Monetary Policy Report

December 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 18 December 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 two weeks after each monetary policy meeting, the Riksbank publishes minutes from the meeting, in which it is possible to follow the discussion that led to the current decision and to see the arguments put forward by the different Executive Board members.

PRESENTATION OF THE 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

After the monetary policy decision in October, economic developments abroad and in Sweden and have been in line with the Riksbank's forecasts. Similar to economies abroad, the Swedish economy has entered a phase with a lower growth rate. However, the slowdown is occurring after several years of high growth and strong developments on the labour market and overall means that the Swedish economy is going from a stronger-than-normal cycle to a more normal situation.

Since the start of 2017, inflation in Sweden has been close to 2 per cent. After an expected decline over the summer, inflation has again risen to just under 2 per cent. Different measures of underlying, more persistent, inflation are also close to 2 per cent. The Riksbank deems that the conditions exist for inflation to remain close to the target in the period ahead. Therefore, in line with the assessment in October, the Executive Board has decided to raise the repo rate from –0.25 per cent to zero per cent. The forecast for the repo rate is unchanged and indicates that the rate will remain still at zero per cent for almost the entire forecast period.

An interest rate of zero per cent means that monetary policy will still be expansionary, emphasising that the Riksbank is safeguarding the inflation target's role as nominal anchor for price-setting and wage formation.

More normal economic situation

Global economic activity slowing down

After several years of good growth, global trade has slowed and industrial activity has weakened, partly as a result of uncertainty about global trade policy, the United Kingdom's withdrawal from the EU and wavering global development in the automotive industry over recent years. However, the situation looks better for the retail trade and the service sector. Despite the decline in industrial production, developments on the labour market abroad have been strong overall, with falling unemployment and rising wage growth. This has contributed to continued higher-than-normal household confidence in most major countries.

Indicators reflecting companies' trust in the future have stabilised, and the conditions for global GDP growth going forward are deemed to be relatively favourable. This year and in the years ahead, GDP in KIX-weighted countries is expected to grow more or less in line with or slightly more weakly than the historical average of just over 2 per cent. Positive signals for global trade are that the risk of the United Kingdom's withdrawal from the EU occurring without an agreement in the short term has been eliminated after the UK election, and that China and the United States say that they intend to sign a "phase-one" agreement on improved trade relations. Sentiment on the financial markets has improved during the autumn and price-setting indicates that participants are expecting the slowdown in economic activity to be limited.

Table 1:1.

Important factors for monetary policy
The conditions for global GDP growth are relatively favourable going forward. Global inflation is rising slowly.
In Sweden and abroad, the financial conditions are expected to remain expansionary, thereby helping to support inflation and economic development.
The Swedish economy is growing at a slower pace. After several years of high growth, resource utilisation is going from a higher-than-normal to a more normal level.
The conditions for close-to-target inflation remain good for the period ahead. The overall picture for long-term inflation expectations is that they have been close to 2 per cent for a few years.
Revisions of the economic outlook and inflation prospects since the monetary policy decision in October are minor.
Conclusion: The repo rate is raised to zero per cent, in line with the assessment in October. The forecast indicates that the repo rate will remain unchanged for almost the entire forecast period.

Despite economic activity in the euro area having been relatively good in recent years, with strong developments on the labour market and rising wage growth, underlying inflation continues to be low and inflation expectations have fallen to low levels in a historical perspective. In light of the past year's weaker growth and low inflationary pressures, several foreign central banks have made monetary policy more expansionary after the summer, which has contributed to a decline in bond yields.

Resource utilisation in the Swedish economy towards a normal situation

Import demand on Sweden's most important export markets is expected to grow moderately in the next few years, which, together with the ongoing decline in construction, is contributing to the assumption of a continued subdued growth rate in the Swedish economy going forward. Although the construction rate is expected to remain high in a historical perspective, fewer homes are being built compared with in recent years, and weakened industrial activity is dampening growth in other business sector investment. Household consumption has recovered over the past six months and is expected to grow at a relatively healthy rate in the coming years, approximately in line with income.

As in other countries, both government bond yields and equity prices have risen in Sweden during the autumn. The financial conditions in Sweden are deemed to still be expansionary, which is providing support to economic development. That the Swedish economy is now growing at a slower rate after several years of good growth means overall that the economy is going from a higher-than-normal activity level to a more normal situation (See Figure 1:2).

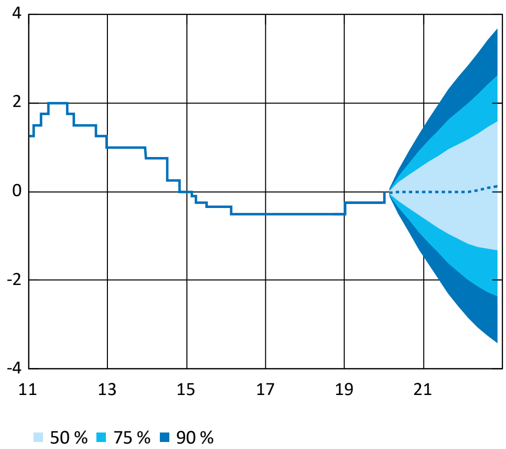
Slowdown on the labour market

Having identified quality flaws in the statistics, Statistics Sweden published in November revised labour market statistics showing that employment has grown approximately at pace with the working-age population since the beginning of 2018, and that unemployment bottomed out at the same time and has thereafter increased at a slow rate. The new figures are more in line with other information regarding the labour market and confirm the Riksbank's view of developments. Outcomes and indicators suggest that the labour market has cooled and that the demand for labour is softening. As a result, unemployment is expected to continue to rise slightly in the years ahead. The employment rate is not increasing further but remains on a high level.

Inflation again close to 2 per cent

Having been close to the Riksbank's target of 2 per cent for some time, CPIF inflation fell during the summer (see Figure 1:3). This is mainly due to falling energy prices (see Figure 1:4). Thereafter, inflation has risen again and in November CPIF inflation amounted to 1.7 per cent. Energy prices made only a marginally

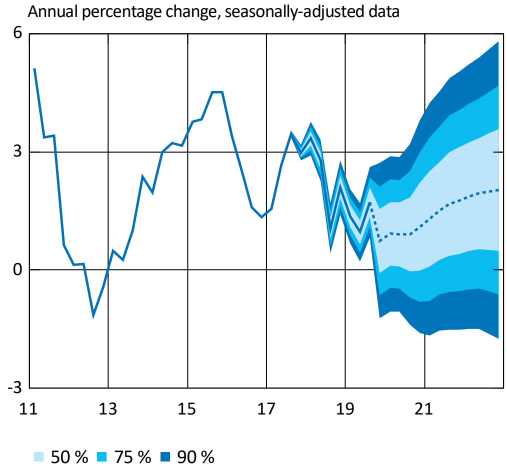
Figure 1:1. Repo rate with uncertainty bands
Per cent



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

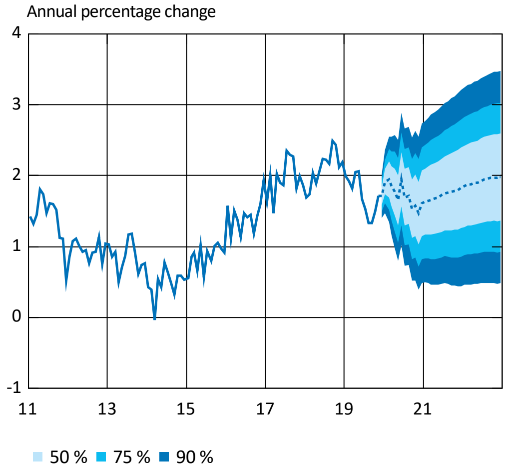
Figure 1:2. GDP with uncertainty bands
Annual percentage change, seasonally-adjusted data



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



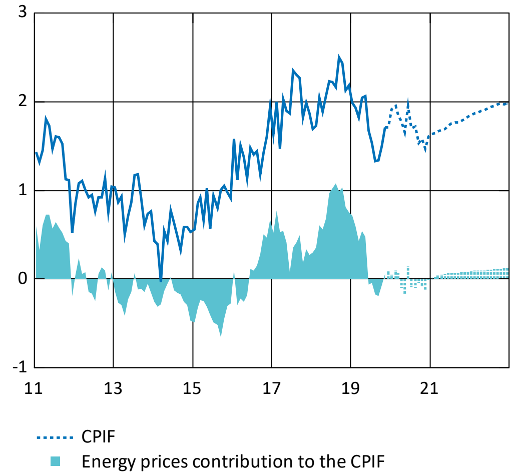
Note. The uncertainty bands are based on the Riksbank's historical forecasting errors.

Sources: Statistics Sweden and the Riksbank

negative contribution to the rate of increase and excluding energy inflation amounted to 1.8 per cent. Different measures of underlying inflation are overall just below 2 per cent.

Inflation will slow slightly in 2020 when the Swedish krona's positive effects on price increases are expected to decline while energy prices have a dampening effect. Overall, the Riksbank's assessment is that the conditions for close-to-target inflation remain good. Demand in the Swedish economy has been high for a long period, wage growth is expected to rise somewhat and companies' costs, measured in terms of unit labour costs, will increase by about 2 per cent per year.

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

Current monetary policy

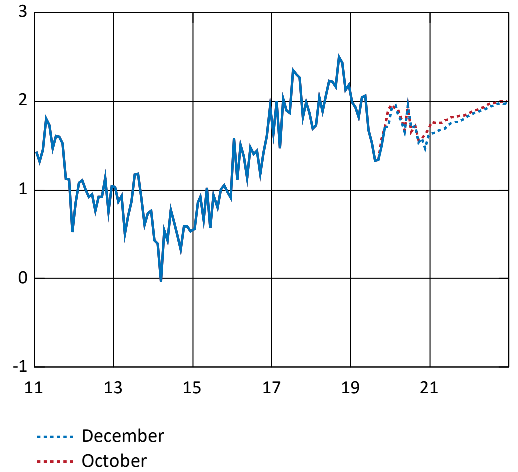
The picture of economic developments is unchanged
Since the Monetary Policy Report in October, economic developments abroad and in Sweden and have been in line with the Riksbank's forecasts.

Similar to economies abroad, the Swedish economy has entered a phase with a lower growth rate after several years of strong economic activity. Revised statistics for the labour market support the Riksbank's previous assessment that a gradual slowdown has occurred on the Swedish labour market. Growth in the third quarter was marginally weaker than expected and expectations among households and companies point to modest growth for some time to come. Compared with the forecast in October, however, growth abroad is slightly higher than expected and indicators reflecting companies' expectations about the future have stabilised.

Overall, the new information confirms that economic activity is declining from a strong to a more normal situation and that inflation has again increased towards 2 per cent after the downturn during the summer. The revisions of both the economic outlook and inflation prospects are minor. The forecast for CPIF inflation is largely unchanged (see Figure 1:5).

According to Prospera's survey, inflation expectations five years ahead have fallen back slightly over the current year. According to price-setting on financial markets, however, expectations have risen since the beginning of the year. The overall view is that long-term inflation expectations have been close to 2 per cent for a few years now (see Figure 1:6).

Figure 1:5. CPIF
Annual percentage change



Sources: Statistics Sweden and the Riksbank

Repo rate raised to zero per cent
Monetary policy has been expansionary for a long time in order to support economic development and inflation. In Sweden, the economy has been strong for several years with high activity and strong development on the labour market. This has contributed to keep inflation close to the target of 2 per cent since the beginning of 2017, apart from a temporary decline during the summer of this year, which is mainly explained by the development in energy prices. Seen over recent years, target attainment has been good.

Figure 1:6. Long-term inflation expectations
Per cent, average and per cent respectively

Note. Inflation compensation refers to a 5-year period starting in 5 years' time, calculated on the basis of bond yields, 15 days moving average.

Sources: Kantar Sifo Prospera and the Riksbank

Developments since the monetary policy meeting in October have on the whole been as the Riksbank expected and the economic outlook and inflation prospects are largely unchanged. The economic situation is close to or slightly higher than normal and inflation is just below the inflation target. With the monetary policy assumed in this report, the economy is expected to be balanced in the coming years and conditions to be good for inflation to remain close to the target going forward. The Executive Board has therefore decided to raise the repo rate from –0.25 per cent to zero per cent, in line with the forecast from October (See Figure 1:7).

Since the start of 2015, the repo rate has been negative, at the same time as the Riksbank has carried out comprehensive purchases of government bonds. The negative repo rate and purchases of government bonds have worked well and had a positive impact on the economy. But if negative nominal interest rates are perceived as a more permanent state, the behaviour of economic agents may change and negative effects may arise.

A repo rate of zero per cent provides continued support

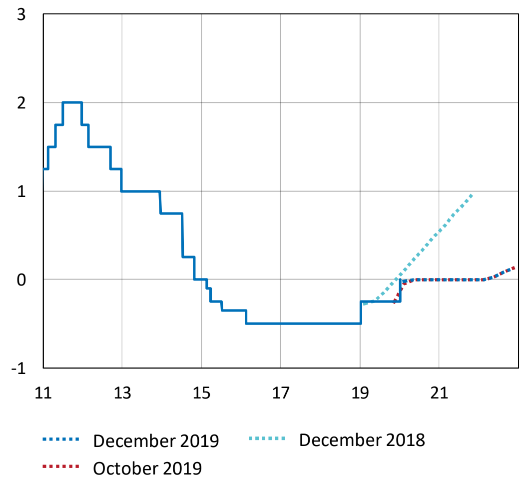
The healthy economic activity over the last few years, in combination with close-to-target inflation, could have justified earlier and more rate rises in 2017 and 2018. But in light of a long period with too low inflation, the Executive Board chose to proceed cautiously by waiting with the first rate rise until the end of 2018. This was in order to ensure that inflation and inflation expectations would become established around 2 per cent.

The forecast in December 2018 indicated that the repo rate would be raised roughly twice a year in 2019–2021. In 2019, the economic outlook has deteriorated unexpectedly rapidly in Sweden and abroad, and the Executive Board has therefore lowered its assessment of the pace at which rate rises will occur (See Figure 1:7). Monetary policy has therefore been successively adapted to provide support to the Swedish economy and inflation in an uncertain world.

That the repo rate is being raised from the very lowest levels when the economy is weakening from a strong level does not mean that the inflation target is in jeopardy. An interest rate of zero per cent, in combination with large holdings of government bonds, means that monetary policy will remain expansionary and thereby create the conditions for inflation to remain close to the target. The real repo rate is expected to remain negative over the entire forecast period (see Figure 1:8).

In the longer term, it is reasonable to expect the repo rate to be higher than zero per cent. But lower rates and uncertainty about economic and inflation development abroad and in Sweden make it difficult to say at present when it will be appropriate to raise the rate next time. The forecast for the repo rate is the same as in October and indicates that the repo rate will be unchanged during almost the entire forecast period. The forecast assumes that uncertainty will gradually decrease in the period ahead and that the economic outlook will stabilise.

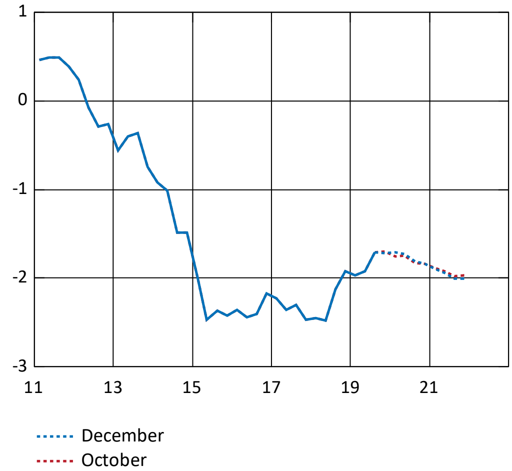
Figure 1:7. Repo rate
Per cent



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

Source: The Riksbank

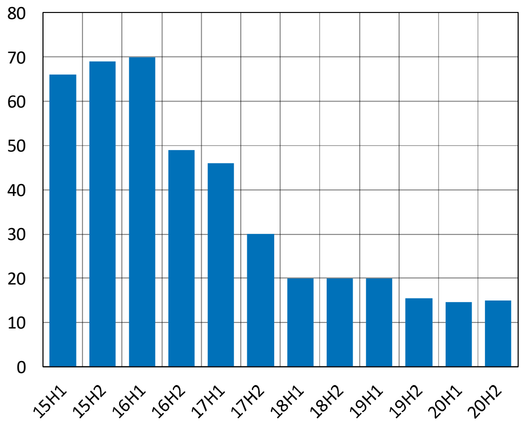
Figure 1:8. Real repo rate
Per cent, quarterly averages



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

Figure 1:9. The Riksbank's purchases of government bonds
Nominal amounts, SEK billion



Source: The Riksbank

If the economic outlook and inflation prospects were to change, monetary policy may need to be adjusted. Improved prospects would justify a higher interest rate. But if the economy were instead to develop more weakly than what is consistent with the forecasts, the Executive Board could both cut the repo rate and take other measures to make monetary policy more expansionary.

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 significant volume of nominal and real Swedish government bonds. The purchases have caused banks' liquidity surplus towards the Riksbank to rise sharply to about SEK 435 billion, equivalent to just under 10 per cent of GDP.

At the end of November, holdings of government bonds amounted to more than SEK 330 billion as a nominal amount. To retain an appropriate level of bond holdings and the Riksbank's presence on the market, the Executive Board decided in April that, from July 2019 to December 2020, the Riksbank will purchase government bonds for a total nominal amount of SEK 45 billion (see Figure 1:9). This means that the Riksbank maintains holdings close to the average level since the beginning of 2018, when net purchases were concluded (see Figure 1:10). The decision is in line with the previously communicated strategy of gradually normalising monetary policy.[5]

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 term, the holdings are expected to be smaller than they are today. The Riksbank will adapt the details regarding the purchases of government bonds in view of how the economy develops.

Uncertainty and risks

Forecasts of future economic developments are always uncertain, as illustrated by the uncertainty bands in Figures 1:1–1:3. In the Riksbank's forecasts, the risks of both stronger and weaker development are, in principle, balanced. It is difficult, however, to assess the likelihood of future events and their potential consequences. 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

Side-effects of monetary policy
The Riksbank continuously analyses the effects on the economy of the negative repo rate and the government bond purchases. One reason is that low interest rates can create incentives for excessive 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.

Another reason is that the functioning of the financial markets may be affected by a negative repo rate and government bond purchases. So far, they have been able to manage negative interest rates relatively smoothly. The Riksbank's purchases of government bonds have meant that a large proportion of the stock is not available for trade on the market. According to the Financial markets survey published by the Riksbank in December, almost half of the respondents think that liquidity on the government bond market is functioning poorly or very poorly.[2] On the other hand, other markets where the participants can manage interest rate risk are considered to be functioning well. The picture is roughly the same as the survey in June.

Banks' lending capacity is considered not to have been affected in any decisive way by the low and negative interest rates. Profitability in the Swedish banking sector is still good. Profits have been high and stable in recent years despite them having decreased slightly and there being differences between banks.

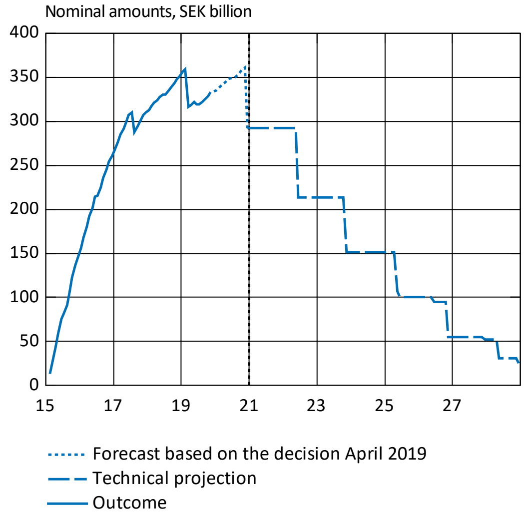
In the Riksbank's latest Business Survey, four out of five companies consider that the net effect of the low rates over the last five years has been positive for their business overall.[3] The Riksbank's assessment is that the side effects of government bond purchases and the negative policy rate have so far been manageable for various economic agents.

But if negative rates are perceived as a more permanent state, there is a risk of various agents changing their behaviour in a way that is negative for economic development. One example is that the demand for cash may increase. This is not something that has been observed so far, which is partly linked to banks not having introduced negative deposit rates for households. This can in turn be due to banks having perceived the negative policy rate as temporary. If the period of negative policy rates is expected to be more permanent, the introduction of negative deposit rates for households cannot be ruled out.[4] In Sweden, it is still only a small portion of deposits that are subject to negative interest rates and then only those from financial corporations, some larger non-financial corporations and parts of the public sector. But in countries such as Germany and Denmark, certain banks have introduced negative deposit rates for households as well.

[2] See Financial markets survey, autumn 2019.
[3] See the article "Positive with low interest rates but negative rates feel counter-intuitive" in the Riksbank's Business Survey November 2019.
[4] The risks do not automatically increase just because households face negative deposit rates. This also requires households to make large cash withdrawals or move large volumes of deposits to other investment options. If sufficiently large volumes of deposits are moved or withdrawn in cash, it may lead to a liquidity risk for the individual bank. Some bank funding then disappears and must be replaced by wholesale funding. Another risk arises if households chose to move their money from a deposit-guaranteed account and invest it in higher-risk assets, such as equities.
[5] See the article "The Riksbank's strategy for a gradual normalisation of monetary policy" in the December 2017 Monetary Policy Report.

may have a severe impact on economic development. But, on other occasions, it may be necessary to await more information before adjusting monetary policy.

Figure 1:10. 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 about economic development abroad
Sweden is a small, open economy, meaning that developments abroad have considerable significance.

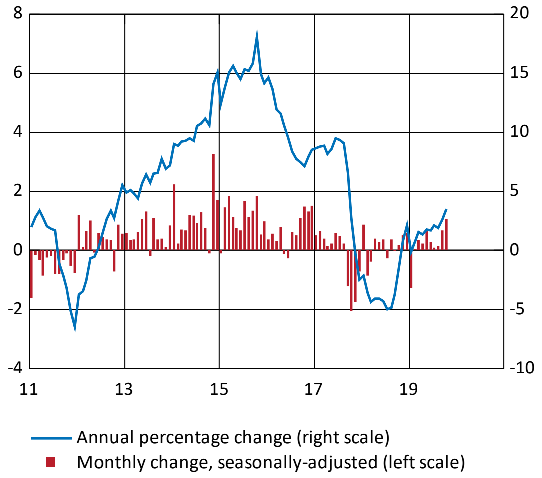
There are several uncertainty factors surrounding global economic developments. The risks associated with the trade conflict between the United States and China have created uncertainty in recent years regarding the development of global trade and global growth. The United States and China have now announced that they intend to sign a "phase-one" agreement in January, which is seen as laying the foundation for a broader trade agreement in the autumn of 2020. The agreement solves several short-term issues regarding trade between the countries, but the most important issues still remain. After the UK general election on 12 December, there is a clear majority in the UK Parliament for approval of the agreement with the EU. The risk of the United Kingdom leaving the EU without an agreement is therefore considered to have been eliminated in the short term. In the slightly longer term, however, uncertainty remains about the future relationship to the EU (see the box "The United Kingdom's withdrawal from the EU – what has happened?" in Chapter 4). A factor that has also affected the risk picture regarding international growth in recent years is developments in Italy. The uncertainty regarding the direction of fiscal policy has diminished in the short term as a result of the new government's expressed ambition to comply with EU budgetary regulations. In a longer perspective, however, significant challenges remain regarding, for example, public indebtedness and the banking sector.

During the period of low global interest rates, investors have turned to riskier asset types, which, among other things, has led to rising equity prices. The price increase has been particularly apparent in the United States, where price-to-earnings (P/E) ratios, which show equity prices in relation to corporate earnings, are now on high levels in a historical perspective.[6] High P/E ratios have historically led to weaker development in prices in relation to earnings a few years ahead. But this does not necessarily imply any dramatic development or price fall. In addition, the currently high valuations can in part be explained by the low interest rates.[7] Nevertheless, there is reason to be vigilant. In recent years, the equity market in the United States has proven to be highly sensitive to tendencies towards rising interest rates.[8] A substantial and sudden decline in US equity prices going forward

[6] P/E ratios for the S&P 500 index based on historical earnings, measured using the so-called Shiller-CAPE ratios, are now at levels surpassed only by those recorded before the crashes in 1929 and 2000.
[7] See, for example, Financial Stability Report, November 2019, Board of Governors of the Federal Reserve System.
[8] For example, volatility on the US equity market increased sharply at the beginning of 2018, at the same time as prices fell significantly. The triggering factor seems to have been unexpectedly strong wage statistics in the United States, which made market participants revise up their expectations of forthcoming policy-rate increases from the Federal Reserve.

could spread to other markets and contribute to greater uncertainty among economic agents globally. Ultimately, it could have an effect on growth prospects both abroad and in Sweden.

Figure 1:11. House prices according to HOX Sweden
Per cent



Sources: Valueguard and the Riksbank

Question marks about domestic demand

In addition to economic risks abroad, there are some question marks about domestic demand. Although household consumption has recovered over the past six months, during the year there has been a decline in consumer confidence. The Riksbank's forecast involves a gradual reduction of saving, so that growth in consumption is maintained. But a pre-condition for the forecast to be accurate is that confidence among households recovers and does not continue to fall.

Future developments on the housing market also constitute an uncertainty factor for the domestic economic outlook. Recently, optimism has strengthened slightly on the Swedish housing market, manifested in, among other things, a slight growth in housing prices (see Figure 1:11). The Riksbank's forecast implies a cautious assessment that housing prices will continue to rise at a modest rate, approximately in line with disposable household income, and that the fall in housing investments will eventually stop, so that they no longer make a negative contribution to GDP growth. If optimism on the housing market continues to strengthen, both housing prices and housing investment can develop more strongly than in the Riksbank's forecast. But the sudden price fall that occurred in the autumn of 2017 shows how difficult developments on the housing market are to assess. If housing prices were to fall sharply during the forecast period, the forecasts would instead need to be revised down.

Uncertainty surrounding the inflation forecast

The risks that are affecting Swedish growth prospects could also lead to a different outcome for inflation than in the Riksbank's forecast. However, even if the economic outlook were largely to be realised, inflation may develop in an unexpected direction.

In the euro area, which is Sweden's most important trading partner, inflation has shown markedly weak development, despite steadily falling unemployment and a rising rate of increase in both wages and unit labour costs.[9] For some time now, underlying inflation has fluctuated around 1 per cent. The Riksbank's assessment is that rising cost pressures will eventually make some impression on inflation in the euro area, so that it rises during the forecast period. In light of developments in recent years, however, there is a downside risk in the forecast. The relationship between inflation in Sweden and abroad is complicated and depends on the driving forces behind the fluctuations. However, it is reasonable to assume that lower inflation abroad affects Swedish inflation negatively via a lower rate of increase in import prices.

[9] See, for example, Wage Growth and Inflation in Europe: A Puzzle?", in Regional Economic Report for Europe, November 2019, IMF.

A link between inflation abroad and in Sweden is the development of the Swedish krona exchange rate. The Riksbank's forecast implies that the krona will strengthen in the longer term compared with its current level, which will dampen cost pressures via imported goods during the forecast period.[10] But exchange rate forecasts are generally very uncertain.[11] The impact of the exchange rate on inflation also constitutes an uncertainty factor in the inflation forecast.[12]

Another source of uncertainty is domestic cost pressures. They are normally measured in terms of unit labour costs, i.e. wages in relation to productivity. In recent years, wage increases have been low despite high resource utilisation.[13] But productivity has also risen slowly. Unit labour costs have therefore increased relatively quickly, despite the modest wage growth. In the period ahead, unit labour costs in the whole economy are expected to rise at a rate that is just below the historical norm, but uncertainty about wages and productivity are one of the factors making it difficult to assess future domestic cost pressures.

The structural problems on the Swedish housing market must be managed

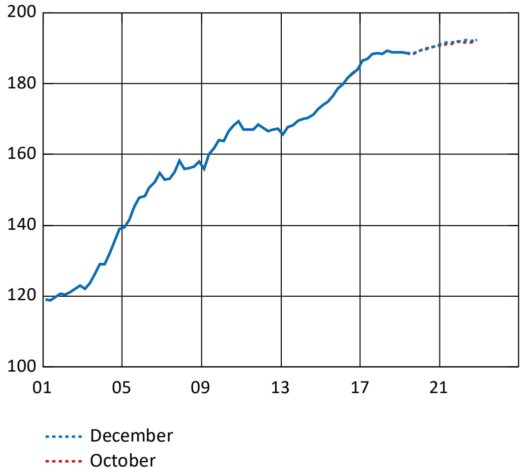
Many years of rapidly rising housing prices and sharply increased indebtedness have increased vulnerabilities in the Swedish economy and made households sensitive to both price falls on the housing market and rising interest expenses. This development is due in part to the Riksbank's expansionary monetary policy but above all to the structural problems on the housing market and to the falling trend in real interest rates in Sweden and abroad.

Since the start of last year, housing prices have increased at a modest pace, and, in relation to previous years, the Swedish housing market has stabilised. Household debt in relation to disposable income is expected nevertheless to increase slightly in the coming years, from an already high level (see Figure 1:12). This will further increase vulnerabilities in the Swedish economy.[14]

Finansinspektionen's amortisation requirements are an example of measures to reduce the risks associated with household indebtedness. However, addressing the fundamental structural problems on the Swedish housing market requires extensive reform measures in housing and tax policy. Examples of feasible measures include reviewing the regulations regarding the new production of housing, as well as the rent-setting

Figure 1:12. 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

[10] This assessment is based on the real krona exchange rate being weaker than the long-term equilibrium level. See the article "Trend development of the Swedish krona" in the Monetary Policy Report of July 2019.

[11] See Askestad, E., Ceh, A. M., Di Casola, P. and Ristiniemi, A., "Forecasting the krona", Economic Commentary No 12 2019, Sveriges Riksbank.

[12] See the article "The significance of the krona for inflation" in the Account of monetary policy. 2018. See also Belfrage, C-J., Corbo, V. and Ingves S., "Perspective on the krona, inflation and monetary policy", Economic Commentaries No 13 2019, Sveriges Riksbank, for a discussion on the uncertainty surrounding both the krona forecast and its pass-through to inflation.

[13] See the article "The Phillips curve and monetary policy" in Monetary Policy Report, July 2018.

[14] See Financial Stability Report 2019:2. Sveriges Riksbank.

system, the taxation of capital gains from housing property sales and also property tax and tax relief on interest expenditure.

CHAPTER 2 – Financial conditions

Sentiment on the financial markets improved over the autumn, causing equity prices to rise. Government bond yields remain on low levels. The expansionary monetary policy abroad is contributing to favourable financial conditions that are supporting economic development. There are now clear expectations among market participants in Sweden that the repo rate will be raised in conjunction with the monetary policy meeting in December and these expectations are in line with the Riksbank's repo rate path. Swedish government bond yields have risen slightly since October but remain on low levels. As in other countries, equity prices in Sweden have continued to rise and are on higher levels than they were at the start of the year. The Swedish krona exchange rate has strengthened since the monetary policy decision in October but is still weaker than it was at the start of 2019. The financial conditions are also assessed to continue to be expansionary in Sweden, which is helping to support economic development.

International developments

In 2019, the sentiment of the financial markets has been characterised by unease over the trade conflict between the United States and China, macroeconomic developments and the subdued inflation outlook. To counteract a downturn in economic activity and inflation prospects, several foreign central banks have made their monetary policies more expansionary, and this has caused bond yields to fall over the year (see Figures 2:1 and 2:2). This has also contributed to rising share prices and shrinking differentials between risky and risk-free assets (see Figures 2:3 and 2:4).

However, over the autumn, the sentiment and economic outlook have developed better than market participants had been expecting. This has given further support to the stock markets and, at the same time, helped government bond yields to rise. The continued good development of higher-risk assets shows that investors expect the slowdown in economic activity to be limited, given that the central banks continue with their expansionary monetary policies. The financial conditions abroad remain favourable and are supporting economic development. Many questions remain regarding the trade relations between the United States and China, and the financial markets are continuing to react particularly strongly to new information on the trade negotiations.

Table 2:1.

Developments on the financial markets since the Monetary Policy Report in October
Market participants expect the repo rate to be raised to zero in Sweden and international policy rates to remain relatively unchanged in the near term.
Government bond yields both abroad and in Sweden have risen slightly over the autumn but remain on low levels from a historical perspective.
Equity prices have risen in Sweden and abroad, while volatility has fallen on stock markets.
After having weakened over the year, the krona exchange rate has strengthened but is still weaker than it was at the start of the year.

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.

Continued expansionary monetary policy abroad

At its monetary policy meeting in December, the European Central Bank (ECB) decided to hold its policy rates unchanged and to continue its asset purchases according to the previous decision. Pricing on the financial markets indicates that market participants expect an unchanged policy rate over the next few years (see Figure 2:1).

The US central bank, the Federal Reserve, decided to decrease the interval for the policy rate by 0.25 percentage points to 1.50–1.75 per cent in conjunction with its monetary policy meeting in October. One of the reasons for the decision was the dampened inflationary pressures. At its meeting in December, the Federal Reserve held the interval for the policy rates unchanged and signalled that monetary policy will remain unchanged for a longer period to come. Pricing on the financial markets indicates that the participants largely expect a further cut to the policy rate in the middle of next year (see Figure 2:1).

In mid-September, turbulence arose on the US money market, when interest rates for overnight loans suddenly started to rise. Since then, the Federal Reserve has taken measures to hold money market rates within the interval for the policy rate. The central bank has also taken measures to prevent a similar situation from arising at the end of the year.

In line with its previous communication, Norges Bank chose to hold its policy rate unchanged at 1.50 per cent at its monetary policy meeting in October. Norges Bank has made its monetary policy less expansionary this year, most recently in September, when the policy rate was raised by 0.25 percentage points. The interest rate path indicates that the policy rate is expected to remain close to 1.50 per cent over the next three years.

Long-term inflation expectations continue to be low in the euro area

Inflation in the euro area continues to be low, which was an important reason behind the ECB's decision to make monetary policy more expansionary at its monetary policy meeting in September. Inflation expectations fell in 2019, according to both market-based and survey-based measures (see Figure 2:5). According to market-based measures, long-term inflation expectations fell particularly rapidly during the first six months of the year. They continued to fall over the autumn, albeit at a somewhat slower pace. The fall in long-term expectations since the start of the year has also been reflected by the ECB's survey.

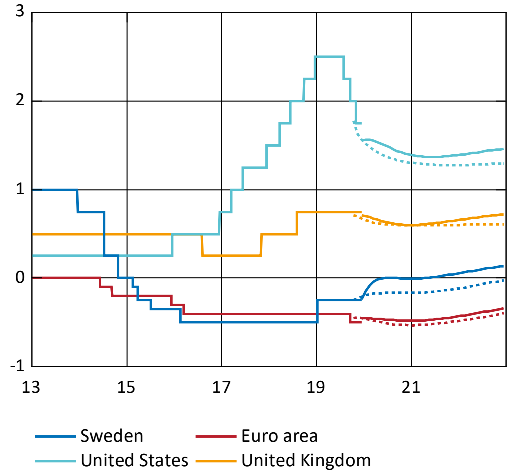
Market-based measures of long-term inflation expectations have also fallen in the United States over 2019 and are at relatively low levels from a historical perspective. The survey-based levels were slightly lower at the start of the year but have not fallen to the same extent as those in the euro area.

Government bond yields have risen over the autumn

Since the start of the year, expectations of an increasingly expansionary monetary policy and increased demand for safe assets has contributed to falling bond yields (see Figure 2:2). However, over the autumn, government bond yields and market participants' expectations of future policy rates rose in

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

Per cent

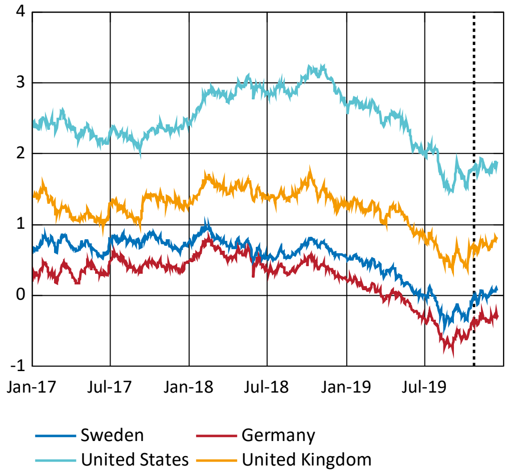


Note. Forward rates describe the expected overnight rate. Unbroken lines refer to 16 December 2019, broken lines refer to 21 October 2019.

Sources: The national central banks, Macrobond and the Riksbank

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

Per cent

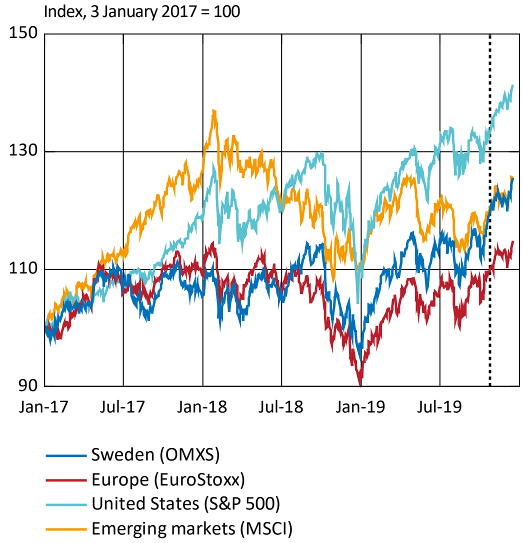


Note. Implied zero-coupon yields from government bonds for Sweden, Germany and United Kingdom. 10-year benchmark bonds for the United States. The vertical line indicates the Monetary Policy Meeting in October.

Sources: The national central banks, US Treasury and the Riksbank

Figure 2:3. Stock market movements in domestic currency

Index, 3 January 2017 = 100



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

Source: Macrobond

conjunction with the improved sentiment. However, since the Monetary Policy Report in October, monetary policy expectations remain more or less unchanged. Bond yields, particularly those with longer maturities, have at the same time risen following information that the United States and China intend to sign a trade agreement on a first phase in improved trade relations between the countries (see Figures 2:1 and 2:2). Overall, bond yields remain on low levels, particularly in the euro area.

Earlier in the autumn, the US yield curve's slope was negative, something interpreted by a number of participants as indicating an increased risk of recession.[15] Since then, the slope of the yield curve has returned to positive.

Stable development for high-risk assets

As central banks have conducted increasingly expansionary monetary policies, prices for higher-risk assets have stabilised and, in several cases, risen. Equity prices have risen during 2019 and also since the Monetary Policy Report in October (see Figure 2:3). From a historical perspective, volatility remains low on many stock markets, even though the markets are continuing to react particularly negatively to news of developments in the trade relations between the United States and China.

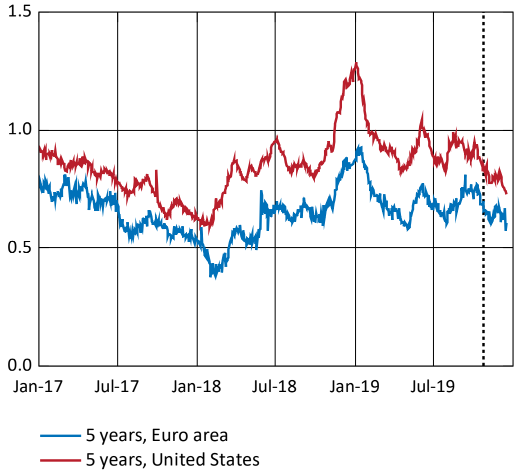
The credit market are also continuing to show stable development. The difference between the yield on corporate bonds with lower credit ratings and yields on government bonds has continued to decrease over the autumn in both the United States and euro area (see Figure 2:4). However, there are signs that risk-taking and vulnerabilities have increased in the global financial system. For example, indebtedness among households and companies has increased since the financial crisis of 2007–2009.[16]

Another factor to consider is that several participants have turned to riskier and more illiquid assets to obtain higher returns. This has contributed to several asset markets being highly valued in a historical perspective. For example, compared with companies' profits, equity prices are on historically high levels, measured using what are known as P/E ratios. On the other hand, if it is taken into account that bond yields are at very low levels, pricing on the stock markets is close to its historical average.[17]

Overall, the continued good development of higher-risk assets shows that investors expect the slowdown in economic activity to be limited, given that the central banks continue to support the economy.

[15] The yield curve describes the relationship between yield and remaining maturity at a certain point in time. A negative yield curve means that the yield for a bond with a long maturity is lower than the yield for a bond with a short maturity.
[16] See Financial Stability Report 2019:2, Sveriges Riksbank.
[17] See, for example, *Financial Stability Report,* November 2019, Board of Governors of the Federal Reserve System.

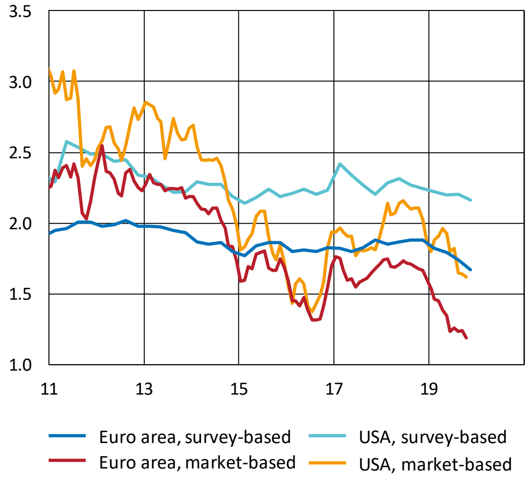
Figure 2:4. Difference between yields on corporate bonds and government bonds in the United States and euro area
Percentage points



Note. Yield differentials refer to 5-year benchmark bonds. Refers to bonds for companies with good credit ratings. The vertical line indicates the Monetary Policy Meeting in October.

Source: Macrobond

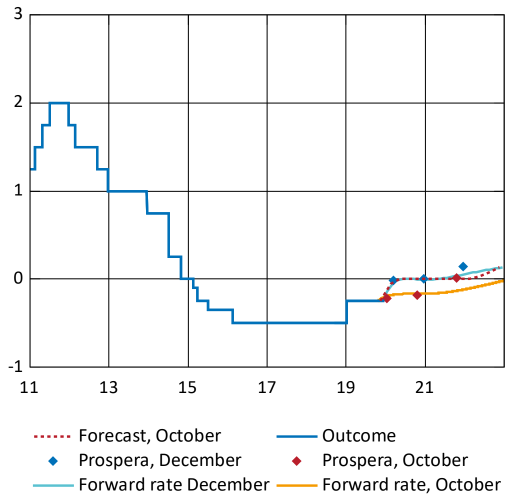
Figure 2:5. Long-term inflation expectations in the euro area and United States
Per cent



Note: Survey-based measures according to the ECB and the Survey of Professional Forecasters by the Federal Reserve Bank of Philadelphia (FRBP), 5 and 10 years ahead, respectively. Market-based measures refer to a 5-year period starting in 5 years' time. This measure has been calculated on the basis of inflation swaps for the euro area and on the basis of bond yields for the United States. Inflation refers to HICP and CPI respectively.

Sources: Bloomberg, ECB, FRBP, Macrobond and the Riksbank

Figure 2:6. Repo rate and market repo rate expectations
Per cent



Note. The forward rate refers to 16 December and 21 October 2019 and is a measure of the expected repo rate. Survey responses from Prospera show the average for money market participants 27 November 2019 (Prospera, December) respectively 25 September 2019 (Prospera, October).

Sources: Kantar Sifo Prospera, Macrobond and the Riksbank

Developments in Sweden

In Sweden, there are now clear expectations among market participants that the repo rate will develop in line with the Riksbank's repo rate path. At the same time, the Swedish krona has strengthened but is still weaker than it was at the start of 2019. As in other countries, both Swedish government bond yields and equity prices have risen since the Monetary Policy Report was published in October. Nonetheless, bond yields remain at low levels and the financial conditions in Sweden are assessed to continue to be expansionary, which is helping to support economic development.

Rate rise expected in the short term in Sweden

According to pricing on the financial markets, there have been clear expectations since the monetary policy in October of a rise in the repo rate in December, after which it will stay still, in line with the Riksbank's repo rate path. Also, according to Prospera's survey of money market participants, which was published in December, the Riksbank is expected to raise the rate in the short term and then leave it unchanged for the following two years (see Figure 2:6).

The development of short interest rates on the interbank market reflects the conditions on the Swedish money market. Until the monetary policy meeting in October, these interest rates stayed largely unchanged after the Riksbank's rate rise last year, but have subsequently risen (see Figure 2:7). The rise has taken place in step with changing expectations for the repo rate and resembles the one at the end of 2018, when the Riksbank was expected to raise the repo rate and subsequently also did so.

Short-term bond yields have risen since October

Like those abroad, Swedish government bond yields have risen from very low levels over the autumn and are now higher than they were at the monetary policy meeting in October, particularly for shorter maturities (see Figures 2:2 and 2:7). The yield for a Swedish government bond with a maturity of two years is now at roughly the same level as at the start of the year. Short-term Swedish yields have also risen more than those abroad, while the development of yields for bonds with longer maturities resembles that abroad. Part of the upturn in bond yields, short-term ones in particular, happened in conjunction with the Riksbank's monetary policy decision in October. The upturn also coincides with rising expectations of future higher policy rates (see Figure 2:6). However, from a historical perspective, Swedish government bond yields remain on low levels, particularly those with longer maturities.

Rising equity prices in line with those abroad

Like abroad, equity prices on the Swedish stock exchange have risen since the start of the year, and the driving factors have been

[18] See the article "The Riksbank's operational framework needs to be adjusted to new conditions" in the Monetary Policy Report for July 2019.

Positive experiences of changed operational framework so far

Repo rate decisions are put into practice via the Riksbank's operational framework for the implementation of monetary policy. With the aid of the operational framework, the Riksbank ensures that the shortest market rates are stabilised close to the repo rate. On 30 September, the Riksbank decided to implement certain changes to make the operational framework simpler and more flexible. These changes are being made in two stages and are aimed at introducing an operational framework with a narrow, symmetrical interest rate corridor. The adjustments to the operational framework are of a technical nature and are not intended to have any monetary policy effects.[18]

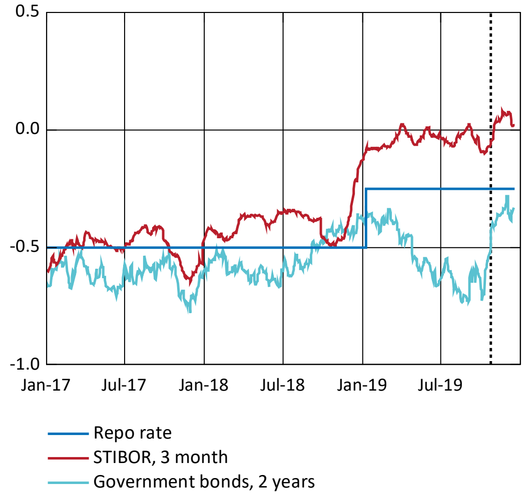
The first stage means that, as of 9 October, the Riksbank has ceased to make daily fine-tuning transactions and that the interest rate for the standing deposit facility – the deposit rate – has been set at 0.10 percentage points below the repo rate, which is to say the same level at which the fine-tuning deposit transactions were previously conducted. In addition, the issue of Riksbank Certificates is being restricted to leave more liquidity available for monetary policy counterparties – primarily banks – over night. In this way, the overnight rate can stay close to the repo rate, even without daily fine-tuning transactions.

Experiences so far have been positive. The counterparties have rapidly adjusted to the new conditions and the daily balancing of liquidity between the banks at the end of the day has worked well. At the certificate auctions, the banks have entered bids for volumes exceeding those on offer. No shocks to price formation at liquidity balancing or on the money market have been observed.

In the next stage, when the technical conditions are in place, the Riksbank will cut the interest rate for its standing lending facility – the lending rate – so that it is 0.10 percentage points above the repo rate. At the same time, requirements for the collateral needed to utilise the lending facility will be tightened. The Riksbank has acted to make the period between stage one and stage two as brief as possible, and will return later with details of the collateral requirements.

Figure 2:7. The repo rate and market rates

Per cent



Note. Zero coupon rate with 2-year maturity calculated from government bonds. The vertical line indicates the Monetary Policy Meeting in October.

Sources: Macrobond and the Riksbank

the same as abroad (see Figure 2:3). During the autumn, however, Swedish bank shares have had weaker outcomes than European and US ones. Bank share prices fell after information came to light on suspected breaches of US sanctions and suspected money laundering in Swedbank and SEB. In recent weeks the bank share prices have begun to rise again.

Gradually rising housing prices and stable lending rates

In recent years, the average lending rates offered to households and companies have followed the Riksbank's repo rate relatively well (see Figure 2:8).[19] When the repo rate was raised in December 2018, mortgage rates rose, but they have since fallen back again.

Measured as an annual percentage change, housing prices fell over most of last year before increasing at a moderate rate this spring and summer. Over the autumn, prices for tenant-owned apartments and houses increased modestly. Various indicators show that both households and estate agents expect prices to continue to rise slightly in the period ahead. However, lending for housing purposes is continuing to grow slightly more slowly than it has over recent years.

Both the banks' lending and lending rate to non-financial corporations rose somewhat in October (see Figure 2:8 and 2:9). Increasingly, however, the corporations obtain funding directly on the capital markets. Bank lending still makes up the primary source of funding, but one-third of the corporations' total liabilities comes from wholesale funding.

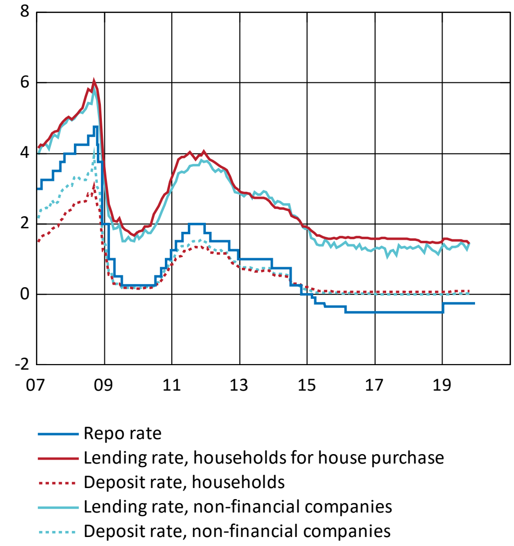
International factors greatly significant to the krona

In trade-weighted terms (according to the krona index or KIX), the krona exchange rate has appreciated since the monetary policy meeting in October. The recent appreciation follows a longer period of depreciation, and the krona exchange rate remains weaker than it was at the start of the year (see Figure 2:10). Like previously over the year, the krona has largely been affected by global economic prospects and uncertainty on the financial markets. The improved sentiment visible on the financial markets over the autumn has also coincided with the appreciation of the krona exchange rate. In addition, the market's expectations that the Riksbank will raise the repo rate in the short term have become significantly clearer, which may also have helped strengthen the krona exchange rate.

[19] However, it is possible that the differential between lending rates to households and the Riksbank's repo rate will decrease slightly in the period ahead. The reason for this is that new actors on the mortgage market have taken market shares, meaning that competition for mortgage customers has increased. These new actors continue to stand for a small part of total lending to households, but, by increasing competition, they may contribute towards holding back a rise in mortgage rates.

Figure 2:8. Repo rate together with the average deposit and lending rate to households and companies, new contracts

Per cent

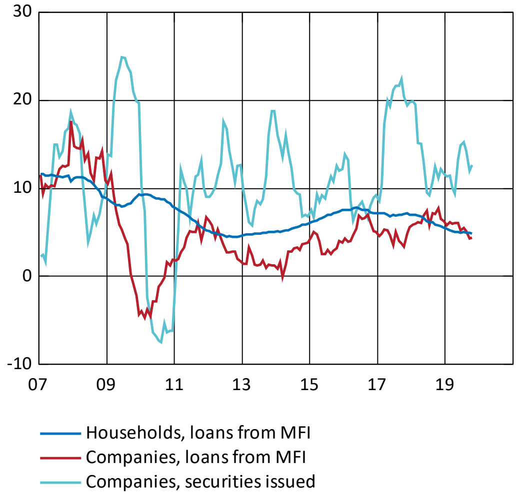


Note. MFIs' average deposit and lending rates are a weighted average of all interest rates for different maturities.

Sources: Statistics Sweden and the Riksbank

Figure 2:9. 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

Figure 2:10. Nominal exchange rate, KIX

Index, 18 November 1992 = 100

Note. The KIX (krona index) is a weighted average of the currencies in 32 countries that are important for Sweden's international trade. A higher value indicates a weaker exchange rate. The vertical line indicates the Monetary Policy Meeting in October.

Sources: National sources and the Riksbank

CHAPTER 3 – The current economic situation

Following an expected fall in inflation over the summer, which was primarily due to falling energy prices, it has risen during the autumn in line with the Riksbank's forecast. Inflation is expected to be close to two per cent in the coming months. In Sweden, as in the rest of the world, the economy has entered a phase of lower growth. GDP growth among Sweden's most important trading partners continued to slow down during the third quarter, and growth is expected to be moderate in the coming period. In Sweden, GDP grew at a somewhat slower pace than normal during the third quarter. Low housing investment combined with confidence among households and companies being lower than normal indicates that GDP growth will continue to be moderate in the coming six months. The Swedish labour market has also slowed down and, after several years of strong economic activity, total resource utilisation in the Swedish economy is assessed as slightly over or close to normal.

Inflation in Sweden

Falling energy prices have contributed to lower CPIF inflation recently

The strong economic activity, the weak krona and high energy prices have contributed to CPIF inflation being close to 2 per cent from 2017 to spring 2019. CPIF inflation then fell during the summer, which was mainly due to energy prices falling. Since then, inflation has risen again and in November, CPIF inflation was 1.7 per cent, which was in line with the forecast in the October Monetary Policy Report. The rate of increase in the CPIF excluding energy has not fallen in the same way and amounted to 1.8 per cent in November, which was somewhat lower than the Riksbank's most recent forecast.

The rate of increase in food prices and many other goods prices has been much higher than an historical average over the past two years. One exception is prices of clothing and shoes, which have continued to rise unusually slowly given the exchange rate. At the same time, prices of services have risen somewhat faster than normal, when viewed in a historical perspective.

The rate of inflation is affected by both temporary and more persistent price variations. The Riksbank's different measures of underlying inflation, which exclude or reduce the significance of prices that have previously varied substantially, indicate that the more lasting inflation rate has been just below 2 per cent in recent months (see Figure 3:1). The measures UND24 and CPIFPC, which, according to an evaluation best reflect underlying inflationary pressures, amounted to 1.7 and 2.0 per cent respectively in November.[20]

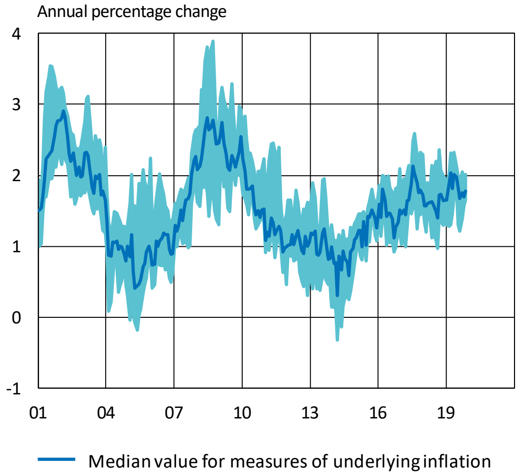
[20] UND24 gives greater weight to less volatile sub-groups in the CPIF, while the CPIFPC is based on common trends among the sub-groups. See also the article "Why measures of core inflation?" in Monetary Policy Report, October 2018.

Table 3:1. The economic situation compared with the assessment in the previous report

Expected development in MPR October	Actual development
CPIF inflation 1.7 per cent, and CPIF excluding energy 1.9 per cent in November.	CPIF inflation was 1.7 per cent and CPIF excluding energy increased by 1.8 per cent.
GDP growth 1.7 per cent in third quarter.	GDP growth was 1.1 per cent.
Unemployment 6.8 per cent in fourth quarter.	Monthly outcomes for October and November indicate somewhat higher unemployment.

Note. MPR refers to the Monetary Policy Report. Inflation refers to the annual percentage change. GDP growth refers to the seasonally-adjusted quarterly change in per cent, calculated at an annual rate.

Figure 3:1. 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 the CPIF excluding energy, UND24, Trim85, CPIF excluding energy and perishables, persistence-weighed inflation (CPIFPV), factors from principal component analysis (CPIFPC) and weighted mean inflation (Trim1).

Sources: Statistics Sweden and the Riksbank

Inflation will rise in the months ahead

CPIF inflation is expected to be close to two per cent in the coming months (see Figure 3:2). Delayed effects of the high resource utilisation in recent years, combined with the krona being weak for some time, contribute to this.

The rate of increase in the CPIF excluding energy is expected to continue rising over the coming quarters (see Figure 3:3). Producer prices for consumer goods are still rising faster than normal, both with regard to imported goods and goods produced in Sweden. According to the Economic Tendency Survey, more trading companies than normal are planning to increase prices in the months ahead (see Figure 3:4). Seen across the entire business sector, however, pricing plans are close to the historical average. And unlike the companies in the Economic Tendency Survey, the consumer-related companies responding to the Riksbank's Business Survey say they are not planning to raise their prices in the coming year.[21]

Inflation forecast unchanged in the short term

The forecast for the rate of increase in the CPIF excluding energy is somewhat lower for the coming six months than the forecast in October, while the forecast for energy prices has been revised up. This means that the forecast for CPIF inflation is in line with the assessment in October (see Figure 1:5). The assumption of somewhat higher inflation in the coming months is supported by the Riksbank's model forecast, which summarises the information from a large number of indicators, such as price plans, producer prices and exchange rates (see Figure 3:3). However, the Riksbank's forecast is slightly higher than the model forecasts from April and onwards.[22]

Global and Swedish economic activity

Modest growth abroad

GDP growth among Sweden's most important trading partners continued slowing down during the third quarter of this year. Trade-weighted (KIX-weighted) GDP is assessed to grow at a somewhat slower pace than the historical average of just over 2 per cent in the coming quarters.

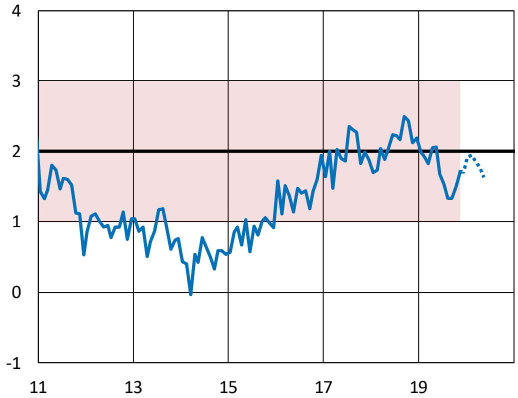
Uncertainty over global trade policy, the effects of the United Kingdom's withdrawal from the EU and a wavering development in the automotive industry have contributed to dampening world trade and industrial activity. This is reflected in the confidence indicators within the manufacturing industry having fallen to low levels (see Figure 3:5). However, there are signs that the confidence indicators have stabilised. At the same time,

[21] See the Riksbank's Business Survey, November 2019.

[22] Prices of, for instance TV games and construction materials, increased unusually slowly in April 2019. This pattern is not expected to be repeated next year, and the annual percentage change in the CPIF excluding energy should therefore rise in April 2020. The model forecast, which is an average of different model specifications, does not fully capture such assessments. A new seasonal pattern in dental care rates and higher rent increases than in recent years are other factors that are not fully captured in the model forecast.

Figure 3:2. CPIF and variation band

Annual percentage change

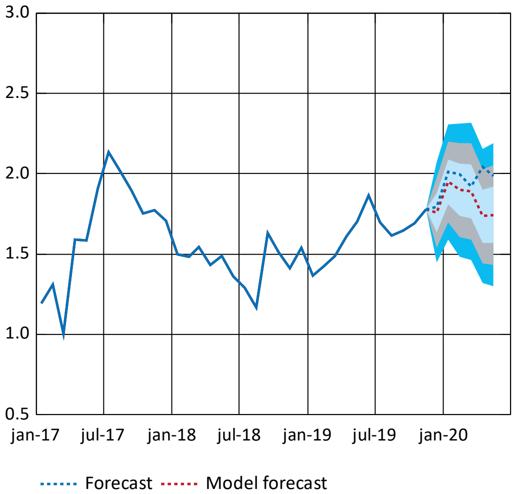


Note. The pink area shows the Riksbank's variation band and covers about three-quarters of the outcomes since January 1995. The variation band is a means of showing whether the deviation from the inflation target is unusually large. The broken line represents the forecast for the next 6 months.

Sources: Statistics Sweden and the Riksbank

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

Annual percentage change

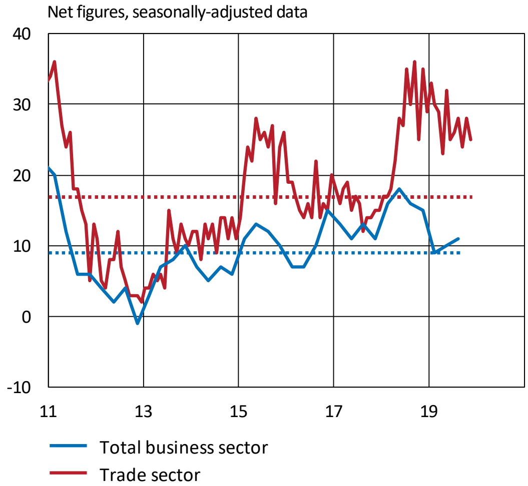


Note. The uncertainty bands 50, 75 and 90 per cent are based on the models' historical forecast errors.

Sources: Statistics Sweden and the Riksbank

Figure 3:4. Price 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 mean values since May 2003.

Source: National Institute of Economic Research confidence in the service sector is close to the historical average and in many countries consumers are optimistic, given the low unemployment and low interest rates.

As a result of the election result in the United Kingdom, the risk of the UK leaving the EU without an agreement is now considered negligible, at least in the short term, as there is a clear majority in parliament to approve the agreement with the EU (see the fact box "The United Kingdom's withdrawal from the EU – what has happened?" in Chapter 4). The United States and China have also announced that they intend to sign an agreement on the first phase in an improved trade relationship in January.

Continued divided economies in euro area

GDP in the euro area increased by a modest 0.9 per cent in the third quarter, compared with the previous quarter and calculated in annualised terms (see Figure 3:6). The largest contribution to GDP growth came from household consumption, which increased by 2.0 per cent. Foreign trade and stocks, on the other hand, provided a negative contribution and other areas contributed only marginally to the growth in demand.

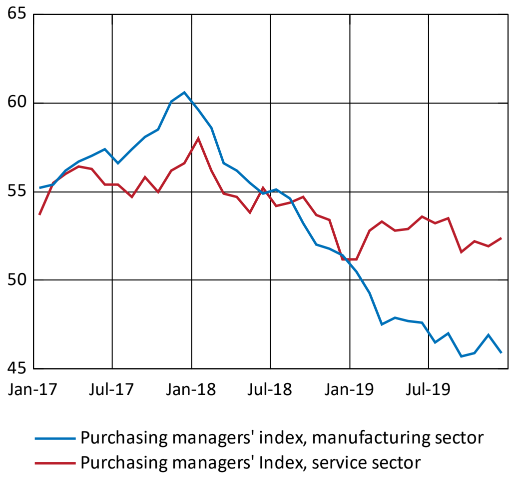
The euro area's economy continues to be divided. According to the Purchasing Managers Index, confidence is somewhat below the historical average in the service sector, but much lower than the average in the manufacturing industry. Sales in the retail trade have developed strongly over the year, but fell in October, while industrial production has been weak for a long time. As in many other countries, the European manufacturing industry has been weighed down by global uncertainty factors. As Germany is a large producer and exporter of motor vehicles, the European manufacturing industry has been hit particularly hard. The recession in the automotive industry is because there are problems adapting production to new and stricter emission requirements from the EU and to demand for cars falling, for instance, in China. One bright spot is that the euro area's exports recovered in September and that export orders have stabilised.

Growth benefits from confidence in the household sector still being above the historical average (see Figure 3:7). Households' scope for consumption has moreover increased, as the strong labour market has led to wages rising much faster than inflation (see Figure 3:8). Investments benefit from good access to credit and low interest rates. Moreover, confidence in the manufacturing industry appears to have stabilised. However, GDP growth in the euro area is nevertheless expected to be weaker going forward than the historical average from 1999.

Growth in the United States slowing down

GDP in the United States increased by 2.1 per cent during the third quarter, compared with the second quarter and in annualised terms (see Figure 3:6). The largest positive contribution to growth in demand came from household and public sector consumption, while exports contributed only marginally. Imports and investments at the same time had a

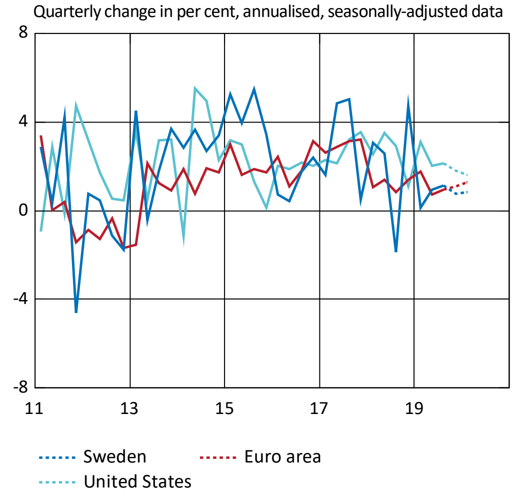
Figure 3:5. Confidence indicators in the euro area
Index



Note. Purchasing managers' Index for the manufacturing industry and service sector published on 2 December 2019 and 4 December 2019 respectively.

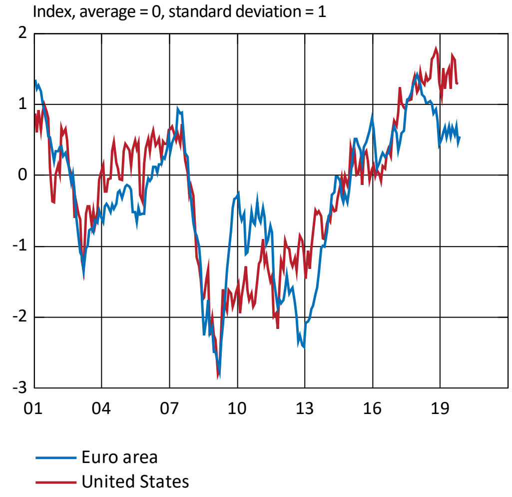
Source: Markit Economics

Figure 3:6. GDP in Sweden and abroad
Quarterly change in per cent, annualised, seasonally-adjusted data



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

Figure 3:7. Consumer confidence
Index, average = 0, standard deviation = 1



Note. The series have been standardised from 1986 by the Riksbank.

Sources: Conference Board, the European Commission and the Riksbank negative contribution to growth. The US labour market remains strong. In November, employment increased by 266,000 persons and unemployment fell from 3.6 per cent to 3.5 per cent.

The low unemployment and households' strong consumption are reflected in a high level of consumer confidence (see Figure 3:7). Corporate sector confidence has fallen over the past year, however, both among service companies and in the manufacturing industry. In the manufacturing industry, confidence has fallen to levels clearly below the historical average, and which indicate a growth level lower than normal. Confidence in the service sector, on the other hand, remains close to the historical average. All in all, economic activity is expected to slow down and GDP growth to be subdued going forward.

Low inflation in the euro area and rising inflation in the United States

In the euro area, inflation is low and expected to continue to be so for the coming quarters. In November, inflation was 1.0 per cent, according to Eurostat's flash estimate. Core inflation, which excludes energy and food, is subdued and amounted to 1.3 per cent (see Figure 3:8).

In the United States, CPI inflation rose to 2.1 per cent in November. Different measures of core inflation show somewhat different pictures, however. CPI inflation excluding energy and food was 2.3 per cent in November (see Figure 3:8). However, the rate of increase in the deflater for private consumption excluding energy and food, which is the measure considered most important by the Federal Reserve, amounted to 1.6 per cent in October. The strong labour market, with low unemployment and high wage growth, is expected to contribute, together with the low interest rates and previously raised tariffs, to a slight rise in inflation towards the end of the year.

Low growth and slowdown in economic activity in Sweden

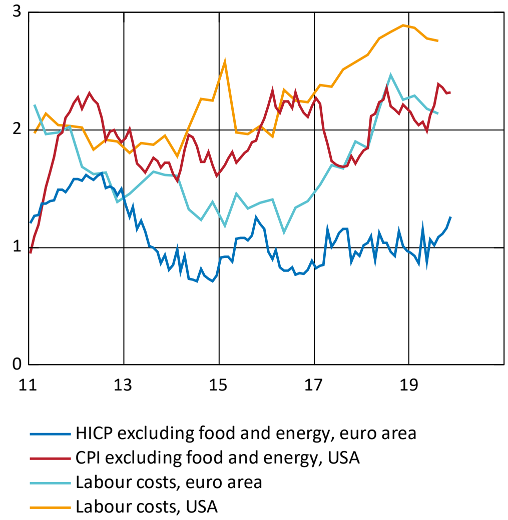
Following relatively high Swedish growth over several years, and increasingly strong economic activity, growth has fallen back and resource utilisation has weakened. Developments in 2019 are primarily explained by lower growth in domestic demand, partly because fewer homes are being built.

According to the National Accounts, Swedish GDP continued to grow at a moderate pace during the third quarter and was 1.1 per cent higher than the second quarter when calculated at an annual rate. This growth was explained by minor increases in both domestic and foreign demand. Household consumption grew at a moderate pace and business sector investment excluding housing increased slightly, following a decline during the first half of the year.

In line with developments abroad, production in the Swedish manufacturing industry has been weak and confidence has fallen from the earlier high levels.

The Economic Sentiment Indicator, which is a summarising measure of confidence in the corporate and household sectors,

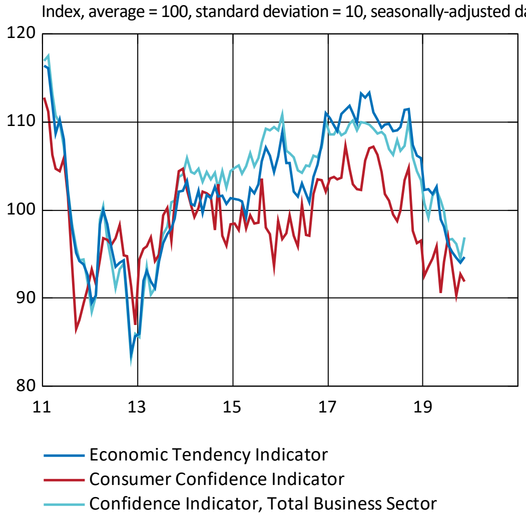
Figure 3:8. Core inflation and labour costs in the euro area and the United States
Annual percentage change



Note. Refers to labour costs per employee. Calendar-adjusted data

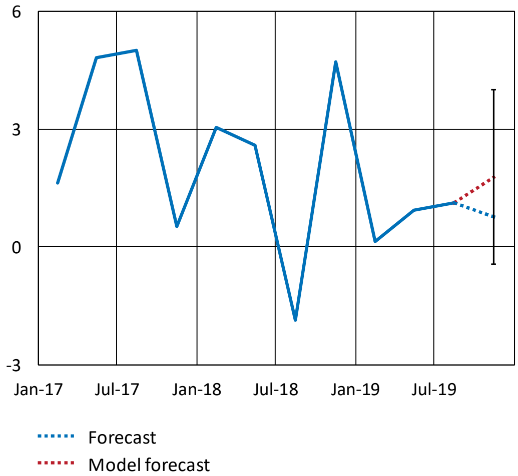
Source: Bureau of Labor Statistics, ECB, Eurostat and Macrobond

Figure 3:9. Confidence indicators in Sweden
Index, average = 100, standard deviation = 10, seasonally-adjusted data



Source: National Institute of Economic Research

Figure 3:10. GDP, model forecast with uncertainty bands
Quarterly change in per cent calculated in annualised terms, seasonally-adjusted data



Note. The model forecast is a mean value of forecasts conducted using different statistical models. The vertical line represents a 50-per cent uncertainty band based on the models' historical forecasting errors.

Sources: Statistics Sweden and the Riksbank

rose marginally in November after falling for six months in a row. Confidence in the manufacturing industry declined slightly further and household confidence fell marginally after rising in October (see Figure 3:9). At the same time, the confidence indicators for the retail trade and the service sector rose, which contributed positively to the Economic Sentiment Indicator. In a comparison perspective, confidence among Swedish service companies and households is lower than in many other European countries. Swedish households are primarily pessimistic when it comes to the Swedish economy, while their views on their own finances are less pessimistic.

The low confidence and the weak development in housing investment contribute to GDP only being expected to increase by just under one per cent a quarter during the fourth quarter this year and the first quarter of 2020, when calculated in annualised terms. The Riksbank's model forecast for GDP growth in the near term is based on confidence indicators and monthly statistics for output and demand. One reason why the forecast for GDP in the fourth quarter is somewhat lower than the Riksbank's model forecast is that the models are not assessed to fully take into account the decline in housing investment (see Figure 3:10).

Slowdown in the labour market

After noting the quality problems in the statistics, Statistics Sweden published a revised outcome in November for the Labour force surveys (LFS) for the period July 2018 to September 2019 (see the box "Revised labour market statistics following errors in LFS").

Labour force participation and the employment rate have reached historically high levels (see Figure 4:9). Developments on the labour market have slowed down, however, since the first half of 2018. The employment rate has remained largely unchanged and unemployment has risen at a moderate pace (see Figure 3:11). As the figures are very uncertain, and this uncertainty has now increased when the LFS only covers half the sample, the monthly outcomes should be interpreted with caution. The most recent outcomes nevertheless indicate that employment has increased at a relatively good pace.

The indicators also point to the demand for labour declining. Recruitment plans according to the Economic Tendency Survey have been subdued and point to unchanged employment in the coming months (see Figure 3:12). Furthermore, the number of newly registered job vacancies has fallen, according to the Swedish Public Employment Service, but is still at a high level. Redundancy notices have increased three months in a row and are at a level close to the historical average. The overall picture indicates that the labour market has cooled and that the demand for labour continues to dampen.

[23] The Riksbank also takes into account other sources than LFS to gain a nuanced and more complete picture of the labour market. See, for instance, Häkkinen Skans I., "Developments on the labour market according to different statistical sources", Economic Commentary No 6 2019, Sveriges Riksbank, for a description and discussion of different sources of statistics that measure developments on the labour market.

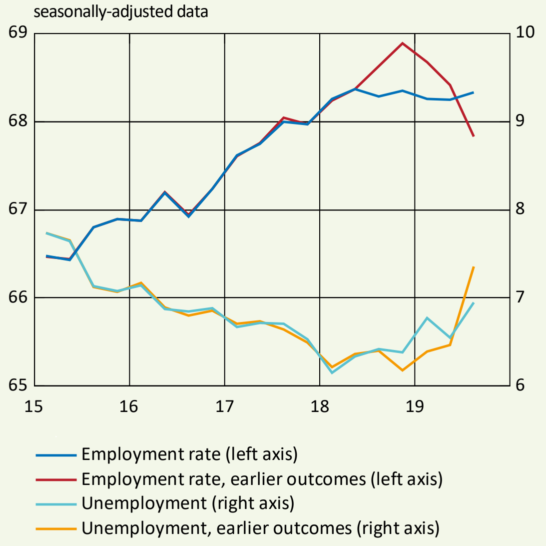
Revised labour market statistics following errors in LFS

Labour force surveys (LFS) are a sample survey carried out every month through telephone interviews with around 29,500 people. From July 2018, an external data collection company, Evry, has gathered in half of the sample. During the autumn, Statistics Sweden detected serious quality problems with Evry's data collection, which has meant that the statistics published have been incorrect.

In November, Statistics Sweden therefore decided to publish revised labour market statistics for the period July 2018- September 2019. This is now based on only half of the sample – the part of the survey for which Statistics Sweden's own department is responsible. The fact that the statistics are now based on a sample that is half as large increases the uncertainty of the figures, not least as the LFS has for a long time had problems with a high non-response rate. During the past year, the non-response rate has been close to 50 per cent. A more limited sample also makes it more problematic to analyse the statistics at a detailed level. This means that the LFS are less useful as a basis for decision-makers.[23] Statistics Sweden has said that in 2020 they will extend their own collection, but not to the same sample size as before. Additionally, Statistics Sweden has begun, together with other authorities, an extensive and long-term change process for statistics in the labour market field, which the Riksbank considers positive.

The revised statistics show that since the beginning of 2018 employment has risen roughly in line with the working age population (see Figure 3:11). At the same time, unemployment has been revised up from July 2018 to June 2019, but since then revised down. This means that the picture of a dramatic slowdown on the Swedish labour market has changed and the outcome now shows that unemployment bottomed out in early 2018 and has since risen at a slow pace.

Figure 3:11. Revision of employment rate and unemployment
Percentage of population and labour force respectively, 15–74 years, seasonally-adjusted data



Note. The series refer to quarterly data

Source: SCB

During the present and next quarter, the number of persons employed and the number of people in the labour force are expected to increase at a slow pace. According to the LFS, unemployment amounted to 7.0 per cent in the third quarter and is expected to remain at this level in the coming period, and then to rise somewhat (see Figure 4:8).

Resource utilisation normalising

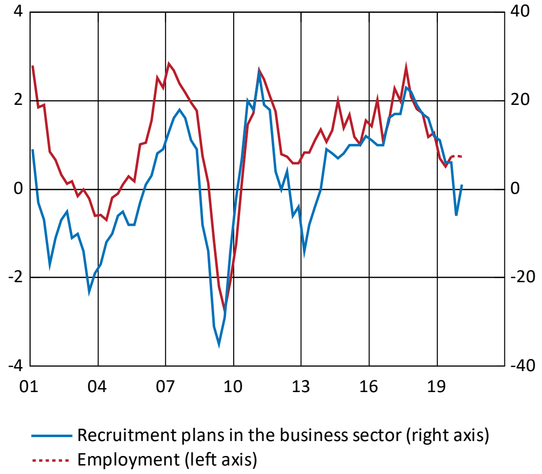
According to economic correlations, the amount of spare capacity in the economy affects developments in prices and wages. This interchange seems to occur in the data with some time lag. However, resource utilisation cannot be measured exactly and the Riksbank therefore makes an assessment based on a number of different indicators.

According to several of these indicators, resource utilisation is now close to or slightly higher than normal. For example, according to the Economic Tendency Survey, fewer companies than before report a shortage of labour, but the proportion doing so is still higher than the historical average. Capacity utilisation in the manufacturing industry is high in a historical perspective, according to Statistics Sweden, but is lower than normal according to the National Institute of Economic Research. The Riksbank's indicator for resource utilisation has fallen back over the year and is now indicating that resource utilisation is close to normal (see Figure 3:13). The GDP gap will normalise during the coming quarters. At present, however, the gap is positive, which indicates that resource utilisation is somewhat higher than normal (see Figure 3:14).

The overall picture is that resource utilisation in the economy has normalised in 2019, after having been high in recent years. At present, it is assessed to be close to or slightly higher than normal.

Figure 3:12. Employment and recruitment plans

Annual percentage change and net figures respectively, seasonally adjusted data

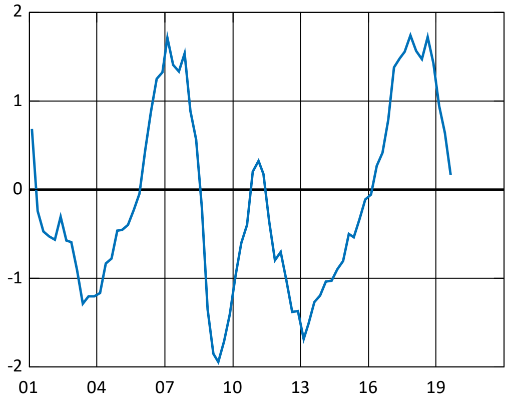


Note. Recruitment plans refer to expectations of the number of employed person in the business sector three months ahead, moved forward one quarter. Recruitment plans for 2019Q4 refer to the monthly outcome for November.

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

Figure 3:13. Resource utilisation indicator

Standard deviations

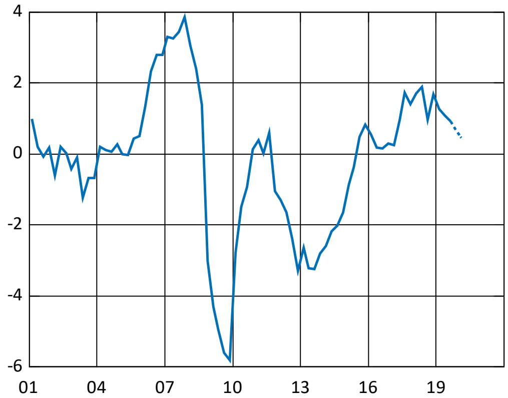


Note. The RU indicator is a statistical measure of resource utilisation. It is normalised so that the mean value is 0 and the standard deviation is 1.

Source: The Riksbank

Figure 3:14. GDP gap

Per cent



Note. The gap refers to the percentage deviation of GDP from the Riksbank's assessed trend.

Statistics Sweden and the Riksbank

CHAPTER 4 – The economic outlook and inflation prospects

GDP growth abroad has weakened since 2017 and is now below its historical average. However, there are signs that the decline in various indicators has slowed and the economic outlook is largely unchanged compared with the assessment in October. Growth abroad is expected to rise somewhat next year and then remain largely unchanged in the years to come. After several years of good growth and rising resource utilisation, the Swedish economy is also growing at a slower rate. This is against a background of modest growth on Swedish export markets and fewer newly built homes. Swedish growth is expected to gradually rise again in the coming years. The labour market has also weakened and demand for labour is expected to soften further in the coming years. Inflation is just below 2 per cent and the conditions for it to remain close to the inflation target going forward are considered good. The healthy demand and high resource utilisation of recent years continue to contribute to this. The weak krona is also expected to contribute to higher prices with a certain time lag. The outlook for inflation is largely the same as in October.

International outlook

Some recovery in international growth

This year and in the years to come, GDP abroad is expected to grow approximately in line with or slightly weaker than the historical average of just over 2 per cent (see Figure 4:1).

Growth in global trade has been low this year as a result of the global slowdown in the manufacturing industry and the trade conflict between the United States and China. Import demand on Sweden's most important export markets is expected to grow by a modest 2.5 per cent this year and just over 3 per cent in the years ahead. This implies a lower growth rate than the average of just over 4.5 per cent per year since the year 2000 (see Figure 4:2).

Confidence in the business sector, measured in terms of the Purchasing Managers' Index, has fallen in recent years. In recent months, however, confidence indicators have stabilised. Since the Monetary Policy Report in October, growth in the third quarter has also been revised upwards in both the euro area and the United States, compared with what was initially disclosed in their official statistics. The United States and China are negotiating a solution to the trade conflict between the two countries. An agreement has yet to be formally concluded, but both countries say that they intend to sign a "phase-one" agreement in January. The risk of the United Kingdom leaving the EU without an agreement has in the short term been eliminated as there is now a clear majority in the UK Parliament for approving the agreement with the EU. In the slightly longer term, however, uncertainty remains about the future relationship to the EU (see the box "The United Kingdom's withdrawal from the EU – what has happened?").

The United Kingdom's withdrawal from the EU – what has happened?

On 17 October, the UK Government and the EU agreed on the terms for the UK's withdrawal from the EU. Among other things, the agreement regulates the rights of EU citizens in the UK and vice versa, how much money the UK is to pay the EU and the border issue between Ireland and Northern Ireland. On 22 October, the UK Parliament gave its support to the UK Government to proceed with the agreement with the EU. However, the Parliament did not approve the Government's timetable for the legislative process. This led to the UK Government requesting a postponement of the withdrawal. On 28 October, the EU accepted the request and announced that the withdrawal will now occur latest on 31 January 2020. A general election was held in the United Kingdom on 12 December. The Conservative Party secured its own majority and the new Government will ratify the agreement with the EU.

After leaving the EU, the United Kingdom will be in a transition period up until 31 December 2020. During this period, negotiations on a new trade agreement will take place. Should the UK and the EU so wish, the transitional period can be extended. A request for an extension must have been received from the UK Government by latest 30 June 2020.

Resource utilisation for the euro area and the United States is expected overall to be close to normal levels for the entire forecast period.

Stabilisation in euro area growth

The division in the euro area economy is continuing, with weak industrial activity but a significantly stronger service sector. The conditions are relatively good for GDP growth to rise slightly next year. Interest rates are expected to be very low and financial conditions favourable during the entire forecast period. Fiscal policy is judged to be mildly expansionary over the next few years. Consumer confidence is relatively high and the labour market is strong. But the decline in unemployment has levelled off and wage growth is expected to slow somewhat. During the spring of 2020, new two-year wage agreements will be concluded in Germany for a number of sectors. As Germany's economy is currently weaker than it was when the previous agreements were concluded in the spring of 2018, the new wage agreements are expected to be slightly lower.

GDP is expected to grow by 1.2 per cent in 2019 and 2020 and then marginally faster in 2021–2022 (See Figure 4:1). The largest contribution to GDP growth is expected to come from household consumption even though, like investment, it is expected to grow at a relatively modest rate in the coming years as the economic cycle has entered a maturity phase.

Subdued US growth

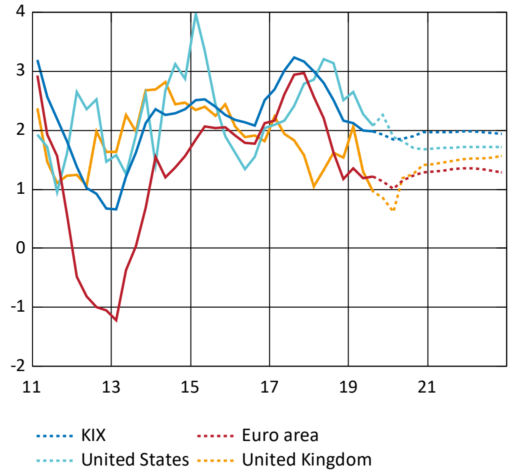
After several years of high growth and falling unemployment, economic activity in the United States is currently strong. In the years ahead, however, a cyclical slowdown in growth is expected. Uncertainty in trade relations between the United States and China with subdued willingness to invest as a result and a fiscal policy that is no longer expansionary contribute to the lower growth. However, this is being partly counteracted by recently implemented cuts in the US policy rate. Overall, GDP is expected to grow by 2.3 per cent this year, after which growth will decline to 1.7 per cent in 2021–2022 (see Figure 4:1). Despite the slightly lower GDP growth, the labour market is expected to remain strong in the coming years and the high resource utilisation on the labour market is assumed to contribute to healthy wage growth over the next year.

Slowly rising inflation abroad

KIX-weighted inflation abroad is expected to be slightly below 2 per cent this year. In the coming years, the effects of the earlier increase in resource utilisation are expected to contribute to a slow rise in inflation abroad to around 2 per cent (see Figure 4:3).

Both HICP inflation and underlying HICP inflation adjusted for energy and food are low in the euro area. Inflation expectations have also fallen to low levels in a historical perspective, in terms of both market pricing and surveys (see Figure 2:5). The strong labour market has contributed to higher wage growth and unit labour costs, but without inflation picking up. There is evidence

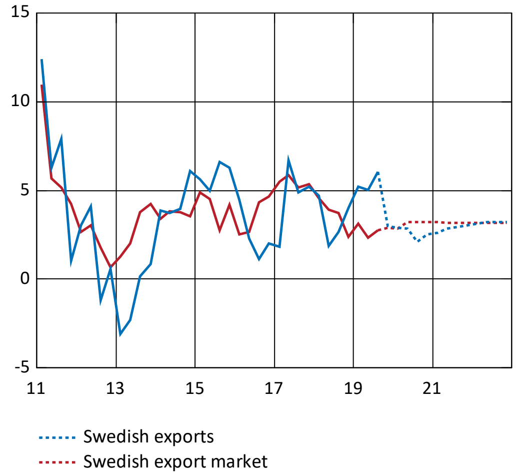
Figure 4:1. GDP in various countries and regions
Annual percentage change



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

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

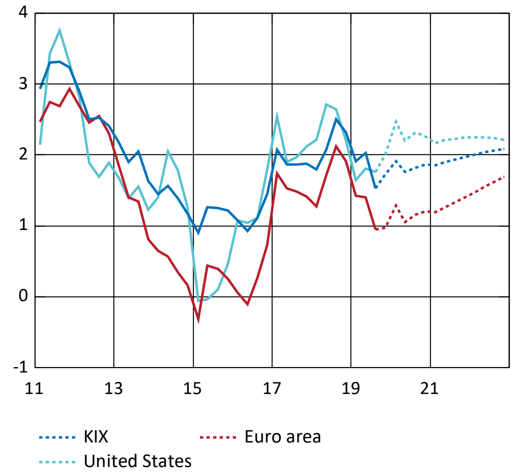
Figure 4:2. Exports and the Swedish export market
Annual percentage change, calendar-adjusted data



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

Sources: Statistics Sweden and the Riksbank

Figure 4:3. Consumer prices
Annual percentage change



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

Sources: The Bureau of Labor Statistics, Eurostat, national sources and the Riksbank that the impact on inflation from labour costs has decreased over the past decade.[24] This is reflected in the forecast for inflation, in which the rising labour costs are expected to contribute to a slow increase in the HICP and the HICP excluding energy and food to just over 1.5 per cent at the end of the forecast period in 2022.

In the United States too, the strong labour market continues to contribute to higher inflation as a result of wages increasing slightly faster, which also increases companies' labour costs. In the short term, earlier higher tariffs will also contribute to slightly higher inflation as a result of an increase in the price of imported goods, but in the longer term, inflationary pressures will be dampened by lower growth and falling resource utilisation. Overall, CPI inflation in the United States is expected to be just above 2 per cent in the coming years (see Figure 4:3).

Sweden

Swedish labour supply growing more slowly

How labour supply and productivity develop over time affects the economy's long-term growth. The way in which the size and composition of the population changes will therefore be significant in this context. In Sweden, the working-age population and labour supply have grown relatively quickly in recent years (see Figure 4:4). An important reason is immigration. The trend labour force participation rate has also increased. The increase has occurred among both Swedish-born and foreign-born persons.

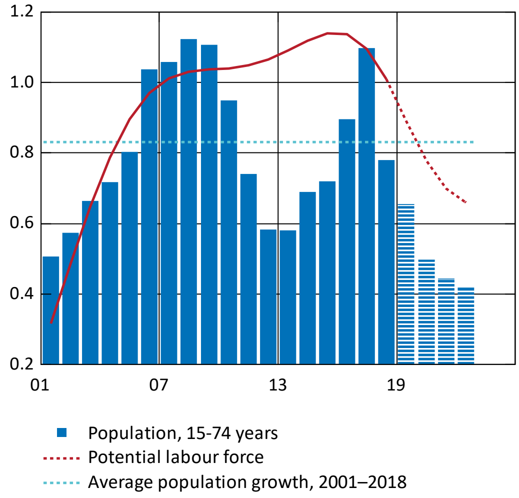
During the forecast period, the Swedish-born population is on average expected to age while immigration will decrease. Higher age limits in the pension system and the fact that people are enjoying better health to a more advanced age and are also living longer are factors contributing to the expectation that the share of older persons participating in the labour force will continue to increase. The share of foreign-born persons in the labour force is also expected to increase. Overall, this means that labour supply growth is not expected to decline as quickly as population growth (see Figure 4:4).

For some time, there has been weak development in productivity for both cyclical and structural reasons (see Figure 4:5).[25] However, revised figures from Statistics Sweden indicate that productivity growth has recovered slightly this year. Productivity growth is expected to increase slightly during the forecast period and be close to its historical average.

Overall, growth in the labour force and productivity is expected to lead to potential GDP growth of nearly 2 per cent a year in 2019–2021 (see Figure 4:6).

[24] See "Wage Growth and Inflation in Europe: A Puzzle?", IMF Regional Economic Outlook: Europe, November 2019, Chapter 2, "The link between labour cost and price inflation in the euro area", ECB Working Paper Series No 2235, February 2019 and "Escaping the low inflation trap", OECD Economic Outlook, Volume 2019 Issue 2: Preliminary version.
[25] See the Chapter "Productivity in Sweden" in the Wage Formation Report 2019, National Institute of Economic Research.

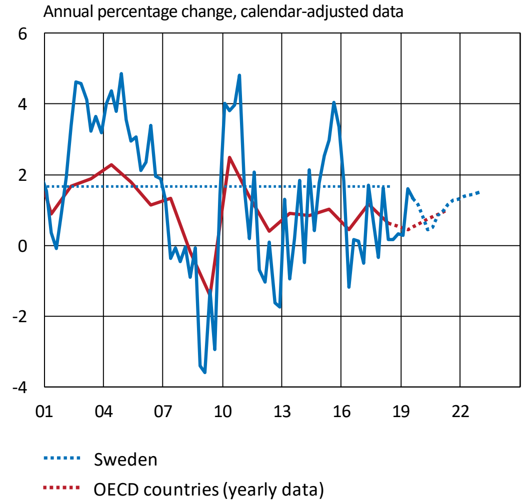
Figure 4:4. Population and potential labour force, 15–74 years
Annual percentage change



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

Sources: Statistics Sweden and the Riksbank

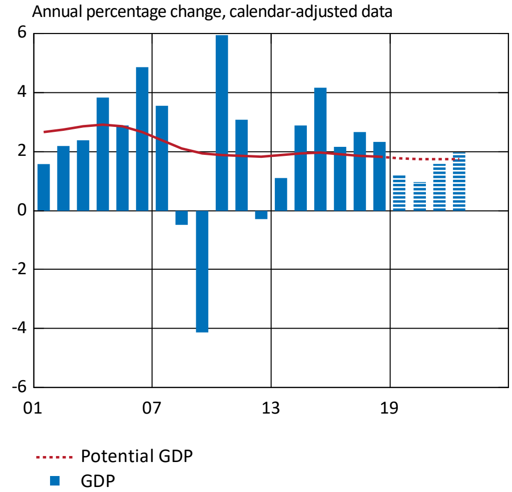
Figure 4:5. Productivity
Annual percentage change, calendar-adjusted data



Note. The forecast for the OECD is taken from Economic Outlook, November 2019. Productivity for the OECD refers to GDP per employee. For Sweden, it refers to GDP per hour worked. The broken line represent the average Swedish productivity growth 1995–2018.

Sources: OECD, Statistics Sweden and the Riksbank

Figure 4:6. 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

Lower Swedish growth, but no recession

The Swedish economy is now growing at a slower rate after several years of good growth and rising resource utilisation (see Figure 4:6 and Figure 4:11). The weak development is expected to continue over the next few years, in light of, among other things, modest growth on Swedish export markets and fewer newly built homes. Overall, the development means that the Swedish economy is entering a more normal economic situation with balanced resource utilisation.

Investment growth is weak and consumption is increasing at a modest pace

Swedish business sector investment has shown weak development for some time and is expected to decrease this year. This is partly a result of the ongoing correction on the housing market with a slower supply of new homes. However, the construction rate is expected to remain high in a historical perspective, with the addition of just over 45,000 homers per year in 2020–2022. As the outlook for industrial activity has weakened, growth in other business sector investment has also slowed and will contribute to a slight reduction in total business sector investment as a share of GDP in the coming years.

Household confidence is low from the outset and household income is expected to rise at a slower pace going forward as growth in the number of persons employed subsides. Despite the slowdown on the labour market, stronger development on the housing market is expected to contribute to a slight improvement in household confidence. Households are then expected to save less of their income in the years ahead and consumption will increase at a relatively healthy rate (see Figure 4:7).

Slightly lower financial saving in the public sector

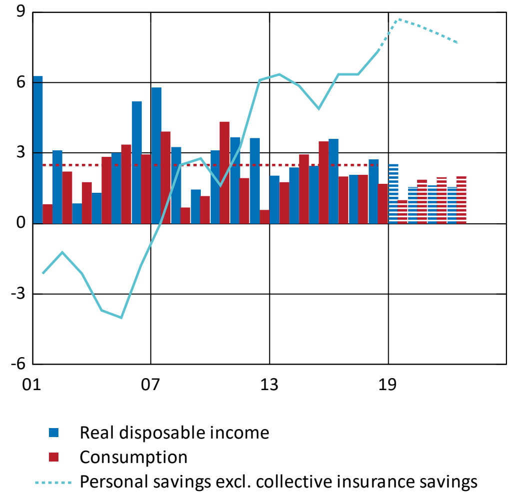
Financial saving in the public sector is expected to fall from 0.8 per cent of GDP last year to 0.3 this year. Next year, the Government is expected to implement unfinanced reforms for over SEK 20 billion, according to its Budget Bill. At the same time, economic activity will slow and financial saving will therefore fall slightly further. Over the next few years, substantial expenditure is expected to be needed due to demographic changes in many municipalities and regions. The forecast for financial saving is that it will remain close to zero per cent in the coming years, which is compatible with the historical pattern of lower saving when economic activity slows and expenditure pressures rise.

Rising prices on the housing market

Measured by the HOX housing price index, housing prices rose by 3.5 per cent in October compared with the same month last year. This can be compared with disposable household income per capita, which has increased at about the same rate as housing prices over the past year. The price level is still slightly lower than prior to the decline in the autumn of 2017, but the rising rate of increase in housing prices reflects greater optimism. Housing supply is still high and, along with the amortisation

Figure 4:7. Households' real disposable income, consumption and savings ratio

Annual percentage change and per cent of disposable income, respectively

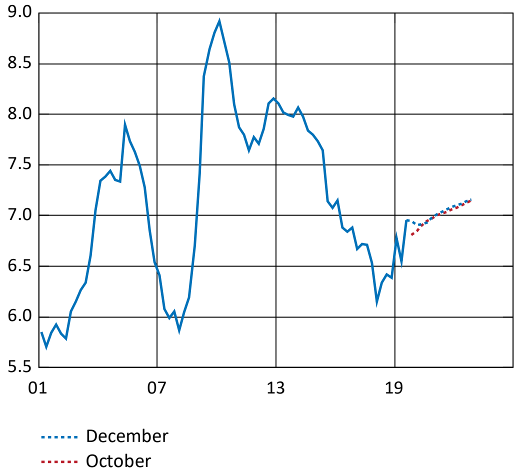


Note. Disposable income has been deflated using the household consumption deflator. Broken line is the average of consumption growth 1994–2018. Collective insurance savings consist of savings that households do not control themselves, e.g. premium pensions and collective agreements insurances.

Sources: Statistics Sweden and the Riksbank

Figure 4:8. Unemployment

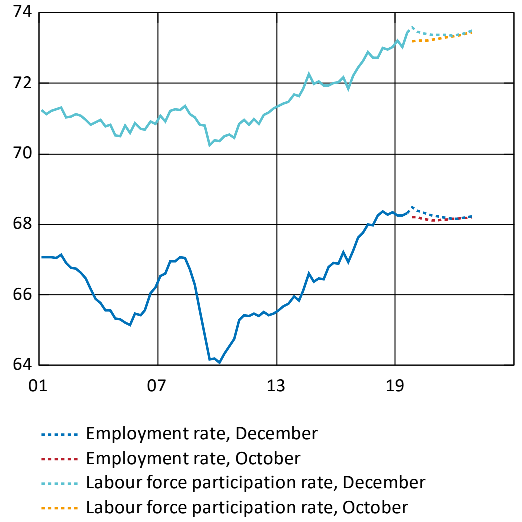
Per cent of the labour force, aged 15–74, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

Figure 4:9. Employment rate and labour force participation rate

Percentage of the population, aged 15–74, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

requirements, is subduing price development. In the coming years, housing prices are expected to grow approximately in line with household incomes.

Although housing prices are slightly lower than in the autumn of 2017, a house-buyer on the secondary market is currently paying a higher price on average than the seller once did. Coupled with the continued large number of additional new homes, which is leading to more people taking out mortgages, this means that household debt has continued to grow by almost 5 per cent per year. Household debt is expected to increase slightly more slowly in the period ahead. This is due in part to the amortisation requirements covering an increasingly large share of borrowers in the future, as homes are sold and new mortgages need to be taken out. However, debt as a share of disposable household income, the so-called debt-to-income ratio, will continue to increase slightly and amount to just over 190 per cent at the end of 2022 (see Figure 1:12).

Swedish labour market will slow down in the years to come

Recently revised statistics from Statistics Sweden support the Riksbank's picture of the labour market having slowed down over the past year, with slower employment growth and slightly rising unemployment (see Figure 4:8). In line with employment, development in the number of hours worked has also slowed. Despite this, the employment rate and labour force participation rate are still at historically high levels (See Figure 4:9). During the course of 2019, fewer and fewer companies have experienced a shortage of labour and the need to recruit more staff has decreased, which is reflected in companies' recruitment plans and newly registered job openings and vacancies. Labour demand is expected to weaken further in the coming years and as a result, unemployment is expected to continue to rise slightly. However, the employment rate remains on a high level.

The rise in unemployment is mainly due to the slowdown in economic activity, although there are also more structural causes. For example, there are signs that it is difficult to match job-seekers to job openings. A common way of illustrating how well matching on the labour market is functioning is the so-called Beveridge curve, which shows the correlation between unemployment and the vacancy rate. A rising vacancy rate is normally associated with falling unemployment and vice versa. After the financial crisis unemployment has been higher for a given vacancy rate, which is illustrated by the Beveridge curve having shifted outwards (see Figure 4:10). The curve can shift for cyclical reasons, which may be an explanation for the change after the financial crisis. That the curve did not shift back when economic activity strengthened is a sign that matching on the labour market has deteriorated. One explanation for this is probably the large inflow to the labour force of groups with weak attachment to the labour market. This applies in particular to people lacking upper-secondary school education or work experience in the Swedish labour market.

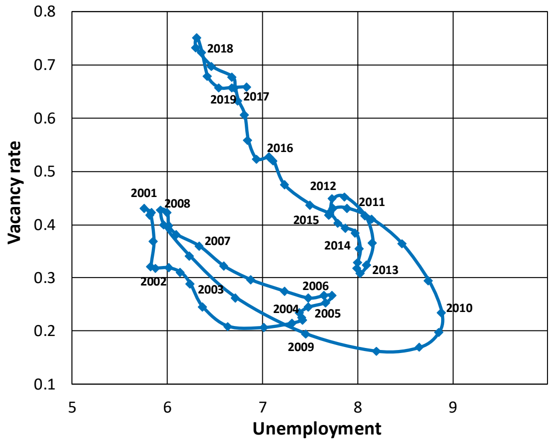
Wage negotiations in 2020

The industrial sector's current wage agreements expire on 31 March 2020. The agreements in industry are often called the benchmark as they tend to set the norm for wage increases in other parts of the economy. The agreements signed within the framework of the industrial agreement affect about half a million employees. In total, new agreements affecting almost three million employees will be signed in 2020. Already this winter, new agreements are expected to be signed in the industrial sector. The wage negotiations have begun with the industrial unions tabling a demand for wage increases of 3.0 per cent per year. This is 0.2 percentage points higher than their opening demand in the previous wage bargaining round.

The Swedish Paper Workers Union, which is not part of the coordinated block of industrial unions, has tabled a wage demand of 4 per cent per year. The Swedish Municipal Workers Union has chosen to leave the trade union block as it has not received support for its initiative to improve the wages of skilled workers in the welfare sector. The Confederation of Swedish Enterprise, on the employers' side, has not quantified an offer, but has stated that wage growth in Sweden is too high and must decrease in future agreements.

Figure 4:10. The Beveridge curve

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

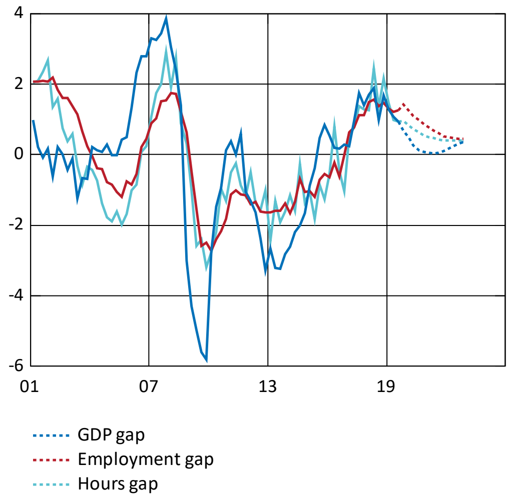


Note. Dates denote first quarter of each year respectively. Vacancies in the business sector.

Sources: Statistics Sweden and the Riksbank

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

Per cent



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

Sources: Statistics Sweden and the Riksbank

Overall, resource utilisation in the economy as a whole is expected to be close to normal levels for most of the forecast period (see Figure 4:11).

Wage growth on the up

In recent years, wage growth has been modest, in relation to both economic activity and the historical average. This is probably due in part to relatively low productivity growth.

Wage growth according to the short-term wage statistics is expected to rise slightly going forward. Several factors point to higher wage growth. Productivity growth has risen and is expected to continue to increase slightly in the years ahead. The labour market has been strong for several years. In addition, wage growth abroad has increased and inflation in Sweden has been close to the target for several years. Different models, in which wage growth is explained by resource utilisation, productivity, profit share in the economy and international wage growth, forecast rising wage growth in the years ahead. The Riksbank's forecast is approximately in line with the model forecasts (see Figure 4:12). The growth rate in real earnings, which has been low from a historical perspective, is expected to increase modestly as nominal wage growth rises (see Figure 4:13).

Hourly wages according to the National Accounts (NA) have increased significantly more rapidly than according to the short-term wage statistics in recent years (see Table 7). This is due in part to hourly wages in NA being a broader measure of wage development than the short-term wage statistics, and for example include bonuses. In addition to rapidly rising wage costs, labour costs according to NA have increased as a result of employers having to pay higher social security contributions.

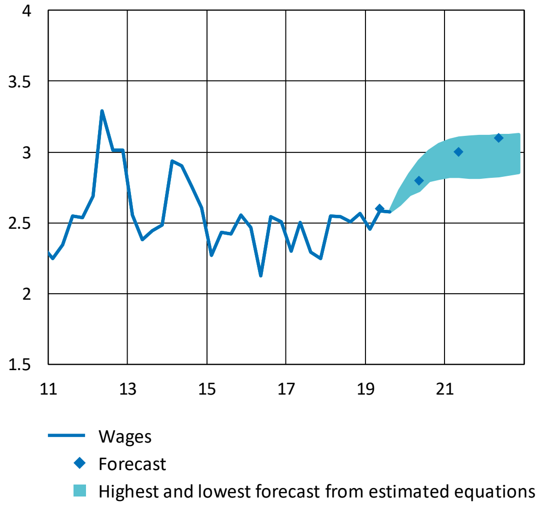
Together with modest productivity growth, this has contributed to a relatively high rate of increase in unit labour costs in recent years (see Figure 4:14). In the period ahead, they are expected to rise more or less in line with their historical average of 2 per cent (see Figure 4:14). Seen in a global perspective, Swedish companies have recently enjoyed a competitive edge as labour costs, expressed in a common currency, have been lower than abroad as a result of the weakening krona.[26]

Krona to appreciate gradually in the period ahead

Uncertainty about macroeconomic developments both in Sweden and abroad forms has contributed to the depreciation of the krona exchange rate in 2019. However, the krona has appreciated over the past month. The Riksbank's assessment is that the krona will continue to strengthen in the longer term, as it is currently weaker than is justified by long-term determinants.[27] However, it is uncertain how quickly the exchange rate will appreciate. The current forecast is based on

[26] See the article "Development of Swedish labour costs in an international perspective" in the Monetary Policy Report published in April 2019.
[27] See the article "Trend development of the Swedish krona" in the Monetary Policy Report published in July 2019.

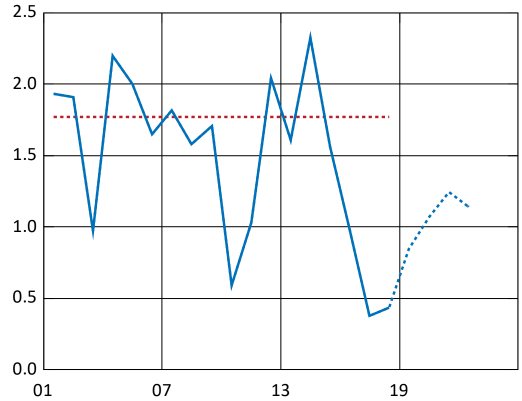
Figure 4:12. Wages
Annual percentage change



Note. Wages according to the short-term wage statistics. The squares illustrate the Riksbank's forecasts for wage growth for 2019–2022. The band illustrates the difference between the highest and lowest forecast from simple estimated equations in which wage growth is explained by the GDP gap, productivity, international wages (KIX-weighted) and profit share in the entire economy.

Sources: National Mediation Office and the Riksbank

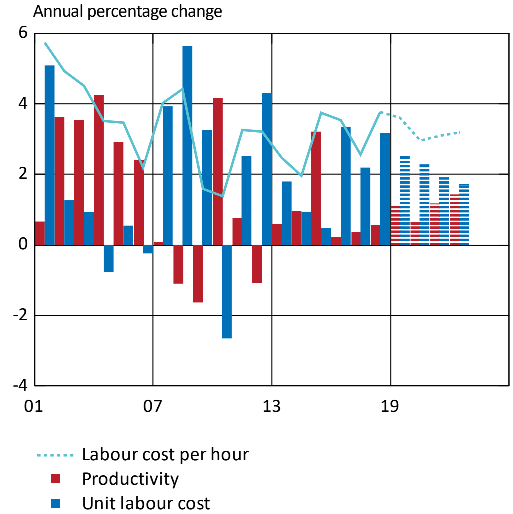
Figure 4:13. Real wages
Annual percentage change



Note. Short-term wages are deflated by the CPIF. The broken red line represent the mean value 1995–2018.

Sources: National Mediation Office, Statistics Sweden and the Riksbank

Figure 4:14. Labour costs in the whole economy
Annual percentage change



Sources: Statistics Sweden and the Riksbank

an assessment in which the krona neither appreciates nor depreciates over the coming year. Thereafter, a gradual appreciation of the exchange rate is expected similar to the assessment in the Monetary Policy Report in October (See Figure 4:15).

The conditions for close-to-target inflation remain good

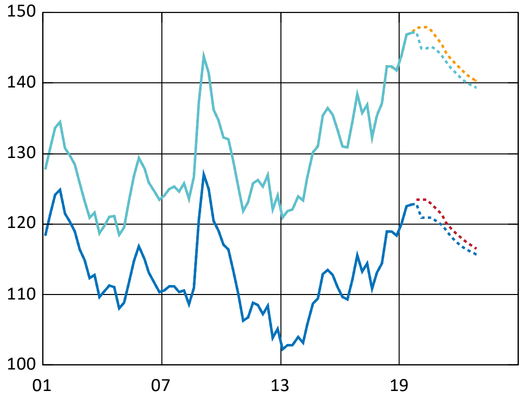
Having been close to the Riksbank's target of 2 per cent for some time, CPIF inflation fell during the summer, due mainly to declining energy prices. Since then, it has risen again (see Figure 4:16). Since the monetary policy meeting in October, inflation has developed more or less as expected. In November, CPIF inflation amounted to 1.7 per cent, while the rate of increase in the CPIF excluding energy amounted to 1.8 per cent. Different measures of underlying inflation are overall just below 2 per cent.

Inflation will weaken somewhat in 2020. This is mainly due to the krona's effects on inflation wearing off, at the same time as energy prices have a marginally dampening effect. The Riksbank's assessment is that the conditions are nevertheless good for inflation to stay close to target. Demand has been healthy for a long period. After being high for several years, resource utilisation is deemed to be close to normal at present and to continue to be so during the forecast period. Wage growth is expected to increase slightly and companies' costs, measured in terms of unit labour costs, are expected to rise by approximately 2 per cent a year. The rate of increase in energy prices is also assumed to rise slowly after 2020. Overall this means that inflation will gradually rise again and is expected to be close to the target towards the end of the forecast period (See Figure 4:16).

The outlook for inflation is largely the same as in October. CPIF inflation excluding energy has been revised down slightly for the year ahead as a result of lower outcomes and a stronger-than-expected krona. The forecast for CPIF inflation is basically unchanged compared with the assessment in October, as energy prices have been revised upwards somewhat (see Figure 4:17).

Figure 4:15. Nominal and real exchange rate, KIX

Index, 18 November 1992 = 100



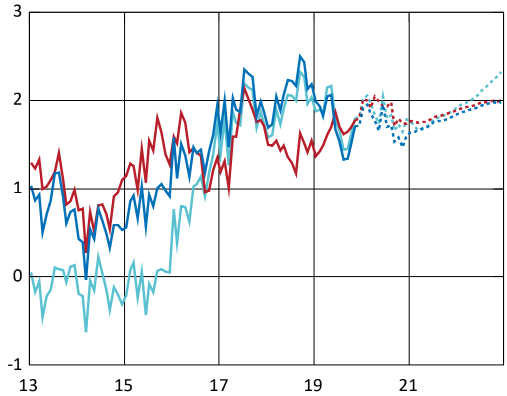
Nominal exchange rate, December
Nominal exchange rate, October
Real exchange rate, December
Real exchange rate, October

Note. The KIX (krona index) is a weighted average of the krona exchange rate against currencies in 32 countries that are important for Sweden's international trade. A higher value indicates a weaker exchange rate.The real exchange rate is calculated using the CPIF for Sweden and the CPI for other countries.

Sources: National sources, Statistics Sweden and the Riksbank

Figure 4:16. CPIF, CPIF excluding energy and CPI

Annual percentage change

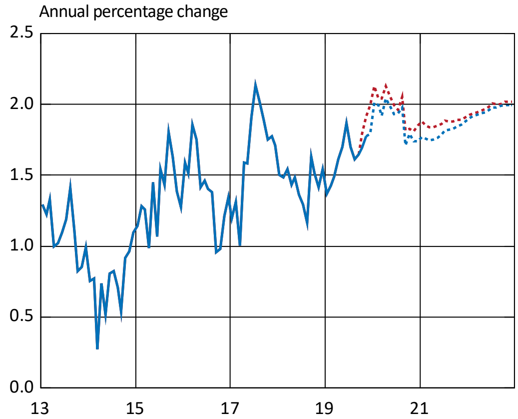


CPIF
CPIF excluding energy
CPI

Sources: Statistics Sweden and the Riksbank

Figure 4:17. CPIF excluding energy

Annual percentage change



December
October

Sources: Statistics Sweden and the Riksbank

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

	Q3 2019	Q4 2019	Q1 2020	Q4 2020	Q4 2021	Q4 2022
Repo rate	−0.25 (−0.25)	−0.25 (−0.25)	−0.02 (−0.05)	0.00 (0.00)	0.00 (0.00)	0.13 (0.13)

Source: The Riksbank

Table 2. Inflation

Annual percentage change, annual average

	2018	2019	2020	2021	2022
CPIF	2.1 (2.1)	1.7 (1.7)	1.7 (1.8)	1.7 (1.8)	1.9 (2.0)
CPIF excl. energy	1.4 (1.4)	1.6 (1.7)	1.9 (2.0)	1.8 (1.9)	2.0 (2.0)
CPI	2.0 (2.0)	1.8 (1.8)	1.8 (1.9)	1.8 (1.8)	2.1 (2.1)
HICP	2.0 (2.0)	1.7 (1.7)	1.8 (1.7)	1.7 (1.8)	1.9 (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

	2018	2019	2020	2021	2022
Repo rate	−0.5 (−0.5)	−0.3 (−0.3)	0.0 (0.0)	0.0 (0.0)	0.1 (0.1)
10-year rate	0.7 (0.7)	0.1 (0.1)	0.3 (0.1)	0.7 (0.5)	1.1 (0.9)
Exchange rate, KIX, 18 November 1992 = 100	117.6 (117.6)	122.1 (122.2)	120.8 (123.0)	118.6 (119.9)	116.3 (117.3)
General government net lending*	0.8 (0.8)	0.3 (0.3)	0.0 (−0.1)	−0.1 (0.0)	−0.1 (0.1)

* Per cent of GDP.

Sources: Statistics Sweden and the Riksbank

Table 4. International conditions

Annual percentage change, unless otherwise stated

GDP	PPP-weights	KIX-weights	2018	2019	2020	2021	2022
Euro area	0.11	0.49	1.9 (1.9)	1.2 (1.1)	1.2 (1.0)	1.3 (1.3)	1.3 (1.3)
USA	0.15	0.08	2.9 (2.9)	2.3 (2.2)	1.8 (1.7)	1.7 (1.7)	1.7 (1.7)
Japan	0.04	0.02	0.3 (0.8)	1.0 (1.0)	0.3 (0.2)	0.5 (0.5)	0.6 (0.5)
China	0.19	0.08	6.7 (6.7)	6.1 (6.1)	5.9 (5.9)	5.8 (5.8)	5.8 (5.7)
KIX-weighted	0.75	1.00	2.6 (2.6)	2.0 (1.9)	1.9 (1.8)	2.0 (2.0)	2.0 (1.9)
World (PPP-weighted)	1.00	—	3.6 (3.6)	3.0 (3.0)	3.3 (3.3)	3.5 (3.5)	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	2018	2019	2020	2021	2022
Euro area (HICP)	1.8 (1.8)	1.2 (1.2)	1.2 (1.2)	1.3 (1.4)	1.6 (1.7)
USA	2.4 (2.4)	1.8 (1.8)	2.3 (2.1)	2.2 (2.3)	2.2 (2.3)
Japan	1.0 (1.0)	0.6 (0.7)	0.8 (0.9)	0.9 (1.0)	1.0 (1.2)
KIX-weighted	2.2 (2.2)	1.8 (1.8)	1.8 (1.8)	1.9 (2.0)	2.1 (2.1)

	2018	2019	2020	2021	2022
Policy rates in the rest of the world, per cent	0.1 (0.1)	0.1 (0.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.1)
Crude oil price, USD/barrel Brent	71.5 (71.5)	63.9 (63.5)	60.3 (57.5)	57.8 (56.1)	56.9 (56.1)
Swedish export market	3.6 (3.7)	2.8 (2.5)	3.1 (3.0)	3.2 (3.1)	3.2 (3.2)

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

	2018	2019	2020	2021	2022
Private consumption	1.7 (1.6)	1.0 (1.0)	1.9 (2.0)	2.0 (2.0)	2.0 (1.8)
Public consumption	0.4 (0.4)	0.4 (0.8)	0.7 (0.7)	1.0 (0.8)	0.9 (0.8)
Gross fixed capital formation	4.2 (4.6)	−1.2 (−1.2)	0.3 (−0.1)	1.7 (1.6)	2.2 (2.2)
Inventory investment*	0.4 (0.5)	−0.3 (−0.2)	−0.3 (−0.1)	0.0 (0.0)	0.0 (0.0)
Exports	3.2 (3.1)	4.7 (4.3)	3.0 (3.0)	3.1 (3.0)	3.2 (2.8)
Imports	3.6 (3.6)	2.2 (1.9)	2.4 (2.6)	3.1 (3.0)	2.9 (2.6)
GDP	2.2 (2.3)	1.1 (1.3)	1.2 (1.2)	1.7 (1.6)	1.9 (1.8)
GDP, calendar-adjusted	2.3 (2.4)	1.2 (1.3)	1.0 (1.0)	1.6 (1.5)	2.0 (1.8)
Final domestic demand*	1.9 (2.0)	0.2 (0.3)	1.1 (1.0)	1.6 (1.5)	1.7 (1.5)
Net exports*	−0.1 (−0.1)	1.2 (1.2)	0.4 (0.3)	0.1 (0.1)	0.2 (0.2)
Current account (NA), per cent of GDP	2.7 (2.3)	4.2 (3.8)	4.4 (3.9)	4.3 (3.9)	4.4 (4.0)

*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

	2018	2019	2020	2021	2022
Population, aged 15–74	0.8 (0.8)	0.7 (0.7)	0.5 (0.5)	0.4 (0.4)	0.4 (0.4)
Potential hours worked	0.9 (1.1)	0.8 (1.0)	0.7 (0.9)	0.6 (0.7)	0.6 (0.6)
Potential GDP	1.8 (1.9)	1.8 (1.8)	1.7 (1.7)	1.7 (1.7)	1.7 (1.7)
GDP, calendar-adjusted	2.3 (2.4)	1.2 (1.3)	1.0 (1.0)	1.6 (1.5)	2.0 (1.8)
Number of hours worked, calendar-adjusted	1.8 *[2.4]*	0.0 *[1.3]*	0.3 (0.0)	0.4 (0.2)	0.5 (0.3)
Employed, aged 15–74	1.5 *[1.8]*	0.7 *[0.3]*	0.5 (0.3)	0.3 (0.4)	0.4 (0.5)
Labour force, aged 15–74	1.1 *[1.4]*	1.2 *[0.8]*	0.6 (0.5)	0.4 (0.5)	0.5 (0.6)
Unemployment, aged 15–74 *	6.3 *[6.3]*	6.8 *[6.8]*	6.9 (6.9)	7.0 (7.0)	7.1 (7.1)
GDP gap**	1.6 (1.4)	1.0 (0.9)	0.2 (0.2)	0.1 (0.0)	0.3 (0.1)
Hours gap**	1.8 (1.8)	1.1 (2.1)	0.7 (1.2)	0.5 (0.7)	0.4 (0.3)

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

Note. Potential hours worked and potential GDP refer to the long-term sustainable level according to the Riksbank's assessment. Having identified quality flaws, Statistics Sweden have published revised labour market statistics. The figures that are based wholly or partly on statistics published earlier are shown in italics in square brackets.

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

	2018	2019	2020	2021	2022
Hourly wage, NMO	2.5 (2.5)	2.6 (2.6)	2.8 (2.8)	3.0 (3.0)	3.1 (3.1)
Hourly wage, NA	2.8 *[2.2]*	3.8 *[2.6]*	2.9 (2.8)	3.0 (3.0)	3.1 (3.1)
Employers' contribution*	0.7 (0.7)	−0.1 (0.0)	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)
Hourly labour cost, NA	3.5 *[2.9]*	3.7 *[2.6]*	3.0 (2.9)	3.1 (3.1)	3.2 (3.2)
Productivity	0.5 *[0.0]*	1.2 *[0.1]*	0.7 (0.9)	1.2 (1.3)	1.4 (1.5)
Unit labour cost	3.2 (3.1)	2.5 (2.6)	2.3 (2.0)	1.9 (1.8)	1.7 (1.7)

* 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. Having identified quality flaws, Statistics Sweden have published revised labour market statistics. Previous misleading figures are in italics inside square brackets.

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

PRODUKTION SVERIGES RIKSBANK.
ISSN 2000-2076 (online)