repo-rate path may need to be supplemented with other measures to promote financial stability and ensure that monetary policy is effective.
- The Riksbank endeavours to ensure that its communication is open, factual, comprehensible and up-to-date. This makes it easier for economic agents to make good economic decisions. It also makes it easier to evaluate monetary policy.

DECISION-MAKING PROCESS

The Executive Board of the Riksbank usually holds six monetary policy meetings per year at which it decides on monetary policy. A Monetary Policy Report is published in connection with these meetings. Approximately ten days 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 MONETARY 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 Executive Board 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

CHAPTER 1 – Monetary policy considerations

The good global economic activity continues but has now entered a phase with lower growth rates. The dampened growth abroad has been roughly in line with the Riksbank's forecast, although inflation has been unexpectedly weak, particularly in the euro area. There is still considerable uncertainty over international developments.

Activity in the Swedish economy is high and inflation is close to 2 per cent. Although inflation is expected to temporarily fall back this year, due to the assessment that energy prices will not increase as quickly as last year, the strong economic activity in Sweden and rising inflationary pressures abroad indicate that inflation will remain close to the target going forward. However, the outcomes in recent months imply that inflationary pressures are a little weaker than expected. Together with lower inflation abroad, this indicates that inflation will be somewhat lower in the coming years, compared with the previous forecast.

The Executive Board has therefore decided to hold the repo rate unchanged at −0.25 per cent. As the inflation prospects look somewhat weaker, the Executive Board assesses that the repo rate will remain at this level for a somewhat longer period of time than was forecast in February. The forecast for the repo rate is thus revised down and indicates that the next increase will occur towards the end of the year or at the beginning of next year. The increases in the repo rate after that are expected to occur at a somewhat slower pace, compared with the forecast made in February. The Executive Board has also decided that from July 2019 until December 2020 the Riksbank will purchase government bonds for a nominal value of SEK 45 billion, which corresponds to around half of the principal payments and coupons the Riksbank receives during this period. The expansionary monetary policy underlines the Riksbank's aim to safeguard the role of the inflation target as nominal anchor for price-setting and wage formation.

Weaker inflation prospects

Good global economic activity but unexpectedly subdued inflation

After a couple of years with high global GDP growth, economic activity in the world is in a phase of lower growth rates. Trade-weighted GDP growth is expected to be just over 2 per cent a year in the coming years, which corresponds to the historical average. Despite lower growth, the average level of resource utilisation abroad is expected to be roughly normal. Underlying inflation in several countries important to Sweden's trade has been weaker than expected recently, which indicates that inflationary pressures are lower than expected. However, unemployment has fallen over several years and the strong labour market is expected to continue contributing to increased cost pressures that will make underlying inflation rise gradually.

Although a milder tone in the trade conflict between the United States and China indicates a better cooperation climate, there is still uncertainty over the forms for the United Kingdom's withdrawal from the EU and also over the strength of the international economy, in particular the euro area.

Table 1:1.

Important factors for monetary policy
Good economic activity abroad but subdued inflation outlook, especially in euro area. Several central banks are now communicating more expansionary monetary policy than before.
Resource utilisation in the Swedish economy is still higher than normal, although growth is slowing down.
Inflation is close to 2 per cent, but the outlook is somewhat weaker. Inflation expectations are around 2 per cent.
Conclusion: The repo rate is held unchanged at −0.25 per cent. As the inflation outlook is somewhat weaker now, the forecast for the repo rate has been revised down. It now indicates that the next increase will occur towards the end of the year or the beginning of next year and that the increases after that will be made at a slower pace. The Executive Board has also decided that the Riksbank will continue purchasing government bonds, for a nominal amount of SEK 45 billion, with effect from July 2019 to December 2020.

Table 1:2.

Important forecast revisions since February MPR
Slightly weaker growth and inflation outlook in the euro area. Global policy rates are also expected to be somewhat lower in the coming years.
Inflation in Sweden has shown weaker development than expected for some time. The impact on consumer prices of the high demand, rising costs and earlier krona weakening has so far been less than expected. The forecast for inflation has therefore been revised down somewhat, despite a somewhat weaker krona and continued high resource utilisation in coming years.

Last autumn the developments on the financial markets were volatile as a result of uncertainty over developments in the real economy and the future monetary policy direction. Since the start of the year, however, several central banks have revised down their economic outlooks and inflation prospects and communicated a more expansionary monetary policy. These softer signals from the central banks have contributed to the financial conditions abroad becoming more expansionary. Equity prices have risen, differentials between interest rates on risky and safe assets have declined and yields on government bonds have continued to fall. Financial conditions in Sweden have to a large degree been affected by developments abroad, and remain expansionary, providing support to economic development.

Growth rate slowing down in strong Swedish economy

Swedish GDP increased faster than expected during the fourth quarter of last year, which was partly a temporary effect following a very weak third quarter. Confidence indicators have softened and the economy is now expected to enter a period of lower growth (see Figure 1:2). Slower global growth has led to the rate of increase in demand on Swedish export markets slowing down somewhat, and this development is expected to continue over the coming years. Domestic demand is also expected to become more moderate, primarily due to the downturn in housing investment.

The demand for labour remains high. The situation on the labour market has been improving for several years, with a rising employment rate and falling unemployment. In many groups in the population, the employment rate is now very high from a historical perspective. It has therefore become more difficult for companies to recruit the right personnel. This, together with lower growth, contributes to the forecast that unemployment will rise somewhat. Overall, resource utilisation on the labour market, and in the economy as a whole, is expected to be higher than normal. This is also expected to apply during the coming years, although resource utilisation will fall back somewhat.

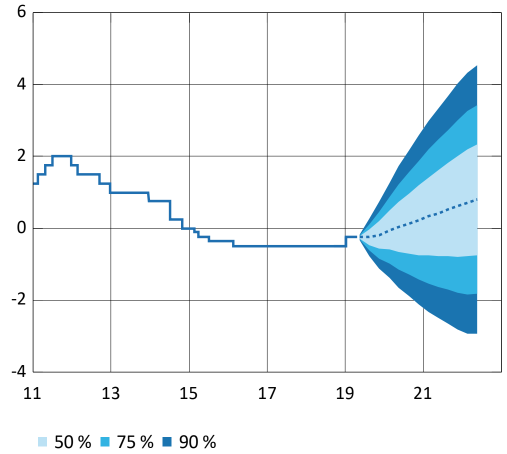
Inflation will fall this year

Inflation has been close to the Riksbank's inflation target of 2 per cent since the start of 2017 (see Figure 1:3). Rapidly rising energy prices are one important explanatory factor, particularly last year when inflation was above 2 per cent for a time (see Figure 1:4). During 2019, the rate of increase in energy prices is expected to be lower, which will contribute to a fall in inflation, with a lowest point of almost 1.5 per cent this autumn.

However, several factors point to the downturn in inflation being temporary, including the earlier krona depreciation, rising food prices and larger rent increases than in recent years. Moreover, economic activity is strong and resource utilisation is expected to remain high in the coming years, at the same time as inflationary pressures around the world are rising. This indicates that inflation will be close to the target going forward.

Figure 1:1. Repo rate with uncertainty bands

Per cent

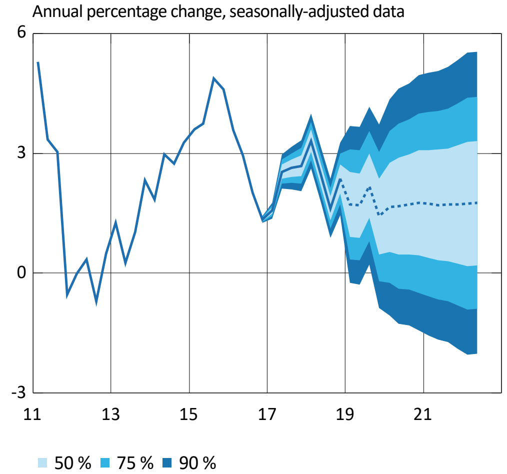


Note. The uncertainty bands for the repo rate are based on the Riksbank's historical forecasting errors and the ability of risk-premium adjusted forward rates to forecast the future repo rate for the period 1999 up to the point when the Riksbank started to publish forecasts for the repo rate during 2007. 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.

Source: The Riksbank

Figure 1:2. GDP with uncertainty bands

Annual percentage change, seasonally-adjusted data

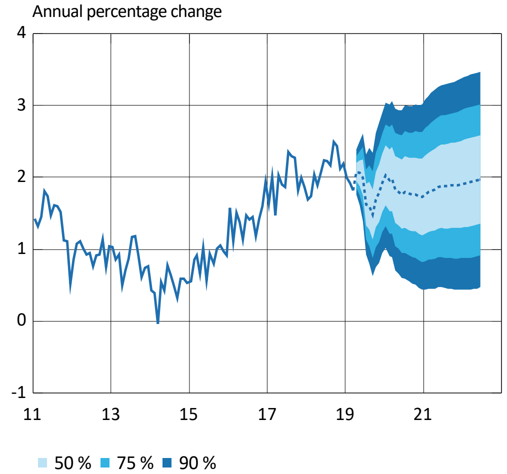


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. The reported outcomes for GDP are also uncertain, as the National Accounts figures are revised several years after the first publication.

Sources: Statistics Sweden and the Riksbank

Figure 1:3. CPIF with uncertainty bands

Annual percentage change



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

Sources: Statistics Sweden and the Riksbank

Current monetary policy

It has taken substantial monetary policy stimulus to bring inflation back on target. The Riksbank's monetary policy has had a clear impact on short- and long-term market rates and on the krona exchange rate.[2] Monetary policy has contributed to inflation and inflation expectations being close to 2 per cent for the past two years or more and contributed to the strong economic activity and labour market. The need for a very expansionary monetary policy has declined somewhat and after a long period with a policy rate of −0.50 per cent, the Riksbank raised the repo rate to −0.25 per cent in December 2018 (see Figure 1:5). The impact of the increase on the interest rates paid by households and companies has been roughly as expected.

Somewhat weaker inflation outlook

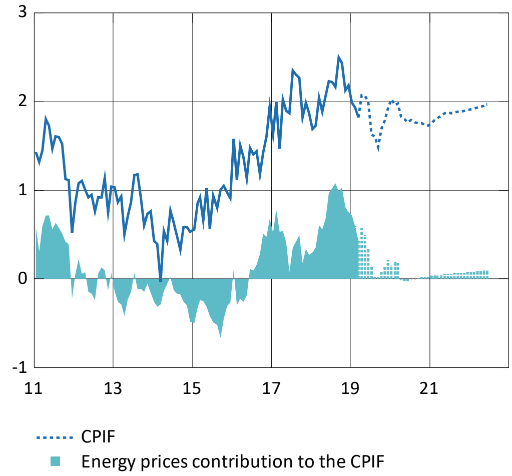
The good economic activity is continuing, even though developments both in Sweden and abroad are in a phase of lower growth than before. The slowdown in growth abroad has been roughly in line with the Riksbank's earlier forecast. At the same time, inflation has been weaker than expected, particularly in the euro area, which has led to a downward revision in the forecast for inflation. The European Central Bank (ECB) now assesses that it will take longer for inflation in the euro area to approach the inflation target and it also communicated more expansionary monetary policy when publishing its most recent decisions. Even the US Federal Reserve has communicated that it intends to conduct a less tight monetary policy in the coming years than it had previously signalled. Market participants' expectations of international policy rates have thus been adjusted downwards.

Since the February Monetary Policy Report was published activity in the Swedish economy has remained high. GDP growth was faster than expected in the fourth quarter of last year and resource utilisation is assessed to be higher than normal. The fact that demand has been high for several years has generated strong development on the labour market with an employment rate that is historically high. The economic prospects still look good and with regard to Sweden have not changed to any great extent since the assessment in February.

Inflation has been rising since 2014 and for the past two years or so has been close to the inflation target. The outcomes since the February Monetary Policy Report have still been close to 2 per cent, but as in the previous assessment, inflation is expected to fall back this year. Various measures of the underlying, more lasting component of the measured rate of inflation have risen and the median of these measures is now at 2 per cent (see Figure 1:6). However, the outcomes for inflation have been lower than expected in recent months. The unexpectedly low outcomes for inflation are partly due to

[2] For an analysis of the effects on mortgage rates, see Erikson, H. and Vestin, D., "Pass-through at mildly negative policy rates: The Swedish case", Staff Memo, January 2019, Sveriges Riksbank.

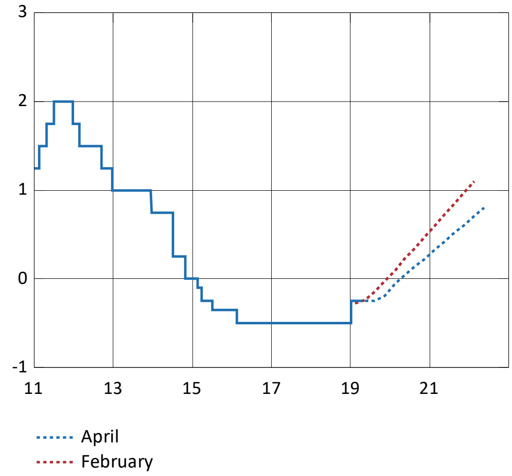
Figure 1:4. CPIF and contribution from energy prices
Annual percentage change and percentage points, respectively



Note. The contribution of energy prices to the CPIF in the forecast is calculated as the annual percentage change in energy prices multiplied by their current weight in the CPIF.

Sources: Statistics Sweden and the Riksbank

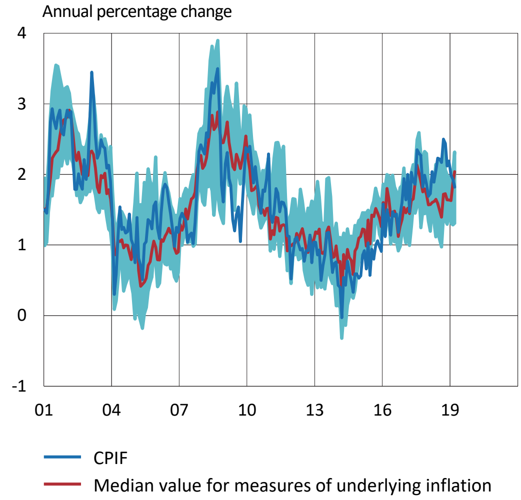
Figure 1:5. Repo rate
Per cent



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

Source: The Riksbank

Figure 1:6. CPIF and different measures of underlying inflation
Annual percentage change



Note. The field shows the highest and lowest outcomes among different measures of underlying inflation. The measures included are CPIF excluding energy, UND24, Trim85, CPIF excluding energy and unprocessed food, persistence-weighed inflation (CPIFPV), factors from principal component analysis (CPIFPC) and weighted median inflation (Trim1).

Sources: Statistics Sweden and the Riksbank

temporary factors, but are also assessed to be because the impact from the strong economic activity, rising costs and weaker krona has been somewhat less than anticipated.

Together with lower inflation abroad, this indicates that inflation will be somewhat lower in the coming years, compared with the previous forecast (see Figure 1:7).

Rate increases at a somewhat slower pace

Inflation has been close to the target for a couple of years now and inflation expectations have also been close to 2 per cent (see Figures 1:7 and 1:8). Target attainment has thus been good. But monetary policy needs to be constantly forward-looking and is formulated on the basis of the economic outlook and inflation prospects. The recent developments now indicate that inflation will in the future be somewhat lower than was assessed in February (see Figure 1:7).

Unexpectedly low inflation both in Sweden and abroad, low interest rates abroad and uncertainty over global developments emphasise that there is a need to proceed with caution in monetary policy. The Executive Board has therefore decided to hold the repo rate unchanged at −0.25 per cent and assesses that it will remain at this level for a somewhat longer period of time than was forecast in February. The forecast for the repo rate has thus been revised down and indicates that the next increase in the repo rate will be towards the end of the year or at the beginning of next year (see Figure 1:5). The increases in the repo rate after that are expected to occur at a somewhat slower pace, compared with the forecast made in February.

The real interest rate is expected to be negative throughout the forecast period, and towards the end of the period to be somewhat lower than in the previous forecast (see Figure 1:9).

The fact that the inflation forecast is lower could justify an even more expansionary monetary policy. But monetary policy is already very expansionary and there is a high level of activity in the Swedish economy. After a period of good target attainment and inflation expectations at 2 per cent, monetary policy can be conducted with greater patience. As global price developments are moderate, it would probably require a much more expansionary monetary policy in Sweden to quickly return inflation to the target. At present, it is the consensus opinion of the Executive Board that this is not necessary or appropriate.

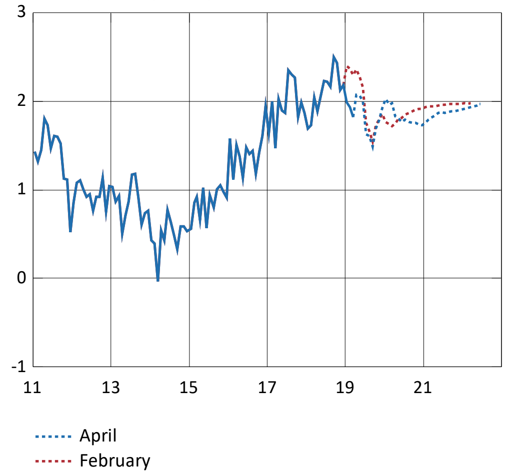
The Riksbank will continue to purchase government bonds

The repo rate is the primary tool for monetary policy. But as a complementary monetary policy measure the Riksbank has also purchased a large volume of nominal and real Swedish government bonds since 2015. These net purchases were concluded in December 2017, but principal payments and coupons have been reinvested since then. At the end of March, the holdings amounted to SEK 316 billion.

To retain an appropriate level of bond holdings and the Riksbank's presence on the market, the Executive Board has decided that from July 2019 to December 2020 the Riksbank will

Figure 1:7. CPIF

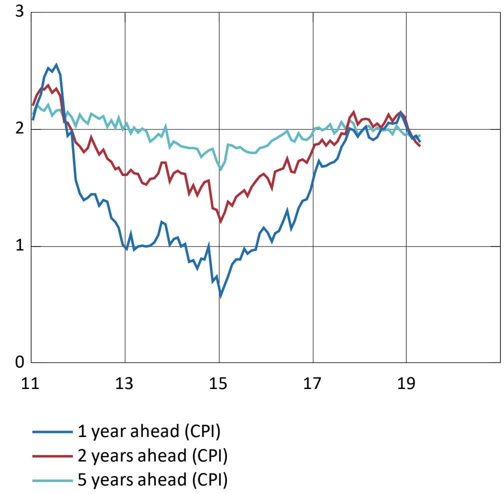
Annual percentage change



Sources: Statistics Sweden and the Riksbank

Figure 1:8. Inflation expectations among money market participants

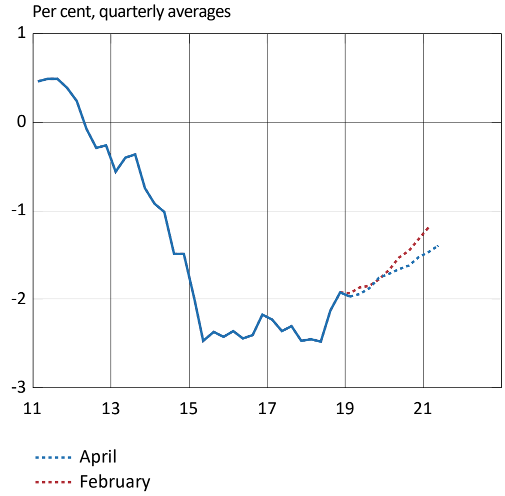
Per cent, mean value



Source: Kantar Sifo Prospera

Figure 1:9. Real repo rate

Per cent, quarterly averages



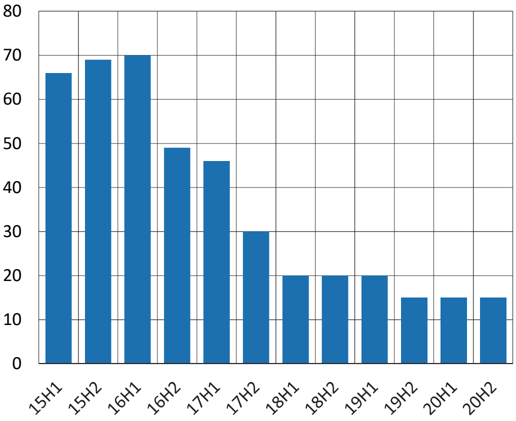
Note. The real repo rate is the Riksbank's expected real interest rate, calculated as a mean value of the Riksbank's repo rate forecast for the year ahead minus the inflation forecast (CPIF) for the corresponding period. Outcomes are based on the latest forecasts at that time.

Source: The Riksbank

purchase government bonds for a nominal amount of SEK 45 billion (see Figure 1:10). This corresponds to around half of the principal payments and coupons the Riksbank will receive during this period. The decision means that the Riksbank maintains holdings close to the average level since the beginning of 2018, after the net purchases were concluded (see Figure 1:11). That the Riksbank is continuing to purchase government bonds to maintain the level of its holdings is in line with the strategy for gradually normalising monetary policy that was communicated earlier.[3]

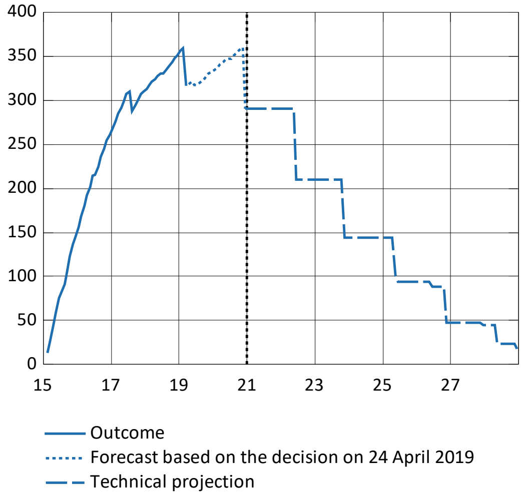
The Executive Board will determine in good time whether or not it is appropriate to continue purchasing government bonds after December 2020. In the long run, the holdings are expected to be smaller than they are today, but their exact size will depend on several factors that are currently difficult to assess. The Riksbank intends to constantly adapt the details regarding the normalisation of monetary policy with consideration to how the economy develops.

Figure 1:10. The Riksbank's purchases of government bonds
Nominal amounts, SEK billion



Source: The Riksbank

Figure 1:11. The Riksbank's holdings of government bonds
Nominal amounts, SEK billion



Note. Forecast up until December 2020, after that a technical projection with the assumption that no further purchases are made. The vertical line marks the shift between the forecast and technical projection.

Source: The Riksbank

Uncertainty and risks

Forecasts of future economic developments are always uncertain, which is illustrated by the uncertainty band in Figures 1:1–1:3. In the Riksbank's forecasts, the risks of both stronger and weaker development shall, in principle, be balanced. It is difficult, however, to assess the likelihood of future events and the consequences they might have should they occur. Neither is it obvious how monetary policy should relate to uncertainty and risks. There are occasions on which monetary policy deliberations may wish to pay particular attention to certain risks, the consequences of which may have a severe impact on economic development. But, on other occasions, it may be necessary to await more information before adjusting monetary policy.

Several uncertainty factors regarding economic developments abroad and in Sweden

As Sweden is a small open economy, developments abroad have substantial significance. In addition to the general economic assessment, it is important to consider different international risks. The three factors that have dominated the risk outlook for some time now are the effects of the United Kingdom's withdrawal from the EU, the trade conflict between the United States and China and developments in Italy.

At an extraordinary meeting on 10 April, the European Council decided to extend the time limit for the United Kingdom to approve the agreement on withdrawal from the EU until 31 October. There will be an evaluation at the next meeting of the European Council in June. There is still a risk that the United Kingdom will leave the EU without an agreement, but this is deemed to be small. However, the uncertainty over how a future agreement will look means continued uncertainty for

[3] See the article "The Riksbank's strategy for a gradual normalisation of monetary policy" in the December 2017 Monetary Policy Report.

households, companies and financial institutions (see the box "The United Kingdom's withdrawal from the EU is being postponed" in Chapter 4).

With regard to the trade conflict between the United States and China, the short-term risks have declined somewhat recently as the negotiation climate has improved and the US has chosen to postpone increases on tariffs for Chinese imports. But as before there are fears that the conflict may cover more countries and regions. The most recent developments have focused on the relationship between the EU and the United States, where there is still a risk of increased trade barriers, given the communication regarding possible new tariffs from the United States and countermeasures from the EU. Economic developments in Italy also comprise a risk to economic activity in Europe. Although the European Commission's approval of the Italian budget provided some breathing space in the short term, considerable challenges still remain regarding both public finances and the banking sector.

All of these uncertainty factors have probably had a negative impact on growth in the euro area, which has been subdued over the past year. Part of the fall during the second half of 2018 is judged to be of a temporary nature, but there is a risk that it reflects a more lasting weakness, and that growth in the euro area will be lower than the Riksbank has forecast.

In Sweden, developments on the housing market still comprise a substantial risk. After falling sharply in the autumn of 2017, housing prices have recovered somewhat over the past year (see Figure 1:12). According to the Riksbank's forecast, prices will continue to rise weakly, and the fall in housing investment is expected to come to a halt in the coming years. However, the future development of housing prices is very uncertain. One cannot rule out the possibility that prices on the housing market will be weaker than the Riksbank has forecast. This could mean that not only housing investments, but also household consumption are weaker than expected.

Uncertainty surrounding the inflation forecast

The risks that remain with regard to growth prospects could also lead to inflation proving different from the Riksbank's forecast.

Another source of uncertainty regarding inflation is the krona exchange rate. The krona could be either stronger or weaker than forecast by the Riksbank. An important factor in this context is the difficulties in estimating the impact of the exchange rate on inflation. The way that the krona ultimately affects consumer prices is determined by a number of factors, which makes the relationship between the exchange rate and inflation more complicated.[4] An illustration of this is that inflation has recently been surprisingly low, despite the krona being much weaker on the whole than the Riksbank's forecasts last year.

A further uncertainty factor concerns the development of domestic cost pressures. Despite strong economic developments,

[4] See the article "The significance of the krona for inflation" in the Account of monetary policy 2018, Sveriges Riksbank.

Side-effects of monetary policy

The Riksbank continuously analyses the effects on the economy of the negative repo rate and the extensive bond purchases.

Low interest rates can create incentives for too much risk-taking in the economy. Assets may become overvalued, risk may be incorrectly priced and the indebtedness of various agents may increase in an unsustainable manner. The increase in Swedish household indebtedness has long been a cause for concern. Among other factors, the increase is due to structural problems on the housing market and the falling trend for real interest rates in Sweden and abroad, while the expansionary monetary policy has also contributed. Several years of rapidly rising housing prices and heavily increased indebtedness have made households sensitive to both price falls on the housing market and rising interest costs. It is therefore important to increase households' resilience in different ways and to limit the risks of their high indebtedness.

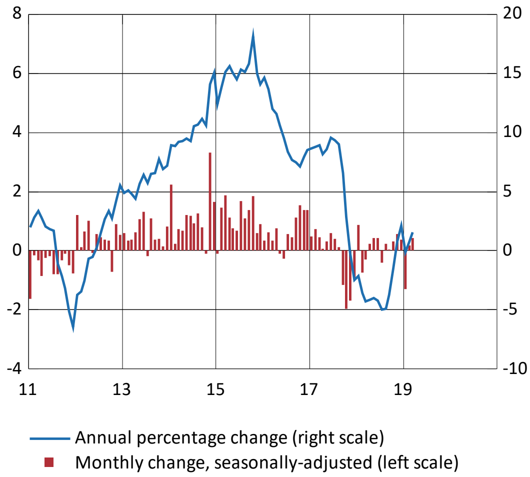
The functioning of the financial markets may be affected by a negative repo rate and government bond purchases. So far, the markets have been able to manage negative interest rates relatively smoothly. The Riksbank's purchases of government bonds have meant that a relatively large proportion of the stock is not available for trade on the market. According to the Financial Market Survey published by the Riksbank in December, about two-thirds of respondents considered that the government bond market is functioning poorly but other markets where participants can manage interest rate risk were considered to be working well. According to the survey published by the Swedish National Debt Office in February, respondents think that market liquidity in nominal government bonds has improved somewhat over the past year.

The negative interest rates have not led to a greater demand for cash. The value of outstanding banknotes and coins is much lower now than when the repo rate first became negative. It is still only a small portion of borrowing that takes place at negative interest rates and then only from certain larger companies and parts of the public sector. The Swedish banks' profits have been high and stable in recent years and although there are differences between the banks, profitability is on the whole good. The banks' results and lending capacity have not been significantly affected by low and negative interest rates and the potential side-effects of negative interest rates should be less now that the repo rate increases have begun.

The Riksbank's overall assessment is that the side-effects of a negative policy rate and government bond purchases have so far been manageable.

Figure 1:12. House prices according to HOX Sweden

Per cent

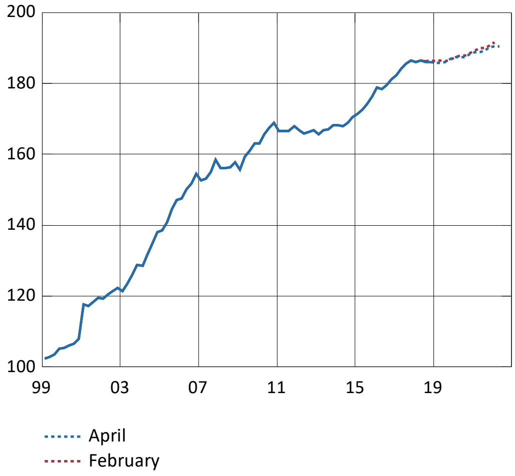


Sources: Valueguard and the Riksbank

wage increases in Sweden have remained low.[5] The low rate of increase in wages stems partly from the weak development in productivity, which has caused unit labour costs to rise at quite a rapid pace historically speaking over the past few years.[6] However, productivity varies substantially and is difficult to forecast. The uncertainty surrounding both wages and productivity contributes to making it difficult to assess future domestic cost pressures.

All in all, there are thus a number of factors that could lead to both lower and higher inflation than is now being assumed, and the Riksbank is prepared to adapt monetary policy if inflation prospects were to change. The risks of lower inflation are still assessed to deserve greater attention.

Figure 1:13. Household debt ratio
Per cent of yearly disposable income



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

Sources: Statistics Sweden and the Riksbank

Risks linked to household indebtedness must be managed

Household debt as a percentage of disposable income is expected to continue increasing in the coming years (see Figure 1:13). The most highly indebted households are sensitive to several types of changed economic conditions, such as rising interest rates, falling housing prices and rising unemployment. Finansinspektionen's amortisation requirements, which aim to limit the number of households with high debt in relation to the value of their home and to their incomes, are an example of measure to reduce the risks linked to household indebtedness. An evaluation made by Finansinspektionen indicates that the requirements have largely had the intended effect.[7] However, the evaluation also shows that as the requirements only cover new mortgage applicants, the amortisation rate for the entire mortgage stock has not been affected very much. It has increased from around 1.5 per cent a year in 2013 to around 1.8 per cent a year in 2018.

The fact that household debt has for a long time been increasing at a much faster pace than household disposable income is partly due to the Swedish housing market having a number of serious structural problems. Addressing these problems requires, above all, measures within housing and tax policy. Examples of feasible measures include reviewing the regulations regarding the new production of housing, as well as the rent-setting system, the taxation of capital gains from housing property sales and also property tax and tax relief on interest expenditure.

[5] See the article "The Phillips curve and monetary policy" in Monetary Policy Report, July 2018.
[6] See also the article "Development of Swedish labour costs and profits in an international perspective" in the Monetary Policy Report, February 2019.
[7] New mortgage borrowers have bought cheaper housing and borrowed less, compared with what they would have done if the requirements had not been introduced. See Finansinspektionen, "The Swedish Mortgage Market", 2019.

CHAPTER 2 – Financial conditions

In the fourth quarter of last year, market participants' expectations of poorer macroeconomic developments and questions about the direction of future monetary policy in several large economies contributed to lower equity prices, lower yields on safe assets and higher yield differentials between risky and safe assets. Since the beginning of 2019, equity prices have risen, yield differentials have decreased and government bond yields have continued to fall as central banks have communicated more expansionary monetary policies than before. Financial conditions abroad have therefore become gradually more expansionary since the turn of the year. In December last year, the Riksbank raised the repo rate from −0.50 to −0.25 per cent. Market rates and lending rates to companies have increased roughly the same as the repo rate while lending rates to households have risen slightly less than the repo rate. The krona is weaker than the forecast in February and interest rates offered to companies and households are low, at the same time as there is good access to credit. The financial conditions in Sweden therefore remain expansionary and are providing support to economic development.

International developments

More expansionary financial conditions abroad

There have been major fluctuations on the financial markets over the past six months. In the fourth quarter of last year, equity prices fell significantly, risk premiums defined as yield differentials between risky and safe assets increased and government bond yields decreased. The most important reason for this was indications of poorer macroeconomic prospects. At the same time, there was uncertainty about the seriousness of the economic slowdown and about how monetary policy would react to the poorer financial and macroeconomic conditions. Since the start of the year, several central banks have revised down their growth and inflation forecasts and communicated a more expansionary monetary policy. This has contributed to a rise in equity prices and a decline in risk premiums while government bond yields have continued to fall.

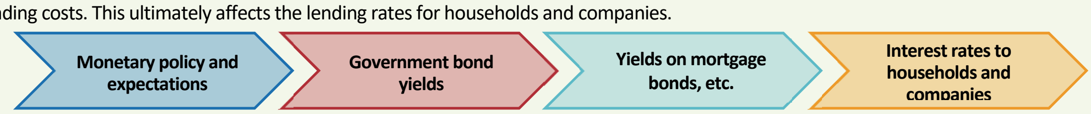
But despite the expectation of continued expansionary monetary policy for a long time to come, uncertainty about real economic development continues to influence financial markets. Even if volatility on the markets is not remarkably high in a historical perspective, there is a tendency for substantial movements on financial markets in connection with unexpectedly weak outcomes for macroeconomic variables.

Table 2:1.

Developments on the financial markets since the Monetary Policy Report was published in February
Expectations of market participants regarding the level of future policy rates have fallen slightly in United States, the Euro area and Sweden but increased slightly in United Kingdom.
Government bond yields have fallen slightly in United States, the Euro area and Sweden but increased slightly in United Kingdom.
The krona exchange rate is weaker than the forecast in February.
Share indices have risen both in Sweden and abroad.
Lending rates to households and companies have increased since the repo rate rise in December.
Growth in bank lending to households has slowed somewhat while lending to non-financial corporations continues to grow at approximately the same rate as in recent years.

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 longer-term government bond yields, which are also influenced by foreign yields. Government bond yields act as an anchor for other types of bond yields, which in turn affect banks' funding costs. This ultimately affects the lending rates for households and companies.



Overall, the financial conditions abroad are more expansionary than they were in February.

Central banks signalling more expansionary monetary policy

In connection with its monetary policy meeting in March, the ECB revised down its forecasts for growth and inflation. The ECB deemed that the previously observed signs of economic weakness were more persistent than expected and that these factors would contribute to lower growth going forward. In addition, the ECB pointed out that it will take longer for inflation to reach the target. The ECB left its policy rates unchanged and communicated that they would remain at their present levels at least through the end of 2019. Previously, the ECB had signalled that the policy rates would remain at their current levels at least through the summer this year. Reinvestments of maturing bonds are expected to continue for an extended period of time past after the date when the policy rate has been increased or as long as necessary to maintain an expansionary monetary policy. At the meeting, the third series of targeted longer-term refinancing operations, TLTRO III, starting in September, was also launched. The monetary policy direction communicated by the ECB in conjunction with the monetary policy meeting in March was also maintained in April. Market pricing indicates that the policy rate expectations of market participants have been revised down since February and that a first rise is not expected until 2021 (see Figure 2:1).

The Federal Reserve also revised down its forecasts for growth and inflation at its monetary policy meeting in March. The Federal Reserve also noted that even if the labour market is still strong, growth has slowed and both inflation and inflation expectations have fallen. The interval for the policy rate was held unchanged at 2.25–2.50 per cent. The median forecasts for the policy rate among members of the Federal monetary policy committee (FOMC) was adjusted downwards and now signals an unchanged policy rate this year and only one increase next year. At the meeting, the Fed also communicated its long-term strategy regarding the size and composition of its balance sheet. The tapering of government bond holdings concludes at the end of September this year, and the long-term intention is for the asset portfolio to primarily consist of government bonds. Market expectations of the future policy rate have shifted down slightly since February. Market participants see it as more probable that the next change in the policy rate will be a cut rather than an increase (see Figure 2:1).

In the United Kingdom, the Bank of England has announced that its monetary policy stance will be greatly affected by the country's withdrawal from the EU and the consequences this will have for the UK economy. According to market pricing, the Bank of England is expected to hold the policy rate unchanged over the coming two years (see Figure 2:1).

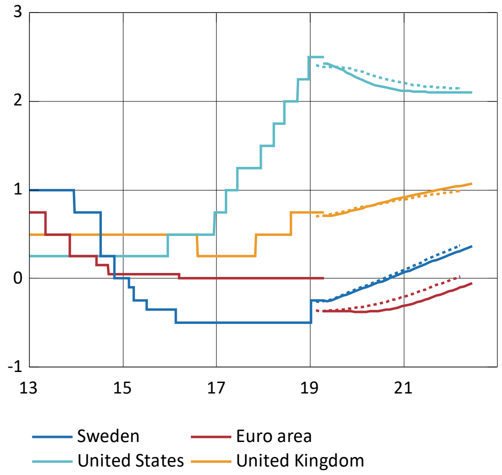
The ECB's Targeted longer-term refinancing operations.

The ECB's Targeted longer-term refinancing operations (TLTRO) are targeted refinancing transactions or loans to credit institutions with maturities longer than one year. They are one of the ECB's extraordinary monetary policy measures. The loans aim to maintain favourable bank lending terms and safeguard the transmission of monetary policy. The first TLTRO transactions were launched in 2014 and were eight in total. The second series of loans, called TLTRO II, were issued on four occasions between March 2016 and March 2017. How much an individual bank or credit institution could borrow in these programmes was determined by its total lending to the private sector excluding mortgages.

In connection with its monetary policy meeting in March, the ECB launched the third series of long-term loans, TLTRO III. Between September 2019 and March 2021, the new loans will be issued on seven occasions. The maturity period for each loan will be two years, at a variable interest rate that will follow the ECB's policy rate, the refi rate. Furthermore, TLTRO III will, as previously, contain incentives for banks to use the loans to fund their own loans to the private sector. As far as TLTRO II was concerned, this meant that the greater the proportion of the loan used to lend to households and companies, the lower the interest rate. The ECB will communicate the more exact details of TLTRO III at one of its next monetary policy meetings.

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

Per cent



Note. Forward rates describe the expected overnight rate, which does not always correspond to the policy rate (the main refinancing rate for the euro area). Unbroken lines refer to 18 April 2019, broken lines refer to 8 February 2019.

Sources: The national central banks, Macrobond and the Riksbank

Continued low government bond yields

Government bond yields abroad have fallen since the turn of the year, but the downturns have not been as sharp as in the autumn. The movements have been primarily driven by expectations of a more expansionary monetary policy but the continued uncertainty over macroeconomic developments in the period ahead has also contributed (see Figure 2:2).

Less political unease, expectations of a more expansionary monetary policy and the announcement of new long-term loans from the ECB have contributed to a fall in Italian government bond yields since the turn of the year. Yield differentials in relation to German bonds have therefore decreased since their peak in the autumn, although they are still significantly higher than the same period last year (see Figure 2:3).

Rising asset prices since the turn of the year

The upswing on equity markets that began after the turn of the year has largely continued abroad and the expected volatility on the US equity market has fallen back (see Figures 2:4 and 2:5). This is mainly due to signals of a more expansionary monetary policy and better prospects for trade between the United States and China. In Europe, bank shares have risen and the banks´ ability to obtain wholesale funding on more favourable terms has improved, among other things, thanks to good demand from investors. Wholesale funding terms have also been affected by the ECB's decision to extend its long-term loans to banks. The yield differentials between bonds with credit risk and government bonds have fallen back to the levels that prevailed in the autumn in the United States (see Figure 2:6). Developments in Europe have followed roughly the same pattern.

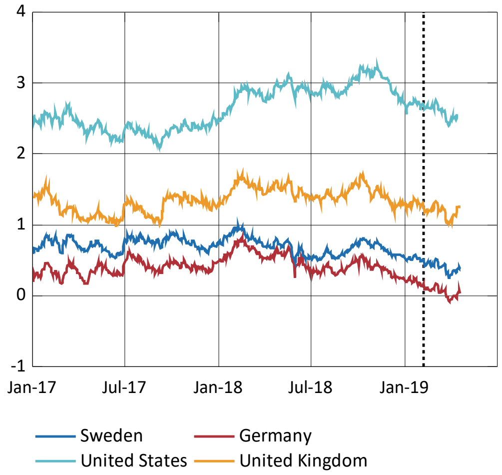
The financial conditions abroad have gradually become more expansionary since the turn of the year; equity prices have risen, yield differentials between risky and safe assets have decreased, monetary policy is expected to be expansionary for some time to come and government bond yields have fallen.

Financial conditions in Sweden

Next rate rise expected in 2020

Repo rate expectations in the months ahead have shifted slightly downwards since February according to both surveys and market pricing. To a certain extent, this development has been driven by expectations of lower policy rates abroad during the same period (see Figure 2:1). Some unexpected weak outcomes for macroeconomic variables in Sweden have also prompted market participants to revise down their repo rate expectations. For example, expectations of the repo rate's future level in connection with the inflation outcomes for January and February according to derivative contracts that reflect monetary policy expectations in Sweden. Market participants' expectations regarding the next repo rate rise have now shifted forward to the second half of 2020 according to market pricing. Expectations

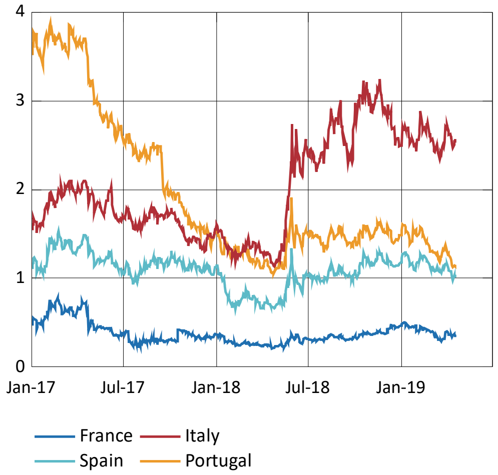
Figure 2:2. Government bond yields with 10 years to maturity
Per cent



Note. Implied zero-coupon yields from government bonds for Sweden, Germany and United Kingdom. 10-year benchmark bonds for the United States. The vertical line indicates the Monetary Policy Meeting in February.

Sources: The national central banks and the Riksbank

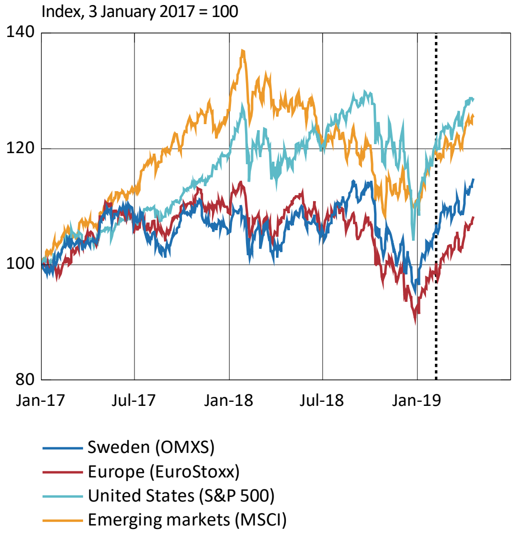
Figure 2:3. Yield differential in relation to Germany, 10-year
Percentage points



Note. Yield differentials refer to 10-year benchmark bonds.

Source: Macrobond

Figure 2:4. Stock market movements in domestic currency
Index, 3 January 2017 = 100



Note. The vertical line indicates the Monetary Policy Meeting in February.

Source: Macrobond

according to Prospera's surveys are between market pricing and the Riksbank's repo rate path. These indicate that the next repo rate rise will occur during the first half of 2020 (see Figure 2:7).

In connection with the repo rate rise in December, short-term yields increased by roughly the same as the repo rate. Yields on two-year government bonds also increased in conjunction with the repo rate rise but have fallen back since mid-March (see Figure 2:8). Longer-term government bonds yields, on the other hand, have fallen in line with international developments (see Figure 2:2). Yields on longer-term bonds issued by companies or mortgage institutions have fallen slightly more than government bond yields. This means that yield differentials have decreased. Share indices in Sweden have risen in line with developments abroad and have recovered entirely from the fall last autumn. So far, the effects of investigations into alleged money laundering activities within Swedbank have primarily had an impact on Swedbank shares with some contagion to other Swedish bank shares. The effects on banks' funding costs have so far been minor. Ultimately, however, the problems may effect banks' profitability and funding costs to a greater extent. Shocks in the financial sector can have serious consequences for real economic development.

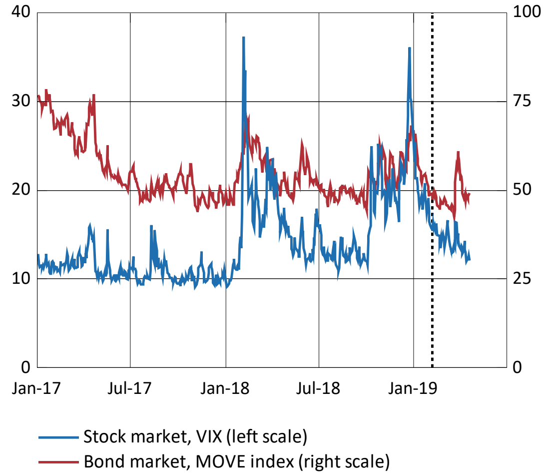
The Riksbank carefully monitors the functioning of the bond market

The markets for Swedish government bonds, covered bonds and interest derivatives are important for the transmission of monetary policy to the rest of the economy. The Riksbank therefore carefully monitors how the government bond market and adjacent markets are functioning, by performing surveys, analysing data and having regular contact with market participants.

In recent years, turnover on the Swedish government bond market has fallen, something which has also occurred in other countries. This is due in part to financial regulations but also to a reduction in the amount of bonds that market participants can actively trade as a result of the Riksbank's bond purchases. According to the Financial Market Survey published by the Riksbank in December, about two-thirds of respondents active on the Swedish fixed-income market considered that the government bond market is functioning poorly but other markets where participants can manage interest rate risk were considered to be working well. According to the survey published by the Swedish National Debt Office in February, both the Office's own dealers and foreign investors think that market liquidity in nominal government bonds has improved somewhat over the past year.[8] However, several market participants say that market liquidity is still low.

[8] See the report "Förtroendet för Riksgälden 2018" (Confidence in the Swedish National Debt Office 2018) issued by Prospera, Sifo/Kantar.

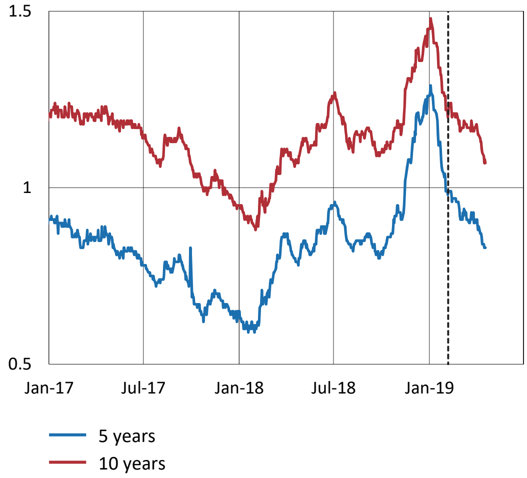
Figure 2:5. Volatility index for US equity and bond markets
Per cent and index respectively



Note. Volatility Index (VIX) shows the expected volatility on the US stock market based on options prices. Merrill Lynch Option Volatility Estimate (MOVE) Index is a measure of the expected volatility of US government bonds based on options prices. The vertical line indicates the Monetary Policy Meeting in February.

Sources: Chicago Board Operations Exchange and Merrill Lynch

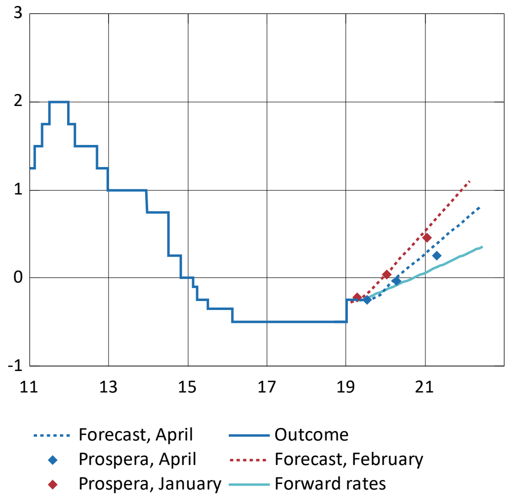
Figure 2:6. Yield differential between corporate bonds with a good credit rating and government bonds for the US
Percentage points



Note. Yield differentials refer to 5-year and 10-year benchmark bonds. The vertical line indicates the Monetary policy Meeting in February.

Source: Macrobond

Figure 2:7. Repo rate and market repo rate expectations
Per cent



Note. The forward rate refers to 18 April 2019 and is a measure of the expected repo rate. The Prospera survey responses show the average for money market participants 23 January 2019 respectively 10 April 2019.

Sources: Macrobond, Kantar Sifo Prospera and the Riksbank

Krona weaker since the turn of the year

In competition-weighted terms (according to the KIX krona index), the krona is weaker compared with the forecast in the Monetary Policy Report in February (see Figure 2:9). In conjunction with the repo rate rise in December, the krona strengthened, but it has weakened since the turn of the year. Some of this weakening has occurred in conjunction with the publication of domestic and foreign macro-statistics that have been weaker than the market was expecting. For example, the krona depreciated by 1.3 per cent in total in conjunction with the inflation outcomes for January and February. However, some of the weakening has occurred without any direct connection to macroeconomic news.

Higher lending rates in Sweden

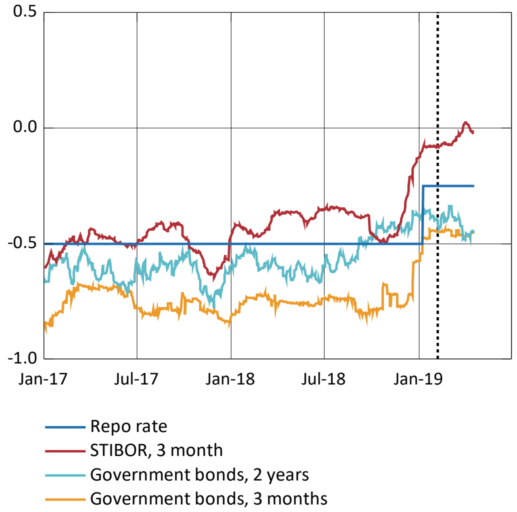
Although Swedish banks' funding costs have risen somewhat since the turn of the year, the conditions for companies and households to obtain credit remain good. The growth rate in lending to households has gradually fallen over the last three years (see Figure 2:10). This development is probably linked to expectations of higher loan costs and subdued price growth on the housing market. However, the debt-to-income ratio of households continues to rise as their debts are still increasing faster than their incomes (see Figure 1:13).

The traditional form for corporate financing, bank loans, has on average increased by 5 per cent a year since 2015. Borrowing via the capital markets by means of corporate bond issues has been increasing for a number of years and now constitutes more than a third of total corporate debt. A number of factors, such as good demand and favourable funding conditions both in Sweden and abroad, have contributed to an increasing number of companies preferring this form of borrowing (see Figure 2:10). Since December last year, the average interest rate for new bank loans to non-financial undertakings has risen by around as much as the Riksbank's repo rate.[9] Corporate bond yields have fallen, however, similar to developments abroad.

The average actual mortgage rate for new agreements has not risen as much as the repo rate (see Figure 2:11). The same is true of the actual variable mortgage rate for new agreements. Several factors may have contributed to these rates not having risen as much as the repo rate. For example, increased competition on the mortgage market caused mortgage rates for new agreements to fall last year. Another cause may be that banks' funding costs may not be fully affected by changes in the repo rate as long as the repo rate is below zero. For example, the average deposit rates offered to households and companies have not risen anything like as much as lending rates since December (see Figure 2:11).

[9] Individual monthly outcomes may vary, however, depending on the credit ratings of companies extending or reducing their lending and on whether the loans are against collateral or not, as the interest rates also reflect risk premium linked to different types of loan and company.

Figure 2:8. The repo rate, interbank rates and market rates
Per cent



Note. Zero coupon yields are calculated on government bonds. The vertical line indicates the Monetary Policy Meeting in February.

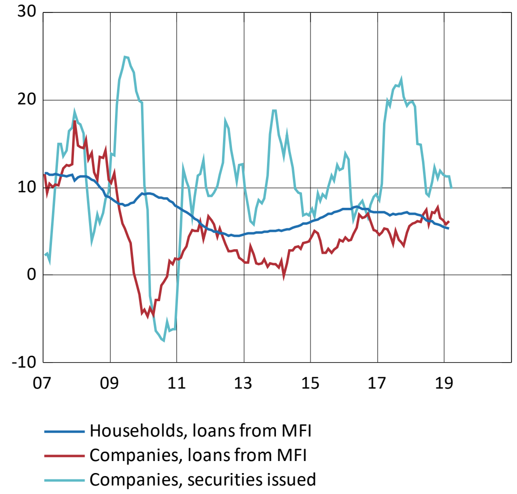
Sources: Macrobond and the Riksbank

Figure 2:9. Competition-weighted nominal exchange rate, KIX
Index, 18 November 1992 = 100

Note. The KIX (krona index) is a weighted average of the krona exchange rate against currencies in countries that are important for Sweden's international transactions. A higher value indicates a weaker exchange rate. The vertical line indicates the Monetary Policy Meeting in February.

Sources: National sources and the Riksbank

Figure 2:10. Bank lending to households and companies
Annual percentage change



Note. Lending by Monetary financial institutions (MFI) to households and non-financial corporations adjusted for reclassifications and bought and sold loans, according to financial market statistics. Securities issued by non-financial corporations have been adjusted for currency impact.

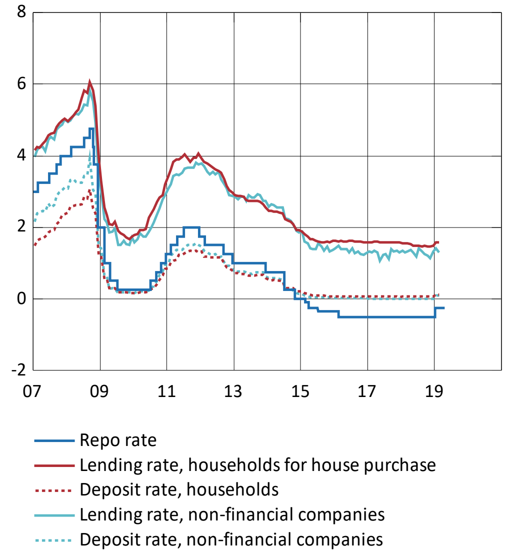
Source: Statistics Sweden

Since October last year, household expectations of the variable mortgage rate have risen, according to the Economic Tendency Survey, at the same time as fixed mortgage rates have not increased as much as variable mortgage rates. This has probably led to an increasing number of households choosing fixed-rate mortgages. The percentage of new loans taken out at a variable rate has decreased since September last year (see Figure 2:12).

The overall picture is that financial conditions in Sweden are still expansionary. The level of interest rates remains low, access to credit is good, equity prices have risen since February and the krona exchange rate is weaker.

Figure 2:11. Repo rate together with the average deposit and lending rate to households and companies, new contracts

Per cent

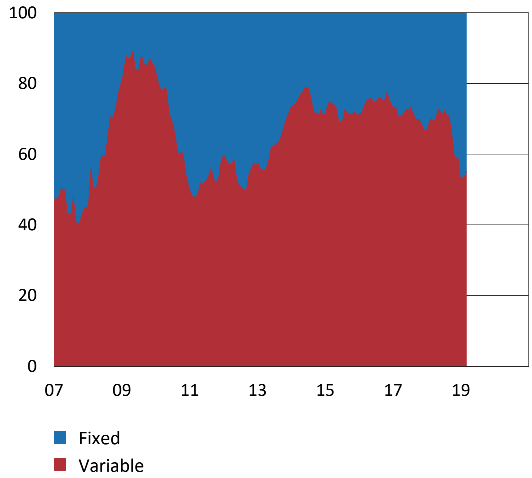


Note. MFIs' average deposit and lending rates are a weighted average of all interest rates for different maturities.

Sources: Statistics Sweden and the Riksbank

Figure 2:12. Rate fixation periods for new household mortgages

Per cent, share of mortgages



Note. New mortgages to households from mortgage institutions. The share of mortgages in each category is volume-weighted. Variable rate refers to a rate fixation period of 3 months. Fixed rate refers to rate fixation periods above 3 months.

Source: Statistics Sweden

CHAPTER 3 – The current economic situation

Global trade and other indicators suggest that global growth slowed at the end of last year and the beginning of this year. Swedish GDP, on the other hand, was surprisingly strong in the fourth quarter after a downturn in the third quarter. In the coming quarters, however, GDP growth is expected to be slightly lower than normal, subdued primarily by housing investment. Demand for labour remains high even though the number of persons employed and in the labour force is expected to increase more slowly. High resource utilisation, depreciation of the krona and rapidly rising energy prices have helped keep inflation around 2 per cent for about two years. In March, inflation was 1.8 per cent, which was lower than the Riksbank's forecast in February. Inflation is expected to remain close to 2 per cent until the end of the summer and then fall back when energy prices contribute to a reduction in inflation. The forecast for inflation has been adjusted downwards compared with the forecast in February.

Inflation in Sweden

Inflation 1.8 per cent in March

In March, CPIF inflation was 1.8 per cent (see Figure 3:1). Excluding energy prices, inflation was lower and amounted to 1.5 per cent. Inflation was lower than the forecast in the Riksbank's Monetary Policy Report in February. Energy prices rose less than expected while prices for foreign travel and clothes increased unusually slowly at the beginning of the year. These are components in the CPI that normally vary a great deal from month to month.

The measured inflation rate is always affected by price variations of a more temporary nature. To estimate the level of the more permanent component of the inflation rate, different measures of core inflation can be studied. These measures exclude or reduce the significance of prices that historically speaking have been shown to vary considerably.[10] The Riksbank's different measures of core inflation indicate that the permanent part of the inflation rate is just above the measured rate of CPIF inflation (see Figure 3:2). The median of all the measures has risen and amounted to 2.0 per cent in March. The measures that use statistical methods to reduce the significance of volatile components indicate higher inflation than, for example, the CPIF excluding energy. These measures attach less weight to the low growth in prices for foreign travel and clothes in recent months, while they are also affected by the higher energy price growth.

Even if the downturn in inflation can largely be explained by prices that normally vary a great deal, inflation has repeatedly been lower than expected. The Riksbank's assessment of the most recent outcomes is therefore that inflationary pressures are now slightly lower than earlier estimated.

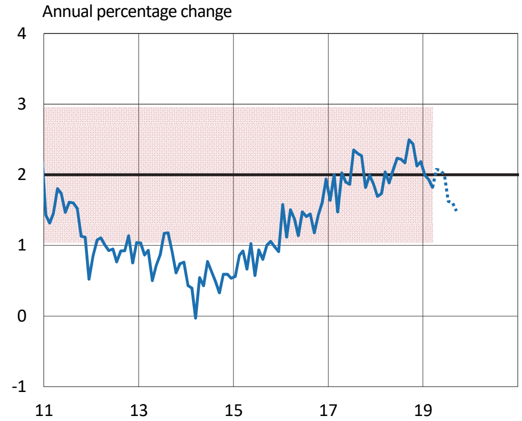
Table 3:1.

Expected development in February MPR	Actual development
CPIF inflation 2.3 per cent and CPIF excluding energy 1.8 per cent in March.	CPIF inflation was 1.8 per cent and CPIF excluding energy was 1.5 per cent.
GDP growth 2.5 per cent in fourth quarter.	GDP growth was 4.7 per cent.
Unemployment 6.2 per cent and employment growth 1.0 per cent in the first quarter.	Unemployment was 6.4 per cent and employment growth was 0.0 per cent.

Note. MPR refers to the Monetary Policy Report. Inflation refers to the annual percentage change. GDP and employment growth refer to the seasonally adjusted quarterly change in per cent, calculated at an annual rate. Unemployment refers to percentage of the labour force.

Figure 3:1. CPIF and variation band

Annual percentage change



Note. The pink area shows the Riksbank's variation band and covers about three-quarters of the outcomes since January 1995. The variation band is a way of showing whether the deviation from the inflation target is unusually large. The broken line represents the forecast.

Sources: Statistics Sweden and the Riksbank

[10] See Appendix 2 in Johansson, J. Löf, M. Sigrist, O. and Tysklind, O., "Measures of core inflation in Sweden", Economic Commentaries no. 11, 2018, for a technical description of the measures.

Inflation close to 2 per cent in the coming months

The strong economic situation has contributed towards rising inflation in recent years. Cost pressures, measured as the rate of increase in unit labour costs, have risen and been higher than normal. Higher energy and food prices and a weaker krona have also contributed to inflation rising and being close to 2 per cent.

Strong economic activity is expected to continue to contribute positively to inflation in the period ahead. More substantial rent increases, higher import prices and rising food prices, as a result of last year's dry summer, are expected to contribute to a higher rate of increase in the CPIF excluding energy over the next few months (see Figure 3:3).

A model forecast summarising the information from a large number of indicators supports the assessment that the rate of increase in the CPIF excluding energy will rise slightly a few months ahead (see Figure 3:3). Signs that inflationary pressures are set to rise can be seen, for example, in the price development in earlier stages than the consumer channel, such as the producer channel, and in companies' pricing plans. Prices in the producer channel are rising more rapidly than normal. According to the Economic Tendency Survey, more companies than normal are planning to raise their prices in the coming months, particularly in the trade sector (see Figure 3:4). In the same survey, the trade sector states that higher import prices are an important explanation for the price rises (see the box "Higher import prices an important explanation for trade and service companies' price increases"). Trade companies interviewed in the Riksbank's most recent Business Survey also state that increased purchasing costs are contributing to the price increases.

The Riksbank's forecast is slightly above the model forecast for the coming months. Larger rent increases and higher food price growth are among the factors deemed to be not fully captured by the model forecast.

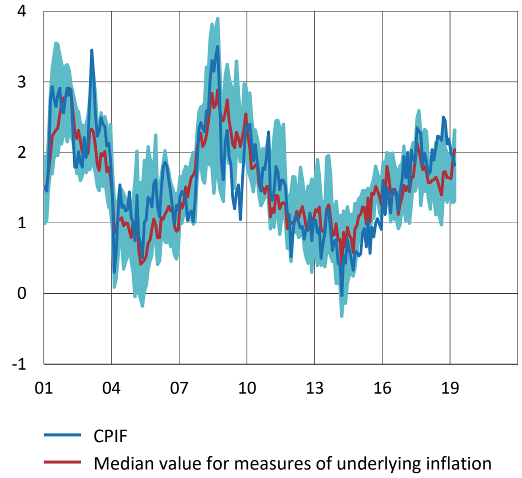
Inflation forecast revised down in the short term

The forecast for the CPIF excluding energy has been revised downwards for the next few months. This has mostly to do with the lower-than-expected outcomes for January to March. Even though the forecast error for the CPIF excluding energy can mainly be attributed to a few specific, volatile components, such as foreign travel and clothes, the lower price growth is expected to continue for a while longer.[11] The rate of increase in the CPIF excluding energy is therefore expected to be lower over the next few months compared with the forecast in February.

The forecast for CPIF inflation has also been revised down over the next few months (see Figure 3:6). Electricity prices are expected to rise more slowly than in previous assessments, which is being counteracted by the expectation of faster-rising fuel

[11] The forecast error for foreign travel is partly due to a method change. As from 2019, Statistics Sweden has increased its sample of charter trips when measuring prices. All else being equal, an unexpected consequence of this increase is a smaller monthly change in January and a larger monthly change in December each year, starting from 2019. The new sample will therefore lead to a lower annual percentage change in the index for foreign travel up until December this year than the old sample would have done.

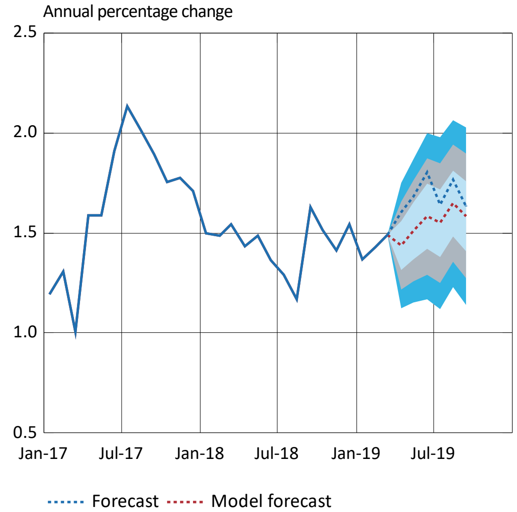
Figure 3:2. CPIF and different measures of underlying inflation
Annual percentage change



Note. The field shows the highest and lowest outcomes among different measures of underlying inflation. The measures included are CPIF excluding energy, UND24, Trim85, CPIF excluding energy and unprocessed food, persistence-weighed inflation (CPIFPV), factors from principal component analysis (CPIFPC) and weighted median inflation (Trim1).

Sources: Statistics Sweden and the Riksbank

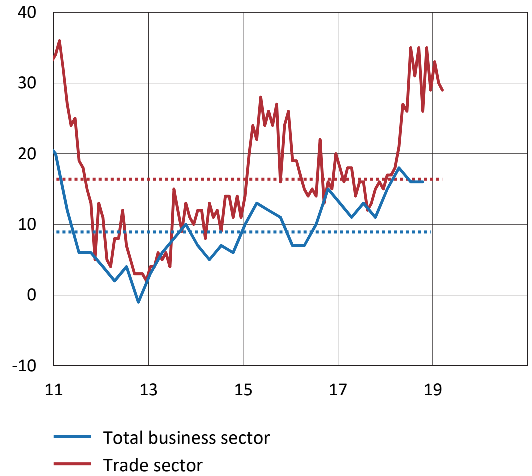
Figure 3:3. CPIF excluding energy, model forecast with uncertainty bands
Annual percentage change



Note. The uncertainty bands 50, 75 and 90 per cent are based on the models' historical forecast errors.

Sources: Statistics Sweden and the Riksbank

Figure 3:4. Pricing plans in the business and trade sectors
Net figures, seasonally-adjusted data



Note. The net figure is the difference between the proportion of companies stating that they expect higher sales prices and those expecting lower sales prices over the next three months. Broken lines represent the averages since May 2003.

Source: National Institute of Economic Research prices. Overall, energy prices over the next few months are expected to grow at approximately the same rate as in February. CPIF inflation is expected to be close to 2 per cent during the spring and then fall back.

Inflation expectations close to 2 per cent

Similar to inflation, inflation expectations 1 and 2 years ahead have fallen slightly according to Prospera's latest surveys. On the other hand, long-term inflation expectations have not been noticeably affected. Five years ahead, expected inflation measured in terms of the CPI is 2.0 per cent among money market participants according to Prospera's survey in April. CPIF inflation expectations are slightly lower and amounted to 1.8 per cent (see Figure 1:8). Inflation expectations can also be inferred from the pricing of nominal and real government bond yields. According to these, long-term inflation expectations have increased since the monetary policy meeting in February and are just under 2 per cent.

Global and Swedish economic activity

Continued uncertainty over the global economy

There is still uncertainty about the direction of the international economy. Global trade showed weak growth towards the end of 2018. GDP growth in the euro area has slowed since last summer and a clear slowdown in the purchasing managers' index for the manufacturing industry is creating uncertainty about the strength of economic activity. At the same time, both consumer confidence and confidence in the service sector are on levels that indicate good growth. Furthermore, global trade partly recovered at the beginning of this year (see Figure 3:7).

GDP in the euro area increased by 0.9 per cent in the fourth quarter, compared with the third quarter and in annualised terms (see Figure 3:8). As during the third quarter, growth is deemed to have been negatively affected by a number of temporary factors. For example, both motor vehicle production and new car registrations fell considerably in conjunction with the introduction in September last year of new regulations on how to measure exhaust emissions and fuel consumption. Since then, there has been some recovery even though the levels continues to be lower than in the summer. Confidence among companies about economic development has continued to fall, but is nevertheless still higher than normal (see Figure 3:9). Industrial production and retail sales recovered at the start of the year after a weak end to last year. Furthermore, the conditions are deemed good for an increase in consumption, due, among other factors, to a rise in real disposable household income in the wake of higher wage growth and continued low inflation. In light of this, GDP growth in the euro area is expected to rise somewhat during the first quarter of 2019.

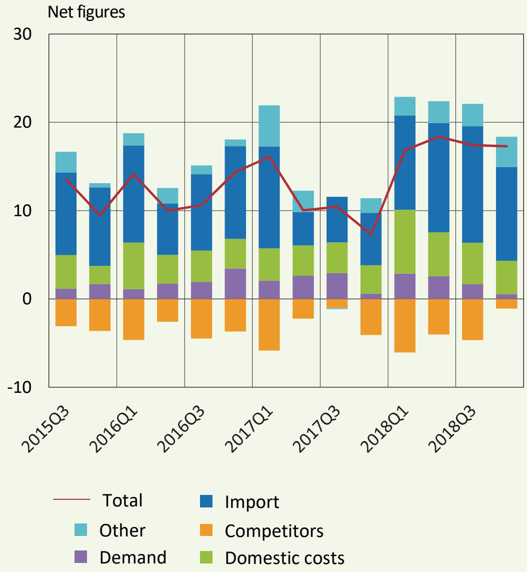
GDP growth in the United States is still good but slowed at the end of last year as a result of weaker domestic demand. GDP

Higher import prices important explanation for trade and service companies' price increases

Figure 3:5 is based on survey data and shows how different factors have affected trade and services companies' prices since 2015. In the service sectors, it is increased demand and higher domestic costs that are pushing up prices. Within the trade sector, it is instead rising costs for imports, to some extent due to the weaker krona, that have dominated the price changes. Statistics for the fourth quarter show that sales prices continue to increase. Competitor behaviour, which has had a counteracting effect in both sectors since 2015, is now playing slightly less of a role. At the same time, slightly fewer respondents point to demand as a factor that is pushing up prices.

Figure 3:5. The driving forces behind price changes by companies in the trade and service sectors

Net figures

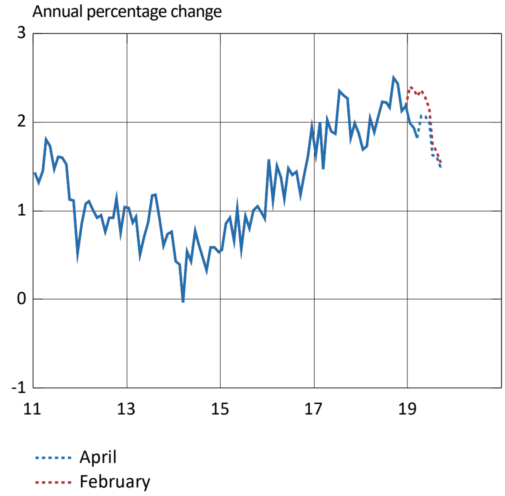


Note. The figure shows how different factors have affected the unweighted net figure for the question of what has happened with prices in the last three months in both the trade and services sectors.

Sources: National Institute of Economic Research and the Riksbank

Figure 3:6. CPIF

Annual percentage change



Sources: Statistics Sweden and the Riksbank

in the United States increased by 2.2 per cent in the fourth quarter, compared with the third quarter and in annualised terms (see Figure 3:8). Statistics on household consumption in January and retail sales in February also suggest a weak start to 2019. At the same time, investment growth was higher than expected. The labour market is still strong and employment rose rapidly in tandem with higher wage increases (see Figure 3:10). The latest outcomes for household and company confidence send mixed signals, but are at high levels overall. Growth is expected to have slowed slightly during the first quarter, due in part to the extended shutdown of some of the federal government.

Slowly rising inflationary pressures abroad

The oil price has continued to rise in recent months, which will contribute to slightly higher international inflation over the next year, compared with the Monetary Policy Report in February. Core inflation, which in most countries means that energy and food prices are excluded, is expected to rise somewhat abroad in the coming quarters but will remain relatively moderate.

In the euro area, inflation fell to 1.4 per cent in March as food prices increased more slowly. Core inflation fell to 0.8 per cent and is expected to be relatively unchanged during the second quarter. In the United States, inflation rose in March to 1.9 per cent. Core inflation, measured in terms of the CPI excluding energy and food, amounted to 2.0 per cent. Energy prices therefore made a negative contribution to inflation in the United States, but a positive one in other regions such as the euro area. This was due to lower crude oil prices (WTI) in the United States than in Europe (Brent) and weaker development of the euro. Core inflation in the United States is expected to remain close to 2 per cent in the months ahead.

Surprisingly strong Swedish GDP growth in the fourth quarter

After a decline in the third quarter, Swedish GDP grew surprisingly rapidly in the fourth quarter. GDP increased by 4.7 per cent compared with the third quarter, calculated in annualised terms. Both foreign and domestic demand was strong. The sale of research and development (R&D) services to other countries contributed to a rapid increase in service exports but also to a reduction in investment by the same amount. Overall, therefore, GDP growth was not affected by these transactions.[12]

According to the Economic Tendency Survey, combined company and household confidence has declined and in March was close to a historical average. Households are less optimistic than normal, however, regarding both their own finances and the Swedish economy. Confidence among households weakened during most of last year, coinciding with a clear slowdown on the housing market. This is seen as an important explanation for the

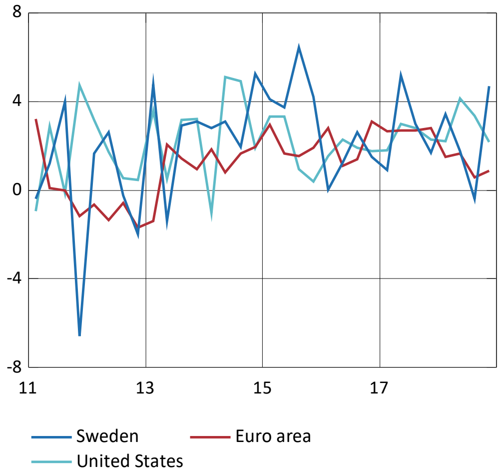
[12] In the calculations of GDP in the fourth quarter, the sale of intangible assets to other countries, such as patents, gave rise to temporarily high service exports. As such a sale refers to earlier investments, domestic investments in intangible assets in the fourth quarter also need to decrease to avoid double counting.

Figure 3:7. World trade volume
Index, 2011 = 100

Note. Refers to trade in goods.

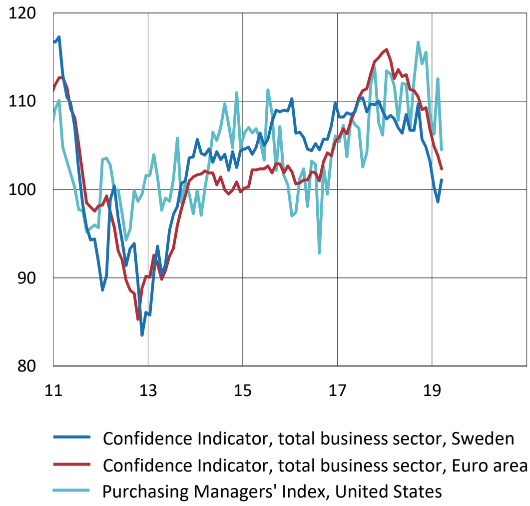
Source: CPB Netherlands Bureau for Economic Policy Analysis

Figure 3:8. GDP in Sweden and abroad
Quarterly change in per cent, annualised, seasonally-adjusted data



Sources: Bureau of Economic Analysis, Eurostat and Statistics Sweden

Figure 3:9. Confidence indicators in Sweden and abroad
Index, average = 100, standard deviation = 10



Note. The Purchasing Managers' Index from the United States and the confidence indicator from the euro area are normalised from January 1998. Purchasing Managers' Index, United States refers to the Riksbank's aggregation of the manufacturing and services sectors.

Sources: European Commission, Institute for Supply Management (ISM), National Institute of Economic Research and the Riksbank slow increase in household consumption last year despite a rapid increase in household income. Among other items, the consumption of passenger cars decreased. However, monthly demand indicators, such as retail sales and household consumption, suggest a certain increase during the first quarter of this year, when consumption is expected to rise at an approximately normal level.

Swedish exports increased rapidly in the fourth quarter, especially in relation to global trade, which saw weak growth. Monthly statistics for the first two months of this year also indicate healthy growth in exports in the first quarter. More forward-looking indicators, such as new export orders, suggest export growth over the next few months approximately in line with the historical average.

Housing investment has declined since the second quarter of 2018 and is now significantly dampening GDP growth after having made substantially positive contributions for several years. The number of housing starts has continued to fall and housing investment is expected to decline further during the first half of 2019.

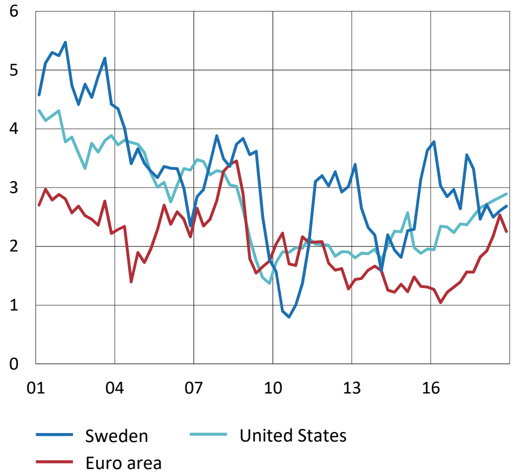
The Riksbank's model forecast for GDP growth in the near term is based on confidence indicators and monthly statistics for output and demand. The model forecast indicates that GDP grew by 1.9 per cent in the first quarter compared with the immediately preceding quarter, calculated in annualised terms (see Figure 3:11). The Riksbank's forecast for the first quarter is somewhat lower than the model forecast, as this is not considered to take full account of the downturn in housing investment. GDP is expected to increase by 0.9 per cent, calculated in annualised terms, in the first quarter and by 1.7 per cent in the second quarter of 2019.

Continued favourable developments on the labour market

The labour market has developed very strongly in recent years. In 2018, an average of almost 280,000 more people were in work compared to in 2015. The pace of employment growth in the first quarter of 2019 slowed, however, in the wake of lower growth in demand. The labour force is now increasing at a slower rate than previously as labour force participation has reached historically high levels and is therefore not expected to be able to increase at the same rate as before (see Figure 4:7).

At the same time, indicators suggest a continued strong demand for labour. Recruitment plans have decreased, but are still higher than normal (see Figure 3:12). Furthermore, the number of newly registered job vacancies is still at a relatively high level, according to the Swedish Public Employment Service. In the second quarter, employment is expected to continue to increase albeit at a slower rate than it has done in recent years. The number of people in the labour force is also projected to grow at a slower rate, which means that unemployment is expected to be unchanged at 6.4 per cent (see Figure 4:12).

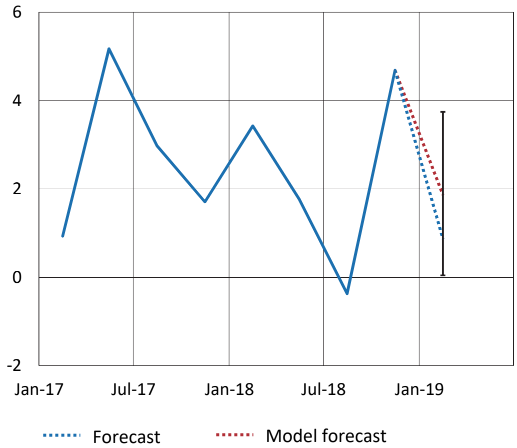
Figure 3:10. Labour costs in Sweden and abroad
Annual percentage change



Note. The Swedish series refers to hourly labour cost and is a four-quarter moving average. It has been calendar-adjusted. For the United States and the euro area, the figures refer to labour costs per employee. Both series have been seasonally adjusted and the euro area series has also been calendar-adjusted.

Sources: Bureau of Labor Statistics, ECB and Statistics Sweden.

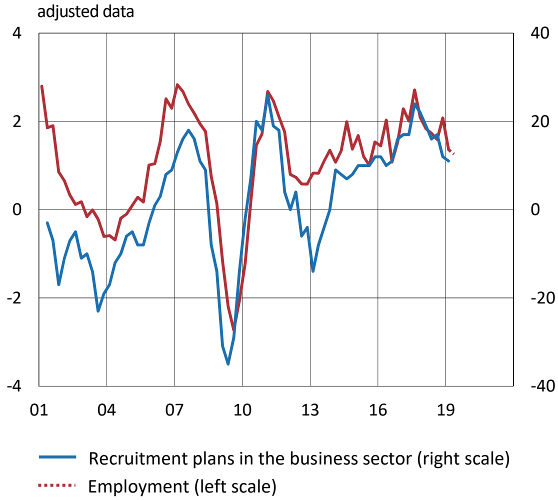
Figure 3:11. GDP, model forecast with uncertainty bands
Quarterly change in per cent, annualised, seasonally-adjusted data



Note. The model forecast is an average of forecasts from different statistical models. The vertical line refers to a 50 per cent uncertainty band based on the models' historical forecast errors.

Sources: Statistics Sweden and the Riksbank

Figure 3:12. Employment and recruitment plans
Annual percentage change and net figures, respectively, seasonally-adjusted data



Note. Recruitment plans refer to expectations of the number of employed in the business sector three months ahead, moved forward one quarter.

Sources: National Institute of Economic Research, Statistics Sweden and the Riksbank

High resource utilisation in the economy

The amount of spare capacity in the economy affects the development of wages and prices, but with a certain time lag. Resource utilisation in the economy cannot be measured exactly, however. The Riksbank therefore follows a number of different indicators to be able to make an assessment of resource utilisation in the economy.

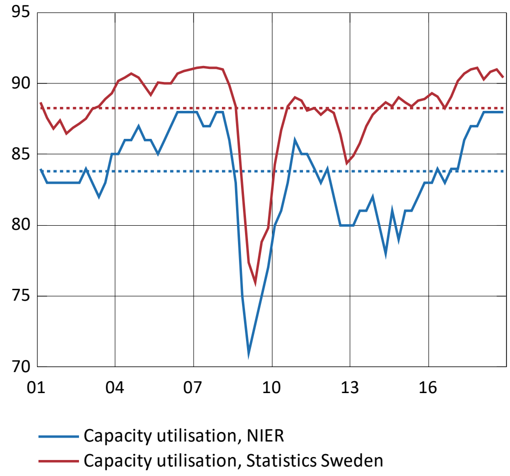
According to the Economic Tendency Survey, many companies report that they have a shortage of labour. Other indicators also point to a small amount of spare capacity in the labour market. Among other factors, the vacancy rate, which measures the proportion of unstaffed positions that need to be filled immediately, is at a high level, and the average recruitment time in the business sector is long. Capacity utilisation within the manufacturing industry is also high from a historical perspective, according to both the National Institute of Economic Research and Statistics Sweden (see Figure 3:13). All in all, the Riksbank deems that resource utilisation in the economy is higher than normal, something that is also supported by the Riksbank's overall resource utilisation indicator. Forward-looking indicators for growth and developments on the labour market point to continued high resource utilisation.

Slowly rising wage growth

The rate of wage increases rose slightly last year according to preliminary short-term wage statistics. Wages in the entire economy rose by an average of 2.6 per cent during the whole of 2018, which is an increase from 2.3 per cent on the whole of 2017. The increase between the years was more marked in the business sector (see Figure 3:14). Wage outcomes according to the National Accounts are usually more volatile and should therefore be interpreted with a certain amount of caution. The most recent wage outcome according to the National Accounts was unexpectedly low. According to this way of measuring wage development, the rate of increase was 2.2 per cent for the whole of 2018, which can be compared with 2.5 per cent for the whole of 2017. Regardless of the measure used, wage growth is expected to rise somewhat in the quarters ahead as the strong labour market situation has an impact on wage formation.

Cost pressures, measured in terms of the rate of increase in unit labour costs, do not just depend on wage development but also on productivity. As productivity has developed weakly for several years, unit labour costs have risen somewhat more rapidly than normal. In the quarters ahead, cost pressures are expected to fall somewhat as productivity rises more rapidly.

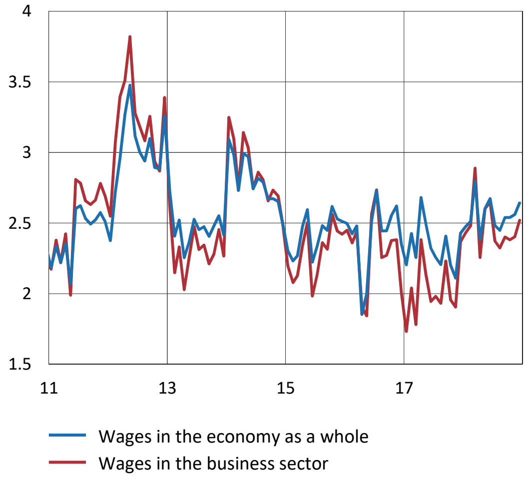
Figure 3:13. Capacity utilisation in the manufacturing industry
Per cent, seasonally-adjusted data



Note. The broken lines represents the mean value since 1996.

Sources: National Institute of Economic Research and Statistics Sweden

Figure 3:14. Wages in the business sector and economy as a whole
Annual percentage change



Note. The National Mediation Office's forecast of final outcome January 2018–December 2018.

Source: National Mediation Office

CHAPTER 4 – The economic outlook and inflation prospects

Several years of high growth abroad and very low interest rates have contributed towards strong economic activity in Sweden with a high level of resource utilisation. Recently, growth has slowed down on several important Swedish export markets. In the period ahead, international growth will continue to be moderate but still high enough for unemployment to fall or remain low in many countries. In Sweden, growth in exports and domestic demand will slow down slightly. However, the Swedish labour market continues to be strong and wages are expected to increase at a slightly more rapidly pace in the years to come. Inflation has been around 2 per cent since 2017 and is expected to stay there until the summer, and thereafter temporarily fall back slightly as the contribution made by energy prices fades. The strong economic activity in Sweden and rising inflation abroad suggest that inflation will continue to be close to the target in the period ahead but, compared to the forecast in the Monetary Policy Report published in February, inflation is expected to be slightly lower in the next few years.

International developments

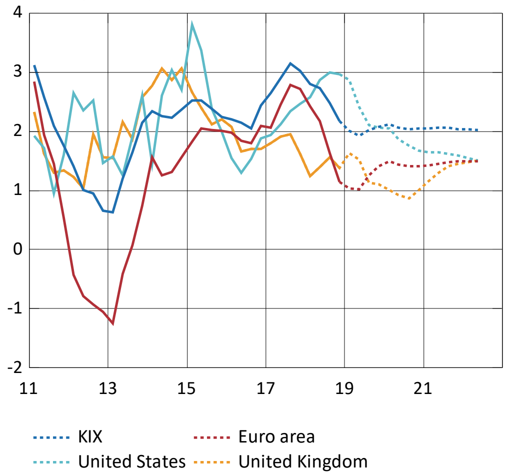
Lower growth abroad

After a couple of years of good momentum, growth has slowed down in Swedish export markets, particularly in the euro area. KIX-weighted GDP will increase by just over 2 per cent per year over the next few years (see Figure 4:1). This growth rate corresponds approximately to the historical average. Resource utilisation has risen in recent years and is expected to be close to a normal level in the coming years. Swedish export markets grew by almost 4 per cent last year. The growth rate is expected to fall to about 3.5 per cent this year and the following few years, which is in line with the last ten years' average growth.

The forms of the United Kingdom's withdrawal from the EU are creating uncertainty over growth in the United Kingdom, but also for the rest of Europe to an extent. Following a request from the British Government, the European Council decided at a meeting on 10 April to extend the time limit for the United Kingdom to approve the agreement on withdrawal from the EU. For further details of the course of events since February, see the box "The United Kingdom's withdrawal from the EU is being postponed" in this chapter.

In the ongoing trade conflict between the United States and China, the tone has improved recently and the parties seem to be nearing a new trade agreement. The US Government has communicated that it will not implement the previously announced increased tariffs on Chinese imports as long as sufficient progress is being made in negotiations. On the other hand, the tone between the United States and EU has deteriorated slightly.

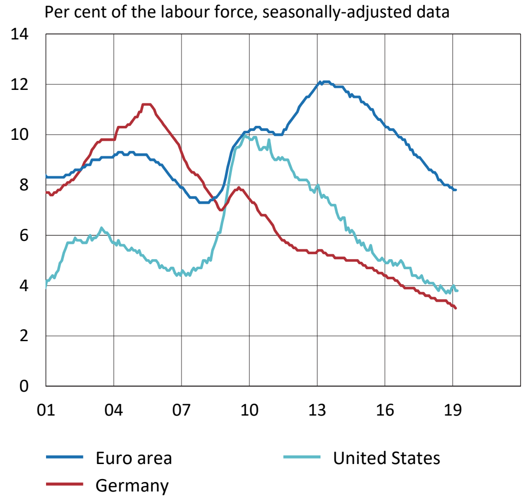
Figure 4:1. GDP in various countries and regions
Annual percentage change



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

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

Figure 4:2. Unemployment in various countries and regions
Per cent of the labour force, seasonally-adjusted data



Source: OECD

Strong economic activity but gradually lower growth in the United States

Economic activity in the United States remains strong. GDP growth is rapid and confidence among both households and companies is at a high level from a historic perspective. GDP increased by almost 3 per cent in 2018, but difficulties for companies in finding staff, coupled with the expectation that monetary policy will be tightened and fiscal policy will be less expansionary in the period ahead, are fuelling expectations that growth will be lower in the period ahead (see Figure 4:1). Congress has presented a proposed budget for the fiscal year 2020. In recent years, budget negotiations have been slow. If an agreement is not reached by the end of September/beginning of October at latest, the result may be a new shutdown of the Federal authorities later this year. The labour market is strong, with unemployment just below 4 per cent (see Figure 4:2). The high level of resource utilisation is expected to contribute towards continued wage growth.

All in all, growth in US GDP is expected to be 2.4 per cent this year before gradually slowing down to 1.6 per cent in 2021, which is largely the same assessment published in the Monetary Policy Report in February.

Lower growth in the euro area

The fall in growth in the euro area in the second six months of 2018 is deemed to be due to temporary reasons, to some extent. Even if companies in the manufacturing industry have become more pessimistic and growth in the period ahead is expected to become lower than in recent years, growth prospects are relatively favourable. Monetary policy is expected to remain highly expansionary over the next few years and the banks have generally continued to ease credit terms for households and companies. In addition, fiscal policy is expected to be slightly expansionary this year.

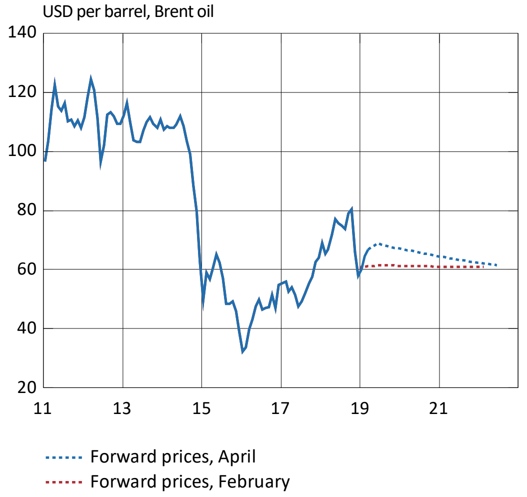
Rising demand for labour is expected to contribute towards unemployment continuing to fall slightly in the coming years, albeit at a slower rate than before. This will contribute to slightly higher wage growth. As global demand is increasing more slowly, investment growth is expected to slow down over the next few years. As employment growth slows down, household consumption will also grow somewhat more slowly. GDP is expected to grow by just over 1 per cent this year, and just under 1.5 per cent per year in 2020–2021 (see Figure 4:1). The forecast has therefore been adjusted downwards, above all for this year, compared with the Monetary Policy Report from February.

Expansionary economic policy in China

Growth in China slowed down slightly to 6.6 per cent in 2018, in line with the government’s growth target of around 6.5 per cent. Since 2017, the Chinese authorities have pursued a policy focused on more sustainable economic development and financial stability. The policy has led to a decline in growth in both investment and consumption at the same time as the trade

Figure 4:3. Price of crude oil

USD per barrel, Brent oil



Note. Forward prices are calculated as a 15-day average. The outcomes refer to monthly averages of spot prices.

Sources: Macrobond and the Riksbank

The United Kingdom's withdrawal from the EU is being postponed

On 10 April, the European Council decided, following a request from the British Government, that the United Kingdom's withdrawal from the EU may be postponed until 1 November 2019 at latest. If the withdrawal agreement is approved by both the United Kingdom and the EU before this date, withdrawal will take place on the first day of the following month. If no agreement has been reached on the withdrawal agreement by 22 May, the United Kingdom will have to participate in elections to the European Parliament. The European Council will evaluate developments at its meeting in June 2019.

Uncertainty over what will happen in the period ahead continues to be high as the British parliament is divided in its opinion on leaving the EU. The postponed withdrawal date gives the parliament more time to agree on the forms for leaving the EU and to solve the matter of how to avoid a hard border between Ireland and Northern Ireland. There is still a risk that the United Kingdom will leave the EU without an agreement, but this is deemed to be small. The uncertainty over how a future agreement will look means continued uncertainty for households, companies and financial institutions.

conflict with the United States is deemed to have restrained export growth.

To compensate for the risks inherent in the trade conflict, the Chinese authorities have recently indicated that they intend to pursue a more expansionary fiscal policy, in which further tax cuts and increased infrastructure investment will stimulate domestic demand. Monetary policy has also been redirected in a more expansionary direction with gradually reduced reserve requirements for the banks. This kind of stimulation has been normal previously when there have been signs of a slowdown in the economy, and have then held up GDP growth. All in all, GDP growth is expected to be around 6 per cent over the next few years.

Some downturn in the price of crude oil in the years ahead

Since the start of the year, the world market price of crude oil has risen to around USD 70 per barrel after having fallen rapidly during the autumn. The price rise is due in part to OPEC and Russia planning to reduce oil production because several important oil-producing countries, primarily the United States, increased production towards the end of last year. A milder tone in the trade conflict between the United States and China has probably also contributed to the price rise.

However, uncertainty over the prospects for the global economy, in particular the oil-dependent Chinese economy, is contributing towards weighing down growth in the price of oil. According to forward pricing, actors on the financial markets expect the price of oil to fall to just over USD 60 in 2022 (see Figure 4:3).

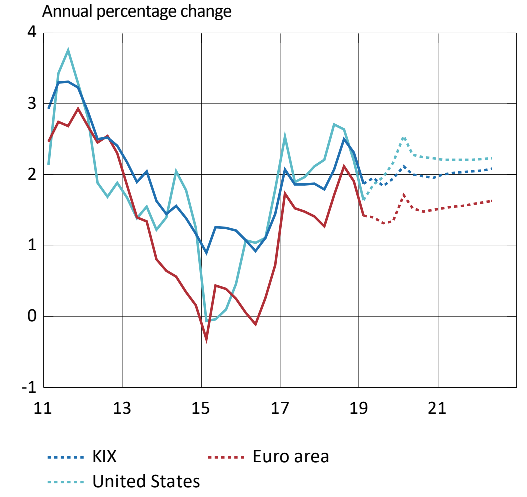
Slowly rising cost pressures abroad

The rise in the price of oil since the start of the year is expected to lead to inflation this year being somewhat higher than in the February forecast among several trading partners important to Sweden. In the euro area, inflation measured in terms of the HICP is expected to remain around 1.5 per cent in the coming years (see Figure 4:4). Underlying inflation has developed weakly and, in recent years, has been close to 1 per cent. However, the increasingly strong labour market is expected to contribute towards increased cost pressures, which will lead underlying inflation to rise gradually in the period ahead.

Compared with the assessment in February, the forecast for inflation in the euro area has been adjusted upwards slightly for 2019 due to the higher oil price, but downwards for the coming years. The downward adjustment can be explained by inflationary pressures being deemed to be slightly lower as the forecast for GDP growth has been revised downwards and the relationship between wage development and underlying inflation seems to have weakened. Underlying inflation is expected to be lower throughout the forecast period than was forecast in the Monetary Policy Report published in February.

At the start of the year, the annual rate of increase in the consumer price index in the United States fell, among other

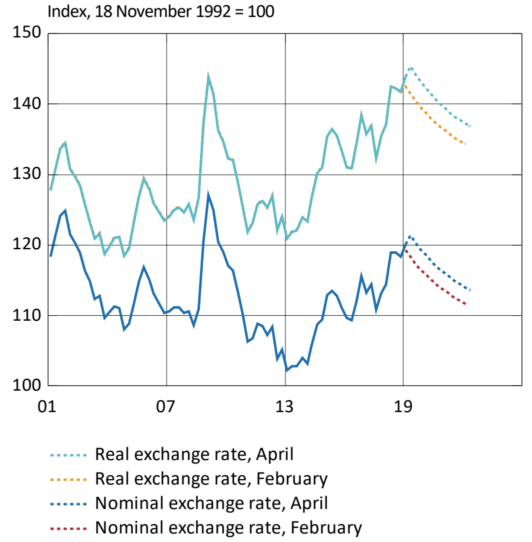
Figure 4:4. Consumer prices in various countries and regions
Annual percentage change



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

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

Figure 4:5. Real and nominal exchange rate, KIX
Index, 18 November 1992 = 100



Note. The real exchange rate is calculated using the CPIF for Sweden and the CPI for the rest of the world. The KIX is an aggregate of countries that are important for Sweden's international transactions.

Sources: National sources, Statistics Sweden and the Riksbank reasons due to a slowdown in energy prices (see Figure 4:4). The strong US labour market of recent years is contributing to a slightly more rapid increase in wage growth and thereby in corporate labour costs, which will contribute towards a rate of inflation of just over 2 per cent in the next few years.

Krona to strengthen in the years ahead

The Swedish krona, measured in terms of the krona index (KIX), is initially slightly weaker than in the forecast published in February. Some of this weakening has occurred in conjunction with the publication of domestic and foreign macro-statistics that have been weaker than the market was expecting. The Riksbank has noted that the krona has depreciated over a longer period from an already weak starting point. Therefore the krona is assessed to be slightly weaker, at the end of the forecast period, than was assumed in the Monetary Policy Report published in February. Currently, however, the real exchange rate is weak compared with the levels that long-term factors justify and the forecast therefore includes an appreciation in the period ahead, as in the assessment made in the Monetary Policy Report published in February (see Figure 4:5).

Sweden

Slower growth in labour supply

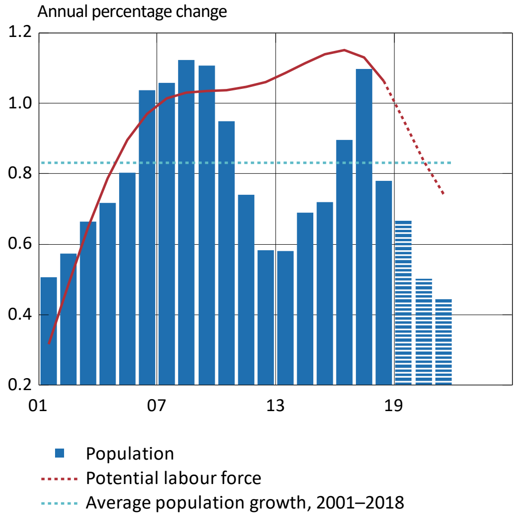
By monitoring the structural development of the labour supply and productivity, it is possible to form an idea of growth potential in the economy. In recent years, the overall working-age population has grown relatively rapidly (see Figure 4:6). This has contributed to a sharp increase in the labour supply.

The overall labour force participation rate has also shown a rising trend since 2009 and, in 2018, over 73 per cent of the population aged 15–74 participated in the labour force (see Figure 4:7). The upturn has occurred among both Swedish-born and foreign-born persons. Among Swedish-born persons, the increase is primarily due to older people choosing to remain in the labour force for longer. The long period of strong economic activity is probably one reason for why those born outside Europe are now also becoming established on the labour market somewhat faster than previously.

In the coming years, growth in the working-age population will slow as the Swedish-born population gets older on average and immigration is assumed to fall. However, continuing increased labour force participation among foreign-born and older people means that the development of the structural supply of labour is not expected to decline as rapidly as the growth in population (see Figure 4:6).

Similarly to many other parts of the world, productivity growth in Sweden, with the exception of isolated years, has been low since the financial crisis (see Figure 4:8). There is no agreement over how the weak productivity growth can be

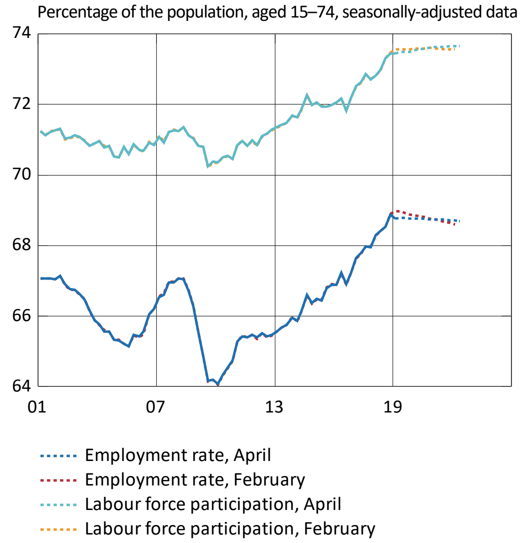
Figure 4:6. Population and potential labour force, 15–74 years
Annual percentage change



Note. Potential labour force refers to the long-term sustainable level according to the Riksbank's assessment.

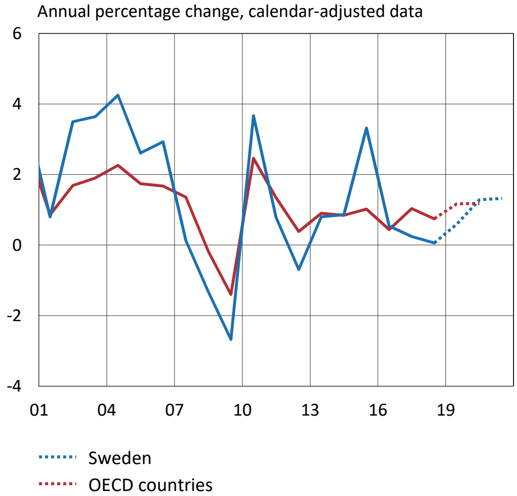
Sources: Statistics Sweden and the Riksbank

Figure 4:7. Employment rate and labour force participation
Percentage of the population, aged 15–74, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 4:8. Productivity
Annual percentage change, calendar-adjusted data



Note. Productivity refers to GDP per hours worked. The forecast for OECD refers to Economic Outlook, November 2018.

Sources: OECD, Statistics Sweden and the Riksbank explained, but several factors have probably contributed.[13] Productivity growth is expected to increase in the period ahead but will remain lower than it was prior to the financial crisis.

Overall, the increase in labour supply and productivity will lead to a GDP growth potential of nearly 2 per cent a year in 2019–2021 (see Figure 4:9).

Strong economic activity but lower growth in the next few years

After a few years of growth just below 2.5 per cent per year, growth is expected to slow to slightly below 2 per cent in the coming years (see Figure 4:9). As growth is expected to be lower than the economy's potential growth in the period ahead, the currently high resource utilisation in the economy will soften somewhat.

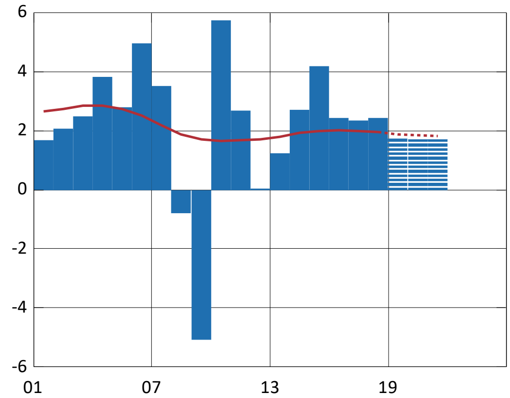
Growth in both domestic and foreign demand will slow down slightly over the coming years. The slowdown in Swedish export markets means that exports will grow slightly more slowly, on average just over 3.5 per cent per year in the period ahead. In the shorter perspective, domestic development will, above all, be weighed down by developments on the housing market. After having been an important driving force for growth in 2014–2017, demand for housing has slowed down and is contributing to falling housing prices. The downturn in prices has reduced profitability for construction companies, who have responded by starting fewer housing construction projects. Despite this, the number of housing starts is expected to continue to be high from a historical perspective. All in all, housing investments are expected to weigh down GDP development by about 0.6 percentage points this year, before making a slightly less negative contribution to growth in the years ahead (see Figure 4:10).

Capacity utilisation is starting from a high position, but, in the years ahead, the slightly weaker economic outlook will contribute to the business sector's investments, excluding housing investments, also increasing more slowly. Overall, total gross investment will increase marginally this year and then increase again at a moderate pace in the years thereafter.

Fiscal policy was slightly expansionary last year and general government net lending fell from 1.4 to 0.9 per cent of GDP. In the Spring Fiscal Policy Bill for 2019, the Government presented no new unfinanced measures but, together with previously decided measures, the proposal nevertheless means that net lending can be expected to fall slightly this year. As economic activity slows down, general government net lending is expected to decrease a little more and amount to 0.5 per cent of GDP in 2021.[14]

Figure 4:9. GDP

Annual percentage change, calendar-adjusted data

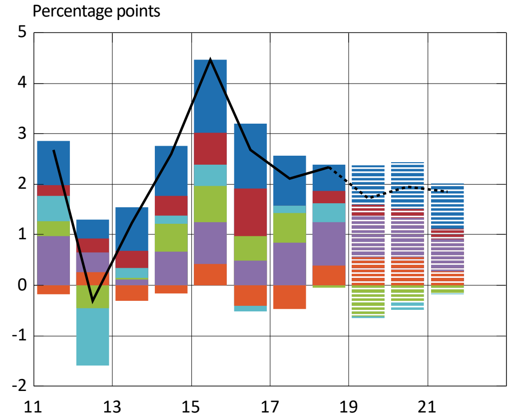


Note. Potential GDP refers to the long-term sustainable level according to the Riksbank's assessment.

Sources: Statistics Sweden and the Riksbank

Figure 4:10. Contribution to GDP growth

Percentage points



Sources: Statistics Sweden and the Riksbank

[13] For an international comparison and review of various explanatory factors, see the chapter "Produktiviteten i Sverige" ["Productivity in Sweden"] in "Lönebildningsrapporten 2017" (in Swedish only, summarised as Wage Formation in Sweden 2017), National Institute of Economic Research.

[14] The Riksbank's forecasts for fiscal policy assume that fiscal policy will be adjusted, more or less as usually, to the surplus target and the economic situation. The forecast also takes announced and adopted reforms into account.

Stable development of consumption despite lower income growth

Uncertainty over global growth prospects and the development of the Swedish housing market has probably contributed towards households saving an increasingly large portion of their incomes last year. However, moderate house price increases and the continuing strong labour market of recent years are creating conditions for households to save a smaller portion of their incomes.

According to the National Institute of Economic Research's Consumer Tendency Survey, households' expectations for the next few years are well in line with the Riksbank's forecast for the repo rate. This suggests that households have included approaching rate rises in their economic planning. When incomes grow at an increasingly slow rate in the years ahead, due to lower employment growth, higher mortgage rates and other factors, households are expected to reduce the portion of income they save to even out their consumption over time. Consumption will thus develop at a relatively even pace in the period ahead, just below the historically average growth rate (see Figure 4:11).

Household debt is continuing to increase, but at a slower pace

The rate of increase in household debt has slowed down in the wake of the fall in housing prices. Even if housing prices, measured using the HOX price index, have remained basically unchanged over the last year, they are slightly less than 5 per cent lower, overall, than at the peak in the summer of 2017.

However, debts are still growing at a relatively rapid rate, which can largely be explained by current home-buyers paying higher prices for their homes than the sellers once did and therefore needing to borrow greater amounts. At the same time, the lower housing construction is restraining the build-up of debt slightly. According to Finansinspektionen, the more stringent amortisation requirement introduced in March 2018 has contributed towards households buying cheaper homes and raising smaller loans that they would have done had there been no requirement. At the same time, only a small proportion of Swedish home-buyers are affected by the requirement. The overall effect on household debt is therefore deemed to be small, even if the effect is greater in regions where more people are subject to the requirement, such as Stockholm and Gothenburg.

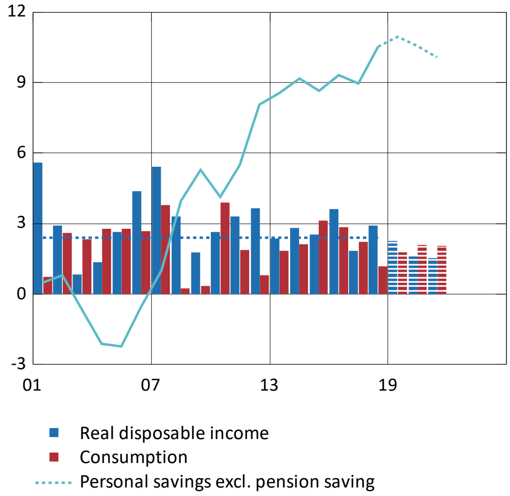
In the years ahead, the amortisation requirements introduced so far are expected to cover increasing numbers of home-owners as housing stocks are sold. Together with higher mortgage rates, this will contribute towards restraining household demand for loans, but debt is nevertheless expected to grow slightly faster than disposable incomes and the so-called debt-to-income ratio is expected to increase to just over 190 per cent in 2022 (see Figure 1:13).

The labour market remains strong

The labour market has been improving for several years with a rising employment rate and falling unemployment (see Figures

Figure 4:11. Households' real disposable income, consumption and savings ratio

Annual percentage change and per cent of disposable income, respectively

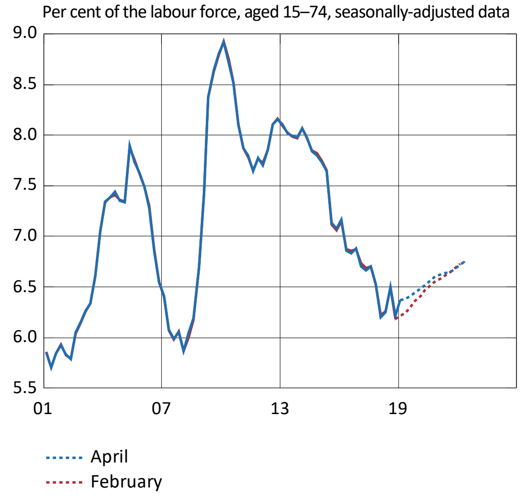


Note. Disposable income has been deflated using the household consumption deflator. Broken line is the average of consumption growth 1994–2018. Collective insurance savings consist of savings that households do not control themselves, such as premium pensions and group insurance policies.

Sources: Statistics Sweden and the Riksbank

Figure 4:12. Unemployment

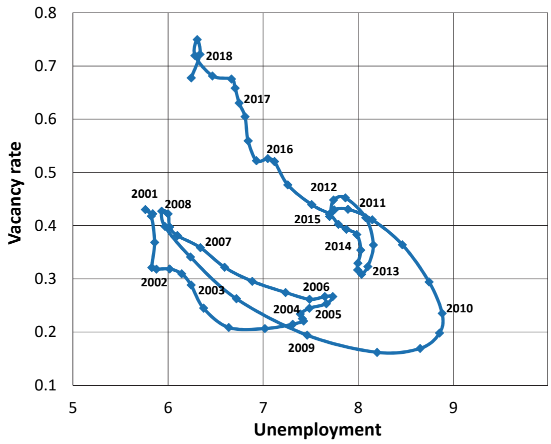
Per cent of the labour force, aged 15–74, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 4:13. The Beveridge curve

Percentage of the labour force, aged 15–74, seasonally adjusted data, trend values



Note. Dates denote first quarter of each year respectively. Vacancies in the business sector.

Sources: Statistics Sweden and the Riksbank

4:7 and 4:12). In some groups in the population, the employment rate is now very high from a historical perspective. For example, the proportion of people in employment in the age group 25–54 with post-secondary education is over 90 per cent. This is making it difficult for companies to find the staff they want, contributing towards a slowdown in employment growth in the period ahead.

The difficulty companies are facing in finding the staff they want, even though may people are still unemployed, indicates that there are problems matching job-seekers with job openings. Among other things, this is reflected in higher shortages and longer recruitment times.

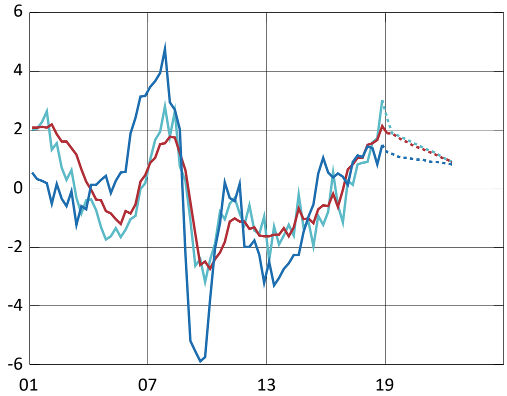
A common way of illustrating how well matching on the labour market is functioning is to use the Beveridge curve that shows the correlation between unemployment and the vacancy rate (the ratio between the number of vacancies and the number of people in the labour force). Rising vacancy rates usually coincide with falling unemployment and vice versa. After the financial crisis, unemployment has been higher for a given vacancy rate, illustrated by the Beveridge curve shifting outwards, a sign that matching on the labour market has deteriorated (see Figure 4:13). One explanation for this is probably the major inflow to the labour force of groups with historically weak connections to the labour market, particularly persons without upper-secondary educations or working experience from the Swedish labour market. This development has led to changes in the composition of the unemployed group, as the proportion of unemployed persons registered with Arbetsförmedlingen (the Swedish public employment service) belonging to 'vulnerable' groups has increased and now forms over 75 per cent.[15] The inflow of labour in the period ahead is also expected to consist primarily of persons experiencing, on average, relatively more difficulty in finding work. Demand for labour is also growing more slowly and unemployment is therefore expected to rise slightly in the next few years (see Figure 4:12).

All in all, resource utilisation on the labour market, and in the economy as a whole, is deemed to be higher than normal and is expected to remain so over the coming years. However, as GDP growth, employment and hours worked are becoming lower than their respective growth trends, resource utilisation will fall slightly (see Figure 4:14).

Wage growth on the up

Wage growth has been moderate in recent years, in relation to both the historical average and the economic situation. The development may, to an extent, be due to low wage increases abroad and a longer period of weak productivity growth, which is reducing the scope for wage rises. At the same time, the low productivity growth has caused unit labour costs to rise unusually

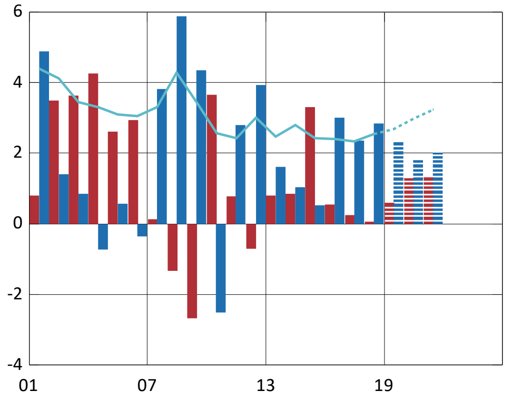
Figure 4:14. GDP gap, employment gap and hours gap
Per cent



Note. The gaps refer to the deviation of GDP, the number of those employed and the number of hours worked from the Riksbank's assessed trends.

Sources: Statistics Sweden and the Riksbank

Figure 4:15. Wages and labour costs in the whole economy
Annual percentage change



Sources: National Mediation Office, Statistics Sweden and the Riksbank

[15] Arbetsförmedlingen defines vulnerable groups as unemployed persons who lack upper-secondary education and/or are born outside of Europe and/or have some form of disability and/or are 55–64 years old.

rapidly in recent years, even though wage growth has been restrained (see Figure 4:15).

Wages are expected to gradually increase slightly more rapidly in the period ahead. Factors suggesting this include the strong labour market situation, rising inflation and the anchoring of inflation expectations around the inflation target. There are also clear signs of rising wage growth abroad (see Figure 3:10). In addition, forecasts for wages in Sweden are based on productivity growth rising gradually over the forecast period, which should increase scope for wage rises in the period ahead.

Wage growth is expected to be slightly lower in the coming years than was suggested in the forecast published in February. The forecast for unit labour costs has therefore been adjusted slightly downwards overall, but is nevertheless expected to increase by around 2 per cent a year during the forecast period, which is a historically normal rate of increase (see Figure 4:15).

Inflation close to 2 per cent in years ahead

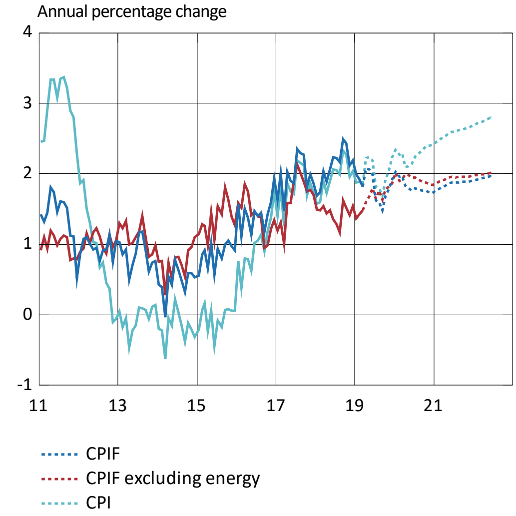
Inflation has now been around to the Riksbank's inflation target of 2 per cent since the start of 2017 (see Figure 4:16). Several factors have contributed to this. Among other things, economic activity in Sweden has become increasingly strong and the krona has weakened, which has contributed to higher rates of price increase in for goods and foodstuffs that are imported. Rapidly rising energy prices have also contributed towards higher inflation, particularly over the last year.

CPIF inflation amounted to 1.8 per cent in March and developed unexpectedly weakly over the start of the year. The rate of increase in the CPIF excluding energy amounted to 1.5 per cent in March. Both the CPIF and CPIF excluding energy increased more slowly than was forecast in the Monetary Policy Report published in February (see Figure 1:7 and 4:17). It was primarily prices for normally volatile components in the CPI, such as energy, foreign travel and clothes, that increased unusually slowly. Several of the Riksbank's measures of underlying inflation, which take less account of price development for goods and services whose prices vary greatly, showed an increase, and the median of the measures was 2.0 per cent in March. However, considering that inflation has repeatedly been surprisingly low, the Riksbank deems that the impact of the strong economic activity, rising costs and the weaker krona has been slightly less than expected.

Several factors suggest an upturn in the CPIF excluding energy prices over the next year, including the weak krona and rising food prices. In addition, rents have started to increase more rapidly than in recent years.

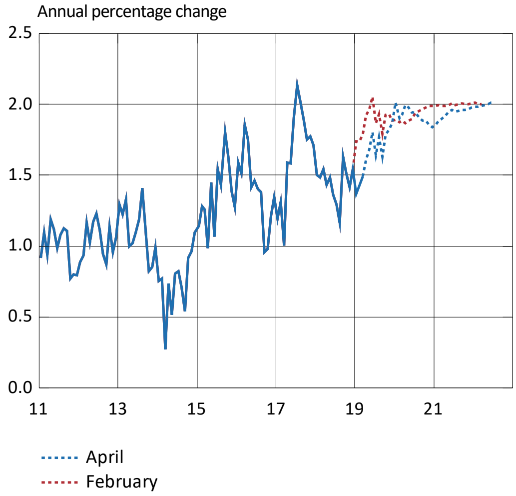
Economic activity is strong and resource utilisation is expected to continue to be high, which, together with rising inflation abroad, also suggests inflation close to 2 per cent in the period ahead. In addition, unit labour costs have increased relatively rapidly recently and are not judged to have reached their full impact on inflation yet.

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



Sources: Statistics Sweden and the Riksbank

Figure 4:17. CPIF excluding energy
Annual percentage change



Sources: Statistics Sweden and the Riksbank

However, there are also factors that will help restrain inflation. The krona is expected to appreciate at the same time as energy prices are expected to increase more slowly than in recent years. The lower rate of increase in energy prices will contribute towards CPIF inflation falling back temporarily to reach a low point of just below 1.5 per cent by the autumn. Following this, inflation is expected to rise and be close to 2 per cent in the period ahead.

Inflation is expected to be lower than in the February report

Despite continued high resource utilisation and a slightly weaker krona in the coming years, inflationary pressures are expected to be lower overall in comparison with the previous forecast. This is partly because international inflation has been adjusted downwards compared with the forecast in February, but also because the impact from economic activity and costs on inflation is now expected to be slightly smaller than in the previous assessment. The forecast for inflation has thereby been adjusted downwards compared with the forecast in February (see Figure 1:7 and 4:17).

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

	Q1 2019	Q2 2019	Q3 2019	Q2 2020	Q2 2021	Q2 2022
Repo rate	−0.27 (−0.27)	−0.25 (−0.24)	−0.25 (−0.14)	0.04 (0.23)	0.42 (0.73)	0.80

Source: The Riksbank

Table 2. Inflation

Annual percentage change, annual average

	2017	2018	2019	2020	2021
CPIF	2.0 (2.0)	2.1 (2.1)	1.8 (2.0)	1.8 (1.8)	1.9 (2.0)
CPIF excl. energy	1.7 (1.7)	1.4 (1.4)	1.7 (1.9)	1.9 (1.9)	1.9 (2.0)
CPI	1.8 (1.8)	2.0 (2.0)	2.0 (2.2)	2.3 (2.6)	2.6 (3.0)
HICP	1.9 (1.9)	2.0 (2.0)	1.8 (2.0)	1.8 (1.8)	1.8 (1.9)

Note. 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

	2017	2018	2019	2020	2021
Repo rate	−0.5 (−0.5)	−0.5 (−0.5)	−0.2 (−0.2)	0.1 (0.3)	0.5 (0.8)
10-year rate	0.7 (0.7)	0.7 (0.7)	0.5 (0.9)	1.0 (1.7)	1.4 (2.4)
Exchange rate, KIX, 18 November 1992 = 100	112.9 (112.9)	117.6 (117.6)	120.3 (117.9)	117.5 (114.9)	115.2 (112.7)
General government net lending*	1.4 (1.5)	0.9 (0.9)	0.6 (0.6)	0.5 (0.5)	0.5 (0.5)

* Per cent of GDP. Outcome and forecast for general government net lending are based on EDP statistics published at the end of March by Statistics Sweden

Sources: Statistics Sweden and the Riksbank

Table 4. International conditions

Annual percentage change, unless otherwise stated

GDP	PPP-weights	KIX-weights	2017	2018	2019	2020	2021
Euro area	0.11	0.49	2.5 (2.5)	1.8 (1.8)	1.2 (1.4)	1.4 (1.5)	1.5 (1.5)
USA	0.15	0.08	2.2 (2.2)	2.9 (2.9)	2.4 (2.4)	1.8 (1.8)	1.6 (1.6)
Japan	0.04	0.02	1.9 (1.9)	0.8 (0.8)	0.6 (0.8)	0.5 (0.5)	0.9 (0.9)
China	0.19	0.08	6.9 (6.9)	6.6 (6.6)	6.1 (6.1)	6.0 (6.0)	6.0 (6.0)
KIX-weighted	0.75	1.00	2.9 (2.9)	2.5 (2.5)	2.0 (2.1)	2.1 (2.1)	2.1 (2.1)
World (PPP-weighted)	1.00	—	3.7 (3.7)	3.7 (3.7)	3.4 (3.6)	3.6 (3.6)	3.6 (3.6)

Note. Calendar-adjusted growth rates. The PPP weights refer to the global purchasing-power adjusted GDP weights for 2018, according to the IMF. KIX weights refer to weights in the Riksbank's krona index (KIX) for 2019. The forecast for GDP in the world is based on the IMF's forecasts for PPP weights. The forecast for KIX-weighted GDP is based on an assumption that the KIX weights will develop in line with the trend during the previous five years.

CPI	2017	2018	2019	2020	2021
Euro area (HICP)	1.5 (1.5)	1.8 (1.7)	1.4 (1.3)	1.6 (1.7)	1.6 (1.7)
USA	2.1 (2.1)	2.4 (2.4)	1.9 (1.9)	2.3 (2.3)	2.2 (2.3)
Japan	0.5 (0.5)	1.0 (1.0)	0.7 (1.1)	1.5 (1.9)	1.2 (1.5)
KIX-weighted	1.9 (1.9)	2.2 (2.2)	1.9 (1.9)	2.0 (2.1)	2.0 (2.2)

	2017	2018	2019	2020	2021
Policy rates in the rest of the world, per cent	−0.1 (−0.1)	0.1 (0.1)	0.2 (0.2)	0.3 (0.3)	0.5 (0.6)
Crude oil price, USD/barrel Brent	54.8 (54.8)	71.5 (71.5)	67.0 (61.3)	65.9 (61.2)	63.4 (61.0)
Swedish export market	5.0 (5.0)	3.4 (3.7)	3.2 (3.5)	3.7 (3.6)	3.5 (3.5)

Note. International policy rate is an aggregate of policy rates in the US, the euro area (EONIA), 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

	2017	2018	2019	2020	2021
Private consumption	2.2 (2.2)	1.2 (1.3)	1.8 (1.7)	2.1 (2.1)	2.0 (2.0)
Public consumption	0.0 (0.0)	0.9 (0.6)	0.9 (0.5)	0.8 (0.8)	0.8 (0.8)
Gross fixed capital formation	6.0 (6.0)	3.3 (4.4)	0.8 (−0.9)	1.9 (2.4)	1.9 (2.3)
Inventory investment*	0.1 (0.1)	0.4 (0.2)	0.0 (0.0)	−0.2 (−0.2)	0.0 (0.0)
Exports	3.2 (3.2)	3.5 (2.5)	3.5 (3.5)	4.0 (3.4)	3.8 (3.4)
Imports	4.8 (4.8)	2.9 (2.4)	2.5 (2.3)	3.1 (3.1)	3.6 (3.4)
GDP	2.1 (2.1)	2.3 (2.2)	1.7 (1.3)	1.9 (1.9)	1.8 (1.8)
GDP, calendar-adjusted	2.4 (2.4)	2.4 (2.3)	1.7 (1.3)	1.7 (1.6)	1.7 (1.7)
Final domestic demand*	2.4 (2.4)	1.6 (1.8)	1.2 (0.6)	1.6 (1.7)	1.6 (1.7)
Net exports*	−0.5 (−0.5)	0.4 (0.1)	0.5 (0.7)	0.5 (0.3)	0.3 (0.1)
Current account (NA), per cent of GDP	3.7 (3.7)	3.4 (3.2)	3.7 (3.6)	4.0 (3.7)	4.1 (3.7)

*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

	2017	2018	2019	2020	2021
Population, aged 15–74	1.1 (1.1)	0.8 (0.8)	0.7 (0.6)	0.5 (0.5)	0.4 (0.5)
Potential hours worked	1.1 (0.9)	1.1 (0.9)	1.0 (0.9)	0.9 (0.8)	0.7 (0.7)
Potential GDP	2.0 (1.8)	2.0 (1.9)	1.9 (1.9)	1.8 (1.8)	1.8 (1.8)
GDP, calendar-adjusted	2.4 (2.4)	2.4 (2.3)	1.7 (1.3)	1.7 (1.6)	1.7 (1.7)
Number of hours worked, calendar-adjusted	2.1 (2.1)	2.4 (2.0)	1.1 (0.9)	0.4 (0.4)	0.4 (0.3)
Employed, aged 15–74	2.3 (2.3)	1.8 (1.8)	1.0 (1.2)	0.5 (0.4)	0.4 (0.4)
Labour force, aged 15–74	2.0 (2.0)	1.4 (1.4)	1.1 (1.2)	0.6 (0.6)	0.5 (0.5)
Unemployment, aged 15–74 *	6.7 (6.7)	6.3 (6.3)	6.4 (6.3)	6.5 (6.5)	6.6 (6.6)
GDP gap**	0.8 (1.3)	1.3 (1.7)	1.1 (1.1)	1.0 (0.9)	0.9 (0.8)
Hours gap**	0.5 (1.0)	1.8 (2.0)	2.0 (2.0)	1.5 (1.6)	1.2 (1.3)

* Per cent of the labour force **Deviation from the Riksbank's assessed potential level, per cent

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

	2017	2018	2019	2020	2021
Hourly wage, NMO	2.3 (2.3)	2.6 (2.6)	2.7 (2.8)	3.0 (3.2)	3.2 (3.3)
Hourly wage, NA	2.5 (2.5)	2.2 (2.6)	2.8 (2.8)	3.0 (3.2)	3.3 (3.4)
Employers' contribution*	0.0 (0.0)	0.5 (0.2)	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)
Hourly labour cost, NA	2.5 (2.5)	2.6 (2.9)	2.9 (2.9)	3.1 (3.3)	3.4 (3.5)
Productivity	0.2 (0.2)	0.0 (0.4)	0.6 (0.4)	1.3 (1.2)	1.3 (1.4)
Unit labour cost	2.4 (2.4)	2.9 (2.7)	2.3 (2.5)	1.8 (2.1)	2.0 (2.1)

* Difference in rate of increase between labour cost per hour, NA and hourly wages, NA, 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 (labour cost sum) divided by the number of hours worked by employees. Unit labour cost is defined as labour cost sum divided by GDP in fixed prices.

Sources: National Mediation Office, Statistics Sweden and the Riksbank

SVERIGES RIKSBANK
103 37 Stockholm
(Brunkebergstorg 11)

Tel 08 - 787 00 00
Fax 08 - 21 05 31
registratorn@riksbank.se
www.riksbank.se

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